

# Critical Release Notice

**Publication number: 297-8021-351**  
**Publication release: Standard 12.02**

## **Attention!**

\*\*\*\*\*

The North America DMS-100 Data Schema Reference Manual, 297-8021-351, will continue to be updated and provided in the North America - DMS NTP collection.

\*\*\*\*\*

The content of this customer NTP supports the SN09 (DMS) software release.

Bookmarks used in this NTP highlight the changes between the NA015 baseline and the SN08 (DMS) release. The bookmarks provided are color-coded to identify release-specific content changes. NTP volumes that do not contain bookmarks indicate that the NA015 baseline remains unchanged and is valid through the SN08 (DMS) release.

## **Bookmark Color Legend**

**Black:** Applies to content for the NA015 baseline that is valid through the current release.

**Red:** Applies to new or modified content for NA017 that is valid through the current release.

**Blue:** Applies to new or modified content for NA018 (SN05 DMS) that is valid through the current release.

**Green:** Applies to new or modified content for SN06 (DMS) that is valid through the current release.

**Purple :** Applies to new or modified content for SN07 (DMS) that is valid through the current release.

**Pink:** Applies to new or modified content for the SN08 (DMS) that is valid through the current release.

**Orange:** Applies to new or modified content for SN09 (DMS) that is valid through the current release.

## **Attention!**

*Adobe ® Acrobat ® Reader ™ 5.0 or higher is required to view bookmarks in color.*

# Publication History

*Note: Refer to the NA015 baseline document for Publication History prior to the NA017 software release.*

## January 2006

Standard NTP release 12.02 for the SN09 (DMS) software release.

### Volume 1

Modified data schema – AMAOPTS (A00009252)

### Volume 4

Modified data schema – ESAPXLA (Q01228425-01)

### Volume 6

Modified data schema – IPNETWRK (Q01215905 and Q01227402)

### Volume 7

Modified data schema – LNSMTCE (Q00959081)

### Volume 9

New data schema – PATHSET (modified by Q01077097)

New data schema – SBSRMINV (Q01063949)

### Volume10

New data schema – SERVIRINV (Q01063949)

### Volume12

Deleted the term TBD, which occurred in two places in this volume.

## September 2005

Preliminary NTP release 12.01 for the SN09 (DMS) software release.

### Volume 1

Modified data schema – AMAOPTS (A00009252, A00009508); ANNMEMS, ANNPHLST (A00009013)

### Volume 8

Modified data schema – OAFUNDEF (A00009012)

### Volume 9

Modified data schema – SCAICOMS (A00009078)

**Volume 11**

Modified data schema – TOPSFTR (A00009012)

**Volume 12**

Modified data schema – TRKSGRP type ISDN (Q01112597)

Modified data schema – XPMIPMAP (A00009011)

**August 2005**

Standard NTP release 11.03 for the SN08 (DMS) software release.

**Volume 5**

Modified data schema – IBNFEAT feature SimRing

**Volume 6**

Modified data schema – KSETFEAT feature SimRing

**Volume 7**

Modified data schema – LTCINV

**Volume 11**

New data schema – TOPSMCDB

Modified data schema – TOPSTOPT

**June 2005**

Standard NTP release 11.02 for the SN08 (DMS) software release.

The following Data Schema content is updated for the SN08 (DMS) release. Content provided in this NTP is not superseded by content provided in the replacement NTP as indicated for the Preliminary release.

**Volume 3**

New data schema – CUSTSTN option CNDBO

**Volume 4**

Modified data schema – EADAS

**Volume 6**

New data schema – KSETINV

New data schema – LCMINV

**Volume 8**

New data schema – NSCDEFS

New data schema – NSCPMAP

## March 2005

Preliminary NTP release 11.01 for the SN08 (DMS) software release.

The following updated Data Schema content is provided in the Carrier VoIP Operational Configuration: Data Schema Reference NTP, NN10324-509. The content provided in NTP 297-8021-351 is superseded by the content provided in NTP NN10324-509.

ACDMISPL  
CGBLDADD  
CGBLDDGL  
CGBLDDIG  
CGBLDNI  
CGBLDPI  
CGPNBLDR  
CUSTSTN\_OPTION\_DBO  
EDAS  
IBNLINES  
ISERVOPT  
KSETINV  
TLDSIAMA\_OPTS  
TRKSGRP\_TYPE\_C7UP

The following new Data Schema content is provided in the Carrier VoIP Operational Configuration: Data Schema Reference NTP, NN10324-509. This content will not be provided in NTP 297-8021-351.

CGBLDSIN  
LOGTHROT  
NTPOLL

## October 2005

Standard release 10.04 for software release SN07 (DMS). Updates made in the North American Data Schema Reference Manual are shown below

### Volume 2

Table BEARNETS description added for CR Q01083765.

### Volume 3

Table DESDATA description added for CR Q01083765.

### Volume 4

Table DPTRKMEM was created as part of activity A59015739 in an earlier release. Documentation updated for CR Q01083781.

### **Volume 5**

Table IHEADRR description added for CR Q01083765.

### **Volume 8**

Table NET2NET description added for CR Q01083765

Table NETBRDGE description added for CR Q01083765

Table NETPATH description added for CR Q01083765

### **Volume 9**

Table PCEMENTT was created as part of activity A00007196 in an earlier release.  
Documentation updated for CR Q01077110.

Table PCEMFEID was created as part of activity A00007196 in an earlier release.  
Documentation updated for CR Q01077137.

Table PRSUDATA description added for CR Q01083765.

Table PVDNCHAN description modified for CR Q00806759/Q01207784

### **Volume 10**

Table SELDEFS and table SETDEFS descriptions added for CR Q01083765.

## **December 2004**

Standard release 10.03 for software release SN07 (DMS). Updates made in the North America Data Schema Reference Manual are shown below

### **Volume 9**

Table PECINV amended for CR Q00900178

Standard release 10.02 for software release SN07 (DMS). Updates made in the North America Data Schema Reference Manual are shown below

### **Volume 1**

AINPRESC (new), ACDENLOG, ACDGRP, ACDLOGIN, ANNS

### **Volume 2**

No changes

### **Volume 3**

CMIPADDR, CUSTSTN option AINDENY

### **Volume 4**

No changes

### **Volume 5**

IBNFEAT feature ACD, IBNFEAT feature SUPR

**Volume 6**

IPAPPL (new), KSETFEAT feature SUPR, KSETFEAT feature IPCLIENT, KSETLINE feature ACD

**Volume 7**

No changes

**Volume 8**

MULTITM (new), OAFUNDEF, OANODINV

**Volume 9**

PADDDATA, QMSMIS

**Volume 10**

No changes

**Volume 11**

TOPSFTR, TOPTDROP, TRIGINFO, TRIGITM, TRKAIN

**Volume 12**

No changes

**September 2004**

Preliminary release 10.01 for software release SN07 (DMS). Updates made in the North America Data Schema Reference Manual are shown below

**Volume 1**

ACDENLOG, ACDGRP, ACDLOGIN

**Volume 2**

AUTHCDE

**Volume 3**

CUSTN, CUSTN option VOWDN (new)

**Volume 4**

DIRPOOL2 (new), DIRPPool, DNROUTE, DNROUTE feature VOWDN (new)

**Volume 5**

IBNFEAT feature ECM, IBNXLA

**Volume 6**

ISUPTRK, KSETFEAT feature ECM

**Volume 7**

LIUINV, LTCINV, MNHSCARR, MSCIDMAP (new), MSCINMAP (new)

**Volume 8**

MUMRTAB

**Volume 9**

RESFEAT

**Volume 10**

TDBDAOPT, TMTMAP

**Volume 11**

TOLLTRKS, TOPSFTR, TOPSPARM, TOPSTLDN

**Volume 12**

TRKOPTS, VOWINV (new), XLABILL (new), XLACCLASS (new)

**March 2004**

Standard release 09.03 for software release SN06 (DMS). Updates made in the North America Data Schema Reference Manual are shown below.

**Volume 1**

DCA references changed / made obsolete

**Volume 2**

CARRMTC, C7UPTMR

**Volume 3**

DCA references changed / made obsolete

**Volume 4**

DNROUTE, DNROUTE feature DISA

**Volume 5-6**

No changes

**Volume 7**

LNPOPTS, LTDATA

**Volume 8**

OPTOPT

**Volume 9**

PADDATA, RDTINV

**Volume 10**

SUSHELF, SYNCLK, DCA references changed / made obsolete

**Volume 11-12**

No changes

**September 2003**

Standard release 09.02 for software release SN06 (DMS). Updates made in the North America Data Schema Reference Manual are shown below.

**Volume 1**

No changes

**Volume 2**

BCCODES

**Volume 3**

CSEDPMAP

**Volume 4**

DSLIMIT, FNPACONT.RTEREF

**Volume 5**

HNPACONT.RTEREF, IBNFEAT feature MWT, IBNLINES option MDN, IBNLINES option STN, IBNRTE selector CND, IBNRTE selector NOT, IBNXLA, IBNXLA selector FTR type LSPKP

**Volume 6**

ISDNPARM, ISERVOPT, KSETLINE

**Volume 7**

LENLINES, LTCINV, MNMGPIP

**Volume 8**

OFRT selector CND, OFRT selector NOT

**Volume 9**

No changes

**Volume 10**

STDPRTCT.STDPRT selector E911

**Volume 11**

TODHEAD, TONES, TRKGRP E911, TRKGRP type IT

## **Volume 12**

TRKOPTS, VFGDATA, VIRGRPS

### **June 2003**

Preliminary release 09.01 for software release SN06 (DMS). Updates made in the North America Data Schema Reference Manual are shown below.

## **Volume 1**

ACRTE, ALMSC, ALMSCGRP, ALMSD, ALDSDGRP, ANNAUDID (new), ANNMEMS, ANNPHLST (new)

## **Volume 2**

No changes

## **Volume 3**

CSEDPMAP (new), CUSTN option CFIND, DEFDATA

## **Volume 4**

FNPACONT

## **Volume 5**

HNPACONT, IBNFEAT feature CFIND, IBNLINES, IBNRTE selector CND, IBNRTE selector NOT

## **Volume 6**

ISERVOPT, KSETLINE

## **Volume 7**

LRGPINV (new), LTDATA, MNCKTPAK, MNIPPARM (new), MNNODE

## **Volume 8**

OFRT selector CND, OFRT selector NOT

## **Volume 9**

PADDDATA, REXSCHED

## **Volume 10**

SERVSINV, SPMECAN, SPMLDVAL (new), STDPRTCT.STDPRT selector E911

## **Volume 11**

TODHEAD, TONES, TRKGRP E911, TRKGRP type IT

## **Volume 12**

TRKMEM, TRKOPTS, TRKSGRP, VFGDATA, VIRTGRPS

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DMS-100 Family

## **North American DMS-100**

Customer Data Schema Reference Manual Volume 3 of 12

Data Schema CDACCESS-DFINV

LET0015 and up Standard 05.02 May 2001

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DMS-100 Family

## **North American DMS-100**

Customer Data Schema Reference Manual Volume 3 of 12

Data Schema CDACCESS-DFINV

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Data Schema OQCQPROF-SCALLTAB

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Data Schema SCCPTMR-TMZONE

**Customer Data Schema Reference Manual Volume 11 of 11**

Data Schema TODHEAD-TRKGRP type NU

**Customer Data Schema Reference Manual Volume 12 of 12**

Data Schema TRKGRP type OC-ZONEORDR

---

# 1 Data schema tables

---

The following pages contain the data schema tables.

## **CDACCESS**

---

### **Table name**

Country Direct Access Codes Table

### **Functional description**

Table CDACCESS contains all valid Country Direct access codes. The datafill in this table indicates what values are expected in a Country Direct stream that begins with each access code.

### **Datafill sequence and implications**

There are no datafill sequence requirements.

### **Table size**

Table CDACCESS has a fixed size with 1000 tuples.

**CDACCESS** (continued)**Datafill**

The following table lists datafill for table CDACCESS.

**Field descriptions (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
KEY		see subfields	<p>Key. This field is the key to the table. It consists of subfields FROMDIG and TODIG.</p> <p>Due to system limitations, no two tuples can begin with the same digits, with different digit lengths, for the key. For example, there can not be a tuple 23 23 and a tuple 231 231 in the same table. There is no way to distinguish between an access code of 23 followed by a country code of 1, and an access code of 231. Access codes must be defined so there is no need for an access code of 23 and 231.</p> <p>The key field cannot be changed. To change the key field (FROMDIG and TODIG), the tuple must be deleted, then re-added.</p> <p>If a range is datafilled (for example, 91 99 2 Y Y) and an attempt is made to change the fields for part of the range (for example, 93 93 2 Y N), the change affects the whole range (91 99 2 Y Y). If it is desired only to change key 93 93, then tuple 91 99 must be deleted and datafilled back as 91 92 2 Y Y, 93 93 2 Y N, and 94 99 2 Y Y.</p> <p>For tuples datafilled as ranges (TODIG is larger than FROMDIG), deleting part of the range causes the whole tuple to be deleted. For example, 91 99 2 Y Y is datafilled. Then an attempt is made to delete 91 94 2 Y Y. This causes the whole tuple (91 99 2 Y Y) to be deleted. In this case, tuple 95 99 2 Y Y must be added back in order to delete 91 94 2 Y Y.</p>
	FROMDIG	up to 18 digits (0 to 9)	From digits. Enter the lower end of the range for the access code digits signalled in the country direct digit stream to TOPS.
	TODIG	up to 18 digits (0 to 9)	To digits. Enter the upper end of the range for the access code digits signalled in the country direct digit stream to TOPS.

**CDACCESS** (continued)

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
ACCDIGS		1 to 4	Number of access code digits. When the access code is parsed from the Country Direct digit stream, the value of ACCDIGS indicates how many digits to parse as the access code.
CTRYCODE		Y or N	Country code. This field indicates whether a Country Direct country code is expected in the Country Direct digit stream. If set to Y, table CDCTRY is accessed with the country code derived from the digit stream. Otherwise, if set to N, the default tuple in table CDCTRY is accessed.
CARRCODE		Y or N	Carrier code. This field indicates whether a Country Direct carrier ID is expected in the Country Direct digit stream. If set to Y, table CDCARR is accessed with the carrier code derived from the digit stream. Otherwise, if set to N, the default tuple in table CDCARR is accessed.

**Datafill example**

The following example shows sample datafill for table CDACCESS.

**MAP display example for table CDACCESS**

KEY	ACCDIGS	CTRYCODE	CARRID
171 171	3	Y	Y
172 172	3	Y	N
173 173	3	N	Y
9107 9107	4	N	N

**CDACCESS** (continued)**Error messages**

The following error messages apply to table CDACCESS.

**Error messages for table CDACCESS (Sheet 1 of 2)**

Error message	Explanation and action
WHEN ADDING A TUPLE, PLEASE ENTER THE SAME NUMBER OF DIGITS FOR THE FROMDIG AND TODIG FIELDS. FOR EXAMPLE, ENTER 515 520 AND NOT 515 52.	This message is displayed if an attempt is made to add a tuple into CDACCESS and the number of digits in the FROMDIG and TODIG fields are not the same. The digits do not have to be the same, just the number of them.
THE NUMBER OF DIGITS MUST BE GREATER THAN ZERO.	This message is displayed if an attempt is made to add a tuple without entering any digits in the FROMDIG and, or, TODIG fields.
ERROR: TODIG FIELD LESS THAN FROMDIG	This message is displayed if an attempt is made to position on a tuple with the TODIG less than the FROMDIG. That is, erroneous values are entered for the position command.
TOO FEW DIGITS IN TODIG FIELD TO IDENTIFY RANGE. AT THIS POSITION, SPECIFY x DIGITS IN THE TODIG FIELD.	This message is displayed if, for example, 110 556 is datafilled and an attempt is made to position on 11 56.
TOO FEW DIGITS IN FROMDIG FIELD TO IDENTIFY RANGE. AT THIS POSITION, SPECIFY x DIGITS IN THE FROMDIG FIELD.	This message is displayed if, for example, 80 80 is datafilled and an attempt is made to position on 8 80.
ATTEMPT TO POSITION ON TOO LARGE A RANGE. TRY SETTING TODIG FIELD TO x.	This message is displayed if, for example, 110 556 is datafilled and an attempt is made to position on 11 557.
TABLE CDACCESS IS FULL	This message is displayed if no more tuples are available in the table.

---

**CDACCESS** (end)

---

**Error messages for table CDACCESS (Sheet 2 of 2)**

<b>Error message</b>	<b>Explanation and action</b>
IMPROPER POSITIONING. COULD NOT WRITE CDACCESS TUPLE	This message is displayed if an attempt is made to add a tuple with a key that is partially encompassed in an existing entry. For example, if 901 910 is datafilled and an attempt is made to add 90 90. This gives an error because the TODIG of the tuple to be added is encompassed in the FROMDIG of the tuple already datafilled.
THIS WILL AFFECT TUPLE ENTRY FROM x TO x	This message is displayed if an attempt is made to change or delete a tuple with a key that is partially encompassed in an existing entry. For example, 90 99 is datafilled and an attempt is made to change or delete 90 94. Therefore, this attempt would affect 90 99. Note, tuple 90 94 is not datafilled, but key 90 99 is entered in the change or delete command.

**Table history**  
**NA005**

Table CDACCESS was introduced by functionality Auto Country Direct, ENSV0010.

---

**CDCARR**

---

**Table name**

Country Direct Carrier of Origin Table

**Functional description**

Table CDCARR defines all carrier of origin IDs that may be signalled in the digit stream of a Country Direct call. A rating name is given for each signalled carrier. Please note that this carrier is used only for rating Country Direct calls, not for Equal Access call processing. The Country Direct carrier of origin may or may not be a valid Equal Access CIC. A default carrier code tuple is provided.

If table CDACCESS, field CARRCODE = Y, the digits following the access code and country code in the Country Direct digit stream are used to access table CDCARR. If table CDACCESS, field CARRCODE = N, the default tuple in CDCARR is accessed.

**Datafill sequence and implications**

A rating name must be datafilled in table CDCARRRT before it can be datafilled in field CARRRATE.

**Table size**

Table CDCARR has a fixed size with 1000 tuples.

**CDCARR** (continued)**Datafill**

The following table lists datafill for table CDCARR.

**Field descriptions (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
KEY		see subfields	<p>Key. This field is the key to the table. It consists of subfields FROMDIG and TODIG.</p> <p>Due to system limitations, no two tuples can begin with the same digits, with different digit lengths, for the key. For example, there can not be a tuple 23 23 and a tuple 231 231 in the same table. There is no way to distinguish between an access code of 23 followed by a country code of 1, and an access code of 231. Access codes must be defined so that there is no need for an access code of 23 and 231.</p> <p>The key field cannot be changed. To change the key field (FROMDIG and TODIG), the tuple must be deleted, then re-added.</p> <p>If a range is datafilled (for example, 91 99 2 CARR1RATE) and an attempt is made to change the fields for part of the range (for example, 93 93 2 CARR2RATE), the change affects the whole range (91 99 2 CARR2RATE). If it is desired only to change key 93 93, then tuple 91 99 must be deleted and datafilled back as 91 92 2 CARR1RATE, 93 93 2 CARR2RATE, and 94 99 2 CARR1RATE.</p> <p>For tuples datafilled as ranges (TODIG is larger than FROMDIG), deleting part of the range causes the whole tuple to be deleted. For example, 91 99 2 CARR1RATE is datafilled. Then an attempt is made to delete 91 94 2 CARR1RATE. This causes the whole tuple (91 99 2 CARR1RATE) to be deleted. In this case, tuple 95 99 2 CARR1RATE must be added back in order to delete 91 94 2 CARR1RATE.</p>
	FROMDIG	up to 18 digits (0 to 9)	From digits. Enter the lower end of the range for the carrier digits signalled in the country direct digit stream to TOPS.

**CDCARR** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	TODIG	up to 18 digits (0 to 9)	To digits. Enter the upper end of the range for the carrier digits signalled in the country direct digit stream to TOPS. Also, see note above in subfield FROMDIG.
CARRDIGS		1 to 4	Number of carrier code digits. When the access code is parsed from the Country Direct digit stream, the value of CARRDIGS indicates how many digits to parse as the country code. When accessing the default tuple because table CDACCESS, field CARRCODE = N, the value in this field is irrelevant, because no carrier code is parsed from the digit stream.
CARRRATE		name from table CDCARRRT	Carrier rating name. Enter a carrier or origin rating name, previously defined in table CDCARRRT.

**Datafill example**

The following example shows sample datafill for table CDCARR.

**MAP display example for table CDCARR**

KEY	CARRDIGS	CARRRATE
0000 0000	4	NOCARR
11 11	2	CARR1RATE
21 21	2	CARR2RATE
31 31	2	CARR3RATE

In the above example, the first entry is the default tuple. This tuple may be changed but not deleted.

**CDCARR** (continued)**Error messages**

The following error messages apply to table CDCARR.

**Error messages for table CDCARR (Sheet 1 of 2)**

Error message	Explanation and action
WHEN ADDING A TUPLE, PLEASE ENTER THE SAME NUMBER OF DIGITS FOR THE FROMDIG AND TODIG FIELDS. FOR EXAMPLE, ENTER 515 520 AND NOT 515 52.	This message is displayed if an attempt is made to add a tuple into CDCARR and the number of digits in the FROMDIG and TODIG fields are not the same. The digits do not have to be the same, just the number of them.
THE NUMBER OF DIGITS MUST BE GREATER THAN ZERO.	This message is displayed if an attempt is made to add a tuple without entering any digits in the FROMDIG and, or, TODIG fields.
ERROR: TODIG FIELD LESS THAN FROMDIG	This message is displayed if an attempt is made to position on a tuple with the TODIG less than the FROMDIG. That is, erroneous values are entered for the position command.
TOO FEW DIGITS IN TODIG FIELD TO IDENTIFY RANGE. AT THIS POSITION, SPECIFY x DIGITS IN THE TODIG FIELD.	This message is displayed if, for example, 110 556 is datafilled and an attempt is made to position on 11 56.
TOO FEW DIGITS IN FROMDIG FIELD TO IDENTIFY RANGE. AT THIS POSITION, SPECIFY x DIGITS IN THE FROMDIG FIELD.	This message is displayed if, for example, 80 80 is datafilled and an attempt is made to position on 8 80.
ATTEMPT TO POSITION ON TOO LARGE A RANGE. TRY SETTING TODIG FIELD TO x.	This message is displayed if, for example, 110 556 is datafilled and an attempt is made to position on 11 557.
TABLE CDCARR IS FULL	This message is displayed if no more tuples are available in the table.

**CDCARR (end)****Error messages for table CDCARR (Sheet 2 of 2)**

Error message	Explanation and action
IMPROPER POSITIONING. COULD NOT WRITE CDCARR TUPLE	This message is displayed if an attempt is made to add a tuple with a key that is partially encompassed in an existing entry. For example, if 901 910 is datafilled and an attempt is made to add 90 90. This gives an error because the TODIG of the tuple to be added is encompassed in the FROMDIG of the tuple already datafilled.
THIS WILL AFFECT TUPLE ENTRY FROM x TO x	This message is displayed if an attempt is made to change or delete a tuple with a key that is partially encompassed in an existing entry. For example, 90 99 is datafilled and an attempt is made to change or delete 90 94. Therefore, this attempt would affect 90 99. Note, tuple 90 94 is not datafilled, but key 90 99 is entered in the change or delete command.

## Table history

### NA005

Table CDCARR was introduced by functionality Auto Country Direct, ENSV0010.

## CDCARRRT

---

### Table name

Country Direct Carrier Rating Name Table

### Functional description

Table CDCARRRT defines the rating names used to rate a Country Direct call on a carrier of origin basis. All Country Direct carrier rating names must be datafilled in this table. A default carrier rating name tuple, NOCARR, is provided.

### Datafill sequence and implications

A carrier rating name must be defined in table CDCARRRT before it can be datafilled in table CDCARR, CDRATE, or CDRATEG.

### Table size

Table CDCARRRT has a fixed size with 64 tuples.

### Datafill

The following table lists datafill for table CDCARRRT.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CARRRTNM		up to 16 characters	Carrier rating name. Enter the name used for rating. This value is used in tables CDCARR, CDRATE, and CDRATEG.

### Datafill example

The following example shows sample datafill for table CDCARRRT.

#### MAP display example for table CDCARRRT

```
CARRRTNM
-----
NOCARR
CARR1RATE
CARR2RATE
CARR3RATE
```

In the above example, the first entry is the default tuple. This tuple may be not be deleted.

**CDCARRRT** (end)**Error messages**

The following error messages apply to table CDCARRRT.

**Error messages for table CDCARRRT**

Error message	Explanation and action
CARRRTNM STILL IN USE. CHECK TABLES CDCTRY, CDRATE, AND CDRATEG.	A carrier rating name cannot be delete from table CDCARRRT if it is still used in table CDCARR, CDRATE, or CDRATEG. This error message is displayed if an attempt is made to delete a rating name still in use
DEFAULT RATING NAME MAY NOT BE DELETED.	The default carrier rate name, NOCARR, may not be deleted. This error message is displayed if an attempt is made to delete default tuple NOCARR.

**Table history****NA005**

Table CDCARRRT was introduced by functionality Auto Country Direct, ENSV0010.

## CDCCUGS

---

### Table name

Customer Data Change Closed User Group Table

### Functional description

Table CDCCUGS is provided for ownership of ISDN packet data closed user groups (CUG). The operating company datafills this table to indicate that the CUGs are user assignable.

Each tuple consists of a CUG number, the CUG type and a CUG network identifier that determines whether the CUG type is national or international.

Refer to table OWNTAB for more information about the customer data change (CDC) system.

### Datafill sequence and implications

The following tables must be datafilled before table CDCCUGS:

- OWNTAB
- OWNER

### Table size

0 to 4096 tuples

### Datafill

The following table lists datafill for table CDCCUGS.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUGNUM		0 to 65353	<i>Closed user group number</i> Enter the number assigned to the CUG.
CUGTYPE		I or N	<i>Closed user group type</i> Enter I to specify an international CUG and datafill subfield CUGDNIC as shown below. Otherwise, enter N to specify a national CUG and leave subfield CUGDNIC blank.

**CDCCUGS** (end)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
OWNER	CUGDNIC	0 to 9999or blank	<i>Closed user group data network identifier</i> Enter the international data network identifier. Datafill this field if field CUGTYPE has a value of I. Otherwise, leave blank.
		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name of the owner of the CUG. This entry must appear in table OWNER.

**Datafill example**

The following example shows sample datafill for table CDCCUGS.

**MAP display example for table CDCCUGS**

CUGNUM	CUGTYPE	OWNER
13456	I 8745	CIVIC
34	N	BNR

## CDCDNAS

---

### Table name

Customer Data Change Data Network Address Table

### Functional description

Table CDCDNAS provides storage for data network addresses (DNA) accessible to a customer data change (CDC) user. A DNA is a number used to access a terminal on the packet-switched network.

DNAs and owner identifications are manually entered in table CDCDNAS by the operating company. CDC users are allowed access to the DNAs stored in the table.

Refer to table OWNTAB for more information about CDC.

Access to the DNAs also depends on tables CDCLENS, CDCPHPAR and CDCCUGS.

### Datafill sequence and implications

The following tables must be datafilled before table CDCDNAS:

- OWNER
- OWNTAB

### Table size

0 to 32 676 tuples

### Datafill

The following table lists datafill for table CDCDNAS.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNA		vector of up to 15 digits (0 to 9)	<i>Data network address</i> Enter the data network address accessible to the CDC user.
OWNER		alphanumeric (up to 8 characters)	<i>Owner name</i> Enter the owner of the DNA. The name entered here must appear in table OWNER.

---

**CDCDNAS** (end)

---

**Datafill example**

The following example shows sample datafill for table CDCDNAS.

**MAP display example for table CDCDNAS**

DNA	OWNER
1000	BNR

## CDCDNS

---

### Table name

Customer Data Change Directory Number Table

### Functional description

Table CDCDNS lists the directory numbers (DN) assigned to a customer group that has customer data change (CDC) capability.

One entry is required for each single DN or block of consecutive DNs that are assigned to the customer group.

For related information, refer to table OWNER.

*Note:* Table CDCDNS is automatically datafilled through the Service Order system (SERVORD) when the CDN SERVORD command is used to change a DN.

Table CDCDNS is automatically datafilled through SERVORD for the ADD, ADO, CDN, EST, or NEW commands. All other SERVORD commands do not interact with table CDCDNS.

For the CDN command, table CDCDNS is updated to reflect the automatic transfer of DN ownership when the DN associated with an existing line is changed to an unassigned DN. This command adds a tuple for the new DN to table CDCDNS using the same owner of the existing DN. If the DN being added is already contained in table CDCDNS, the tuple remains unchanged. This command does not delete the tuple associated with the original DN in table CDCDNS.

If this command causes the subscriber to attempt to add a CDC owner to a DN that is different than the current owner in table CDCDNS, the following message is displayed.

WARNING: Cannot change existing owner for DN 4165550000 in CDCDNS table. The existence of different owners in the CDCDNS and CDCLENS tables prevents CDC users from fully utilizing a line.  
Verify that the owners for the LEN and DN in each table are the same.

**CDCDNS** (continued)

For more information about the interaction of the CDN command with table CDCDNS, refer to *SERVORD Reference Manual*.

**Datafill sequence and implications**

Table OWNER must be datafilled before table CDCDNS.

**Table size**

0 to 256 tuples

Memory is allocated automatically for this table.

**Datafill**

The following table lists datafill for table CDCDNS.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
SNPA		numeric (3 digits)	<i>Serving numbering plan area</i> Enter the serving numbering plan area (NPA) assigned to the DN or block of consecutive DNs.
NXX		numeric (3 digits)	<i>Office code</i> Enter the office code assigned to the DN or block of consecutive DNs. Values outside this range are invalid.
FROMDIGS		numeric (4 digits)	<i>From digits</i> If the entry is for a single DN, enter the last four digits of the DN. If the entry is for a block of consecutive DNs, enter the last four digits of the first DN in the block.
TODIGS		numeric (4 digits)	<i>To digits</i> If the entry is for a single DN, enter the last four digits of the DN. If the entry is for a block of consecutive DNs, enter the last four digits of the last DN in the block.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This entry must appear in table OWNER field OWNER.

## CDCDNS (end)

---

### Datavfill example

The following example shows sample datavfill for table CDCDNS.

The example shows both a single DN (2265432) and a block of DNs (2264800 to 2264899) for customer group BNRMC. This customer group belongs to a family of customer groups, which has the owner name of CARLING. The customer group is assigned in serving NPA 613.

### MAP display example for table CDCDNS

SNPA	NXX	FROMDIGS	TODIGS	OWNER
613	226	5432	5432	CARLING
613	226	4800	4899	CARLING

---

**CDCLENS**

---

**Table name**

Customer Data Change Line Table

**Functional description**

Table CDCLENS lists the line equipment numbers (LEN) that are assigned to a customer group that has customer data change capability.

The LENs that are listed in this table can only be assigned in table IBNLINES or KSETINV, except if the line is an ISDN line. The logical terminal identifiers (LTID) for ISDN channel switching or D-channel packet switching (D-type) sets and channel packet switching (PB-type) sets do not appear in either table IBNLINES or KSETINV, but can appear in table CDCLENS and must be defined in table LTDEF.

Any LEN that is added to table IBNLINES or KSETINV by table control or service order that has the option CDC is automatically added to table CDCLENS.

The option CDC can only be deleted from a line by deleting the entry from this table.

For related information, refer to table OWNER.

**Datafill sequence and implications**

The following tables must be datafilled before table CDCLENS:

- IBNLINES
- KSETINV
- OWNER

**Table size**

Memory is automatically allocated for this table.

**CDCLENS** (end)

**Datafill**

The following table lists datafill for table CDCLENS.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
LEN	see subfields		<p><i>Line equipment number</i></p> <p>This field defines the physical location of the equipment that is connected to a specific telephone line.</p> <p>Because field LEN is common to more than 60 tables, it is documented in a single section to avoid unnecessary duplication. Refer to section "Common entry field LEN" for a complete description of field LEN and associated subfields.</p> <p>Field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.</p>
OWNER		alphanumeric (1 to 8 characters)	<p><i>Owner</i></p> <p>Enter the name assigned to the owner. This name must appear in field OWNER of table OWNER.</p>

**Datafill example**

The following example shows sample datafill for table CDCLENS.

In the example, non-ISDN line equipment number 00 1 10 16 is assigned to an owner with the name CARLING.

**MAP display example for table CDCLENS**

LEN	OWNER
00 1 10 16	CARLING

**CDCLOGON****Table name**

Customer Data Change Logon Table

**Functional description**

Table CDCLOGON lists the logon user name associated with an owner name.

Failure to enter the user name in this table enables the user access to all the data in the switching unit accessible by service order.

This table also specifies whether to enable a pending order file for the user. Pending order files can only be run by operating company personnel.

For related information, refer to table OWNER.

**Datafill sequence and implications**

The following tables must be datafilled before table CDCLOGON:

- OWNER
- USERINF

**Table size**

0 to 255 tuples

Memory is automatically allocated for this table.

**Datafill**

The following table lists datafill for table CDCLOGON.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
USERNAME		alphabetic (up to 8 characters)	<i>User name</i> Enter the logon user name assigned to the customer group by the telephone operating company. This name must appear in field UNAME in table USERINF.
OWNER		alphanumeric (up to 8 characters)or NIOWNER	<i>Owner</i> Enter the name assigned to the owner. This name must appear in field OWNER of table OWNER. Otherwise, enter NIOWNER.

**CDCLOGON** (end)

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CLASS		GENERAL NONUSER OBSERVER orTELCO	<p><i>Ownership user class</i></p> <p>Enter the class assigned to the user.</p> <p>Enter GENERAL if users assigned this class can view and change their own data, and view public data.</p> <p>Enter NONUSER if users assigned this class cannot change or view any data.</p> <p>Enter OBSERVER if users assigned this class can view, but not change, their own data and all public data.</p> <p>Enter TELCO if users assigned this class can view and change all data.</p>
POF		Y or N	<p><i>Pending order file</i></p> <p>Enter Y (yes) if the user can have a pending order file. Otherwise, enter N (no).</p>

**Datafill example**

The following example shows sample datafill for table CDCLOGON.

In the example, logon user name OPERATOR, associated with customer groups belonging to an owner with the name CARLING, can view and change all data owned by OPERATOR (CLASS is GENERAL) and can view all public data. A pending order file is enabled.

**MAP display example for table CDCLOGON**

USERNAME	OWNER	CLASS	POF
OPERATOR	CARLING	GENERAL	Y

**CDCOPTS****Table name**

Customer Data Change Line Option Table

**Functional description**

Table CDCOPTS lists the line options that are assigned to a customer group that has customer data change (CDC) capability.

If a customer group has no entry in table CDCOPTS, the CDC users that own a line assigned to that customer cannot add any options to the line.

For related information, refer to table OWNER.

**Datafill sequence and implications**

Table CUSTHEAD must be datafilled before table CDCOPTS.

**Table size**

0 to 4095 tuples

Memory is automatically allocated for table CDCOPTS.

**Datafill**

The following table lists datafill for table CDCOPTS.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CUSTGRP		alphanumeric (up to 16 characters) or blank	<i>Customer group</i> If this is the first record for the customer group, enter the name of the customer group that has customer data change (CDC) capability. If this is not the first record, leave this field blank.
OPTIONS		vector of up to 158 line options	<i>Option list</i> Enter the list of line options that can be assigned to the customer group. Separate each option with a single space. If less than 158 line options are required, end the list with a \$ (dollar sign).  <b>Note:</b> Value XXTRIG is not a valid option.

## CDCOPTS (end)

---

### Datafill example

The following example shows sample datafill for table CDCOPTS.

#### MAP display example for table CDCOPTS

CUSTGRP	OPTIONS
POTSDATA	( MDNNAME) \$

---

**CDCPHPAR**

---

**Table name**

Customer Data Change Packet Handler Parameter Table

**Functional description**

Table CDCPHPAR is a list of parameters, datafilled by the operating company, that allows customer data change (CDC) users to access the packet handler commands they own. Only the allowed parameters of these commands, as specified by the datafill of this table, are user changeable.

For further information about CDC, refer to table OWNTAB.

Table CDCPHPAR is initially datafilled with default values. The operating company can change these values.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table CDCPHPAR.

**Table size**

The table size is fixed at 267 tuples.

**CDCPHPAR (end)**

**Datafill**

The following table lists datafill for table CDCPHPAR.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
PARMOPT		see subfields	<i>Parameter option</i> This field consists of subfields PARMNAME and OPTION.
	PARMNAME	CUG, DC, DNA, LAPB, LAPD, PVC	Parameter name Enter the parameter option of the packet handler commands. <ul style="list-style-type: none"> <li>• CUG (closed user group)</li> <li>• DC (data change)</li> <li>• DNA (data network address)</li> <li>• LAPB (link access procedure balanced)</li> <li>• LAPD (link access procedure on the D-channel)</li> <li>• PVC (permanent virtual circuit)</li> </ul>
	OPTION	alphanumeric (up to 16 characters)	<i>Option</i> Enter the parameter name types associated with the option.
CHANGE		Y or N	<i>User changeability</i> Enter Y (yes) if the parameter is user-changeable. Otherwise, enter N (no).

**Datafill example**

The following example shows sample datafill for table CDCPHPAR.

**MAP display example for table CDCPHPAR**

PARMOPT CHANGE		
LAPB	LNKPROC	N

**CDCSOPT2****Table name**

Country direct carrier select options number 2

**Functional description**

Table CDCSOPT2 assigns the outpulsing when selecting a terminating carrier for country direct calls. This table is accessed if a match is not found in table CDCSOPTS.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table CDCSOPT2.

No cross-checks are provided for the ORIGCTRY and ORIGCARR fields since table CDCTRY and CDCARR use digit ranges and this table uses the actual country code and carrier ID.

**Table size**

0 to 10,000 tuples

**Datafill**

The following table lists datafill for table CDCSOPT2.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
ORIGCTRY		1 to 3 digits	<p>Originating country code. This is part of the key to the table. Enter an originating country code that is included in table CDCTRY field KEY.</p> <p>Three zeros correspond to zero country digits being signalled in the country direct call. Note that one zero is not equivalent to three zeros.</p>

**CDCSOPT2** (end)

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
ORIGCARR		1 to 4 digits	<p>Originating carrier code. This is part of the key to the table. Enter an originating carrier code that is included in table CDCARR field KEY.</p> <p>Four zeros in the ORIGCARR field correspond to zero carrier digits being signalled in the country direct call. Note that one zero is not equivalent to four zeros.</p>
CDCSOPT2		ALLOW or BLOCK	<p>Country direct carrier select options number 2. This field specifies outpulsing of the call. The values are:</p> <ul style="list-style-type: none"> <li>• ALLOW - Outpulse the existing translations: network prefix + country code + national number. Note that there is no carrier code, so the following network node (international gateway) needs to perform translations to select the carrier.</li> <li>• BLOCK - Disallow outpulsing. A display is presented on the operator screen.</li> </ul>

**Datafill example**

The following example shows sample datafill for table CDCSOPT2.

**MAP display example for table CDCSOPT2**

ORIGCTRY	ORIGCARR	CDCSOPT2
000	111	ALLOW
2	222	BLOCK
46	0000	ALLOW

**Table history**

**TOPS08.1**

This table was created by feature AF7021 in functionality Carrier Selection, ENSV0001.

---

**CDCSOPTS**

---

**Table name**

Country direct carrier select options

**Functional description**

Table CDCSOPTS determines outpulsing when selecting a terminating carrier for country direct (CDIR) calls. This table is accessed if a CDIR called number is found in table ZONEFOR. If no match is found, table CDCSOPT2 is accessed.

This table determines whether a call needs to use Global Competitive Access (GCA) processing. The table performs this action with a three-part key. The three-party key consists of the terminating party's zone, the originating country code, and the incoming carrier code determined from country direct processing.

**Datafill sequence and implications**

Table TOPSZONE must be datafilled before table CDCSOPTS.

**Table size**

0 to 100,000 tuples

*Note:* Although the table may have up to 100,000 total tuples, only 96,000 of them can utilize the substitution option.

**CDCSOPTS** (continued)**Datafill**

The following table lists datafill for table CDCSOPTS.

**Field descriptions (Sheet 1 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
TERMZONE		name from table TOPSZONE	Terminating zone. This field is part of the key to the table. Enter a terminating zone name defined in table TOPSZONE. The name in table TOPSZONE must be associated with an INDEX in the range of 0 to 256. A name with an index outside this range results in an error message..
ORIGCTRY		1 to 3 digits	<p>Originating country code. This field is part of the key to the table. Enter an originating country code that is included in table CDCTRY field KEY.</p> <p>Three zeros indicate that no country digits were signalled. Whereas, one or two zeros indicate that one or two zeros (respectively) were signalled.</p> <p><b>Note:</b> The originating country code is necessary when the carrier code is not signalled or when the same carrier number could be used by two different countries. If the country code is not relevant, a zero entry (000) may be used to ignore this option.</p>
ORIGCARR		1 to 4 digits	<p>Originating carrier code. This field is part of the key to the table. Enter an originating carrier code that is included in table CDCARR field KEY.</p> <p>Four zeros indicate that no carrier digits were signalled. Whereas, one, two, or three zeros indicate that one, two, or three zeros (respectively) were signalled.</p>

**CDCSOPTS** (continued)

## Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
CDCSOPTS		ALLOW, BLOCK, or SUBST (1-8 digits, 1-100 weighted distribution value)	Country direct carrier select options. This field specifies outpulsing of the call. The values are: <ul style="list-style-type: none"> <li>• ALLOW - Outpulse the existing translations: network prefix + country code + national number. Note that there is no carrier code, so the following network node (international gateway) needs to perform translations to select the carrier.</li> <li>• BLOCK - Deny outpulsing and release from the position. The call is not released even if the operator attempts to release the call before outpulsing. A message is presented on the operator screen.</li> <li>• SUBST - Replace the network prefix and country code as determined by tables CCTR and CTCODE. Datafill refinement VECTOR.</li> </ul>
	VECTOR	see subfields	Vector. This refinement is valid only when field CDCSOPTS = SUBST. This refinement consists of subfields DIGITS and WEIGHT. Up to 16 iterations of this refinement can be entered. Repeated substitution strings are allowed.

**CDCSOPTS** (continued)

## Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIGITS	1 to 8 digits	<p>Digits for substitution - This user defined value replaces the network prefix and country code. This value may contain a routing prefix, carrier code, service code, and so forth. The national number remains intact at all times. Thus, the substitution string and called national number are outpulsed. The substitution string plus national number must be 18 digits or less; otherwise, the national number is truncated and the call does not complete. For example, if the national number is 12 digits, the substitution string can only be 6 digits maximum.</p> <p>There are no limitations on the format of this field. An example 6 digit string (092 + XX + 4) for use with a 12 digit national number is the following:</p> <ul style="list-style-type: none"> <li>• 092 - Prefix to route a call from the TOPS switch through the DMS-100 switch to a DMS-300 switch</li> <li>• XX - 2-digits representing carrier code for use by a DMS-300 switch</li> <li>• 4 - Service code</li> </ul> <p><b>Note:</b> The TOPS switch does not validate the substitution string. For example, an invalid carrier code may be datafilled as part of the substitution string, and the TOPS switch will outpulse this string into the network. It is the responsibility of the other nodes in the network (for example the DMS-300 switch) to route a call with an invalid carrier selection string to the appropriate treatment. It is also the responsibility of the DMS-300 switch to route calls with substitution strings to the correct carriers, and to route calls without substitution strings (that is, the ALLOW option) to the correct carriers.</p>

**CDCSOPTS** (continued)**Field descriptions (Sheet 4 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
GCACALL	WEIGHT	1 to 100	Weighted distribution value - The SUBST option randomly selects the substitution string (field DIGITS) based upon this weighted value. The higher the weight, the more often the substitution string is used. All iterations of this weighted value in this tuple must add up to 100.
		Y or N	Global competitive access call. This new field indicates this country direct call should be processed by GCA. Enter Y to indicate processing by GCA. Enter N for no GCA processing.  When GCACALL = Y, the default CIC is selected based on the incoming trunk group in table TOPCATRK.

**Datafill example**

The following example shows sample datafill for table CDCSOPTS.

**MAP display example for table CDCSOPTS**

TERMZONE	ORIGCTRY	ORIGCARR	CDCSOPTS	GCACALL
BARBADOS	0	45	ALLOW	Y
BARBADOS	000	45	BLOCK	N
CARIBBEAN	42	111	BLOCK	N
CARIBBEAN	896	3333	SUBST (092611 100) \$	Y
JAMAICA	3	0000	SUBST (092241 70) (092341 30) \$	Y

In the above example, an originating carrier of 45 terminating to Barbados is allowed regardless of where the call originated, because an originating country was not signalled.

**Table history**  
**TOPS12**

Restriction added to field TERMZONE about the range in table TOPSZONE. This change is made by feature A59006827 in functionality Table LATANAME Expansion, OSB00001.

## **CDCSOPTS** (end)

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Even though design activities related to the feature LATA Screening Alternative modified table CDCSOPTS, this feature does not use the table to function.

### **TOPS11**

Field GCACALL is added by feature AF7576 in functionality Global Competitive Access II, GOS00007.

### **TOPS08.1**

This table was created by feature AF7021 in functionality Carrier Selection, ENSV0001.

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**CDCTRY**

---

**Table name**

Country Direct Country Codes Table

**Functional description**

Table CDCTRY defines billing restrictions, screen displays, and rating names for each Country Direct country of origin. A default country code tuple is provided.

If table CDACCESS, field CTRYCODE = Y, the digits following the access code in the Country Direct digit stream are used to access table CDCTRY. If CDACCESS, field CTRYCODE = N, the default tuple in CDCTRY is accessed.

**Datafill sequence and implications**

Tables CDCTRYRT and CDCTRYRT must be datafilled before table CDCTRY.

**Table size**

Table CDCTRY has a fixed size with 1000 tuples.

**CDCTRY** (continued)**Datafill**

The following table lists datafill for table CDCTRY.

**Field descriptions (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
KEY		see subfields	<p>Key. This field is the key to the table. It consists of subfields FROMDIG and TODIG.</p> <p>Due to system limitations, no two tuples can begin with the same digits, with different digit lengths, for the key. For example, there can not be a tuple 23 23 and a tuple 231 231 in the same table. There is no way to distinguish between an access code of 23 followed by a country code of 1, and an access code of 231. Access codes must be defined so that there is no need for an access code of 23 and 231.</p> <p>The key field cannot be changed. To change the key field (FROMDIG and TODIG), the tuple must be deleted, then re-added.</p> <p>If a range is datafilled (for example, 91 99 2 ALL 1 BARBRATE) and an attempt is made to change the fields for part of the range (for example, 93 93 2 CLGCARD 1 BARBRATE), the change affects the whole range (91 99 2 ALL 1 BARBRATE). If it is desired only to change key 93 93, then tuple 91 99 must be deleted and datafilled back as 91 92 2 ALL 1 BARBRATE, 93 93 2 CLGCARD 1 BARBRATE, and 94 99 2 ALL 1 BARBRATE.</p> <p>For tuples datafilled as ranges (TODIG is larger than FROMDIG), deleting part of the range causes the whole tuple to be deleted. For example, 91 99 2 ALL 1 BARBRATE is datafilled. Then an attempt is made to delete 91 94 2 ALL 1 BARBRATE. This causes the whole tuple (91 99 2 ALL 1 BARBRATE) to be deleted. In this case, tuple 95 99 2 ALL 1 BARBRATE must be added back in order to delete 91 94 2 ALL 1 BARBRATE.</p>
	FROMDIG	up to 18 digits (0 to 9)	From digits. Enter the lower end of the range for the country code digits signalled in the country direct digit stream to TOPS.

**CDCTRY** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	TODIG	up to 18 digits (0 to 9)	To digits. Enter the upper end of the range for the country code digits signalled in the country direct digit stream to TOPS. Also, see note above in subfield FROMDIG.
CTRYDIGS		1 to 3	Number of country code digits. When the country code is parsed from the Country Direct digit stream, the value of CTRYDIGS indicates how many digits to parse as the country code. When accessing the default tuple because table CDACCESS, field CTRYCODE = N, the value in this field is irrelevant, because no country code is parsed from the digit stream.
BILLOPT		Set of {CLGCARD, THIRD, COLLECT}, ALL, or NONE	Billing option. This field is the set of valid billing options for calls from the originating country.
CDCTRYNM		0 to 999	Country direct country name. This is an index into table CDCTRYNM to specify the name for operator screen displays on TOPS-MP and OPP compliant positions. The index must be previously datafilled in table CDCTRYNM.
CTRYRATE		name from table CDCTRYRT	Country rating name. Enter a rating name for the originating country. The rating name must be previously defined in table CDCTRYRT.

**Datafill example**

The following example shows sample datafill for table CDCTRY.

## CDCTRY (continued)

### MAP display example for table CDCTRY

KEY	CTRYDIGS	BILLOPT	CDCTRYNM	CTRYRATE
000 000	3	ALL	0	NOCTRY
069 069	3	ALL	1	BARBRATE
30 30	2	THIRD	2	PORTRATE
76 76	2	COLLECT	15	CHLRATE

In the above example, the first entry is the default tuple. This tuple may be changed but not deleted.

## Error messages

The following error messages apply to table CDCTRY.

### Error messages for table CDCTRY (Sheet 1 of 2)

Error message	Explanation and action
WHEN ADDING A TUPLE, PLEASE ENTER THE SAME NUMBER OF DIGITS FOR THE FROMDIG AND TODIG FIELDS. FOR EXAMPLE, ENTER 515 520 AND NOT 515 52.	This message is displayed if an attempt is made to add a tuple into CDCTRY and the number of digits in the FROMDIG and TODIG fields are not the same. The digits do not have to be the same, just the number of them.
THE NUMBER OF DIGITS MUST BE GREATER THAN ZERO.	This message is displayed if an attempt is made to add a tuple without entering any digits in the FROMDIG and, or, TODIG fields.
ERROR: TODIG FIELD LESS THAN FROMDIG	This message is displayed if an attempt is made to position on a tuple with the TODIG less than the FROMDIG. That is, erroneous values are entered for the position command.
TOO FEW DIGITS IN TODIG FIELD TO IDENTIFY RANGE. AT THIS POSITION, SPECIFY x DIGITS IN THE TODIG FIELD.	This message is displayed if, for example, 110 556 is datafilled and an attempt is made to position on 11 56.
TOO FEW DIGITS IN FROMDIG FIELD TO IDENTIFY RANGE. AT THIS POSITION, SPECIFY x DIGITS IN THE FROMDIG FIELD.	This message is displayed if, for example, 80 80 is datafilled and an attempt is made to position on 8 80.

**CDCTRY** (end)**Error messages for table CDCTRY (Sheet 2 of 2)**

<b>Error message</b>	<b>Explanation and action</b>
ATTEMPT TO POSITION ON TOO LARGE A RANGE. TRY SETTING TODIG FIELD TO x.	This message is displayed if, for example, 110 556 is datafilled and an attempt is made to position on 11 557.
TABLE CDCTRY IS FULL	This message is displayed if no more tuples are available in the table.
IMPROPER POSITIONING. COULD NOT WRITE CDCTRY TUPLE	This message is displayed if an attempt is made to add a tuple with a key that is partially encompassed in an existing entry. For example, if 901 910 is datafilled and an attempt is made to add 90 90. This gives an error because the TODIG of the tuple to be added is encompassed in the FROMDIG of the tuple already datafilled.
THIS WILL AFFECT TUPLE ENTRY FROM x TO x	This message is displayed if an attempt is made to change or delete a tuple with a key that is partially encompassed in an existing entry. For example, 90 99 is datafilled and an attempt is made to change or delete 90 94. Therefore, this attempt would affect 90 99. Note, tuple 90 94 is not datafilled, but key 90 99 is entered in the change or delete command.
TUPLE x IS NOT DATAFILLED IN TABLE CDCTRYNM	This message is displayed if an attempt is made to datafill an index in in field CDCTRYNM that is not present in table CDCTRYNM.

## Table history

### NA005

Table CDCTRY was introduced by functionality Auto Country Direct,  
ENSV0010.

## CDCTRYNM

---

### Table name

Country Direct Country Name Table

### Functional description

Table CDCTRYNM defines the country names used for operator screen displays on TOPS-MP and OPP compliant positions. All Country Direct country names must be datafilled in this table. A default tuple is provided.

### Datafill sequence and implications

Table CDCTRYNM must be datafilled before table CDCTRY.

### Table size

Table CDCTRYNM has a fixed size with 1000 tuples.

### Datafill

The following table lists datafill for table CDCTRYNM.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NAMEIDX		0 to 999	Name index. This is the index into the table. This value is sent to OPP compliant positions, indicating a value for the country of origin. Note, the position must contain parallel datafill to map the integer to the appropriate name.
CTRYNAME		up to 8 characters	Country name. This value is sent to TOPS-MP positions, indicating the country of origin. This value is used in table CDCTRY, field CDCTRYNM.

### Datafill example

The following example shows sample datafill for table CDCTRYNM.

**CDCTRYNM** (end)**MAP display example for table CDCTRYNM**

NAMEIDX	CTRYNAME
0	CTRYDIR
1	BARBADOS
2	PORTUGAL
15	CHILE

In the above example, the first entry is the default tuple. This tuple may be changed but not deleted.

**Error messages**

The following error messages apply to table CDCTRYNM.

**Error messages for table CDCTRYNM**

Error message	Explanation and action
NAMEIDX STILL IN USE. CHECK TABLE CDCTRY.	A country name cannot be deleted from table CDCTRYNM if it is still used in table CDCTRY. This error message is displayed if an attempt is made to delete a country name still in use.
CDCTRYNM DEFAULT TUPLE MAY NOT BE DELETED.	The default tuple in table CDCTRYNM may be changed, but not deleted. This error message is displayed if an attempt is made to delete the default tuple.

**Table history**  
**NA005**

Table CDCTRYNM was introduced by functionality Auto Country Direct, ENSV0010.

## CDCTRYRT

---

### Table name

Country Direct Country Rating Names Table

### Functional description

Table CDCTRYRT defines the rating names used to rate a Country Direct call on a country of origin basis. All Country Direct country rating names must be datafilled in this table. A default country rating name tuple, NOCTRY, is provided.

### Datafill sequence and implications

A country rating name must be defined in table CDCTRYRT before it can be datafilled in table CDCTRY, CDRATE, or CDRATEG.

### Table size

Table CDCTRYNM has a fixed size with 128 tuples.

### Datafill

The following table lists datafill for table CDCTRYRT.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CTRYRTNM		up to 16 characters	Country rating name. Enter the name used for rating. This value is used in tables CDCTRY, CDRATE, and CDRATEG.

### Datafill example

The following example shows sample datafill for table CDCTRYRT.

#### MAP display example for table CDCTRYRT

CTRYRTNM
-----
NOCTRY
BARBRATE
CHILRATE
PORTRATE

**CDCTRYRT** (end)**Error messages**

The following error messages apply to table CDCTRYRT.

**Error messages for table CDCTRYRT**

Error message	Explanation and action
CTRYRTNM STILL IN USE. CHECK TABLES CDCTRY, CDRATE, AND CDRATEG.	A country rating name cannot be delete from table CDCTRYRT if it is still used in table CDCTRY, CDRATE, or CDRATEG. This error message is displayed if an attempt is made to delete a rating name still in use.
DEFAULT RATING NAME MAY NOT BE DELETED.	The default country rate name, NOCTRY, may not be deleted. This error message is displayed if an attempt is made to delete default tuple NOCTRY.

**Table history****NA005**

Table CDCTRYRT was introduced by functionality Auto Country Direct, ENSV0010.

## CDRATE

---

### Table name

Country Direct Rate Table

### Functional description

Table CDRATE maps a country code rate name (from table CDCTRY) and a carrier rate name (from table CDCARR) to a calling tariff name (from table TARIFF). This table is used to rate Country Direct calls in a North American environment.

### Datafill sequence and implications

The following tables must be datafilled before table CDRATE.

- CDCTRYRT
- CDCARRRT
- TARIFF

*Note:* It is possible to delete a tuple from table TARIFF that is still in use by other tables. This leaves a “hole” in the other tables, including table CDRATE. Please use caution and take note of the warning messages when deleting tuples from table TARIFF.

### Table size

0 to 8192 tuples

Table CDRATE is a dynamically allocated.

**CDRATE** (end)**Datafill**

The following table lists datafill for table CDRATE.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	Key. This field is the key to the table. It consists of subfields CTRYRATE and CARRRATE.
	CTRYRATE	name from table CDCTRY, field CTRYRATE	Country rate. Enter the rating name for the call's country of origin, datafilled in table CDCTRY, field CTRYRATE.
	CARRRATE	name from table CDCTRY, field CARRRATE	Carrier rate. Enter the rating name for the call's carrier of origin, datafilled in table CDCARR, field CARRRATE.
CDTRF		name from table TARIFF	Country direct tariff. Enter a tariff name to be used for the given country rate name/carrier rate name combination. The tariff name must be defined in table TARIFF.

**Datafill example**

The following example shows sample datafill for table CDRATE.

**MAP display example for table CDRATE**

CTRYRATE	CARRRATE	CDTRF
NOCTRY	NOCARR	TRF_CD0
BARBRATE	CARR1RATE	TRF_CD3
BARBRATE	CARR2RATE	TRF_CD5

**Table history****NA005**

Table CDRATE was introduced by functionality Auto Country Direct, ENSV0010.

# CDRATEG

## Table name

Country Direct Rate Global Table

## Functional description

Table CDRATEG is used in a global operating system environment to map a country code rate name (from table CDCTRY) and a carrier rate name (from table CDCARR) to a schedule name (from table SSETNAME). This table is used to rate Country Direct calls in a GOS environment.

## Datafill sequence and implications

The following tables must be datafilled before table CDRATEG.

- CDCTRYRT
- CDCARRRT
- SSETNAME

## Table size

0 to 8192 tuples

Table CDRATE is a dynamically allocated.

## Datafill

The following table lists datafill for table CDRATEG.

### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	Key. This field is the key to the table. It consists of subfields CTRYRATE and CARRRATE.
	CTRYRATE	name from table CDCTRY, field CTRYRATE	Country rate. Enter the rating name for the call's country of origin, datafilled in table CDCTRY, field CTRYRATE.

**CDRATEG** (end)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CDSSET	CARRRATE	name from table CDCTRY, field CARRRATE	Carrier rate. Enter the rating name for the call's carrier of origin, datafilled in table CDCARR, field CARRRATE.
		name from table SSETNAME	Country direct schedule set name. Enter a schedule set name to be used for the given country rate name/carrier rate name combination. The schedule set name must be defined in table SSETNAME.

**Datafill example**

The following example shows sample datafill for table CDRATEG.

**MAP display example for table CDRATEG**

CTRYRATE	CARRRATE	CDSSET
NOCTRY	NOCARR	SSET_CD0
BARBRATE	CARR1RATE	SSET_CD3
BARBRATE	CARR2RATE	SSET_CD5

**Table history****NA005**

Table CDRATEG was introduced by functionality Auto Country Direct, ENSV0010.

## CDRCLSNM

---

### Table name

Call Detail Recording Class Names Table

### Functional description

Table CDRCLSNM lists the call data recording classes (field CDRCLASS) that table CDRSERVF (Call Detail Recording Service Feature) uses. Table CDRCLSNM must be complete before the use of CDRCLASS in table CDRSERVF occurs

See table CDRENTCD for additional information.

### Datafill sequence and meaning

You must enter data in table CDRSERVF before you enter data in table CDRCLSNM.

### Table size

128 class names

### Datafill

Datafill for table CDRCLSNM appears in the following table.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
VALUE		0 to 255	<i>Value.</i> Enter an integer that is not signed for each NAME. The name no call data recording class (NCDR) has the VALUE 0 (zero)  Entries out of the range specified for this field are not correct.
SYMBOL		alphanumeric (a maximum of 4 characters)	<i>Screening class name.</i> Enter the name that the operating company defines to represent the call data recording (CDR) class. The gateway trunk group(s) and table CDRSERVF use the CDR.

### Datafill example

Sample datafill for table CDRCLSNM appears in the following example.

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**CDRCLSNM** (end)

---

**MAP display example for table CDRCLSNM**

VALUE	SYMBOL
0	NCDR
1	GS2N
2	CC2D

## CDRCOMPL

### Table name

Call Detail Recording Completion Code Table

### Functional description

Table CDRCOMPL contains the values for the external completion code (EXTERNCC). The external completion code indicates the completion of the call or the failure of the call to complete. The external completion code depends on the internal completion code.

The operating company defines the external completion code values. These values appear in the call entry on the call data recorder tape. See table for these values.

See table CDRENTCD for additional information.

### List of internal completion codes (Sheet 1 of 9)

Completion code	Description
A_NUMBER_BARRED	Calling directory number (A-number) barred
CDR_ANNOUNCEMENT_MACH_TRBL	Announcement machine trouble
CDR_CALL_FAILED	Call-process failure
CDR_CLD_DISC	No identifiable trouble, called disconnect
CDR_CLG_DISC	No identifiable trouble, calling disconnect
CDR_DATA_ERROR	Datafill not correct or datafill not present
CDR_DIG_RCVR_NOISE_HIGH	High noise on digital MF receiver
CDR_DIG_RCVR_NOISE_MARGINAL	Marginal noise on digital MF receiver
CDR_DOUBLE_SEIZURE	Double seizure on last repeat attempt
CDR_DTR_CONGESTION	Request for digitone receiver denied
CDR_DTR_NOT_CONNECTED	Digitone receiver connection problem
CDR_ECHO_SUPP_CONGESTION	Request for echo-suppressor service circuit denied
CDR_ECHO_SUPP_NOT_CONN	Echo-suppressor service circuit not connected
CDR_EMERGENCY_ANN	Emergency announcement (network management controls)

**CDRCOMPL** (continued)**List of internal completion codes (Sheet 2 of 9)**

<b>Completion code</b>	<b>Description</b>
CDR_EXPECTED_STOP_TIME_OUT	Expected stop time-out exceeds sender time-out
CDR_FALSE_KP	False key pulse (a second KP received)
CDR_FALSE_START	False start (MF trunk)
CDR_HIT_DETECTED	Hit detected on trunk
CDR_INDECISION	Indecision (fluctuation) on digital MF receiver
CDR_INTEGRITY_FAILURE	Integrity check failure (integrity from the distant office)
CDR_INTEGRITY_LOST	Integrity lost on both planes message received by call processing
CDR_INVALID_ST_DIGIT	The ST digit received is not correct
CDR_LARGE_TWIST	Large_twist (digital MF RCVR)
CDR_MAX_CONN_ATTEMPTS	Maximum connection attempts
CDR_MAX_REPEAT_ATTEMPT	Repeat attempt failed
CDR_MFR_CONGESTION	Request for MFR denied
CDR_MFR_NOT_CONNECTED	MFR connection problem
CDR_MORE_THAN_TWO_FREQS	More than two frequencies (digital MF receiver)
CDR_MUTILATED_DIGIT	Mutilated digit on MF trunk
CDR_MUTILATED_PULSE	Mutilated digit on DP trunk
CDR_NETWORK_BLK_HVY_TRAFFIC	Network congestion
CDR_NIL_CODE	NIL completion code
CDR_NO_ANSWER	No identifiable trouble, an unanswered call
CDR_NO_CIRCUIT_AVAILABLE	No circuit available (all trunks busy)
CDR_NO_CONDBLK	No condense block available
CDR_NO_INTERDIGIT_PAUSE	No interdigit pause (digital MF receiver)
CDR_NO_START_DIAL	No start dial from distant end

**CDRCOMPL** (continued)**List of internal completion codes (Sheet 3 of 9)**

<b>Completion code</b>	<b>Description</b>
CDR_OUTGOING_GROUP_BUSY	No idle trunks in outgoing group
CDR_PARTIALDIAL	Partial dial time-out (for example, MF trunk no ST collection)
CDR_PERMANENT_SIGNAL	Permanent signal time-out (no digit)
CDR_PRE_ROUTE_ABANDON	Abandon before call routes
CDR_REPEAT_ATTEMPT_CANCELLED	The NWMGT cancels repeat attempts
CDR_REVERSED_TRUNK	Reversed trunk problem (no continuity or wrong polarity)
CDR_TEST_CALL	No identifiable trouble, test call
CDR_TEST_CALL_FAILED	Miscellaneous test-call failure
CDR_TRANS_CONDENSE_FAIL	No translation CONBLK available
CDR_TRANS_EXPAND_FAIL	Trans condense block time-out
CDR_TRUNK_RESET	Call processeing resets trunk
CDR_TRUNK_RESET_FAILED	Call processing attempt to reset trunk failed
CDR_TRUNK_SUPERVISION_ERROR	Confusion message received during call processing
CDR_UNEXPECTED_STOP_DIAL	Unexpected stop dial signal
CDR_VACANTCODE	Vacant code announcement (unassigned NNX)
INTER_DIGIT_TIMEOUT	For incoming trunks the specified time-out did not receive the expected digit
NO_DIG_RCVR	Request for UTR denied
N5CF_ANS_ACK_NOT_REC	Answer acknowledge not received
N5CF_ANS_ACK_NOT_REMOVED	Distant end did not remove answer acknowledgement
N5CF_ANS_NOT_REMOVED	Distant end did not remove answer signal
N5CF_BUSY_FLASH_ACK_NOT_REC	Busy flash acknowledgement not received

**CDRCOMPL** (continued)**List of internal completion codes (Sheet 4 of 9)**

<b>Completion code</b>	<b>Description</b>
N5CF_BUSY_FLASH_ACK_NOT_REM	Distant end did not remove busy flash acknowledgement
N5CF_BUSY_FLASH_NOT_REM	Distant end did not remove busy flash signal
N5CF_CLB_ACK_NOT_REMOVED	Distant end did not remove clear back acknowledgement
N5CF_CLB_NOT_REMOVED	Distant end did not remove clear back signal
N5CF_CLF_NOT_REMOVED	Clear forward not removed
N5CF_CLR_BACK_ACK_NOT_REC	Clear back acknowledgement not received
N5CF_CLR_FWD_REM_BEF_RG	Clear forward removed before release guard
N5CF_CSM_PROTOCOL_ERROR	A CSM protocol error
N5CF_FWD_TRANS_NOT_REM	Forward transfer not removed
N5CF_GLARE_ORIG_NOT_REM	Distant end did not remove seize signal after glare
N5CF_INVALID_INTERRUPT	Wrong peripheral processor interrupt
N5CF_NO_PAUSE_BET_TONES	Mandatory pause not present between tones
N5CF_ORIG_ABANDONED	Attempt to send PTS after origination abandon
N5CF_ORIG_NOT_ABANDONED	Distant end did not remove seize signal not removed
N5CF_PROT_FAIL_AFT_ANS	Protocol failure after answer
N5CF_PROT_FAIL_AFT_ANS_ACK	Protocol failure after answer acknowledgement
N5CF_PROT_FAIL_AFT_BSY_FLASH_ACK	Protocol failure after busy flash acknowledgement
N5CF_PROT_FAIL_AFT_BUSY_FLASH	Protocol failure after busy flash
N5CF_PROT_FAIL_AFT_CLR_BACK	Protocol failure after clear back
N5CF_PROT_FAIL_AFT_CLR_FWD	Protocol failure after clear forward
N5CF_PROT_FAIL_AFT_CLRBK_ACK	Protocol failure after clear back acknowledgement

**CDRCOMPL** (continued)**List of internal completion codes (Sheet 5 of 9)**

<b>Completion code</b>	<b>Description</b>
N5CF_PROT_FAIL_AFT_ORIG	Protocol failure after origination
N5CF_PROT_FAIL_AFT_SEIZE_ABAN	Protocol violation after removal of seize signal
N5CF_PROT_FAIL_AFTER_FT	Protocol failure after forward transfer
N5CF_PROT_FAIL_DUR_IDLE	Protocol failure during idle
N5CF_PTS_NOT_REC	Proceed to send signal not received from distant end
N5CF_PTS_NOT_REMOVED	Proceed to send signal the distant end did not remove
N5CF_PTS_REM_BEF_SEIZE	Proceed to send signal removed before removal of seize signal
N5CF_Q_OVERFLOW	Too many concurrent signals to process
N5CF_RLS_GRD_NOT_REC	Release guard not received
N5CF_RLS_GRD_NOT_REM	Release guard not removed
N5CF_SEIZE_NOT_REMOVED	Near end did not remove seize signal
N6_ADDRESS_INCOMPLETE	Address incomplete message received
N6_CALL_FAILED	Call failure message received from ST
N6_CIRCUIT_GROUP_CONGESTION	Circuit group congestion message received
N6_CLEAR_FORWARD_NOT_REC	Clear forward not received
N6_CONFUSION	Confusion from preceding exchange
N6_CONT_SIG_NOT_RECEIVED	No.6 continuity signal not received
N6_CONT_TONE_NOT_REMOVED	No.6 continuity tone not removed
N6_CONTINUITY_NOT_DETECTED	No.6 trunk failed to detect continuity
N6_IC_CIRCUIT_RESET	No.6 IC TRK reset from far end
N6_LINE_OUT_OF_SERVICE	Line out of service message received
N6_NATIONAL_NET_CONGESTION	National network congestion message received
N6_NO_ACK_TO_RESET_CIRCUIT	No acknowledgement to reset circuit received

**CDRCOMPL** (continued)**List of internal completion codes (Sheet 6 of 9)**

<b>Completion code</b>	<b>Description</b>
N6_NO_SIG_ROUTE	All no.6 signaling routes are down
N6_OG_CIRCUIT_RESET	No.6 OG TRK reset from far end
N6_PROTOCOL_FAILURE	No.6 message protocol violation
N6_RELEASE_GUARD_NOT_REC	Release guard not received
N6_SEIZE_FAILURE	The ST cannot send IAM on link
N6_ST_FAILURE	No.6 signaling terminal has failed
N6_STP_MESSAGE_REFUSAL	No.6 STP has refused message
N6_SUBSCRIBER_BUSY	Subscriber busy message received
N6_SUBSCRIBER_TRANSFERRED	Subscriber transferred received
N6_SWITCH_EQUIP_CONGESTION	Switch equipment congestion message received
N6_VACANT_NATIONAL_NUMBER	Vacant number message received
N7_UNALLOCATED_NUMBER	Unallocated number
N7_NO_ROUTE_TO_TRANSIT_NET	No route to specified transit network
N7_NO_ROUTE_TO_DESTINATION	No route to destination
N7_SEND_SPECIAL_INFO_TONE	Send special information tone
N7_MISDIALLED_TRUNK_PREFIX	Misdialled trunk prefix
N7_FORCED_RELEASE	Forced release
N7_NORMAL_CALL_CLEARING	Normal call clearing
N7_SUBSCRIBER_BUSY	Subscriber busy
N7_NO_USER_RESPONDING	No user response
N7_NO_ANSWER_FROM_USER	No answer from user (user alerted)
N7_CALL_REJECTED	Call rejected
N7_NUMBER_CHANGED	Number changed
N7_DESTINATION_OUT_OF_ORDER	Destination out of order

**CDRCOMPL** (continued)**List of internal completion codes (Sheet 7 of 9)**

<b>Completion code</b>	<b>Description</b>
N7_ADDRESS_INCOMPLETE	Address incomplete
N7_FACILITY_REJECTED	Facility rejected
N7_NORMAL_UNSPECIFIED	Normal call clearing unspecified
N7_CIRCUIT_GROUP_CONGESTION	Circuit group congestion
N7_CIRCUIT_OR_SWITCH_CONG	Circuit group or switch equipment congestion
N7_NATIONAL_NET_CONGESTION	National network congestion
N7_TEMPORARY_CALL_FAILURE	Temporary call failure
N7_SWITCH_EQUIP_CONGESTION	Switching equipment congestion
N7_USER_INFO_DISCARDED	User information discarded
N7_CHANNEL_UNAVAILABLE	Requested channel unavailable
N7_NET_RESOURCE_UNAVAILABLE	Network resource unavailable
N7_FACILITY_NOT_SUBSCRIBED	Requested facility not requested
N7_DIGITAL_PATH_NOT_PROVIDED	Digital path not provided
N7_ACCESS_BARRED	Access barred
N7_INCOMING_CALL_BARRED	Incoming calls barred within CUG
N7_BEARER_CAP_NOT_AUTHORIZED	Bearer capability not authorized
N7_BEARER_CAP_NOT_AVAILABLE	Bearer capability not currently available
N7_SERVICE_NOT_AVAILABLE	Service/option not available unspecified
N7_BEARER_CAP_NOT_IMPLEMENTED	Bearer capability not implemented
N7_FACILITY_NOT_IMPLEMENTED	Requested facility not implemented
N7_RES_DIG_INFO_B_CAP_AVAIL	Only restricted digital information bearer capability is available
N7_SERVICE_NOT_IMPLEMENTED	Service or option not implemented-unspecified
N7_INVALID_CALL_REF_VALUE	Invalid call reference value
N7_USER_NOT_MEMBER_OF_CUG	User not member of CUG

**CDRCOMPL** (continued)**List of internal completion codes (Sheet 8 of 9)**

<b>Completion code</b>	<b>Description</b>
N7_INCOMPATIBLE_DESTINATION	Incompatible destination
N7_INVALID_TRANSIT_NET_SELECT	Invalid transit network selection
N7_INVALID_MESSAGE	Invalid message-unspecified
N7_MSG_TYPE_NONEXISTENT	Message type nonexistent or not implemented
N7_PARM_NONEXISTENT_DISCARDED	Parameter nonexistent or not implemented-discarded
N7_INVALID_PARAMETER_CONTENTS	Invalid parameter contents
N7_RECOVERY_TIMER_EXPIRY	Recovery on timers expiry
N7_PARM_NONEXISTENT_PASSED_ON	Parameter nonexistent or not implemented-passed on
N7_PROTOCOL_ERROR	Protocol error-unspecified
N7_INTERWORKING_UNSPECIFIED	Interworking-unspecified
R2_CONGESTION	Congestion message received
R2_INTL_CONGESTION	International congestion
R2_LINE_OUT_OF_ORDER	Directory number out of order
R2_NO_SEIZE_ACK	No seize_acknowledge signal received
R2_NUM_CHANGED	Called number changed
R2_NUM_UNALLOCATED	Unallocated number
R2_OUTPULSE_TIMEOUT	For outgoing trunk - a compelled tone has not been received in a specified time-out
R2_PROT_FAIL_AFT_ANSWER	Protocol failure after answer
R2_PROT_FAIL_AFT_SEIZE_ACK	Protocol failure after seize_acknowledge
SIGNAL R2_PROT_FAIL_AFT_SEIZE	Protocol failure after seize state
R2_SUBSCRIBER_BUSY	Subscribers busy message received
R2_TONE_OFF	Far end stops sending the tone
R2_TONE_ON	Far end keeps sending the tone

**CDRCOMPL** (continued)**List of internal completion codes (Sheet 9 of 9)**

Completion code	Description
R2_UNDEFINED_SIGNAL	Received MFC signal has no interpretation
R2_UNEXPECTED_SIGNAL	Received MFC signal is unexpected in the current context

**Datafill sequence and meaning**

You do not need to enter data in other tables before you enter data in table CDRCOMPL.

**Table size**

172 internal completion codes

**Datafill**

Datafill for table CDRCOMPL appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
INTERNCC		alphanumeric	<i>Internal completion code.</i> Enter one of the values in from the table in this section. This entry specifies if the call completed or failed. This entry specifies how the call completed or failed.
EXTERNCC		000 to 999	<i>External completion code.</i> Enter the completion code for downstream processing purposes. This entry appears in the call entry on the CDR tape. The operating company defines this entry.

**Datafill example**

Sample datafill for table CDRCOMPL appears in the following example.

**CDRCOMPL** (end)

**MAP display example for table CDRCOMPL**

INTERNCC	EXTERNCC
CDR_NIL_CODE	000
CDR_NO_ANSWER	001
CDR_FALSE_START	014
N5CF_NO_PAUSE_BET_TONES	045

## CDRENTCD

---

### Table name

Call Detail Recording Entry Code Table

### Overview

Table CDRENTCD is a member of the call detail recording tables. The complete list of call detail recording tables appears in the following table.

#### Call detail recording tables

Title of table	Table name
Call Detail Recording Entry Code	CDRENTCD
Call Detail Recording Service Feature	CDRSERVF
Call Detail Recording Completion Code	CDRCOMPL
Call Detail Recording Class Names	CDRCLSNM

Call detail recording (CDR) provides a method to use and manipulate devices that record call data. The Device Independent Recording Package (DIRP) provides a method to record the CDR data. The DIRP provides a method to manipulate and modify the states of the recording devices. The capability to record data on disk and tape is available.

The DIRP commands replace the CDR device control commands to record data. These control commands can mount or assign tapes. Use the DIRP commands at the MAP level to manipulate the device of the CDR subsystem.

### Functional description

Table CDRENTCD contains the values for field ENTICODE (entry code). The entry code indicates the call type. The type of call (field TYPCALL), the international service call direction (ISCDIR) and the translation system (TRANSYS) determine the entry code.

Entry code values that the operating company defines appear in the call entry on the call data recorder tape.

### Datafill sequence and meaning

You do not need to enter data in other tables before you enter data in table CDRENTCD.

**CDRENTCD** (continued)**Table size**

The system allocates memory for 20 tuples. Each tuple corresponds to one entry code key.

**Datafill**

The datafill for table CDRENTCD appears in the following table.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
ENTCDKEY		see subfield	<i>Entry code key.</i> This field contains subfield CDR.
	CDR	see subfield	<i>Call detail recording.</i> This field contains subfield CALLTYPE, ISCDIR, and TRANSYS.
	CALLTYPE	DD, GVPN, IDA, IDCD, IGA, IVPN, I800, OA, SVPN	<p><i>Type of call.</i> Enter the type of call.</p> <ul style="list-style-type: none"> <li>• DD (direct dial)</li> <li>• GVPN (global virtual private network [VPN])</li> <li>• IDA (international directory assistance)</li> <li>• IDCD (international dial carrier direct)</li> <li>• IGA (international general operator assistance)</li> <li>• IVPN (international VPN)</li> <li>• I800 (international 800 service calls)</li> <li>• OA (operator assisted)</li> <li>• SVPN (VPN calls that use standard translations) (feature package NTXK08AA [Service Screening Destination] must be present in the switch)</li> </ul> <p><b>Note:</b> Entries N and NISC are not correct entries for this field.</p>
	ISCDIR	I, N, O	<i>International service call direction.</i> Enter the international service call (ISC) direction. Enter I (incoming), O (outgoing), or N (field is ignored).

**CDRENTCD** (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRANSYS	IN, NA, NO	<p><i>Translation system.</i> Enter the type of translation system:</p> <ul style="list-style-type: none"> <li>• IN (international)</li> <li>• NA (national)</li> <li>• NO (call route directly from the international pretranslator)</li> </ul> <p><b>Note:</b> An entry of IP is not correct for this field.</p>
ENTCODE		numeric (two digits) (00 to 99)	<p><i>Entry code.</i> Enter the entry code for downstream processing purposes. This entry appears in the call entry on the CDR tape. The operating company defines this entry.</p>

**Datafill example**

Sample datafill for table CDRENTCD appears in the following example.

**MAP example for table CDRENTCD**

ENTCDKEY	ENTCODE
DD N NA	01

**Table history**

**BCS36**

Subfield CDR was added in BCS36.

**CDRSERVF****Table name**

Call Detail Recording Service Feature Table

**Functional description**

Table CDRSERVF contains the values the system allows for the service feature (field SERVFEAT). Field SERVFEAT contains four digits. The first two digits indicate the class of the incoming trunk. The last two digits indicate the class of the outgoing trunk. The class of the originating trunk and terminating trunk determine the service feature values.

The operating company defines the service feature value. The service feature appears in the call entry on the call data recorder (CDR) tape.

See table CDTENTCD for additional information.

**Datafill sequence and meaning**

You do not need to enter data in other tables before you enter data in table CDRSERVF.

**Table size**

128 CDR classes

**Datafill**

Datafill for table CDRSERVF appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CDRCLASS		alphanumeric (a maximum of four characters)	<i>Call data recorder class.</i> Enter the trunk group class. You can assign a maximum of 128 different classes. System use requires 16 of these classes. These 16 classes include NCDR, TI, TONE, and ANN. The operating company can define 112 classes.
SERVFEAT		0000 to 9999	<i>Service feature.</i> Enter the service feature. The first two of the four digits represent the calling party class of service or class mark. The last two digits represent the called party class of service or class mark. This entry appears in the call entry on the CDR tape. The operating company defines this entry.

## CDRSERVF (end)

---

### Datavill example

Sample datavill for table CDRSERVF appears in the following example.

### MAP display example for table CDRSERVF

CDRCLASS	SERVFEAT
----------	----------

---

NCDR	0000
------	------

TONE	0004
------	------

A1IA	1200
------	------

---

**CFFPDPLN**

---

**Table name**

Call Forward Fraud Prevention Dial Plan

**Functional description**

Table CFFPDPLN is used to define dial plan restrictions on an office-wide basis. These dial plan restrictions can be overridden for each line through line option CFFPOVR.

Table CFFPDPLN can have a maximum of 15 tuples (one for each call forwarding type, and one for all the types). The default tuple, which is applicable to all the call forwarding types, restricts forward-to DNs corresponding to dial plan codes IDDD, FGB, and COIN.

**Datafill sequence and implications**

Table CFFPDPLN must be datafilled before table CFFPTYPE (Call Forward Fraud Prevention Type).

**Table size**

1 through 15 tuples

**CFFPDPLN** (continued)**Datafill**

The following table lists datafill for table CFFPDPLN.

**Field descriptions (Sheet 1 of 4)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
DPLNIDX		1 through 15 alphanumeric characters	<p><i>Dial plan index.</i> This field specifies the entry related to the dial plan code restrictions. This entry is referenced by table CFFPTYPE to determine the dial plan code restrictions that apply to the call forwarding types specified in table CFFPTYPE.</p> <p><b>Note 1:</b> When an attempt is made to delete a tuple in this table that is referenced by table CFFPTYPE, an error message is displayed that indicates the tuple is referenced by another table, and cannot be deleted.</p> <p><b>Note 2:</b> Avoid using special characters such as !, @, #, \$, %, &amp;, and * for the dial plan index. Using special characters for the dial plan index may cause problems to position on a tuple, unless they are between single quotes.</p>
IDDD		Y or N	<p><i>International Direct Distance Dialing.</i> This field is used to indicate whether international 011+ type dial plans are to be restricted. When N is entered, these dial plans are not restricted. The default value is Y, which indicates these dial plans are restricted and cannot be used as forward-to DNs.</p>
FGB		Y or N	<p><i>Feature Group B.</i> This field is used to indicate whether 1+950+WXXX type dial plans are to be restricted. When N is entered, these dial plans are not restricted. The default value is Y, which indicates these dial plans are restricted and cannot be used as forward-to DNs.</p>

**CFFPDPLN** (continued)**Field descriptions (Sheet 2 of 4)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
INTERTOL		Y or N	<i>InterLATA toll.</i> This field is used to indicate whether interLATA toll type dial plans are to be restricted. When Y is entered, these dial plans are restricted, therefore, cannot be used as forward-to DNs. The default value is N, which indicates these dial plans are not restricted.
INTRATOL		Y or N	<i>IntraLATA toll.</i> This field is used to indicate whether intraLATA toll type dial plans are to be restricted. When Y is entered, these dial plans are restricted, and cannot be used as forward-to DNs. The default value is N, which indicates these dial plans are not restricted.
COIN		Y or N	<i>Coin.</i> This field is used to indicate whether intraswitch calls terminating at coin lines with an LCC of CCF, CDF, CSP, CFD, ZMD, or ZMZPA are to be restricted. When N is entered, these calls are not restricted. The default value is Y, which indicates these calls are restricted.
I500		500 through 599	<i>Information 500.</i> This field is used to specify which 500-type dial plans (for example, 1+500-NXX-XXXX) are to be restricted. A maximum of 15 entries is allowed. The default value is \$, which indicates an empty list.
I700		700 through 799	<i>Information 700.</i> This field is used to specify which 700-type dial plans (for example, 1+700-NXX-XXXX) are to be restricted. A maximum of 15 entries is allowed. The default value is \$, which indicates an empty list.
I800		800 through 899	<i>Information 800.</i> This field is used to specify which 800-type dial plans (for example, 1+800-NXX-XXXX) are to be restricted. A maximum of 15 entries is allowed. The default value is \$, which indicates an empty list.

**CFFPDPLN** (continued)

---

**Field descriptions (Sheet 3 of 4)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
I900		900 through 999	<i>Information 900.</i> This field is used to specify which 900-type dial plans (for example, 1+900-NXX-XXXX) are to be restricted. A maximum of 15 entries is allowed. The default value is \$, which indicates an empty list.

**CFFPDPLN** (continued)

## Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
N11		111, 211, 311, 411, 511, 611, 711, 811, 911	<p><i>N11</i>. This field is used to specify which N11-type dial plans are to be restricted. The default value is \$, which indicates an empty list.</p> <p><b>Note:</b> If the forward-to DN is a 3-digit N11 extension number that extends to a 7-digit DN, then the CFPE feature finds the selector in table IBNXL A. If the selector is extn_sel, bypass the N11 checking.</p>
NPANXX		Vector of 3 or 6 digits; 000-999, 000000-9999 99, or XXX000-XXX 999	<p><i>NPANXX</i>. This field is used to specify particular NPAs or NPANXX combination dial plans that are to be restricted. A maximum of 15 entries is allowed. The default value is \$, which indicates an empty list.</p> <p>The NPA portion of NPANXX allows for a wild card value of XXX. When XXX is specified, CFFP screens the calls based on the NXX value and ignores the NPA portion. For example, when XXX is entered for the NPA, and the value of NXX is 555, CFFP screens all DNs that have an NXX of 555 regardless of the NPA. (N11-type numbers cannot be used in the NXX portion of XXXNXX.)</p> <p>CFFP validates DNs with dial plans entered in field NPANXX for toll and local calls. In the case of a 7-digit toll call, reverse translations is performed to determine the NPA.</p> <p><b>Note 1:</b> If the forward-to DN is an extension number and the selector in table IBNXL A is extn_sel, the CFPE feature does not perform NPANXX validation.</p> <p><b>Note 2:</b> If restricting local calls is required, specify the dial plans to be restricted using XXXNXX. This accounts for local calls made using 7- or 10-digit dialing. For example, by entering XXX624 in field NPANXX, local calls that are dialed using NPA-624-XXXX or 624-XXXX are restricted.</p>

## CFFPDPLN (continued)

### Error messages

There are standard DMS table control error messages. Call Forward Prevention Enhancements (CFPE) and Call Forward Fraud Prevention (CFFP) have specific error messages. They are displayed when attempting to datafill table CFFPDPLN. These messages are provided in the following table.

#### Error message for table CFFPDPLN

Message
MEMORY ALLOCATED PROBLEM
TUPLE NOT UPDATED - MULTIPLY - DEFINED DNS
TUPLE NOT DELETED - INDEX IS REFERENCED BY TABLE CFFPCTYPE
VECTOR OF 3 OR 6 DIGITS: 000-999, 000000-999999, XXX000-XXX999
TUPLE NOT FOUND - UNABLE TO ACCESS TABLE CFFPDPLN DUE TO UNDEFINED INDEX
TUPLE NOT UPDATED - FIELD NPANXX MUST BE 3 OR 6 DIGITS
TUPLE NOT UPDATED - ILLEGAL DN IN NPANXX FIELD

### Datafill example

The following example shows sample datafill for table CFFPDPLN.

#### MAP display example for table CFFPDPLN

```

>CFFPDPLN

DPLNIDX  IDDD  FGB  INTERTOL  INTRATROL  COIN  I500
I700     I800     I900     N11         NPANXX

-----
DEFAULT  Y      Y      N          N          Y   (500) $
(700) $ (800 888) $ (900) $ (911 411) $ (613625) $
    
```

### Table history

#### NA009

Table CFFPDPLN was modified to increase the maximum number of tuples to 15. The additional Call Forwarding (CFW) types for centrex and POTS agents are supported through this table.

---

**CFFPDPLN** (end)

---

**NA008**

Table CFFPDPLN was introduced for the CFFP feature to support RES agents.

**Supplementary information**

A dump and restore of table CFFPDPLN must occur before a dump and restore of table CFFPTYPE.

## **CFFPTYPE**

---

### **Table name**

Call Forward Fraud Prevention Type

### **Functional description**

Table CFFPTYPE is used to specify the RES, Centrex, and POTS programmable Call Forwarding (CFW) types with restricted dial plans. Each RES, Centrex, and POTS programmable CFW type has an index entry pointing to a tuple in table CFFPDPLN. Dial plan restrictions are defined in table CFFPDPLN.

These dial plan restrictions can only be defined on an office-wide basis. Table CFFPTYPE has one tuple with the key field. This key field, used to access this table, is set to the value OFFICE.

By default, table CFFPTYPE contains tuple OFFICE (ALL DEFAULT) \$. This indicates that all RES, Centrex, and POTS Programmable CFW types have the dial plan restrictions defined for the DEFAULT entry. This entry is located in field DPLNIDX of table CFFPDPLN.

Use the CHA (change) command to modify the information in the tuple.

### **Datafill sequence and implications**

Table CFFPTYPE must be datafilled after table CFFPDPLN.

### **Table size**

1 tuple

**CFFPTYPE** (continued)**Datafill**

The following table lists datafill for table CFFPTYPE.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield	Entry	Explanation and action
KEY		OFFICE	<p><i>Key.</i> This field is set to OFFICE since only office-wide dial plan restrictions can be defined.</p> <p>The OFFICE tuple cannot be deleted. When an attempt is made to delete this tuple, an error message is displayed.</p>
TYPEIDX		List of call forward types and associated entry.	<p><i>Type index.</i> This field is used to specify one or more RES, Centrex, and POTS programmable CFW types. Dial plan restrictions are applied to these CFW types. Their associated entry points to a tuple in table CFFPDPLN that defines the dial plan restrictions.</p>

**CFFPTYPE** (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
TYPEIDX (continued)		<p>The valid CFW types for RES are CFW/C, UCFW, CFBL, CFDA, CFRA, and SCF.</p> <p>Valid CFW types for POTS are CFW/C and UCFW.</p> <p>For Centrex, valid CFW types are CFRA, CFD, CFU, CFB, CFK, and SCF.</p> <p>The value of the entry associated with the call forward type is dependent on the datafill in table CFFPDPLN.</p>	<p>The default value is (ALL DEFAULT). Value ALL cannot be deleted; when an attempt is made to delete this value, an error message is displayed.</p> <p>Entry (ALL DEFAULT) indicates all RES, Centrex, and POTS programmable CFW types have dial plan restrictions defined for entry DEFAULT. This entry is in table CFFPDPLN. ALL can be associated with any index entry specified in table CFFPDPLN.</p> <p><b>Note:</b> Please note the following acronyms: Call Forward All Calls (CFW/C) Usage Sensitive Call Forwarding (UCFW) Call Forward Busy Line (CFBL) Call Forwarding Don't Answer (CFDA) Call Forwarding Remote Access (CFRA) Selective Call Forwarding (SCF) Call Forwarding Don't Answer (CFD) Call Forward Universal (CFU) Call Forward Busy (CFB) Call Forward Universal Per Key</p>

**CFFPTYPE** (end)**Error messages**

CFFP error messages that are displayed when attempting to datafill table CFFPTYPE are provided in the following table.

**Error message for table CFFPTYPE**

Message
TUPLE NOT UPDATED - MULTIPLY - DEFINED CFW TYPE
CANNOT ADD TUPLE - OPERATION NOT PERMITTED
CANNOT PERFORM OPERATION
TUPLE NOT DELETED - OFFICE TUPLE IS MANDATORY
TUPLE NOT UPDATED - DEFAULT TYPE ALL IS MANDATORY

**Datafill example**

The following example shows sample datafill for table CFFPTYPE.

**MAP display for table CFFPTYPE**

CFFPTYPE	
KEY	TYPEIDX
OFFICE (ALL2) (CFW DEFAULT) (CFRA DEFAULT) (UCFW DEFAULT)	(SCF DEFAULT) \$

**Table history****NA009**

Table CFFPTYPE was modified to support additional CFW types for CENTREX and POTS agents.

**NA008**

Table CFFPTYPE was introduced for the Call Forward Fraud Prevention (CFFP) feature.

## CFIBDATA

### Call Forward Interface Busy Data

Table CFIBDATA is used to store information about the remote directory numbers (DN) to which the call is forwarded. Provision one remote DN for each of the bearer capabilities that this feature supports.

### Datafill

The table that follows lists datafill for the CFIBDATA table.

#### Field descriptions

Field	Subfield	Entry	Explanation and action
CFIBID		A string of up to 16 characters	CFIB identifier This identifier is specified in table DNROUTE for a directory number (DN) that subscribes to the CFIB option.
RDNSPCH		DN with a maximum of 15 digits in length	This is the DN to which the switch forwards the call if the incoming bearer capability is circuit-mode speech.
RDN3AUD		DN with a maximum of 15 digits in length	This is the DN to which the switch forwards the call if the incoming bearer capability is circuit-mode 3.1 KHz audio.
RDN64KUD		DN with a maximum of 15 digits in length	This is the DN to which the switch forwards the call if the incoming bearer capability is circuit-mode unrestricted digital information (64 kbit/s).
RDNUDAD		DN with a maximum of 15 digits in length	This is the DN to which the switch forwards the call if the incoming bearer capability is circuit-mode unrestricted digital information adapted from 56 kbit/s to 64 kbit/s.

### Datafill example

The figure that follows shows sample datafill for the CFIBDATA table.

**CFIBDATA** (continued)**MAP display example for table CFIBDATA**

CFIBID	RDNSPCH	RDN3KAUD	RDN64KUD	RDNUDAD
CFIB1	5551000	5551007	7915551111	8015551003

**Supplementary information**

The one night process (ONP) dumps and restores data. The CFIBDATA table is dumped and restored before table DNROUTE.

**CFIB error messages**

An attempt to add a CFIB tuple when the maximum number of DNs provisioned with CFIB has been reached (10, 000) produces the following error message:

```
THE MAXIMUM NUMBER OF 10000 VIRTUAL DNs WITH CFIB HAS BEEN REACHED
```

An attempt to add a CFIB tuple in table DNROUTE that has a CFIBID that is not provisioned in table in table CFIBDATA produces the following error message:

```
THE ENTERED CFIBID MUST BE PROVISIONED IN CFIBDATA
```

An attempt to add a CFIB tuple in table DNROUTE that has an invalid route table or index, produces the following error message:

```
THE ENTERED ROUTE IS INVALID.
THE ROUTE IS NOT PROVISIONED IN TABLE <specified table>.
```

An attempt to add a CFIB tuple to table DNROUTE with IRTE as the routing table produces the following error message:

```
IRTE IS NOT SUPPORTED FOR CFIB.
```

## **CFIBDATA** (end)

---

An attempt to position on a CFIB tuple in table DNROUTE that has a CFIBID that is out of range may corrupt table CFIBDATA and produce the following error message:

```
CANNOT FIND CFIBID IN CFIBDATA-DATA CORRUPTED.
```

An attempt to add a CFIB tuple to table DNROUTE with RRTE as the routing table produces the following error message:

```
RRTE IS NOT SUPPORTED FOR CFIB.
```

An RDNSPCH that is not a DN with digits 0–9, produces the following error message:

```
The DN for RDNSPCH must be digits 0-9.
```

An RDNSKAUD that is not a DN with digit 0–9, produces the following error message:

```
The DN for RDN3KAUD must be digits 0-9.
```

### **Table history**

#### **NA013**

Table CFIBDATA was introduced in NA013.

---

**Table name**

Regular and Remote Call Forwarding Table

**Functional description**

Feature Call Forwarding (CF) allows a subscriber to have incoming calls to a station automatically forwarded to a predetermined telephone number. The station corresponding to the dialed number is referred to as the base station; the number to which calls are forwarded is referred to as the remote station.

The regular CF subscriber pays a set rate for a specified period of time for unlimited use of CF. The Call Forwarding Usage Sensitive Pricing (CFUSP) feature allows the subscriber to pay for every activation of CF.

In the case of regular CF the base station is a physical entity while in the case of Remote CF (RCF), the base station is physically nonexistent. Feature RCF allows a business subscriber to have a local directory number (DN) that is not associated with an actual station. Calls to that local DN can be routed to the remote station without the caller being billed for the forwarded portion of the call. The toll charge is billed to the business subscriber.

Table CFW enables the plain ordinary telephone services (POTS) subscriber to use features CF and RCF with the common carrier of his choice, to any valid DN of up to 30 digits (including the 10XXX or 101XXXX prefix digits signifying the carrier). This DN length allows forwarding to an international DN.

The Suspend and Restore Remote Call Forward Lines feature applies the existing service order commands SUS (suspend) and RES (restore) to Remote Call Forwarding (RCF) lines. This feature allows an RCF subscriber to temporarily suspend service to a line without having the operating company delete and reassign an RCF DN.

**Note:** Calls can also be forwarded using the CFWREP command interpreter (CI). This feature allows updates to CFW and CFX tables during image dumps. If the directory number corresponding to the base station (FROM\_DN) and the directory number corresponding to the remote station (TO\_DN) are entered using CFWREP CI, the CFW and CFX tables are updated. The CFWREP CI functions only if it has been activated through Software Optionality Control (SOC). If a user attempts to use the feature, and the feature has not been activated through SOC, the user will receive an error message.

## CFW (continued)

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### Call Forwarding - fixed and subscriber activated

The restrictions of POTS CF allowing only the subscriber to use the primary inter-LATA (local access and transport area) carrier (PIC) and limiting the forward-to DN to ten digits no longer apply. For regular CF, the subscriber activates the feature by dialing 72# plus one of the following sequences with the results shown in the following:

- (1/011)# # digits routes through the subscriber's PIC or in an equal access office, the default carrier
- 10XXX (1/011) digits routes through the carrier specified by XXX

The digits can represent a non-prefix (NP) local call, a direct dialed (DD) domestic or international call. NP calls are routed through the Bell operating company. In non-equal access end offices (non-EAEO), the call is routed by the route in table HNPACONT. For fixed CF calls done by service orders, a carrier is selected by entering the (1/011)# + # digits or 10XXX# + #(1/011)# + # digits for field FWDDN. The subscriber dials 73# to deactivate CF.

### Call Forwarding Usage Sensitive Pricing

The Call Forwarding Usage Sensitive Pricing (CFUS) feature is available only to single-party POTS lines in a Bellcore automatic message accounting (AMA) format (BAF) office. CFUSP is available if feature package NTX045AA (Usage Sensitive Pricing [USP Bellcore Format]) is present and the office parameter USP\_ENABLED is set to Y (yes) in table OFCENG.

Feature CFUSP allows the subscriber to pay for every activation of feature CF. The regular CF subscriber pays a flat rate for unlimited usage over a contracted period of time.

The subscriber dials 72# to add the CFUSP feature and dials 73# to delete feature CFUSP. If office parameter USP\_ENABLED is set to Y in table OFCENG, and the subscriber dials 72#, table CFW is datafilled automatically for feature CFUSP. If the subscriber dials 73# to deactivate the CFUSP feature, the entry in table CFW is deleted.

### Remote Call Forwarding

The POTS subscriber is permitted to remote call forward up to 24 digits. The operating company uses the Service Order system (SERVORD) to enter the entire forwarding directory number, including prefix digits, into field FWDDN.

Fields PRTNM and SCRNCCL are included in table LINEATTR and are referenced by the field LINEATTR in table CFW.

---

**CFW** (continued)

---

For equal access RCF, the operating company no longer inputs a carrier or a line class code (LCC) because field FWDDN contains the 10XXX digits and now has access to fields PRTNM and LATANM. The entries in fields PRTNM, LATANM, and SCRNL are defined in table LINEATTR and are referenced by field LINEATTR added to table CFW.

As with regular CF, only direct dialed calls are allowed to go through. CF and RCF 0+, 0-, and 01+ are not allowed.

In addition, all calls forwarded outside world zone 1 are blocked, unless they route by carrier.

An RCF subscriber can suspend service to a line for a time without having the operating company delete and reassign an RCF DN. An additional field, RCF\_SUS, is provided for this purpose.

### **Multiple Simultaneous Call Forwarding**

The POTS Multiple Simultaneous Call Forwarding feature allows multiple calls to forward concurrently through a POTS station with any form of local POTS CF active. The maximum number of multiple simultaneous calls is requested by the subscriber and entered by the operating company for every line, and it is based on the type of local POTS CF assigned.

If feature package NTX806AA (Enhanced Call Forwarding—POTS) is present in a switch, both SERVORD and table control for Call Forwarding features are changed. Lines with those features are given a maximum limit (1 to 1024) of multiple simultaneous calls (fields NUMCALLS and WNUMCALLS in table CFW) for the particular call forward type.

If Call Forward Simultaneous (CFS) is not requested, a value of 1 is entered for field NUMCALLS.

If a station is datafilled with the CFS information, multiple calls are simultaneously forwarded from the base station under the following conditions:

- One call cannot be forwarded within the central office more than five times. This provides intraoffice loop detection in the case if a line forwards directly or indirectly back to itself. If each station has a simultaneous limit that forwards another call leg, the looping stops when the chain reaches five bases. Subsequent calls receive busy line (BUSY) treatment.
- Forwarding the call must not exceed the number of simultaneous forwards allowed for the base station.

**CFW** (continued)

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If the CFS limit is reached, subsequent calls receive call forwarding overflow (CFOV) treatment.

A log LINE 138 is issued if a line originator or a trunk originator is routed to CFOV treatment. Field CALLED NO of the log LINE 138 represents the POTS Call Forwarding base station whose maximum simultaneous forwarding limit is exceeded if the call is forwarded.

Feature AL0362 only applies to POTS lines that have one or more POTS Call Forwarding features.

If feature package NTX806AA is not present in the switching unit, the maximum number of calls that can be simultaneously forwarded through the base station is one. The value in field NUMCALLS must be equal to 1.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table CFW.

**Table size**

Store for table CFW is based on the highest numbered tuple. For example, if a table has only one tuple whose key is 12 000, the table allocates 12 001 tuples. For this reason, it is recommended that tuples be datafilled with keys as low as possible.

**Datafill**

The following table lists datafill for table CFW.

The field names used for regular call forwarding are described in the following table. The entry for fields CFZCLASS is equal to LCL.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CFZKEY		see subfield	Call forwarding key area. This field consists of subfield CFW_KEY.
	CFW_KEY	0 to 32767	Call forwarding key. Enter a unique index number for each table record. The key cannot be duplicated in regular, remote, or remote equal access call forwarding for the same office.

**CFW** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CFZINFO		see subfield	Call forwarding information. This field consists of subfield CFZCLASS.
	CFZCLASS	LCL, REM, or HNT	Call forwarding selector type. Enter LCL for the regular Call Forwarding feature and datafill refinements described in the following:  Enter REM for remote call forwarding and datafill refinements on page Section , "CFZCLASS = REM" on page -89.  Enter HNT for remote call forwarding from a hunt group and datafill refinements on page Section , "CFZCLASS = HNT" on page -93.

**CFZCLASS = LCL**

If the entry in subfield CFZCLASS is LCL, datafill the following refinements.

**Field descriptions for conditional datafill (Sheet 1 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	Serving numbering plan area. Enter the serving numbering plan area (SNPA) assigned to the base station.
	LCLDN	numeric (1 to 13 digits, 0 to 9)	Local directory number. Enter the directory number (DN) assigned to the base station.
	SCRNCL	alphanumeric or NSCR	Class of service screening table name. Enter the class of service screening subtable used. If screening by class of service is not required, enter NSCR (no screening).
	CFW_OPT	see subfield	Call forwarding options. This field consists of subfield CFW.
	CFW	Y or N	Call forwarding. If the line has the Call Forwarding feature, enter Y (yes) and datafill refinements WCNTL, WNUMCAL, WSTATE, and WFWDDN.  If the line does not have the Call Forwarding feature, enter N (no). Go to field CFBL_OPT.

**CFW** (continued)**Field descriptions for conditional datafill (Sheet 2 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
	WCNTL	C, F, or U	<p>Call forwarding control. If the entry in subfield CFW is Y, datafill this refinement. The entry in this field indicates who can control call forwarding.</p> <p>Enter C if the number to which calls are forwarded is assigned by the subscriber for each activation.</p> <p>Enter F if the number to which calls are forwarded is fixed once assigned by the operating company.</p> <p>Enter U if the subscriber activates call forwarding for one usage. Entry U cannot be datafilled if the parameter USP_ENABLED for table OFCENG is not present or if the office parameter is set to N.</p>
	WNUMCAL	1 to 1024	<p>Number of simultaneous calls. If the entry in subfield CFW is Y, datafill this refinement. Enter a number to indicate the number of calls that can be simultaneously forwarded through the base station.</p> <p>If the entry in field WCNTL is equal to U, the entry in this field must be 1.</p> <p>If the optional POTS Multiple Simultaneous Call Forwarding feature is not present in the load, the entry in this field must be 1.</p>
	WSTATE	I, A, or W	<p>Call forwarding state. If the entry in subfield CFW is Y, datafill this refinement. Enter I (inactive) for initial input. The switching logic updates this field to A (active) or W (waiting). An entry of W indicates that the subscriber is programming the forward DN.</p> <p><b>Note:</b> If the entry in this field is W, the user is offline and it is not possible to remove the Call Forwarding feature.</p>

**CFW** (continued)**Field descriptions for conditional datafill (Sheet 3 of 4)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
	WFWDDN	numeric (1 to 30 digits) or \$	<p>Call forwarding directory number. If the entry in subfield CFW is Y, datafill this refinement. This field contains the DN to which the call is forwarded.</p> <p>This DN can be any valid DN (including the 10XXX prefix digits signifying the carrier) with the exception of DNs starting with 0 (zero). All calls forwarded outside world zone 1 are blocked, unless they route by carrier.</p> <p>Entry \$ can be input only if the entry for field WSTATE is I.</p>
	CFBL_OPT	see subfield	Call forwarding busy options. This field consists of subfield CFBL.
	CFBL	Y or N	<p>Call forwarding busy line. If the line has the Call Forwarding feature when the line is busy, enter Y and datafill refinements BNUMCALCALS and BFWDDN.</p> <p>If the line does not have the Call Forwarding feature when the line is busy, enter N. Go to field CFDA_OPT.</p>
	BNUMCALCALS	1 to 1024	Number of simultaneous calls. Enter the number of calls that can be simultaneously forwarded through the base station.
	BFWDDN	numeric (1 to 30 digits)	<p>Busy line call forwarding directory number. This field contains the DN to which the call is forwarded if the base station is busy.</p> <p>This forwarding DN can be any valid DN (including the 10XXX prefix digits signifying the carrier), with the exception of DNs starting with 0 or 01. All calls outside world zone 1 are blocked, unless they route by carrier.</p> <p>\$ is not a valid entry.</p>
	CFDA_OPT	see subfield	Call forwarding don't answer options. This field consists of subfield CFDA.

**CFW** (continued)**Field descriptions for conditional datafill (Sheet 4 of 4)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
	CFDA	Y or N	<p>Call forwarding no answer. If the line has the Call Forwarding feature and there is no answer, enter Y and datafill refinements DNUMCALC, DTIME, and DFWDDN.</p> <p>If the line does not have the Call Forwarding feature and there is no answer, enter N. No further datafill is required.</p>
	DNUMCALC	1 to 1024	Number of simultaneous calls. Enter the maximum number of calls that can be simultaneously forwarded through the base station.
	DTIME	0 to 325	No answer time. Enter the time, in seconds, that the base station rings before the call is forwarded.
	RINGCTRL	FIXRING, RPGRING	<p>Ring control. Enter PRGRING to signify that the Subscriber Programmable Ringing for CFDA (SPRING) feature is activated.</p> <p>Enter FIXRING to signify that SPRING is not in effect.</p>
	DFWDDN	numeric (1 to 30 digits)	<p>No answer call forwarding directory number. This field contains the DN to which the call is forwarded after the base station rings for the time specified in field DTIME.</p> <p>This DN can be any valid DN (including the 10XXX prefix digits signifying the carrier) with the exception of DNs starting with 0. All calls outside world zone 1 are blocked, unless they route by carrier.</p> <p>\$ is not a valid entry.</p>

**CFW** (continued)**CFZCLASS = REM**

If the entry in field CFZCLASS is REM, datafill refinements RTYPE, SNPA, and LCLDN.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Explanation and action
	RTYPE	R or RE	Remote call forwarding type. Enter R (Remote Call Forwarding feature) and datafill fields SNPA and LCLDN, then datafill refinements on page Section , "CFZCLASS = REM and RTYPE = R" on page -90.  Enter RE (Remote Equal Access Call Forwarding feature) and datafill fields SNPA and LCLDN, then datafill refinements on page Section , "CFZCLASS = REM and RTYPE = RE" on page -92.
	SNPA	numeric (3 digits)	Serving numbering plan area. Enter the serving number plan area (SNPA) assigned to the base station.
	LCLDN	numeric (1 to 13 digits, 0 to 9)	Local directory number. Enter the directory number (DN) assigned to the base station.

**CFW** (continued)**CFZCLASS = REM and RTYPE = R**

If the entry in field CFZCLASS is REM, and the entry in field RTYPE is R, datafill the following refinements.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	FWDDN	numeric (1 to 30 digits)	Forwarding directory number. Enter the DN to which the call is forwarded.  This DN can be any valid DN (including the 10XXX prefix digits signifying the carrier) with the exception of DNs starting with 0 (zero). All calls forwarded outside world zone 1 are blocked, unless they route by carrier.  \$ is not a valid entry.
	RORS	see subfield	Route reference or class of service. This field consists of subfield RTEORSCR.
	RTEORSCR	RTE or SCR	Route reference or class of service screening selector. Enter selector RTE if an office route index is required and datafill refinement OFRTINDX.  Enter selector SCR if screening by class of service is required. Subtables CLSVSCRC.CLSVSCR and STDPRTCT.STDPRT are specified in table LINEATTR.
	OFRTINDX	0 to 1023	Office route index. If entry in field RTEORSCR is RTE, enter the route reference number assigned to the route list.  The default entry for this field is 0 (zero).
	MAXCALLS	0 to 511	Maximum number of calls. Enter the maximum number of calls that can be forwarded simultaneously.
	LINEATTR	alphanumeric (up to 16 characters)	Line attribute index. Enter the line attribute index from table LINEATTR for the remote call forwarding DN.
	BLKTLCMP	Y or N	Block toll completing calls. If call forwarding is deflected to block toll completing calls, enter Y (yes). Otherwise, enter N (no).

**CFW** (continued)**Field descriptions for conditional datafill (Sheet 2 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
	BLKTLTRT	alphanumeric (1 to 4 characters)	Block toll treatment. If field BLKTLCMP is equal to Y, enter the appropriate treatment. If field BLKTLCMP is equal to N, enter UNDT (undefined treatment). See subtable TMTCNTL.TREAT.
	RCFOMIND	0 to 127	Remote call forwarding operational measurements index. Enter the OM index for remote call forwarding (RCF).  Note that 0 (zero) can be used for as many entries as desired while 1 to 127 can only be assigned to one tuple each.
	RCF_SUS	Y or N	Remote call forward DN suspended. Field RCF_SUS provides the capability of flagging an RCF DN as suspended.  Enter Y if the RCF DN is suspended. Otherwise, enter N.
	SIGDATA (NA002-)	Y or N	Remote call forward signaling enhancements required. Enter Y if the RCF signaling enhancements are required. Otherwise, enter N.

**CFW** (continued)**CFZCLASS = REM and RTYPE = RE**

If the entry for field CFZCLASS is REM, and the entry for field RTYPE is RE, datafill the following refinements.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
	FWDDN	numeric (1 to 30 digits)	Forwarding directory number. Enter the DN to which the call is forwarded.  This DN can be any valid directory number (including the 10XXX prefix digits signifying the carrier) with the exception of DNs starting with 0 (zero). All calls forwarded outside world zone 1 are blocked, unless they route by carrier.  Entry \$ must not be used.
	MAXCALLS	0 to 511	Maximum number of calls. Enter the maximum number of calls that can be forwarded simultaneously.
	LINEATTR	alphanumeric (up to 16 characters)	Line attribute index. Enter the line attribute index from table LINEATTR for the remote call forwarding DN.
	BLKTLCMP	Y or N	Block toll completing calls. If call forwarding is deflected to block toll completing calls, enter Y (yes). Otherwise, enter N (no).
	BLKTLTRT	alphanumeric (1 to 4 characters)	Block toll treatment. If field BLKTLCMP is equal to Y, enter the appropriate treatment.  If field BLKTLCMP is equal to N, enter UNDT (undefined treatment). See subtable TMTCNTL.TREAT.

**CFW** (continued)**Field descriptions for conditional datafill (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	RCFOMIND	0 to 127	Remote call forwarding operational measurements index. Enter the OM index for remote call forwarding.  Note that 0 (zero) can be used for as many entries as desired while 1 to 127 can only be assigned to one tuple each.
	RCF_SUS	Y or N	Remote call forwarding directory number suspended. Field RCF_SUS provides the capability of flagging an RCF DN as suspended.  Enter Y if the RCF DN is suspended. Otherwise, enter N.

**CFZCLASS = HNT**

If the entry in field CFZCLASS is HNT, datafill the following refinements. The field names used for call forwarding from a hunt group if the station in the hunt group does not answer are described in the following table.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	CFZCLASS	HNT	Call forwarding selector type. Enter HNT for the Call Forwarding Group Don't Answer (CFGDA) feature.
	HGRPNO	0 to 32767	Hunt group number. Enter the number of the hunt group to which feature CFGDA is being added. See table HUNTGRP.  Any entry outside the range indicated for this field is invalid.
	SCRNCL	alphanumeric or NSCR	Class of service screening table name. Enter the class of service screening subtable used. If screening by class of service is not required, enter NSCR (no screening).
	HNUMCAL	1 to 1024	Number of simultaneous calls. Enter the number of calls that can be simultaneously forwarded through the base station.

## CFW (continued)

### Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	HTIME	0 to 325	Hunt time ringing. Enter the time, in seconds, that the base station rings before the call is forwarded.
	HFWDDN	numeric (1 to 30 digits)	Forwarding directory number. Enter the directory number (DN) to which the call is forwarded.  This DN can be any valid directory number (including the 10XXX prefix digits signifying the carrier) with the exception of DNs starting with 0. All calls forwarded outside world zone 1 are blocked, unless they route by carrier.  Entry \$ must not be used.

### Datafill example

Examples of datafill for table CFW are shown in the following.

The first example shows datafill for regular call forwarding.

#### MAP display example for table CFW

CFZKEY	CFZINFO
<hr/>	
0	LCL 613 8214527 NSCR N Y 1 2287654 Y 1 12 2287654

The second example shows datafill for remote equal access call forwarding.

Note that because field BLKTLCMP is N, the entry in field BLKTLTRT is UNDT (undefined treatment).

**CFW** (continued)**MAP display example for table CFW**

CFZKEY	CFZINFO
1	REM R 613 7424597 5122641257 RTE 5 20 19 N UNDT 0 Y Y

The third example shows datafill for remote call forwarding.

Note that because field BLKTLCMP is N, the entry in field BLKTLTRT is UNDT.

**MAP display example for table CFW**

CFZKEY	CFZINFO
2	REM RE 919 8489900 10120011552112345 2 25 N UNDT 0 Y

The fourth example shows datafill for hunt group call forwarding.

**MAP display example for table CFW**

CFZKEY	CFZINFO
3	HNT 0 TINT 30 20 7252870

## Table history

### MMP14

Amended the datafill for “CFZCLASS = LCL” and for “CFZCLASS = REM”. The entry for subfield LCLDN has been changed from “(7 digits, 0 to 9)” to

**CFW** (end)

---

“(1 to 13 digits, 0 to 9)” for feature E.164 Compliance for Redirection Services (REDIRSV ARCHID).

**NA012**

Development activity 59007050 introduces changes to field LINEATTR of table CFW. This field now accepts an alphanumeric string instead of an integer string when CFZCLASS is set to REM and RTYPE to either R or RE.

**NA006**

Added description of the CFWREP CI and its effect on CFW and CFX tables.

**NA004**

The “Entry” portion of refinements FWDDN, HFWDDN, WFWDDN, BFWDDN, and DFWDDN was changed from “(1 to 24 digits)” to “(1 to 30 digits)” to accommodate 15-digit international dialing.

**NA002**

The following updates occurred during NA002 to table CFW:

- included field SIGDATA for enabling remote call forward signaling enhancements
- added refinement RINGCTRL to subfield CFDA

---

**CFXCMD**

---

**Table name**

Call Forwarding (CFX) Circuit Mode Data (CMD)

**Functional description**

Table CFXCMD is not manually datafillable. This table is modified by the Service Order System (SERVORD) and call processing (CFX programming). It is a repository for CFX data storage for Integrated Services Digital Network (ISDN) calls with a call type of CMD. Operating company personnel can refer to table CFXCMD and modify it from SERVORD, but tuples cannot be added or deleted.

The functionality of this table is identical to that of table CFX. However, table CFX stores voiceband information (VI) call type information as well as non-call type specific CFX information, and table CFXCMD stores CMD CFX information for NI-2 and NI-3 ISDN sets. This is a read-only table.

Even though a DN with a call type of CMD can be provisioned through option CFXDNCT to have CFX assigned in table CFXCMD, data store functions as if it is still key based, not DN/CT based. The DMS switch automatically maps and stores the CFXDNCT feature on the appropriate DN key to which CFX was assigned, not to the feature activator specified in SERVORD. This allows for a DN/CT provisioning perspective for the craftsperson, and enables DMS key-based call processing.

**Datafill sequence and implications**

This table cannot be datafilled by operating company personnel by way of the table editor. Use SERVORD to modify this table.

**Table size**

Memory for this table is dynamically updated.

**CFXCMD** (continued)**Datafill**

The following table lists datafill for table CFXCMD.

**Field descriptions (Sheet 1 of 3)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
CFXLEN			<i>Call Forwarding Line Equipment Number</i> This field is the key to the table. All LTIDs that have CFW assigned to their line are stored here.
	KEY	0-69	<i>Key</i> This subfield shows the keys that appear in the keylist of the CFXDNCT tuple in table KSETFEAT.
CFUIFVAR		see subfield	<i>Call Forward Universal Intragroup Fixed variables</i> This field consists of subfield CFUIF.
	CFUIF	Y, N	<i>Call Forward Universal Intragroup Fixed</i> If CFU Intragroup Fixed is assigned to the LTID, the entry is Y and the following refinements are datafilled: CFBBD, CSTATE, CFUIFDN, CFXUSP. If N, the following refinements are datafilled: CFBSTATE, CFBBDN, CFDSTATE, CFDDN, CFBSTAT2, CFBBDN2, CFDSTAT2, and CFDDN2.
	CFBD	Y, N	<i>Call Forward Busy Don't Answer</i> If CFBD is assigned to the LTID, the entry is Y and the following refinements are datafilled: CFBSTATE, CFBBDN, CFDSTATE, CFDDN, CFBSTAT2, CFBBDN2, CFDSTAT2, and CFDDN2. If N, the following refinements are datafilled: CSTATE, CFUIFDN, and CFXUSP.

**CFXCMD** (continued)

## Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	CSTATE	I, A, CFUI_WAIT	<i>Call Forward State</i> This subfield shows the state of CFU, CFI, or CFF. When the CFW feature is provisioned by SERVORD, the default state is inactive (I). For CFU or CFI, CFUI_WAIT is the wait state (the interim digit collection time between dialing the forward-to number or pressing the feature key to activate CFW). After the user programs the CFW feature, the state is active (A).
	CFUIFDN	up to 30 digits	<i>Call Forward Universal Intragroup Fixed DN</i> This refinement shows the remote DN that applies to CFU, CFI, or CFF.
	CFXUSP	N	<i>Call Forward Usage-Sensitive Pricing</i> This field is always N. USP does not apply to ISDN CFW.
	CFBSTATE	I, A	<i>Call Forward Busy State</i> This refinement shows the state of CFB on the internal DN assigned Internal/External for CFB (IECFB), inactive (I) or active (A).
	CFBDN	up to 30 digits	<i>Call Forward Busy DN</i> This refinement shows the internal DN to which the call is forwarded when the line assigned IECFB is busy.
	CFDSTATE	I, A	<i>Call Forward Don't Answer State</i> This refinement shows the state of CFD on the internal DN assigned Internal/External for CFD (IECFD), inactive (I) or active (A).
	CFDDN	up to 30 digits	<i>Call Forward Don't Answer DN</i> This refinement shows the internal DN to which the call is forwarded when the line assigned IECFD does not answer.
	CFBSTAT2	I, A	<i>Call Forward Busy State 2</i> This refinement shows the state of CFB on the external DN assigned IECFB, inactive (I) or active (A).

**CFXCMD** (end)

**Field descriptions (Sheet 3 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
	CFBDN2	up to 30 digits	<i>Call Forward Busy DN 2</i> This refinement shows the external DN to which the call is forwarded when the line assigned IECFB is busy.
	CFDSTAT2	I, A	<i>Call Forward Don't Answer State 2</i> This refinement shows the state of CFD on the external DN assigned IECFD, inactive (I) or active (A).
	CFDDN2	up to 30 digits	<i>Call Forward Don't Answer DN 2</i> This refinement shows the external DN to which the call is forwarded when the line assigned IECFD does not answer.

**Datafill example**

The following example shows sample datafill for table CFXCMD.

**MAP display example for table CFXCMD**

```

CFXLEN  CFUIFVAR
-----
ISDN 1 15 0 Y N I $ N
ISDN 2 4 Y Y I $ N A 500034 A 500034 I $ I $
ISDN 3 1 Y N I $ N
    
```

**Table history**

**NA008**

This table was created.

---

**CGNSCRN**

---

**Table name**

Calling Number Screening Table

**Functional description**

Table CGNSCRN is used both as a feature group D automatic number identification (ANI) screening table and as a calling number screening table. It allows customers to add or remove standard access stations from their virtual private network (VPN). Stations can be added or deleted by changing, adding, or deleting a corresponding public switched telephone network (PSTN) number from the range defined in table CGNSCRN. Access to table CGNSCRN is implemented using the partitioned table editor (PTE) within the customer data change (CDC) package. The PTE partitions the data in a table so that a customer can only modify tuples that he owns. Ownership of directory numbers (DN) is defined by telephone company personnel using table DNOWN, a DN ownership table. This allows the owner to be associated with a range of directory numbers that do not reside on this switch.

Table CGNSCRN is accessed for calling number screening in the Australian network if the method of access to the virtual Australian private network (VAPN) is standard access. Standard access is provided to stations that are linked to a switch in the Australian network where calling line identification (CLI) is available and can generate dual-tone multifrequency (DTMF) digits. Standard access calls come into the service switching point (SSP) on Integrated Business Network (IBN) Australian telephone user part (ATUP) trunks, and can then be routed to any agent. The CLI provided in the initial address information (IAI) message is checked against entries in table CGNSCRN. The IAI message contains the CLI of the originator and the standard access code. If the CLI appears, the call continues.

Customers are assigned a network class of service (NCOS) defining the dial plan to which they have access. Authorization codes allow access to the dial plan associated with the NCOS. By varying the NCOS of a particular range of PSTN numbers, the customer can vary the call screening capabilities of stations. The customer has access to all fields in table CGNSCRN. If there is only one customer group associated with a given owner, that customer group is entered by default.

## CGNSCRN (continued)

---

### Failure conditions

The following conditions can cause a failure in table CGNSCRN:

- CLI is not datafilled.
- CLI is not as long as the numbers datafilled for that customer group. If the entries in table CGNSCRN are all ten digits long, and CLI is only nine digits long, the match fails.

If the call fails for either of these reasons, it receives ANI database failure (ADBF) treatment. This generates an unsuccessful backwards setup message (UBM) of call failure (CFL).

*Note:* If a CFL is received by a DMS-100, it is treated as system failure (SYFL) treatment. The call receives permanent signal treatment time-out (PSIG) and a UBM of address incomplete (ADI) is returned if the digit 12 is contained in the CLI. The call continues as though it was coming from a line on the switch with the customer group and NCOS that had been derived from table CGNSCRN.

### Datafill sequence and implications

The following tables must be datafilled before table CGNSCRN:

- CUSTHEAD
- NCOS

For standard access calls to succeed, office parameter MARKET\_OF\_OFFICE in table OFCENG must be set to AUSTRALIA.

### Table size

Table CGNSCRN is a digilator-based table. Memory is dynamically allocated as needed. Maximum size is 32 639 digit blocks. The relationship between digit blocks and the maximum number of tuples depends on the contiguity of the datafill. Worst case analysis shows that this table can hold approximately 4000 tuples. An empirical estimate of maximum size is 8000 tuples.

**CGNSCRN** (continued)**Datafill**

The following table lists datafill for table CGNSCRN.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Range of calling numbers</i> Field KEY consists of subfields FROMDIGS and TODIGS. These fields define a range of calling numbers.
	FROMDIGS	vector of up to 10 digits (0 to 9)	<i>From digits</i> Enter the calling digit or digits to be translated. If the entry represents a range of consecutive numbers, enter the first number in the range.  It is only necessary to enter enough digits to uniquely identify the block.
	TODIGS	vector of up to 10 digits (0 to 9)	<i>To digits</i> If the entry in FROMDIGS represents a block of consecutive numbers, enter the upper bound of the range. Otherwise, the entry in TODIGS is equal to the entry in FROMDIGS.
CUSTGRP		alphanumeric (1 to 16 characters)	<i>Customer group</i> Enter the name of the customer group associated with the network class of service (NCOS) number as datafilled in table NCOS.
NCOS		0 to 511	<i>Network class of service</i> Enter the NCOS that defines the dial plan to which the customer has access as datafilled in table NCOS.
ACCTREQ		Y or N	<i>Account code required</i> Enter Y (yes) if an account code or authorization code is required for all incoming virtual Australian private network (VAPN) feature group D (FGD) or virtual private network (VPN) standard access calls originating from the off-net address specified by the automatic number identification (ANI) range. Otherwise, enter N (no).

**Datafill example**

The following example shows sample datafill for table CGNSCRN.

**CGNSCRN** (end)

---

**MAP display example for table CGNSCRN**

KEY		CUSTGRP	NCOS	ACCTREQ
61372282	61372283	DEPT3	2	N

**Table history**

**BCS36**

Added reference to table NCOS in field NCOS.

---

**CHARGE**

---

**Table name**

TOPS Charge Table

**Overview**

Charge tables are associated with rate schedules.

A charge table shows the actual charges (in dollars and cents) for the rate steps in the schedule.

Different charge tables exist depending on the different call class, call type, and so on. However, different call classes or call types can share the same charge table.

To accommodate this duplication, table CHARGE is used to identify all call categories in the rate schedule that share the same charge tables.

The schedule type, standard (STD), call-type tier (CTT), station-class tier (SCT), and multitier (MLT), are described in table DCOUNT.

The discount type, NODISC, RATIO, PCENT, and QUOTED are also described in table DCOUNT, field DISC which points to the appropriate charge table to be used here.

The name of a charge table can be interpreted as follows:

- The first three characters indicate whether the call is person or station.
- For CTT rating or STC rating, the next two characters indicate either the call type or station class respectively.
  - OA: operator assisted (0)
  - OH: operator handled (0)
  - DD: direct dialed (1)
  - NC: non-coin
  - CN: coin

**CHARGE** (continued)

- The sixth and seventh characters for the call-type tier and station-class tier indicate the discount table for quoted type of discount.
  - ND: no discount
  - D1: discount 1
  - D2: discount 2
- For MLT rating, the fourth and fifth characters show the call type, and the sixth and seventh characters show the station class.

The rating system does not provide separate charge tables for the hotel station class or tables for quoted multitier rating. Hotel is included in the non-coin category.

The following tables, show the valid charge table names for all the different call classifications.

**Standard charge table names**

Type	Station	Person
NODISC	STA	PER
PCENT	STA	PER
QUOTED	STAND	PERND
	STAD1	PERD1
	STAD2	PERD2
RATIO	STA	PER

**Call-type tier charge table names (Sheet 1 of 2)**

Type	Station	Person
NODISC	STAOA	PEROA
	SATOH	PEROH
	STADD	
PCENT	STAOA	PEROA
	SATOH	PEROH
	STADD	

**CHARGE** (continued)**Call-type tier charge table names (Sheet 2 of 2)**

Type	Station	Person
QUOTED	STAOAND	PEROAND
	STAOAD1	PEROAD1
	STAOAD2	PEROAD2
	STAOHND	PEROHND
	STAOHD1	PEROHD1
	STAOHD2	PEROHD2
	STADDND	
	STADDD1	
	STADDD2	
	RATIO	STAOA
SATOH		PEROH
STADD		

**Station-class tier charge table names (Sheet 1 of 2)**

Type	Station	Person
NODISC	STACN	PERCN
	STANC	PERNC
PCENT	STACN	PERCN
	STANC	PERNC
QUOTED	STACNND	PERCNND
	STACND1	PERCND1
	STACND2	PERCND2
	STANCND	PERNCND
	STANCD1	PERNCD1
	STANCD2	PERNCD2

**CHARGE** (continued)

**Station-class tier charge table names (Sheet 2 of 2)**

Type	Station	Person
PCENT	STACN	PERCN
	STANC	PERNC

**Multitier charge table names**

Type	Station	Person
NODISC	STAOACN	PEROACN
	STAOANC	PEROANC
	STAOHCN	PEROHCN
	STADDCN	PEROHNC
	STADDCN	
	STADDNC	
PCENT	STAOACN	PEROACN
	STAOANC	PEROANC
	STAOHCN	PEROHCN
	STADDCN	PEROHNC
	STADDCN	
	STADDNC	
RATIO	STAOACN	PEROACN
	STAOANC	PEROANC
	STAOHCN	PEROHCN
	STADDCN	PEROHNC
	STADDCN	
	STADDNC	

**Zero-charge-rate step**

Rate steps can be assigned that result in a calculated charge of \$0.00 whenever the Traffic Operator Position System (TOPS) operator uses the KP RS XX

---

**CHARGE** (continued)

---

START (XX is assigned rate step number) keying sequence. These rate steps are referred to as zero-charge-rate steps and are used to bypass a flashing rate step but retain the automatic message accounting (AMA) tape entry, that is, these rate steps are used for manually-rated calls that require an AMA tape entry. The automatic rating system in this case does not provide any charge calculation but does provide the function of timing the call by indicating the following time periods:

- initial period (field INP in table CHARGE)
- coin recall period (field CRP in table SCHED)
- coin initial recall period (field CIRP in table SCHED)

A single rate step is adequate if these parameters are common to all schedules.

If the above parameters are not common, a rate step must be assigned to each schedule (or group of schedules) with different parameters.

Rate steps can be assigned to one of the schedules provided that the schedule is not subject to the following charges:

- class charge (field CLCHG in table CHARGE is set to 0[zero])
- surcharges (fields in table SUR are set to 0 [zero])

Otherwise, a new schedule must be used for each of the zero charge rate steps.

### **Caribbean expansion plan (CEP) International TOPS (ITOPS)**

Calls requiring operator assistance result in a charge to the customer that is calculated by a downstream process using the call information (call type, destination, answer time, and duration of call).

There are cases, however, where the charges on a call must be quoted to the customer. This is true for the following call types:

- hotel calls
- coin calls
- calls requiring time-and-charges quote

In all three cases, the ITOPS system calculates the charges on the call. For hotel calls, these charges are reported to the hotel billing center (HOBIC) for quoting; in the latter two cases, the operator quotes the charges.

## CHARGE (continued)

---

### CEP dialing plan

The dialing plan for the Caribbean islands is based on the North American plan (NPA-NXX-XXXX). The islands have numbering plan area (NPA) 809, with each island having one or more unique NXX associated with it.

### CEP ITOPS rating zones

The following terminology is used within this document to define the different CEP ITOPS rating zones:

**Local.** Calls completed within the same rate zone as the calling customer (calls within the same NXX are always considered to be in the local rate zone)

**Domestic.** Calls completed within NPA 809 but to an NXX in a different rate zone as the calling customer

**North American.** Calls completed from NPA 809 to any destination based on the NPA-NXX dialing plan (other than domestic calls)

**International (or Overseas).** Calls completed from NPA 809 to a foreign country not based on the NPA-NXX dialing plan (outside World Zone 1)

### CEP billing details

It is possible to vary the call charges, as required, depending on the following information:

- person or station billing
- operator handled, assisted, or direct dialled
- coin or non-coin

It is possible to assign different charges to all combinations of these factors. However, this is not mandatory and is only used as required.

In table SCHED, the rate schedule is used to determine the necessary refinement of the charges based on the billing details. The following information is obtained (in order):

- the lowest and highest valid rate steps
- the terminating type (LOC [local], DOM [domestic], OVS [overseas])
- the schedule type (STD, CTT, SCT, MLT)

The schedule type determines the allowed refinement for a particular schedule based on the station class (CN, NC), call type (DD, OA, OH) and billing type (STA, PER). STD allows only billing type refinement (allowed by all), CTT allows a refinement on call type, SCT allows a refinement on station class, and MLT allows both further refinements.

---

**CHARGE** (continued)

---

- the coin initial recall period (CIRP)
- the coin recall period (CRP) for subsequent recalls

Table CHGMAP can then be accessed, based on the value obtained in table SCHED for the schedule type, and a mapping of the necessary charge tables for this schedule is determined. Table CHGMAP is used to map an unwieldy number of charge tables into a smaller one if common rates apply.

Finally, the mapping obtained in table CHGMAP (if used), or the breakdown obtained from table SCHED, is used in table CHARGE to obtain the length of the initial and overtime periods, for this schedule and rate step, as well as the charges associated with these periods.

For instances where discounts are included in the value obtained in table CHARGE, these discounts are said to be quoted (see table DCOUNT). It is therefore possible, in such cases, to allow three charge tables for each entry in the schedule type based on the discount (no discount, discount 1, discount 2). This is shown in the second datafill example in this document for the entry against UK where, although schedule type STD is specified in table SCHED (allowing STA and PER), a further refinement is used to allow inclusion of the discount (now allows STAND, STAD1, STAD2, PERND, PERD1, PERD2).

### Functional description

Table CHARGE is used to list all the unique combinations of charges for each rate step associated with the charge tables for each rate schedule. A charge table name (CHGTAB) must be defined in table CHARGE before it can be used in field MAPTAB of table CHGMAP.

#### Overseas Operator Center (OOC):

Table CHARGE provides the initial and overtime periods and corresponding charges for those call durations. The initial charge can vary depending upon the type of call and discount type. The parameters required to determine the initial charge are schedule name and rate step.

**CHARGE** (continued)**Datafill**

The following table lists datafill for table CHARGE.

**Field descriptions (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
CHGKEY		see subfields	Charge key. This field consists of subfields SCHNAME, CHGTAB, and RATESTEP.
	SCHNAME	alphanumeric (up to 16 characters)	Rate schedule name. Enter the name of the rate schedule. This name must be known to table SCHED.
	CHGTAB	alphanumeric (up to 8 characters)	Charge table name. Enter the charge table name. Only valid table names are allowed.
	RATESTEP	0 to 999	Rate step. Enter the rate step of the charge table in the schedule.
CLCHG		0 to 4095	<p>Class charge. Enter the class charge in cents, for operator-handled calls.</p> <p>Normally, on an operator-handled call, the initial period rate contains a charge to compensate for the operators assistance.</p> <p>Alternatively, this portion of the charge can be specified separately. This feature is used if initial period discounting is allowed (DINP field in table DCOUNT set to Y [yes]) and the operator-handled portion of the charge is not discounted.</p> <p>The class charge is added to the base cost if the call (combined initial and overtime charges) plus any surcharge that applies.</p>
INP		0 to 15	<p>Initial period. Enter the initial period in minutes.</p> <p>An entry of 0 (zero) indicates an infinite initial period.</p>
IC		0 to 4095	Initial charge. Enter the initial charge in cents.

**CHARGE** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
OVTI		0 to 15	Overtime interval. Enter the overtime interval in minutes.  Calls extending beyond the initial period are charged overtime on a 0- to 15-minute basis of the overtime charge rate.
OVTC		0 to 4095	Overtime charges. Enter the overtime charges in cents.

**Datafill example**

The following example shows sample datafill for table CHARGE.

The first example shows datafill for North American TOPS.

In this example, SAMPLESCH is assigned a SCHTYPE of STD NODISC. Therefore only two CHARGE tables (STA and PER) are allowed. However, both station and person calls are subject to the same charges.

See table CHGMAP for the mapping required to point the rating system to the STA charge table on person calls.

**MAP display example for table CHARGE**

		CHGKEY	CLCHG	INP	IC	OVTI	OVTC
SAMPLESCH	STA	18	0	3	30	1	5
SAMPLESCH	STA	19	0	3	35	1	7
SAMPLESCH	STA	20	0	3	40	1	9

The second example shows datafill for CEP ITOPS.

For instances where discounts are included in the value obtained in table CHARGE, these discounts are said to be quoted (see table DCOUNT). It is possible, in such cases, to allow three charge tables for each entry in the schedule type based on the discount (no discount, discount 1, discount 2). This is shown in the example below for the entry against UK where, although

---

**CHARGE** (end)

---

schedule type STD is specified in table SCHED (allowing STA and PER), a further refinement is used to allow inclusion of the discount (now allows STAND, STAD1, STAD2, PERND, PERD1, PERD2).

**MAP display example for table CHARGE**

		CHGKEY	CLCHG	INP	IC	OVTI	OVTC
CANADA	STA	36	0	3	300	1	125
CANADA	STA	37	0	3	350	1	175
CANADA	PER	36	0	3	500	1	150
CANADA	PER	37	0	3	600	1	200
LOCAL	STAOHCN	350	0	0	75	0	0
UK	PERDI	536	0	3	800	1	250

**CHARGEI****Table name**

TOPS Charge Inactive Table

**Functional description****Overview of TOPS Mass Table Control**

Feature F1013 (BNR V0178) (TOPS Mass Table Control) permits data changes in the 18 tables listed below to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the 18 mass-table-controlled tables by entering the data changes for table X into table XI, and then, when all the required changes have thus been entered, swap the contents of tables X with the corresponding tables XI.

At all times, call processing uses the data that the user sees in tables X.

Therefore:

- the table X contents are referred to as the active data
- the table XI contents are referred to as the inactive data
- the set of Xs is referred to as the active tables
- the set of XIs is referred to as the inactive tables

The following table lists the mass controlled tables:

**Mass controlled tables (Sheet 1 of 2)**

<b>Table xl</b>	<b>Table x</b>	<b>Form</b>
CHARGEI	CHARGE	2740A, B
CHGMAPI	CHGMAP	2745A, B
CLDNPAI	CLDNPA	2715A, B
DACCLRSI	DACCLRS	2778A, B
DACCSURI	DACCSUR	2840
DCOUNTI	DCOUNT	2735A, B
HOLTRTI	HOLTRT	2761A, B
LCLRSI	LCLRS	2717
MILESI	MILES	2725A, B
MINCHGI	MINCHG	2775

**CHARGEI** (continued)**Mass controlled tables (Sheet 2 of 2)**

Table xl	Table x	Form
OVSRSI	OVSRS	2718A, B
RBKMAPI	RBKMAP	2751A, B
RBKSETI	RBKSET	2750A, B
ROUNDI	ROUND	2790
SCHEDI	SCHED	2730A, B
SURI	SUR	2770A, B
TAXESI	TAXES	2780
TAXMAPI	TAXMAP	2781A, B

**The Mass Table Control CI increment**

The user enters the mass table control command interpreter (CI) increment by keying:

>MASSTC

The HELP command displays the following available commands:

**Available commands (Sheet 1 of 2)**

Command	Explanation
HELP	display command documentation
STATUS	display the current status of the mass table control system
DUPLICATE	copy the contents of each active table into the corresponding inactive table
ENABLE	go from the initial state to the duplicated state (like duplicate), but without copying table contents allows inactive tables to be filled with completely new data
ACTIVATE	swap the contents of the active and inactive tables
OLD/NEW	activate new makes the new data active activate old makes the old data active

**CHARGEI** (continued)**Available commands (Sheet 2 of 2)**

Command	Explanation
PERM	erase old data old data must be inactive when perm is issued
SCRAP	erase new data new data must be inactive when perm is issued
LEAVE	leave the MASSTC level
QUIT	leave the MASSTC level

**Using Mass Table Control**

A major rate revision is implemented as shown in the following procedure.

*Implementing a major rate revision*

1. Access the mass table control by typing

**>MAXXTC**

and pressing the Enter key.

2. Copy the original table by typing

**>DUPLICATE**

and pressing the Enter key.

3. Exit the mass table control by typing

**>LEAVE**

and pressing the Enter key.

4. Edit the inactive data to reflect the rate revision by typing

**>TABLE tablename**

and pressing the Enter key.

*where*

**tablename**

is the name of the table to be duplicated

5. Override the checking for synchronization and the journal file by typing

**>OVE**

and pressing the Enter key.

## CHARGEI (continued)

---

6. Position on the tuple to be changed by typing

>POS **tuple**  
and pressing the Enter key.  
*where*

**tuple**  
is the tuple to be changed

7. Change the entries for the tuple by typing

>CHA **a b c d**  
and pressing the Enter key.  
*where*

**a b c d**  
are the new entries for the tuple

8. Exit the table control by typing

>LEAVE  
and pressing the Enter key.

9. Test the new (inactive) data using the rating test data. Be sure to specify which data is inactive.

10. If required, test the new data on live calls. Access the mass table control by typing

>MASSTC  
and pressing the Enter key.

11. Activate the new data by swapping the table contents by typing

>ACTIVATE **NEW**  
and pressing the Enter key.

12. Exit the mass table control by typing

>LEAVE  
and pressing the Enter key.

13. If required, revert to the original table data. Access the mass table control by typing

>MASSTC  
and pressing the Enter key.

---

**CHARGEI** (continued)

---

14. Activate the old data by swapping the table contents by typing  
**>ACTIVATE OLD**  
and pressing the Enter key.
15. Exit the mass table control by typing  
**>LEAVE**  
and pressing the Enter key.
16. If required, make the new table data permanent. Access the mass table control by typing  
**>MASSTC**  
and pressing the Enter key.
17. Activate the new data by swapping the table contents by typing  
**>ACTIVATE NEW**  
and pressing the Enter key.
18. Exit the mass table control by typing  
**>LEAVE**  
and pressing the Enter key.
19. You have completed this procedure.

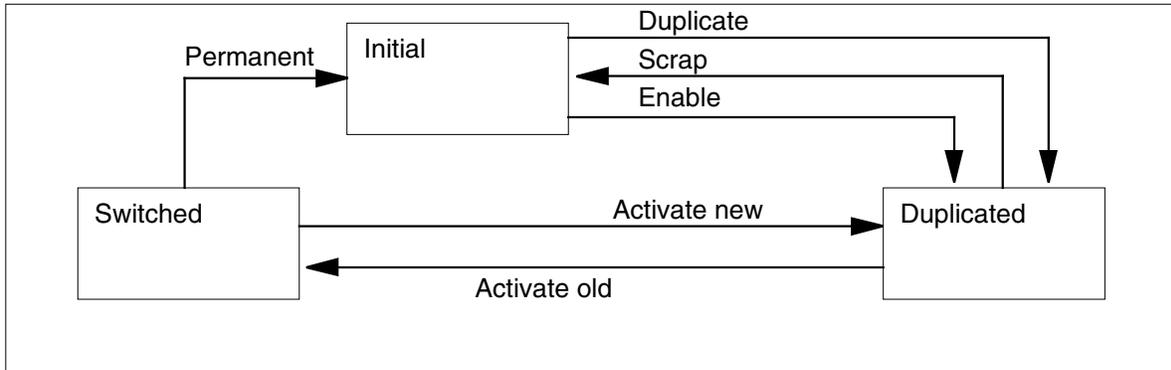
The system is now in the prestep state, that is, ready for the next major rate revision.

**The Mass Table Control state diagram**

At all times, the Mass Table Control system is in one of the following states:

- initial
- duplicated
- switched

The MASSTC commands cause state changes as shown in figure Figure , "MASSTC state changes" on page -120 below.

**CHARGEI** (continued)**MASSTC state changes****Initial state**

The following possibilities exist in the initial state:

- the active tables can be edited
- the inactive tables are empty
- if the user attempts to add a tuple to an inactive table, the add fails and the following error message is displayed at the MAP (maintenance and administration position) terminal:

```
TABLE IS NOT ENABLED
```

- the STATUS command displays the following.

```
INITIAL STATE
NO INACTIVE DATA
THE FOLLOWING TABLES HAVE INACTIVE TWINS....
  SCHED  RBKMAP  ROUND
DCOUNT  SUR      CLDNPA
CHARGE  HOLTRT  MILES
CHGMAP  TAXES   LCLRS
RBKSET  TAXMAP  OVSRS
MINCHG
```

**Duplicated state**

The following possibilities exist in the duplicated state:

- the system enters the duplicated state after command DUPLICATE or ENABLE is entered
- if command ENABLE is entered, the inactive tables start out empty
- if command DUPLICATE is entered, the inactive tables start out with a copy of the active data

**CHARGEI** (continued)

- all tables can be edited
- table control error checks ensures that
  - the active data forms a consistent set
  - the inactive data forms a consistent set
- after an update to an active table, the following error message is displayed at the MAP terminal:

```
WARNING -- EDITING ACTIVE DATA
```

- the STATUS command displays the following:

```
DUPLICATED STATE
OLD DATA IS ACTIVE
NEW DATA IS INACTIVE
THE FOLLOWING TABLES WERE DUPLICATED AT yy/mm/dd hh:mm
  SCHED   RBKMAP   ROUND
  DCOUNT SUR      CLDNPA
  CHARGE  HOLTRT  MILES
  CHGMAP  TAXES   LCLRS
  RBKSET  TAXMAP  OVSRS
  MINCHG
```

— or —

```
DUPLICATED STATE
OLD DATA IS ACTIVE
NEW DATA IS INACTIVE
THE FOLLOWING TABLES WERE ENABLES AT yy/mm/dd hh:mm....
  SCHEDI  RBKMAPI  ROUNDI
  DCOUNTI SURI      CLDNPAI
  CHARGEI HOLTRTI  MILESI
  CHGMAPI TAXESI   LCLRSI
  RBKSETI TAXMAPI  OVSRSI
  MINCHGI
```

**Switched state**

The following possibilities exist in the switched state:

- the active tables contain the new data
- the inactive tables contain the old data
- after an update to an active table, the following message is displayed at the MAP terminal:

## CHARGEI (continued)

---

WARNING -- EDITING ACTIVE DATA

- if the user tries to update an inactive table, the following error message is displayed at the MAP terminal:

CANNOT EDIT OLD DATA WHEN SWITCHED

- the STATUS command displays the following:

```
SWITCHED STATE
NEW DATA IS ACTIVE
OLD DATA IS INACTIVE
THE FOLLOWING TABLES WERE DUPLICATED AT yy/mm/dd hh:mm
  SCHED   RBKMAP   ROUND
  DCOUNT SUR      CLDNPA
  CHARGE  HOLTRT  MILES
  CHGMAP  TAXES   LCLRS
  RBKSET  TAXMAP  OVSRS
  MINCHG
```

— or —

```
SWITCHED STATE
NEW DATA IS ACTIVE
OLD DATA IS INACTIVE
THE FOLLOWING TABLES WERE ENABLED AT yy/mm/dd hh:mm....
  SCHEDI  RBKMAPI  ROUNDI
  DCOUNTI SURI     CLDNPAI
  CHARGEI HOLTRTI  MILESI
  CHGMAPI TAXESI  LCLRSI
  RBKSETI TAXMAPI  OVSRSI
  MINCHGI
```

### Summary of edit capability

The following table provides a summary of the edit capability.

#### Summary of edit capability (Sheet 1 of 2)

MASSTC state		
Initial	Duplicated	Switched

**CHARGEI** (continued)**Summary of edit capability (Sheet 2 of 2)**

Table X	updates allowed	updates allowed WARNING— EDITING ACTIVE DATA	updates allowed WARNING— EDITING ACTIVE DATA
Table XI	table is empty updates (ADDs) not allowed TABLE IS NOT ENABLED	updates allowed	updates not allowed CANNOT EDIT OLD DATA WHEN SWITCHED

**Output generated by commands****MASSTC command**

The following are outputs generated by the MASSTC command:

- the system displays

```
TOPS MASS TABLE CONTROL
FOR DOCUMENTATION, ENTER HELP
```

- then, depending on the current-masstc-state, one of the following displays appears on the MAP terminal:

```
INITIAL STATE
NO INACTIVE DATA
```

or

```
DUPLICATED STATE
OLD DATA IS ACTIVE
NEW DATA IS INACTIVE
```

or

```
SWITCHED STATE
NEW DATA IS ACTIVE
OLD DATA IS INACTIVE
```

## **CHARGEI** (continued)

---

### **DUPLICATE command**

The following are outputs generated by the DUPLICATE command:

- if current-masstc-state is duplicated, the system displays the following error message at the MAP terminal:

```
CANNOT DUPLICATE WHEN IN THE DUPLICATED STATE
```

- if current-masstc-state is switched, the system displays the following error message at the MAP terminal:

```
CANNOT DUPLICATE WHEN IN THE SWITCHED STATE
```

- for each table copied, the system displays the following message at the MAP terminal:

```
COPIED TABLE x TO xi
```

### **ENABLE command**

The following are outputs generated by the ENABLE command:

- if current-masstc-state is duplicated, the system displays the following error message at the MAP terminal:

```
CANNOT ENABLE WHEN IN THE DUPLICATED STATE
```

- if current-masstc-state is switched, the system displays the following error message at the MAP terminal:

```
CANNOT DUPLICATE WHEN IN THE SWITCHED STATE
```

- when the command completes, the system displays the following message at the MAP terminal:

```
INACTIVE TABLES ENABLED
```

### **ACTIVATE command**

The following are outputs generated by the ACTIVATE command:

- if current-masstc-state is initial, the system displays the following error message at the MAP terminal:

```
CANNOT ACTIVATE WHEN IN THE INITIAL STATE
```

- if current-masstcstate is duplicated and command ACTIVATE OLD is specified, the system displays the following message at the MAP terminal:

```
OLD DATA IS ALREADY ACTIVE
```

---

**CHARGEI** (continued)

---

- if current-masstc-state is switched and command **ACTIVATE NEW** is specified, the system displays the following message at the MAP terminal:

```
NEW DATA IS ALREADY ACTIVE
```

- for each table pair switched, the system displays the following message at the MAP terminal:

```
SWITCHED TABLES x, xi
```

**PERM command**

The following are outputs generated by the PERM command:

- if current-masstc-state is initial, the system displays the following error message at the MAP terminal:

```
CANNOT PERM WHEN IN THE INITIAL STATE
```

- if current-masstc-state is duplicated, the system displays the following error message at the MAP terminal:

```
CANNOT PERM WHEN IN THE DUPLICATED STATE
```

- for each inactive table cleared, the system displays the following message at the MAP terminal:

```
CLEARED TABLE xi
```

**SCRAP command**

The following are outputs generated by the SCRAP command:

- if current-masstc-state is initial, the system displays the following error message at the MAP terminal:

```
CANNOT SCRAP WHEN IN THE INITIAL STATE
```

- if current-masstc-state is switched, the system displays the following error message at the MAP terminal:

```
CANNOT SCRAP WHEN IN THE SWITCHED STATE
```

- for each inactive table cleared, the system displays the following message at the MAP terminal:

```
CLEARED TABLE xi
```

## CHARGEI (continued)

---

### QUIT command

The following are outputs generated by the QUIT command:

- if an error on the DUPLICATE command occurred because of incorrect datafill, the system displays the following message at the MAP terminal:

```
DUPLICATE COMMAND FAILURE:  
CLEARING INACTIVE TABLES, RESETTING MASSTC
```

### Error handling

The following particulars pertain to error handling:

- the masstc update commands are DUPLICATE, ENABLE, ACTIVATE, PERM, and SCRAP
- the software that carries out an update command can fail to complete successfully (FTCS)
- specifically, it can
  - trap
  - discover a problem, display an error message, and give up
  - be HXed
  - be the victim of a system-wide restart
- if an FTCS occurs,
  - the current-masstc-state does not change
    - the data that was active before the command was invoked continues to be active
    - the masstc system knows that it is in an unstable state, and protects itself
  - the following lines are appended to the output already specified for the MASSTC and STATUS commands:

```
LAST UPDATE COMMAND ENTERED...  
<masstc update command>  
DID NOT COMPLETE SUCCESSFULLY
```

---

**CHARGEI** (continued)

---

**Traps**

The following particulars pertain to traps:

- if a MASSTC UPDATE command traps, the user must
  - avoid using the masstc system
  - get some expert advice

**Software detected problems**

The following particulars pertain to software detected problems:

- for any of the update commands, the system can
  - detect data store corruption
  - display an error message
  - give up
- if this occurs, the user must
  - avoid using the masstc system
  - get some expert advice
- in the case of the DUPLICATE command, the system can
  - detect incorrect datafill in the data tables condition
  - detect a no data store available condition
  - display NO DATA STORE AVAILABLE
  - give up
- if the no data store available condition occurs, the user must
  - make some data store available
  - enter command DUPLICATE again
- if enough data store is available, the DUPLICATE command completes successfully
- the error messages are as follows:

**CHARGEI** (continued)

```

CASE failed-command IN
  <DUPLICATE>:
    NO DATA STORE AVAILABLE | <other table control
error
  message> |
  <nothing>
  SUBCOMMAND FAILED
  COULD NOT COPY x TO xi
  COMMAND ABORTED
  <ACTIVATE>:
    <table control error message> | <nothing>
    SUBCOMMAND FAILED
    COULD NOT SWITCH TABLES x, xi
    COMMAND ABORTED
  <PERM, SCRAP>:
    <table control error message> | <nothing>
    SUBCOMMAND FAILED
    COULD NOT CLEAR TABLE xi
    COMMAND ABORTED
  <ENABLE>:
    enable is fail-proof
  ( would you believe fail-resistant?)
ENDCASE;

```

- if the incorrect datafill condition occurs, the user must execute the QUIT command.
- all inactive tables are cleared and MASSTC environment is returned to the initialized state

**HX and restarts**

The following particulars pertain to HX and restarts:

- to recover, the user must enter the interrupted command again
- the command then completes successfully.

**Self-preservation after FTCS**

The following particulars pertain to self-preservation after FTCS:

- after an update command fails to complete successfully, all the other update commands are disabled
- if a command other than the one that failed is entered, the following message is displayed at the MAP terminal:

```

OTHER MASSTC UPDATE COMMANDS DISABLED UNTIL ...
<masstc update command>
COMPLETES SUCCESSFULLY

```

**CHARGEI** (continued)

- it is not possible to edit any of the MASSTC tables after an FTCS
- an edit attempt generates the following error message at the MAP terminal:

```
CANNOT EDIT UNTIL
<masstc update command>
COMPLETES SUCCESSFULLY
```

**Mutual exclusion**

The following particulars pertain to mutual exclusion:

- it is possible (but not advisable) for two users to be in the MASSTC increment at the same time
- it is not possible for two users to execute different MASSTC UPDATE commands concurrently
- if two users try to execute different MASSTC UPDATE commands concurrently, the following error message is displayed at the MAP terminal:

```
OTHER MASSTC UPDATE COMMANDS DISABLED UNTIL ...
<masstc update command>
COMPLETES SUCCESSFULLY
```

- if two users execute the same command concurrently, one of the commands is ignored
- it is not possible to edit any of the MASSTC tables if a masstc update command is in progress
- if an attempt is made to edit, the following error messages is displayed at the MAP terminal:

```
CANNOT EDIT UNTIL
<masstc update command>
COMPLETES SUCCESSFULLY
```

**Datafill sequence and implications**

Refer to table CHARGE.

**Table size**

Refer to table CHARGE.

**Datafill**

Refer to table CHARGE.

**CHARGEI** (end)

---

**Datafill example**

Refer to table CHARGE.

**CHARGTAB****Table name**

Multi-Unit Message Rate Charge Table

**Functional description**

Table CHARGTAB is used for local message rate calls as follows:

- local coin overtime to define the initial and overtime time periods (60 to 3600 s) that apply for a specified message billing index (MBI)
- hotel/motel message registers to define the initial and overtime time periods (0 to 3600 s) and number of pulses (0 to 15) for a specified combination of MBI and date\_time\_treatment index

For related information, refer to table MRSANAME.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table CHARGTAB.

**Table size**

0 to 4000 tuples (four different charge types of 0 to 999 tuples each).

**Datafill**

The following table lists datafill for table CHARGTAB.

**Field descriptions (Sheet 1 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
ELEMINDX		see subfields	<i>Key MBI treatment</i> This field consists of subfields MBIINDEX and TRTINDEX.
	MBIINDEX	1 to 999	<i>Key subfield message billing index</i> Enter the message billing index (MBI). Entry 000 is reserved for NO BILLING.
	TRTINDEX	CHGA CHGB CHGC CHGD	<i>Key subfield day and time treatment</i> Enter the day and time treatment for hotel/motel originated calls CHGA, CHGB, CHGC, or CHGD.

**CHARGTAB** (continued)

## Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
INITPERD		0 to 3600	<p><i>Initial period</i></p> <p>Enter the duration, in seconds, of the initial period.</p> <p>Enter 0 (zero) for local coin overtime.</p> <p>Enter 0 (zero) to 3600 for hotel/motel originated calls.</p>
INITPULS		0 to 15	<p><i>Initial pulses</i></p> <p>Enter the number of pulses the DMS switch returns to the hotel/motel message register for the initial period.</p> <p>Enter 0 (zero) for local coin overtime.</p> <p>Enter 0 (zero) to 15 for hotel/motel.</p>
OVRTPERD		0 to 3600	<p><i>Overtime period</i></p> <p>Enter the duration, in seconds, of each overtime period.</p> <p>Enter 0 (zero) for local coin overtime.</p> <p>Enter 0 (zero) to 3600 for hotel/motel originated calls.</p>
OVRTPULS		0 to 15	<p><i>Overtime pulses</i></p> <p>Enter the number of pulses the DMS switch returns to the hotel/motel message register for each overtime period.</p> <p>Enter 0 (zero) for local coin overtime.</p> <p>Enter 0 (zero) to 15 for hotel/motel.</p>

**CHARGTAB** (end)**Field descriptions (Sheet 3 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
LCOINIT		0 or 60 to 3600	<p><i>Local coin initial period</i></p> <p>Enter the duration, in seconds, of the initial period.</p> <p>Enter 0 (zero) for hotel/motel originated calls.</p> <p>Enter 60 to 3600 for local coin overtime calls.</p>
LCOOVT		0 or 60 to 3600	<p><i>Local coin overtime period</i></p> <p>Enter the duration, in seconds, of each overtime period.</p> <p>Enter 0 (zero) for hotel/motel originated calls.</p> <p>Enter 60 to 3600 for local coin overtime calls.</p>

**Datafill example**

The following example shows sample datafill for table CHARGTAB.

**MAP display example for table CHARGTAB**

ELEMINDX	INITPERD	INITPULS	OVRTPERD	OVRTPULS	LCOINIT	LCOOVT
0 CHGA	0	0	0	0	60	60

## CHGADJKY

---

### Table name

TOPS Equal Access Charge Adjust Key Table

### Functional description

Table CHGADJKY is required in a Traffic Operator Position System (TOPS) office with the equal access automatic message accounting format for TOPS.

The charge adjust key handles part charge, walkaway, coin credit, and the number of occurrences of charge adjust.

### Datafill sequence and implications

There is no requirement to datafill other tables prior to table CHGADJKY.

### Table size

0 to 100 tuples

### Datafill

The following table lists datafill for table CHGADJKY.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CGADJNUM		0 to 99	Charge adjust number. Enter the charge adjust number that corresponds to the digit typed after the charge adjust key.  Enter a value between 0 and 9 for a Traffic Operator Position System (TOPS) office.
CGADJTYP		CNCREDIT PARTCHG STANDARD or WALKAWAY	Charge adjust type. Enter the kind of charge adjust number.

### Datafill example

---

**CHGADJKY** (end)

---

**MAP display example for table CHGADJKY**

CGADJNUM	CGADJTYP
1	PARTCHG

## CHGATRIB

---

### Table name

ITOPS Rating Charge Calculator Attribute Charge Table

### Functional description

Table CHGATRIB (ITOPS rating charge calculator attribute charge) includes attribute specific charge data.

Table CHGATRIB is used when the following two conditions are met:

- table CHGHEAD, field ATTRIB is Y
- a match is found for the call characteristics (origination type and attribute set) in table ATTRIB

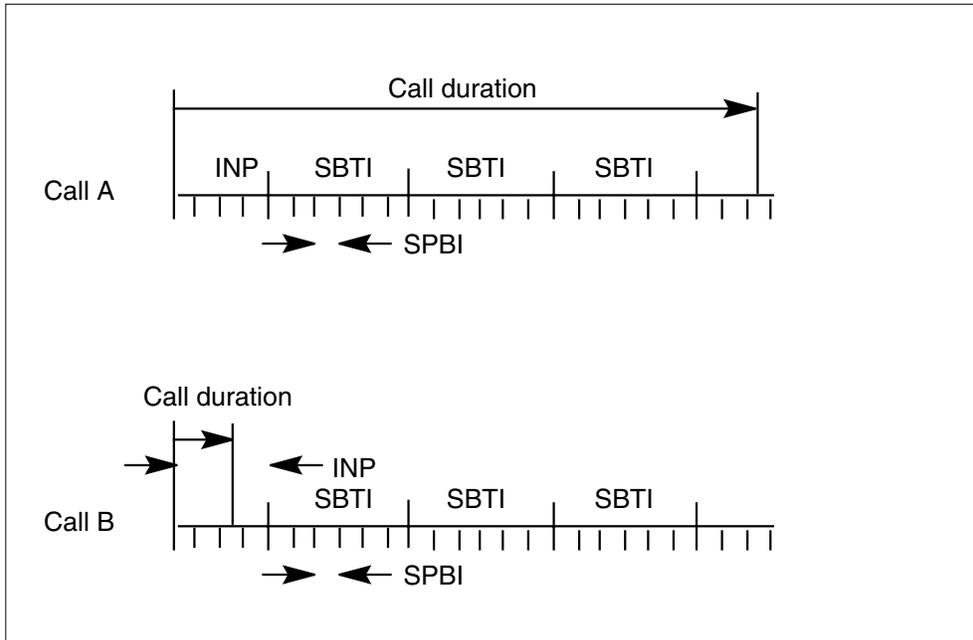
Table CHGATRIB is indexed by the entry in the INDEX field of Table ATTRIB in the tuple that was found to match the call characteristics.

When discount, surcharge, or charge rates depend on call characteristics, the system calculates the charges using tables ATTRIB, CHGATRIB, and ATRIMOD, superseding the default charge rates of Table CHGHEAD and then calculates the date-and-time-dependent discount or surcharge, starting with Table TIMEZONE.

For information on how this table is related to all other tables in the ITOPS Rating System, refer to Table ATRIMOD, Supplemental Information.

### Charge rating periods

Calls are rated according to time periods in fields INP (initial period), SBTI (subsequent time period), and SPBI (sub-period billing interval). These periods are illustrated in the following diagram.

**CHGATRIB** (continued)**Example calls**

In the above diagram, the charge time is:

- Call A: 1 INP + 3 SBTI + 3 SPBI periods
- Call B: 2 SPBI periods

The following are special considerations when using sub-period billing (that is, SPBI is not set to 0):

- Call duration < INP

If the call duration is less than the initial period, the call is rated only on sub-periods. For example, if INP = 90 seconds and SPBI = 30 seconds, a call of 60 seconds = 2 sub-periods and 0 INPs.

- SPBI = INP

If a sub-period value equals the INP, call durations of INP or less have no sub-period considerations. That is, SPBI is not used since INP provides the same result.

- SPBI = INP and SPBI < SBTI

If a sub-period value equals INP and is less than the subsequent period value, sub-period considerations are in effect after the INP value has been reached.

## CHGATRIB (continued)

This condition is similar to the prior consideration where SPBI is not used during INP.

- $SPBI = INP = SBTI$

If the sub-period value equals both the INP and subsequent period, there is no reason to have a sub-period value, since it has no effect on the call.

- $INP > Duration > SPBI$  or  $SBTI > Duration > SPBI$

If a call duration is greater than the sub-period value and less than the INP (depending on the SPBI value) the call duration may end on an INP boundary and sub-periods are not used. That is, if  $INP = 90$  seconds,  $SPBI = 30$  seconds,  $Duration = 62$  seconds,  $Duration$  rounds up to 90 seconds which is the INP value. This fact also applies to SBTIs.

### Datafill sequence and implications

Table ATTRIB must be datafilled before table CHGATRIB.

Table CHGATRIB must be datafilled after table CHGATRIB.

### Table size

0 to 64 tuples

### Datafill

The following table lists datafill for table CHGATRIB.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
INDEX		see subfields	Key into table CHGATRIB. This field contains subfields SCHNAME, RATESTEP, and ATTRIB. See the appropriate field name for its definition.
	SCHNAME	1 to 16 characters	Schedule name. Contains the name of the schedule that has been datafilled in table SCHNAME.
	RATESTEP	0 to 999	Rate step. Contains the rate step.
	ATTRIB	Y, N	Attribute. Y (yes) indicates that further refinements for this attribute exist in INDEX field of table ATTRIB. N (no) indicates that no further refinements exist in the INDEX field. The default is N.

**CHGATRIB** (continued)

## Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
MULT		ONE, TEN, HUNDRED, THOUSAND	Multiplying factor. The multiplying factor is used for countries having large currencies. The multiplying factor is the smallest charge available to non-coin and is used when rounding charges. (See table OFCVAR, parameter RATING_SMALLEST_COIN, for the smallest charge available for coin lines.) The default is ONE.
CLCHG		0 to 32767	Class charge. Contains the class charge for operator handled calls in applicable currency units. The default is 0.  The class charge is added to the base cost of the call (combined initial and subsequent charges).  Normally, on an operator-handled call, the initial period rate contains a charge to compensate for operator assistance. The class charge entry is then 0. However, when initial period discounting is enabled (table RATEMOD, field MODINP is Y) and operator assistance is not to be discounted, then the operator assistance portion is entered here.
TIMEAREA		see subfield	Incremental time charge area. This field consists of subfield TIMEUNIT and refinements.
	TIMEUNIT	MIN, SEC	Incremental time charge unit. Contains the desired time increment to be used for call charging purposes (see following). The default is MIN.  When this field is changed, the remaining fields must be recalculated and changed. The system does not perform automatic adjustment.

**CHGATRIB** (continued)

**TIMEUNIT = MIN**

When field TIMEUNIT is MIN, datafill fields SPBI, INP, IC, ICRP, SBTI, SBTC, SCRCP, and GRACE.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	SPBI	0 to 900	<p>Sub-period billing interval. This field is valid for non-coin calls only and indicates the sub-period billing interval in seconds for calculating rate charges. The default is 0.</p> <p>This field provides subdivision intervals for the INP and SBTI intervals. This allows more accurate billing since a call is charged for whole intervals, regardless of when the call ends. Therefore, a small SPBI means a shorter unused portion. If the call ends during INP, the rate is the time fraction of IC. If the call ends during SBTI, the rate is the time fraction of SBTC.</p> <p>If SPBI is set to zero, SPBI has no affect as prior to SPBI. SPBI is not affected by field TIMEUNIT.</p> <p>The values in fields INP and SBTI must be integer multiples of field SPBI. For example, if SPBI = 8 (seconds), INP and SBTI must be set to 2, or 4, or 6, and so forth (minutes).</p>
	INP	0 to 15	<p>Initial period. Contains the initial period in minutes. An entry of 0 indicates an infinite initial period. The default is 0.</p> <p>If field SPBI is not set to zero, field INP must divide evenly (no fractions) into field SPBI. Since SPBI is in seconds and INP is in minutes, the INP value is multiplied by 60 before it is divided by SPBI.</p>
	IC	0 to 32767	<p>Initial charge. Contains the initial charge in applicable currency units. The default is 0.</p>
	ICRP	0 to 15	<p>Initial charge return period. This is the amount of time before the call returns to the operator. The ICRP time period equals the sum of the time in field INP plus a multiple of the time in field SBTI. The default is 0.</p>

**CHGATRIB** (continued)**Field descriptions for conditional datafill (Sheet 2 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
	SBTI	0 to 15	<p>Subsequent period minutes. Contains the subsequent period in minutes. Calls extending beyond the initial period are charged the amount as specified in field SBTC for each subsequent period. The default is 0.</p> <p>If field SPBI is not set to zero, field SBTI must evenly divide (no fractions) into field SPBI. Since SPBI is in seconds and SBTI is in minutes, the INP value is multiplied by 60 before it is divided by SPBI.</p>
	SBTC	0 to 32767	<p>Subsequent charge. Contains the subsequent period charge in applicable currency units. The default is 0.</p>
	SCRP	0 to 15	<p>Subsequent charge return period. Contains the number of minutes after the call first returns to the operator. The SCRП time period is a multiple of the SBTI time. The default is 0.</p>
	GRACE	0 to 900	<p>Grace. This field indicates the number of seconds to be deducted from the time used for calculating the rating charge. The default is 0.</p> <p>If the call duration is less than or equal to the GRACE value, then the call duration is set to 0. If the call duration is 0, there is no charge for the call.</p>

**CHGATRIB** (continued)**TIMEUNIT = SEC**

When field TIMEUNIT is SEC, datafill fields SPBI, INP, IC, ICRP, SBTI, SBTC, SCRCP, and GRACE.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	SPBI	0 to 900	<p>Sub-period billing interval. This field is valid for non-coin calls only and indicates the sub-period billing interval in seconds for calculating rate charges. The default is 0.</p> <p>This field provides subdivision intervals for the INP and SBTI intervals. This allows more accurate billing since a call is charged for whole intervals, regardless of when the call ends. Therefore, a small SPBI means a shorter unused portion. If the call ends during INP, the rate is the time fraction of IC. If the call ends during SBTI, the rate is the time fraction of SBTC.</p> <p>If SPBI is set to zero, SPBI has no affect as prior to SPBI. SPBI is not affected by field TIMEUNIT.</p> <p>The values in fields INP and SBTI must be integer multiples of field SPBI. For example, if SPBI = 8 (seconds), INP and SBTI must be set to 2, or 4, or 6, and so forth (minutes).</p>
	INP	0 to 900	<p>Initial period. Contains the initial period in seconds. The default is 0.</p> <p>An entry of 0 indicates an infinite initial period.</p> <p>If field SPBI is not set to zero, field INP must divide evenly (no fractions) into field SPBI.</p>
	IC	0 to 32767	<p>Initial charge. Contains the initial charge in applicable currency units. The default is 0.</p>
	ICRP	0 to 900	<p>Initial charge return period. This is the number of seconds before the call returns to the operator. The ICRP time period equals the sum of the time in field INP plus a multiple of the time in field SBTI. The default is 0.</p>

**CHGATRIB** (continued)**Field descriptions for conditional datafill (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	SBTI	0 to 900	<p>Subsequent period seconds. Contains the subsequent period in seconds. The default is 0.</p> <p>Calls extending beyond the initial period are charged the amount as specified in field SBTC for each subsequent period.</p> <p>If field SPBI is not set to zero, field SBTI must evenly divide (no fractions) into field SPBI.</p>
	SBTC	0 to 32767	<p>Subsequent charge. Contains the subsequent period charge in applicable currency units. The default is 0.</p>
	SCRP	0 to 900	<p>Subsequent charge return period. Contains the number of seconds after the call returns to the operator. The SCRП time period is a multiple of the SBTI time. The default is 0.</p>
	GRACE	0 to 900	<p>Grace. This field indicates the number of seconds to be deducted from the time used for calculating the rating charge. The default is 0.</p> <p>If the call duration is less than or equal to the GRACE value, then the call duration is set to 0. If the call duration is 0, there is no charge for the call.</p>

**Datafill example**

The following example shows sample datafill for table CHGATRIB.

**CHGATRIB (end)**

**MAP display example for table CHGATRIB**

INDEX	MULT			CLCHG	TIMEAREA								
SCHED1	4	1	1	123	MIN	0	4	213	3	10	25	7	1
SCHED2	2	2	10	13	MIN	1	3	33	5	13	60	9	1
SCHED3	1	4	100	35	SEC	2	4	12	6	14	90	66	1

**Error messages**

The following error messages apply to table CHGATRIB..

**Error messages for table CHGHEAD**

Error message	Explanation and action
SPBI VALUE MUST EVENLY DIVIDE INTO INP	This error message is displayed if an attempt is made to datafill field INP with a value that does not divide evenly into the field SPBI value.
SPBI VALUE MUST EVENLY DIVIDE INTO SBTI	This error message is displayed if an attempt is made to datafill field SBTI with a value that does not divide evenly into the field SPBI value.

**Table history**

**TOP08.1**

Fields SPBI and GRACE added by feature AF7110 in functionality Global Operator Services Rating, GOS00001.

**BCS36**

Upper limit of SEC fields INP, ICRP, SBTI, and SCRCP increased.

---

**CHGHEAD**

---

**Table name**

ITOPS Rating Charge Calculator Head Charge Table

**Functional description**

Table CHGHEAD contains the default charge data. This table is the only non-optional table in the charge calculator system.

The default charge rates apply unless charge, discount, or surcharge rates depend on call characteristics, in which case table CHGHEAD is superseded by tables ATTRIB, CHGATRIB, and ATRIMOD.

When the default charge rates in table CHGHEAD apply, the system calculates the default charges and then calculates the date- and time-dependent discount or surcharge, starting with table TIMEZONE.

For related information, refer to table ATRIMOD.

**Datafill sequence and implications**

Table SCHNAME must be datafilled before table CHGHEAD.

**Table size**

0 to 64 tuples

**Datafill**

The following table lists datafill for table CHGHEAD.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
INDEX		see subfields	Key into table CHGHEAD. This field contains subfields SCHNAME and RATESTEP. See the appropriate field name for its definition.
	SCHNAME	1 to 16 characters	Schedule name. Contains the name of the schedule that has been datafilled in Table SCHNAME.
	RATESTEP	0 to 999	Rate step. Contains the rate step.

**CHGHEAD** (continued)

## Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ATTRIB		Y or N	Additional attributes. Y (yes) indicates that further refinements for this SCHNAME exist in table CHGATTRIB at the index in table ATTRIB. N (no) indicates that no further refinements exist.
MULT		ONE, TEN, HUNDRED, THOUSAND	Multiplying factor. The multiplying factor is used for countries having large currencies. The multiplying factor is the smallest charge available to non-coin lines and is used when rounding charges.  (See table OFCVAR, parameter RATING_SMALLEST_COIN, for the smallest charge available for coin lines).
CLCHG		0 to 32767	Class charge. Contains the class charge for operator-handled calls in applicable currency units.  The class charge is added to the base cost of the call (combined initial and subsequent charges).  <b>Note:</b> Normally, on an operator-handled call, the initial period rate contains a charge to compensate for operator assistance. The class charge entry is then 0. However, when initial period discounting is enabled (table RATEMOD, field MODINP is Y (yes), and operator assistance is not to be discounted, then the operator assistance portion is entered here.
TIMEAREA		alphanumeric	Incremental time charge area. This field contains the subfields TIMEUNIT, INP, IC, ICRP, SBTI, SBTC, and SCRP.
TIMEUNIT		MIN, SEC	Incremental time charge unit. Contains the desired time increment to be used for call charging purposes.

**CHGHEAD** (continued)**TIMEUNIT = MIN**

When field TIMEUNIT contains MIN, datafill fields INP, IC, ICRP, SBTI, SBTC and SCRP.

**Field descriptions for conditional datafill**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
INP		0 to 15	Initial period. Contains the initial period in minutes.  An entry of 0 indicates an infinite initial period.
IC		0 to 32767	Initial charge. Contains the initial charge in applicable currency units.
ICRP		0 to 15	Initial charge return period. ICRP is the number of minutes before the call returns to the operator. The ICRP time period equals the sum of the time in field INP plus any multiple of time in SBTI.
SBTI		0 to 15	Subsequent time period. Contains the subsequent period in minutes.  Calls extending beyond the initial period are charged the amount specified in field SBTC for each subsequent period.
SBTC		0 to 32767	Subsequent charge. Contains the subsequent period charge in applicable currency units.
SCRP		0 to 15	Subsequent charge return period. Contains the number of minutes after the call returns to the operator. The SCRP time period is a multiple of the SBTI time.

**CHGHEAD** (continued)**TIMEUNIT = SEC**

When field TIMEUNIT contains SEC, datafill fields INP, IC, ICRP, SBTI, SBTC and SCRП.

**Field descriptions for conditional datafill**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
INP		0 to 900	Initial period. Contains the initial period in seconds.  An entry of 0 indicates an infinite initial period.
IC		0 to 32767	Initial charge. Contains the initial charge in applicable currency units.
ICRP		0 to 900	Initial charge return period. ICRP is the amount of required time before the call returns to the operator. The ICRP time period equals the sum of the time in field INP plus a multiple of the time in field SBTI.
SBTI		0 to 900	Subsequent time period. Contains the subsequent period in seconds.  Calls extending beyond the initial period are charged the amount specified in field SBTC for each subsequent period.
SBTC		0 to 32767	Subsequent charge. Contains the subsequent period charge in applicable currency units.
SCRП		0 to 900	Subsequent charge return period. Contains the required amount of time after the call first returns to the operator. The SCRП time period is a multiple of the SBTI time.

**Datafill example**

The following example shows sample datafill for table CHGHEAD.

**CHGHEAD** (end)**MAP display example for table CHGHEAD**

INDEX					TIMEAREA						
SCHNAME	RATESTEP	ATTRIB	MULT	CLCHG	INP	IC	ICRP	SBTI	SBTC	SCRP	
SCHED1	4	Y	1	123	MIN	4	213	3	10	25	7
SCHED2	2	N	10	13	SEC	3	33	5	13	60	90

## **CHGMAP**

---

### **Table name**

TOPS Schedule Charge Mapping Table

### **Functional description**

Table CHGMAP is used to map all the charge tables for a rate schedule that share the same charge data. One of these tables is used in table CHARGE and the rest are mapped against it in table CHGMAP. Table CHGMAP can only be filled out after table CHARGE is completed.

The operating company lists all the charge tables sharing different charge data in table CHARGE, and then maps the rest of the charge tables to this first set in table CHGMAP.

Feature V0178 (TOPS Mass Table Control) permits data changes in table CHGMAP to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table CHGMAPI, and then, when all the required changes are entered, swap the contents of table CHGMAP with table CHGMAPI.

For further information on feature V0178, refer to table CHARGEI.

For related information, refer to table CHARGE.

### **Overseas Operator Center (OOC)**

Table CHGMAP allows mapping of different class charges to a specific class charge for each valid schedule.

### **Datafill sequence and implications**

There is no requirement to datafill other tables prior to table CHGMAP.

### **Table size**

None

**CHGMAP** (continued)**Datafill**

The following table lists datafill for table CHGMAP.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
SCHTBL		see subfields	Charge MAP key. This field consists of subfields SCHNAME and CHGTAB.
	SCHNAME	alphanumeric (1 to 16 characters)	Schedule name. Enter the name of the rate schedule as previously defined in table SCHED.
	CHGTAB	alphanumeric (up to 8 characters)	Charge table name. Enter the name of a charge table with charges identical to those of a charge table name listed in table CHARGE. Only valid table names, as shown in the description of table CHARGE, are allowed.  List all the charge tables belonging to the schedule type of the schedule that are not listed in table CHARGE.
MAPTAB		alphanumeric (up to 8 characters)	Charge table name. Enter a charge table name for which charges are defined in table CHARGE and that are identical to the charges for the table name in field CHGTAB.

**Datafill example**

The following example shows sample datafill for table CHGMAP.

The first example shows datafill for North American TOPS.

**MAP display example for table CHGMAP**

SCHTBL	MAPTAB
SAMPLESCH	PER STA

The second example shows datafill for the Caribbean Expansion Plan (CEP) International TOPS (ITOPS).

**CHGMAP** (end)

---

**MAP display example for table CHGMAP**

SCHTBL	MAPTAB	
LOCAL	PEROACN	STAOHCN

---

**CHGMAPI**

---

**Table name**

TOPS Schedule Charge Mapping Inactive Table

**Functional description**

Refer to table CHGMAP.

Feature V0178 (TOPS Mass Table Control) permits data changes in table CHGMAP to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table CHGMAPI, and then, when all the required changes are entered, swap the contents of table CHGMAP with table CHGMAPI.

For further information on feature V0178, refer to table CHARGEI.

For related information, refer to table CHARGEI.

**Datafill sequence and implications**

Refer to table CHGMAP.

**Table size**

Refer to table CHGMAP.

**Datafill**

Refer to table CHGMAP.

**Datafill example**

Refer to table CHGMAP.

## CHKDIGIT

---

### Table name

Traffic Operator Position System Domestic Credit Card Check Digit Table

### Functional description

Table CHKDIGIT performs a special digit check that compares one of the last four digits of the 14-digit domestic credit card or portable special billing number against a designated check digit in the number. The last four digits are of the format yyyy, representing a Personal Identification Number (PIN) with any one of the four digits designated a check digit (specified in field CHKDGPOS).

Each year, the seventh, eighth, ninth, or tenth digit is designated as the check digit and a number (0 to 9) is assigned to each of the numerics 0 to 9 to which the check digit may be equal. A valid credit card or special billing number is one that has the correct value in yyyy to match the value of the check digit. When the match is found during the special digit check the DMS traffic operator position system (TOPS) proceeds to the next check.

Conversely, a mismatch indicates an invalid domestic credit card or Special Billing Number. If this occurs, the credit card number shown on the TOPS flashes off and on to notify the TOPS operator of the mismatch.

As of BCS9, two other tables (RAOCHECK and NPACHECK) are used to define RAOs and numbering plan areas (NPA) to be checked using table CHKDIGIT.

For related information, refer to table HOTLIST.

### Datafill sequence and implications

There is no requirement to datafill other tables prior to table CHKDIGIT.

### Table size

0 to 2 tuples

**CHKDIGIT** (continued)**Datafill**

The following table lists datafill for table CHKDIGIT.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
PERIOD		PRESENT or PREVIOUS	Period. Enter PRESENT or PREVIOUS to specify the year to which the special digit check applies.  At the end of each year, transfer the information in the PRESENT record to the PREVIOUS record, then enter the information that applies to the new year in the PRESENT record.
VERDGPOS		7 to 10	Verification digit position. Enter the position of the verification digit.
CHKDGPOS		11 to 14	Check digit position. Enter the position of the check digit.
VAL0 to VAL9		0 to 9	Value. Enter in fields VAL0 to VAL9 the value that the <i>n</i> th digit of the credit card or special billing number must be when the value of the check digit is equal to 0 to 9, where <i>n</i> is the entry in field CHKDGPPOS.

**Datafill example**

The following example shows sample datafill for table CHKDIGIT.

The 14th digit of the present year credit card or special billing number must be equal to 2, 1, 5, 6, 0, 9, 7, 4, 3, or 8 when the 7th digit of the present year credit card number is equal to 0, 1, 2, 3, 4, 5, 6, 7, 8, or 9 respectively.

The 11th of the 14-digit previous year credit card or special billing number must be equal to 5, 9, 2, 7, 1, 4, 0, 6, 8, or 3 when the 9th digit of the previous year credit card number is equal to 0, 1, 2, 3, 4, 5, 6, 7, 8, or 9 respectively.

**Note:** 41444453333338 is an invalid present year credit card number because its 7th digit is equal to 5, and in PRESENT period, the entry in field CHKDGPPOS is 14, indicating that the last digit of the credit card number is the check digit and its value (8) should match the value of VAL5, which is 9.

## CHKDIGIT (end)

---

### MAP display example for table CHKDIGIT

PERIOD	VERDGPOS	CHKDGPOS	VAL0	VAL1	VAL2	VAL3	VAL4	VAL5	VAL6	VAL7	VAL8	VAL9
PRESENT	7	14	2	1	5	6	0	9	7	4	3	8
PREVIOUS	9	11	5	9	2	7	1	4	0	6	8	3

**CICGRP****Table name**

Carrier Identification Code Group

**Functional description**

This table defines CIC group names for the new TOPS translations and screening. This table allows carriers to be grouped when they have the same processing requirements. The CICGRP name is assigned to a trunk in table TOPEACAR and used for refinement of an equal access XLAGRP in table XLACIC. Therefore, CICGRP is used to refine an XLAGRP based on the carrier.

**Datafill sequence and meaning**

Enter datafill into table TOPSEACAR after you enter datafill into table CICGRP.

**Table size**

0 to 1023 tuples

**Datafill**

The table that follows lists datafill for table CICGRP.

**Field descriptions**

Field	Subfield	Entry	Explanation and action
CICGRP		up to 32 alphanumeric characters	Carrier identification code group. Define a CIC group name for use in tables TOPEACAR and XLACIC.

**Datafill example**

The figure that follows shows sample datafill for table CICGRP.

## **CICGRP (end)**

---

### **MAP display example for table CICGRP**

CICGRP
CD12
A112
C123

### **Table history**

#### **TOPS12**

This table was introduced by feature 59006822 in functionality OPRTRANS and EA, UNBN0001.

### **Additional information**

None

---

**CICSETS**


---

**Table name**

Carrier Identification Code Sets Table

**Functional description**

Table CICSETS defines and stores carrier identification code (CIC) sets for the control of carrier information parameter (CIP) inclusion in the Initial Address Message (IAM) for equal access (EA) feature group D (FGD) multifrequency (MF) to signaling system 7 (SS7) interworking calls. Defining CIC set names and adding CICs to or deleting CICs from CIC sets are performed using this table.

The single field LTKEY (Logical Tuple) in table CICSETS contains the following:

- 1- to 16-character set name string
- CIC value (0000-9999)

A CIC set in table CICSETS consists of all tuples with the same set name string. Tuples are sorted by set name and CIC value.

Existing tuples in table CICSETS cannot be modified. Additions and deletions are allowed.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table CICSETS.

**Table size**

Table CICSETS is sized based on the number of CIC sets defined in the office. There is no limit on the size of table CICSETS.

**Datafill**

The following table lists datafill for table CICSETS.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
LTKEY		16 character Set Name string number between 0000 - 9999	Logical Tuple key. This field contains the 16 character Set Name string and the CIC value. The CIC value is between 0000 and 9999.

## CICSETS (end)

---

### Datavfill example

The following example shows sample datavfill for table CICSETS.

#### MAP display example for table CICSETS

```
LTKEY
-----
CARRIER_A_DATA      0468
CARRIER_A_DATA      0838
CARRIER_A_SPEECH    0063
CARRIER_B_DATA      9742
```

### Table history

#### NA004

This table was introduced.

### Supplementary information

A carrier identification code set defined in table CICSETS can be datavfilled against an access to carrier (ATC) trunk group by datavfilling option CICSET in table TRKGRP. Trunk groups without option CICSET datavfilled (the default) do not include the CIP in the IAM. If option CICSET is datavfilled as SSET for a trunk group, the CIP is always included in the IAM for the trunk group.

Table CICSETS must contain at least one tuple with a given CIC set name before that CIC set can be assigned with option CICSET in table TRKGRP. Attempts to delete the last tuple for a CIC set assigned against an ATC trunk group tuple in table TRKGRP result in the following error message:

CIC set is assigned against an ATC trunk group type in table TRKGRP.

---

**CICSIZE4**

---

**Table name**

Carrier Identification Code Size Four Table

**Functional description**

Table CICSIZE4 exists only if feature FGD Carrier Identification Code Expansion is present. Table CICSIZE4 specifies the trunk groups that use four digit CICs. Trunk groups not appearing in CICSIZE4 are assumed to use three-digit CICs. The key field, TRUNKGRP, is the only field in the table.

When an InterLATA call is made through an Access Tandem (AT), the converted Equal Access End Office (EAEO) transmits four-digit CICs to the AT (independent of whether it received a four-digit CIC from the subscriber) if the trunk is datafilled in CICSIZE4. If a three-digit CIC is received, a leading zero must be appended before outpulsing. If a four-digit CIC is received for a trunk group not datafilled in table CICSIZE4, the leading digit must be removed. DFIL log 147 is produced if the leading carrier digit is not zero.

For calls routed to an international carrier, the converted EAEO is required to transmit either three or four digits, depending on whether the trunk group is datafilled in table CICSIZE4. The converted EAEO must delete (XXXX becomes XXX) or add (XXX becomes 0XXX) the leading zero. DFIL log 147 is output if a non-zero leading digit is deleted.

Office parameter EA\_TAB\_CICSIZE4\_OBSOLETE appears in both EOs and ATs. When full four-digit CIC conversion has been achieved, all trunks at an EO or AT carry four-digit CICs, and table CICSIZE4 is no longer required. The EO or AT can then be turned on to override checking table CICSIZE4 by setting EA\_TAB\_CICSIZE4\_OBSOLETE to Y. With EA\_TAB\_CICSIZE4\_OBSOLETE set to Y, table CICSIZE4 no longer needs to be datafilled. Note that this office parameter must only be set to Y when no trunks in the office carry three-digit CICs.

**Datafill sequence and implications**

Table TRKGRP must be datafilled before table CICSIZE4.

**Table size**

0 to 8192 tuples

---

## CICSIZE4 (end)

---

### Datfill

The following table lists datfill for table CICSIZE4.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
TRUNKGRP		alphanumeric (1 to 16 characters)	<i>Trunk group</i>  Enter the common language location identifier (CLLI) name of the trunk group that requires four-digit carrier identification codes (CIC). There are no additional fields to datfill.

### Datfill example

The following example shows sample datfill for table CICSIZE4.

#### MAP display example for table CICSIZE4

TRUNKGRP

---

TGRPX  
TGRPY  
TGRPZ

### Table history

#### BCS35

Table CICSIZE was introduced.

**CITYMAP****Table name**

TOPS City Map Table

**Functional description**

Table CITYMAP is used to identify the city where zone rating is to apply, once its numbering plan area (NPA) and three-digit exchange number (Nxx) become known in table VH.

For related information, refer to table CITYNUM.

**Datafill sequence and implications**

The following tables must be datafilled before table CITYMAP.

- CITYNUM
- CLDNPA

**Table size**

0 to 640 000 tuples

**Datafill**

The following table lists datafill for table CITYMAP.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
NPANXX		see subfields	Key into table CITYMAP. This field consists of fields NPA and NXX.
	NPA	200 to 999	Numbering plan area. Enter a called NPA known to table CLDNPA.
	NXX	200 to 999	Three-digit exchange number. Enter a called Nxx within the above NPA.
CITY		alphanumeric	City. Enter the name of the city where zone rating is to apply. Only up to 15 possible values for this field can be in the switch at a given time.

**Datafill example**

The following example shows sample datafill for table CITYMAP.

## **CITYMAP** (end)

---

### **MAP display example for table CITYMAP**

NPANXX	CITY
817 453	EULESS

### **Table history**

#### **BCS36**

Range of field NPA was changed. New range is 200 to 999.

---

**CITYNUM**

---

**Table name**

TOPS City Number Table

**Overview**

The City Zone Rating System tables (CITYMAP, CITYNUM, and CITYZONE) are used in a switch with the Traffic Operator Position System (TOPS).

City Zone Rating is a method of automatic rate step determination by the DMS rating system and is an extension of the vertical and horizontal (V&H) rating. It applies only to some of the largest cities in the U.S. that have several rate centers, also known as city zones.

Implementation of this feature enables the operating company to rate TOPS calls to locations where two V&H co-ordinates apply; one for those calls that exceed the operating company specified rate distance, for example, 40 miles, and another one for calls from locations less than the specified rate, for example, less than 40 miles.

The V&H calculations are automatically done based on the actual co-ordinates for the calling and called parties. If the mileage is greater than the operating company specified rate distance, then the V&H co-ordinates are replaced by the city's central co-ordinates of the called party and the calculations are redone. The new mileage is then used with a minimum mileage of rate distance, plus one.

The City Zone Rating System tables are used if field RATETYPE in table CLDNPA is equal to CZ (City Zone).

**Functional description**

Table CITYNUM is used to associate the city name to a number (1 to 15) such that field CITY can be used as a key in table CITYZONE. Each city number must be entered in this table before it can be referenced elsewhere.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table CITYNUM.

**Table size**

1 to 15 tuples

## CITYNUM (continued)

### Datavfill

The following table lists datavfill for table CITYNUM.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
VALUE		see subfield	Value. This field consists of subfield UNINT.
UNINT		1 to 15	Integer. Numbers can be chosen arbitrarily with the restriction that no two city names can be associated with the same number and no two numbers can be associated with the same city name.  Entries outside the range indicated for this field are invalid.
SYMBOL		alphanumeric (up to 32 characters)	Symbol for city name. Enter the city name that the above number is to be associated with.

### Datavfill example

The following examples shows sample datavfill for tables CLDNPA, VH, CITYMAP, CITYNUM, and CITYZONE.

#### MAP display example for table CLDNPA

NPATRF	OVERLAY
<hr/>	
506 BELLONT	VH CANUSA

**CITYNUM** (end)**MAP display example for table VH**

NPANXX	V	H
212 263	4988	1378

**MAP display example for table CITYMAP**

NPANXX	CITY
212 263	NEWYORK

**MAP display example for table CITYNUM**

VALUE	SYMBOL
15	NEWYORK

**MAP display example for table CITYZONE**

CITYZN	RATEDIST	V	H
NEWYORK	4	9213	7878

# CITYZONE

---

## Table name

TOPS City Zone Table

## Functional description

Table CITYZONE is used to give the value of the rate distance required in deciding whether a new set of vertical and horizontal (V&H) co-ordinates are needed for the called party with the following criteria:

- If the mileage is less than or equal to the rate distance, the rate step corresponding to that mileage is used.
- If the mileage is greater than the rate distance, a new set of V & H co-ordinates are needed.

For related information, refer to table CITYNUM.

## Datafill sequence and implications

There is no requirement to datafill other tables prior to table CITYZONE.

## Datafill

The following table lists datafill for table CITYZONE.

### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CTYZN		alphanumeric (up to 8 characters)	City. Enter the name of the city where zone rating is to apply as previously defined in field CITY in table CITYMAP.
RATEDIST		1 to 9999	Rate distance. Enter the distance required in deciding whether a new set of V & H co-ordinates are needed in establishing the type of rating to be used.
V		0 to 21505	Vertical. Enter the vertical co-ordinate used in rating.
H		0 to 21505	Horizontal. Enter the horizontal co-ordinate used in rating.

## Datafill example

The following example shows sample datafill for table CITYZONE.

---

**CITYZONE** (end)

---

**MAP display example for table CITYZONE**

CITYZN	RATEDIST	V	H
NEWYORK	4	9213	7878

## CKTDIGIT

---

### Table name

Circuit Digit Table

### Functional description

Table CKTDIGIT allows the end office to map a particular 0ZZ, 1NX code (field CKTDIGS) into a transit network selector (TNS) (field CKT\_CODE) when originating an equal access (EA) call to an access tandem (AT) over Signaling System #7 (SS#7) trunking. This table is also used to allow the AT to map the received TNS into a particular 0ZZ or 1NX code. The AT extracts field CARRIER\_NAMES from table OCCINFO using the XXX digits received in the TNS.

Calls arriving at an AT on SS7 trunks are identified as EA calls by the presence of the TNS parameter. The TNS parameter contains the equivalent of the multifrequency (MF) EA 0ZZXXX or 1N/NZXXX digits.

In the AT switch, the combination of the resultant 0ZZ or 1NX with the XXX digits (and CCC or 01R for international carrier calls) from the TNS is provided to pretranslations. The pretranslation either results in an interexchange carrier (IEC) route selection or the activation of a service switching point (SSP) function such as an Enhanced 800 Service (E800) database query.

### Datafill sequence and implications

The following tables must be datafilled before table CKTDIGIT:

- OCCNAME
- OCCINFO

An entry can be deleted from table CKTDIGIT at any time without special requirements. If the carrier is deleted from table OCCINFO without deleting it from table CKTDIGITS first, the entry in table CKTDIGIT is automatically deleted.

### Table size

0 to 1780 tuples

**CKTDIGIT** (continued)**Datafill**

The following table lists datafill for table CKTDIGIT.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields CARRIER_NAMES and CKT_CODE.
	CARRIER_NAMES	alphanumeric (1 to 16 characters)	<i>Carrier names</i> Enter the name of the carrier for equal access (EA) calls. See table OCCNAME.
	CKT_CODE	1, 2, 8 to 15	<i>Circuit code</i> At the end office, enter the circuit code to be included in the TNS optional parameter in an initial address message (IAM).  At the AT, enter the circuit code expected in the TNS optional parameter in an IAM received at the switching unit for an EA call from an EA end office.
CKTDIGS		000 to 999	<i>Circuit digits</i> Enter the first three digits in the EA signaling digit sequences 0ZZ XXX, 1N/NX XXX CCC, or 1N/NX XXX 01R transmitted on multifrequency (MF) trunks. In the AT, these digits are used to single out one of the outgoing circuits in the carrier group identified by the XXX digits.  <b>Note:</b> The first digit must be 0 or 1. The remaining two digits can be any value from 00 to 99.

**Datafill example**

The following example shows sample datafill for table CKTDIGIT.

## CKTDIGIT (end)

---

### MAP display example for table CKTDIGIT

KEY	CKTDIGS
GTE 1	179
GTE 11	099
ITT 1	179
ITT 11	099
SSP 8	088

---

**CLDNPA**

---

**Table name**

TOPS Called NPA and Calling Tariff to Rate Type Table

**Overview**

The Traffic Operator Position System (TOPS) Automatic Rating System tables are used to determine the rate schedule and rate step that apply on a call, given the calling NPA-Nxx (numbering plan area and three-digit exchange number) and called NPA or called NPA-Nxx.

Each calling NPA-Nxx served by the TOPS office is related to a calling tariff.

A tariff is defined as a set of rate schedules applicable to chargeable calls, and includes tax and rounding information. Different telephone companies can have different tariffs, and within one telephone company there may be different tariffs for different regions served by the telephone company.

A rate schedule consists of a common set of rating characteristics that apply from the originating point to the terminating point. An originating point can have several rate schedules (intrastate, interstate, local, overseas, and so on) that make up a set of schedules for a tariff.

**Caribbean expansion plan (CEP) International TOPS (ITOPS)**

Calls requiring operator assistance result in a charge to the customer that is calculated by a downstream process using the call information (call type, destination, answer time, duration of call, and so on).

There are cases, however, where the charges on a call must be quoted to the customer. This is true for the following call types:

- hotel calls
- coin calls
- calls requiring time-and-charges quote

In all three cases, the ITOPS system calculates the charges on the call. For hotel calls, these charges are reported to the hotel billing center (HOBIC) for quoting; in the latter two cases, the operator quotes the charges.

**CEP dialing plan**

The dialing plan for the Caribbean islands is based on the North American numbering plan area (NPA-Nxx-xxxx). The islands have numbering plan area (NPA) 809, with each island having one or more unique Nxx numbers associated with it.

## CLDNPA (continued)

---

### CEP ITOPS rating zones

The following terminology is used within this document to define the different CEP ITOPS rating zones:

- *Local* Calls completed within the same rate zone as the calling customer (calls within the same Nxx are always considered to be in the local rate zone).
- *Domestic* Calls completed within NPA 809 but to an Nxx in a different rate zone as the calling customer.
- *North American* Calls completed from NPA 809 to any destination based on the NPA-Nxx dialing plan (other than domestic calls).
- *International (or Overseas)* Calls completed from NPA 809 to a foreign country not based on the NPA-Nxx dialing plan (outside World Zone 1).

### CEP definitions

The ITOPS rating system for CEP is arranged to allow the operating company to create rate schedules that consist of a common set of rating characteristics that apply from an originating point to a terminating point. The same rate schedules can be used for origination and termination combinations that share these rating characteristics.

An originating point can have several rate schedules, depending on the type of rating required (TOPS rating system description [local, domestic, North American, international]). The group of rate schedules that entirely defines the rating requirements of an originating point is defined as a tariff. Tariffs are based on the calling party's NPA-Nxx. More than one NPA-Nxx can share the same tariff.

### CEP tariff and schedule definitions

The operating company can define a maximum of 63 tariffs as well as a maximum of 63 rate schedules.

Tariffs are defined in table TARIFF and associated with a tariff name. Similarly, schedules are defined in table SCHED and associated with a schedule name.

### CEP call rating

Using the calling party's NPA-Nxx, it is then possible to determine which tariff applies to the call. This information is obtained by indexing table CLGTRF.

After having determined the rating zone of the called party, the tariff obtained through table CLGTRF, for the calling party, is used to obtain the rate schedule applicable to that call. At the same time, a rate step is determined for that call.

---

**CLDNPA** (continued)

---

The rate step is later used, in conjunction with the rate schedule, to determine the charges applicable to the call.

The methods of obtaining the rate schedule and rate step for a call depend on the rate zone of the terminating point.

**CEP local rate zone**

For local rate zone calls, the rate schedule and rate step are directly associated to the tariff through table LCLRS.

**CEP North American rate zone**

For North American rate zone calls, the rate schedule and the rate step are obtained by using the called party's NPA as well as the originating party's tariff. The necessary information is obtained from table CLDNPA.

By using the single rate area (SRA) method of billing, a rate schedule and a rate step are easily obtained based uniquely on the called NPA and the calling tariff.

**CEP domestic rate zone**

Domestic rate zone calls cannot use the SRA method of billing as they require a further breakdown of the NPA into individual Nxxs. This is done by using the extended method of billing (EXT) that allows access into table CLDNPAEX. Table CLDNOA gives the necessary Nxx refinement needed.

If an entry is not found in table CLDNPAEX for a given Nxx, the default rate schedule and rate step are used as input for the NPA in table CLDNPA. The method of rating used also defaults to SRA.

**CEP charges on a call**

Once a rate step and a rate schedule have been obtained for the call, it becomes possible to calculate charges for this call as these two values drive the charge calculation.

There are, however, other factors that can influence the calculation of the total charges on the call.

**CEP billing details**

It is possible to vary the call charges, as required, depending on the following information:

- person or station billing
- operator handled, assisted, or direct dialed
- coin or noncoin

**CLDNPA** (continued)

---

It is possible to assign different charges to all combinations of these factors. However, this is not mandatory and is only used as required.

In table SCHED, the rate schedule is used to determine the necessary refinement of the charges based on the billing details. The following information is obtained (in order):

1. the lowest and highest valid rate steps
2. the terminating type (LOC [local], DOM [domestic], OVS [overseas])
3. the schedule type (STD, CTT, SCT, MLT)

It is this field that determines the allowed refinement for a particular schedule based on the station class (CN [coin], NC [non-coin]), call type (DD, OA, OH), and billing type (STA, PER). STD (standard) allows only billing type refinement (allowed by all), CTT (call type tier) allows a refinement on call type, SCT (station class tier) allows a refinement on station class, and MLT (multitier) allows both further refinements.

4. the coin initial recall period (CIRP)
5. the coin recall period (CRP) for subsequent recalls

**Functional description**

Table CLDNPA is used to define the automatic rating method to be used on calls between a specified calling tariff (related to the calling NPA-Nxx) and called NPA combination.

If more than one automatic rating method is required on calls between a specified calling tariff and called NPA combination, the extended rate type method is used and table CLDNPA points to table CLDNPAEX where a different automatic rating method can be defined for each specified combination of calling tariff and called NPA-Nxx.

Once it is determined whether the extended rate type is required or not, the DMS-TOPS rating system offers the following four methods (rate types) for the automatic schedule name and rate step determination:

- **Vertical and horizontal coordinate system (V&H)**

In this method, the schedule name is listed in table CLDNPA or table CLDNPAEX and the rate step is determined by looking up the calling and called NPA-Nxx vertical-horizontal (V-H) coordinate system in table VH, calculating the mileage, and looking up in table MILES the rate step corresponding to the schedule name and mileage.

- **Single rate area**

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**CLDNPA** (continued)

---

For called NPAs or called NPA-Nxx's that result in a single rate step from a calling tariff, the schedule name and rate step are defined in table CLDNPA or CLDNPAEX, respectively.

- **Point-to-point**

In this method the point-to-point originating and terminating rate centers are defined in tables ORIGRC and TERMRC, respectively. The schedule name and rate step for a specific combination of originating and terminating rate centers are defined in table PTP.

- **City zone**

This is an extension of the V&H method. The schedule name is listed in table CLDNPA or table CLDNPAEX and the rate step is determined by looking up the RATEDIST field in table CITYZONE before calculating the mileage band. If the mileage is less than or equal to RATEDIST, then the rate step corresponding to that mileage is used. Otherwise, V&H calculations are redone.

### **TOPS Mass Table Control**

Feature V0178 (TOPS Mass Table Control) permits data changes in table CLDNPA to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table CLDNPAI, and then, when all the required changes are entered, swap the contents of table CLDNPA with table CLDNPAI.

For further information on feature V0178, refer to table CHARGEI.

### **Datafill sequence and implications**

The following tables must be datafilled before table CLDNPA:

- SCHED
- TARIFF

### **Table size**

0 to 10 080 tuples

**CLDNPA** (continued)

**Datafill**

The following table lists datafill for table CLDNPA.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
NPATRF		see subfields	Called numbering plan area—calling tariff key. This field consists of subfields CLDNPA and TARIFF.
	CLDNPA	200 to 999	Called numbering plan area. Enter the called numbering plan area (NPA).
	TARIFF	alphanumeric (1 to 17 characters )	Calling tariff. Enter the tariff name that the originating NPA-Nxx belongs to.  This name must be known to table TARIFF and cannot be the tariff name associated with tariff number 0.
OVERLAY		see subfield	Rate type and refinements as determined by the rate type. This field consists of subfield RATETYPE.
	RATETYPE	CZ, EXT, PTP, SRA, or VH	Rate type. Enter the rate type to define the method of automatic rate step determination for this combination of called NPA and calling tariff.  Enter CZ for city zone method and datafill refinement SCHNAME.  Enter EXT for extended rate type and datafill refinement SCHNAME.  Enter PTP for point-to-point method and datafill no refinements.  Enter SRA for single rate area method and datafill refinements SCHNAME and RATESTEP.  Enter VH for V-H method and datafill refinement SCHNAME.

**CLDNPA** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	SCHNAME	alphanumeric (1 to 17 characters)	<p>Schedule name. If RATETYPE is CZ, SRA, or VH, datafill this refinement. Enter the schedule name applicable to this combination of called NPA and calling tariff.</p> <p>If the RATETYPE is EXT, enter the schedule name that applies when the combination of called NPA-Nxx and calling tariff is not found in table CLDNPAEX. The call is then rated as if RATETYPE is VH.</p> <p>The schedule name must be known to table SCHED with field TERMTYPE set to DOM. The name cannot be the schedule name associated with schedule number 0.</p>
	RATESTEP	0 to 999	<p>Rate step. If the entry in subfield RATETYPE is SRA, enter the rate step applicable to this combination of called NPA and calling tariff.</p> <p>The value for this refinement must be within the rate step limits LRS &amp; HRS specified in table SCHED for the associated schedule name.</p>

**Datafill example**

The following examples show sample datafill for table CLDNPA.

The first examples shows datafill for North American TOPS.

**MAP display example for table CLDNPA**

NPATRF	OVERLAY
219 TELEBEC	VH CANUSA

The second example shows datafill for the CEP ITOPS domestic rate zone. The extended rate type must be used since a breakdown by Nxx is required in table CLDNPAEX.

## CLDNPA (end)

---

### MAP display example for table CLDNPA

	NPATRF		OVERLAY
809	STKITTS1	EXT STKITTS469	250

The third example shows datafill for the CEP ITOPS North American rate zone.

### MAP display example for table CLDNPA

	NPATRF		OVERLAY
613	STKITTS1	SRA CANADA	36

### Table history BCS36

The range of field CLDNPA was changed.

**CLDNPAEX****Table name**

TOPS Called NPA-Nxx and Calling Tariff to Rate Type Table

**Functional description**

Table CLDNPAEX is used to define the automatic rating method used on calls between a specified calling tariff (related to the calling NPA-Nxx) and called NPA-Nxx combination if more than one automatic rating method is required on calls between a specified calling tariff and called NPA combination.

For related information, refer to table CLDNPA and CLDNPAEXI.

**Datafill sequence and implications**

The following tables must be datafilled before table CLDNPAEX:

- SCHED
- TARIFF

**Table size**

0 to 819 200 tuples

**Datafill**

The following table lists datafill for table CLDNPAEX.

**Field descriptions (Sheet 1 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
TRFNPAXX		see subfields	Called NPA - calling tariff key. This field consists of subfields CLDNPA, CLDNXX, and TARIFF.
	CLDNPA	200 to 999	Called NPA. Enter the three-digit called numbering plan area (NPA).
	CLDNXX	200 to 999	Called Nxx. Enter the three-digit called Nxx.
	TARIFF	alphanumeric (1 to 17 characters)	Calling tariff. Enter the tariff name that the originating NPA-Nxx belongs to. This name must be known to table TARIFF and cannot be the tariff name associated with tariff number 0.

**CLDNPAEX** (continued)

## Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
OVERLAY		see subfield	RATETYPE and refinements as determined by the rate type. This field consists of subfield RATETYPE and its refinements.
	RATETYPE	CZ, PTP, SRA, or VH	<p>Rate type. Enter the rate type to define the method of automatic rate-step determination for this combination of called NPA and calling tariff.</p> <p>Enter CZ for city zone method and datafill refinement SCHNAME.</p> <p>Enter PTP for point-to-point method (no additional datafill required).</p> <p>Enter SRA for single-rate area method and datafill refinements SCHNAME and RATESTEP.</p> <p>Enter VH for V-H method and datafill refinement SCHNAME.</p> <p><b>Note:</b> Rate type EXT is not allowed in this table.</p>

**CLDNPAEX** (continued)**Field descriptions (Sheet 3 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
	SCHNAME	alphanumeric (1 to 17 characters)	<p>Schedule name. If the entry in subfield RATETYPE is PTP, leave this refinement blank.</p> <p>If the entry in subfield RATETYPE is VH, CZ, or SRA, enter the schedule name applicable to this combination of called NPA and calling tariff.</p> <p>The schedule name must be known to table SCHED with field TERMTYPE = DOM. It cannot be the schedule name associated with schedule number 0.</p>
	RATESTEP	0 to 999	<p>Rate step. If the entry in subfield RATETYPE is SRA, enter the rate step applicable to this combination of called NPA-Nxx and calling tariff.</p> <p>The value for this refinement must be within the rate step limits LRS &amp; HRS specified in table SCHED for the associated schedule name.</p>

**Datafill example**

The following example shows sample datafill for table CLDNPAEX.

An example of datafill for North American TOPS is shown in the first half of the following example; an example of the Caribbean expansion plan (CEP) International TOPS (ITOPS) domestic rate zone is shown in the second half of the following example.

## CLDNPAEX (end)

---

### MAP display example for table CLDNPAEX

TRFNPAXX				OVERLAY
212	663	BELLONT	VH	CANUSA
212	741	TELEBEC	VH	ONTQUE
613	232	TELEBEC	VH	TELEQUE
819	663	BELLONT	CZ	TELENORAM
809	465	STKITTS2	SRA	STKITTS465 200
809	465	STKITTS2	SRA	STKITTS469 250

### Table history

#### BCS36

Range of field CLDNPA was changed.

---

**CLDNPAEXI**

---

**Table name**

TOPS Called NPA-Nxx and Calling Tariff to Rate Type Inactive Table

**Functional description**

For related information, refer to tables CLDNPAEX, CLDNPA, and CHARGEI.

**Datafill sequence and implications**

The following tables must be datafilled before table CLDNPAEXI:

- SCHEDI
- TARIFF

**Table size**

Refer to table CLDNPAEX.

**Datafill**

Refer to table CLDNPAEX.

**Datafill example**

Refer to table CLDNPAEX.

**Table history****BCS36**

Table CLDNPAEXI was introduced.

## **CLDNPAI**

---

### **Table name**

TOPS Called NPA and Calling Tariff to Rate Type Inactive Table

### **Functional description**

Feature V0178 (TOPS Mass Table Control) permits data changes in table CLDNPA to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table CLDNPAI, and then, when all the required changes are entered, swap the contents of table CLDNPA with table CLDNPAI.

For further information on feature V0178, refer to table CHARGEI.

Refer to table CLDNPA.

### **Datafill sequence and implications**

Refer to table CLDNPA.

### **Table size**

Refer to table CLDNPA.

### **Datafill**

Refer to table CLDNPA.

### **Datafill example**

Refer to table CLDNPA.

---

**CLGSET**

---

**Table name**

TOPS Zenith Calling Point Set Table

**Overview**

The Traffic Operator Position System (TOPS) operator can key in a five-digit Zenith number given verbally by the calling party into the system. The software checks the validity of the number and terminate on a preassigned forward destination number, provided the subscriber is permitted to do so.

Validation checks on Zenith numbers and speed up Zenith calls can be automated.

The set of tables described below can handle up to 5120 Zenith numbers. Under each Zenith number there is one or more forward destination numbers (the actual directory number [DN] the Zenith call is going to terminate on, and a calling point set).

A calling point set is defined as a set of data containing the local call area name of the calling subscriber, a serving numbering plan area (SNPA), up to 18 NXXs. This set of data is used to validate the Zenith number given verbally.

Two data tables, CLGSET and ZENITH, are used to implement this automation as follows:

- Table CLGSET associates a calling point set name with the list of checking data mentioned above.
- Table ZENITH associates a Zenith number with the calling point set name and the forward destination number.

The TOPS operator invokes this checking procedure by keying in KPFWD + 800 + Zenith number + START at the TOPS position. The system then asks for the calling number and looks at tables ZENITH and CLGSET to perform the validity checks. If the call passes the checks, the forward destination number is used to forward the call. Otherwise, the operator is informed that authorization is not granted by the UCA code on the screen.

**Functional description**

Table CLGSET is used to associate a calling point set name with a set of data that includes the local calling area, the SNPA and the calling NXXs of the calling subscribers.

The data in table CLGSET is used to validate the Zenith number given verbally by the subscriber to the TOPS operator before a Zenith call can proceed.

**CLGSET** (continued)

Authorization is given for the call to proceed provided either the local name of the incoming trunk or the calling NXX of the call matches the data contained in table CLGSET.

One calling point set name can be and, if possible, should be shared by a number of Zenith numbers.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table CLGSET.

**Datafill**

The following table lists datafill for table CLGSET.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CLGKEY		alphanumeric (1 to 16 characters)	Calling point set name. Enter the calling point set name to be associated with table ZENITH.
SNPA		numeric (3 digits)	Serving numbering plan area. Enter the serving numbering plan area (SNPA) of the calling party. This entry is used to check against field SNPA in the incoming trunk group.
LCANAME		alphanumeric (1 to 4 characaters)	Local calling area name. Enter the local calling area name of the calling party. This entry is used to check against field LCA in the incoming trunk group and table TOPSBC.
NNXAREA		see subfield	Originating NXX. This field consists of subfield MORE.
	MORE	Y or N	More data flag. Enter Y (yes) if a list of possible originating NXXs are to be checked as well, and datafill refinement NNX. Otherwise, enter N (no).
	NNX	alphanumeric (3 digits of 0 to 9, B to F, N)	Office code. Enter a list of up to 18 NXXs that are to be associated with the particular calling point set name. These NXXs are checked by the system. If less than 18 NXXs are required, end the list with a \$ (dollar sign).

**Datafill example**

The following example shows sample datafill for table CLGSET.

**MAP display example for table CLGSET**

CLGKEY	SNPA	LCANAME NNXAREA
UNRESTRICTED	613	NLCA N

## CLGSSET

---

### Table name

ITOPS Rating Rate Step Calculator Calling Area Schedule Set Table

### Functional description

Table CLGSSET maps a calling area to a schedule set.

The originator's (calling) number is used to index into table CLGSSET field CLGNUM. The schedule set name in field SSETNAME is then used to index into table RSLOC, RSNAT, or RSFOR depending on the called number.

Refer to 2nd figure of the ITOPS rating system flowchart.

For related information see table ATRIMOD.

### Datafill sequence and implications

The following tables must be datafilled before table CLGSSET:

- SSETNAME

### Table size

0 to 32 767 tuples

### Datafill

The following table lists datafill for table CLGSSET.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CLGNUM		numeric (1 to 18 characters)	Calling number. Enter the numeric digilator string to define a calling number, or a range of calling numbers, to be associated with the schedule set name defined in field SSETNAME below.
SSETNAME		alphanumeric (1 to 16 characters)	Schedule set name. Enter the schedule set name, known to table SSETNAME, to be associated with any calling number within the range of the digilator string of field CLGNUM above.

### Datafill example

The following example shows sample datafill for table CLGSSET.

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**CLGSSET** (end)

---

**MAP display example for table CLGSSET**

CLGNUM	SSETNAME
1021	SSETNAMEA
1022	SSETNAMEB
20	SSETNAMEC
3041	SSETNAMED

## CLGTRF

---

### Table name

TOPS Calling NPA-NXX to Tariff Table

### Functional description

Table CLGTRF is used in domestic local and toll rating to determine which tariff to use when rating a call originating from an NPA-NXX point served by the Traffic Operator Position System (TOPS).

For related information, refer to table CLDNPA.

#### **Overseas Operator Center (OOC):**

Table CLGTRF allows operating companies to assign a tariff based on the calling numbering plan area (NPA) and NXX for up to 16 NPAs in that serving NPA.

For OOC, all overseas call charges are the same, irrespective of where the call originated from within Canada. However, there are different provincial tax rates applicable on a tariff base. For this reason, table CLGTRF is retained.

### Datafill sequence and implications

The following tables must be datafilled before table CLGTRF:

- TARIFF
- HNPACONT

### Table size

0 to 12 800 tuples

**CLGTRF** (continued)**Datafill**

The following table lists datafill for table CLGTRF.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
NPANXX		see subfields	Calling NPA-NXX key. This field consists of subfields CLGNPA and CLGNXX.
	CLGNPA	N 0/1 X	Calling numbering plan area. Enter the calling numbering plan area (NPA) served by the Traffic Operator Position System (TOPS) as previously defined in table HNPACONT.  N is a number from 2 to 9 X is a number from 0 to 9  A maximum of 16 originating NPAs can be datafilled.
	CLGNXX	0 to 9 (3 digits)	Calling NXX. Enter the calling NXX of the calling NPA above served by TOPS.
TARIFF		alphanumeric (1 to 17 characters)	Calling tariff. Enter the tariff name that the originating NPANXX belongs to as previously defined in table TARIFF.  The entry cannot be the tariff name associated with tariff 0 (zero).

**Datafill example**

The following examples show sample datafill for table CLGTRF.

The first example shows datafill for North American TOPS.

**MAP display example for table CLGTRF**

NPANXX	TARIFF
<hr/>	
212 837	BELLONT

**CLGTRF** (end)

---

The second example shows datafill for the Caribbean Expansion Plan (CEP) International TOPS (ITOPS).

Points in NXX 465 follow different rate schedules than points in NXX 469.

**MAP display example for table CLGTRF**

NPANXX	TARIFF
809 465	STKITTS1
809 469	STKITTS2

---

## CLIDN

---

### Table name

Calling Line Identification Table

### Functional description

Table CLIDN contains the ten-digit directory numbers (DN) for which calling line identification (CLI) is available. These DNs are external to the switching unit. The ten-digit DNs include an area code + office code + directory number.

In a local switching unit, the NPA (area code) must be the same NPA as the originating subscriber to produce log report TRK163.

In a toll switching unit, the NPA (area code) must be the same as the serving NPA of the incoming trunk to produce log report TRK164.

To generate a TRK164 log for FGD calls with two-stage outpulsing, include SNPA+0ZZ+XXX in table CLIDN. If this event does not occur, the system does not generate a TRK164 log.

The letter N must prefix service codes like 411, 911, and 0 to make the total digit count equal to 10. The system internally translates the letter N to 0. This condition requires two entries. One entry, NPAnnnn911, has the serving NPA (SNPA) of the trunk. The other entry, nnnnnnn911, does not have the SNPA of the trunk.

For CLI numbers internal to the switching unit, see feature CLI in table LENFEAT.

Use feature CLI in a local, toll or local/toll switching unit.

If a local line calls an external DN that table CLIDN identifies for calling line identification, the system generates log report TRK163. Log report TRK163 contains the following:

- the DN of the calling party
- the outgoing trunk number
- the DN of the called party
- the date and the time

If the system cannot identify the calling DN, the originating equipment number and tip-and-ring side identification replace the number. The tip-and-ring side identification must be available.

## **CLIDN** (continued)

---

An incoming trunk can receive a call for an external DN that table CLIDN identifies for CLI. When this event occurs the system generates log report TRK164. Log report TRK164 contains:

- the incoming trunk number
- the outgoing trunk number
- the DN of called party
- the date and time

An incoming SS7 trunk on a tandem switch can receive a call for an external DN that table CLIDN identifies for CLI. When this event occurs the system generates log report TRK605. Log report TRK605 contains:

- the incoming trunk number
- the outgoing trunk number
- the DN of the called number
- the DN of the originating number
- the date and time

### **United Kingdom**

In the UK market, log TRK164 cannot trace the origin of a call. Log report TRK602 replaces TRK164 in this market for PCM30 digital trunk controller (PDTC) MEL and Digital Private Network Signaling System No. 1 (DPNSS) calls to BTUP. The BTUP is the UK variant of national user part.

The TRK602 contains the same information as log TRK164 and a default CLI in table TRKMEM (CLI).

### **Datafill sequence and meaning**

You do not need to enter data in other tables before you enter data in table CLIDN.

### **Table size**

67 tuples

**CLIDN** (continued)**Datafill**

Datafill for table CLIDN appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
DIGITS		numeric and N	<p><i>Digits.</i> The entry is equal to the ten-digit DN of a line external to the switching unit.</p> <ul style="list-style-type: none"> <li>The letter N must prefix service codes like 411, 911, and 0. This action makes the total digit count equal to 10. The system translates the letter N internally to 0. This condition requires two entries. One entry, NPAnnn911, has the NPA. One entry, nnnnnnn911, does not have the NPA.</li> <li>To produce log report TRK163 in a local switching unit, the NPA must be the same NPA as the originating subscriber.</li> <li>You can produce log report TRK164 in a toll switching unit. The NPA must be the same NPA as the serving NPA of the incoming trunk.</li> <li>Log report TRK602 replaces log TRK164 in the UK market. This log report contains the same information, and a default CLI.</li> </ul>

**Datafill example**

An example of datafill for table CLIDN appears in the following table. The example contains two lines in NPA 613 with assigned DNs 224-4579 and 238-2378. These DNs appear for CLI in table CLIDN.

**MAP example for table CLIDN**

DIGITS
6132244579
6132382378

**CLIDN** (end)

---

**Table history**

**NA100**

In accordance with CSR Q00272213 (UD10015), table CLIDN documentation is modified.

**EUR003**

Design activity AE1497 (CLI from Type II MEL) introduced log report TRK602 in EUR003.

---

**CLLI**

---

**Table name**

Common Language Location Identifier Table

**Functional description**

The common language location identification (CLLI) codes identify the far end of each announcement, tone, or trunk group.

The CLLI codes describe each announcement, tone, trunk group, test trunk, national milliwatt test line, and service circuit.

You must enter the CLLI codes for all national milliwatt test lines in tables CLLI and TRKGRP. In table TRKGRP, type TTL2, field MWDBLEVEL specifies the card code of the milliwatt test line. The card code indicates the dB level of the milliwatt source. Field MWSPRVSN specifies the supervision. The old fixed pseudo CLLI codes can be present. Pseudo CLLI code cannot assume the dB level and supervision.

The international milliwatt test lines continue to use the fixed pseudo CLLI codes, INTL102T, INTL102L, and INTL100Q. In table TRKGRP (type TTL2), the international test lines, INTL102T, INTL102L, and INTL100Q have datafill in fields MWDBLEVEL and MWSPRVSN. The switch does not use the information in these fields.

The list of codes must contain the fixed pseudo codes that apply to the switch. The list of codes must contain the codes that the operating company defines.

Use the command interpreter (CI) command RENAMECLLI to rename or change the spelling of a current CLLI code. Use the CI command CLLINUMBER to obtain the number associated with the CLLI name. Specified tables require the CLLI number and not the CLLI name. Refer to the *Basic Translations Tools Guide* for additional information.

**Note:** Do not use the CI command RENAMECLLI for primary rate interface (PRI) trunks that are used as a PRI public safety answering point (PSAP).

The following codes are four types of CLLI codes:

- The CLLI codes that external (EXT) files contain. The system adds these codes to table CLLI if a feature is in the switch.
- The fixed CLLI codes that you must add to table CLLI. The spelling of the codes must be the same as the spelling that appears.

**CLLI** (continued)

- The suggested CLLI codes that you must add to table CLLI. The spelling of these codes can be different. This condition applies if the spelling of the code is the same in each table in which the code appears.
- The CLLI codes that the operating company defines.

The CLLI codes the EXT files contain appear in the following table. The system adds these codes to table CLLI for an associated feature.

The type of restart the system requires after the addition of the CLLI code to table CLLI appears in the list. This addition allows this CLLI code to occur in another table. The system requires this restart to increase the TRKGRSIZ for the specified CLLI.

If your switch has the NORESTARTSWACT utility, a service interruption does not occur when you activate data changes. Refer to the *NORESTARTSWACT User Guide*.

**CAUTION****Possibility of service interruption**

Perform restarts only during low traffic periods. You can enter data anytime. The data activates only after the restart. The following information tables indicate the restart.

**CLLI codes that depend on the feature (Sheet 1 of 3)**

CLLI	Explanation	Related table	Restart
BBTOUT	Board-to-board testing	None	None
DLSE	Dial line service evaluation	None	None
DMODEMC	Digital modem, Bell 212 communication protocol	DMODEM	None
DPPSC	Distributed processing peripheral scan circuits	DPP	None
DSCKT	Dialable short	MTAHORIZ	None
EADNMCLLI	Engineering and Administration Data Acquisition System for Network Management	EADNMTG	None

**CLLI** (continued)**CLLI codes that depend on the feature (Sheet 2 of 3)**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Restart</b>
FRBTONE	Faultsman's ringback tone. Use this tone to access acknowledgement tone. The acknowledgement tone is a special information tone that resides in the digital recorded announcement machine [DRAM].	DRAMS	Cold
ITSE	Incoming toll service evaluation	None	None
MISCSC	Miscellaneous scan group (SC) circuits (see note 9)	SCGRP	None
MISCSD	Miscellaneous signal distributor (SD) circuits (see note 9)	SDGRP	None
NWMSC	Network Management scan point	NWMSC	None
NWMSD	Network Management signal distributor point	NWMSD	None
OFFHKSUP	Supervision signal off-hook (see note 5)	OFRT and all RTEREF subtables	None
ONHKSUP	Supervision signal on-hook (see note 5)	OFRT and all RTEREF subtables	None
ROTLSC	Remote office test line scan point	ROTLSCSD	None
ROTLSD	Remote office test line signal distributor point	ROTLSCSD	None
STGOVFL	Equal access shared trunk group overflow peg	IBNRTE	None
STRG	Station ringer. Refer to the current station ringer test example on page 17.	None	None
SYNCH	Synchronous test line. Refer to route reference 11 for table OFRT.	OFRT and all RTEREF subtables	None

**CLLI** (continued)**CLLI codes that depend on the feature (Sheet 3 of 3)**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Restart</b>
TERMARTER	International ARTER transmission testing of Turkish trunks. The addition of these trunks occurs at initial program load (IPL) time by terminating ARTER software code.	None	Cold
TOPSCOINCOLLECT	TOPS coin collect (see note 4)	OFRT and all RTEREF subtables	None
TOPSCOINDISABLE	TOPS coin key pad disable (see note 4)	OFRT and all RTEREF subtables	None
TOPSCOINENABLE	TOPS coin key pad enable (see note 4)	OFRT and all RTEREF subtables	None
TOPSCOINRETURN	TOPS coin return (see note 4)	OFRT and all RTEREF subtables	None
TRKLPBK	Dialable loopback for trunks that are DS-0 channels. These trunks include ISDN user part [ISUP] trunks. (see note 10)	None	None
WINKSUP	Supervision signal wink (see note 5)	OFRT and all RTEREF subtables	None

The fixed CLLI codes to add to table CLLI appear in the following table. The spelling of the fixed CLLI codes must be the same as the spelling that appears.

**Fixed CLLI codes (Sheet 1 of 8)**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Type of restart needed</b>
AIS	Automatic Intercept System trunk	TRKGRP (type AI)	None
ALL	SATOVER table generic CLLI	SATOVER	None
AOSSANN	Auxiliary Operator Services System (ADSS) announcement	ANNS DRMUSERS	None

**CLLI** (continued)**Fixed CLLI codes (Sheet 2 of 8)**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Type of restart needed</b>
AOSSDEV	ADSS device	AOSSDEV	Cold
AOSSPOS	ADSS position	AOSSPOS	Cold
AOSSPOSDATA	ADSS position data	AOSSPOS	Cold
ASCS	Alarm sending and checking	ASCS	None
ATMERA	ATME2 type A responder (see note 11)	OVR0-9	Cold
ATMERB	ATME2 type B responder (see note 11)	OVR0-9	Cold
ATMERC	ATME2 type C responder (see note 11)	OVR0-9	Cold
BVTONE	Busy verification tone (see note 7)	STN	Warm
CAPOX	CAMA Call Waiting suspension	CAMACSW	Cold
CF3P	Three-port conference circuit	CONF3PR	None
CF6P	Six-port conference circuit	CONF6PR	None
COPP	Cutoff on permanent signal and partial dial	None	None
CPOS	CAMA position talk circuit	CAMACSW	Cold
CPOSKEY	CAMA position key circuit	CPOS	Cold
CSUSP	Traffic Operator Position System (TOPS) CAMA suspension circuit	CSUSP	None
CWT	Call Waiting tone	STN	Warm
DCLTONE	Dialable cable locator tone	TRKGRP (type MAINT)	None
DCTTERMBERT	Data call tester bit error tester termination application	DNIBERT	None
DGT300	DMS-300 digital Digitone receivers	RECEIVER	None
DISTCWT	Distinctive Call Waiting tone	STN	Warm

**CLLI** (continued)**Fixed CLLI codes (Sheet 3 of 8)**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Type of restart needed</b>
DMODEM	Digital modem (Integrated Business Network (IBN), TOPS	None	None
DQB300	Dial-up autoquote modem at 300 baud	DQMODEM	None
DQB1200	Dial-up autoquote modem at 1200 baud	DQMODEM	None
DRCWTONE	Distinctive ringing/call waiting tone	STN	Warm
DTU	Digital test unit	TRKGRP (type MAINT)	None
EAPEG	Equal access overflow peg	AMAOPTS	None
EBOT	Executive Busy Override warning tone. Most switches use this tone. The UK switches are the only switches that do not use this tone.	STN	Warm
ENHCWT1	Enhanced Call Waiting tone for the first secondary directory number (SDN)	STN	Warm
ENHCWT2	Enhanced Call Waiting tone for the second SDN	STN	Warm
ENHCWT3	Enhanced Call Waiting tone for the third SDN	STN	Warm
ERWT	Expensive route warning tone	STN	Warm
ESADGTR	Emergency stand-alone Digitone receivers	TRKGRP (type MAINT)	None
ESUP1 to ESUP5	Digital echo suppressors (see note 3)	ECHOSUP	None
FMTSC	Fiber multiplex terminal scan point	FMTSC	None
FPOT	Foreign potential test (refer to example F at the end of this section)	OFRT and all RTEREF subtables	None

**CLLI** (continued)**Fixed CLLI codes (Sheet 4 of 8)**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Type of restart needed</b>
GTERM102T	Terminates testlines on Global 100 trunks. This CLLI routes an incoming call to the MTM Test equipment. The MTM generates a T102 Toll Milliwatt tone.		None
GTERM100Q	Terminates testlines on Global 100 trunks. This CLLI routes an incoming call to the MTM Test equipment. The MTM generates a T100 Quiet Termination.		None
GTERM102S	Terminates testlines on Global 100 trunks. This CLLI routes an incoming call to the MTM Test equipment. The MTM generates a T102 Steady Tone.		None
GTERM102L	Terminates testlines on Global 100 trunks. This CLLI routes an incoming call to the MTM Test equipment. The MTM generates a T102 Local Milliwatt Tone.		None
HOBICDEV	Hotel billing information center device	HOBICDEV	Cold
HSET	Maintenance head set circuit	TRKGRP (type MAINT)	None
IEBOT	International Executive Busy Override tone. Only UK switches use this tone.	STN	Warm
IDLE	Idle. Only in a North American switch uses this CLLI. Refer to example G at the end of this section.	OFRT and all RTEREF subtables	None
INTL100Q	International 100 balance test line	TRKGRP (type ITL2)	None
INTL102T	International 102 test line	TRKGRP (type ITL2)	None
INTL102L	International 102 test line	TRKGRP (type MAINT)	None

**CLLI** (continued)**Fixed CLLI codes (Sheet 5 of 8)**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Type of restart needed</b>
ISDNBRIVOE	Integrated services digital network basic rate interface verification, office equipment assignment verification	STDPRI, RTEREF	None
IROH	International receiver off-hook	TONES	Warm
ITOPSDEV	International TOPS device (see note 6)	ITOPSDEV	Cold
ITOPSPoS	International TOPS position voice trunk (see note 6)	ITOPSPoS	Cold
ITOPSPoSDATA	International TOPS position data trunk (see note 6)	ITOPSPoS	Cold
JACK	TTP - toll jack circuit	TRKGRP (type MAINT)	None
KSR2ICVR	For licensee use only	RECEIVER	None
KSR2OCVR	For licensee use only	RECEIVER	None
LKOUT	Lockout. Refer to example G at the end of this section.	OFRT and all RTEREF subtables	None
LOOPA1	Loop-around test line, port 1	TRKGRP (type LOOPA)	None
LOOPA2	Loop-around test line, port 2	TRKGRP (type LOOPA)	None
LTU	Line test unit	TRKGRP (type MAINT)	None
MF300	DMS-300 analog and digital MF receivers	RECEIVER	None
MJACK	Metallic jack	MTAMDRVE	Cold
MOBICPT	Mobile intercept	None	Cold
MOBRODR	Mobile reorder	None	Cold

**CLLI** (continued)**Fixed CLLI codes (Sheet 6 of 8)**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Type of restart needed</b>
MONTALK	Talk and monitor. This CLLI is for line test unit [LTU].	TRKGRP (type MAINT)	None
MTADRIVER	Metallic test access driver	MTAHORIZ	None
MTU	Metallic test unit (nondomestic) or multiline test unit (domestic)	TRKGRP (type MAINT)	None
NOSYN	Nonsynchronous test line (see route reference 11 for table OFRT)	OFRT and all RTEREF subtables	None
OAUSC	Office alarm unit scan groups (refer to note 2)	ALMSCGRP	None
OAUSD	Office alarm unit signal distributor groups (refer to note 2)	ALMSDGRP	None
OOCKT	Open circuit termination	TRKGRP (type SOCKET)	None
OHQT	Off-hook queuing tone	STN	Warm
OOCDEV	Overseas operator center (OOC) device	TOPSDEV	Cold
OOCPOS	OOC operator position - voice	TOPSPOS	Cold
OOCPOSDATA	OOC operator position - data	TOPSPOS	Cold
OPMPES	Outside plant module power and environmental system	OPMINV	None
PCNOR	Preset conference normal notification tone	STN	Warm
RCVATDUK	A-Law automatic tone detector UK	RECEIVER	None
RCVRATD	Audio tone detector	RECEIVER	None
RCVRCDC	Coin detection circuit receiver	RECEIVER	None
RCVRCOIN	Automatic coin toll service receiver	RECEIVER	None
RCVRDGT	Digital Digitone receiver circuits	RECEIVER	None

**CLLI** (continued)**Fixed CLLI codes (Sheet 7 of 8)**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Type of restart needed</b>
RCVRDTUK	A-Law Digitone receiver UK	RECEIVER	None
RCVRMCCS	Mechanized calling card receiver	RECEIVER	None
RCVRMF	Analog and digital MF receivers	RECEIVER	None
ROH	Receiver off-hook	STN	Warm
ROTLTP	Remote office test line (ROTL) port	TRKGRP (type ROTL)	None
SIGTERM	CCS6 signaling terminal	None	None
SCKT	Short circuit termination	TRKGRP (type SOCKT)	None
SSMAN	Silent switchman. See table OFCENG, parameter SILENT_SWITCHMAN_TIMEOUT.	OFCENG	None
SVDTMF	Dual-tone multifrequency (DTMF) transmitter	SVRCKT	Warm
SVMFC	R2 interregister signaling circuit	SVRCKT	Warm
SVOBSV	Service observing circuit	SVRCKT	Warm
TASISC	TASI state controller	TASIB	None
TASISD	TASI state controller	TASIB	None
TERM100Q	Termination 100 test line	TRKGRP (type TTL2)	None
TERM102L	Termination 102 test line	TRKGRP (type TTL2)	None
TERM102T	Termination 102 test line	TRKGRP (type TTL2)	None
TERM103T	Terminating 103 test line	OFRT and all RTEREF subtables	None

**CLLI** (continued)**Fixed CLLI codes (Sheet 8 of 8)**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Type of restart needed</b>
TERM105	Terminating 105 test line. The use of fixed pseudo CLLI TERM105 occurs if ROTL equipment is present.	TRKGRP (type T105)	Cold
TERM105T	Terminating 105 test line. The use of fixed pseudo CLLI TERM105T occurs if ROTL equipment is not present. This condition permits the use of the 105 test line with the transmission test unit (TTU) at the terminating office. Tables TRKGRP, TRKSGRP or TRKMEM do not require additional datafill.		None
TERM107T	Terminating 107 test line (preemption test line)	None	Cold
TERM108	Terminating 108 test line	TRKGRP (type MAINT)	None
TISS	Terminating international 103 signal supervisory test line	TSTLCONT (subtable TLNOS)	None
TOPSDEV	TOPS device (refer to note 6)	TOPSDEV	Cold
TOPSPOS	TOPS position - voice (refer to note 12)	TOPSPOS	None
TOPSPOSDATA	TOPS position - data (refer to note 12)	TOPSPOS	None
TTT	Transmission trunk test	TRKGRP (type MAINT)	None
TTU	Transmission test unit	TRKGRP (type MAINT)	None
VER90	Operator verification (refer to note 1)	TRKGRP (type VR)	None

A list of suggested CLLI codes you must add to table CLLI appears in the following table. The spelling of these codes can be different. The spelling of

**CLLI** (continued)

the code must be the same in each table in which the code appears. Use the spelling that appears.

**Suggested CLLI codes**

<b>CLLI</b>	<b>Explanation</b>	<b>Related table</b>	<b>Type of restart needed</b>
ACCSTOPS	Automatic Calling Card Service bilingual announcement	ANNS	None
ACTSTOPS	Automatic coin toll service	ANNS	None
RING	Ringback tone (refer to note 8)	TONES	None
DSCDBUSY	DSCWID busy announcement	RESOFC	None
DSCWDDFLT	DSCWID default announcement	RESOFC	None
DSCWDDSCN	DSCWID disconnect announcement	RESOFC	None
DSCWDHOLD	DSCWID hold announcement	RESOFC	None
DSCWDRMDR	DSCWID reminder announcement	RESOFC	None

**Note 1:** Code VER90 is for the operator verification trunk group in the host switch. The operating company defines the codes for the operator verification trunk groups at the remote location.

**Note 2:** Trunk group size for fixed pseudo CLLI codes OAUSC and OAUSD equals the number of scan and signal distributor groups. The office alarm requires the scan and signal distributor groups.

**Note 3:** For codes ESUP1 to ESUP5, the value in field TRKGRSIZ must be equal to two times the number of digital echo suppressors. The digital echo suppressors are for the code in table ECHOSUP. One digital echo suppressor must be present for each port.

**Note 4:** The pseudo CLLI codes TOPSCOINCOLLECT, TOPSCOINENABLE, TOPSCOINDISABLE, and TOPSCOINRETURN allow the operating company to specify coin signals. These coin signals are for calls that arrive at an access tandem on TOPS trunks. These calls do not route to an operator. One CLLI code allows the operating company to make sure the system enables Digitone key pads. These Digitone key pads are on coin phones. The system allows these Digitone key pads for feature group B calls and for 800 service calls.

**CLLI** (continued)

Some end offices do not leave the key pads in the correct state. Special CLLI code TOPSCOINENABLE allows the operating company to have complete flexibility to enable these pads. To use this CLLI code, place this code at the beginning of a route list. This route list must route the call to an incoming (IC) trunk. To route a call on trunk group OGEACAR1, the operating company can enter the following data in a route in table OFRT:

```
999 ( S D TOPSCOINENABLE) (N D OGEACAR1 0 N N)
```

This datafill sends a coin enable signal to enable a Digitone key pad for all coin calls that use route list. After the coin signal finishes, the call routes to trunk group OGEACAR1. A coin call can originate from an end office that left the key pad in the correct state. When this event occurs, calls from these offices can route to a different route list. This route list does not include the coin enable the CLLI code. This routing avoids the additional post-dial delay the coin enable signal causes.

The addition of a coin signal to a route list can occur. This addition adds approximately 3 s of post-dial delay to each coin call that uses this route list. The time for the transmission of the coin signal is 3 s.

The three other types of coin signals are pad disable, coin collect, and coin return. A requirement to send these signals for some calls on TOPS trunks that do not route to TOPS operators can occur. Three CLLI codes, TOPSCOINDISABLE, TOPSCOINCOLLECT, and TOPSCOINRETURN are available for this purpose.

The position of these coin CLLI codes is at the beginning of a route list before any trunk CLLI codes. The system can require more than one coin signal. When this event occurs, the addition of more than one CLLI code to the route list can occur. Only calls that originate on TOPS trunks and that a TOPS operator does not complete can use the CLLI codes. The Centralized Automatic Message Accounting (CAMA) calls that route to a TOPS operator can use the CLLI codes. Calls that transfer to an IC operator service can use the CLLI codes. These conditions occur because the TOPS operator does not complete these calls.

The system can route noncoin calls to a route list with the special coin CLLI code. The software determines that the call is noncoin. The system does not attempt coin signaling.

**CLLI** (continued)

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To use the four CLLI codes, add the codes to table CLLI. The system does not require a restart. The removal of restart requirement occurred in CSP04.

**Note 1:** The system can use the CLLI codes at the end of a route list. The CLLI codes send the correct supervision signal to the originating office. This event occurs if all members of the outgoing trunk group are busy. The system performs the standard treatment after the system completes this procedure. The system only supports the following trunk group types: SC, IS, IT, OI, OC, OP, TI, T2, TOPS, A5, and TDDO.

**Note 2:** You can enter the fixed CLLI code TOPSDEV, ITOPSPPOS, ITOPSPPOS DATA, or ITOPSPDEV in table CLLI. When you perform this action, you must perform a cold restart before you enter tuples in the associated tables.

To increase the size of tables TOPSDEV, ITOPSPPOS, or ITOPSPDEV, you must delete all members of these tables. The value in field TRKGRSIZ in table CLLI increases for the associated fixed CLLI code or codes. Perform a cold restart or a reload restart. Enter the members of the table again.

**Note 1:** The remote switch in the network busy verification line (BVL) requires the busy verification tone (BVTONE) circuit. You must enter the fixed CLLI code BVTONE on the remote switch in table CLLI.

**Note 2:** Treatment NTRS (no terminal responding) or CREJ (call rejected) can occur on an ISDN basic rate access (BRA) call. When this event occurs, the caller receives audible ringback. The system can apply ringback at the originating agent after these events occurred. The definition of a tone that software generated appears in table TONES for ISDN switches. This tone is \*RING. Enter the \*RING tone in table CLLI. Table OFRT and fields LNT and OFFTREAT in table TMTCNTL.TREAT define tuples. This action maps treatments NTRS and CREJ to this tone. When one of these treatments occurs, the system sustains audible ringback at the originating end of the call.

**Note 3:** You can enter members of the SC and SD groups in tables SCGRP and SDGRP. When this event occurs, the system automatically enters a tuple in table CLLI for pseudo fixed CLLI codes MISCSC and MISCSD.

**Note 4:** Trunk group size for CLLI code TRKLPBK is equal to 0 (zero). This event occurs because table TRKMEM does not assign trunks.

**Note 5:** For ATME2 to function, add the three CLLI codes ATMERA, ATMERB, and ATMERC to table CLLI. Perform a cold restart. If you do not perform this action, the system does not bind the correct CLLI codes.

**Note 6:** For CSP04, the system eliminates the restart requirement when the size of table TOPSPPOS changes. Before CSP04, the size increased as note

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**CLLI** (continued)

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6 indicated for the other TOPS tables. In CSP04, to increase the size, increase the value of TRKGRSIZ in table CLLI for TOPSPOS and TOPSPOSDATA CLLIs. Add the new tuples in table TOPSPOS. The system does not require a restart.

Deallocation of memory does not change. You must delete all tuples as follows:

- delete all tuples in table TOPSPOS
- change the value of field TRKGRSIZ in table CLLI for both TOPSPOS and TOPSPOSDATA CLLIs to value 0
- change the value of field TRKGRSIZ in table CLLI for both TOPSPOS and TOPSPOSDATA CLLIs to the new size
- add tuples or add tuples again to table TOPSPOS

The system does not require a restart.

*Warning:* The maximum size of table TOPSPOS is 1023 tuples. The TRKGRSIZ can be higher than 1023 for fixed CLLI (TOPSPOS or TOPSPOSDATA). When this event occurs, the addition of tuples to table TOPSPOS cannot occur and an error message appears. You cannot change tuples. You must delete and add all tuples again. The steps for this action appear above. For releases before CSP04, this condition causes an outage because of the cold restart requirement.

### **Deleting CLLI codes from table CLLI**

To delete a CLLI code, you must delete the CLLI code from all tables in which the code appears. You must perform this action before you delete the tuple from table CLLI. The system does not require that you delete the tuple from table CLLIMITCE. When you delete the tuple table CLLI, the system deletes the tuple from table CLLIMITCE.

The CI command TABREF can determine the other tables that a CLLI code can reference.

### **Assigning CLLI codes for spare analog trunks**

All spare analog trunks in the switch must appear in the table TRKGRP with a CLLI code of SPAREXXXXXX. The XXXXXX is the card code of the spare analog trunk or trunks. If spare analog trunks are present with a card code of 2X83AA, the CLLI code is SPARE2X83AA. The value of field TRKGRSIZ must be large enough to handle all spare analog trunks until the next extension. You must add the spare analog trunks to table CLLIMITCE.

## CLLI (continued)

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### SEAS 1.1 Enhancements

Feature AL1334 (SEAS 1.1 Enhancements) changed the design of routeset CLLI codes. Routeset CLLI codes are the key to table C7RTESET when the Signaling Engineering and Administration System (SEAS) commands ADD\_RTE or CHG\_RTE modify data routing information.

Feature AL1334 maintained tuples in table CLLI. These tuples are the key to table C7LKSET. Field ADMININF in table CLLI contains the far-end office name. This name is in field FECLLI of table C7LKSET as SEAS commands ADD\_LS or CHG\_LS provide.

*Note:* For feature AE0901 for BT7, you must enter EMERGENCY\_CALL\_ANN in field ADMININF in table CLLI. This entry specifies that an emergency call announcement will occur.

### Routeset CLLI codes

For feature AL1334, the name that is the routeset name changes to reflect information about the routeset the data determines. This action can occur by the two following methods.

The name can be the exact name entered in field FECLLI of table C7LKSET of the linkset. This table defines the linkset as the associated route of the routeset. A route is associated if the far-end point code of this linkset is the correct point code of this routeset. The far-end point code is in field FEPC of table C7LKSET. The routeset is in field DPC of table C7RTESET.

If the routes are not associated, the routeset name can be the textual representation of the point code of the routeset. This textual representation is a field that contains nine digits.

You must create the name of the routeset when the definition of a route for a new destination occurs. Routes are not defined to this point code. When the addition of a route to a current routeset occurs, the routeset name does not change. When the following events occur, the routeset name changes to reflect the new configuration:

- The SEAS uses the command CHG\_RTE to add an associated route where a route was not present.
- The SEAS uses the command CHG\_RTE to remove a current associated route.

### Field ADMININF for linkset CLLI tuples

Field ADMININF of table CLLI stores any additional information on the CLLI code you define. With feature AL1334, the field ADMININF indicates the associated far-end CLLI name of the linkset you add. The associated

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**CLLI** (continued)

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far-end CLLI name is in field FECLLI in table C7LKSET. You can use the SEAS command CHG\_LS to change the name in field FENAME of the linkset. When you change the name, you must update field ADMININF to maintain this new relationship.

The SEAS commands ASGN\_LS and CHG\_LS provide the far-end name information.

**Limits**

The system maintains the routeset name relationship that feature AL1334 defines only if the SEAS interface changes the data. If the DMS table control interface changes this data, the routeset name does not change.

The DMS table control interface can change table C7LKSET. When this event occurs, the system does not update field ADMININF of table CLLI to reflect the far-end name of the linkset.

The DMS table control interface can make changes. When this event occurs, operating company personnel must maintain the name relationships manually.

To invoke the DMS-100G Terminating Testline Service, you must enter the CLLI name. Provisioned CLLI names are fixed. You cannot delete the CLLI names.

The DMS-100 Terminating Testline datafill must be in the office for a DMS-100G Terminating Testline to function. A warning message appears if the datafill is not present when you provision table CLLI. Calls that originate in an office where DMS-100 datafill is not available transfer to datafill\_error treatment. Offices can use DMS-100 and DMS-100G Terminating Testline routing. For these offices, use different digits for digits the originating office outpulses.

Tables TRKGRP, TRKSGRP, and TRKMEM do not require additional datafill. The DMS-100 testline datafill must be present in the office for DMS-100G Testline to function correctly.

**Station ringer test examples**

To activate the station ringer test (SRT), dial a two-digit code and the last five digits of the directory number (DN). This DN is the DN for which the test occurs. The two-digit code can be 57. For example, to test DN 621-1234, the tester dials 571-1234. This condition applies if the DNs in an office do not share the same last five digits. The same office can serve two DNs, 621-1234 and 631-1234. When this event occurs a separate test cannot occur for each station because the only dialing pattern possible is 571-1234. This dialing pattern refers to both DNs.

## CLLI (continued)

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A more current method to invoke SRT is to dial the SRT access code and the DN for which the test occurs. This method can be present with the method that appears above.

The SRT access code is nominally three digits. Datafill can change the SRT access code. Both access methods function on the same switch. You can use datafill access codes for both methods to dial SRT.

The DN for which the test occurs can be seven digits without the numbering plan area (NPA). This DN can be ten digits with NPA. The DN can be a seven-digit DN. If this condition occurs, the SRT tests that compare the number dialed against the station dialing cannot include the NPA. This condition does not cause a problem often. A problem occurs only if the same switch serves two DNs that differ only by NPA. Operating companies can use different datafill to allow one the following events to occur:

- access code plus seven- or ten-digit DN dialing of SRT
- access code plus seven-digit dialing only
- access code plus ten-digit dialing only

If the operating company specifies the first option, and the subscriber dials seven digits, a pause of several seconds occurs. After the pause, the system processes the call. The pause occurs because the line module (LM) waits. The LM waits to make sure the subscriber does not dial additional digits.

### Example

The DN to test is DN 613-621-1234. The older SRT access code is 57. The newer SRT access code is 999. Dial 571-1234, 999-621-1234, or 999-613-621-1234 from that station to invoke SRT.

### Administrative trunk group number (ADNUM)

In table CLLI, field ADNUM can range from 0 to 8191. This range is one less than the maximum size of table CLLI. This field allows the operating company to associate an ADNUM with each DMS-100 family trunk group CLLI code. This ADNUM must be different between the CLLI codes. This ADNUM remains fixed for the life of the trunk group. The number of dump-and-restore actions that occur on the switch does not affect this condition.

The range of values for field ADNUM starts at 0 (zero). The range is from 0 to a number that is one less than the size of table CLLI. The size of table CLLI appears in table DATASIZE. For example, if the size of table CLLI is 650, the maximum value that for field ADNUM is 649.

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**CLLI** (continued)

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For pseudo CLLI codes, the operating company assigns a specified ADNUM occurs. The pseudo CLLI codes are CLLI codes added from EXT files. These numbers start with 1 and continue in ascending order. Avoid a value of 0 (zero) because specified downstream processors do not accept 0 as an allowed identifier. These downstream processors include Engineering and Administrative Data Acquisition System (EADAS) for network management (EADAS/NM). To assign a 0 causes an error message. The system does not reject the entry.

Assign CLLI codes that the operating company defines in sequence. Start with the lower numbers. The ADNUM values 1 to 50 are for pseudo CLLI codes. The value 0 (zero) is not always correct for some downstream processing.

The number of CLLI codes the operating company defines can be greater than the size of table CLLI minus 50. When this event occurs, increase the size of table CLLI. This increase in table size prevents the use of ADNUM values reserved for additional future pseudo CLLI codes.

**Modifying the value in field ADNUM**

You can change the value in field ADNUM. You can change this value if other tables in the DMS-100 switch do not refer to the CLLI code. To change the ADNUM value, you must remove tuples that contain the CLLI code from the following tables:

- all routing tables
- trunk tables
- any other tables

You must delete the tuple that contains the CLLI code in table CLLI. You must enter this tuple again in table CLLI to change the value of field ADNUM.

See sections EADAS/DC changes and EADAS/NM changes.

**CLLI** (continued)**Default ADNUMs for pseudo CLLI codes**

The default ADNUM assigned to each pseudo CLLI code that an EXT file adds appears in the following table.

**Default ADNUMs (Sheet 1 of 2)**

CLLI	ADNUM
DLSE	1
DMODEMC	2
DPPSC	3
DSCKT	4
EADNMCLLI	5
FRBTONE	6
ITSE	7
NWMSC	8
NWMSD	9
OFFHKSUP	10
ONKHSUP	11
STGOVFL	12
STRG	13
SYNCH	14
TERM105T	15
TOPSCOINCOLLECT	16
TOPSCOINDISABLE	17
TOPSCOINENABLE	18
TOPSCOINRETURN	19
WINKSUP	20

**Note:** The ADNUM assigned to a CLLI code must be different. The system does not allow you to assign an ADNUM associated with another CLLI code. Do not use an ADNUM assigned to a pseudo CLLI code for CLLI codes the operating company defines.

**CLLI** (continued)**Default ADNUMs (Sheet 2 of 2)**

CLLI	ADNUM
BBTOUT	21
ROTLSC	22
ROTLSD	23
TRKLPBK	24
TERMARTER	25
MISCSC	26
MISCSD	27
NILWAITANNC	29
<p><b>Note:</b> The ADNUM assigned to a CLLI code must be different. The system does not allow you to assign an ADNUM associated with another CLLI code. Do not use an ADNUM assigned to a pseudo CLLI code for CLLI codes the operating company defines.</p>	

The EADAS for data collection (EADAS/DC) and EADAS network management (EADAS/NM) interfaces to the DMS-100 change. This change allows the use of the ADNUM in table CLLI.

**EADAS/DC changes**

The record identification (ID) fields in the EADAS/DC sections for the following operational measurement (OM) groups contain the administrative number. This number relates to the CLLI code:

- TRK
- TRK250
- NWMSILC
- DCRICTRK

The ADNUM orders the records in these sections.

## CLLI (continued)

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The EADAS/DC section contains the counts for the preceding OM groups. The information associated with these counts is as follows:

- The numeric record ID parameter associated with the feature commands EADASKEY and EADASFMT is the ADNUM value.
- The output of the CI command OMDUMP for EADAS/DC collection classes identifies the CLLI codes. The output identifies the codes by the character name of the codes.

The operating company cannot change the ADNUM for a CLLI code if both of the following conditions apply:

- The system reports OM counts for that CLLI code to EADAS/DC.
- The OM counts the system reports to EADAS/DC are for one of the following OM groups:
  - TRK
  - NWMSILC
  - TRK250
  - DCRICTRK

To change an ADNUM, you must remove the tuples that refer to the CLLI code of the ADNUM from all tables. You must delete the tuple in table CLLI that contains the ADNUM. You must enter this tuple again in table CLLI with the new ADNUM value. Enter tuples that contain the CLLI code again. Enter these tuples in the tables from which you removed these tuples.

### **EADAS/NM changes**

If an ADNUM changes, the ADNUM sets the EADAS/NM trunk group list discrete to indicate the change. The office can have feature package X455AB (1A EADAS Network Management). If the office has this package, a change to the ADNUM creates two entries. These entries are in the EADAS/NM trunk group changed list. One entry identifies the old ADNUM. The other entry identifies the new ADNUM.

### **Table TRKNAME**

Table TRKNAME is a read-only table. The system enters data in this table with entries in table CLLI. With an ADNUM value, the associated CLLI code can appear in table TRKNAME. The reverse mapping appears in table CLLI. See the example at the end of this section.

### **Datavfill sequence and meaning**

You do not need to enter data in other tables before you enter data in table CLLI.

**CLLI** (continued)**Table size**

0 to 8192 tuples

The system allocates memory by field SIZE in table DATASIZE for the entry with field DATSKEY equal to CLLI. To extend table CLLI, increase the value of field SIZE in table DATASIZE. Perform a cold restart. If your switch has the NORESTARTSWACT utility, an interruption of service does not occur when you activate data changes. Refer to the *NORESTARTSWACT User Guide*.

**Datafill**

Datafill for table CLLI appears in the following table.

**Field descriptions (Sheet 1 of 8)**

Field	Subfield	Entry	Explanation and action
CLLI		alphanumeric (vector of a maximum of 16 characters)	<p><i>Common language location identifier</i></p> <p>Enter a CLLI code to identify the far end of each announcement, tone, or trunk group.</p> <p><b>Note:</b> You can only enter alphabetic characters, numeric characters, and _ (underscores) in this field. The first character must be alphabetic. The use of other special characters like @, #, \$, %, ^, &amp;, *, (, ), -, +, =, /, ', ;, :, ?, }, and { can cause errors in the data in this field.</p> <p>For best use, a CLLI code must contain a maximum of 12 characters. Only the first 12 characters appear on the MAP. When a CLLI code appears in a log report, the whole 16-character CLLI code appears.</p>

**CLLI** (continued)

**Field descriptions (Sheet 2 of 8)**

Field	Subfield	Entry	Explanation and action
			<p>The recommended code for a gateway switch contains the following elements:</p> <ul style="list-style-type: none"> <li>• <i>SITE - Site</i>. This element has three characters. This element identifies the name of the site. The site is a switch. If more than one site is present in a city, each site has a name. If only one site is in a city, enter the abbreviated city name.</li> <li>• <i>SUFFIX - Suffix</i>. This element has two characters. This element identifies the trunk group. If more than one trunk group is in the same site, each trunk group has a different number for identification.</li> <li>• <i>COUNTRY - Country</i>. This element has three characters. This element identifies the name of the country that is the location of the site.</li> <li>• <i>CITY - City</i>. This element has three characters. This element identifies the name of the city at the far end of each trunk group. If only one site is in a city, and the abbreviated city name identified the entry, leave CITY blank. If more than one site is present in a city, use both element SITE and element CITY.</li> </ul> <p><b>Note:</b> The CLLI code can occupy 11 characters of the string of 16 characters. The field ends at the first blank character. For example, only one trunk group can be present for a specified switch. When this event occurs, only the element SITE requires data entry as the CLLI code.</p>

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**CLLI** (continued)

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**Field descriptions (Sheet 3 of 8)**

Field	Subfield	Entry	Explanation and action
			<p>The recommended CLLI code for other than a gateway switch contains the following elements:</p> <ul style="list-style-type: none"> <li>• <i>PLACE - Place.</i> This element has four characters. This element identifies the name of the city or town at the far end of each group. This element can identify the name for each tone or announcement.</li> <li>• <i>PROV - Province or state.</i> This element has two characters. This element identifies the province or state at the far end of the trunk group.</li> <li>• <i>BLDG - Building.</i> This element has two characters. This element identifies the building number at the far end of the trunk group.</li> <li>• <i>TRAFUNIT - Traffic unit.</i> This element has three characters. This element identifies the designation of the traffic unit at the far end of the trunk group.</li> <li>• <i>SUFFIX - Suffix.</i> This element has one character. This element identifies trunk groups that terminate at the same location.</li> </ul> <p><b>Note 1:</b> This CLLI code can occupy 12 characters of the field of 16 characters. The system treats the CLLI code as a character string. The field ends at the first blank character. If only one trunk group ends at a specified switch, only the element PLACE requires data entry for the CLLI code.</p> <p><b>Note 2:</b> For feature AE0901 for BT7, the entry EMERCALL in this field specifies the emergency call feature.</p>

**CLLI** (continued)

**Field descriptions (Sheet 4 of 8)**

Field	Subfield	Entry	Explanation and action
ADNUM		numeric (0 to 8191)	<p><i>Administrative trunk group number</i></p> <p>Enter a number in the range from 0 to one less than the current size of table CLLI. The current size of table CLLI appears in field SIZE of table DATASIZE.</p> <p>The operating company must not assign administrative numbers (ADNUM) below 51. This condition allows for future growth in the number of pseudo CLLI codes.</p> <p>The ADNUMs for fixed CLLI codes and CLLI codes the operating company defines have a specified range. This range is from 51 to the size of table CLLI that appears in table DATASIZE minus one. The ADNUMs for pseudo CLLI codes external (EXT) files add must use the default value.</p> <p>The value of field ADNUM in table CLLI must be different. The system rejects attempts to add a CLLI code with an ADNUM that is in use.</p> <p>You cannot change field ADNUM in table CLLI if one of the following events occurs:</p> <ul style="list-style-type: none"> <li>• The system reports operational measurement (OM) counts to the Engineering and Administrative Data Acquisition System (EADAS). The system reports OM counts for data collection (EADAS/DC). These OM counts are for OM groups TRK, NWMSILC, TRK250, or DCRICTRK</li> <li>• the CLLI code is in the EADAS network management (EADAS/NM) trunk group schedule</li> </ul> <p>The operating company can change the ADNUM value. This event can occur if other tables in the switch do not refer to the CLLI code of the ADNUM value.</p>

## CLLI (continued)

## Field descriptions (Sheet 5 of 8)

Field	Subfield	Entry	Explanation and action
TRKGRSIZ		numeric (0 to 2047)	<p>You must delete the tuple that contains the ADNUM value to change an ADNUM value. You must perform the following actions:</p> <ul style="list-style-type: none"> <li>• delete the tuple</li> <li>• change the ADNUM value</li> <li>• enter the tuple again in table CLLI</li> </ul> <p><i>Trunk group size</i></p> <p>Enter the maximum number of trunk members to assign in the trunk group. This number allocates storage. This number can be greater than the number of initial working trunks.</p> <p>The only continuous change you can make to this quantity is to increase the size. An attempt to decrease TRKGRSIZ causes an error message. The only size reduction that can occur is to decrease the quantity in field TRKGRSIZ to 0 (zero). When this event occurs, you must delete all members that use this CLLI code before you decrease the quantity to 0.</p> <p>Enter 10 for a DRAM or EDRAM of 4 m. Enter 33 for an EDRAM of 16 m.</p> <p>You must define an announcement CLLI Audiogram Delivery Services (ADS). If the ADS has only one EDRAM card, you can set the field TRKGRSI to 30. This action allows all 30 channels on the EDRAM card to connect at the same time. These channels connect to play ADS OOSPs. See the Audiogram Delivery Services-Offer of Service Prompt functionality (ENSV0013) in this document.</p>
ADMININF		alphanumeric (vector of a maximum of 32 characters)	<p><i>Administrative information</i></p> <p>Enter operating company administration information. The switch does not use the information in this field.</p> <p><b>Note:</b> Use only alphabetical characters, numeric characters, and _ (underscores) to enter data in this field. The use of other special characters, like @, #, \$, %, ^, &amp;, *, (, ), -, +, =, /, ', ;, :, ?, }, and { can cause errors in the data in this field.</p>

**CLLI** (continued)**Field descriptions (Sheet 6 of 8)**

Field	Subfield	Entry	Explanation and action
			<p>The following entries are the recommended entries in field ADMININF for a gateway switch:</p> <ul style="list-style-type: none"> <li>• DIR</li> <li>• MED</li> <li>• SIG</li> <li>• SRVCAT</li> <li>• N6MODE</li> <li>• MISC</li> </ul> <p><i>DIR - Direction.</i> This entry is optional datafill for administration only. If the system requires specification of the direction, enter the direction of the traffic in the trunk group. If the system does not require direction, enter a - (dash) for entry DIR.</p> <p><i>MED - Medium.</i> This entry of one character is optional datafill for administration only. If the system requires specification of the medium, enter the medium of the trunk group. The medium is S for satellite or C for cable. If the system does not require the medium, enter a - (dash) for entry MED. If the entries that follow MED do not contain information, leave MED blank.</p> <p><i>SIG - Signaling</i></p> <p>This entry of one character is optional datafill for administration only. If the system requires specification of the signaling type, enter the signaling type for the trunk group. The signaling type is 5 for CCITT Signaling No. 5 (N5) and 6 for CCITT Signaling No. 6 (N6). If the system does not require specification of the signaling type, enter a - (dash) for entry SIG. If the entries that follow entry SIG do not contain information, leave SIG blank.</p>

**CLLI** (continued)**Field descriptions (Sheet 7 of 8)**

Field	Subfield	Entry	Explanation and action
			<p><i>SRVCAT - Service category</i></p> <p>This entry of three characters is optional datafill for administration only. If the system requires specification of the service category, enter the type of service the trunk group provides. The type of service is TEL for telephone. If the system does not require specification of the service category, enter a - (dash) in entry SRVCAT. If the entries that follow entry SRVCAT do not contain information, leave SRVCAT blank.</p> <p><i>NO6MODE - Signaling 6 mode.</i> This entry of four characters is optional datafill for administration only. If the system requires specification of the N6 mode, enter the following:</p> <ul style="list-style-type: none"> <li>• FA for fully associated</li> <li>• QA for quasi-associated</li> <li>• FQ for fully and quasi-associated</li> </ul> <p>This entry can identify which route set or signaling link set carries the signal for this trunk group. If the system does not require specification of the N6 mode, enter a - (dash) for entry NO6MODE. If the entries that follow entry NO6MODE do not contain information, leave MO6MODE blank.</p> <p><i>MISC - Miscellaneous information.</i> This entry of 12 characters is optional datafill for administration only. If the system requires miscellaneous information, you can enter any data in this field. For example, the entry can contain the full name of the abbreviated site name. If the system does not require this entry, leave MISC blank.</p>

**CLLI** (continued)

**Field descriptions (Sheet 8 of 8)**

Field	Subfield	Entry	Explanation and action
			<p><b>Note:</b> The field ADMININF can occupy 32 characters. The system treats this field like a character string. The field ends at the first blank character. You must enter an _ (underscore) between each entry in field ADMININF, if the entries that follow this entry are not blank.</p> <p>The recommended entries for field ADMININF for other than a gateway switch are TRAFCLS, OFFCLS, and TRKGRTYP.</p> <p><i>TRAFCLS - Trunk group traffic class.</i> This entry is optional datafill for administration only. If the system requires specification of traffic class, enter one of the traffic classes that operating company practices define. If the system does not require specification of traffic class, enter a - (dash) for entry TRAFCLS.</p> <p><i>OFFCLS - Office class.</i> This entry is optional datafill for administration only. If the system requires specification of office class, enter one of the office classes that operating company practices define. If the system does not require specification of office class, enter a - (dash) for entry OFFCLS. If entry TRKGRTYP is blank, entry OFFCLS can be blank.</p> <p><i>TRKGRTYP - Trunk group type.</i> This entry is optional datafill for administration only. The system can require specification of the trunk group type. When this event occurs, enter an alphanumeric entry equal to one of the trunk group types that the operating company practices define. If the system does not require specification of trunk group type, leave TRKGRTYP blank.</p> <p><b>Note 1:</b> The field ADMININF can occupy 32 characters. The system treats this field like a character string. The field ends at the first blank character. You must enter an _ (underscore) between each entry in field ADMININF, if the entries that follow this field are not blank.</p> <p><b>Note 2:</b> For feature AE0901 for BT7, the entry EMERGENCY_CALL_ANN in this field specifies that an emergency call announcement will occur.</p>

**CLLI** (continued)**Datafill example**

An example of datafill for tables CLLI for a North American local, toll, or combined local and toll DMS switch appears in the following figure.

**MAP example for table CLLI**

CLLI	ADNUM	TRKGRSIZ	ADMININF
HLFXNS0101T	100	24	PH_43_IT
OTWAON23CG00	101	225	FG_45_DTS
OTWAON23CG00	102	30	CO_54_CA
OTWAON2323H1	103	150	LA_54_LA
CF3P	54	12	MI
ESUP1	55	128	MI
TERM102T	57	1	MI
TERM102L	58	0	MI
TERM100Q	59	0	MI
SCKT	60	0	MI
OCKT	61	0	MI
ASCS	62	0	MI
FBOT	51	0	MI
LKOUT	52	0	MI
IDLE	53	0	MI
CF6P	56	12	MI

The associated datafill of table TRKNAME appears in the following figure.

**CLLI** (continued)**MAP example for table TRKNAME**

ADNUM	CLLI
51	FPOT
52	LKOUT
53	IDLE
54	CF3P
55	ESUP1
56	CF6P
57	TERM102T
58	TERM102L
59	TERM100Q
60	SCKT
61	OCKT
62	ASCS
100	HLFXNS0101T0
101	OTWAON23CG00
102	OTWAON23CG01
103	OTWAON2323H1

An example of datafill for a gateway DMS switch appears in the following figure.

**MAP example for table CLLI**

CLLI	ADNUM	TRKGRSIZ	ADMININF
MOS01URS	300	2	BS5TEL_MOSCOW
MOL03GBNLON	301	52	OC5TEL_MOLLISON
CF3P	51	12	MI
ESUP1	52	128	MI
TERM102T	53	1	MI
TERM102L	54	0	MI
TERM100Q	55	0	MI
ALL	56	2	SATOVER_CLLI
MF300	57	250	MF_RECEIVERS
DGT300	58	100	DIGITONE_RCVR

An example of datafill for feature AE0901 in BT7 appears in the following figure.

**CLLI** (continued)**MAP example for table CLLI**

CLLI	ADNUM	TRKGRSIZ	ADMININF
EMERCALL	124	3	EMERGENCY_CALL_ANN

**Description of previous examples**

Switches that have three-port conference circuits require this pseudo fixed CLLI code CF3P. The trunk group size is equal to three times the number of conference circuits assigned in table CONF3PR. One trunk group is present for each port.

Switches that are not gateway, and have less than 1024 digital echo suppressors require this pseudo fixed code ESUP1. The trunk group size is equal to two times the number of digital echo suppressors assigned to this code in table ECHOSUP. One trunk group is present for each port.

Switches that have the terminating 102 test lines require CLLI codes TERM102T, TERM102L, and TERM100Q. You must enter the CLLI codes in table TRKGRP (type TTL2). This table defines the dB level and supervision.

Trunk group size for CLLI code TERM102T is equal to 1. You can assign only 1 mW trunk for each dB level in table TRKMEM. Trunk group size for CLLI codes TERM102L and TERM100Q is equal to 0 (zero). This condition applies because trunks are assigned in table TRKMEM.

The pseudo fixed CLLI codes SCKT and OCKT are associated with the transmission termination trunk group. This trunk group is in a local or combined local/toll switch.

Trunk group size for CLLI code SCKT is equal to the number of transmission termination trunk circuits table CLLI allocates. Trunk group size for CLLI code OCKT is equal to 0 (zero).

## CLLI (continued)

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The system requires this pseudo fixed CLLI code ASCS in a local or a combined local/toll switch. One of the following conditions must apply to the switch:

- the switch can send and check alarms with tones
- the switch can use the automatic number identification (ANI) information digit 8 to send alarms over a Traffic Service Position System (TSPS) or TOPS trunk

The system requires the foreign potential test code (FPOT) in a local or combined local and toll switch. The FPOT must be one of the routes in the route lists for partial dial time-out and permanent signal time-out treatments for lines. This condition applies if the system requires a foreign potential test.

The system requires line lockout (LKOUT) and idle (IDLE) codes in a North American local or combined local and toll switch.

One of these codes must be the last route in the route lists associated with the treatments for lines. You must not use the code IDLE in an international switch.

Switches that have six-port conference circuits require this pseudo fixed code CF6P. The trunk group size is equal to six times the number of six-port conference circuits.

Some DMS-300 gateway switches require the pseudo fixed code ALL. These switches permit an incoming trunk group that receives signaling by satellite to connect to an outgoing trunk group that transmits signals by satellite.

The DMS-300 gateway switches that have digital Digitone receivers and digital or analog multifrequency (MF) receivers require the following pseudo fixed CLLI codes:

- MF300
- DGT300

### Table CLLI for BT7

For feature AE0901 for BT7, table CLLI must contain the entry EMERCALL in the field CLLI. This entry specifies the emergency call feature. Table CLLI must contain the entry EMERGENCY\_CALL\_ANN in the field ADMININF. This entry specifies that an emergency call announcement will occur.

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**CLLI** (continued)

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**Table history****GL04**

The current fixed CLLI names to support the DMS-100G Terminating Testline Service were added.

The current limits for DMS-100G Terminating Testline Service were added.

**NA006**

The restart requirement was removed from note 4 for TOPSCOINCOLLECT, TOPSCOINRETURN, TOPSCOINENABLE, and TOPSCOINDISABLE. This action occurred for CSP04 feature AF5918 in functionality TOPS Robustness (OSB00001).

A warning about exceeding the maximum size for table TOPSPOS in fixed CLLIs TOPSPOS and TOPSPOSDATA was added.

**APC06**

Information for 4 min EDRAM or DRAM, and 16 min EDRAM was added.

**NA005**

Trunk group sizing information is added in the TRKGRSIZ field for Audiogram Delivery Services-Offer of Service Prompt functionality (ENSV0013).

The TOPSPOS and TOPSPOSDATA sizing information was added to Table size section. Deleted TOPSPOS and TOPSPOSDATA from list of CLLIs that require a cold restart in Note 6 of Functional description section. This deletion occurred for TOPS04 Robustness: Restart Elimination.

**CSP05**

Restart information was added for increasing TRKGRSIZ for CLLIs.

Removed related table information for TERM105T. Additional datafill is not required in table TRKGRP, TRKSGRP or TRKMEM.

**NA004**

Suggested DSCWID announcements were added in table 3.

**CLLI** (continued)

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**CSP03**

Restart activation was changed to None for these CLLIs in table 1:

- OFFHKSUP
- ONHKSUP
- WINKSUP

Restart activation was changed to None for the fixed CLLIs in table 2:

- TERM103T
- TERM105T
- TRKLPBK

**CSP02**

Restart activation was changed in CSP02 to None for the CLLIs in table 1:

- DSCKT
- STGOVFL
- STRG
- SYNCH

Restart activation was changed to None for the fixed CLLIs in table 2:

- ASCS
- DGT300
- IDLE
- KSR2ICVR
- KSR2OCVR
- LKOUT
- MF300
- NOSYN
- RCVATDUK
- RCVRATD
- RCVRCDC
- RCVRCOIN
- RCVRDGT
- RCVRDTUK

- RCVRMCSS
- RCVRMF
- SSMAN

Additional explanation is in field ADNUM.

**BCS36**

The following changes occurred:

- Fixed CLLI DCTTERMBERT was added to table 2.
- Reference to limits in the maximum number of trunks in a single trunk group that the audit can process was removed.
- The NORESTARTSWACT utility was introduced to allow data changes to be activated without a service-interrupting restart.

Restarts are not required for the following fixed CLLIs for BCS36 and up:

- BVTONE
- COPP
- CWT
- DISTCWT
- EAPEG
- EBOT
- ENHCWT1
- ENHCWT2
- ENHCWT3
- ERWT
- FPOT
- IEBOT
- OHQT
- PCNOR
- ROH
- TERM105T

## CLLIMTCE

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### Table name

CLLI Maintenance Table

### Functional description

Table CLLIMTCE stores information for each trunk group common language location identifier (CLLI). The following lists the CLLI types:

- hardware tone group CLLIs. Table STN lists these CLLIs. Table CLLIMTCE does not store information for CLLIs assigned to software tone groups. Table TONES lists these CLLIs.
- digital recording announcement machine (DRAM) trunk CLLIs
- metallic test access driver (MTADRIVER) CLLIs

The following information appears in table CLLIMTCE:

- an abbreviated CLLI code for use by maintenance staff
- the percentage of trunks or service circuits that you can remove from service before a specified type of alarm appears for a specified CLLI
- the type of test line equipment at the far end of each outgoing trunk group. The type of test line equipment can be synchronous or not synchronous.
- the index to table TSTLCONT for each outgoing or two-way trunk group when the far end contains test lines
- the index to the table MWDATA
- if a signaling test runs after a diagnostic test
- prefixed digits in addition to the four digits in subtable TLNOS. The system outputs these digits on a given trunk group for test line access.

**Note:** Do not enter IBN consoles in table CLLIMTCE. The field INSV in table ATTCONS determines if the return-to-service (RTS) of an attendant console is over a switch of activity (SWACT) or over a cold restart.

### Datafill sequence and meaning

You must enter data in the following tables before you enter data in table CLLIMTCE:

- ANNMEMS
- CLLI
- CONF3PR
- CPOS

**CLLIMTCE** (continued)

- DRAMTRK
- STN
- TONES
- TRKMEM

**Table size**

0 to 8192 tuples

The size of table CLLIMTCE is equal to the size of table CLLI. The entry for table CLLI in table DATASIZE determines the size of both tables. The maximum number of different CLLI names is 8192.

You can change tuples in table CLLIMTCE. You cannot add or delete tuples in this table. The addition and deletion of tuples occurs through table CLLI.

**Datafill**

The following table lists datafill for table CLLIMTCE.

**Field descriptions (Sheet 1 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	<i>Common language location identifier.</i> Enter the code in table CLLI that the operating company assigns to the trunk group.
SCLLI		alphanumeric (6 characters)	<i>Short common language location identifier.</i> Enter the abbreviated CLLI that the maintenance staff uses.
MINALM		numeric (1 to 5 or 101)	<i>Minor alarm.</i> If you require a minor alarm indication, enter the percentage of out-of-service (OOS) trunks in the trunk group that activates the minor alarm. If you do not require a minor alarm indication, enter 101. Any entry out of the range of values this field indicates is not correct.  <b>Note:</b> The entry in this field must not be greater than 5, except for the entry of 101 - no major alarm. This entry prevents the system from leaving receivers that wait a system test in a busy state.

**CLLIMTCE** (continued)

## Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
MAJALM		numeric (1 to 101)	<i>Major alarm.</i> If you want a major alarm indication, enter the percentage of OOS trunks in the trunk group that activates the major alarm. If you do not want a major alarm indication, enter 101. Any entry out of the range of indicated values is not correct.
CRITALM		numeric (1 to 101)	<i>Critical alarm.</i> If you want a critical alarm, enter the percentage of OOS trunks in the trunk group that activates the critical alarm. If you do not want a critical alarm, enter 101. Any entry out of the range of indicated values for this field is not correct.
SYNCTYPE		NSS or SYN	<i>Synchronous type.</i> If the far end of an outgoing or two-way trunk group has a synchronous test line, enter SYN. The far end of an outgoing or two-way trunk group has a nonsynchronous test line or does not have a test line circuit. Enter NSS.
TSTNOIND		numeric (0 to 164)	<i>Test number index</i> Enter the number that the operating company assigns to the subtable TLNOS in table TSTLCONT. This number translates the test line codes. The entry in this field indicates which TLNOS subtable, in table TSTLCONT, is for the test line that originates end translations.  The ISDN user part (ISUP) trunks have an index value to reference subtable TSTLCONT.TLNOS.  The CCITT no. 7 signaling ISUP trunks in a DMS-300 switching unit also have an index value to reference subtable TSTLCONT.TLNOS.

**CLLIMTCE** (continued)**Field descriptions (Sheet 3 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
MWIDX		numeric (0 to 9)	<i>Milliwatt data table index.</i> Enter the index to table MWDATA that specifies the level and frequency of the milliwatt test tone. The default value for this field is 0 (zero).
SIGTST		Y or N	<i>Signaling test.</i> Enter Y if a signaling test completes after the diagnostic test. If this condition does not occur, enter N. The default value for this field is N.  <b>Note:</b> This test only applies to outgoing or two-way trunks with a start signal of wink or delay dial. This test also applies to outgoing or two-way trunks with an immediate start signal and trunk card PEC code 2X83AA or 2R83AA.
PRFXDIGS		numeric (to a maximum of 4 digits) or N	<i>Prefix digits.</i> Enter the digits that prefix the test line number. The maximum number of prefix digits is 4. If prefix digits are not present, enter N.
DIAGDATA		does not apply	<i>Diagnostic data.</i> This field is a read-only field. Only the used_space field appears. See table CLLIMTCE.DIAGDATA for additional information.

**Datafill example**

An example of first input for table CLLIMTCE appears in the following example. This example specifies the following information:

- the trunk group CLI is OTWAON23CG00 and the CLI (SCLI) is OCOESS
- the alarm indications agree with the information in table “Alarm indication threshold levels” when the percentage of trunks in the trunk group are OOS
- the far end of trunk group has synchronous test lines
- subtable TLNOS#0 lists the test line names and test line codes for the trunk group

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**CLLIMTCE** (end)

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- the index to table MWDATA is 0 (the default)
- the system performs the signaling test after diagnostic test
- for test lines, digit 8 prefixes the number in subtable TSTLCONT.TLNOS (field TLNUMBER)

**MAP example for table CLLIMTCE**

```
CLLI          SCLLI MINALM MAJALM CRITALM
SYNCTYPE TSTNOIND MWIDX SIGTST PRFXDIGS DIAGDATA
-----
OTWAON23CG00  OCOESS  5    10    50
SYN      0      0      Y      8      ( 0)
```

**Alarm indication threshold levels**

Percentage trunks out of service	Alarm indication
5	Minor alarm
10	Major alarm
50	Critical alarm

---

**CLLIMTCE.DIAGDATA**

---

**Table name**

CLLI Maintenance Diagnostic Data Subtable

**Functional description**

Table CLLIMTCE.DIAGDATA is a subtable of table CLLIMTCE. This subtable contains data for each trunk that has a common language location identifier (CLLI) in table CLLIMTCE. The following data appear in this subtable:

- trunk number in group
- the transmit and receive decibel (dB) level to which the switch on the trunk is set

*Note:* The trunk passes diagnostics if the trunk is four-wire and measurement is in the range of  $\pm 1.5$  dB of the value in the subtable. The trunk passes diagnostics if the trunk is two-wire and the measurement is in the range of  $\pm 3$  dB of the value in the subtable.

- type of precision balance network refer to “Precision balance network types” and “Precision balance network types - available balance networks”
- type of compensating resistor (high or low)
- type of loop (long or short)
- cable and cable pair
- automatic transmission data for each outgoing and two way trunk circuit
- zone on distribution frame

The system assigns the trunk to a trunk group. When this action occurs, the system assigns the trunk in subtable DIAGDATA with the default values for each field. These default values appear in table “Default Values”.

**CLLIMTCE.DIAGDATA** (continued)

Operating companies can use subtable CLLIMTCE.DIAGDATA to change trunk data if the field values are different from the default values.

**Default values (Sheet 1 of 2)**

<b>Field</b>	<b>Usage</b>	<b>Default value</b>
DBREC	Receive pad dB level - for card codes:NT1X54AA, NT2X72AA, NT2X72AB, and NT2X88AA	48 (12 dB)
DBREC	Receive pad dB level - for card codes: NT2X65AA, NT2X78AA, NT2X85AA,NT2X86AA, NT2X72AC, NT2X82AA,NT2X83AA, NT2X90AA, NT2X90AB,NT2X92AA, NT2X95AA, NT3X06AA,and NT3X07AA	36 (9 dB)
DBREC	Receive pad dB level - for card codes:NT5X03AA, NT5X04AA, and NT5X06AA	24 (6 dB)
DNTRANS	Transmit pad dB level - for card codes:NT1X54AA, NT2X72AA, NT2X72AB, and NT2X88AA	36 (9 dB)
DNTRANS	Transmit pad dB level - for card codes:NT2X65AA, NT2X82AA, NT2X83AA,NT2X85AA, NT2X86AA, NT2X90AA,NT2X90AB, NT2X92AA, NT2X95AA,NT3X07AA, and NT3X06AA	24 (6 dB)
DNTRANS	Transmit pad dB level - for card codes:NT2X72AC and NT2X78AA	54 (13 dB)
DNTRANS	Transmit pad dB level - for card codes:NT5X03AA, NT5X04AA, and NT5X06AA	4 (1 dB)
PRECBAL	Precision balance network	2X77AA
COMPRES	Compensating resistor	LO
LOOP	Loop	SH
CABLE	Cable	xxxx
CABLEPR	Cable pair	0

**CLLIMTCE.DIAGDATA** (continued)**Default values (Sheet 2 of 2)**

Field	Usage	Default value
ZONE	Zone	0
EML	Expected measured loss	0
NML	Noise level maintenance limit	50
NIAL	Noise level immediate action limit	50

One balance network plug in (PRECBAL), is provisioned for each circuit on each card type that appears in tables “Precision balance network types” and “Precision balance network types - available balance networks”.

**Precision balance network types (Sheet 1 of 2)**

Card code	Circuit type
NT2X65AA	Centralized automatic message accounting (CAMA) position signaling trunk
NT2X81AA	Two-wire, E&M 900 $\Omega$ , two-way/incoming/outgoing, multifrequency (MF), or dial pulse (DP) trunk
NT2X81AB	Two-wire, E&M 600 $\Omega$ , two-way/incoming/outgoing, MF or DP trunk
NT2X82AA	Two-wire, loop 900 $\Omega$ incoming, reverse battery, MF or DP trunk
NT2X83AA	Two-wire, loop 900 $\Omega$ , outgoing, reverse battery DP trunk
NT2X85AA	Recording completing trunk HI-LO, T&R coin trunk
NT2X86AA	Two-wire, incoming loop third wire coin SX ring, toll switch
NT2X90AA	Two-wire incoming from NE-14 LTD 900 $\Omega$

**CLLIMTCE.DIAGDATA** (continued)**Precision balance network types (Sheet 2 of 2)**

<b>Card code</b>	<b>Circuit type</b>
NT2X90AB	I/O test trunk
NT2X92AA	Two-wire, loop 900 $\Omega$ , outgoing, reverse battery, MF pulsing
NT2X95AA	Two-way, private branch exchange (PBX) trunk direct inward dialing (DID)/direct outward dialing (DOD) or direct dialing in (DDI) (United Kingdom)
NT3X06AA	Two-wire outgoing trunk to AE/3CL collocated
NT3X07AA	Two-wire incoming trunk from AE/3CL collocated
NT5X25AA	One-way central office trunk outgoing ground start with DP or Digitone
NT5X30AA	101 communication test line

**Precision balance network types - available balance networks (Sheet 1 of 2)**

<b>Card code</b>	<b>Circuit type</b>
NT2X77AA	Compromise balance network, 900 $\Omega$
NT2X77AB	Compromise balance network, 600 $\Omega$
NT2X77AC	Compromise balance network, 900 $\Omega$
NT2X77AD	Compromise balance network, 600 $\Omega$
NT2X80AA	Precision balance network, H88
NT2X87AA	Precision balance network, D66

**CLLIMTCE.DIAGDATA** (continued)**Precision balance network types - available balance networks (Sheet 2 of 2)**

Card code	Circuit type
NT2X77BA	Precision balance network, 600 $\Omega$ + 2150 nF and complex impedance of 300 $\Omega$ + 1000 $\Omega$ in parallel with 220 nF (United Kingdom)
NT2X77BB	Precision balance network, 600 $\Omega$ + 2150 nF and complex impedance of 370 $\Omega$ + 620 $\Omega$ in parallel with 310 nF (United Kingdom)

**Datafill sequence and meaning**

You must enter data in table CLLIMTCE before you enter data in table CLLIMTCE.DIAGDATA.

**Table size**

See table CLLIMTCE.

**Datafill**

Datafill for table CLLIMTCE.DIAGDATA appears in the following table.

**Field descriptions (Sheet 1 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
EXTRKNM		numeric (0 to 9999)	<i>External trunk number.</i> Enter the trunk number that the operating company assigns to the trunk.
DBREC		numeric (0 to 63)	<i>Receive pad dB level.</i> If the trunk is analog, enter the receive pad decibel (dB) level. This value appears in 0.25-dB units. The range corresponds to 0 to 15.75 dB.  If the trunk is digital, enter 0 (zero). The default value for this field is 0 (zero).

**CLLIMTCE.DIAGDATA** (continued)

## Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
DBTRANS		numeric (0 to 63)	<p><i>Transmit pad dB level.</i></p> <p>If the trunk is analog, enter the transmit pad dB level. This value appears in 0.25-dB units. The range corresponds to 0 to 15.75 dB.</p> <p>If the trunk is digital, enter 0 (zero). The default value for this field is 0 (zero).</p>
DIGDBRCV		numeric (0 to 8)	<p><i>Digital pads receive dB level.</i></p> <p>If the trunk is digital, enter the receive pad dB level. This value appears in 0.25-dB units. The range corresponds to 0 to 2 dB.</p> <p>If the trunk is analog, do not use the entry in this field. Enter 0 (zero).</p> <p>The default value for this field is 0 (zero).</p>
DIGDBTRN		numeric (0 to 8)	<p><i>Digital pads transmit dB level.</i></p> <p>If the trunk is digital, enter the transmit pad dB level. This value appears in 0.25 dB units. The range corresponds to 0 to 2 dB.</p> <p>If the trunk is analog, do not use the entry in this field. Enter 0 (zero).</p> <p>The default value for this field is 0 (zero).</p>
PRECBAL		2X77AA 2X77AB 2X77AC 2X77AD 2X77BA 2X77BB 2X78AA 2X80AA or 0	<p><i>Precision balance network.</i></p> <p>If the card code is equal to one of the types that appear in table "Precision balance network types - available balance networks", enter the type of balance network mounted on the trunk.</p> <p>Enter 0 (zero) if the trunk does not use a precision balance network. An example of this type of trunk is a digital trunk.</p> <p>Operating companies in the United Kingdom use precision balance networks 2X77BA and 2X77BB.</p> <p>The default value for this field is 2X77AA.</p>

**CLLIMTCE.DIAGDATA** (continued)

## Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
COMPRES		HI or LO	<p><i>Compensating resistance.</i> If the card code of the trunk is equal to NT2X83AA, enter the type of resistance for which the trunk is arranged. If the card code of the trunk is other than NT2X83AA, enter LO.</p> <p>The default value for this field is LO.</p>
LOOP		LG or SH	<p><i>Loop.</i> If the card code of the trunk is equal to NT2X82AA, enter the loop option wired in the trunk. For long loops, enter LG. For short loops, enter SH.</p> <p>The default value for this field is SH.</p>
CABLE		alphanumeric (1 to 4 characters)	<p><i>Cable.</i> If the cable name is recorded, enter the name that the operating company defines to identify the associated outside plant cable. If this condition does not occur, enter xxxx.</p> <p>The default value for this field is xxxx.</p>
CABLEPR		numeric (0 to 32 767)	<p><i>Cable pair.</i> If a cable name is in field CABLE, enter the pair in the cable. If this condition does not occur, enter 0 (zero).</p>
ZONE		numeric (0 to 31)	<p><i>Zone.</i> Enter the distributing frame zone in which the leads from the trunk terminate.</p>
EML		numeric (0 to 360)	<p><i>Expected measured loss.</i> The Trunk Test Position (TTP) and Automatic Trunk Test (ATT) levels of the MAP use the value of this field to test outgoing and two way trunks. Enter the expected measured loss. This value is in 0.1 dB units. The units correspond to a range of 0 to 36.0 dB. If you do not know the expected measured loss value, enter 0 (zero).</p> <p>The default value for this field is 0 (zero).</p>

**CLLIMTCE.DIAGDATA** (continued)

## Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
NML		numeric (1 to 63)	<i>Noise level maintenance limit.</i> The TTP level and the ATT level use the value for this field to test outgoing and two way trunks. Enter the noise level maintenance limit. This value is in 1 dBrm (relative measurement) units. The units correspond to a range of 1 to 63 dBrm. If you do not know the noise level maintenance limit, enter 50.  The default value for this field is 50.
NIAL		numeric (1 to 63)	<i>Noise level immediate action limit.</i> The TTP and ATT levels use the value for this field to test outgoing and two way trunks. Enter the noise level limit at which immediate maintenance action is necessary. This value appears in 1 dBrm units in a range of 1 to 63 dBrm. If you do not know the correct noise level limit, enter 50.  The default value for this field is 50.
INSVCE		Y or N	<i>In service.</i> If the trunk is in service, enter Y (yes). If the trunk is not in service, enter N (no).

**Datafill example**

Sample datafill for table CLLIMTCE.DIAGDATA appears in the following example.

This example contains datafill that has the following requirements:

- The position of the subtable is for the trunk group with a CLLI equal to OTWAON23CG00.
- The tuple input is for one in-service trunk in the group with an external trunk number equal to 208.
- The trunk with card code NT2X83AA has the balance network NT2X77AC and a high compensating resistor.
- The trunk is cross-connected to pair 767 in cable T001.

**CLLIMTCE.DIAGDATA** (end)

- The trunk has the following transmission values:
  - receive pad decibel level 8.75 dB
  - transmit pad decibel level 11.75 dB
  - expected measured loss 6.0 dB
  - noise level maintenance limit 23.0 dBm
  - noise level immediate action limit 37.0 dBm
- This trunk does not require a field LOOP. This trunk is the default level (SH).
- The leads from the trunk terminate at locations in zone 1 of the distributing frame.

**MAP example for table CLLIMTCE.DIAGDATA**

EXTRNKNM	DBREC	DBTRANS	DIGDBRCV	DIGDBTRN	PRECBAL	COMPRES	LOOP	CABLE
CABLEPR	ZONE	EML	NML	NIAL	INSVCE			
767	208	35	47	4	4	2X77AC	HI	SH T001
	1	60	23	37	Y			

## CLSVSCRC

---

### Table name

Class-of-service screening control table

These tables allow the switching unit to screen calls. The switching unit screens calls based on the serving numbering plan area (SNPA) code, class of service (COS), type of call or digits dialed.

The COS screening tables are as follows.

- CLSVSCRC - COS screening control table
- CLSVSCRS.CLSVSCR - COS screening subtable
- SCRNCCLAS - list of screening class names

A local (DMS100) switching unit provides COS screening based on the following:

- each line attribute telephone
- each trunk group
- multiple line attributes
- multiple trunk groups

If the local level does not provide COS screening, a toll (DMS-200) switch can provide COS screening. Screening is available for single or multiple:

- intertoll calls
- AMR5 trunk groups
- incoming AMR5 calls
- Centralized Automatic Message Accounting (CAMA) billing codes

Three types of calls route to the COS screening tables for call screening. These types of calls are:

- calls with codes that the system does not route from a standard pretranslator
- calls routed to treatment from local call area screening
- calls routed to a treatment from a home NPA subtable.

Calls that do not route to a treatment or to an office route proceed to wide area telephone service band screening.

**CLSVSCRC** (continued)

The NA009 release increases the range of screening classes for table SCRNCCLAS from 255 to 8 000. The increased number of screening classes requires more storage allocation in table CLSVSCRC. The NA009 release increases the number of digilator pools from one to four.

**Partitioned Table Edit (PTE) feature**

The DMS offices can have the feature BC1459. This feature is the Partitioned Table Editor. With this feature, the operating company can authorize an operating company to use PTE to edit specified tuples of table CLSVSCRC. This feature allows the operating company to edit all the tuples of the subtables CLSVSCRC.CLSVSCR at the authorized positions of table CLSVSCRC.

To access a tuple in table CLSVSCRC, the operating company must own the STS and SCRNCCL.

Datafill for table DATAOWNER appears in the following example:

KEY		OWNER
STS	001	CARLING
SCRNCCL	OTWA	CARLING

In this example, the operating company, CARLING can access the tuples that have a key 001 or OTWA. The operating company CARLING cannot view any other tuple. The operating company CARLING can view tuples owned by other operating companies if the tuples are classified as public in table OWNER.

The PTE feature allows the operating company to limit editing access to a specified operating company. The PTE feature can limit editing access to the following tuples:

- denied
- read only
- change only
- add and delete

The recommended PTE access for operating companies is as follows:

**Table CLSVSCRC**  
change only access

## **CLSVSCRC** (continued)

---

### **Subtables CLSVSCRC.CLSVSCR**

add and delete tuples access

See table OWNER for additional information.

### **Functional description**

Table CLSVSCRC contains the following information for each screening class:

- the serving NPA of the screening class
- the screening class name that the operating company defines
- the type of call to which screening applies. Examples of this type of call are direct dial operator assistance or no prefix.

The digits dialed can determine the destination of a call. If this condition occurs, subtable CLSVSCRC.CLSVSCR must specify the total number of different routes or treatments (results) available to the call.

The destination of a call can be independent of the digits dialed. If this condition occurs, control table CLSVSCR can specify the treatment or route of the call. Control table CLSVSCR can specify the type of position in which all calls route when the calls require operator intervention. Subtables are not necessary.

If the call routes to table OFRT, the route does not depend on the digits dialed. The selector is equal to T (table). In this condition, subfield RTEREFIX contains the indexes to the office route tables in table OFRT.

If the call routes to table OFRT, the route does not depend on the digits dialed. The selector is equal to D. If this condition occurs, subfield TREAT specifies the treatments available to the call.

The call destination can depend on the digits dialed. If this condition occurs, the selector is equal to N. The subtable CLSVSCRC.CLSVSCR specifies the routes or treatments available to the calls.

In a local or toll switching unit, a call can route to a position that table POSITION specifies. The screening selector of the unit is equal to N. The number of results is equal to 0 (zero). Field POSN specifies the point in table POSITION at which the system routes translation.

### **Datafill sequence and meaning**

You must enter data in table HNPACONT before you enter data in table CLSVSCRC.

**CLSVSCRC** (continued)**Table size**

0 to 1000 tuples

If the table has less than 128 screening classes assigned, the system allocates 512 words of memory for each serving NPA.

If the table has more than 127 screening classes assigned, the system allocates 1024 words of memory for each serving NPA.

**Datafill**

Datafill for table CLSVSCRC appears in the following table.

**Selector T**

Table CLSVSCRC selector T is used if translation proceeds to table OFRT at the specified route reference index.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
NPASCTYP		see subfields	<i>NPA screening class type.</i> This field has the subfields STS, SCRNCCL, and TYPCALL.
	STS	numeric	<i>Serving translation scheme.</i> Enter the serving home numbering plan area (NPA) for a specified trunk group or line attribute.
	SCRNCCL	alphanumeric (1 to 4 digits)	<i>Screening class.</i> Enter the class of service screening subtable name for the trunk group, line attribute or CAMA or AMR5 billing code.
	TYPCALL	DD, OA, or NP	<i>Type of call.</i> Enter the call type. The call types are direct dial (DD), operator assisted (OA) no prefix (NP).
NORSLTS		0 to 255	<i>Number of results.</i> Enter the number of results required.
TMTOFRT		see subfields	<i>Treatment or office route.</i> This field has the subfields SCRNCSEL and RTEREFIX.
	SCRNCSEL	T	<i>Screening selector.</i> If translation routes to table OFRT enter the screening selector T.
	RTEREFIX	see subfields	<i>Route reference index.</i> This field has the subfields OFC_RTE and RTE_ID.

**CLSVSCRC** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	OFC_RTE	OFRT, OFR2, OFR3, or OFR4	<i>Office route table name.</i> Enter the office route table name to which the system directs the translations.
	RTE_ID	0 to 1023	<i>Route reference table index.</i> Enter the route index in table OFRT to which the translation routes.

**Selector D**

Use table CLSVSCRC selector D if translation proceeds to the correct subtable TMTCNTL.TREAT at the specified treatment.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
NPASCTYP		see subfields	<i>NPA screening class type.</i> This field has the subfields STS, SCRNCNCL and TYPCALL.
	STS	numeric	<i>Serving translation scheme.</i> Enter the serving home numbering plan area (NPA) for a specified trunk group or line attribute.
	SCRNCNCL	alphanumeric (1 to 4 digits)	<i>Screening class.</i> Enter the class of service screening subtable name for a specified trunk group, line attribute or centralized automatic message accounting (CAMA) or AMR5 billing code.
	TYPCALL	DD, OA, or NP	<i>Type of call.</i> Enter the call type. The call types are direct dial (DD), operator assisted (OA) no prefix (NP).
NORSLTS		0 to 255	<i>Number of results.</i> Enter the number of results required.
TMTOFRT		see subfields	<i>Treatment or office route.</i> This field has the subfields SCRNCNSEL and TREAT.

**CLSVSCRC** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	SCRNSEL	D	<i>Screening selector.</i> Enter the screening selector D if translation routes to one of the treatments in table TREAT.
	TREAT	alphanumeric	<i>Treatment.</i> Enter the treatment in table TREAT to which translation routes.

**Selector N**

Use table CLSVSCRC selector N if translation proceeds to one of the following tables:

- table POSITION at a position that field POSN specifies
- subtable CLSVSCRC.CLSVSCR, for additional digit translation

**Selector N = POSITION****Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
NPASCTYP		see subfields	<i>NPA screening class type.</i> This field has the subfields STS, SCRNCL, and TYPCALL.
	STS	numeric	<i>Serving translation scheme.</i> Enter the serving home NPA for a specified trunk group or line attribute.
	SCRNCL	alphanumeric	<i>Screening class.</i> Enter the class of service screening subtable name for a specified trunk group, line attribute or CAMA or AMR5 billing codes.
	TYPCALL	DD, OA or NP	<i>Type of call.</i> Enter the type of call direct dial (DD), operator assisted (OA) no prefix (NP).
NORSLTS		0 to 255	<i>Number of results.</i> Enter the number of results required.
TMTOFRT		see subfield	<i>Treatment or office route.</i> This field has the subfields SCRNSEL and POSN.

**CLSVSCRC** (continued)

## Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SCRNSEL	N	<i>Screening selector.</i> Enter the screening selector N if translation routes to a position in table POSITION.
	POSN	CAMA, TOPS, CTOP, TSPS, AMRX, RTE1, RTE2, RTE3, or RTE4	<i>Position.</i> Enter the position in table POSITION in which translation routes.

**Selector N = CLSVSCRC.CLSVSCR**

## Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
NPASCTYP		see subfields	<i>NPA screening class type.</i> This field has the subfields STS, SCRNCL and TYPCALL.
	STS	numeric	<i>Serving translation scheme.</i> Enter the serving home NPA for a specified trunk group or line attribute.
	SCRNCL	alphanumeric	<i>Screening class.</i> Enter the class of service screening subtable name for a specified trunk group, line attribute, or CAMA or AMR5 billing code.
	TYPCALL	DD, OA or NP	<i>Type of call.</i> Enter the type of call direct dial (DD), operator assisted (OA) no prefix (NP).
NORSLTS		0 to 255	<i>Number of results.</i> If class of service screening requires only one route, enter the digit 2.
TMTOFRT		see subfield	<i>Treatment or office route.</i> This field has the subfield SCRNSEL and POSN.

**CLSVSCRC** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	SCRNSEL	N	<i>Screening selector.</i> Enter the screening selector N if class of service screening requires more than one route.
	POSN	NONE	<i>Position.</i> This field is not necessary. Enter the default value NONE.

**Datafill example****Example 1: Call proceeds to table OFRT (local or toll)**

A call can route to one of the routes in table OFRT in a local or toll switching unit. This condition appears in the following example. The example includes tables SCRNCLAS, CLSVSCRC and OFRT.

A local or combined local/toll switching unit with Traffic Operator Position System (TOPS) requires this screening class to route 0+ calls from a 1FR line. All correct operator-assisted calls route to the TOPS or Traffic Service Position System (TSPS) trunk group. Route reference index number 6 in table OFRT specifies this trunk group.

The screening class and flat rate message rate (FRMR) appear in table SCRNCLAS. This table assigns the screening class a value of 4.

**MAP example for table SCRNCLAS**

VALUE	SYMBOL
4	FRMR

Table CLSVSCRC lists the index, number 6, in table OFRT to which the system routes all correct operator assisted (OA) calls. Correct OA calls originate from lines that have a line attribute that specifies screening class FRMR and serving NPA 613.

**CLSVSCRC** (continued)

**MAP example for table CLSVSCRC**

NPASCTYP	NORSLTS	MTOFRT	CLSVSCR
613 FRMR OA 0		T OFRT	6

Route reference index number 6 in table OFRT specifies the common language location identifier (CLLI) of the trunk to which the call routes.

**MAP example for table OFRT**

RTE	RTELIST
6	( S D ATWAON2303TO) \$

**Example 2: Call proceeds to table POSITION (local or toll)**

Calls that route to a position in table POSITION for a local or toll switching unit appears in the following example.

A toll or combined local/toll switching unit with TOPS requires this screening class for incoming TOPS trunk groups. All correct operator assisted calls on the incoming TOPS trunk groups route to the position TOPS in table POSITION.

The example includes tables SCRNCCLAS, CLSVSCRC and POSITION.

The screening table name TOPS appears in table SCRNCCLAS. This table assigns the screening table a value of 3.

**CLSVSCRC** (end)**MAP example for table SCRNCCLAS**

VALUE	SYMBOL
3	TOPS

The position TOPS appears in table CLSVSCRC. All correct OA calls on incoming TOPS trunk group in serving NPA 613 route to this position.

**MAP example for table CLSVSCRC**

NPASCTYP	NORSLTS	TMTOFRT
613 FRMR OA	0	N TOPS

The position TOPS in table POSITION routes calls to the TOPS operator trunk group with a fixed pseudo CLLI code of TOPSPOS.

**MAP example for table POSITION**

POS	PRTE
TOPS	S TOPSPOS

## CLSVSCRC.CSVSCR

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### Table name

Class of Service Screening Subtable

### Functional description

Subtable CLSVSCRC.CLSVSCR is a requirement when the digits dialed determined the call destination.

The subtable determines the following for specified digits dialed:

- if the call must maintain the route in the home numbering plan area (NPA) code subtable
- if the call completes to the route or treatment specified in subtable CLSVSCRC.CLSVSCR

The number of digits that the subtable screens ranges from 3 to 11.

The initialization of subtable CLSVSCRC.CLSVSCR allows all codes to maintain the route in the home NPA code subtable.

Each code or block of consecutive codes can require a destination different from the destination in the home NPA subtable. These codes require the following input:

- Each subtable CLSVSCRC.CLSVSCR requires one set of records.
- A local (DMS-100) switching unit can provide class of service screening. This switching unit provides screening if the toll switching unit associated with this switching unit cannot perform class-of-service screening. This unit provides screening if the operating company performs class-of-service screening in the local switching unit. When this condition occurs, the operating company does not perform class-of-service in the toll switching unit.
- If the code or block of consecutive codes reroutes to table OFRT, the selector is equal to T. The subfield RTEREFIX is equal to the office route table name field OFC\_RTE. This subfield is equal to the office route table index field RTE\_ID.
- If the code or block of consecutive codes reroutes to an office treatment table, the route selector is D. The subfield TREAT contains the treatment to which the call routes.

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**CLSVSCRC.CSVSCR** (continued)

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- When a call routes to one of the positions in table POSITION, the screening selector equals N in a local or toll switching unit. The field POSN specifies the position in table POSITION where translation routes.
- All codes the system does not specify maintain the route in the home NPA code subtable for the code.

**DMSMON command DBLOCKS**

The batch change supplement monitoring system (DMSMON) command DBLOCKS provides the number of digit blocks in use. The DMSMON command DBLOCKS also provides the number of digit blocks allocated and the number of blocks used. The DMSMON command DBLOCKS provides the percent of digit blocks available for each of the following tables:

- CLSVSCRC.CLSVSCR
- CODEBLK
- HNPACONT.HNPACODE
- IBNXLA
- LATAXLA
- SPLDNID
- STDPRTCT.STDPRT

See table CLSVSCRC for additional information.

**Datafill sequence and meaning**

You must enter data in table HNPACONT before you enter data in table CLSVSCRC.CSVSCR.

*Note:* With the use of the I selector, the AMBI selector in table HNPACONT.HNPACODE must translate the call. A failure to route the call through the AMBI selector and through the I selector causes DTFL treatment.

**Table size**

0 to (see note)

*Note:* This subtable uses digilators. The maximum number of tuples depends on the data entered in the table. The data entered in the table varies for each application.

**Datafill**

Datafill for table CLSVSCRC.CSVSCR appears in the following table.

**CLSVSCRC.CSVSCR** (continued)**Selector T**

Subtable CLSVSCRC.CLSVSCR selector T is in use if translation proceeds to table OFRT at the specified route reference index.

**Field descriptions (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
FROMDIGS		numeric (a maximum of 18 digits)	From digits. Enter the single code or the first code in a block of consecutive codes that have the same screening route.
TODIGS		numeric (a maximum of 18 digits)	To digits. If field FROMDIGS represents a single code, the entry in this field is the same as the entry in field FROMDIGS.  If field FROMDIGS represents the first number in a block of consecutive codes: the entry in this field equals the last number in the block.
TMTOFRT		see subfields	Treatment or office route. This field has the subfields INPA, SCRNSEL and RTEREFIX.
	INPA	I or blank	Interchangeable Numbering Plan Area. Enter I if INPA codes require separate routes for seven and ten dialed digits. The entry of I requires two routes. The first route is for calls with seven dialed digits. The second route is for calls with ten dialed digits.
	SCRNSEL	T	Screening selector. Enter the screening selector T if translation routes to table OFRT.
	RTEREFIX	see subfields	Route reference index. This field has the subfields OFC_RTE and RTE_ID.

**CLSVSCRC.CSVSCR** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	OFC_RTE	OFRT, OFR2, OFR3, or OFR4	Office route table name. Enter the office route table name to which the system directs the translations.  The entry of the INPA selector I in subfield INPA requires two routes. The first route handles seven-digit calls. The second route handles ten-digit calls.
	RTE_ID	0 to 1023	Route reference table index. Enter the route reference index in the OFR table to which the translation routes.  The entry of the INPA selector I in subfield INPA requires two route reference indices. The first index applies to the first route entry. The second index applies to the second route entry.

**Selector D**

Use subtable CLSVSCRC.CLSVSCR selector D if translation proceeds to the correct subtable TMTCNTL.TREAT at the specified treatment.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (a maximum of 18 digits)	From digits. Enter the single code or the first in a block of consecutive codes that have the same screening route.
TODIGS		numeric (a maximum of 18 digits)	To digits. If field FROMDIGS represents a single code, the entry in this field is the same as the entry in field FROMDIGS.  If field FROMDIGS represents the first number in a block of consecutive codes: the entry in this field is equal to the last number in the block.
TMTOFRT		see subfields	Treatment or office route. This field has the subfields INPA, SCRNSEL and TREAT.

**CLSVSCRC.CSVSCR** (continued)**Field descriptions for conditional datafill (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	INPA	I or blank	Interchangeable Numbering Plan Area. Enter I if INPA codes require separate routes for seven and ten dialed digits.
	SCRNSEL	D	Screening selector. Enter the screening selector D if translation routes to one of the treatments in table TREAT.
	TREAT	alphanumeric	Treatment. Enter the treatment in the treatment table to which translation routes.

**Selector N**

Use subtable CLSVSCRC.CLSVSCR selector N if translation proceeds to table POSITION.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (a maximum of 18 digits)	From digits. Enter the single code or the first in a block of consecutive codes that have the same screening route.
TODIGS		numeric (a maximum of 18 digits)	To digits. If field FROMDIGS represents a single code, the entry in this field is the same as the entry in field FROMDIGS.  If field FROMDIGS represents the first number in a block of consecutive codes: the entry in this field is equal to the last number in the block.
TMTOFRT		see subfield	Treatment or office route. This field has the subfields INPA, SCRNSEL and POSN.
	INPA	I or blank	Interchangeable Numbering Plan Area. Enter I if INPA codes require separate routes for seven and ten dialed digits.

**CLSVSCRC.CSVSCR** (continued)**Field descriptions for conditional datafill (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	SCRNSEL	N	Screening selector. Enter the screening selector N, if translation routes to a position in table POSITION.
	POSN	AMRX, CAMA, CTOP, RTE1, RTE2, RTE3, RTE4, TOPS, or TSPS	Position. Enter the position in table POSITION to which translation routes.

**Datafill examples**

Sample datafill for table CLSVSCRC.CSVSCR appears in the following example.

This example is an example of subtable CLSVSCRC.CLSVSCR in a toll or combined local/toll switching unit that switches normal traffic.

The system assigns the subtable to all codes in table BILLCODE assigned to normal lines.

The subtable intercepts the toll information code 555, Canadian TWX code 610 and the American 100 speed TWX code 710. This condition occurs if the call originates from a normal line.

Calls to toll information from a normal line reroute through table OFRT, route reference number 5.

Calls to TWX codes 610 and 710 route to unauthorized CAMA treatment (UNCA).

Calls to NXX 568 in NPA 819 are local calls. The subtable does not allow a caller to dial 819-568-xxxx. All calls to NXX 568 in NPA 819 route to MSCA treatment.

All other codes dialed proceed to the home NPA code subtable to receive a call route.

Subtable CLSVSCRC.CLSVSCR is necessary for normal line billing codes if the originating office cannot perform screening. Subtable CLSVSCRC.CLSVSCR is necessary if the operating company performs

**CLSVSCRC.CSVSCR** (continued)

screening at the toll switching unit. Subtable CLSVSCRC.CLSVSCR is not necessary if the operating company performs screening at the local switching unit.

Tables SCRNCCLAS, CLSVSCRC and CLSVSCR appear in the following example.

The screening class CAMA appears in table SCRNCCLAS. This table assigns the screening class a value of 1.

**MAP example for table CLSVSCRC.CSVSCR**

VALUE	SYMBOL
1	CAMA

Table CLSVSCRC, with field NORSLTS equal to 2, indicates the requirement of subtable CLSUSCR with this screening class name.

**MAP example for table CLSVSCRC.CSVSCR**

NPASCTYP	NORSLTS	TMTOFRT	CLSVSCR
613 CAMA DD	2	N NONE (	1)

The completed record for subtable CLSVSCRC.CLSVSCR appears in the following.

Each three- to seven-digit code or block of consecutive three- to seven-digit codes needs one record. The codes that require one record can route in a different way from the route specified in table HNPA.

**CLSVSCRC.CSVSCR** (continued)**MAP example for table CLSVSCRC.CSVSCR**

FROMDIGS	TODIGS	TMTOFRT
555	555	T OFR2 5
610	610	D UNCA
710	710	D UNCA
819568	819568	D MSCA

The INPA selector can route seven-digit calls to one treatment and ten-digit calls to a second treatment. Sample datafill for table CLSVSCRC and subtable CLSVSCR, when the INPA selector performs this action, appears in the following example.

**MAP example for table CLSVSCRC**

NPASCTYP	NORSLTS	TMTOFRT	CLSVSCR
518 TCA9 DD	2	N NONE	( 0)

**MAP example for subtable CLSVSCRC.CSVSCR**

FROMDIGS	TODIGS	TMTOFRT
827	829	I T OFRT 1021 T OFRT 892
912	912	I D UNCA T OFRT 97

## **CLSVSCRC.CSVSCR (end)**

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### **Table history**

#### **NA006**

The field TMTOFRT changes to include the value I for INPA in NA006. This change complies with the Dial Plan Translations Enhancements feature.

### **Additional information**

There is no additional information.

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**CMDS**

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**Table name**

Command Screening table

**Functional description**

Command screening table CMDS is part of the enhanced security feature. Office parameter ENHANCED\_COMMAND\_SCREENING, in table OFCOPT, determines if the feature is active. You set office parameter ENHANCED\_COMMAND\_SCREENING to Y if you purchased the feature or N if you did not purchase the feature. You cannot set office parameter ENHANCED\_COMMAND\_SCREENING after the first datafill. This prevention stops any person from overriding security.

Each command that has between one and thirty-one command classes appears in table CMDS.

You can assign any set of up to 31 classes to a command. For more information, refer to the description of table TERMDEV in the data schema section of *Translations Guide*. Command screening ensures that the command classes of the user match the classes of the commands the user wants to use. You must datafill each command for the directory in which you intend to use the command. For example, if you want the FRLS (force release command) to be accessible at the LTP level of the MAP, you must make an FRLS entry in table CMDS for the LTP directory.

The PRIVCLAS command allows multiple command classes to be set.

Fields LOGONUSE, USEALARM, LOGABUSE, and ALRMABUS determine if the system generates a log or alarm for command use or abuse.

The system automatically inserts tuples in this table with default values.

**Datafill sequence and meaning**

You do not need to enter data in other tables before you enter data in table CMDS.

**Table size**

The system dynamically allocates memory for this table. The initial size of the table is 100 entries. The system automatically expands the table size when necessary.

**CMDS** (continued)**Datafill**

The following table describes datafill for table CMDS.

**Field descriptions (Sheet 1 of 3)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
CMDINCR		see subfields	<i>Command and increment</i>  This field has the subfields CMDNAME and INCRNAME.
	CMDNAME	alphanumeric (1 to 16 characters)	<i>Command name</i>  Enter the command name.
	INCRNAME	alphanumeric (1 to 16 characters) or \$	<i>Increment name</i>  Enter the increment name.  If the command is not part of an increment, enter \$.
DUMPSAFE		NOTSAFE, DSPS, or PS	<i>Command availability</i>  The default value NOTSAFE makes the command not available during data store (DS) dump and program store (PS) dump.  Enter DSPS if you want the command available during both DS dump and PS dump.  Enter PS if want want the command available only during PS (after DS is complete).
LOGONUSE		Y or N	<i>Command use log status</i>  Enter Y if you want a log report for each use of the command. Enter N if you do not want a log report for each use of the command.  The default value is N.

**CMDS** (continued)**Field descriptions (Sheet 2 of 3)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
USEALARM		CR, MJ, MN or NA	<p><i>Command use alarm status</i></p> <p>Enter one of the following values:</p> <ul style="list-style-type: none"> <li>• CR if you want a critical alarm for command use</li> <li>• MJ if you want a major alarm for command use</li> <li>• MN if you want a minor alarm for command use</li> <li>• NA if you want no alarm for command use</li> </ul> <p>The default value is NA.</p>
LOGABUSE		Y or N	<p><i>Command abuse log status</i></p> <p>Enter Y if you want a log report when a user with the wrong command set tries to use the command. Enter N if you do not want a log report when a user with the wrong command set tries to use the command.</p> <p>The default value is N.</p>

## CMDS (continued)

### Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
ALRMABUS		CR, MJ, MN or NA	<p><i>Command use alarm status</i></p> <p>Enter one of the following values:</p> <ul style="list-style-type: none"> <li>• CR if you want a critical alarm for command abuse</li> <li>• MJ if you want a major alarm for command abuse</li> <li>• MN if you want a minor alarm for command abuse</li> <li>• NA if you want no alarm for command abuse</li> </ul> <p>The default value is NA.</p>
PRIVSET		0 to 30, ALL, or '(NONE)'	<p><i>Privileged set</i></p> <p>Enter the set of command classes that correspond to the specified command.</p> <p>The default value is '(NONE)'.</p> <p>The system defaults an incorrect entry to '(NONE)'.</p>

### Datafill example

The following example shows sample datafill for table CMDS.

#### MAP display example for table CMDS

	CMDINCR	DUMPSAFE	LOGONUSE	USEALARM	LOGABUSE	ALRMABUS	PRIVSET
DUMP	\$	DSPS	N	NA	N	NA	ALL
STOPDUMP	\$	DSPS	N	NA	N	NA	ALL
HPDUMP	\$	DSPS	N	NA	N	NA	ALL
JFFREEZE	\$	DSPS	N	NA	N	NA	ALL
DCN	\$	DSPS	N	NA	N	NA	ALL
TABLE	\$	PS	N	NA	N	NA	ALL
DMOPRO	\$	PS	N	NA	N	NA	ALL
SERVORD	\$	PS	N	NA	N	NA	ALL
RESTART	\$	NOTSAFE	N	NA	N	NA	30

## **Table history**

### **BASE11**

The correct entries for field DUMPSAFE changed from Y and N to NOTSAFE, DSPS, and PS.

### **BASE03**

In field PRIVSET a default value and an explanation of the `(NONE)` entry were added.

## CMGRING

---

### Table name

Call Management Group Ringing

### Functional description

Table CMGRING specifies the ringing types and their associated ringing pattern. The end office supports Call Management Group (CMG) simultaneous ringing and CMG call hold ringback.

#### Distinctive ringing

Tuple distinctive ringing (DISTRING) specifies the supported ringing types and their associated ringing pattern for simultaneous ringing. The associate CMG line receives DISTRING when a call terminates to the subscriber CMG line.

#### Hold ringback

Tuple hold ringback (HOLDRGBK) specifies the ringing type and their associated ringing pattern for ringback tone. The CMG lines in a call hold design receives HOLDRGBK.

### Datafill sequence and meaning

There is no requirement to datafill other tables before table CMGRING.

### Table size

Table CMGRING has two fixed tuples.

### Datafill

The following table lists datafill for table CMGRING.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
CMGRING		DISTRING	This field specifies the key of the table consisting of two entries.
		HOLDRGBK	
<b>Note:</b> The Subscriber Module Access (SMA) peripheral for CODED 20 HZ does not support the ringing patterns 2 and 7-11. When the ringing pattern is set to one of these values, the switch can provide normal ringing or the call may not work.			

**CMGRING** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield	Entry	Explanation and action
RINGLIST		Ringing type: (CODE SUPER CODE30  CSRING CODE5_AI CODE5_BI  CODE3_CI CODE3_DI  CODE6_EI CODE4_AI  CODE5_CI FREQ_DECI  FREQ_SYNCI FREQ_HARMI  FREQ_SYNC16I CODE4_BI  CODE45_AI CODE5_DI  CODE5_EI CODE5_FI  CODE5_GI CODE5_HI  CODE5_I CODE6_F)	This field specifies the list of supported ringing types and associated ringing patterns in the end office. The list can be empty with a default value of \$. The list can have a maximum of 24 pairs of ringing types and ringing patterns.
		Ringing pattern: (0 1 2 3 4 5 6 7 8 9 10 11 12 13  14 15 16 17 18 19 20 21 22 23)	
<p><b>Note:</b> The Subscriber Module Access (SMA) peripheral for CODED 20 HZ does not support the ringing patterns 2 and 7-11. When the ringing pattern is set to one of these values, the switch can provide normal ringing or the call may not work.</p>			

The following table lists the ringing types and the countries which use them.

**(Sheet 1 of 2)**

Ringing type	Country
CODE	North America
CODE3_C	UK
CODE3_D	Japan
CODE30	North America
CODE4_A	Belgium
CODE4_B	Belgium
CODE45_A	Spain
CODE5_A	China
CODE5_B	Morocco
CODE5_C	Italy

**CMGRING** (continued)

(Sheet 2 of 2)

Ring type	Country
CODE5_D	Sweden
CODE5_E	Holland
CODE5_F	France
CODE5_G	Italy
CODE5_H	Norway
CODE5_I	Egypt
CODE6_E	Saudi Arabia
CODE6_F	Portugal
CSRING	North America
FREQ_DEC	North America
FREQ_HARM	North America
FREQ_SYNC	North America
FREQ_SYNC16	North America
SUPER	North America

**Datafill example**

The following example shows sample datafill for table CMGRING.

**MAP display example for table CMGRING**

CMGRING	RINGLIST
DISTRING	(CODE 3) (CODE30 4) (SUPER 5) \$
HOLDRGBK	(CODE 6) (CODE30 5) (SUPER 7) \$

**Table history**

**MMP14**

Added nine new ringing types and ringing pattern values to field RINGLIST for use by the Dual Line Call Management feature. Changes to the code implement the hooks needed to allow the feature to use the required ringing

**CMGRING** (end)

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schemes, and ensure that the correct MMP-specific ringing cadences are played when the feature is invoked.

**NA010**

Table CMGRING was introduced.



## CMIPADDR

---

### Table name

Computing Module Internet Protocol Addresses

### Functional description

Table CMIPADDR contains the IP addresses and netmasks associated with the XA-Core, as well as the gateway router IP address and the edge device IP addresses and netmasks.

### Datafill sequence and meaning

Table CMIPADDR is datafilled during commissioning of the Ethernet interfaces in an XA-Core switch. Changing the gateway or host address information after that may cause data mismatches between various nodes in the IP network. There is no requirement to enter datafill into other tables before table CMIPADDR.

### Table size

0 to 11 tuples

**CMIPADDR** (continued)

**Datafill**

The table that follows lists datafill for table CMIPADDR.

**Field descriptions**

Field	Subfield	Entry	Explanation and action
KEY	KEYCLASS	GATEWAY, CMHOST, AMDIHOST, ETHRLNK	<p>This field consists of subfields KEYCLASS and ENTRYNO.</p> <p>Key class. Indicates the class of tuple being datafilled.</p> <p>Enter GATEWAY to datafill the IP address of a gateway router. There can be only one GATEWAY tuple.</p> <p>Enter CMHOST to datafill an active IP address for the XA-Core. There can be two CMHOST tuples (total two active host IP addresses).</p> <p>Enter ETHRLNK to datafill a physical Ethernet link. There can be up to 8 ETHRLNK tuples, with each tuple corresponding to a physical link.</p> <p>AMDIHOST exists to allow datafill of an IP address to be used with an AMDI link for CLIP (Classical IP) over ATM. This value cannot be datafilled currently.</p>
	ENTRYNO	0 to 7	<p>Entry number. This is used to create a unique key. The KEYCLASS limits the ENTRYNO values that can be datafilled:</p> <p>GATEWAY: 0 to 0            CMHOST: 0 to 1            AMDIHOST: N/A            ETHRLNK: 0 to 7</p>

**CMIPADDR** (continued)**Field descriptions**

Field	Subfield	Entry	Explanation and action
DATA			This field consists of selector field SELCLASS and refinements.
	SELCLASS	GW, HOST, AMDI, ETHR	<p>Selector class. This is a selector field.</p> <p>Selector class. The KEYCLASS in the key must match the SELCLASS entry as follows:</p> <p>GATEWAY: GW            CMHOST: HOST            AMDIHOST: AMDI            ETHRLNK: ETHR</p>

**SELCLASS = GW**

If the entry in subfield SELCLASS is GW, datafill refinements as shown in the following table.

**GW refinement field descriptions**

Field	Subfield	Entry	Explanation and action
GTWYIP		four numbers, each 0 to 255	<p>Gateway IP address. Enter an address for a gateway router. This address is downloaded to the Ethernet interface card or packlet.</p> <p><b>Note 1:</b> VRRP and similar redundancy schemes allow a pair of routers to use a single IP address.</p> <p><b>Note 2:</b> The GTWYIP entry may be the same as an address entered for an edge device in an ETHRLINK tuple, if that is appropriate for the network configuration. It may not be the same as any other IP address in table CMIPADDR.</p>
NETID		0 to 1	<p>Network (that is, subnet) identifier. Enter 0. Currently, there can be only one Ethernet-based subnet for the core.</p>

**CMIPADDR** (continued)**SELCLASS = HOST**

If the entry in subfield SELCLASS is HOST, datafill refinements as shown in the following table.

**HOST refinement field descriptions**

Field	Subfield	Entry	Explanation and action
ACTIVEIP		four numbers, each 0 to 255	Active IP address for the XA-Core. This will be one of the IP addresses used by applications and advertised outside of the core.  The active IP addresses are dynamically associated with physical interfaces. If an active IP address is bound to a physical interface that suffers a failure, it will be automatically rebound to a different interface in the same subnet.
NETMASK		1 to 30	Netmask. Enter the number of leading '1's in the mask.
NETID		0 to 1	Network (that is, subnet) identifier. Enter 0. Currently, there can be only one Ethernet-based subnet for the core.

**SELCLASS = AMDI**

This value cannot be datafilled currently.

**CMIPADDR** (continued)**SELCLASS = ETHR**

If the entry in subfield SELCLASS is ETHR, datafill refinements as shown in the following table.

**ETHR refinement field descriptions**

Field	Subfield	Entry	Explanation and action
SLOTID			This field consists of subfields SLOT and SIDE
	SLOT	0 to 18	Slot. The physical slot number on the XA-Core shelf where the Ethernet interface card resides. (For EIOP, this is where the IOP resides.)  <b>Note:</b> Refer to XA-Core engineering documentation for packfill restrictions.
	SIDE	UNKNOWN, FRONT, REAR	Side. The location on the XA-Core shelf where the Ethernet interface card resides. Enter FRONT or REAR.  <b>Note:</b> Refer to XA-Core engineering documentation for packfill restrictions.
PACKLET		NONE, LOWER, UPPER	Packlet. For EIOP, enter the location of the Ethernet packlet on the IOP card. For other Ethernet interfaces such as HIOP and HCMIC, enter NONE.
CARDIP		four numbers, each 0 to 255	Card IP address. This address is used only within the interface card or packlet, and is not advertised
CARDNETM		1 to 30	Card netmask. Enter the number of leading '1's in the mask.
MTCIP		four numbers, each 0 to 255	Maintenance IP address. This is used by the core for maintenance of the interface card or packlet from the core. This address is not advertised
MTCNETM		1 to 30	Maintenance netmask. Enter the number of leading '1's in the mask.

## CMIPADDR (continued)

### ETHR refinement field descriptions

Field	Subfield	Entry	Explanation and action
EDGEIP		four numbers, each 0 to 255	<p>Edge device IP address. This is the address of the device to which the Ethernet interface is directly attached</p> <p>This address is used by the core in performing integrity checks, using ICMP echo requests, on the point-to-point link between the Ethernet interface card or packlet and the edge device to which it is attached</p> <p>Assuming the edge device is a Passport 8600, datafill the physical IP address of the CallIP VLAN/subnet on the Passport 8600 that the HIOP or HCMIC subtends.</p>
NETID		0 to 1	<p>Network (that is, subnet) identifier. Enter 0. Currently, there can be only one Ethernet-based subnet for the core.</p>

### Datafill example

The figure that follows shows sample datafill for table CMIPADDR.

#### MAP display example for table CMIPADDR

KEY	DATA
GATEWAY 0	GW (172 16 0 1) 0
CMHOST 0	HOST (172 16 14 108) 20 0
CMHOST 1	HOST (172 16 14 109) 20 0
ETHRLNK 1	ETHR 12 REAR NONE (172 16 14 104) 20 (172 16 14 110) 20 (172 16 0 2) 0
ETHRLNK 2	ETHR 6 REAR NONE (172 16 14 106) 20 (172 16 14 112) 20 (172 16 0 3) 0

### Additional information

Currently, only one subnet is supported for the core Ethernet interfaces. All active IP, maintenance IP, and card IP addresses must be unique, and they must all have the same netmask and the same subnet.

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**CMIPADDR (end)**

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A GATEWAY or CMHOST tuple can be changed or deleted only if all links associated with the subnet are off-line. An ETHRLNK tuple can be changed or deleted only if the link is off-line.

**Note:** Changes to the GATEWAY or CMHOST IP addresses or subnet information in this table after the initial commissioning may cause data mismatches between various nodes in the IP network.

SN07/ISN07 activity A00005160 (OSSAIN XA-Core Data Messaging Capacity Enhancements) adds the following error message. This message is printed if an attempt is made to delete or change a CMHOST tuple whose active IP address is datafilled in table OANODINV.

```
ERROR: The active IP address in this tuple is referenced
by table OANODINV. The tuple cannot be changed or deleted
as long as table OANODINV references it.
```

**Note:** Much other datafill may depend on the OANODINV tuple. To avoid having to delete and re-add all this other datafill if it is necessary to change the IP address plan, one can temporarily change the DATAPATH field in the OANODINV tuple to EIU. However, this does not imply that the CMHOST tuples can be changed without major impact on the OSSAIN application.

## Table history

### SN07 (DMS)

New cross-checks and error messages are added by the following features:

- A00002510, LANCOMM IP over IRM - adds cross-checks with table IPNETWRK.
- A00005160, OSSAIN XA-Core Data Messaging Capacity Enhancements (this feature) - adds cross-checks with table OANODINV.

This table description is introduced.

### CSP16

Table CMIPADDR was introduced and modified in CSP16 by the following features:

- A59025829, IRM Plan B.
- A59029386, CLIP on the XA-Core
- A59029980, Succession HIOP Maintenance Software



## CMSGCTRL

---

### Table name

Call Messaging Control

### Functional description

The DMS uses table CMSGCTRL to define which carriers can be used to carrier Call Messenger traffic, and the conditions under which that traffic is carried.

### Datafill sequence and implications

The following tables must be datafilled before table CMSGCTRL.

- OCCNAME
- OCCINFO
- OFRT, ORF2, ORF3, ORF4
- CLLI
- TRKGRP
- TMTCNTL

### Datafill example

The following example shows sample datafill for table CMSGCTRL.

#### MAP display example for table CMSGCTRL

CARRNAME	ACCESS			FANI	RTEREF
CARRIERONE	CARRIER	Y	N	Y	48 OFRT 79
CARRIER TWO	CARRIER	Y	Y	Y	10 OFR3 150
LOCAL	LOCAL	Y			12 OFRT 56

### Table history

#### NA002

Table CSMGCRTL was introduced in NA002.

**CMSHELF****Table name**

Computing Module Shelves Table

**Functional description**

Table CMSHELF provides location information for computing module shelves in the DMS-100E. You can enter data in table SLM after you enter data in the extension shelf first in table CMSHELF. The extension shelf is the computing module (CM) shelf 1.

Table CMSHELF stores physical location information for each shelf of the computing module. Each entry in the table corresponds to a shelf. The shelf is a part of the central processing unit (CPU) plane or memory system. The entry in this table indicates the location of cards equipped on the shelf.

**Datafill sequence and meaning**

You do not need to enter data in other tables before you enter data in table CMSHELF.

You must enter data in table SLM after you enter data in table CMSHELF.

**Datafill**

Datafill for table CMSHELF appears in the following table.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CMSHELFK		see subfields	<i>Computing module shelf key.</i> This field contains subfields PLANESH and CMNO.
	PLANESH	see subfields	<i>Plane shelf.</i> This field contains subfields PLANE and SHELF.
	PLANE	0 or 1	<i>Plane.</i> Enter the plane number.
	SHELF	0 to 3	<i>Shelf.</i> Enter the shelf number for the specified plane.
	CMNO	0	<i>Computing module number.</i> Enter the computing module number for the shelf information.
FLOOR		0 to 99	<i>Floor.</i> Enter the floor number of the shelf location.

**CMSHELF** (end)

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
ROW		A to Z and AA to ZZ with the exceptions: I, O, II, OO	<i>Row.</i> Enter the row on the floor of the shelf location.
FRAMEPOS		0 to 99	<i>Frame position.</i> Enter the frame position in the row that contains the shelf.
FRTYPE		alphanumeric (a maximum of 4 characters)	<i>Frame type.</i> Enter the frame type. You can enter the values DPCC, MCOR, MCMM and PCMM for a CM frame. The SuperNode Compact Cabinet (SCC) identifies the SuperNode compact cabinet configuration.
FRAMENO		0 to 511	<i>Frame number.</i> Enter the frame number.
SHELFPOS		0 to 77	<i>Shelf position.</i> Enter the shelf position on the frame.

**Datafill example**

Sample datafill for table CMSHELF appears in the following example.

**Example of MAP for table CMSHELF**

```

CMSSELFK FLOOR ROW FRAMEPOS FRTYPE FRAMENO SHELFPOS
-----
0 0 0 0 z 0 DPCC 0 13
    
```

---

**CNALDSPK**

---

**Table name**

Calling Number Announcement to a Loudspeaker Table

**Functional description**

The calling number announcement (CNA) feature is an alternative to hardware automatic number announcer circuits (ANAC). It is implemented by table ANNS and associated tables.

Table CNALDSPK identifies the trunk, attached to a loudspeaker, over which the announcement is played. This feature can use any outgoing analog trunk card.

**Datafill sequence and implications**

The following tables must be datafilled before table CNALDSPK:

- CLLI
- ANNS (corresponding to CNAT entry)
- ANNMEMS
- DRAMTRK

**Table size**

0 to 2046 tuples ( or 0 to 256 without feature package NTXN26AA (AG2244)(Announcement Enhancement)

**CNALDSPK** (continued)**Datafill**

The following table lists datafill for table CNALDSPK.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CNALDMEM		alphanumeric (1 to 16 characters)	<i>CNA loudspeaker member</i> Enter the announcement common language location identifier (CLLI) code corresponding to the CNAT entry in table ANNS.
LDCLLI		alphanumeric (1 to 16 characters)	<i>Loudspeaker CLLI</i> Enter the outgoing trunk CLLI to which the loudspeaker is attached.  Each loudspeaker location must have a unique announcement CLLI associated with it. The announcement must also have ANTYPE datafilled as CNAT in table ANNS.

**Datafill example**

The following example shows sample datafill for table CNALDSPK.

This example shows the CNA feature function of playing back the calling number over an outgoing trunk. This allows the operating company outside plant to identify pairs in the event of a cable cut, and verify assignment records.

The CNA is played over a loudspeaker attached to trunk CLLI OTSDPL1.

**MAP display example for table CNALDSPK**

CNALDSPK	
CNALDMEM	LDCLII
<hr/>	
CNATEST	OTSDPL1

**Supplementary information**

This section provides information on datafilling table CNALDSPK for specific applications.

---

**CNALDSPK (end)**

---

**Error messages**

There are two error messages generated for table CNALDSPK. If the CLI entered in field CNALDMEM is not an announcement CLI, the following error message is displayed:

```
NOT ANN CLI '
```

If the announcement group entered in field CNALDMEM is not datafilled as CNAT is table ANNS, the following error message is displayed:

```
NOT CNAT ANN GROUP '
```

## CNGROUP

---

### Table name

Called Number Group Table

### Functional description

The information that the Call Detail Recording (CDR) system gathers establishes division of revenue information. This information allows the operating company to recover costs. The operating company recovers costs from the national telephone authorities and the different international bodies connected to the DMS-300 gateway switch.

The changes made to the CDR system are to the call record category. The system creates two new call records. One call record has a record code of 08. The other call record has a record code of 09. The current record code 01 does not change.

A gateway switch can use one of the three call record formats. The system creates one call record for each of the calls that pass through the DMS-300 switch when trunk seizure occurs. The DMS-100 switch uses this type of call record. The CDR system inserts call details into the call record. When the call completes, the buffer stores the call record for future use.

Field CNG (called number group) is a four-byte field that indicates the called number group associated with the call. Field CNG is in CDR call record 08. This field is on the right and padded with spaces if required.

Table CNGROUP updates field CNG of CDR call record 08. Part of the called number indexes table CNGROUP. Table CNGROUP retrieves the CNG. The CNG updates field CNG. The default value of field CNG of the CDIC call record is 9999. If you did not enter the called number and the table is empty, insert the default value of 9999. Insert the default value in the field NG of the CDR call record.

### Datafill sequence and meaning

You do not need to enter data in other tables before you enter data in table CNGROUP.

### Table size

The system allocates the size of this table continuously.

**CNGROUP** (end)**Datafill**

Datafill for table CNGROUP. appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CNGINDEX		0 to 9 (1 to 16 digits)	<i>Called number group index</i> Enter part of the called number. This field is the key to the table. This table retrieves the called number group in field CNG.
CNG		0000 to 9999	<i>Called number group</i> Enter a number that groups the called numbers and updates field CNG of the CDR call record. The operating company defines the number.

**Datafill example**

Sample datafill for table CNGROUP appears in the following example.

The grouping of all called numbers for Morocco (country code 212) in CNG 0001 appears in this example.

**Example of MAP for table CNGROUP**

CNGINDEX	CNG
212	0001

# COANISCR

## Table name

Company ANI Screening

## Functional description

Table COANISCR is used to map a company identifier and Automatic Number Identification (ANI) ID digits to an index into the TOPS database. It consists of a three-part key, and a data field.

## Datafill sequence and implications

The following table must be datafilled before table COANISCR.

- TOPSDB

## Table size

Table COANISCR is a fixed-size table with 1000 tuples.

## Datafill

The following table lists datafill for table COANISCR.

### Datafilling table CAOANISCR

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	Key. This is the key to the table and is composed of subfields COTYPE, COID, and ANDIG.
	COTYPE	NBEC or IEC	Company type. This field specifies if a non-Bell exchange carrier (NBEC) or interexchange carrier (IEC) is referenced.
	COID	Table of 4 {0 to 9}'s	Company identifier.
	ANIDIG	00-99	ANI ID digits. ANI ID digits signalled with a call
TDBIDX		0 to 32,766	Table TOPSDB index. Index into table TOPSDB.

## Datafill example

The following example shows sample datafill for table COANISCR.

**COANISCR** (end)**MAP display example for table COANISCR**

KEY	TDBIDX		
NBEC	0234	00	4
IEC	0111	00	7

**Error messages**

The following error messages apply to table COANISCR.

**Error messages for table COANISCR**

Error message	Explanation and action
Tuple 39 is not datafiled in table TOPSDB.	Table TOPSDB must be datafiled prior to datafilling table COANISCR with an index into the database. If the craftsperson attempts to add or change a table COANISCR tuple with a given TDBIDX prior to adding the tuple to table TOPSDB, the add or change is not allowed and an error message is given.

**Table history****TOPS03**

Feature AN0262 in Cellular/IXC/LEC/ ADACC, OSDA0005:

- Introduced table

## CODEBLK

---

### Table name

Code Blocking Table

### Functional description

Table CODEBLK allows or denies outgoing dialed calls to area codes, office codes, and country codes.

Table CODEBLK can restrict the following outgoing calls:

- direct outward dial
- electronic switching network
- OUTWATS
- private network numbers
- area code, office code, country code

Data entered in table IBNXLA must provide the access codes for these call types.

The operating company client specifies the restricted codes for each location. The restrictions can apply to all operating company client stations and access lines served by a hub. Restrictions can vary with the class of service of the originating terminal. Calls dialed to restricted codes can have an announcement or routed to a custom treatment.

### Datafill sequence and implications

For the partitioned table editor feature, the ownership of each tuple in table CODEBLK is defined in tables DATAOWNER and OWNTAB.

Entries in table DATAOWNER that apply to table CODEBLK have an entry in field TABNAME equal to CUSTGRP. The entry in field CUSTNAME in table DATAOWNER is equal to field CUSTOMER in table CODEBLK.

The entry in table OWNTAB that applies to this table is field TABNAME equal to CODEBLK.

### Restrictions for using table CODEBLK

A maximum of four selector entries are permitted for each tuple with one option per selector entry.

**CODEBLK** (continued)

The following is a description of the restrictions for using the selector entries for table CODEBLK:

- GEN - Maintains the code restriction functionality that existed before this feature
  - Only one GEN selector can be entered per tuple
  - If a GEN selector is entered, then no other selector is permitted for that tuple
- NPA - area code restrictions
  - Only one NPA selector can be entered per tuple
  - The NPA selector can be used in conjunction with a CC selector and multiple OFC selectors in a tuple
  - When the NPA selector is used in combination with an OFC selector in the same tuple, the NPA digits cannot be the same as the OFC\_NPA digits for the OFC selector.
- OFC - for office code restrictions
  - Up to four OFC selectors can be entered per tuple
  - When an OFC selector is used in the same tuple as an NPA selector, the OFC\_NPA digits and the NPA digits cannot be the same
- CC - country code restrictions
  - Only one CC selector can be entered per tuple
  - The CC selector can be used in conjunction an NPA selector and multiple OFC selectors in a tuple

The following is a description of the restrictions for using the option entries for table CODEBLK:

- ANN - Custom announcement for blocked calls
  - Only one ANN option permitted per selector entry
  - The announcement that corresponds to the ANN option must first be entered in tables ANNS and ANNME before it can be used in table CODEBLK.
- TRMT - Extended treatment for blocked calls
  - Only one TRMT option permitted per selector entry

**Table size**

Memory is allocated for this table.

**CODEBLK** (continued)

There are 32,000 selector elements and 32,000 digit blocks allocated for table CODEBLK. The size of the table depends on the use of digit blocks and selector elements for each tuple.

The DMSMON (DMS monitoring) system command DBLOCKS allows the operating company to display digit block counts for the table. The number of digit blocks used, the number allocated, the percentage used, and the percentage of digit blocks available are displayed.

**Datafill**

The following table lists the data entries for table CODEBLK.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CRLKEY		see subfields	<i>Code restriction level key</i> This field consists of subfields CUSTOMER and NUMBER.
	CUSTOMER	alphanumeric (1 to 16 characters)	<i>Customer</i> This subfield consists of a customer group name assigned a code restriction.
	NUMBER	numeric(1 to 18 digits)	<i>Number</i> This subfield consists of a number for which code restriction applies.
SELLIST	SELECTOR	(GEN, NPA, CC, OFC)	<i>GEN, NPA, CC, OFCc</i> This subfield consists of entries GEN, NPA, OFC, and CC.
		GEN(3 to 18 digits)	<i>General</i> The default for the Selector is GEN.
		NPA(1 to 7 digits)	<i>Nnumbering plan area</i> This entry blocks/allows calls to an area code.
		CC(1 TO 3 DIGITS)	<i>Country code</i> This entry blocks/allows calls to a country code.

**CODEBLK** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
		OFC(1 to 7 digits)	<i>Office codex</i> This entry blocks/allows calls to an office code based on a 1- to 7-dialed digits string.
	CRLDATA	numeric (1 to 15)	<i>Code Restriction Level Data.</i> . This subfield specifies the code restriction levels (CRL) that apply to the number. Each CRL uses a number from 1 to 15 that must be separated by a blank space.
	OPTION	ANNTRMT	<i>Option</i> The subfield OPTION allows the entry of announcements (ANN) and treatments (TRMT) data for calls blocked/allowed. If no customized announcement/treatment is specified, then the calls are routed calls to a vacant treatment. The default is \$.
		OFC_NPA(1 to 7 digits)	<i>Office code_ Numbering plan area</i> A subentry for the OFC selector entry. This entry is only valid for the OFC selector. This entry blocks/allows calls to an office code based on a 1- to 7-digit string. You are asked to enter the office code and then the area code.

Code restriction level (CRL) can be set to allow or block calls. , A CRL can involve blocking calls to all numbering plan areas (NPA) except the home NPA. Within the home NPA, only calls to the OFC within the local calling area and to a coded station are permitted. To conserve memory stores, only the allowed OFC needs separate entry.

NPAs that are entered in this table inhibit access from any speed calling list used by NCOS (network class of service).

Code restriction levels are one of class of service restrictions. A station or trunk group can be unrestricted for direct outward dialing. A CRL assignment can specify that you cannot access an OFC by dialing 9. The same applies to line screening code (for example, a station or trunk group can have access to EPSCS). The CRL defines blocked codes by dialing 8 or private network

**CODEBLK** (continued)

---

numbers. The data in table IBNXLA for access codes specifies the correct code restriction for the type of call.

If code restriction applies to the call, route definition occurs for the number dialed. Route definition occurs before checking when the digits dialed are in the code blocking table.

If you require code restriction, the CRL option in NCOS is assigned to the line, attendant console, incoming IBN or the incoming side of a two-way IBN trunk group for the applied CRL. The CRL option specifies when calls are allowed or blocked.

**Table History**

Table CODEBLK includes updates for two new fields with six new entries added by feature AF7522 ( Enhancements for Table CODEBLK). The new fields are SELECTOR and OPTIONS. The new Selector entries are GEN (general), area code (NPA), office code (OFC), country code (CC) and NPA\_OFC. The new Option entries are ANN (announcement) and TRMT (treatment) options. The announcement and treatment options apply to any or all of the new selector subfields.

**Datafill example**

Some examples of datafill for the customer group with the name BNRMC are shown below:

- All calls to 514 234 with CRL 1 specified in their NCOS number are allowed or denied . Calls are allowed or denied by lines, attendant consoles, incoming IBN, or incoming side of two way IBN trunk groups from the customer group named BNRMC. Use the GEN selector entry to allow or deny the calls.
- All international calls to country code 55 with CRL 5 or CRL 10 are allowed or denied. calls are allowed or denied by lines, attendant consoles, incoming IBN, or incoming side of two way IBN trunk groups from the customer group named BNRMC. Denied calls are routed to Reorder (RODR) treatment. Use the CC selector entry to allow or deny the calls.
- National calls to the 919 NPA with CRL 1, 2, or 3 are allowed or denied. Allowed or denied by lines, attendant consoles, incoming IBN, or incoming side of two way IBN trunk groups from the customer group named BNRMC. Denied calls are routed to the NODIAL announcement. Use the NPA selector entry to allow or deny the calls.
- National calls to the 222 OFC in the 412 NPA with CRL 5, 8, or 10 are allowed or denied. Calls are allowed or denied by lines, attendant consoles, incoming IBN, or incoming side of two way IBN trunk groups

**CODEBLK** (end)

from the customer group BNRMC. Denied calls are routed to BUSY treatment by using the OFC selector entry.

- National calls to 555 OFC in the 919 or 808 NPA with CRL 1 in their NCOS number are allowed or denied . Calls are allowed or denied by lines, attendant consoles, incoming IBN, or incoming side of a two way IBN trunk groups from the customer group named BNRMC. Use the OFC\_NPA option entry to allow or deny the calls.
- If the station dials 9-1-514-xxx-xxxx, digit translations in table IBNXLA removes the digit 9. Digit translations in the standard pre-translator removes the digit 1 automatically.

**MAP display example for table**

CRLKEY	SELLIST	CRLDATA
BNRMC 514234	(GEN (1) \$\$) \$ \$\$	
BNRMC 55	(CC (5) (10) \$(TRMT RODR) \$) \$	
BNRMC 919	(NPA (1) (2) (3) \$(ANN NODIAL) \$) \$	
BNRMC 222	(OFC (5) (8) (10) \$(TRMT BUSY) \$ 412) \$	
BNRMC 555	(OFC (1) \$ \$ 919) (OFC (1) (2) \$(TRMT VACT) \$ 808) \$	

## CODECALL

---

### Table name

Code Calling Table

### Functional description

Table CODECALL permits stations to access operating company code call equipment by dialing an access code (for example, 1xx) and a called party code. The called party code is transferred to the code call equipment, which in turn activates operating company-provided visual or audible signaling devices to alert the called party. The called party can be connected to the calling party by dialing a code call pickup code from any Integrated Business Network (IBN) station served by DMS-100.

Code calling equipment can be activated from stations, trunks, and attendants belonging to the customer group.

The code call pickup code can be dialed from any IBN station served by the switching unit.

A time-out period applies to the code call access line. If a station dials the access code plus a called party code, the code call access line remains seized until the time-out period is reached.

If another station dials the code call access code within the time-out period, it receives busy tone and must redial at a later time.

The time defined in the data is equal to the value of the code call unit timer plus 10 s.

The maximum number of code calling units for each switching unit is 60.

If the code calling equipment interface is a trunk card, the code call unit must be connected to an intragroup DT wink trunk, that is the only member of the trunk group.

If the code calling equipment interface is a line card, it must be an NT2X18 line card with the ground start option and the frame relay service (FRS) line feature.

The code call access and pickup codes are defined in table IBNXLA with translation selector FEAT and field FEATURE equal CDCL.

**CODECALL** (continued)**Datafill sequence and implications**

The following tables must be datafilled before table CODECALL:

- LENLINES
- CUSTHEAD

**Table size**

Memory is automatically allocated for 60 code calling units.

**Datafill**

The following table lists datafill for table CODECALL.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
INDEX		1 to 60	<i>Index</i> Enter the index into the table.
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the name assigned to the customer group to which the code call unit is assigned.
ACTCODE		numeric (1 to 11 digits)	<i>Activate code</i> Enter the access code that activates the code call unit.
PUCODE		numeric (1 to 11 digits)	<i>Pickup code</i> Enter the pickup code for the code call unit.
TIME		0 to 3600	<i>Time</i> Enter the time in seconds that the code call unit remains in use after activation.
CCDAT		see subfields	<i>Code calling data</i> This field consists of subfield CARDTYPE.
	CARDTYPE	L or T	<i>Card type</i> If the code calling equipment interface is a line card, enter the card type L and datafill field LEN.  If the code calling equipment interface is a trunk card, enter the card type T and datafill field CLLI.

**CODECALL** (end)

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	LEN	see subfields	<p><i>Line equipment number</i> This field defines the physical location of the equipment that is connected to a specific telephone line.</p> <p>Because field LEN is common to more than 60 tables, it is documented in a single section to avoid unnecessary duplication. Refer to section "Common entry field LEN" for a complete description of field LEN and associated subfields.</p> <p>For ISDN lines, field LEN consists of subfield LTID. For non-ISDN lines, field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.</p>
	CLLI	alphanumeric (1 to 16 characters)	<p><i>Common language location identifier</i> Enter the code that is assigned to the code calling equipment in table CLLI.</p>

**Datafill example**

The following example shows sample datafill for table CODECALL.

**MAP display example for table CODECALL**

INDEX	CUSTNAME	ACTCODE	PUCODE	TIME	CCDAT
1	BNR1	112	113	190 T	CCALL
2	BNR2	112	113	190 L	HOST 00 1 11 21

---

**COMPCODE**

---

**Table name**

Company Code Table

**Functional description**

Table COMPCODE associates a six digit company code against an incoming trunk and NPA-NXX. Also, the table indicates which incoming trunks and NPA-NXXs use RTRS instead of the internal rating system

When external real-time rating is performed on a call, table COMPCODE is consulted for the company code to send to the external rater database (the RTRS).

*Note:* Incoming trunks can serve more than one company so the NPA-NXX is an optional part of the key for determining the company code.

**Datafill sequence and implications**

Table TRKGRP must be datafilled before table COMPCODE. The CLLI name must be deleted from this table before it can be deleted from table TRKGRP.

**Table size**

0 to 8191 tuples

**Datafill**

The following table lists datafill for table COMPCODE.

**Field descriptions (Sheet 1 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
IINCOMING		See subfields	Incoming. Key to the table. This field consists of subfields TRKCLLI and NPANXX.
	TRKCLLI	cli name from table TRKGRP	Trunk. An incoming or two-way trunk CLLI that is one of the following types: TOPS, IT, ATC, RONI.

**COMPCODE** (continued)

## Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NPANXX	0 to 2 numbers in range 200 to 999	<p>The NPA or the NPA and NXX can be used to further qualify the incoming trunk in associating a company code. This field is optional (just enter a \$).</p> <p>If no NPA-NXX is specified, the company code for this entry applies to all calls coming in from the trunk specified in TRUNK which require real-time rating, regardless of NPA-NXX. If the NPA is specified, the NXX is optional (just enter a \$). If only the NPA is specified, the company code for this entry applies to all real-time rated calls coming in from the trunk specified in TRUNK with an NPA equal to the one entered in this field, regardless of NXX.</p> <p>Attempting to datafill a duplicate tuple results in an error message. For example, if a tuple with a key of TRKCLLI1 \$ is already present, and an attempt is made to datafill a tuple with a key of TRKCLLI1 703 \$, an error message is displayed and the add operation will fail. Note that if the first entry had been TRKCLLI1 919 \$, datafilling TRKCLLI1 703 \$ would be legal because there is no duplication.</p> <p>Note, this field is not applicable for Open Numbering.</p>
COMPCODE		see subfield	Company Code. This field consists of subfield CCODESEL and refinement.
	CCODESEL	Y or N	Company Code Select. This subfield indicates if the default company code specified in table TOPSPARM is to be used. A value of Y (yes) means that the default company code is used for all externally rated calls originating from the specified TRUNK and NPA-NXX. A value of N (no) means that the company code specified in field COMPCODE is used for calls requiring real-time rating which come in from the specified TRUNK and NPA-NXX. If N is entered, datafill refinement COMPCODE.

**COMPCODE** (continued)

## Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	COMPCODE	000000 to 999999	Company Code. Enter code assigned to company. This field only appears if subfield CCODESEL is set to N.
COMPNAME		alphanumeric (up to 32 characters)	Company Name. This field indicates the name of the company associated with the traffic coming in from the supplied TRUNK and NPA-NXX. This field is for informational purposes only. It is not used by other tables or by any software. Any string up to 32 characters in length can be entered.
XRATESRV		Y or N	External Rating System. This field indicates if the real-time rated calls originating from the specified TRUNK and NPA-NXX are to be served by the external real-time rating system or the internal rating system. Value Y (yes) selects the external rater and value N (no) selects the internal rater.

**Datafill example**

The following example shows sample datafill for table COMPCODE.

**MAP display example for table COMPCODE**

INCOMING	COMPCODE	COMPNAME
XRATESRV		
-----		
TRKCLLI1 201 220 \$	N 007355	COMPANY_A
Y		
TRKCLLI2 704 552 \$	N 102275	COMPANY_Y
Y		
TRKCLLI2 704 644 \$	Y	COMPANY_X
Y		
TRKCLLI3 \$	N 002616	COMPANY_X
N		
TRKCLLI4 919 \$	N 000922	COMPANY_X
Y		

**COMPCODE** (continued)

In the above example, the following calls are served by the external rater for their real-time rating needs:

- calls with NPA-NXX = 201-220 on incoming trunk TRKCLLI1
- calls with NPA-NXX = 704-552 on incoming trunk TRKCLLI2
- calls with NPA-NXX = 704-644 on incoming trunk TRKCLLI2
- calls with NPA = 919 on incoming trunk TRKCLLI4

In the above example, the following calls are not served by the external rater for their real-time rating needs:

- calls on incoming trunk TRKCLLI3
- all calls on incoming trunks not datafilled in this table (unless RTRS\_DEFAULT\_SYSTEM = EXTERNAL in TOPSPARM)
- calls on incoming trunk TRKCLLI1 with NPA-NXX not equal to 201-220
- calls on incoming trunk TRKCLLI2 with NPA-NXX not equal to 704-644 or 704-552
- calls on incoming trunk TRKCLLI4 with NPA not equal to 919

Note that calls on TRKCLLI2 with NPA-NXX = 704-644 use the default company code datafilled in table TOPSPARM.

Different companies can share the same incoming trunk. This is the case with TRKCLLI2 in the example. COMPANY\_X and COMPANY\_Y both use TRKCLLI2. The NPA-NXX is used to distinguish between the two companies. Note that this is only possible if the NPA-NXX is different for COMPANY\_X traffic than COMPANY\_Y traffic. If COMPANY\_Y also served 704-644 on TRKCLLI2, then it would not be possible with this table to give them unique company codes and the external rater would be unable to rate differently for COMPANY\_X and COMPANY\_Y based on company code.

The company name is for informational purposes only for the craftsperson. Note that any legal table control string can be input under company name. Also note that the following example is legal:

**MAP display example for table COMPCODE**

INCOMING	COMPCODE	COMPNAME	XRATESRV
TRKCLLIA 201 220 \$	N 000222	XYZ	Y
TRKCLLIB 704 644 \$	N 000222	ABC	Y

**COMPCODE** (end)

---

That is, a company code can be associated with multiple company names.

**Table history**

**TOPS04**

Table COMPCODE was introduced.

## CONF3PR

---

### Table name

Three-port Conference Circuit Table

### Functional description

Table CONF3PR lists the conference trunk number and the external trunk number of the first port. This table contains the equipment location of the conference trunk.

Table CLLI contains pseudo fixed codes CF3P and CF3PX to represent this group of circuits.

### Datafill sequence and meaning

You must enter data in the following tables before you enter data in table CONF3PR:

- CLLI
- PADDDATA
- TMINV
- office parameter PM\_PCM\_PROTOCOL\_SELECTION in table OFCENG

You must enter data in table CLLIMITCE after you enter data in table CONF3PR.

### Table size

0 to 1364 tuples

The system allocates memory to this table.

### Activation

Immediate

**CONF3PR** (continued)**Datafill**

Datafill for table CONF3PR appears in the following table.

**Field descriptions (Sheet 1 of 5)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Description</b>
CNFCKTNO		0 to 1363	<i>Conference circuit number.</i> Enter the circuit number assigned to the three-port conference trunk circuit.
GRPCLLI		CF3P, CF3PX	<i>Group CLLI.</i> Enter the value of the group common language location identifier (CLLI) for the three-port conference circuit.
EXTRKNM		0 to 9990	<i>External trunk number.</i> Enter the lowest of the three following external trunk numbers assigned to the three-port conference trunk circuit. The value for this field is 0 (zero) or multiples of 10.

**CONF3PR** (continued)

## Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Description
TMTYPE		AUD, ATM, CTM, MMA, MTM, OAU, RSM, RMM, STM, TAN, TMA, TM2, TM4, TM8, or T8A	<p><i>Trunk module type.</i></p> <p>Enter the acronym for the type of trunk module on which the three-port conference trunk circuit is mounted.</p> <p>If the entry in field CARDCODE is 1X31AA, the three-port conference trunk circuit can be mounted on the listed peripheral trunk modules.</p> <p>The entry in field TMTYPE is AUD (Audio Server) to provision the conference circuits on the Audio Server for the Call Server 2000.</p> <p>The entry in field CARDCODE can be 3X67AA, 3X67BA or 3X67BB. For these entries, the three-port conference trunk circuit can be mounted on a maintenance trunk module (MTM).</p> <p>If the entry in field CARDCODE is 1X81AA or 1X81BA, the three-port conference trunk circuit resides on a conference trunk module (CTM).</p> <p>Office parameter PM_PCM_PROTOCOL_SELECTION configures the CTM in table OFCENG. The office parameter configures the CTM to be a Mu-law (domestic) or A-law (international) peripheral module.</p> <p>The parameter determines the available options and combinations for the CTM.</p> <p>Entries other than the specified entry values are not correct.</p>
TMNO		0 to 2047	<p><i>Trunk module number.</i></p> <p>Enter the number assigned to the trunk module on which the three-port conference trunk circuit is mounted.</p>

**CONF3PR** (continued)

## Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Description
TMCKTNO		0 to 84	<p><i>Trunk module circuit number.</i></p> <p>Enter the lowest of the three trunk module circuit numbers assigned to the three-port conference trunk circuit.</p> <p>The entry in field CARDCODE can be NT1X31AA. In this event, the lowest trunk circuit numbers are the circuit numbers assigned to port 0 or 3. The fields TMCKTNO, TMTYPE, and the TMNO, calculate the terminal identifiers (TIDs) for the CS 2000 Audio Server. The Audio Server does not have fixed conference circuits, so the number represents a virtual circuit. An Audio Server can support 60 three-port conference circuits, Pretty Primitive Virtual Machine (PPVM) messaging allows 1 byte for the conference port number. The audio node can support 256 conference ports for each audio node or 85 three-port conference circuits.</p> <p>The entry in field CARDCODE can be NT3X67AA, BA or BB. In this event, the lowest trunk circuit numbers are the circuit numbers assigned to port 0 or 1.</p> <p>The entry in field CARDCODE can be 1X81AA or 1X81BA. The trunk module circuit number of the first conference trunk circuit on the card can be equal to x. In this event, the trunk module circuit numbers of the following conference trunks on the card are equal to:</p> <ul style="list-style-type: none"> <li>• x + 1</li> <li>• x + 6</li> <li>• x + 7</li> <li>• x + 12</li> <li>• x + 13</li> <li>• x + 18</li> <li>• x + 19</li> <li>• x + 24</li> <li>• x + 25</li> </ul>

**CONF3PR** (continued)

## Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Description
CARDCODE		1X31AA 3X67AA 3X67BA 3X67BB 1X81AA 1X81BA	<p><i>Conference card code.</i></p> <p>Enter the card code used for the conference circuit.</p> <p>Enter 1X31AA for a domestic three-port conference circuit (Mu-law PCM) (A&amp;M) The Audio Server uses 1X31AA card because the assignment of terminal identifiers (TIDSs) is sequential. The 1X31AA card is a regular three-port conference card with TID numbers n, n plus 1, and n plus 2.</p> <p>Enter 3X67AA for a domestic six-party conference circuit (Mu-law PCM).</p> <p>Enter 3X67BA international six-party conference circuit (A-law PCM).</p> <p>Enter 3X67BB international six-party conference circuit (A-law PCM) with continuous toll break (TB) in background tone.</p> <p>Enter 1X81AA domestic or international (Mu-law/A-law) conference trunk module.</p> <p>Enter 1X81BA Mu-law conference trunk module for Japan.</p> <p><b>Note:</b> The NT1X81AA and NT1X81BA are not present in the same office. If the entry for EQPEC is 1X81AA, remove entry 1X81BA. If the entry for EQPEC is 1X81BA, remove entry 1X8AA. Use entry 1X81BA for the Japanese market.</p> <p>The TB applies to the trunk signaling types NTL06 and NTL07. The entry for each trunks, up to the near-end switching unit, must be OPR.</p>

**CONF3PR** (continued)**Field descriptions (Sheet 5 of 5)**

Field	Subfield or refinement	Entry	Description
PADGRP		CONF or alphabetic	<p><i>Pad group.</i></p> <p>Enter the name of the pad group assigned to the conference circuits in table PADDATA.</p> <p>Table PADDATA lists the value of the pad circuits that switch to the network. The pad circuits switch to the network if one of the members of the group takes part in a call.</p> <p>The table specifies different values for the pad circuits if the circuit connects to an agent with a different pad group.</p> <p>Network pad switching applies if the circuit connects to a new network.</p> <p>The name can be the predefined name CONF in table PADDATA or a name that the operating company specifies.</p> <p>The predefined name CONF in table PADDATA can be the name of the pad group. A name that the operating company specifies can be the name of the pad group.</p>

**Datafill example**

Sample datafill for table CONF3PR appears in the following table.

**MAP example for table CONF3PR**

CNFCKTNO	GRPCLLI	EXTRKNM	TMTYPE	TMNO	TMCKTNO	CARDCODE	PADGRP
0	CF3P	0	STM	1	18	1X31AA	CONF
1	CF3P	0	AUD	0	0	1X31AA	CONF

**Table history****Beta 1**

The changes for the fields TMTYPE, TMCKTNO, and CARDCODE NT1X31AA to include the modifications for the Audio Server.

**TL06**

Information for the NT1X81BA card was added in TL06.

## **CONF3PR** (end)

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### **CSP03**

Activation was changed to immediate in CSP03.

A dependency on table DATASIZE, and a restart to expand the table size, was removed in CSP03.

### **BCS36**

The reference to the NORESTARTSWACT utility was added in BCS36.

### **BCS35**

The following entries were added in BCS35:

- CTM to field TMTYPE
- 1X81AA to field CARDCODE

**CONF6PR****Table name**

Six-port Conference Circuit Table

**Functional description**

Table CONF6PR contains datafill for conference trunks. The pseudo common language location identifier (CLLI) CF6P in table CLLI represents this group of circuits.

Conference circuit cards with six circuits enable a single card to handle a six-port conference circuit.

Six-port conference circuits are present, to a maximum of 2047. Each six-port conference circuit has a conference trunk circuit number assigned. The conference trunk circuit numbers are 0 to 2046. Each six-port conference circuit has six external trunk numbers in sequence, one for each port. The lowest of the six external trunk numbers in sequence must be a multiple of ten.

An example of external trunk number to conference circuit number assignment appears in table 1.

**Trunk number to conference circuit number assignment**

Conference circuit number	External trunk number, one for each port					
	port 1	port 2	port 3	port 4	port 5	port 6
0	00	01	02	03	04	05
1	10	11	12	13	14	15
2	20	21	22	23	24	25

Each NT3X67 conference card uses six trunk module circuit numbers. The two card slots at the right of the conference circuit must remain not used.

The trunk module circuit number of the first conference trunk circuit on the card equals  $x$ . The trunk module circuit number of the second conference trunk on the next card equals  $x + 6$ .

Each NT1X81 conference card uses 30 trunk module circuit numbers. The trunk module circuit number of the first conference trunk circuit on the card equals  $x$ . The trunk module circuit number of the second, third, fourth, and fifth conference trunks on the same card equal  $x + 6$ ;  $x + 12$ ;  $x + 18$ ; and  $x + 24$ , respectively. The trunk module circuit number of the sixth conference trunk, which is on the next card, equals  $x + 30$ .

## **CONF6PR** (continued)

---

Field PADGRP contains the name of the pad group in table PADDATA. Table PADDATA lists the values of pad circuits. The pad circuits can switch in to the network if one member of the group is in a call.

If the circuit connects to an agent that has a different pad group, you can specify different values for the pad circuits.

Network pad switching applies if the circuit connects to a new network.

Table PADDATA predefines the name CONF. The operating company can specify the name.

Northern Telecom produces the data for table CONF6PR for the initial load and all extension loads.

### **Datafill sequence and meaning**

Enter data in the following tables before you enter data in table CONF6PR:

- the CLLI
- the PADDATA
- the TMINV
- the TRKMEM

After any value change, you must increase the value of field TRKGPSIZ in table CLLI for the entry with code CF6P. The increase must occur before the addition of any new circuits to table CONF6PR.

### **Table size**

0 to 2047 tuples

The system allocates memory table when the addition of tuples occur.

### **Activation**

Immediate

**CONF6PR** (continued)**Datafill**

Datafill for table CONF6PR appears in the following table.

**Field descriptions (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
CNFCKTNO		numeric (0 to 2046)	<i>Conference circuit number.</i> Enter the conference circuit number that the operating company assigns to the six-port conference trunk circuit.
EXTRKNM		numeric (0 to 9999 in multiples of 10)	<i>External trunk number.</i> Enter the lowest of the six external trunk numbers in sequence that the operating company assigns to the six-port conference trunk circuit.
TMTYPE		ATM, CTM, ISM, MMA, MTM, OAU, PTM, RMM, RSM, STM, TAN, TMA, TM2, TM4, TM8, or T8A	<i>Trunk module type.</i> Enter the type of trunk module where the mounting of a six-port conference trunk circuit occurs.  For operating companies that have a package trunk module (PTM) peripheral module, enter maintenance trunk module (MTM).  The only possible entries are listed.
TMNO		numeric (0 to 2047)	<i>Trunk module number.</i> Enter the number assigned to the trunk module where the mounting of a six-port conference trunk circuit occurs.
TMCKTNO		numeric (0 to 29)	<i>Trunk module circuit number.</i> Enter the lowest of the six trunk module circuit numbers assigned to the six-port conference trunk circuit.

**CONF6PR** (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE		1X81AA 1X81BA 3X67AA 3X67BA 3X67BB	<p><i>Card code.</i></p> <p>This field contains the product engineering code (PEC) of the type of card used.</p> <p>If CTM is in field TMTYPE, enter 1X81AA domestic or international (Mu-law/A-law) conference trunk module. Enter 1X81BA Mu-law conference trunk module for Japan.</p> <p><b>Note:</b> The NT1X81AA and NT1X81BA do not occur together in the same office. If EQPEC is 1X81AA, you must remove entry 1X81BA. If EQPEC is 1X81BA, you must remove entry 1X81AA. Entry 1X81BA is for the Japanese market only.</p> <p>In any other condition:</p> <p>The 3X67AA, 6-Port conference circuit, is for mu-law PCM.</p> <p>The 3X67BA, 6-port conference CP, is for A-law PCM.</p> <p>The 3X67BB is for A-law PCM and TBI tone generation.</p>
PADGRP		CONF or alphabetic	<p><i>Pad group.</i></p> <p>Enter the name of the pad group assigned to the conference circuits in table PADDATA.</p>

**Datafill example**

Sample datafill for table CONF6PR appears in the following example.

**MAP display example for table CONF6PR**

CNFCKTNO	EXTRKNM	TMTYPE	TMNO	TMCKTNO	CARDCODE	PADGRP
0	0	MTM	4	8	3X67AA	CONF

## **Table history**

### **TL06**

Information for NT1X81BA card was added in TL06.

### **CSP03**

Activation to immediate was changed in CSP03.

A requirement for table DATASIZE was removed in CSP03 and a restart expanded the table size.

## COSDATA

---

### Table name

Network Class of Service Data Table

### Functional description

Each entry in table COSDATA comprises a mapping result value and a two-part key, which consists of a mapping name and a network class of service (NCOS) value.

An addition to this table is rejected under the following conditions:

- The mapping name does not have a corresponding entry in table COSMAP.
- The mapping result does not satisfy the value restrictions for mapping in table COSMAP.
- The mapping result exceeds the value specified in field MAX in table COSMAP.

If the Partitioned Table Editor feature is present in the switch, the ownership of each tuple in this table is defined in tables DATAOWNER and OWNTAB.

The following entries in table DATAOWNER are applicable to this table:

- the entry in field TABNAME equal to COSMAP
- the entry in field COSNAME equal to the value of field COSMAP in this table

Enhanced class of service mapping using the Network Switching Service (NSS) Replace Dialed Digits (RDD) Database Control Point (DBCP) is available through the use of the COSMAP option in table NSCDEFS. Refer to table NSCDEFS for details relating to this feature.

The entry in field TABNAME equal to COSDATA in table OWNTAB is applicable to this table.

For related information, refer to table COSMAP.

### Table size

A maximum of 1024 mapping names are allowed in table COSMAP, and memory is automatically allocated in table COSDATA for 256 tuples per COSMAP name.

**Note:** Only the first 256 COSMAP names datafilled in table COSMAP can be datafilled in table COSDATA.

**COSDATA** (end)**Datafill**

The following table lists datafill for table COSDATA.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
COSMAP		alphanumeric (1 to 16 characters)	Mapping name. Enter the name that was entered in field NAME of table COSMAP. This is the first part of the table key.
COS		0 to 511	Class of service. Enter the NCOS value that is to be screened or altered. This is the second part of the table key.
RESULT		0 to 32767	Mapping result value. Enter the class of service value to which the original NCOS value is changed if the original NCOS passes screening.

**Datafill example**

Refer to table COSMAP for examples of mapping functions with appropriate datafill in tables COSDATA and COSMAP.

**Table history****NA006**

Updated values in fields COS in accordance with the Intra-LATA PIC Enhancements and the TL Changes for LINEATTR, NCOS, and LTG Table Expansion features.

## COSMAP

---

### Table name

Network Class of Service Mapping Table

### Functional description

Table COSMAP identifies class of service mappings. It has one entry for each different mapping. Each entry consists of a mapping name and the following data fields:

- **MAX:** maximum value allowed for the mapping result. For example, feature package NTX432AA uses the mapping result as the new NCOS value for the call. Numbers greater than 255 are not valid NCOS values. Entries in table COSMAP for feature package NTX432AA specify a MAX of 255, preventing accidental datafilling of invalid NCOS values in the mapping.
- **SCREEN:** type of screening done on the original NCOS value by the mapping. Each COS mapping takes an NCOS value and returns the following information:
  - whether table COSDATA includes a tuple for the given NCOS value
  - the screening option in table COSMAP

The screening options are ALLOW, DISALLOW, and DEFAULT.

- **ALLOW:** NCOS values listed in table COSDATA are allowed. The others are screened out.
- **DISALLOW:** NCOS values that are listed in table COSDATA are disallowed. The others pass screening.
- **DEFAULT (value):** If no mapping result is datafilled in table COSDATA, the default value is used instead.
- **VALTYPE:** restrictions that the user can place on the mapping results. The datafill for table COSMAP can optionally impose restrictions on the COSDATA mapping results for each mapping. One such restriction is imposed by field MAX as mentioned above. Other restrictions specified in field VALTYPE can have the following values: ANYTHING, SAME, and CONST.
  - **ANYTHING:** all values are allowed. There are no restrictions.
  - **SAME:** no NCOS value is changed by this mapping. For example, against NCOS 12, the only mapping result that can be datafilled is 12.

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**COSMAP** (continued)

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The only effect of such a mapping is to screen out some of the NCOS values.

- **CONST (value):** only a single (constant) value can be datafilled for all the mapping results. The constant value must be supplied in the datafill for table COSMAP entry when this option is selected. For example, a mapping with the restriction, **CONST 5**, produces a mapping result of 5 for all the NCOS values that are not screened out by that mapping.

If changes or deletions are made to table COSMAP, the following restrictions apply:

- Changes to field VALTYPE are not allowed. If field VALTYPE must be changed, a new mapping must be datafilled.
- Changes to field MAX are not allowed.
- If a COSMAP entry is deleted, all associated COSDATA entries are deleted.

If the Partitioned Table Editor feature package NTX412CA or NTX412CB (IBN Customer Data Change) is present, the ownership of each tuple in table COSMAP is defined in tables DATAOWNER and OWNTAB. Refer to the *Basic Translations Tools Guide*, 297-1001-360 for more information on the table editor.

## Datafill sequence and implications

The entries in table DATAOWNER, applicable to table COSMAP are those that have the entry in field TABNAME equal to COSMAP and the entry in field COSNAME equal to the value of field NAME in table COSMAP.

The entry in table OWNTAB, applicable to table COSMAP, is the entry in field TABNAME equal to COSMAP.

If the Partitioned Table Editor feature is present, table COSMAP must be changed or table CUSTPROT must be read-only for non-operating company users.

## Table size

Memory is automatically allocated for 1024 tuples (mappings).

**Note:** Only the first 512 COSMAP names datafilled in table COSMAP can be datafilled in table COSDATA.

## **COSMAP** (continued)

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### **Datafill**

The following table lists datafill for table COSMAP.

#### **Field descriptions (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
NAME		alphanumeric (1 to 16 characters)	<i>Mapping name</i> Enter a name to identify a particular class of service mapping. This is the key to the table and is called from tables DIGMAN, PACMAN, and IBNRTE.
MAX		0 to 511	<i>Maximum value</i> Enter the maximum result allowed for the mapping result. An entry outside this range is invalid.

**COSMAP** (continued)

## Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SCREEN		ALLOW, DISALLOW, or DEFAULT	<p><i>Type of screening</i></p> <p>Enter the type of screening done on the original NCOS by the mapping. The following values are allowed:</p> <ul style="list-style-type: none"> <li>• ALLOW: NCOS values that are datafilled in table COSDATA for this mapping are allowed. The others are screened out.</li> <li>• DISALLOW: NCOS values that are datafilled in table COSDATA for this mapping are disallowed. The others pass screening.</li> <li>• DEFAULT: The screening result is always pass. If DEFAULT is entered, enter a value from 0 to 511. Separate the value entered from the entry DEFAULT with a single space (for example, DEFAULT 12).</li> </ul>
VALTYPE		SAME, ANYTHING, or CONST	<p><i>Value type</i></p> <p>Enter the restrictions on mapping results allowed in table COSDATA. The following value types are allowed:</p> <ul style="list-style-type: none"> <li>• SAME: No NCOS value is changed by this mapping.</li> <li>• ANYTHING: All values are allowed.</li> <li>• CONST: Only a single (constant) value can be datafilled for all the mapping results in this mapping. If CONST is entered, enter a value (constant) from 0 to 511. Separate the value entered from the entry CONST with a single space (for example, CONST 10). An entry outside this range is invalid.</li> </ul>

**Datafill example**

Examples of descriptions or mapping functions that can be implemented by using appropriate datafill in tables COSMAP and COSDATA are shown below.

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**COSMAP** (continued)

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**Example 1**

<b>NCOS</b>	<b>Screening result</b>	<b>Mapping result</b>
2	Pass	2
57	Pass	102
105	Pass	4
Others	Fail	N/A

**Example 2**

<b>NCOS</b>	<b>Screening result</b>	<b>Mapping result</b>
7	Fail	N/A
9	Fail	N/A
Others	Pass	same as original NCOS

**Example 3**

<b>NCOS</b>	<b>Screening result</b>	<b>Mapping result</b>
3	Pass	4
6	Pass	5
Others	Pass	100

**COSMAP** (continued)**Example 4**

<b>NCOS</b>	<b>Screening result</b>	<b>Mapping result</b>
95	Fail	N/A
102	Fail	N/A
Others	Pass	90

**MAP display example for table COSMAP**

NAME	MAX	SCREEN	VALTYPE
EXAMPLE1	32767	ALLOW	ANYTHING
EXAMPLE2	32767	DISALLOW	SAME
EXAMPLE3	32767	DEFAULT 100	ANYTHING
EXAMPLE4	32767	DISALLOW	CONST 90

**MAP display example for table COSDATA**

COSMAP	COS RESULT	
EXAMPLE1	2	2
EXAMPLE1	57	102
EXAMPLE1	105	4
EXAMPLE2	7	7
EXAMPLE2	9	9
EXAMPLE3	3	4
EXAMPLE3	6	5
EXAMPLE4	95	90
EXAMPLE5	255	90

## COSMAP (continued)

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### Supplementary information

This section provides information on datafilling table COSMAP for specific applications, and product descriptive information related to table COSMAP.

The ESN Network Class of Service tables COSMAP (network class of service mapping) and COSDATA (network class of service data) are required in switching units with Electronic Switched Network (ESN) and network class of service (NCOS).

Table COSMAP allows flexible screening and mapping of NCOS values in an ESN switch. Datafill defines a number of class of service (COS) mapping functions that are capable of screening and altering COS values.

A utility program performs COS mappings. The meaning of each mapping is dependent on the feature that uses it. For example, feature package NTX432AA (Network Speed Calling) uses mappings to reject some calls, based on their NCOS values, and to change the NCOS value of those calls that are not rejected.

The mapping utility is given two parameters: a mapping name and an NCOS value. The first parameter specifies which mapping to use, and the second parameter specifies the NCOS that is mapped.

The mapping utility returns two values: a screening result and a mapping result. The screening result indicates either a pass or fail, based on the screening criteria that are datafilled for the mapping. The mapping result is a number that is datafilled against the associated NCOS value in the associated mapping. Feature package NTX432AA uses the screening result to allow or reject the current call, and uses the mapping result as the new NCOS value for calls that are not screened out.

Enhanced class of service mapping, using the network switching service (NSS), replaced dialed digits (RDD), and database control point (DBCP) is available through the use of the COSMAP option in table NSCDEFS.

See table NSCDEFS for details relating to this feature.

**Note:** Whenever the screening result is a failure, the associated NCOS value is returned as the mapping result.

Head table COSMAP identifies each class of service mapping, while data table COSDATA lists the mapping and screening data for each mapping in table COSMAP.

---

**COSMAP** (end)

---

The following tables access table COSMAP:

- DIGMAN
- PACMAN
- IBNRTE
- TIMEODAY

## COUNTRY

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### Table name

TOPS Overseas Number to Country Name Mapping Table

### Overview

Feature BV0179 (Overseas Rating) is available in a toll switch or in a combined local and toll switch that has enhanced call handling on Traffic Operator Position System (TOPS).

The Overseas Rating tables (COUNTRY, OVSRS, OVSBILL, and OVSCC) are used when translation of the incoming digits identifies the translation system as international (field TRANSYS in table STDPRTCT set to IN), and the call requires operator assistance (determined from field TYPSCALL of table STDPRTCT and the type of station originating the call).

The incoming digits following the prefix digits (determined in field NOPREDIG of table STDPRTCT) are used to index into table COUNTRY to determine the name of the called country. The called country name together with the tariff, (determined from table CLGTRF, by indexing into it with the calling number numbering plan area [NPA] and NXX), are used to index into table OVSRS to determine the rate schedule name and rate step value that apply to this particular combination of tariff (from calling NPANXX) and country (from called country code). The rating can then proceed in table SCHED.

### **Caribbean expansion plan (CEP) International TOPS (ITOPS)**

Calls requiring operator assistance result in a charge to the customer that is calculated by a downstream process using the call information (call type, destination, answer time, duration of call).

There are cases, however, where the charges on a call must be quoted to the customer. This is true for the following call types:

- hotel calls
- coin calls
- calls requiring time-and-charges quote

In all three cases, the International TOPS (ITOPS) calculates the charges on the call. For hotel calls, these charges are reported to the hotel billing center (HOBIC) for quoting; in the latter two cases, the operator quotes the charges.

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**COUNTRY** (continued)

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**CEP dialing plan**

The dialing plan for the Caribbean islands is based on the North American plan (NPA-NXX-XXXX). The islands have NPA 809, with each island having one or more unique NXX associated with it.

**CEP ITOPS rating zones**

The following terminology is used within this document to define the different CEP ITOPS rating zones:

**Local**

Calls completed within the same rate zone as the calling customer (calls within the same NXX are always considered to be in the local rate zone)

**Domestic**

Calls completed within NPA 809 but to an NXX in a different rate zone as the calling customer

**North American**

Calls completed from NPA 809 to any destination based on the NPA-NXX dialing plan (other than domestic calls)

**International (or Overseas)**

Calls completed from NPA 809 to a foreign country not based on the NPA-NXX dialing plan (outside World Zone 1)

**CEP: International Rate Zone**

For international rate zone calls, the rate schedule and the rate step are obtained by using the calling tariff as well as the country name of the called party. This is done by first obtaining the country name from table COUNTRY, as matched to the country code of the country, and by then using this country name as well as the calling tariff to obtain the relevant information from table OVSRS.

**Functional description**

Table COUNTRY associates an overseas country name with its overseas number consisting of the overseas country code and, if required, a national number.

**Overseas Operator Center (OOC):**

Table COUNTRY allows mapping of the country code dialed to the country name.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table COUNTRY.

**COUNTRY** (continued)**Table size**

0 to 256 tuples

**Datafill**

The following table lists datafill for table COUNTRY.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
COUNTRY		alphanumeric (up to 16 characters)	Country name. Enter the country name. Up to 256 country names can be datafilled.
OVSNUM		0 to 9	Overseas number. Enter the overseas country code and, if necessary, the national number.

**Datafill example**

The following examples show sample datafill for table COUNTRY.

The first example shows datafill for North American TOPS.

**MAP display example for table COUNTRY**

COUNTRY	OVSNUM
FRANCE	33
ANDORRA	33078

The second example shows datafill for the CEP ITOPS.

---

**COUNTRY** (end)

---

**MAP display example for table COUNTRY**

COUNTRY	OVSNUM
GREATBRITAIN	44
FRANCE	33
AUSTRIA	43

## CPOS

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### Table name

CAMA Position Trunk Circuit Table

### Functional description

Table CPOS stores the CAMA position signaling circuit card (NT2X65AA) equipment location. Two circuits (a key circuit and a talk circuit) actually exist on the NT2X65AA card. The following table shows the numbers (0 to 29) assigned to these circuits.

#### Circuit and function

Circuit	Function
Even (0 to 28)	KEY circuit
Odd (1 to 29)	TALK circuit

Only the trunk module circuit number of the CAMA position talk circuit is datafilled in field TMCKTNO (odd numbers only) of table CPOS.

The DMS switch software obtains the CAMA position key circuit number from the talk circuit number. The key circuit number is not datafilled in table CPOS.

The CAMA position talk circuit group is represented in table CLLI by a fixed pseudocode CPOS.

The CAMA position key circuit group is represented in table CLLI by a fixed pseudocode CPOSKEY.

The NT2X65AA card, using an applique or hardware modification, can be used for one of the following functions:

- a 3CL switchboard, which can be switched to CAMA Operator Number Identification (ONI) operation
- Remote Operator Number Identification (RONI) to Traffic Operator Position System (TOPS) or Traffic Service Position System (TSPS)

---

**CPOS** (continued)

---

In addition to the physical location of the NT2X65AA card, the following input data is required:

- whether the position is local (not RONI) or remote (RONI)
- whether the switching unit is to supply audible ringing while seizing a position (for example, in queue in TSPS)
- the pad group in the pad data table that is assigned to the CAMA position circuit

If the position circuit requires the use of an office interrupter, this data is required after the implementation of a cost saving proposal to eliminate the requirement for such common equipment through use of DMS switch program facilities.

For related information, refer to table CAMACSW.

**Datafill sequence**

There is no requirement to datafill other tables before table CPOS.

The following tables must be datafilled after table CPOS:

- CLLIMTCE
- OFRT
- OFR2
- OFR3
- OFR4

**Table size**

Memory is allocated by the SIZE field in table DATASIZE for the entry with field DATSKEY in table DATASIZE equal to CPOS.

The maximum number of tuples in table CPOS is 128.

To allocate additional memory for the table, increase the size in table DATASIZE and do a cold restart.

After the cold restart, the value of field TRKGRSIZ in table CLLI for entry with code equal to CPOS must be increased before adding any new entries to the table.

Before table CPOS can be datafilled, fixed common language names CPOS, CPOSKEY, and CAPOX must be present in table CLLI.

**CPOS** (continued)

Pseudo CLLIs CPOS, CPOSKEY, and CAPOX must not be deleted or renamed.

**Datafill**

The following table lists datafill for table CPOS.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
POSITION		0 to 127	<i>Position number</i> Enter the internal position number, commencing at zero and in ascending sequence.
EXTRKNM		0 to 9999	<i>External trunk number</i> Enter the CAMA position number assigned to the CAMA position TALK circuit. This number may be assigned in random order with gaps.
TMTYPE		TM8	<i>Trunk module type</i> Enter the type of trunk module on which the NT2X65AA card is located. Indicated values outside this range are not valid.
TMNO		0 to 2047	<i>Trunk module number</i> Enter the number of the trunk module on which the NT2X65AA card is located.
TMCKTNO		0 to 29	<i>Trunk module circuit number</i> Enter an odd number from 1 to 29, to indicate the trunk module circuit number of the CAMA position TALK circuit. Refer to the section "Functional description of table CPOS" for additional information.
LOCAL		Y or N	<i>Local</i> If the position is local, enter Y (yes). Otherwise, if the position is remote (RONI), enter N (no).
SEIZRING		Y or N	<i>Seizure ring</i> If the switching unit provides audible ringing while seizing a position (for example, in queue in TSPS), enter Y. Otherwise, if the seizure time is short or the remote switch provides audible ring, enter N.

**CPOS** (end)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
INTRRPTR		Y or N	<i>Interrupter</i> If the circuitry of the position requires the use of an office interrupter, enter Y. Enter N if an office interrupter is not required.  <b>Note:</b> Use entry Y until further notice.
PADGRP		alphanumeric	<i>Pad group</i> Enter the name of the pad group assigned to the CAMA position circuit in table PADDATA.

**Datafill example**

The following example shows sample datafill for table CPOS.

This example lists data for two CAMA position TALK circuits, which are assigned to CAMA positions 5208 and 5209.

The table editor command CHANGE is not permitted on this table. The user is forced to delete, then add.

**MAP display example for table CPOS**

POSITION	EXTRKNM	TMTYPE	TMNO	TMCKTNO	LOCAL	SEIZRING	INTRRPTR	PADGRP
0	5208	TM8	4	1	Y	N	Y	TLD
0	5209	TM8	3	1	Y	N	Y	TLD

## CPOSTIME

---

### Table name

CAMA Position Timing Table

### Functional description

Table CPOSTIME lists the following parameters for the CAMA position:

- maximum queue time before pegging an operational measurement
- maximum queue time after pegging an operational measurement (OM) but before the call is routed to treatment
- maximum seizure before reorder is the length of time a call is allowed to sit waiting for a seized position to respond. If the position is only hardware, this time period must be short, so the caller is quickly reordered to a position that does work. If the position is a Remote Operator Number Identification (RONI) trunk to Traffic Service Position System (TSPS), this time must include any time that the call may spend in queue in TSPS; therefore, it must be long enough to avoid unnecessary reorders.
- guard time is the length of time that a call remains on a position after the operator has keyed the seventh (last) digit of the calling number. Some offices object to this delay to the customer and set this time to zero; other offices insist that this time be non-zero, to permit the operator to key a reset, or an eighth digit during this interval to force a reset of the position. This is used when the operator realizes (in time) a keying error, and provides a means of catching and correcting the error.
- minimum idle time for multifrequency (MF) receiver is a time expressed in units of 160 ms. When an operator plugs into a position, an MF receiver is obtained and dedicated to that position as long as the operator remains in that position. After the operator vacates the position, the MF receiver is returned to the pool. However, 3CL boards can toggle back and forth between 3CL operation and CAMA operation. This can result in unnecessary overhead obtaining and relinquishing receivers. To avoid this, the receiver is retained for the minimum idle time after the operator removes the headset.
- maximum reorders is the maximum number of times an individual call is allowed to present reorder signal to one position. The reorder signal is a flashing lamp, indicating to the operator that the calling number provided did not pass a screening test.

In addition to the above, if an operator removes the headset while connected to a call or a fault is found on the current position, the call is transferred to another position. The number of times this form of reorder (transferring to another position) can occur is equal to the value of maximum reorders plus two.

**CPOSTIME** (continued)

If either of these counts expire, the call is routed to no service circuit (NOSC) treatment in the respective Treatment table.

The operating company uses the CAMA Position Timing Record to change the values of the CAMA timing parameters if the value with which the parameter is initialized requires replacing by another value specified by the operating company.

The following are the values with which each of the parameters is initialized.

**Table 1**  
**Values of initialized parameters**

Name	Value	Unit
MAXQ-BEFORE-OM	5	seconds
MAXQ-BEFORE-TRTMT	175	seconds
MAXSZ-BEFORE-REORDER	180	seconds
GUARD-TIME	1	seconds
MIN-IDLE-MFR	250	160 milliseconds
MAX-REORDERS	2	times
<b>Note:</b> The initial input is forwarded to Northern Telecom for production of an input data tape.		

For related information, refer to table CAMACSW.

### **Datafill sequence and implications**

There is no requirement to datafill other tables prior to table CPOSTIME.

### **Table size**

0 to 32 tuples (with the first 6 hardcoded)

**CPOSTIME** (continued)**Datafill**

The following table lists datafill for table CPOSTIME.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
LINE		see subfield	<i>Line</i> This field consists of subfield INDEX.
INDEX		0 to 31	<i>Index</i> Enter the parameter number.

**INDEX = 0**

If field INDEX contains 0 (zero), datafill fields NAME, VALUE, UNIT, MIN, and MAX as described below.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Explanation and action
NAME		MAXQ_ BEFORE_OM	<i>Name</i> Entry is equal to MAXQ_BEFORE_OM.
VALUE		1 to 255	<i>Value</i> Enter the time in seconds that a call can wait in queue before pegging an operational measurement. This value is initialized to 5. Indicated values outside of this range are not valid.
UNIT		SEC	<i>Unit</i> Entry is equal to SEC (seconds). Indicated values outside of this range are not valid.
MIN		1	<i>Minimum</i> Entry is equal to the minimum value that can be entered in field VALUE. Indicated values outside of this range are not valid.
MAX		255	<i>Maximum</i> Entry is equal to the maximum value that can be entered in field VALUE. Indicated values outside of this range are not valid.

**CPOSTIME** (continued)**INDEX = 1**

If field INDEX is equal to 1, datafill fields NAME, VALUE, UNIT, MIN, and MAX as described below.

**Field descriptions for conditional datafill**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
NAME		MAXQ_ BEFORE_TR TMT	<i>Name</i> Entry is equal to MAXQ_BEFORE_TRTMT.
VALUE		29 to 255	<i>Value</i> Enter the time in seconds a call can remain in queue after pegging an operational measurement, before it is routed to a treatment. This value is initialized to 175. Indicated values outside of this range are not valid.
UNIT		SEC	<i>Unit</i> Entry is equal to SEC (seconds).
MIN		29	<i>Minimum</i> Entry is equal to the minimum value that can be entered in field VALUE. Indicated values outside of this range are not valid.
MAX		255	<i>Maximum</i> Entry is equal to the maximum value that can be entered for field VALUE. Indicated values outside of this range are not valid.

**CPOSTIME** (continued)**INDEX = 2**

If INDEX is equal to 2, datafill fields NAME, VALUE, UNIT, MIN, and MAX as described below.

**Field descriptions for conditional datafill**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
NAME		MAXSZ_BEF ORE_ REORDER	<i>Name</i> Entry is equal to MAXSZ_BEFORE_ REORDER.
VALUE		2 to 255	<i>Value</i> Enter the length of time in seconds that a call is allowed to sit waiting for a seized position to respond. This value is initialized to 180 seconds. Indicated values outside of this range are not valid.
UNIT		SEC	<i>Unit</i> Entry is equal to SEC (seconds).
MIN		2	<i>Minimum</i> Entry is equal to the minimum value that can be entered in field VALUE. Indicated values outside of this range are not valid.
MAX		255	<i>Maximum</i> Entry is equal to the maximum value that can be entered in field VALUE. Indicated values outside of this range are not valid.

**CPOSTIME** (continued)**INDEX = 3**

If INDEX is equal to 3, datafill fields NAME, VALUE, UNIT, MIN, and MAX as described below.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Explanation and action
NAME		GUARD_TIME	<i>Guard time</i> Entry is equal to GUARD_TIME.
VALUE		0 to 2	<i>Value</i> Enter the length of time in seconds that a call remains on a position after the operator has keyed the seventh (last) digit of the calling number. This value is initialized to 1. Indicated values outside of this range are not valid.
UNIT		SEC	<i>Unit</i> Entry is equal to SEC (seconds).
MIN		0	<i>Minimum</i> Entry is equal to the minimum value that can be entered in field VALUE. Indicated values outside of this range are not valid.
MAX		2	<i>Maximum</i> Entry is equal to the maximum value that can be entered in field VALUE. Indicated values outside of this range are not valid.

**CPOSTIME** (continued)**INDEX = 4**

If INDEX is equal to 4, datafill fields NAME, VALUE, UNIT, MIN, and MAX as described below.

**Field descriptions for conditional datafill**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
NAME		MIN_IDLE_MFR	<i>Name</i> Entry is equal to MIN_IDLE_MFR.
VALUE		25 to 250	<i>Value</i> Enter the length of time in units of 160 ms that a receiver remains attached to the position after the operator removes her headset. This value is initialized to 250 (160 ms intervals). Indicated values outside of this range are not valid.
UNIT		MSX160	<i>Unit</i> Entry is equal to MSX160.
MIN		25	<i>Minimum</i> Entry is equal to the minimum value that can be entered in field VALUE. Indicated values outside of this range are not valid.
MAX		250	<i>Maximum</i> Entry is equal to the maximum value that can be entered in field VALUE. Indicated values outside of this range are not valid.

**CPOSTIME** (continued)**INDEX = 5**

If INDEX is equal to 5, datafill fields NAME, VALUE, UNIT, MIN, and MAX as described below.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Explanation and action
NAME		MAX_REORDERS	<i>Name</i> Entry is equal to MAX_REORDERS.
VALUE		0 to 10	<i>Value</i> Enter the number of times an individual call is allowed to present reorder signal to one position. The default value is 2 and is the recommended value. Also, when an operator removes the headset while connected to a call or a fault is found with the current position, the call is transferred to another position. The number of times a call can be transferred to another position is the value of this field plus two. Indicated values outside of this range are not valid.
UNIT		TIMES	<i>Unit</i> Entry is equal to TIMES.
MIN		0	<i>Minimum</i> Entry is equal to the minimum value that can be entered in field VALUE. Indicated values outside of this range are not valid.
MAX		10	<i>Maximum</i> Entry is equal to the maximum value that can be entered in field VALUE. Indicated values outside of this range are not valid.

**Datafill example**

The following example shows sample datafill for table CPOSTIME.

In this example the number of reorders (line 5) is changed from two to three. Only the value for field VALUE can be changed.

**CPOSTIME** (end)

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**MAP display example for table CPOSTIME**

LINE	NAME	VALUE	UNIT	MIN	MAX
5	MAX-REORDERS	3	TIMES	0	10

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**CRSFMT**

---

**Table name**

Call Record Stream Format Table (CRSMFT)

**Overview**

The call record stream tables are in switches with the following feature packages:

- TOPS Call Processing
- Local Automatic Message Accounting
- Centralized Automatic Message Accounting
- IBN—Station Message Detail Recording
- CNS—Standard Base Package
- ISC—Call Detail Recording

**Functional description**

Table CRSFMT defines format characteristics for specified data streams. Several billing streams can be in a specified switch.

**Data streams**

The system automatically enters data streams NIL and AMA. The NIL is only for initialization purposes. The AMA is the default stream. The AMA contains Northern Telecom automatic message accounting (AMA) format (NTFMT).

The data stream name corresponds to the Device Independent Recording Package (DIRP) subsystem identification (ID). The DIRP ID is the key to table DIRP. Refer to *Device Independent Recording Package (DIRP) Administration Guide*. The DIRP subsystem ID allows the definition of data stream characteristics. The format of a specified stream is static for a specified office. For example, a Station Message Detail Recording (SMDR) stream always has format SMDRFMT. Change the format of a stream only when you perform the first entry of the office before call processing starts.

From the time you add a new stream until you perform a restart reload, the system merges both call data types to the current active stream. This combination creates data that the downstream processor cannot read. Perform

## **CRSFMT** (continued)

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a restart reload immediately after the tuple change to clear any recording units (RU) in the formatter.

*Note:* If the NORESTARTSWACT utility is on your switch, you can activate data changes without service interruption. Refer to *NORESTARTSWACT User Guide*.

AMA data in format BCFMT and SMDR is sent to the AMA stream. You must send SMDR data to a separate stream, like SMDR.

### **Changing the format of a stream**

To configure a DMS-100 switch as a private branch exchange (PBX) with SMDR, the first data entry must change NTFMT to SMDRFMT. You can change the format at any time. Understand the implications of this change. This change can cause the file to have a mix of two formats. The system generates a warning if you change the format of an active stream.

### **Deleting a stream**

Before you can delete a stream from table CRSFMT, you must delete the stream from table DIRPSSYS. Delete all references to the stream from table CRSMAP.

### **Datafill sequence and meaning**

You do not have to enter data in other tables before you enter data in table CRSFMT.

### **Table size**

The parameter NUM\_CALLREC STREAMS in table OFCENG determines the size of this table. This parameter specifies the number of streams that you can enter in table CRSFMT. The maximum number of entries is 15. This parameter excludes NIL.

**CRSFMT** (continued)

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**Datafill**

Datafill for table CRSFMT appears in the following table.

**CRSFMT** (continued)

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		AMA, CDR, ICAMA, OCC, SMDR, or alphanumeric (a maximum of 16 characters)	<p><i>Key</i></p> <p>Enter one of the predefined or operating company-defined call data stream names, like the following names. The system enters call data stream name AMA.</p> <ul style="list-style-type: none"> <li>• AMA (Automatic Message Accounting)</li> <li>• CDR (Call Detail Recording)</li> <li>• ICAMA (International Centralized AMA)</li> <li>• OCC (DMS-250)</li> <li>• SMDR (Station Message Detail Recording)</li> </ul>
FORMAT		BCFMT CDR250FMT CDR300FT ICAMAFMT INTLFMT ITOPFMT NTFMT SMDRFMT TDRFMT	<p><i>Format</i></p> <p>Enter one of the following formats.</p> <ul style="list-style-type: none"> <li>• BCFMT (Bellcore toll offices use only this format)</li> <li>• CDR250FMT (DMS-250 switches use this format)</li> <li>• CDR300FT (DMS-300 gateway switches use this format)</li> <li>• ICAMAFMT (International toll switches for ICAMA format stream use this format)</li> <li>• INTLFMT (International local switches use this format)</li> <li>• ITOPFMT -(International toll switches use this format)</li> <li>• NTFMT (default format. Refer to <i>Meridian Digital Centrex Station Message Detail Recording Reference Guide.</i>)</li> <li>• SMDRFMT (like NTFMT. This format is for Station Message Detail Recording. Refer to <i>Meridian Digital Centrex Station Message Detail Recording Reference Guide.</i>)</li> <li>• TDRFMT (TOPS call detail recording records format for billing TOPS calls)</li> </ul>

**CRSFMT** (continued)

## Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DATADUMP		Y or N	<p><i>Data dump</i></p> <p>Enter Y to indicate that a data dump of C2C2 records is a requirement.</p> <p>Enter N to indicate that a data dump is not a requirement.</p> <p>Enter Y in field DATADUMP to activate package X076AA (AMA—Enhanced), feature BR0156 (Trunk Identifier in AMA/SMDR Record). This feature allows the AMA/SMDR record for each call to include the identification of the trunk groups that the call involves. If DATADUMP is on (entry of Y), the amount of disk storage required for the AMA/SMDR billing information is increased.</p>
CDRSRCH		NIL_FM	<p><i>Call detail recording search</i></p> <p>This field is for DMS-250 switches. An entry of NIL_FM satisfies the table editor.</p>
ALARMS		Y or N	<p><i>Alarms</i></p> <p>Enter Y to indicate that this stream requires audible alarms for billing failures. Enter N to indicate that audible alarms are not a requirement.</p>
TIMERDMP		Y or N	<p><i>Timer dump</i></p> <p>Enter Y to activate the timer dump mechanism. Enter N to deactivate the timer dump.</p> <p>The default value is N.</p>
TIMERVAL		0 to 32767	<p><i>Timer interval</i></p> <p>Enter the time in even-numbered seconds between timer dumps.</p> <p>The default value is 0 (zero).</p>

**Datafill example**

Sample datafill for table CRSFMT appears in the following example.

**CRSFMT** (end)

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**MAP example for table CRSFMT**

KEY	FORMAT	DATADUMP	CDRSRCH	ALARMS	TIMERDMP	TIMERVAL
NIL	NTFMT	N	NIL_FM	N	N	0
AMA	BCFMT	N	NIL_FM	N	N	0
SMDR	SMDRFMT	N	NIL_FM	N	N	0

**Table history**

**TOPS11**

Field FORMAT value TDRFMT added by feature AF7817 in functionality TOPS/Carrier Interworking, OSB00001.

**TL09**

References to VCDR were removed in TL09.

**BCS36**

The reference to the NORESTARTSWACT utility was added in BCS36.

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**CRSMAP**

---

**Table name**

Call Record Stream Mapping Table

**Functional description**

Table CRSMAP defines the types of call recording data the system routes to the different streams. Some call data types are predefined.

Examples of call data types are:

- central automatic message accounting (CAMA)
- local automatic message accounting (LAMA)
- Station Message Detail Recording (SMDR)
- Traffic Operator Position System (TOPS)

The operating company can define the call data type and call data stream names. The system enters predefined call data types to use the automatic message accounting (AMA) stream. You cannot delete these tuples from table CRSMAP.

In a specified load, only the known names of features in the load appear to the user. For example, in a DMS-100 local office, only LAMA is available.

**Changing the target stream**

Change the target stream of a call data type after a restart. Until a restart occurs, when you read the tuple, the system displays the new stream. To read the tuple, the system generates a warning that the tuple is not active. The system displays the current active stream.

**Note:** If the NORESTARTSWACT utility is on your switch, you can activate data changes without service interruption. Refer to *NORESTARTSWACT User Guide*, 297-1001-546.

**Limits**

You cannot fill the NIL stream against a call data type. The default stream is AMA. The NIL only appears as the active stream for each call data type before the first restart. This action activates the AMA stream. The AMA is the active stream for all call data types. The call data types do not have changes for all deleted call data types.

See table CRSFMT for additional information.

## CRSMAP (continued)

### Datavill sequence and meaning

You must enter data in table CRSFMT before you enter data in table CRSMAP.

### Table size

Memory is statically allocated for a maximum of 32 call data types.

### Datavill

Datavill for table CRSMAP appears in the following table.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		AOSS, CAMA, CDR, ICAMA, ITCR, ITOPS, LAMA, MCDR, MTX, OCC, SMDR, TOPS, or alphanumeric (a maximum of 16 characters)	<p><i>Key.</i> Enter one of the following set or operating company-defined call data types routed to one of the different streams.</p> <p>The following are set call data types:</p> <ul style="list-style-type: none"> <li>• AOSS: Auxiliary Operator Service System or DMS-250 CDR-TOPS</li> <li>• CAMA: Central Automatic Message Accounting</li> <li>• CDR: Call Detail Recording</li> <li>• ICAMA: International CAMA</li> <li>• ITCR: International Toll Call Recording</li> <li>• ITOPS: International Traffic Operator Position System</li> <li>• LAMA: Local Automatic Message Accounting</li> <li>• MTX: Mobile Telephone Exchange</li> <li>• OCC: DMS-250</li> <li>• SMDR: Station Message Detailed Recording</li> <li>• TOPS: Traffic Operator Position System</li> </ul>
STREAM		AMA, CDR, ICAMA, ITOP, OCC, SMDR, or alphanumeric	<p><i>Stream.</i> Enter the stream name used in table CRSFMT. The system automatically enters set call data types to use the AMA stream. You cannot delete the tuples from table CRSMAP.</p>

**CRSMAP** (continued)**Datafill example**

Sample datafill for table CRSMAP appear in the following example.

**MAP example for table CRSMAP**

KEY	STREAM
CAMA	AMA

**Table history****TL09**

References to VCDR were removed in TL09.

**BCS36**

A reference to the NORESTARTSWACT utility was added in BCS36.

**Supplementary information**

This section provides information on how to enter data in table CRSMAP for specified applications. This section provides information on product description information that relates to table CRSMAP.

The steps a customer uses to define a new stream to store SMDR call data appear in the following example. In table CRSFMT, add the call data type SMDR and the format SMDRFMT as follows:

**MAP example for table CRSFMT**

TIMERVAL	KEY	FORMAT	DATADUMP	CDRSRCH	ALARMS	TIMERDMP
0	SMDR	SMDRFMT		N	NIL_FM	N

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## CRSMAP (end)

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The following is an example of datafill for table CRSFMT after you added the SMDR.

### MAP example for table CRSFMT

TIMERVAL	KEY	FORMAT	DATADUMP	CDRSRCH	ALARMS	TIMERDMP
0	NIL	NTFMT	N	NIL_FM	N	N
0	AMA	NTFMT	N	NIL_FM	Y	N
0	SMDR	SMDRFMT	N	NIL_FM	N	N

Tables DIRPPPOOL and DIRPSSYS are changed to allow the DIRP to use of the new stream name (SMDR).

In table CRSMAP, the KEY (call data type) SMDR changes to indicate the correct stream as follows:

1. Enter table CRSMAP, position on field STREAM. This entry indicates AMA as the active stream.
2. Change the stream to SMDR. List the tuple to indicate that the stream is SMDR. This action warns that AMA is the active stream.
3. QUIT table CRSMAP.
4. Perform a RESTART WARM.

The position on SMDR, in table CRSMAP, indicates that SMDR is the active stream. Warnings do not appear.

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**CSDDSCUG**

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**Table name**

Circuit-switched Digital Data Service Closed User Group Table

**Functional description**

A closed user group (CUG) provides security for circuit-switched data subscribers, implementing a virtual private network by restricting access into and out of a predefined group of data lines while allowing the group subscribers to communicate with each other.

Table CSDDSCUG provides a facility for a subscriber to have access to one or more CUGs. A CUG is assigned to a subscriber's digital data line card (DDLC). The originating subscriber can only communicate with a subscriber whose DDLC has a CUG that is in the list of CUGs against the CUG of the originating subscriber's DDLC or if the originating subscriber is in the list of CUGs against the CUG of the terminating subscriber.

Feature BV1318 (Datapath User Group) is based on the CUG facility provided with the Circuit Switched Digital Data Service (CSDDS). In this implementation, each data line is a member of one CUG. For each CUG, a list of compatible CUGs, or groups with which it can communicate, is maintained. During call setup the switch checks the CUG numbers of the originator and terminator and determines if the call can proceed.

Table CSDDSCUG does not provide a general CUG facility for Datapath. Table CSDDSCUG is for use in the Datapath implementation of Telecom Canada's Datalink service (for tariff compatibility with the earlier CSDDS implementation).

CUG membership is assigned by adding the CUG option to a line. Any number of data lines can be assigned the same CUG identification (ID). The outgoing access bit indicates whether the line can terminate on non-CUG members.

Members of the special CUG, 1, (known as the universal CUG) are treated the same as non-CUG members. This is for compatibility with the CSDDS CUG implementation.

Data subscribers who have identical CUG IDs are allowed to call and receive calls from each other. Each CUG can be assigned a list of up to eight other CUGs with which it can communicate. Access privileges between CUGs are always mutual; that is, if members of A can call members of B, then members of B can call members of A. The list of compatible CUGs is stored in the

## **CSDDSCUG** (continued)

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system table CSDDSCUG, which exists in every office with either or both Datapath and CSDDS software.

Table CSDDSCUG contains an entry for every CUG that is allowed to access a different group. Since this results in two table entries (A can access B, and B can access A) there is a restriction that only the entry for A is datafilled—if A is less than B—with the implication that both A and B can access each other.

*Note:* The same table is used for both Datapath and CSDDS, subscribers of which are not able to access each other without special interworking hardware. Do not assign Datapath and CSDDS lines into compatible user groups unless interworking facilities are in place.

### **Datafill sequence and implications**

There is no requirement to datafill other tables prior to table CSDDSCUG.

### **Table size**

0 to 4 096 tuples

**CSDDSCUG** (end)**Datafill**

The following table lists datafill for table CSDDSCUG.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
MEMKEY		2 to 4000	<i>Closed user group member key</i> Enter the closed user group (CUG) to which the subscriber's digital data line card (DDLC) is assigned (see table DDLC).
LIST		2 to 4000 (vector of up to 8 values)	<i>Closed user group list</i> Enter the CUGs with which the subscriber can communicate. This field is a vector of up to eight CUG numbers with which the CUG entered in field MEMKEY can communicate. Access privileges between CUGs are mutual; the member in field MEMKEY can call any member in field LIST and any member of field LIST can call the member in field MEMKEY. The entry in field LIST cannot contain any CUG numbers having a value less than or equal to the value in field MEMKEY. Each CUG in the list is separated by a single space. Enter a \$ (dollar sign) to end the vector.

**Datafill example**

An example of datafill for table CSDDSCUG is shown below.

In this example, a DDLC has a CUG of 2 and is able to communicate with subscribers in CUGs 4, 6, and 20.

**MAP display example for table CSDDSCUG**

MEMKEY	LIST
2	( 4 ) ( 6 ) ( 20 ) \$

---

## CSEDPMAP

---

### Table name

Capability Set Event Detection Point Map

### Functional description

The table consists of three linked fields:

- the cause value index (Q763CAUSEVAL)
- this field determines the EDP detected when the specified cause value is returned by the terminating exchange before the call is answered (PREANS)
- this field determines the EDP detected when the specified cause value is returned by the terminating exchange after the call is answered (POSTANS)

### Datafill sequence and meaning

There is no requirement to datafill other tables prior to CSEDPMAP.

### Table size

The table has a fixed size of 128 tuples.

### Datafill

The table that follows lists the datafill for table CSEDPMAP.

### Field descriptions

Field	Subfield	Entry	Explanation and action
Q763CAUSEVAL		integer (1 to 127)	<p><i>Q.763 Cause Value</i></p> <p>This field is the key to the table. Note the following restrictions for different values:</p> <p>16 - PREANS is always \$, POSTANS is always DISC</p> <p>17 - PREANS field cannot be changed</p>

## CSEDPMAP (continued)

### Field descriptions

Field	Subfield	Entry	Explanation and action
PREANS		\$, RSF, NOANS or BUSY	<i>Pre-answer</i> Message handling options for BEFORE the call is answered.
POSTANS		\$ or DISC	<i>Post-answer</i> Message handling options for AFTER the call is answered. This field cannot be edited by the user.

### Datafill examples

The figure that follows shows sample datafill for table CSEDPMAP.

#### MAP display example for table CSEDPMAP

```
Q763CAUSEVAL PREANS POSTANS
```

```
-----  
5 RSF $
```

### Table history

#### SN06 (DMS)

NOANS added as entry for PREANS field for feature A89008170, CS1R China ISUP Calling Card Service. All restrictions removed. This table description created.

#### SN04

Restriction 2) altered: BUSY Cannot be entered in PREANS other than tuple #17 20 34 or 4.  
Restriction 4) removed.

#### MMP15

Restriction 1) removed.

#### MMP13

Table introduced by feature A59009460.  
restrictions:

- 1) The POST field cannot be altered except tuple 16
- 2) BUSY cannot be entered in PREANS other than tuple #17:

**CSEDPMAP** (end)

---

- 3) REASON #17 PREANS must be BUSY
- 4) REASON #16 PREANS must be \$
- 5) REASON #16 POSTANS must be DISC

## CSUSP

---

### Table name

TOPS CAMA Suspension Circuit Table

### Functional description

The TOPS CAMA Suspension Circuit table is used in a switching unit with the Traffic Operator Position System (TOPS).

The TOPS CAMA Suspension Circuit feature is enabled prior to the evacuation of TOPS Operators due to a fire, bomb, or other type of threat. Once the TOPS CAMA Suspension Switch is on, no calls will be directed to a TOPS position by the DMS switch TOPS program. Instead, the TOPS program will dispose of calls normally requiring connection to a TOPS position as follows:

- If noncoin Operator Number Identification (ONI) or Automatic Number Identification (ANI) Fail are entered on the CAMA tape with 0 for the calling number, the call is allowed to proceed.
- All other operator calls go to reorder.

Calls not requiring TOPS operator intervention are not affected when the TOPS CAMA Calls Suspension switch is on. For example, 1+ noncoin ANI success calls are allowed to proceed after being recorded on the CAMA tape as usual.

The TOPS CAMA Suspension Circuit table CSUSP stores the NT2X66AA equipment location (the maximum of circuits is one).

The TOPS CAMA Suspension Circuit table CSUSP is represented in the CLLI by the fixed code CSUSP.

### Datafill sequence and implications

The following tables must be datafilled before table CSUSP:

- CLLI
- TMINV

**CSUSP** (end)**Datafill**

The following table lists datafill for table CSUSP.

**1Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CLLI		CSUSP	<i>Common language location identifier</i> Enter CSUSP, the pseudo common language location indicator (CLLI) code for the TOPS CAMA Suspension Circuit. It must be known to table CLLI.
TMTYPE		TM8	<i>Trunk module type</i> Enter the trunk module number on which the trunk card is located.
TMNO		0 to 2047	<i>Trunk module number</i> Enter the trunk module number on which the trunk card is located.
TMCKTNO		0 to 28(even numbers only)	<i>Trunk module circuit number</i> Enter the trunk module circuit number of the CAMA call suspension circuit.
SIGOPT		EM or LP	<i>Signalling option</i> Enter the signalling option associated with the NT2X66AA circuit, EM or LP (Loop).

**Datafill example**

The following example shows sample datafill for table CSUSP.

**MAP display example for table CSUSP**

CLLI	TMTYPE	TMNO	TMCKTNO	SIGOPT
CSUSP	TM8	3	2	LP

## CT4QAUTO

---

### Table name

Call Type For Queueing By Automated Service Table

### Functional description

Table CT4QAUTO segregates traffic that has already received automated service. An example of a partially-automated call is a calling card call that initially routes to (MCCS) or (ACCS), but the subscriber does not enter the calling card number. In this case the TOPS attempts to connect the call to an operator. Special groups of operators are used to handle different types of partially-automated calls. This segregation allows the operating company to group their operators so that special training for handling partially-automated calls is not required by all groups. Table CT4QAUTO allows for the use of automated services (ACTS, ACCS, MCCS, AABS, ADACC, and ADAS) as a criterion. The value in field OLDCT4Q, and the automated service by which the call was most recently served are checked against the datafill in table CT4QAUTO. If a match is found, the CT4Q is changed according to the data field of the matching tuple.

MCCS and ACCS (see below for acronym expansion) provide essentially the same service within TOPS to different calling card databases. For the purpose of table CT4QAUTO, designation MCCACCS is used to represent either service.

A list of TOPS automated service acronyms is expanded below.

#### **AABS**

Automated Alternate Billing Service

#### **ACCS**

Automated Calling Card Service

#### **ACTS**

Automated Coin Toll Service

#### **ADAS**

Automated Directory Assistance Service (to be released in a future BCS).

---

**CT4QAUTO** (continued)

---

**ADACC**

Automated Directory Assistance Call Completion

**CT4Q**

Call Type For Queuing

**MCCS**

Mechanized Calling Card Service

**TOPS**

Traffic Operator Position System

Entries in fields OLDCT4Q and NEWCT4Q must match entries in table CT4QNAMS.

**CAUTION:** Table CT4QAUTO, a QMS refinement table, must contain datafill (cannot be empty) when using automated services. Otherwise, an automated system may request further assistance and return the call to the incorrect service type. This causes SWERs and TQMS logs.

For example, if a DA call is released to an automated service (usually ADACC) and requires further assistance from an operator (for example, billing) the call will come back to TOPS marked as TA service. If the old queue is not datafilled in table CT4QAUTO, the call defaults to DA service and returns to the DA queue it left. The call should actually be in a TA queue.

**Datafill sequence and implications**

Table CT4QNAMS must be datafilled before table CT4QAUTO.

**Table size**

0 to 12 288 tuples

**CT4QAUTO** (continued)**Datafill**

The following table lists datafill for table CT4QAUTO.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		alphanumeric(1 to 32 characters)	<p>Old call type for queuing. This is the first of a two-part key field of the table, (OLDCT4Q and AUTOCRIT).</p> <p>Enter the previous call type for queuing.</p> <p>This entry must first be datafilled in table CT4QNAMS.</p>
AUTOCRIT		AABS_BILLED_CONNECT ED AABS_NOT_CONNECTED MCCSACCS ACTS ADACC ADAS or NO_AUTO	<p>Automated service criterion. This is the second of a two-part key field of the table.</p> <p>AUTOCRIT is a fixed range of names of TOPS-supported automated services.</p> <p>AABS_BILLED_CONNECTED applies to calls arriving at TOPS Queue Management System (QMS) after AABS processing, where the billed party is connected to the call.</p> <p>AABS_NOT_CONNECTED applies to calls arriving at TOPS QMS after AABS processing, where the billed party is not connected to the call.</p> <p>MCCSACCS applies to calls which have been to either MCCS or ACCS prior to arriving at TOPS QMS.</p> <p>ACTS applies to calls which have been to ACTS prior to arriving at TOPS QMS.</p> <p>ADACC applies to calls which have been to ADACC prior to arriving at TOPS QMS.</p>

**CT4QAUTO** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
AUTOCRIT (continued)			<p>ADAS applies to calls which have been to ADAS prior to arriving at TOPS QMS.</p> <p>NO_AUTO applies to calls that have not been to any automated services. This entry allows channeling of all the non-automated traffic to a specific group of operators.</p> <p><b>Note:</b> Indicated values outside this range are not valid.</p>
NEWCT4Q		alphanumeric (1 to 32 characters)	<p>New call type for queuing. This is the data field of each tuple, which specifies the CT4Q assigned to a call matching the key field of the tuple.</p> <p>This entry must first be datafilled in table CT4QNAMS.</p>

**Datafill example**

The following example shows sample datafill for table CT4QAUTO.

The example consists of four call types. Three of which are 0\_PLUS and one which is 1\_PLUS\_COIN (from table (CT4QNAMS)).

Field AUTOCRIT specifies the TOPS-supported service to which each call type applies:

- AABS\_BILLED\_CONNECTED
- AABS\_NOT\_CONNECTED
- MCCSACCS
- ACTS

Field NEWCT4Q (from table CT4QNAMS) specifies the call type assigned matching the key field of the tuple.

## CT4QAUTO (end)

---

### MAP display example for table CT4QAUTO

OLDCT4Q	AUTOCRIT NEWCT4Q
0_PLUS	AABS_BILLED_CONNECTED 0_AABS_CONNECT
0_PLUS	AABS_NOT_CONNECTED 0_AABS_NO_CONNECT
0_PLUS	MCCSACCS 0_PLUS_FROM_ACCS
0_PLUS_COIN	ACTS 1_PLUS_FROM_ACCS

### Table history

#### TOPS05

Added caution that table must contain datafill to prevent SWERs.

#### BCS36

Added explanation for entry NO\_AUTO in field AUTOCRIT.

#### BCS34

Table CT4QAUTO was introduced.

### Supplementary information

No dump and restore is needed when first applied. Normal dump and restore procedures apply after the first application.

**CT4QBLST****Table name**

Call Type for Queueing Billing Satisfied

**Functional description**

Table CT4QBLST refines the CT4Q based on satisfaction of billing. Therefore, calls with unsatisfied billing go to operators that handle that type of traffic. And, calls with satisfied billing go to operators that only can handle that type of traffic. Example operators are those at TOPS basic purpose (BP) positions.

**Datafill sequence and implications**

Table CT4QNAMS must be datafilled before table CT4QBLST.

**Table size**

0 to 4096 tuples

**Datafill**

The following table lists datafill for table CT4QBLST.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		name from table CT4QNAMS	Old call type for queueing. This field is part of the key to the table. Enter the name of the previous CT4Q defined in table CT4QNAMS that requires refinement.

## CT4QBLST (continued)

### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
BLSTCRIT		SATISFIED or UNSATISFIED	Billing satisfied criteria. This field is part of the key to the table. Indicate the type of billing satisfaction for this segregated traffic.
NEWCT4Q		name from table CT4QNAMS	<p>New call type for queueing. Enter the CT4Q name from table CT4QNAMS that meets the criteria in field BLSTCRIT.</p> <p>Ensure that the outgoing CT4Q (field NEWCT4Q) has the correct billing status. The system does not check this state. For example, the outgoing CT4Q should be a billing unsatisfied CT4Q for the following condition. The condition is that the incoming CT4Q is billable and the criteria is UNSATISFIED. The outgoing CT4Q would not have the correct billing status if it were a toll free CT4Q.</p> <p>In order to ensure the correct billing status of the outgoing CT4, the incoming and outgoing services should be the same. This suggestion is because the billing satisfied/unsatisfied status may vary between services.</p>

### Datafill example

The following example shows sample datafill for table CT4QBLST.

### MAP display example for table CT4QBLST

OLDCT4Q	BLSTCRIT	NEWCT4Q
0_MINUS	SATISFIED	0_MINUS_BILLSAT
0_MINUS	UNSATISFIED	0_MINUS_BILLUNSAT
0_PLUS	UNSATISFIED	0_PLUS_BILLUNSAT
0_PLUS_COIN	UNSATISFIED	0_PLUS_COIN_BILLUNSAT

In the above example, the 0\_MINUS is split into two CT4Qs explicitly stating satisfaction of billing. For 0\_PLUS and 0\_PLUS\_COIN, a new CT4Q only supports unsatisfied billing.

---

**CT4QBLST** (end)

---

The above 0\_MINUS split is an excessive use of the table. Instead, enter either the satisfied or unsatisfied tuple and use the OLDCT4Q for the other calls. For example, if only 0\_MINUS\_BILLUNSAT was entered, that queue would contain unsatisfied billing calls. And the 0\_MINUS queue would contain only satisfied billing calls after refinement. This design would conserve CT4Qs. A limit of 2047 CT4Qs are available for all eleven CT4Q refinement tables.

**Table history****TOPS09**

Initial release by feature AF7321 in functionality QMS Billing Indicator, ADVQ0007.

## CT4QCALT

---

### Table name

Call Type for Queueing Call Type Category

### Functional description

Table CT4QCALT refines the CT4Q by the called number type.

### Datafill sequence and implications

Table CT4QNAMS must be datafilled before table CT4QCALT.

### Table size

0 to 8188 tuples

(The maximum number of CT4Qs times the number of CALTCRITs.)

### Datafill

The following table lists datafill for table CT4QCALT.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		name from table CT4QNAMS	Old call type for queueing. This field is part of the key to the table. Enter the name of the previous CT4Q defined in table CT4QNAMS that requires refinement.
CALTCRIT		LOCAL, NONLOCAL, INTERNATIONAL, and UNKNOWN	Called number type criteria. This field is part of the key to the table. Indicate the called number type for this segregation of traffic.
NEWCT4Q		name from table CT4QNAMS	New call type for queueing. Enter the CT4Q name from table CT4QNAMS that meets the criteria in field CALTCRIT.

### Datafill example

The following example shows sample datafill for table CT4QCALT.

---

**CT4QCALT** (end)

---

**MAP display example for table CT4QCALT**

OLDCT4Q	CALTCRIT	NEWCT4Q
0_PLUS	NONLOCAL	0_PLUS_NONLOCAL
0_PLUS	INTERNATIONAL	0_PLUS_INTL

**Table history****TOPS10**

This table was created by feature AF7574 in functionality Queue by Called Type, ADVQ0001.

## CT4QCAR

---

### Table name

Call Type for Queueing by Inter-LATA Carrier Table

### Functional description

Table CT4QCAR provides call-type-for-queueing (CT4Q) refinement on the basis of inter-LATA carrier name. An operating company may provide operator services on a per carrier basis, through a Traffic Operator Position System (TOPS) feature called TICS (TOPS Inter-LATA Carrier Service). If TICS is in the office, this table routes all calls for a particular carrier to a particular CT4Q, which then maps to a call queue number staffed by operators dedicated to the particular carrier.

Entries in fields OLDCT4Q and NEWCT4Q must match entries in table CT4QNAMS. Entries in field CARCRIT must match entries in table TQCARNAM.

### Datafill sequence and implications

The CT4Qs used in each tuple must be datafilled in table CT4QNAMS. Field CARCRIT must first be datafilled in table TQCARNAM.

### Table size

0 to 204 800 tuples

This table uses 128 words when empty, plus 256 words for each block of 64 CT4Qs. For each CT4Q in the table, an additional 128 words are required to build an internal table for the potential 128 criteria that could be combined with that CT4Q. The maximum datastore required for a table containing 2048 CT4Qs with 128 criteria per CT4Q (the absolute maximum) is 270 K words of store.

**CT4QCAR** (continued)**Datafill**

The following table lists datafill for table CT4QCAR.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		alphanumeric (1 to 32 characters)	Previous call type for queueing. This is the first of a two-part key field for the table.  Enter the previous CT4Q value.  This entry must first be defined in table CT4QNAMS.
CARCRIT		(1 to 32 characters)	Carrier name criterion. Enter the carrier name criterion.  This entry must first be defined in table TQCARNAM.  This is the second of a two-part key field for the table.
NEWCT4Q		alphanumeric (1 to 32 characters)	New call type for queueing. Enter the value for the new CT4Q. This entry must first be defined in table CT4QNAMS.

**Datafill example**

The following example shows sample datafill for table CT4QCAR.

The example consists of two calls, a 0\_MINUS and a 0\_MIN\_RES with carrier criterion of AAA, and ACME, respectively. The NEWCT4Q's are 0\_MIN\_AAA\_CAR, and 0\_MIN\_RES\_ACME, respectively.

**MAP display example for table CT4QCAR**

OLDCT4Q	CARCRIT	NEWCT4Q
0_MINUS	AAA_CARRIER	0_MIN_AAA_CAR
0_MINUS_RES	ACME_CARRIER	0_MIN_RES_ACME

## **CT4QCAR** (end)

---

### **Table history**

#### **BCS34**

Table CT4QCAR was introduced.

### **Supplementary information**

This is a new table (BCS34). No dump and restore is needed when first applied. Normal dump and restore procedures apply after the first application.

**CT4QCLAS****Table name**

Call Type for Queueing by Class of Service Table

**Functional description**

Table CT4QCLAS provides call-type-for-queueing (CT4Q) refinement on the basis of CLASCRIPT, which is class of service associated with the calling number.

**Datafill sequence and implications**

Table CT4QNAMS must be datafilled before table CT4QCLAS.

**Table size**

0 to 10 240 tuples

This table uses 512 words when empty, plus 192 words for each block of 16 CT4Qs. The maximum datastore required is 17 K words.

**Datafill**

The following table lists datafill for table CT4QCLAS.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		alphanumeric (1 to 32 characters)	Previous call type for queueing. This is the first of a two-part key field for the table.  Enter the value for the previous CT4Q.  This entry must first be defined in table CT4QNAMS.
CLASCRIPT		UNKNOWN_CLAS COIN STATION HOTEL RESTRICT- ED	Class of service. This is the second of a two-part key field for the table.  Enter the class of service associated with the calling number.
NEWCT4Q		alphanumeric(1 to 32 characters)	New call type for queueing. Enter the new CT4Q.  This entry must first be defined in table CT4QNAMS.

## CT4QCLAS (end)

---

### Datavill example

The following example shows sample datavill for table CT4QCLAS.

The example consists of two calls, both 0\_MINUS, with class of service of RESTRICTED and COIN respectively. The NEWCT4Qs are 0\_MIN\_RESTRICTED and 0\_MIN\_COIN, respectively.

### MAP display example for table CT4QCLAS

OLDCT4Q	CLASCRIT	NEWCT4Q
0_MINUS	RESTRICTED	0_MIN_RESTRICTED
0_MIUNS	COIN	0_MIN_COIN

### Table history

#### BCS34

Table CT4QCLAS was introduced.

### Supplementary information

This is a new table (BCS34). No dump and restore procedure is needed when first applied. Normal dump and restore procedures apply after the first application.

**CT4QCLD****Table name**

Call Type For Queueing By Called Number Table

**Functional description**

Table CT4QCLD provides call-type-for-queueing refinement on the basis of CLDCRIT, which is a called number criterion associated with the call.

Entries in field OLDCT4Q and NEWCT4Q must match entries in table CT4QNAMS. Entries in field CLDCRIT must match entries in table TQCLDNAM.

**Datafill sequence and implications**

The CT4Qs used in each tuple must be datafilled in table CT4QNAMS. The CLDCRIT to be used in a tuple must be datafilled in table TQCLDNAM.

**Table size**

0 to 204 800 tuples

This table uses 128 words when empty, plus 256 words for each block of 64 CT4Qs. For each CT4Q in the table, an additional 128 words are required to build an internal table for the potential 128 criteria that could be combined with that CT4Q. The maximum datastore required for a table containing 2048 CT4Qs with 128 criteria per CT4Q (the absolute maximum) is 270 K words of store.

**Datafill**

The following table lists datafill for table CT4QCLD.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		alphanumeric (1 to 32 characters)	Previous call type for queueing. This is the first of a two-part key field for the table. This entry must first be defined in table CT4QNAM.

## CT4QCLD (end)

### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLDCRIT		alphanumeric (1 to 32 characters)	Called number criterion. This is the second of a two-part key field for the table. This entry must first be defined in table CT4QNAM.
NEWCT4Q		alphanumeric (1 to 32 characters)	New call type for queueing. This entry must first be defined in table CT4QNAM.

### Datafill example

The following example shows sample datafill for table CT4QCLD.

The example consists of two calls, both with an OLDCT4Q of 1\_PLUS. The CLDCRIT is defined as TIME\_WEATHER\_DN and CUST\_NAME\_ADDRESS, respectively. The NEWCT4Q is defined as 1\_TIME\_AND\_WEATHER and 1\_CNA, respectively.

### MAP display example for table CT4QCLD

OLDCT4Q	CLDCRIT	NEWCT4Q
1_PLUS	TIME_WEATHER_DN 1_TIME_AND_WEATHER	
1_PLUS	CUST_NAME_ADDRESS	1_CNA

### Table history

#### BCS35

Table CT4QCLD was introduced.

### Supplementary information

This is a new table (BCS35). No dump and restore is needed when first applied. Normal dump and restore procedures apply after the first application.

---

**CT4QLANG**

---

**Table name**

Call Type for Queueing by Language Table

**Functional description**

Table CT4QLANG provides call type for queueing refinement on the basis of LANGCRIT, which is a language name associated with the call. Language is determined either by the operator or an automated service. The operator marks the language of the call through keying actions, and upon recall, this language mark is used to route the call to the proper queue for recall. If the automated service marks the language, it is used as a criterion in this table and routes to an appropriate operator fluent in the language specified upon its initial position seizure.

Entries in fields OLDCT4Q and NEWCT4Q must match entries in table CT4QNAMS. Entries in field LANGNAME must match entries in table TOPSLANG.

**Datafill sequence and implications**

The call type for queueing (CT4Q)'s used in each tuple must be defined in table CT4QNAMS. The LANGCRIT used in a tuple must be defined in table TOPSLANG.

**Table size**

0 to 204 800 tuples

This table uses 128 words when empty, plus 256 words for each block of 64 CT4Qs. For each CT4Q in the table, an additional 128 words are required to build an internal table for the potential 128 criteria that could be combined with that CT4Q. The maximum datastore required for a table containing 2048 CT4Qs with 128 criteria per CT4Q (the absolute maximum) is 270 K words of store.

**CT4QLANG** (continued)**Datafill**

The following table lists datafill for table CT4QLANG.

**Field descriptions**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
OLDCT4Q		alphanumeric (1 to 32 characters)	Previous call type for queueing. This is the first of a two-part key field for the table.  Enter the value for the previous CT4Q.  This entry must first be defined in table CT4QNAMS.
LANGCRIT		alphanumeric (3 characters)	Language criterion. This is the second of a two-part key field for the table.  Enter the language criterion.  This entry must first be defined in table TOPSLANG.
NEWCT4Q		alphanumeric (1 to 32 characters)	New call type for queueing. Enter the value for new CT4Q.  This entry must first be defined in table CT4QNAMS.

**Datafill example**

The following example shows sample datafill for table CT4QLANG.

The example consists of two calls, one with an OLDCT4Q of 0\_MINUS and the other with an OLDCT4Q of 0\_MIN\_RES. The LANGCRIT is defined as FRE and SPA, respectively. The NEWCT4Q is defined as 0\_MIN\_FRENCH and 0\_MIN\_SPANISH, respectively.

---

**CT4QLANG** (end)

---

**MAP display example for table CT4QLANG**

OLDCT4Q	LANGCRIT	NEWCT4Q
0_MINUS	FRE	0_MIN_FRENCH
0_MIN_RES	SPA	0_MIN_SPANISH

**Table history****BCS35**

Table CT4QLANG was introduced.

**Supplementary information**

This is a new table (BCS35). No dump and restore is needed when first applied. Normal dump and restore procedures apply after the first application.

## **CT4QNAMS**

---

### **Table name**

Call Type for Queuing by Names Table

### **Functional description**

Table CT4QNAMS defines the group of call types for queuing (CT4Q) that are used by the other tables in the Queue Management System (QMS) feature. This definition is achieved by associating an alphabetical name with an internal integer value. The range of CT4Q values datafilled in table CT4QNAMS varies significantly depending on the choice of traffic segregation and the different names used to describe categories and subcategories of traffic.

The first two tuples in table CT4QNAMS are reserved as UNSPEC and CAMA.

### **Datafill sequence and implications**

Table TOPAUDIO must be datafilled before table CT4QNAMS.

### **Table size**

0 to 2047 tuples

**CT4QNAMS** (continued)**Datafill**

The following table lists datafill for table CT4QNAMS.

**Field descriptions (Sheet 1 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
CT4QNUM		0 to 2046	CT4Q number. This is the index into the table. The first two tuples, UNSPEC and CAMA, are reserved. CAMA calls are not refineable and must have a unique call queue. Otherwise, if refinement is used, there is the potential for breaking the REQ CAMA function.
CT4QNAME		alphanumeric (1 to 32 characters)	Call type for queueing name. Enter a CT4Q name of CT4Q for use by the other CT4Q tables.  Fields CT4QNUM and CT4QNAME must match between the host and remote switches to avoid problems. Otherwise, if a call assigned to a final CT4Q in a remote switch is sent to the host switch for a controlled traffic (CT) operator, an idle operator may not receive the call. Instead, the call goes to a CALLQ operator or a queue. This is due to the CT4QNUM rather than CT4QNAME being passed from the remote to host switch.  UNSPEC and CAMA are default, reserved entries.
NOAMA		Y or N	No automatic message accounting indicator. Enter Y (yes) if no AMA record is required.  Enter N (no) if an AMA record is required.
ITRIGIDX		see subfields	Initial call setup trigger profile index. This field consists of subfield PROFSEL.
	PROFSEL	Y or N	Profile select. This field indicates if float trigger processing is required. Enter Y for processing and datafill subfield IDXVAL. Enter N for no processing.
	IDXVAL	0 to 2046	Index value. Datafill this subfield if subfield PROFSEL = Y. Enter a trigger profile index into table OATPRFIX.

**CT4QNAMS** (continued)

## Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
SYSAREA		see subfield	System area. This field consists of subfield SYSAREA_SEL and its refinements.
	SYSAREA_SEL	TOPSOPR or OSSAIN	System area select. After a call is routed through QMS to a final call queue, this field directs the call to either an operator (TOPSOPR) or an OSSAIN service node (OSSAIN).  If OSSAIN is entered, table OAINCTLA must be datafilled. No further fields must be datafilled.  If TOPSOPR is entered, datafill subfields CT4QDISP, AUTOORDB, OAINPRE, and TAUDIO.
	CT4QDISP	see subfield	CT4Q display. This field consists of subfield CT4QDISP_SEL and refinements.
	CT4QDISP_SEL	Y or N	CT4Q display selector. Enter Y if a special display is required for this CT4Q and datafill refinement DISPLAY.  Enter N if a special CT4Q display is not required.
	DISPLAY	1 to 8 characters	Display. If field CT4QDISP_SEL = Y, datafill this refinement.  Enter 1 to 8-characters.
	AUTOORDB	see subfield	Automated operator reference database. This field consists of subfield AUTOORDB_SEL.
	AUTOORDB_SEL	Y or N	AUTOORDB Selector. If an AUTOORDB session is initiated, enter Y and datafill refinement ORDBVAL.  Enter N if AUTOORDB is not used.
	ORDBVAL	0 to 100	AUTOORDB value. If the entry in field AUTOORDB_SEL is Y, datafill this refinement. This field is an index into AUTOORDB.

**CT4QNAMS** (continued)

## Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	OAINPRE	Y or N	<p>OSSAIN preprocessing. Datafill this field if SYSAREA_SEL = TOPSOPR. Enter Y to enable preprocessing and datafill refinement OPRSYS. Otherwise, enter N and no further refinements require datafill.</p> <p>The applied function for OSSAIN preprocessing is selected in table OAINPRE. For a description of OSSAIN preprocessing, refer to table OAINPRE.</p>
	OPRSYS	set of {OPR, MCCA, ACTS, AABS, ADAS} or ALL	Operator system. Enter the set of TOPS systems that OSSAIN preprocessing is to be applied. Note, value NONE appears on the MAP display but is not valid.
	TAUDIO	see subfield	TOPS audio. Datafill this field if SYSAREA_SEL = TOPSOPR. This field consists of subfield AUDIO_SEL and refinements.
	AUDIO_SEL	Y or N	<p>Audio selector. This field indicates if an audio program is to be played for this CT4Q while the caller is waiting for an operator. The values are Y (play the program) and N (provide ringing). If Y, datafill refinements THRESHOLD and AUDIOKEY.</p> <p>Note that every TOPS operator CT4Q has an audio selector field, but it may not make sense to datafill a "Y" value for some CT4Qs. In most offices, some CT4Qs are reserved for intermediate use during refinements, and are never used for final call queue assignment. Also, some CT4Qs may be used only for calls that are ineligible for Music and Announcement in Queue for other reasons (refer to the "Interactions" section). If audio information is entered for a CT4Q that is not used for final call queue assignment for calls that are eligible for Music and Announcement in Queue, TOPS call processing simply ignores the unnecessary audio information in datafill.</p>

**CT4QNAMS** (continued)

## Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	THRESHLD	0 to 60	<p>Threshold. If the predicted wait time of a call in the queue is equal to or greater than THRESHLD in seconds, the audio program defined in field AUDIOKEY is played. Otherwise, only the default treatment (ringing) is provided while the call is queued for an operator. For further information, refer to section "Wait times and audio thresholds".</p> <p>This field allows a program to be applied only to calls that are expected to be in queue longer than a specified number of seconds. Judicious use of this field can decrease the frequency that callers hear only a short burst of music, or only a partial announcement, before the operator is connected.</p> <p>The predicted wait time for each queue is computed using a 60-second window that slides every 10 seconds. If no calls have been served from a queue in the past 60 seconds, a predicted wait time cannot be computed. Then, the call receives the audio program in table TOPAUDIO, regardless of THRESHLD.</p> <p>For more information about predicted wait times for QMS calls, refer to the Force Management Guide for your operator position type, or to functionality Host QMS, ADVQ0003, in this document.</p>
	AUDIOKEY	name from table TOPAUDIO	<p>Audio key. This field identifies the audio program to be played to a caller waiting in the queue for an operator. This field is an index into table TOPAUDIO. This name must be previously defined in table TOPAUDIO.</p>

**Datafill example**

The following example shows sample datafill for table CT4QNAMS.

The example consists of 13 call types, 0 to 12. Field CT4QNAME indicates the names used in all the other CQA tables. CT4Q numbers 5, 10, 11, and 12 have special displays, while CT4Q numbers 5, 10, and 12 have auto-ORDB indexes.

**CT4QNAMS** (continued)**MAP example for table CT4QNAMS**

CT4QNUM	CT4QNAME	NOAMA	ITRIGIDX	SYSAREA
0	UNSPEC	N	N	
			TOPSOPR Y UNSPEC	N N N
1	CAMA	N	N	
			TOPSOPR Y UNSPEC	N N N
2	NODE1_CT4Q	N	N	
				OSSAIN
3	OSS_DA	N	Y 534	
				OSSAIN
4	PCS_OPR	N	Y 1039	
			TOPSOPR Y PCSOPR	N N N

**Error messages for table CT4QNAMS**

The following error messages apply to table CT4QNAMS.

**Error messages for table CT4QNAMS**

Error message	Explanation and action
An OPRSYS value other than NONE must be specified.	If field OAINPRE = Y, field OPRSYS should not be set to NONE. If this entry is attempted, this error is displayed.
AUDIOKEY <key> DOES NOT EXIST IN TOPAUDIO TABLE	When field AUDIO_SEL=Y, the AUDIOKEY refinement identifying an audio program must already be in table TOPAUDIO. If the AUDIOKEY does not exist in TOPAUDIO, then this error message is displayed.
WARNING: The trigger index specified is not activated until datafilled in Table OATPRFIX. Table OATPRFIX and its associated trigger tables must be datafilled to activate this trigger index.	This warning message is displayed if a trigger profile index is entered in subfield IDXVAL that is not datafilled in table OATPRFIX.

## **CT4QNAMS (end)**

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### **Table history**

#### **TOPS12**

Subfield ITRIGIDX is added by feature 59006766 in functionality OSSAIN 12 Enhancements, OSAN0007.

#### **TOPS10**

Subfield TAUDIO added by feature AF7567 in functionality Music and Announcement in Queue, ADVQ0008.

#### **TOPS07**

Refinements OAINPRE and OPRSYS are added by feature AF6493 in functionality OSSAIN Enhancements, ENSV0020.

#### **TOPS06**

Subfield SYSAREA\_SEL is added by functionality Operator Services AIN, ENSV0014.

#### **BCS34**

Table CT4QNAMS was introduced.

### **Supplementary information**

No dump and restore is needed when this table is first applied. Normal dump and restore procedures apply after the first application.

---

**CT4QORIG**

---

**Table name**

Call Type for Queueing by Originating Location Table

**Functional description**

Table CT4QORIG provides call-type-for-queueing refinement on the basis of ORIGCRIT, which is an originating location associated with the call. This table is used to route calls to special groups of operators who:

- have local knowledge of geographical areas,
- have training or equipment to provide service to disabled or physically-challenged subscribers,
- have fluency in a particular language,
- so that these operators can effectively handle calls from special groups of subscribers.

Entries in fields OLDCT4Q and NEWCT4Q must match entries in table CT4QNAMS. Entries in field ORGCRIT must match entries in table TQORGNAM.

**Datafill sequence and implications**

The call type for queueing (CT4Q)s used in each tuple must be datafilled in table CT4QNAMS. The ORIGCRIT used in a tuple must be datafilled in table TQORGNAM.

**Table size**

0 to 204 800 tuples

This table uses 128 words when empty, plus 256 words for each block of 64 CT4Qs. For each CT4Q in the table, an additional 128 words are required to build an internal table for the potential 128 criteria that could be combined with that CT4Q. The maximum datastore required for a table containing 2048 CT4Qs with 128 criteria for each CT4Q (the absolute maximum) is 270 K words of store.

## CT4QORIG (continued)

### Datavfill

The following table lists datavfill for table CT4QORIG.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		alphanumeric (1 to 32 characters)	Previous call type for queueing. This is the first of a two-part key field for the table. Enter the previous CT4Q which must first be defined in table CT4QNAMS.
ORGCRIT		alphanumeric (1 to 32 characters)	Originating location criterion. This is the second of a two-part key field for the table. Enter the name first defined in table TQORGNAM that describes the originating location.
NEWCT4Q		alphanumeric (1 to 32 characters)	New call type for queueing. Enter the new CT4Q which must first be defined in table CT4QNAMS.

### Datavfill example

The following example shows sample datavfill for table CT4QORIG.

The example consists of two calls, one with an OLDCT4Q of 0\_MINUS and the other with an OLDCT4Q of DA\_411. The ORGCRIT is defined as DISABLED\_SUBSCRIBER and DOWNTOWN\_EXCHANGE, respectively. The NEWCT4Q is defined as 0\_MIN\_DISABLED and DA\_411\_DOWNTOWN, respectively.

#### MAP display example for table CT4QORIG

OLDCT4Q	ORGCRIT	NEWCT4Q
0_MINUS	DISABLED_SUBSCRIBER	0_MIN_DISABLED
DA_411	DOWNTOWN_EXCHANGE	DA_411_DOWNTOWN

---

**CT4QORIG** (end)

---

**Table history****BCS34**

Table CT4QORIG was introduced.

**Supplementary information**

This section provides information on dump and restore procedures for table CT4QORIG.

**Dump and restore**

This is a new table (BCS34). No dump and restore is needed when first applied. Normal dump and restore procedures apply after the first application.

## CT4QPFXT

---

### Table name

Call Type for Queueing by Prefix Call Type Table

### Functional description

Table CT4QPFXT provides call-type-for-queueing (CT4Q) refinement on the basis of PFXTCRIT, which is the dialed prefix associated with the call either operator assisted (OA) or direct dialed (DD). This queueing is useful, depending upon TOPS position capability.

Entries in fields OLDCT4Q and NEWCT4Q must match entries in table CT4QNAMS.

### Datafill sequence and implications

Field CT4Q values used in each tuple must be datafilled in table CT4QNAMS.

### Table size

0 to 4096 tuples

This table uses 256 words when empty, plus 64 words for each block of 32 CT4Qs. The maximum datastore required is 3 K words of store.

### Datafill

The following table lists datafill for table CT4QPFXT.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		alphanumeric (1 to 32 characters)	Previous call type for queueing. This is the first of a two-part key field for the table. Enter the previous CT4Q. This value must first be defined in table CT4QNAMS.

**CT4QPFXT** (end)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
PFXTCRIT		OA, DD	Dialed prefix value. This is the second of a two-part key field for the table.  Enter either operator assisted (OA) or direct dialed (DD).
NEWCT4Q		alphanumeric (1 to 32 characters)	New call type for queueing. Enter the new CT4Q.  This value must first be defined in table CT4QNAMS.

**Datafill example**

The following example shows sample datafill for table CT4QPFXT.

The example consists of two calls. The OLDCT4Q of the first is defined as DA\_411, the second as DA\_555. Both dialed prefix values are defined as OA (Operator Assisted) calls. The NEWCT4Q entries are defined as DA\_411\_OA and DA\_555\_OA, respectively.

**MAP display example for table CT4QPFXT**

OLDCT4Q	PFXTCRIT	NEWCT4Q
DA_411	OA	DA_411_OA
DA_555	OA	DA_555_OA

**Table history****BCS34**

Table CT4QPFXT was introduced.

**Supplementary information**

This is a new table (BCS34). No dump and restore is needed when first applied. Normal dump and restore procedures apply after the first application.

## CT4QREST

---

### Table name

Call Type for Queueing by Restricted Billing Index Table

### Functional description

Table CT4QREST provides call-type-for-queueing (CT4Q) refinement on the basis of RESTCRIT, which is a restricted billing index. A restricted billing index is defined only for calls with COIN or RESTRICTED class of service.

Entries in fields OLDCT4Q and NEWCT4Q must match entries in table CT4QNAMS.

### Datafill sequence and implications

The CT4Qs used in each tuple must be datafilled in table CT4QNAMS.

### Table size

0 to 204 800 tuples

Store for the potentially large TOPS QMS tables is allocated dynamically on several levels, which reduces storage consumption, but increases the complexity of estimating store use. Contact Northern Telecom for assistance in determining the datastore required for this table.

**CT4QREST** (continued)**Datafill**

The following table lists datafill for table CT4QREST.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		alphanumeric (1 to 32 characters)	Previous call type for queueing. This is the first of a two-part key field for the table.  Enter the previous CT4Q that must first be defined in table CT4QNAMS.
RESTCRIT		0 to 100	Restricted billing index criterion. This is the second of a two-part key field for the table.  Enter the value for the restricted billing index criterion.  The meaning and screen displays associated with these values is found in table RESTBIL.  The restricted billing index associated with the call is derived from tables SPLNDID or (in BCS32 and later), SLTANIID.
NEWCT4Q		alphanumeric (1 to 32 characters)	New call type for queueing. Field NEWCT4Q is the data field of each tuple, which specifies the CT4Q assigned to a call matching the key field of the tuple.  Enter the new CT4Q.  This entry must first be defined in table CT4QNAMS.

**Datafill example**

The following example shows sample datafill for table CT4QREST.

The example consists of two calls, one with an OLDCT4Q of 0\_MIN\_RESTRICT and the other with an OLDCT4Q of 0\_MIN\_COIN. The RESTCRIT is defined as 55 and 12, respectively. The NEWCT4Q is defined as 0\_MIN\_RES\_55 and 0\_MIN\_COIN\_12, respectively.

## CT4QREST (end)

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### MAP display example for table CT4QREST

OLDCT4Q	RESTCRIT	NEWCT4Q
0_MIN_RESTRICT	55	0_MIN_RES_55
0_MIN_COIN	12	0_MIN_COIN_12

### Table history

#### BCS34

Table CT4QREST was introduced.

### Supplementary information

This is a new table (BCS34). No dump and restore is needed when first applied. Normal dump and restore procedures apply after the first application.

**CT4QSLRN****Table name**

Call type for queueing refinement on the special location routing number (SLRN)

**Functional description**

This table is used in the queue management system (QMS) to refine calls by the SLRN

**Datafill sequence and meaning**

Enter datafill into the tables that follow after you enter datafill into table CT4QSLRN:

- TQSRNNAM
- TQSRNDIG

**Table size**

0 to 2047 tuples

**Datafill**

The table that follows lists datafill for table CT4QSLRN.

**Field descriptions**

Field	Subfield	Entry	Explanation and action
OLDCT4Q		name from CT4QNAMS	Old call type for queueing. Enter a CT4Q to receive this refinement. The name must be defined in table CT4QNAMS.
SRNCRIT		name from TQSRNNAM	SLRN criteria. Enter an SLRN refinement criteria from table TQSRNNAM for refinement of the OLDCT4Q.
NEWCT4Q		name from CT4QNAMS	New call type for queueing. Enter a CT4Q that results from the refinement of field OLDCT4Q. The name must be defined in table CT4QNAMS.

**Datafill example**

The figure that follows shows sample datafill for table CT4QSLRN.

## CT4QSLRN (end)

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### MAP display example for table CT4QSLRN

OLDCT4Q	SLRNCRIT	NEWCT4Q
INIT_LRN	CPP_WIRELESS_CO1	LRN_CPP_CO1
INIT_LRN	CPP_WIRELESS_CO2	LRN_CPP_CO2
INIT_LRN	OTHER_CPP	LRN_CPP_OTHER

### Table history

#### TOPS12

This table was introduced by feature 59007166 in functionality OSSAIN 12 Enhancements.

### Additional information

None

**CT4QSPID****Table name**

Call Type for Queueing Service Provider Identifier

**Functional description**

Table CT4QSPID refines the queue management system (QMS) call type by individual or groups of SPIDs defined in table TQSPIDNM.

**Datafill sequence and implications**

The following tables must be datafilled before table CT4QSPID.

- CT4QNAMS
- TQSPIDNM

**Table size**

0 to 12,288 tuples

**Datafill**

The following table lists datafill for table CT4QSPID.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		name from table CT4QNAMS	Old call type for queueing. This field is part of the key to the table. Enter the name of the previous CT4Q defined in table CT4QNAMS that is to be refined.
SPIDCRIT		name from table TQSPIDNM	SPID criterion. This field is part of the key to the table. Indicate if this segregated traffic belongs to this SPID criterion defined in table TQSPIDNM.
NEWCT4Q		name from table CT4QNAMS	New call type for queueing. Enter the CT4Q name from table CT4QNAMS that meets the criterion in field SPIDCRIT.

**Datafill example**

The following example shows sample datafill for table CT4QSPID.

## CT4QSPID (end)

---

### MAP display example for table CT4QSPID

OLDCT4Q	SPIDCRIT	NEWCT4Q
0_MINUS	CLECGRP1	0_MINUS_THEM
0_MINUS	CLECGRP2	0_MINUS_THEM2
0_PLUS	CLECGRP1	0_PLUS_THEM
0_PLUS_COIN	CLECGRP1	0_PLUS_THEM

### Table history

#### TOPS09

Initial release by feature AF7160 in functionality Queueing, UNBN0002,

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**CT4QTIME**

---

**Table name**

Call Type for Queueing by Time of Day of Week Table

**Functional description**

Table CT4QTIME provides call-type-for-queueing (CT4Q) refinement on the basis of TIMECRIT, which is a time criterion associated with the call. A set of tables is provided to allow the specification of differently treated times of day for each day of the week and for holidays. Table CT4QTIME diverts traffic to a new CT4Q based on the TIMECRIT value determined upon call arrival. This allows operating companies to consolidate different types of traffic into a smaller number of call types for queueing at known low-traffic periods providing savings in staffing requirements.

Entries in fields OLDCT4Q and NEWCT4Q must match entries in table CT4QNAMS. Entries in field TIMECRIT must match entries in table TQTIMENM.

**Datafill sequence and implications**

The CT4Qs used in each tuple must be datafilled in table CT4QNAMS. The TIMECRIT used in a tuple must be datafilled in table TQTIMENM.

**Table size**

0 to 204 800 tuples

This table uses 128 words when empty, plus 256 words for each block of 64 CT4Qs. For each CT4Q in the table, an additional 128 words are required to build an internal table for the potential 128 criteria that could be combined with that CT4Q. The maximum datastore required for a table containing 2048 CT4Qs with 128 criteria per CT4Q (the absolute maximum) is 270 K words of store.

**CT4QTIME** (continued)**Datafill**

The following table lists datafill for table CT4QTIME.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
OLDCT4Q		alphanumeric (1 to 32 characters)	<p>Previous call type for queueing. (From table CT4QNAMS)</p> <p>This is the first of a two-part key field for the table.</p> <p>Enter a value for the previous CT4Q.</p> <p>This field must first be defined in table CT4QNAMS.</p>
TIMECRIT		alphanumeric (1 to 32 characters)	<p>Time of day criterion. This is the second of a two-part key field for the table.</p> <p>Enter a name defined for a time period in table TQTIMENM.</p> <p>This entry must first be defined in table TQTIMENM.</p>
NEWCT4Q		alphanumeric (1 to 32 characters)	<p>New call type for queueing. This is the data field of each tuple, specifying the CT4Q assigned to a call matching the key field of the tuple.</p> <p>Enter the new CT4Q.</p> <p>This entry must first be defined in table CT4QNAMS.</p>

**Datafill example**

The following example shows sample datafill for table CT4QTIME.

The example consists of three calls. The first has an OLDCT4Q of DA\_411. The other two are 0\_MINUS. The TIMECRIT of the first and second calls are LIGHT\_HOUR while the TIMECRIT of the third call is HEAVY\_HOUR. The NEWCT4Qs are DA\_411\_LIGHT\_HR, 0\_MINUS\_LIGHT\_HR and 0\_MINUS\_HEAVY\_HR, respectively.

**CT4QTIME** (end)**MAP display example for table CT4QTIME**

OLDCT4Q	TIMECRIT	NEWCT4Q
DA_411	LIGHT_HOUR	DA_411_LIGHT_HR
0_MINUS	LIGHT_HOUR	0_MINUS_LIGHT_HR
0_MINUS	HEAVY_HOUR	0_MINUS_HEAVY_HR

**Table history****BCS34**

Table CT4QTIME was introduced.

**Supplementary information**

This is a new table (BCS34). No dump and restore is needed when first applied. Normal dump and restore procedures apply after the first application.

## **CTCODE**

---

### **Table name**

Country Code Code Table

### **Functional description**

Table CTCODE is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table CTCODE translates the country code digit segment, together with tables CTHEAD and CTRTE.

For related information, refer to table ACCODE. For a description of the universal translation tables, see table ACHEAD.

### **Datafill sequence and implications**

Table CTHEAD must be datafilled before tables CTRTE and CTCODE.

### **Table size**

Refer to table ACCODE.

### **Datafill**

Field names, subfield names, and valid data ranges for table CTCODE are described in table ACCODE.

### **Datafill example**

Refer to table ACCODE.

### **Table history**

#### **BCS36**

The table name was changed from Country Code Table to Country Code Code Table.

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**CTHEAD**

---

**Table name**

Country Code Head Table

**Functional description**

Table CTHEAD is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table CTHEAD translates the country code digit segment, together with tables CTCODE and CTRTE.

For related information, refer to tables ACCODE and ACRTE. For a description of the universal translation tables, refer to table ACHEAD.

**Datafill sequence and implications**

Refer to table ACHEAD.

**Table size**

Memory is automatically allocated to a maximum of 2047 tuples. The size is initially set to 64 and the table extends itself automatically.

**Datafill**

Field names, subfield names, and valid data ranges for table CTHEAD are described in table ACHEAD.

**Datafill example**

Refer to table ACHEAD.

**Table history**

Refer to table ACHEAD.

## CTRTE

---

### Table name

Country Code Route Table

### Functional description

Table CTRTE is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table CTRTE translates the country code digit segment, together with tables CTHEAD and CTCODE.

For related information, refer to table ACRTE. For a description of the universal translation tables, see table ACHEAD.

### Datafill sequence and implications

Table CTHEAD must be datafilled before tables CTRTE and CTCODE.

### Table size

Refer to table ACRTE.

### Datafill

Field names, subfield names, and valid data ranges for table CTRTE are described in table ACRTE.

### Datafill example

Refer to table ACRTE.

### Table history

#### NA017

Feature 59035336 introduces the Supergroup (SG) option.

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**CUGCOMP**

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**Table name**

Closed User Group Compatibility Table

**Functional description**

Closed User Group (CUG) is a security feature that allows data unit (DU) users to form a virtual private group to limit access. This feature limits access between the group and outside users. The DUs can use the CUG as a means against accidental or random access. The CUG does not provide permanent protection against determined efforts from outside users to break into this group.

Datapath offers the CUG a security feature. Datapath is a DMS-100 based product that provides circuit-switched digital data communication services. The CUG was first designed for the Circuit Switched Digital Data Service (CSDDS). See table CSDDSCUG for additional information.

The CUG allows a set of data units to form a closed group with restricted access. The DUs can apply the access restriction to incoming calls, outgoing calls, or incoming and outgoing calls. Members in the same group can place and receive calls from each other.

Use datafill to assign each member of a CUG the same CUG identifier. During call setup, this identifier is checked against the CUG identifier of the other DUs in the call. If the CUGs are the same or compatible, the DMS/SL-100 allows calls to proceed. If the CUGs are not the same or compatible, the DMS/SL-100 disconnects the call.

The CUGs are compatible if the CUGs can access each other. A CUG can have nine compatible CUGs. In intraswitch, access between compatible CUGs is always mutual. If A can access B, B can access A.

In interswitch, access only applies to incoming calls. Other involved switching units need datafill CUG compatibility for mutual access. For example, switching units X and Y must enter CUG compatibility. This action occurs so that members of CUGs in X can access CUGs in Y. This action occurs so that members of CUGs in Y can access CUGs in X.

Call types that Datapath CUGs support are intraswitch DU-to-DU and interswitch DU-to-DU over digital facilities. The end-to-end CUG transmissions are a success in these environments. Calls can proceed if CUG numbers are compatible. End-to-end CUG exchange is not a success if the system connects the call through a modem pool. A CUG and modem pooling are separate from each other. A CUG member can place calls to public

**CUGCOMP** (continued)

members if the CUG grants outgoing access privilege. A CUG can spread past the geographical region of the operating company. A CUG number identifies each CUG. The CUG number contains two parts:

- CUG region
- CUG ID

The CUG region is a value from 0 to 63. The CUG region normally identifies a geographical region of the operating company.

*Note:* The CUG regions 0 to 3 are for future use.

For example, operating company A provides telephone services for city B. All DMS/SL-100 offices that A operates and that are in B must have the same CUG region value.

Private branch exchange (PBX) offices in a region can have a separate CUG region value if these offices do not want to interact with the outside world. A large region can use more than one CUG region number if the number of CUG IDs exceeds the maximum.

Northern Telecom (Nortel) engineers CUG regions as office parameter CUG\_REGION in table OFCSTD for each office. All DMS-100 offices in a region must have the same value.

In a CUG region, 1024 CUG IDs are available. These IDs appear in the following table. The following table lists the IDs in different types.

**Types of CUG IDs**

Name	CUG ID value	Explanation
	0	Not used
Public CUG	1	Equivalent to non-CUG
Regular CUG	2 to 1022	For subscribers
Maintenance CUG	1023	For maintenance purposes

**Public CUG**

Members with a public CUG ID are the same as non-CUG members.

---

**CUGCOMP** (continued)

---

**Regular CUG**

You can assign regular CUG IDs to users to form closed groups.

**Maintenance CUG**

The maintenance CUG value is for maintenance purposes only. This value is compatible with all CUGs in the region.

Use office parameter `US_CUG_ENABLED` in table `OFCOPT` to enable or disable this feature in an office. Nortel personnel engineer this parameter after the office parameter `CUG_REGION`.

Enter CUG ID in a CUG region for each line in table `KSETFEAT`.

**Accessibility and compatibility of CUGs**

Access between regions can allow interregional CUG compatibility. As a result, a CUG can extend past a region. Successful CUG data calls between regions are possible.

Compatible CUGs can access each other. In intraswitch, this access is mutual. In interswitch, the access privilege is one-way and applies to incoming calls. Specify `CUG_REGION` and `CUG ID` as a pair for each compatible CUG to enter the CUG compatibility in table `CUGCOMP`. The switch performs a CUG check to verify if the call can proceed. Verification occurs before T-link handshaking. During the CUG verification, if the switch verifies that the call can proceed, the switch notifies the DU. The switch notifies the DU to start T-link handshaking for ready to accept data transmission. If the switch does not notify the DU, reorder treatment is applied to the originating DU. The switch denies the call.

The steps for CUG verification appear in the flowchart in figure 1. Each box in the figure is a verification step. Each box has numbers on the upper left corner to explain the purpose of the box:

**Check 1**

determines if the call is between members in the same region. If the call is intraregional, the switch applies CUG ID checking. If the call is not intraregional, the switch must apply interregional compatibility checking.

**Check 2**

determines if the call is between members of public CUGs. The CUG always permits calls between public CUG members.

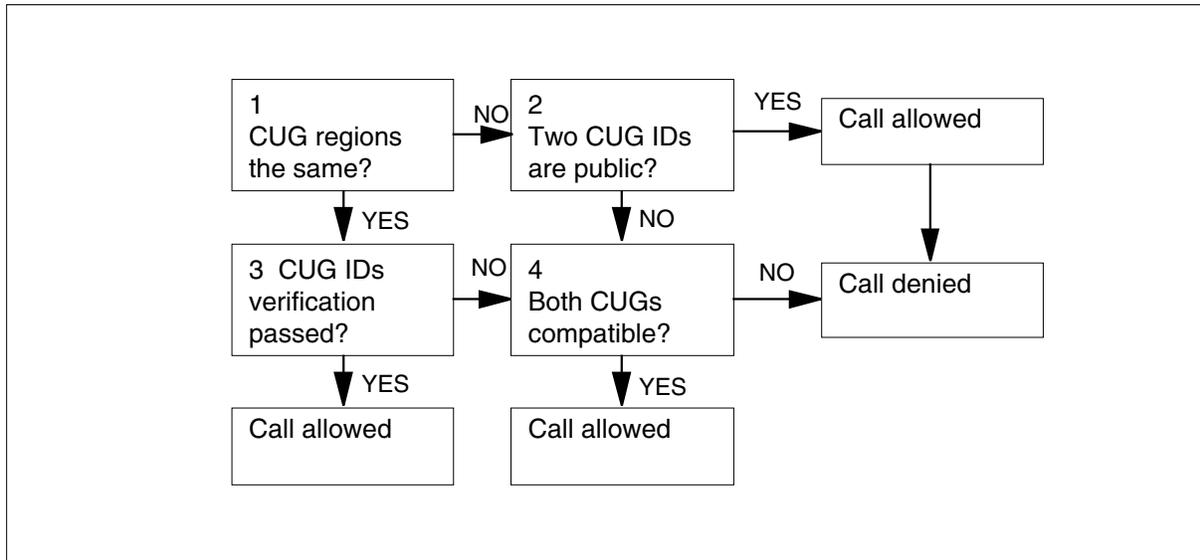
**CUGCOMP** (continued)**Check 3**

is for CUG IDs. The verification passes if one of following conditions exists:

- two CUG IDs are the same
- one CUG ID is a maintenance CUG
- the originating member is a regular CUG and has outgoing access privilege

**Check 4**

determines if a table CUGCOMP defines a compatibility between the two CUGs.

**CUG verification sequence****Datafill sequence and meaning**

You do not have to enter data in other tables before you enter data in table CUGCOMP.

**Table size**

0 to 1021 tuples

**CUGCOMP** (continued)**Datafill**

Datafill for table CUGCOMP appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CUGKEY		see subfields	<i>CUG key.</i> This field contains subfields CUGREGION and CUGID.
	CUGREGION	0 to 63	<i>CUG region.</i> Enter the geographical region of the operating company. The entry in this field must be the same as the entry in office parameter CUG_REGION in table OFCSTD. These entries are a reminder to distinguish between intraregional and interregional compatibilities.  <b>Note:</b> CUG regions 0 to 3 are for future use.
	CUGID	0 to 1023	<i>CUG identity.</i> Enter the number of the CUG. Value 0 is not used. Value 1 is for public CUG (non-CUG) values. Value 2 to 1022 is for regular CUG. Value 1023 is for maintenance purposes.
COMPDAT		vector of a maximum of 8 or \$	<i>Compatibility data.</i> This field contains a vector of a maximum of eight multiples of fields CUGREGION and CUGID. This field specifies the CUGs that are compatible with the CUG specified in field CUGKEY for incoming interregional CUGs. For intraswitch CUGs, the access is mutual. Enter fields CUGREGION and CUGID. Enter a \$ to terminate the vector.
CUGREGION		4 to 63	<i>CUG region.</i> Enter the geographical region of the compatible CUG that can be the same as the region defined in field CUGKEY for intraswitch CUGs. Enter the region of the CUG that can be different for interregional CUGs.
CUGID		2 to 1023	<i>CUG identity.</i> Enter the CUG number of the compatible CUG. See table for a description of CUGID IDs.

---

**CUGCOMP** (end)

---

**Datafill example**

Datafill for table CUGCOMP appears in the following example. In this example, three tuples from an office in region 4 are entered.

The first tuple defines access privileges to members of CUG 2 in regions 7, 6, and 5 with CUG 2 in this office.

In the second tuple, a CUG compatibility appears with other regions. Compatible with CUG 7 of this office are CUG 10 of region 9, CUG 3 of region 8, and CUG 2 of region 5.

In the third tuple, the compatibility between CUGs 1021, 1022, 10, and 9 appears. In intraswitch, access between these CUGs is mutual.

**MAP example for table CUGCOMP**

CUGKEY		COMPDATA					
4	2	( 7	2)	( 6	2)	( 5	2)\$
4	7	( 9	10)	( 8	3)	( 5	2)\$
4	1021	( 4	1022)	( 4	10)	( 4	9)\$

**CUGINFO****Table name**

Closed User Group Information Table

**Functional description**

Table CUGINFO functions as a look-up table to determine Closed User Group (CUG) service parameters for use with the DMS Packet Handler (DMS-PH). The key field is CUGKEY, which contains either a directory number (DN) from table KSETLINE or a common language location identifier (CLLI) from table TRKSGRP. Table CUGINFO serves as a screen for valid CUGs if field CUGSCRN is datafilled in table TRKSGRP.

**Datafill sequence and implications**

The following tables must be datafilled before table CUGINFO:

- KSETLINE
- TRKSGRP

**Table size**

0 to 8100 tuples

**Datafill**

The following table lists datafill for table CUGINFO.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CUGKEY		see subfields	CUGINFO key. This field consists of subfield ENDTYPE.
	ENDTYPE	X25 or X75	Endpoint type. Enter the network layer protocol for the CUG network endpoint interface.

**CUGINFO** (continued)**ENDTYPE = X25**

If the entry in subfield ENDTYPE is X25, datafill refinements DN and CUGIDX as described below.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Explanation and action
	DN	numeric (up to 18 digits)	Directory number. Enter the DN datafilled in table KSETLINE for the CUG data terminal equipment (DTE).
	CUGIDX	0 to 99	CUG index number. Enter the CUG index number used to identify the CUG on the interface.

**ENDTYPE = X75**

If the entry in subfield ENDTYPE is X75, datafill refinements CLLI and CUGIDX as described below.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Explanation and action
	CLLI	alphanumeric (up to 16 characters)	Common language location identifier. Enter the common language location identifier (CLLI) datafilled in table TRKSGRP for the CUG trunk group.
	CUGIDX	0 to 99	CUG index number. Enter the CUG index number used to identify the CUG on the interface.

**CUGINFO** (continued)**All ENDTYPE values**

For all values of field ENDTYPE, datafill fields DNIC, ITLK, and CUGACC as described below.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
DNIC		0000 to 9999	Data network identification code. Enter the data network identification code assigned to the CUG.
ITLK		0 to 65535	Interlock code. Enter the data network interlock code assigned to the CUG.
CUGACC		see subfield	CUG access. This field consists of the subfield ACCESS.
	ACCESS	X25 or X75	Access type. Enter the type of interface on which the CUG access is defined.

**ACCESS = X25**

If the entry in subfield ACCESS is X25, datafill refinements CUGIAB and CUGOAB as described below.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Explanation and action
	CUGIAB	Y or N	CUG incoming access barred. Enter Y (yes) if incoming calls are barred for this CUG on this interface. Otherwise, enter N (no).
	CUGOAB	Y or N	CUG outgoing access barred. Enter Y (yes) if outgoing calls are barred for this CUG on this interface. Otherwise, enter N (no).

**Datafill example**

An example of datafill for table CUGINFO follows.

The first tuple consists of a CUGKEY made up of ENDTYPE X25, DN 722-7630, and CUGIDX 11; DNIC is 1234, ITLK is 2222, ACCESS is X25, incoming access is permitted, and outgoing access is barred.

## CUGINFO (end)

---

The second tuple consists of a CUGKEY made up of ENDTYPE X75, CLLI ISDNX75, and CUGIDX 23; DNIC is 5555, ITLK is 1111, and ACCESS is X75.

### MAP display example for table CUGINFO

	KEY	DNIC	ITLK	CUGACC
X25	7227630	11 1234	2222	X25 Y N
X75	ISDNX75	23 5555	1111	X75

### Table history BCS34

Table CUGINFO was introduced.

**CUSTAB****Table name**

Customer Table

**Functional description**

Table CUSTAB contains the following data for each table assigned in the switching unit:

- the version of table control (old or new)
- the logical (or real or internal) name of the table

Table control automatically produces the first datafill for this table.

The operating company cannot change this table.

**Datafill sequence and meaning**

You must enter data in table SYSDATA before you enter data in table CUSTAB.

**Table size**

0 to 2048 tuples

**Datafill**

Datafill for table CUSTAB appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
TABNAME		alphanumeric (a maximum of 16 characters)	<i>Table name.</i> This field specifies the table name.
OLDTC		Y or N	<i>Old table control.</i> This field specifies if old table control applies. A Y (yes) entry defines that the old table control applies. An N (no) entry defines that the new table control applies.
LOGTAB		alphanumeric (a maximum of 16 characters)	<i>Logical table name.</i> This field specifies the logical, or the real or internal, name of the table.

## CUSTAB (end)

---

### Datafill example

Sample datafill for table CUSTAB appears in the following example.

### MAP example for table CUSTAB

TABNAME	OLDTC	LOGTAB
CUSTAB	N	CUSTAB
CUSTFLDS	N	CUSTFLDS

---

**CUSTACD**

---

**Table name**

Customer Group Automatic Call Distribution Table

**Functional description**

Table CUSTACD allows Automatic Call Distribution (ACD) options and features for each customer group.

To access table ACDENLOG, option ENLOG must be added to the customer group in table CUSTACD, with field INUSE set to Y (yes).

ACD provides an equal distribution of calls to a predesignated set of answering positions called ACD agent positions. If all agents are busy, incoming calls are answered on a first-in, first-out basis and are distributed evenly among the available agent positions.

Feature AD0620 (ACD Agent Login Enhancement) ensures that only ACD personnel assigned to a specific login identification (ID) can use that ID. Screening is accomplished through optional customer group and password restrictions.

For more information on feature AD0620, see table ACDENLOG.

If field CUSTSEL in table ACDLOGIN is set to Y, the system checks if the customer group associated with the login ID matches the customer group of the Incalls key of the set the agent is trying to log into. If the field is set to N (no), no check is made.

Similarly, if field PSWDSEL in table ACDLOGIN is set to Y, the agent must enter a password to log in. If the field is set to N, there is no prompting for a password.

With feature AD0620, table CUSTACD is datafilled for the customer group. If option ENLOG is specified and subfield INUSE is set to Y, the login ID along with the partition number indexes the customer's own partition in table ACDENLOG. Otherwise, the login ID indexes table ACDLOGIN.

In BCS35, ENLOG was the only optional feature available.

For further information on ACD datafill, refer to tables ACDADMIN, ACDENLOG, ACDGRP, and ACDLOGIN.

**Datafill sequence and implications**

Table CUSTENG must be datafilled before table CUSTACD.

## CUSTACD (continued)

### Table size

0 to 4 095 tuples

Table CUSTACD is a variable-length table whose size varies with the number of datafilled customer groups.

### Datafill

The following table lists datafill for table CUSTACD.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric	Customer group name. Enter the name of the ACD customer group.
OPTIONS		ENLOG	Options. Enter ENLOG to allow a customer group to access its own partition number, and datafill refinements PARTNO and INUSE.
	PARTNO	0 to 1024	Partition number. Enter the partition number the customer group accesses in table ACDENLOG.  An entry of 0 (zero) represents table ACDLOGIN and is not a valid entry.
	INUSE	Y or N	In use. Enter Y if feature AD0620 is operational for the specified customer group. Otherwise, enter N.

### Datafill example

The following example shows sample datafill for table CUSTACD.

#### MAP display example for table CUSTACD

CUSTNAME	OPTIONS
E911	(ENLOG 2 Y) \$

**CUSTACD** (end)

---

**Table history**

**APC007**

The entry for field PARTNO in table CUSTACD was changed from 0 to 256 to 0 to 1024.

**BCS35**

Table CUSTACD was introduced.

# CUSTANN

## Table name

Customer Group Announcement Table

## Functional description

Table CUSTANN enables an operating company to assign up to a maximum of 16 different Integrated Business Network (IBN) station intercept treatments for each customer group. The table entries point to one of the route lists in table OFRT.

When an IBN station is removed from service, the Service Order System (SERVORD) prompts for one of the 16 entries assigned to the customer group.

## Datafill sequence and implications

The following tables must be datafilled before table CUSTANN:

- CUSTHEAD
- a routing table (OFR2, OFR3, OFR4, or OFRT)

## Table size

0 to 4096 tuples

Memory is allocated for 16 entries for each assigned customer group.

## Datafill

The following table lists datafill for table CUSTANN.

### 1Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CANNKEY		see subfields	Customer group announcement key. This field consists of subfields CUSTGRP and CANNINDX. This field is the key to the table.
	CUSTGRP	alphanumeric (1 to 16 characters)	Customer group name. Enter the name that is assigned to the customer group. This value must have been previously datafilled in table CUSTHEAD.
	CANNINDX	0 to 15	Customer group announcement index. Enter the index number that is assigned to the customer group announcement.

**CUSTANN** (end)**1Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CANNRTE		see subfields	Customer group announcement route. This field consists of subfields OFCRTE and RTEID.
	OFCRTE	OFR2, OFR3, OFR4, or OFRT	Office route. Enter the office route translation table to which the call routes.
	RTEID	0 to 1023	Route identification. Enter a value that indexes the route to the table specified in subfield OFCRTE.

**Datafill example**

The following example shows sample datafill for table CUSTANN.

**MAP display example for table CUSTANN**

CANNKEY	CANNRTE
IBNTST 1	OFRT 30

# CUSTANNS

## Table name

Customized Announcements Table

## Functional description

Table CUSTANNS allows the mapping of customer groups and announcement identifications (ID) for each user interface (I/F) on the DMS switch, for example, transaction capability application part (TCAP) interfaces, onto specific announcements in the DMS switch. This mapping capability provides the tailoring of a fixed set of terminating and non-terminating announcement IDs (255 each) for each defined user I/F for each customer group.

Only Advanced Intelligent Network (AIN) announcements can be specified in table CUSTANNS.

## Datafill sequence and implications

The following tables must be datafilled before table CUSTANNS:

- ANNS
- DRMUSERS

*Note:* Field CLLI represents an announcement group and must be first datafilled in table ANNS. The common language location identifier (CLLI) and the announcement number (subfield ANNNUM) form the key to table DRMUSERS and must be present in table DRMUSERS before it can be entered in table CUSTANNS.

## Table size

0 to 2 088 960 tuples

## Datafill

The following table lists datafill for table CUSTANNS.

### 1Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
CUSTANN		see subfields	Customer announcement. This is the first and key field of the table and consists of subfields CUSTNAME, ANNTYPE, and ANNID.
	CUSTNAME	alphanumeric	Customer group name. Enter the customer group name as datafilled in table CUSTENG.

**CUSTANNS** (continued)**1Field descriptions (Sheet 2 of 2)**

Field	Subfield	Entry	Explanation and action
ANNCINFO	ANNTYPE	TERM NTERM	Announcement type. Enter TERM if a terminating announcement. Enter NTERM if a non-terminating announcement.
	ANNID	1 to 255	Announcement identification. Enter the announcement identification value that is received on a user I/F, for instance, in a TCAP message.
		see subfields	Announcement information. This is a vector of up to two multiples. This field consists of subfields USER, CLLI, and ANNNUM.
	USER	AIN, USER1	User. Enter the individual application that wants to define customized announcements for its specific use. Enter AIN to define the AIN announcements for the TCAP I/F (TR-402). Enter USER1 for a spare user for one more application that may want to define customized announcements.  <b>Note:</b> Each tuple cannot contain duplicate user values. The tuple can have more than one user value as long as the values are unique
	CLLI	alphanumeric	Common language location identifier. Enter the common language location identifier (CLLI) name of the ANNGRP as defined in table CLLI.
	ANNNUM	1 to 255	Announcement number. Enter the announcement member as datafilled in table DRMUSERS for the ANNGRP being specified in table CUSTANNS.
CONTMARK		+ or \$	Continuation mark. Enter + if additional information for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.

**Datafill example**

The following example shows sample datafill for table CUSTANNS.

---

## CUSTANNS (end)

---

### MAP display example for table CUSTANNS

CUSTANN		ANNCINFO			
GM NTERM 7		(AIN	GMANNS 1)	( USER1	POTSANNS 12)\$
GM TERM 27			( AIN		GMANNS 136)\$
CONTBANK TERM 7			( AIN		CBANKANNS 1)\$

### Error messages

The following error message occurs when the user tries to enter more than one user value for the AIN entry:

The user AIN should not have multiple entries within a tuple.

The following error message occurs when the user tries to enter more than one user value for the USER1 entry:

The user USER1 should not have multiple entries within a tuple.

### Table history

#### CNA13

Added note and error messages related to entries AIN and USER1.

#### BCS34

This table was introduced.

---

**CUSTCONS**

---

**Table name**

Customer Group Attendant Console Option Table

**Functional description**

Table CUSTCONS is required for switches with North American translations and the Integrated Business Network (IBN) feature. Table CUSTCONS lists the attendant console options that are assigned to each customer group that is equipped with attendant consoles. Up to 256 customer groups can be assigned attendant console options. There must be a customer group entry in table CUSTCONS for each customer group that has the field CONSOLES datafilled Y (yes) in table CUSTENG. Although 256 customer groups can have the option CONSOLES set to Y, the maximum number of consoles that can be equipped is 255.

The value of parameter MAXNUCS in table OFCENG should be increased by; (the number of attendant consoles) X 3.

If the Partitioned Table Editor feature has been purchased, the ownership of each tuple in table CUSTCONS is defined in tables DATAOWNER and OWNTAB.

The entries in table DATAOWNER that are applicable to table CUSTCONS are those that have the entry in field TABNAME equal to CUSTGRP and the entry in field CUSTNAME equal to the value of field CUSTNAME in table CUSTCONS.

The entry in table OWNTAB that is applicable to table CUSTCONS is the one that has the entry in field TABNAME equal to CUSTCONS.

For information about attendant console options see the *Translations Guide*.

For related information, refer to table CUSTFAM.

**Meet Me Conference**

If adding a Meet Me Conference number to table MMCONF, table CUSTCON must have datafill for the customer group of that number (field CUSTNAME).

For further information on the Meet Me Conference feature, refer to tables MMCONF and SUBGRP.

**CUSTCONS** (continued)**Datafill sequence and implications**

The following tables must be datafilled before table CUSTCONS:

- AUDIO
- OFCENG

**Table size**

0 to 256 tuples

**Datafill**

The following table lists datafill for table CUSTCONS.

**Field descriptions (Sheet 1 of 3)**

Field	Subfield	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the name that is assigned to the customer group.
OPTIONS		see subfield	<i>Options</i> This field consists the subfield OPTION.
		ACCFB ACCFD ACCPKTIM ACHOLD ACOANN CFIUSPIE CWLNUPD CWNATIM FLASHTHR HLDRECTO ICINUM IMMREL INTERCNB LPKEY NDSCTIM NS2KEY PEGLA REMTKDSPS EC SGRPNUM TIM12	<i>Option</i> Enter the options that are assigned to the customer group.

**CUSTCONS** (continued)**Field descriptions (Sheet 2 of 3)**

Field	Subfield	Entry	Explanation and action
			<p>Each option and its subfield are separated by a blank space. If an option is not provided, then no input for that option is required. Refer to the following pages for a description of datafill for each option.</p> <ul style="list-style-type: none"> <li>• ACCFB: Attendant extending Call Forwarding Busy (CFB)</li> <li>• ACCFD: Attendant console calls to a station with Call Forwarding Don't Answer (CFD) feature are forwarded if station does not answer</li> <li>• ACCPKTIM: Attendant Call Parked Recall Time</li> <li>• ACHOLD: Attendant Call Hold with Music</li> <li>• ACO: Attendant Camp-on</li> <li>• ANN: Announcements</li> <li>• CFISUPIE: Call Forward ISDN User Part (ISUP) or Protocol Independent Environment (PIE) trunks</li> <li>• CWLNUPD: Calls Waiting lamps updated</li> <li>• CWNATIM: Call Waiting, no answer recall</li> </ul>

**CUSTCONS** (continued)

## Field descriptions (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
			<p>Each option and its subfield are separated by a blank space. If an option is not provided, then no input for that option is required. Refer to the following pages for a description of datafill for each option.</p> <ul style="list-style-type: none"> <li>• FLASHTHR: Incoming call identification flash threshold</li> <li>• HLDRECTO: Hold recall total</li> <li>• ICINUM: Number of incoming call identifications</li> <li>• IMMREL: Attendant immediate release</li> <li>• INTERCNB: Stops DN appearing on AC</li> <li>• LPKEY: Number of loop keys</li> <li>• NDSCTIM: No-disconnect time-out</li> <li>• NS2KEY: Night Service double key-hit</li> <li>• PEGLA: Attendant answer delay peg count</li> <li>• REMTKDSP: Remote trunk display</li> <li>• SEC: Secrecy</li> <li>• SGRPNUM: Number of attendant subgroups</li> <li>• TIM12: Time and date</li> </ul>

**CUSTCONS** (continued)**OPTION = ACCFB**

Datafill field OPTION and subfieldt CFBOVCO as shown in Table “Field descriptions for conditional datafill”.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	ACCFB	<i>Option</i> Enter ACCFB.
	CFBOVCO	Y or N	<i>Attendant extending CFB calls override camp-on</i> Enter Y (yes) to indicate that CFB takes precedence over camp-on. Enter N (no) to indicate that camp-on takes precedence over CFB.
<b>Note:</b> Option ACCFB is only valid for camp-on calls. It does not work for Network camp-on calls.			

**OPTION = ACCFD**

This option enables call forwarding. There are no subfields to datafill.

**OPTION = ACCPKTIM**

If the customer group has the Attendant Call Park Recall Time option and the attendant calls parked recall time is other than 60 s, datafill field OPTION and subfield ACCPKTO as shown in Table “Field descriptions for conditional datafill”.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	ACCPKTIM	<i>Option</i> Enter ACCPKTIM.
	ACCPKTO	0 12 to 59 61 to 240	<i>Attendant calls parked recall timeout</i> Enter the time-out period, in 1-s intervals, that an attendant can park a call. The time ranges from 12 to 240 s.  Enter 0 (zero) to specify that the time-out period is infinite. The default value is 60 s. Entries outside this range are invalid.

**CUSTCONS** (continued)**OPTION = ACHOLD**

To select Attendant Call Hold with Music, datafill field OPTION and subfield AUDIOGRP as shown below.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	ACHOLD	<i>Option</i> Enter ACHOLD.
	AUDIOGRP	AUDIO1 to AUDIO512	<i>Audio group</i> Enter the audio group identification. It identifies the announcement or music option that is datafilled in table AUDIO.

**OPTION = ACO**

To select Attendant Camp-on datafill field OPTION and subfields ACORECTO, FLASH, DURATION, ANNMUSIC, and AUDIOGRP as shown below.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

Field	Subfield	Entry	Explanation and action
	OPTION	ACO	<i>Option</i> Enter ACO.
	ACORECTO	12 to 60, or 0	<i>Attendant Camp-on recall time-out</i> Enter the time, in 1-s intervals, after which an unanswered Camped-on call is recalled to the attendant. Enter 0 (zero) to set time to infinite.  Entries outside this range are invalid.
	ACORECTO (continued)		A call cannot be camped on to a station that has either the Call Waiting (CWT) option assigned in the IBNLINES table, or the Malicious Call Hold assigned in the IBNLINES or KSETFEAT tables respectively.
	FLASH	CAMPON or FEATURES	<i>Flash</i> CAMPON indicates that the party that has had a call Camped-on to it can flash to connect to the Camped-on party. FEATURES indicates that the party that has had a call Camped-on to it cannot flash to connect to the Camped-on party.

**CUSTCONS** (continued)**Field descriptions for conditional datafill (Sheet 2 of 2)**

Field	Subfield	Entry	Explanation and action
	DURATION	0 to 15	<i>Duration</i> Enter the time, in 100-ms intervals, that Camp-on tone is to be applied.
	ANNMUSIC	Y or N	<i>Announcement/Music</i> Enter Y (yes) to indicate that announcement or music is to be given to the caller. Enter N (no) to indicate no announcement.
	AUDIOGRP	AUDIO1 to AUDIO512	<i>Audio group</i> If field ANNMUSIC is Y, this field contains the audio group identification. It identifies the music option that is datafilled in table AUDIO under the option CAMPON.

**OPTION = ANN**

This option allows the announcements to be turned on. There are no subfields to datafill.

**OPTION = CFISUPIE**

This option applies to trunk calls that use table IBNXLA NET translation selector. The CFISUPIE option allows calls that forward over ISDN User Part (ISUP) or Protocol Independent Environment (PIE) trunks to an attendant console to terminate to the Call Forward Incoming Call Identifier (ICI) keys. Without option CFISUPIE, those trunk calls that use table INBXLA NET translation selector terminate on the listed directory number (LDN) ICI key on the attendant console. There are no subfields to datafill.

**OPTION = CWLNUPD**

With this option the Calls Waiting (CW) Lamps are updated for every console instead of subgroups CW lamp state. Removing the option turns the CW lamp operation to its original functionality. The default is CW lamp updating based on the subgroup lamp state. There are no subfields to datafill.

**CUSTCONS** (continued)**OPTION = CWNATIM**

To select Call Waiting, no answer recall, datafill field OPTION and subfield CWNATO as shown below.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	CWNATIM	<i>Option</i> Enter CWNATIM.
	CWNATO	0 or 12 to 29 31 to 60	<i>Call waiting/No answer recall timeout</i> This field indicates the maximum time, in 1-s intervals, after which a call that has been call-waited or terminated on a ringing phone is recalled to an attendant. Enter 0 (zero) to set time to infinite.  The default value of this option is 30 s.  Entries outside this range are invalid.

**OPTION = FLASHTHR**

To select incoming call identification flash threshold, datafill field OPTION and subfield ICIFLTHR as shown below.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	FLASHTHR	<i>Option</i> Enter FLASHTHR.
	ICIFLTHR	0 to 255	<i>Incoming call identification flash threshold</i> This field indicates the incoming call identification flash threshold in 4-s increments. If this option is not specified, it is automatically assigned the default value of 255 (1020 s). Enter 0 (zero) to set the threshold to infinite.

**CUSTCONS** (continued)**OPTION = HLDRECTO**

To select the hold recall total option, datafill field OPTION and subfield HLDRECTO as shown below.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	HLDRECTO	<i>Option</i> Enter HLDRECTO.
	HLDRECTO	0, or 12 to 240	<i>Hold recall total</i> Enter the time, in 1-s increments, that a call is held before the recall timer is activated. If set to 0 (zero), time is infinite. Otherwise the range is between 12 and 240 s. Entries outside this range are invalid.

**OPTION = ICINUM**

To set the number of incoming call identifications, datafill field OPTION and subfield NOICIS as shown below.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	ICINUM	<i>Option</i> Enter ICINUM.
	NOICIS	1 to 229	<i>Number of incoming call identification codes</i> The maximum number of incoming call identification codes (CIC) that can be assigned to a customer group is 255. The first 26 (0 to 25) are automatically assigned. Enter in this field the balance of the number of ICI codes that are required.  <b>Note:</b> A later change to NOICIS requires complete removal of all console translations for the attendant console group and then re-adding the console group translations with the new value.

**OPTION = IMMREL**

This option enables the call to be released before the answer is received. There are no subfields to datafill.

**CUSTCONS** (continued)**OPTION = INTERCNB**

This option causes the attendant's display to show no information instead of the calling directory number (DN) for calls that originated outside the attendant's customer group. There are no subfields to datafill.

**OPTION = LPKEY**

To select the number of loop keys, datafill field OPTION and subfield NOACLPKY as shown in Table "Field descriptions for conditional datafill". This option is only required if the attendant consoles for the customer group are not equipped with the maximum number of six loop keys.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	LPKEY	<i>Option</i> Enter LPKEY.
	NOACLPKY	2 to 6	<i>Number of attendant console loop keys</i> Enter the number of loop keys.

**OPTION = NDSCTIM**

To set the no-disconnect time-out, datafill field OPTION and subfield NDSCTO as shown below.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	NDSCTIM	<i>Option</i> Enter NDSCTIM.
	NDSCTO	12 to 29 or 31 to 60	<i>No-disconnect supervision time-out</i> Enter the time-out value in 1-s increments. Entries outside this range are invalid.  The default is 30 s.

**OPTION = NS2KEY**

This option enables night service when the key is hit twice. There are no subfields to datafill.

**OPTION = PEGLA**

To set the attendant answer delay peg count, datafill field OPTION and subfield ANSTIME as shown in Table "Field descriptions for conditional

**CUSTCONS** (continued)

datafill". If the attendant answer delay peg count time is less than 60 s, subfield ANSTIME must contain a value.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	PEGLA	<i>Option</i> Enter PEGLA.
	ANSTIME	1 to 15	<i>Answer time</i> Enter the attendant answer delay peg count time in 4-s intervals, for example, to set 56 s, enter 14.

**OPTION = REMTKDSP**

This option enables remote trunk display. There are no subfields to datafill.

*Note:* When processing a call with REMTKDSP enabled, the system checks to see if a Network CLI Identification Number (NETCLLID) is received in the initial address message. If it is, Table REMCLLI is checked to see if this call terminates at a specific ICI key that is associated with the NETCLLID. Additionally, a check is made to see if a different CLI displays at the IBN attendant console.

**OPTION = SEC**

To select the secrecy option, datafill field OPTION and subfield LOCKOUT as shown below. This option only applies to calls that are held on an attendant loop. It applies to all attendant consoles in the customer group. It cannot be set separately for each console.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	SEC	<i>Option</i> Enter SEC.
	LOCKOUT	Y or N	<i>Lockout</i> Enter Y (yes) to indicate attendant lockout is required; otherwise, enter N (no).

**CUSTCONS** (continued)**OPTION = SGRPNUM**

To set the number of attendant subgroups, datafill field OPTION and subfield NOSGRPS as shown below.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	SGRPNUM	<i>Option</i> Enter SGRPNUM. This option allocates memory for the attendant subgroups in table SUBGRP for each of the customer groups.
	NOSGRPS	1 to 8	<i>Number of subgroups</i> Enter the maximum number of attendant subgroups required for the customer group. The default value for this option is 1. Enter a different value if the number of attendant subgroups is between two and eight.  <b>Note:</b> If the total number of attendant subgroups for all customers groups exceeds 20, then a warm restart is required whenever an additional 20 subgroups are added. This is necessary for allocating store for operational measurements (OM).

**OPTION = TIM12**

To select the 12-h time and date, datafill field OPTION as shown below. A 24-h clock is used if a 12-h clock is not specified.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
	OPTION	TIM12	<i>Option</i> Enter TIM12.

**Datafill example**

The following example shows sample datafill for table CUSTCONS.

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**CUSTCONS** (end)

---

**MAP display example for table CUSTCONS**

CUSTNAME	OPTIONS
PPHN	(SGRPNUM 8) (FLASHTHR 7) (ICINUM 100) (CWNATIM 12) (ACO 12 CAMPON 5 Y AUDIO) (LPKEY 6) (PEGLA 15) (NDSCTIM 30) (HLDRECTO 0) (ACCPKTIM 60) (ACHOLD AUDIO1) (CFISUPIE)\$

## CUSTENG

---

### Table name

Customer Group Engineering Table

### Functional description

Table CUSTENG is required for a switching unit with North American translations and MDC or Residential Enhanced Services (RES) features.

Table CUSTENG lists the values for the engineering parameters and options for each of the customer groups.

If the customer group has option AMACUST assigned to the customer group in table CUSTSMR, and the customer group has the value 0 (zero) in field GROUPID of table CUSTENG, then a warning is given stating that the 0 (zero) value of field GROUPID is not recommended when option AMACUST is in effect.

The above situation could cause confusion at the revenue accounting office (RAO) since all such customer groups would have identical values in module code 120 of their automatic message accounting (AMA) records, making these customer groups impossible to uniquely identify.

For information about customer group names, refer to table CUSTFAM. This table contains one entry for each family name that is defined in table CUSTENG and specifies if the family is private or public.

When a new customer group is added, a unique administration number (ADNUM) is defined in the ADNUM field in table CUSTENG. The Station Message Detail Recording (SMDR) billing system looks at the value in the ADNUM field to represent a particular customer group for SMDR call records. A customer group name remains associated with the same customer group number, derived from the value in field ADNUM, regardless of any changes to the order of table CUSTENG tuples.

**Note:** When upgrading from software prior NA003, table CUSTENG requires a patch on the dump side prior to the ONP if the office has SMDR billing. This allows a stable mapping between a customer group name and a customer group number for SMDR billing records. If the office does not apply this patch, ONP sets its own values for the ADNUM field and changes the customer numbers in SMDR billing.

The following table shows the input required for each customer group in a switching unit with North American translations and RES. Field

**CUSTENG** (continued)

CUSTNAME is equal to the 1- to 16-character name assigned to the residential group.

**Required datafill for switches with North American translations and feature AG0508**

CUST-NAME	ADNUM	NON-COS	NO-IBNTMT	CON-SOLES	CUS-TYPE	GROUP-ID	OPTIONS
customer-defined	1	1	0	N	PUBLIC	0	\$

The following table shows the default values that are automatically entered in table CUSTENG, if the switching units have POTS data lines.

**Required datafill for switches with POTS**

CUST-NAME	ADNUM	NON-COS	NO-IBNTMT	CON-SOLES	CUS-TYPE	GROUP-ID	OPTIONS
POTS-DATA	1	1	1	Y	PUBLIC	0	\$

**Datafill sequence and implications**

The following tables must be datafilled before table CUSTENG:

- CUSTFAM
- VMXTAB (if option VMX [voice message exchange] is required)
- NARDATA (if option NARS [network access registers] is required)

**Table size**

0 to 4096 tuples

There is a maximum of 256 customer groups with attendant consoles (AC), or a maximum of 3840 customer groups without AC.

**CUSTENG** (continued)**Datafill**

The following table lists datafill for table CUSTENG.

**Field descriptions (Sheet 1 of 5)**

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters )	<i>Customer group name</i> Enter the name that is assigned to the customer group.
ADNUM		0 to 4095	<i>Administration number</i> Enter a unique number assigned to this customer group.  <b>Note:</b> The operating company cannot datafill values above 4080 for the ADNUM field in table CUSTENG. These values are reserved for system-defined customer groups.
NONCOS		1 to 511	<i>Number of network class of service numbers</i> Enter the highest numbered network class of service (NCOS) that is assigned to the customer group during the engineering interval +1. Each NCOS requires 14 words of memory.
NOIBNTMT		0 to 63	<i>Number of integrated business network treatments</i> Enter the number of Integrated Business Network (IBN) treatments required for this customer group.
CONSOLES		Y or N	<i>Attendant consoles</i> Enter Y (yes) if customer group can be equipped with attendant consoles. Otherwise, enter N (no).  <b>Note:</b> Up to 256 customer groups can be assigned attendant console options.
DOMAIN		see subfield	<i>Domain</i> This field consists of subfield CUSTTYPE.

**CUSTENG** (continued)

## Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	CUSTTYPE	FAMILY PRIVATE or PUBLIC	<i>Customer group type</i> Enter the type of customer group: FAMILY, PRIVATE, or PUBLIC. If FAMILY is entered, datafill refinement FAMILY. Otherwise, go to field GROUPID.
	FAMILY	alphanumeric (1 to 16 characters)	<i>Family</i> If the entry in subfield CUSTTYPE is FAMILY, datafill this refinement. Enter the name of the family to which the customer group belongs. The family name must be assigned in table CUSTFAM.
GROUPID		0 to 4095	<i>Customer group identification number</i> Enter a unique number assigned to this IBN customer group. This number is used by IBN option AMACUST in table CUSTSMR for billing purposes. The default value is 0 (zero).
OPTIONS		see subfield	<i>Options</i> This field consists of subfield OPTION.

**CUSTENG** (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	ACDCQLMT CONF6C NARS PKTSUP SIM1A VMX	<p><i>Option</i></p> <p>Enter up to eight options that are assigned to the customer group. Each option and its refinement is separated by a blank space. Use as many records as required to datafill the list of options and associated subfields. If an option is not provided, then no input for that option is required. If less than eight options are required, end the list with a \$ (dollar sign). No further datafill is required.</p> <p>Enter ACDCQLMT to set the call queue limit for all the Automatic Call Distribution (ACD) groups defined in table ACDGRP on a customer group basis. Datafill refinement CUSTLMT on page .</p> <p>Enter CONF6C if the number of six-port conference circuits that can be allocated to the customer group at any one time is less than the total quantity of six-port conference circuits. Datafill refinement MAX_NO_CNF6C on page . If this option is not provided, all six-port conference circuits can be allocated to the customer group at any one time.</p> <p>Enter NARS to provide network access registers for the customer group. Datafill refinement NARACTIVE on page .</p> <p>Enter PKTSUP if the intra-basic business group (INTRABBG) billing suppression is activated for the DMS package handler (PH) (DMS-PH) product. The INTRABBG call must take place within the same customer group, within the same office, and within the same DMS switch. Datafill refinement PKTSUP on page .</p>

**CUSTENG** (continued)

## Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION (continued)		<p>Enter SIM1A to forward a call to a busy remote station that has the Call Terminating option. This allows the DMS-100 to emulate the 1AESS Call Forward Don't Answer (CFD) option. No further datafill is required.</p> <p>Enter VMX if the voice message exchange subscribers in this customer group can use the Call Forward Universal option to forward calls to their VMX mailboxes. Datafill refinement VMXINDX on page .</p>
	CUSTLMT	0 to 32767	<p><i>Customer group automatic call distribution call queue size limit</i></p> <p>If the entry in subfield OPTION is ACDCQLMT, datafill this refinement. Enter the customer group ACD call queue size limit.</p>
	MAX_NO_ CNF6C	0 to 2047	<p><i>Maximum six-port conference circuits</i></p> <p>If the entry in subfield OPTION is CONF6C, datafill this refinement. Enter the maximum number of six-port conference circuits that can be allocated to the customer group at any one time.</p>
	NARACTIVE	see subfield	<p><i>Network access registers active</i></p> <p>If the entry in subfield OPTION is NARS, datafill this refinement. This field consists of subfield NARACT.</p>
	NARACT	Y or N	<p><i>Network access registers active</i></p> <p>If the entry in subfield OPTION is NARS, datafill this subfield. Enter Y if the NARS option is active for the customer group and datafill refinements NARIN, NAROUT, and ALTHROUT. Otherwise, enter N. No further datafill is required.</p>

**CUSTENG** (continued)

## Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NARIN	alphanumeric (1 to 16 characters)	<i>Network access registers incoming calls</i>  If the entry in subfield OPTION is NARS and the entry in subfield NARACT is Y, datafill this refinement. Enter the NAR name of incoming calls through NARS as datafilled in table NARDATA.  The default value is NILNAR.
	NAROUT	alphanumeric (1 to 16 characters)	<i>Network access registers outgoing calls</i>  If the entry in subfield OPTION is NARS and the entry in subfield NARACT is Y, datafill this refinement. Enter the NARS name of outgoing calls through NARS as datafilled in table NARDATA.  The default value is NILNAR.
	ALTHROUT	Y or N	<i>Throttle all outgoing calls</i>  If the entry in subfield OPTION is NARS and the entry in subfield NARACT is Y, datafill this refinement. Enter Y if all outgoing calls are throttled. Otherwise, enter N.
	PKTSUP	Y or N	<i>Packet suppression</i>  If the entry in subfield OPTION is PKTSUP, datafill this refinement. Enter Y if INTRABBG calls are not billed. Billing suppression is turned on and no records are generated. Enter N if INTRABBG calls are billed. Billing suppression is turned off and records are generated.
	VMXINDX	0 to 255	<i>Voice message exchange</i>  If the entry in subfield OPTION is CONF6C, datafill this refinement. Enter the number corresponding to the entry in table VMXTAB that is applicable to this customer group.

**Datafill example**

The following example shows sample datafill for table CUSTENG.

**CUSTENG** (continued)

The example shows the following information:

- Customer group PRADEFAULT on a switching unit with North American translations and the IBN feature.
- The administration number is 5.
- The maximum quantity of NCOS numbers required is 30.
- The maximum quantity of IBN treatment numbers required is 1.
- The customer group has attendant consoles.
- The customer group is private.
- The customer group identification number is 0.
- No options are assigned to the customer group.

**MAP display example for table CUSTENG**

CUSTNAME	ADNUM	NONCOS	NOIBNTMT	CONSOLES	DOMAIN	OPTIONS
PRADEFAULT	5	30	1	Y	PRIVATE	0

**Table history****NA011**

Removed field MASCON.

**NA003**

The Administration Number (ADNUM) field was added.

**BCS36**

Added table size. Corrected field name MAX\_NO\_CNF6C. Added option NARS and its refinements.

**CUSTENG** (end)

**Supplementary information**

Whenever a CUSTENG tuple is being added or changed, table control performs certain checks. The following table lists the resulting error and warning messages.

**Error messages for table CUSTENG**

Error message	Explanation and action
<p>ADNUM must be unique. ADNUM value of # is already in use by another customer group. You can use the next available ADNUM value: #. where # is a number.</p>	<p>The value entered in the ADNUM field is already in use by another customer group. Enter the next available ADNUM value.</p>
<p>ADNUM value of 0 is being replaced with #, the next available ADNUM value.</p>	<p>A tuple was added to table CUSTENG with an ADNUM value of 0. Table control automatically replaces 0 with the lowest ADNUM value currently not in use.</p> <p><b>Note:</b> Although this automatic replacement does not allow the addition of a tuple with a 0 value, 0 is still a valid ADNUM value. Customer groups whose customer number was 0 prior to the implementation of this feature preserve their customer number. Table control does not perform the automatic replacement when a tuple's ADNUM is changed or when the ONP adds a tuple.</p>
<p>WARNING! You are changing the customer group number for SMDR billing. This change will impact downstream processes that use SMDR billing records.</p>	<p>An existing customer group's ADNUM value was changed.</p>
<p>ADNUM values 4080 and above are reserved for system-defined customer groups. You can use the next available ADNUM value: #.</p>	<p>An ADNUM value greater than or equal to 4080 was entered. Enter the next available ADNUM value.</p> <p><b>Note:</b> Table control only prints this error message when the end user requests the transaction.</p>

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**CUSTFAM**

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**Table name**

Customer Group Family Table

**Functional description**

Table CUSTFAM is required for a switching unit with North American translations and the Integrated Business Network (IBN) feature.

This table contains the family names that are assigned to groups of customer groups and specifies if the family is private or public.

This table contains one entry for each family name that is defined in table CUSTENG.

**Datafill sequence and implications**

The following tables must be datafilled in the following order prior to table CUSTFAM:

- CUSTFAM
- CUSTENG
- CUSTCONS
- CUSTHEAD
- CUSTNTWK
- CUSTSMDR
- CUSTSTN

**Table size**

Up to 64 family names can be specified in this table.

Memory is dynamically allocated as customer groups are defined. The maximum number of customer groups that can be assigned with attendant consoles is 256.

Before consoles can be added to the customer group, all reference to the customer group must be removed from all tables. Table CUSTHEAD is the last table from which the data is removed. Re-enter the data in table CUSTENG with field CONSOLES equal to Y (yes).

Table ATTCONS contains the information on the assignment of attendant consoles to the customer group.

**CUSTFAM** (continued)

As customer groups are deleted, data store is returned to a pool of available store for this table. The data store is not deallocated outright.

**Datafill**

The following table lists datafill for table CUSTFAM.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
FAMNAME		alphanumeric (1 to 16 characters)	Family name. Enter the customer family name.
FAMTYPE		PRIVATE or PUBLIC	Family type. Enter the type of customer group family, that is, PRIVATE or PUBLIC.

**Datafill example**

The following example shows sample datafill for table CUSTFAM.

The example shows a private family type with a family name BNR.

**MAP display example for table CUSTFAM**

FAMNAME	FAMTYPE
BNR	PRIVATE

**Supplementary information**

This section provides information on datafilling table CUSTFAM for specific applications, and product descriptive information related to table CUSTFAM.

The seven IBN customer group tables follow:

- CUSTCONS (Customer Group Console)
- CUSTENG (IBN Customer Group Engineering)
- CUSTFAM (IBN Customer Group Family)
- CUSTHEAD (IBN Customer Group Head)

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**CUSTFAM** (continued)

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- CUSTNTWK (Customer Group Network)
- CUSTSMR (Customer Group Station Message Detail Recording)
- CUSTSTN (Customer Group Station)

All the above tables are required for a customer group in a switching unit with North American translations and the IBN feature.

Only tables CUSTENG, CUSTHEAD, and CUSTSTN are required for a customer group in a switching unit with North American translations and the Residential Enhanced Services (RES) feature.

Each group of IBN stations is assigned to a customer group. Each customer group is identified by a unique 1- to 16-character name. The maximum number of customer groups for each switching unit is 4096.

A customer group can be designated as private, public, or family. For a private customer group, features are allowed only within the boundary of the customer group.

For a public or private customer group, features are allowed if the originator's translation data establishes that the call between originator and terminator is intragroup. If the domain of the terminator is public, the call is always intragroup. If the domain of the terminator is private, the call is intragroup only if the originator belongs to the same private group or family.

If customer group is designated as family, the family type can be either public or private.

For a public family, features are allowed if the originator's data is set to establish that the call is intragroup.

For a private family, features are allowed within the combined boundaries of the set of customer groups belonging to the family.

By choosing one of the above three types, a customer group can ignore customer group transparency (private) and remain an isolated private branch exchange (PBX), achieve feature transparency with all the customer groups (properly datafilled) on the switch (public), or achieve feature transparency with a selected subset of customer groups (family).

## **CUSTFAM** (continued)

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### **Line features**

The line features that operate within the boundaries of a customer group follow:

- Call Back Queuing (Basic)
- Call Forward Busy
- Call Forward Don't Answer
- Call Forwarding Intragroup
- Call Transfer Station
- Call Hold
- Call Park
- Call Pickup
- Call Waiting
- Call Waiting-Originating
- Conference Call Announcement
- Dial-Call Waiting
- Directed Call Pickup-Barge-In
- Directed Call Pickup-Non Barge-In
- Direct Inward Switch Access (DISA)
- Do Not Disturb
- Executive Right Of Way
- Flexible Station Controlled Conference (500/2500 sets)
- Meet-Me Conference
- Off-Hook Queuing
- OHQ, CBQ for OUTWATS VFG
- Permanent Hold (500/2500 sets)
- Preset Conference
- Ring Again
- Station Message Waiting
- Three-way Calling
- Toll Call Forwarding
- Uniform Call Distribution

**CUSTFAM** (end)**Attendant features**

The attendant features that operate within the boundaries of a customer group family follow:

- Attendant Call Waiting
- Attendant Call Transfer
- Attendant Camp-on
- Attendant Conference
- Attendant Hold
- Attendant Message Waiting
- Attendant Service
- Attendant Set Up Conference: 10 or more conferees
- Auto Attendant Recall
- Busy Verification Line
- Busy Verification Trunks
- Interposition Calls and Transfers
- Multiple Console Operation
- Night Service (fixed)
- Night Service-flexible
- Three-way Calling
- Through Dialing
- VFG TGB on A/C

The following tables and selectors contain the intragroup flags.

<b>Table</b>	<b>Selectors</b>
INBXLA	CUTTD TTTT ATTO NET
TRKGRP	IBNTI IBNTO IBNT2
VIRTGRPS	IBN
DNROUTE	DISA

## CUSTHEAD

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### Table name

Customer Group Head

### Functional description

Table CUSTHEAD is required for a switching unit with North American translations and feature package NTX100AA (Integrated Business Networks [IBN]) or basic feature package NTXA94AA (Residential Enhanced Services [RES] features), or for a switching unit (international) with universal translations and Integrated Business Services (IBS).

For each customer group, table CUSTHEAD lists the names assigned to the blocks of data in table IBNXLA (IBN Translations) that store the data for the translation of digits. These digits originate from an IBN station, attendant console, incoming, or incoming side of a two-way trunk group.

For a customer group with North American translations and the IBN feature, these blocks of data are called customer, feature, and octothorpe translators and are datafilled in table IBNXLA.

For a customer group with North American translations and the RES feature, these blocks of data are called customer or feature translators and are datafilled in table IBNXLA.

The customer translator translates all access codes that have a leading numeric digit. Translation uses this data when pretranslation of digits is not required, or when pretranslation of digits is required and the preliminary translator forwards the call to the customer translator for further digit translation.

The feature translator translates all access codes that have a star (\*) as the leading digit.

The octothorpe translator translates all access codes that have an octothorpe (#) as the leading digit.

The name assigned to the block of data in table DIGCOL (IBN Digit Collection) that specifies the digit collection required for the IBN or RES stations assigned to the customer group is listed in this table.

For a customer group with North American translations and the IBN feature, enter data in all the fields.

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**CUSTHEAD** (continued)

---

For each customer group in a switching unit with North American translations and RES, the following input is required:

- Field CUSTNAME must be equal to the name assigned to the residential group.
- Field CUSTXLA must be equal to the name assigned to the customer translator for the residential group.
- Field DGCOLNM must be equal to the name assigned to the digit collection table for the residential group.
- Option FEATXLA must be equal to the name assigned to the feature translator for the residential group.

For examples of datafill, refer to the "Datafill example" section.

If the Partitioned Table Editor feature was purchased, the ownership of each tuple in table CUSTHEAD is defined in tables DATAOWNER (Data Owner) and OWNTAB (Ownership).

The entries in table DATAOWNER that are applicable to table CUSTHEAD are those that have the entry in field TABNAME equal to CUSTGRP and the entry in field CUSTNAME equal to the value of field CUSTNAME in table CUSTHEAD.

The entry in table OWNTAB that is applicable to table CUSTHEAD is the one that has the entry in field TABNAME equal to CUSTHEAD.

For related information, refer to table CUSTFAM (Customer Group Family).

### Options

The customer group can be assigned one or more of the following options.

#### **Account code capability (ACCT)**

This option enables a station user to enter a cost accounting or client billing code into the Station Message Detail Recording (SMDR) record by dialing a feature access code and an account code. The ACCT activation methods are voluntary, flash, and compulsory.

If the subscriber is prompted to enter the account code by the switch, see option Account Code Required (ACR). The prompt for the account tone consists of 440 Hz at -13 dBm. The cadence provides two 200-ms tone bursts separated by 200 ms, followed by a steady tone.

The account code can be from 2 to 14 digits in length. Within a customer group, the number of digits in the account code can be fixed or variable.

## **CUSTHEAD** (continued)

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For NA005 and up, MDC Variable CDAR allows variable-length account codes on a per feature access code basis (for voluntary and flash activation methods only) datafilled through table VARACCT (Variable Account Codes). MDC Variable CDAR is controlled by software optionality control (SOC), so it cannot be activated until tariff conditions are met.

The Star in Account Code First feature improves the voluntary account code. The account code first is another name for voluntary account code. The star or asterisk is a valid digit in account code first. The enhancement allows the customer to choose the asterisk as a valid digit for account code first or for reset dialing. Call origination is another name for reset dialing. The option STARACPT (star accept) in table CUSTHEAD (Customer Group Head) for option ACCT determines whether the asterisk is a valid digit or a call origination.

The subfield POTSDGT (Plain Old Telephone Service Digit Collection) improves feature voluntary account code. The enhancement allows the operating company personnel to select POTS digit collection or Meridian Digital Centrex (MDC) digit collection for the called number digits. The operating company personnel enters N (no) for subfield POTSDGT to select MDC digit collection. The operating company personnel enters Y (yes) for subfield POTSDGT to select POTS digit collection. The default value for the subfield POTSDGT is N.

### **Authorization or account code last (ACR)**

This option is required if the caller is to enter the account code or authorization code or combined account and authorization code after dialing the called number.

If the caller uses an authorization or combined authorization and account code, option AUTH is also required.

If the caller uses an account code, option ACCT is also required.

If the authorization code is to be used for automatic route selection, ARS must be selected.

If the authorization code is to be used for ARS and to be entered last, AUARS must be selected.

This option also specifies the treatment number in table IBNTREAT (IBN Treatment) to which calls with invalid account or authorization codes are to be routed.

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**CUSTHEAD** (continued)

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Call routing is done prior to the input of the ACR. Call routing cannot be changed after the input of the ACR, but can be blocked if the ACR is invalid.

**Authorization or account code last announcement (ACRANN)**

This option is required only if an announcement is provided to prompt for the account code, authorization, or combined account and authorization code after the caller has dialed. This option also specifies the code (CLLI) of the announcement.

**Authorization codes (AUTH)**

This option defines the name assigned to the customer group in tables AUTHCDE (Authorization Code) and AUTHPART (Authorization Partition).

This option specifies if the user of an authorization code must indicate end of dialing by keying in an octothorpe (#) or awaiting the expiration of an interdigit time-out.

If an authorization code is required for direct inward switch access (DISA), the user cannot indicate end of dialing by keying in an octothorpe, but must wait for the expiration of the interdigit time-out. If the authorization code is a combined authorization and account code, the user can indicate the end of dialing by keying in an octothorpe, or by waiting for the interdigit time-out.

If the authorization code is to be entered after the called number has been dialed, see option ACR.

The Call Forwarding Remote Access (CFRA) authorization partition defined in table AUTHPART must not be used with the AUTH option in table CUSTHEAD. CFRA authorization partition table AUTHPART is for CFRA use only.

**Authorization code enforcement (AUTHENF)**

The authorization code enforcement (AUTHENF) option prevents users from completing calls with an invalid AUTHCDE. AUTHENF enforces AUTHCODE validation when used with the AUHCDE first feature. AUTHENF is enabled at the customer group level. The user receives a treatment defined as type EXTENDED\_TREATMENT that is similar to the one used in AUTHCDE last.

**Basic business group ISDN (BBGI)**

This option allows operating companies to produce detailed AMA records for ISDN basic rate interface (BRI) BBG facilities and services. Option BBGI allows operating companies to generate AMA records for the office, customer group, or each line.

## **CUSTHEAD** (continued)

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This option produces module code 074, ISDN basic business group. This module code identifies the

- BBG ISDN (BBG-I) call type
- billing number of the BBG customer
- associated virtual facility group (VFG) or trunk group number (TGN) used in the call

Option BBGI appends module code 074 to all BBG-I enabled BRI AMA records.

Option ISDNBBGBILL in table AMAOPTS (Automatic Message Accounting Options) permits activation or deactivation of this feature for the office or switch. To deactivate BBG-I billing for the office, set option ISDNBBGBILL to OFF in table AMAOPTS. Assign option ISDNBBGBILL a value of ON to permit BBG-I AMA recording office wide.

Option BBGI in table CUSTHEAD and option BBGI Y (or BBGI N) in table KSETFEAT (Business Set and Data Unit Feature) complete the primary user interface. These two options allow the operating company to activate or deactivate this feature for a customer group or for each line. Use of option BBGI in table KSETFEAT overrides the BBGI option set in table CUSTHEAD for the customer group.

### **BT7 emergency calls for BTUP**

This option provides emergency call service on a DMS-100 switch over BTUP (United Kingdom variant of national user part). The service is a fast and reliable means of connecting a caller in an emergency situation, through an operator, to the appropriate authorities.

The 999 code is used to access police, ambulance, coast guard, and fire brigade services, but this code could change to an internationally agreed 112 EC-regulation code.

For BT7 emergency calls, the entry EMERCALL in field ANNCLLI of table CUSTHEAD specifies the emergency call feature.

### **BTUP calling and called party category (BTUPCPC)**

This option enables the calling and called party category to be extracted from table CUSTHEAD for the BTUP messages initial address message (IAM), initial and final address message (IFAM), ACM, and ACI (3 and 4). Option BTUPCPC is available for BTUP packages and used in line-BTUP-line calls only.

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**CUSTHEAD** (continued)

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**BTUP V2+ CLI, CPC**

This feature adds to the BTUP version 2 protocol presently used on a DMS-100 switch to support the BTUP version 3 protocol handling of Calling Line Identification (CLI), Calling and Called Party Category (CPC), and release mapping.

The following new V2+ fields are added in the existing template for the IAM and IFAM messages:

- Originating Line Identity Indicator (OLI) indicates whether the optional field Calling Line Identity (CLI) Indicator is included as an optional field in the IAM and the IFAM.
- Calling Line Identity (CLI) Indicator
- CCITT No.7 BTUP Version Indicator
- Network Translated Address Indicator indicates whether the original called address has been translated within the network. This field is set by the node translating the address of the call.

These indicators take the place of spare bit(s) fields.

**Category routing (CATRTE)**

This option is used to allow charge category routing in IBN translations.

**Comfort tone (COMFEXCL)**

This option is required in a switching unit if comfort tones are to be excluded for the given customer group.

If this option is not provided, comfort tones are applied if the COMFORT option in table NSCDEFS (Number Service Code Database Response Timeouts) is specified.

Comfort tones are inserted at specific intervals of call setup to reassure the subscriber that the service switching point (SSP) call is in progress. This reduces the number of subscriber abandons and retries if the post-dial delay is long.

Comfort tones are provided for the following SSP services: private virtual network (PVN), Enhanced 800 Service (E800), and 800 Plus Service (800+).

Comfort tones are not applied to attendant consoles, operator positions, and ISDN primary rate access (PRA) trunks.

Comfort tones must not be used for PVN calls with special dial tone (SDT) and no announcements since the two tones can confuse the caller.

## **CUSTHEAD** (continued)

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### **Call park (PRK)**

This option allows stations that have feature BV0534 (Call Park) or BV1535 (Directed Call Park) (DCPK) assigned in tables IBNLINES (IBN Line Assignments) or KSETFEAT (Business Set and Data Unit Feature) to give announcements or music to the caller if a call is parked. The parked call can then be retrieved from any station by dialing a feature code and the directory number (DN) against which the call is parked.

The announcement or music is datafilled in table AUDIO for option CPARK of the chosen audio group specified.

The maximum number of calls that can be parked by the system is 32 767. If the switching unit has a large number of customer groups with this feature, the maximum number for each customer group must be limited in field CPKMAXNO so that all groups can have access to the feature.

When the customer group park queue overflows, all stations attempting to park a call are routed to treatment CGRO (customer group resource overflow) in the appropriate subtable of table TMTCNTL (Treatment Control).

When the system park queue overflows, all stations attempting to park a call are routed to treatment NOSR (no software resource) in the appropriate subtable of table TMTCNTL.

If this option is not provided, the default value for the maximum number of calls that can be parked at any one point in time is 100.

For the maximum time an attendant can park a call, see option ACCPKTIM in table CUSTCONS (Customer Group Attendant Console Option).

See option CPARK in table CUSTSTN (Customer Group Station Option) for the call park recall time-out.

### **Called number parameter routing (CDNRTE)**

This option activates table CDNIXLA to route the translation according to the CDNNAME (called number name) provided by table CDNCHAR. This option is also available in table NCOS, where it activates the functionality only for the particular combination of customer group and NCOS.

### **Calling party category (CPCRTE)**

This option enables routing according to the CPCNAME (calling party category name) provided by table CPCIXLA. The option applies to the entire customer group.

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**CUSTHEAD** (continued)

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**Cut-through dial time-out (CUTIMOUT)**

This option is required with the Cut-through Dial feature and specifies how long the feature waits for digits before assuming that dialing is complete. If the user dials no digits before the feature times out, the feature times out and the user leaves the cut-through dial mode.

The waiting time is from 4 to 10 s.

If this option is not provided, the waiting time defaults to 4 s.

**Cut-through dial pause (CUTPAUSE)**

This option is required with the Cut-through Dial feature and specifies how long the feature pauses when a star (\*) is dialed.

The pause time is from 1 to 7 s.

If this option is not provided, the pause time defaults to 3 s.

**DISA feature announcement code (DISAFAC)**

This option specifies the announcement CLLI that prompts for the DISA feature access code.

The announcement CLLI must be added to tables ANNS (Announcement) and ANNMEMS (Announcement Members) before being added to option DISAFAC.

No predefined announcement is supplied. The operating company records the announcement on RAM or EEPROM cards. The recommended announcement is "Please enter your feature access code now."

If no announcements are available in an office providing both DISA and remote access PVN, the DISA directory numbers must be defined so that no announcement prompt is required (that is, one DISA DN is dedicated to DISA and one DN is dedicated to remote access PVN).

If the recommended announcement text is used, it is assumed that the subscriber already knows what feature access codes can be entered. The operating company can provide a more informative announcement such as "Please enter X to access DISA or Y to access PVN now."

**Expensive route delay time (ERDT)**

This option specifies the time that elapses from the end of the receipt of expensive route warning tone to the call terminating on the expensive route.

If no input is provided for this option, the time defaults to 6 s.

## **CUSTHEAD** (continued)

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### **Emergency stand-alone (ESA) prefix translator (ESAPXLA)**

This option is required if the customer group requires an ESA prefix translator.

An ESA prefix translator defines prefix translation data for remote line concentrating modules (RLCM) and remote cluster controllers (RCC) operating in stand-alone mode.

This option specifies the name that is assigned to the translator in table ESAPXLA (Emergency Stand-Alone Prefix Translation).

Table ESAPXLA contains special prefix translation data used for POTS and IBN customer groups. Independent prefix data can be entered for POTS and for each IBN customer group on each remote site.

For all prefix translator names, except one, the name is specified by the operating company. The only exception is for POTS. POTS can also have prefix translation. The prefix name is hard-coded to ESAPOTS. All nodes that want prefix translation for POTS use ESAPOTS as the prefix name and specify the node.

Table ESAPXLA must be datafilled before table CUSTHEAD.

### **External network class of service number (EXTNCOS)**

This option specifies the external NCOS number for calls that originate from outside the customer group (for example, DISA).

If this option is not provided, it defaults to NCOS number 0.

*Note:* Attendant consoles use option EXTNCOS on rerouted calls that terminate to a trunk, announcement, or voicemail system. If option EXTNCOS is 0, and NCOS 0 is datafilled to be restricted, calls may not terminate.

### **Feature translator (FETXLA)**

A feature translator is required if one or more of the access codes, other than the speed calling access codes \*0 to \*9 or \*00 to \*69, has a star (\*) as the leading digit.

If codes \*0 to \*9 or \*00 to \*69 are assigned as access codes, they cannot be used for speed calling.

If this option is chosen, the translator name must be defined in table XLANAME (Translator Names). The usage of the translator name can be optionally customized in table IBNXLA. Table IBNXLA is datafilled when the star (\*) is followed by digits.

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**CUSTHEAD** (continued)

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**International pretranslator (INPRXLA)**

This option is used only by the DMS-300 switch to index table INPRTRNS (International Pretranslator).

**Loudspeaker paging answerback (LPA)**

This option is required if a customer group wants the Loudspeaker Paging Answerback (LPA) feature. The LPA feature allows a user to put a caller on hold and page the called person or department. The paged party answers the page with an answerback code, and is either connected to the user or connected directly to the caller.

The LPA feature allows users to control the paging sequence and offers a simpler activation of paging. LPA is available only to MDC subscribers.

**Intergroup line screening code checking (LSCCHECK)**

This option provides line screening code checking for intergroup calls.

**Music on hold (MHOLD)**

This option provides the ability to specify a combination of announcement and music for calls waiting in the attendant queue.

The combination of announcement and music is datafilled in table AUDIO (Audio Interlude) under the feature ATTQ (Attendant Queue) of the specified audio group.

The threshold time, in seconds, before music on hold applies, is specified. If the threshold time is exceeded by the attendant service time, music on hold is applied automatically.

**Name delivery time-out (NDTIMOUT)**

This option provides a time-out value in the Custom Local Area Signaling Service (CLASS) Calling Name Delivery (CNAMD) feature.

CLASS CNAMD enables delivery of a calling party's name to the terminal of a CLASS CNAMD subscriber.

For National ISDN Primary Rate Interface (NIPRI), the TCAP timer is assigned on a customer group basis. The PRI TCAP\_CNAM option in table LTDATA is assigned on an LTID. The corresponding LTID in table LTCALLS must have the respective customer group provisioned to set the timer. A customer group can only be allocated to an LTID with an IBN translations route. The customer group attributes control the TCAP timer in table CUSTHEAD.

## **CUSTHEAD** (continued)

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### **Octothorpe translator (OCTXLA)**

This option is required if the customer group is assigned an octothorpe translator in table IBNXLA for abbreviated dialing.

All the one- or two-digit codes for this translator must be prefixed by an octothorpe (#).

A maximum of ten terminators (500/2500 sets, business set keys, or business set abbreviated dialing keys) can be reached by a single-digit (#0 to #9) octothorpe translator, and a maximum of 100 terminators can be reached by a double-digit (#00 to #99) octothorpe translator.

### **Off-hook queuing announcement (OHQA)**

This option is required for the Off-hook Queuing Announcement feature, and specifies the announcement that informs the caller that off-hook queuing is being offered.

### **Preliminary translator (PLMXLA)**

This option is required if the customer group is assigned a preliminary translator in table IBNXLA.

### **Private TCAP translator (PRITCXLA)**

This option is required if the customer group is assigned a private transaction capability application part (TCAP) translator.

This option must never be assigned to RES customer groups since private network TCAP translations are not required for these groups.

### **Public network access (PUB\_NET\_ACC)**

This option supports the provisioning of a line attribute index and public network access digits for the AIN response translation simplification feature.

The line attribute index is used in the digit conversion process for national calls. The public network access code is prefixed to enable reuse of existing public network access datafill in table IBNXLA.

Option PUB\_NET\_ACC activates AIN response translation simplification when both of the following occur:

- SOC AIN0026 is ON
- there are no tuples present in table XLAMAP for the customer group

### **Public TCAP translator (PUBTCXLA)**

This option is required if the customer group is assigned a public TCAP translator.

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**CUSTHEAD** (continued)

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This translator is used in conjunction with the called number digits in table DNREVXLA (Directory Number Reverse Translation) in deriving a TCAP DN.

**Super conference (SUPERCNF)**

This option extends the maximum number of conferees on an attendant setup or meet-me conference call from six to ten or more.

**Time-of-day network class of service (TODNCOS)**

This option is required for time-of-day NCOS, and specifies the one- to eight-character name assigned to the time-of-day NCOS.

**Vacant treatment (VACTRMT)**

This option is required if the value of field DEFAULT in table XLANAME, for the entry that specifies the customer group translator name, is equal to a dollar (\$) sign.

This option specifies the treatment number in table IBNTREAT to which all access codes in table IBNXLA are defaulted for the customer group translator for which no input data has been provided.

If this option is not provided, it defaults to IBN treatment 0.

**Virtual facility group look ahead (VFGLA)**

This option allows the DMS switch to search for an idle virtual facility group (VFG) member as soon as it is possible to determine from the digits being dialed that a VFG is required.

If a VFG member cannot be found, a customer group resource overflow (CGRO) treatment is applied to the line. If a VFG member is found, it is reserved for use by this call. This option applies to MDC and RES customers that access VFGs.

**Datafill sequence and implications**

The following tables must be datafilled before table CUSTHEAD:

- ESAPXLA
- CUSTENG
- DGHEAD
- ANNMEMS
- AUDIO
- CLLI

**CUSTHEAD** (continued)

- DIGCOL
- TODHEAD
- ANNS
- AUTHPART
- XLANAME

**Table size**

Maximum table size is 2047 tuples.

**Datafill**

The following table lists datafill for table CUSTHEAD.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	Customer group name. Enter the name that is assigned to the customer group.
CUSTXLA		alphanumeric (1 to 8 characters)	Customer translator. Enter the name assigned to the block of data (customer translator) defined in table IBNXLA that specifies the data for the translation of digits originating from an Integrated Business Network (IBN) station, attendant, incoming trunk group, or incoming side of a two-way trunk group. The translator name is defined in table XLANAME.  This field is not applicable to DMS-300 translations.
DGCOLNM		alphanumeric (1 to 8 characters) NDGT	Digit collection name. Enter the name assigned to the block of data in table DIGCOL that specifies the IBN digit collection for the IBN lines. Enter NDGT for individual collection of digits.  This field is not applicable to DMS-300 digit collection.

**CUSTHEAD** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield	Entry	Explanation and action
IDIGCOL		alphanumeric (1 to 8 characters) or NIL	International digit collection name. Enter the name assigned to the block of data in table DGHEAD. This field only appears if feature package NTXB57AA (Open Number Translations) is in the load. Otherwise, enter NIL.  This field is not applicable to DMS-300 digit collection.
OPTIONS		see subfield	Options. This field consists of subfield OPTION. Enter the list of options and associated subfields that are assigned to the customer group. Each option and its subfields must be separated by a blank space. Use as many records as required to complete the list of options and associated subfields.  If an option is not wanted, then no input for that option is required.

**Account code capability (ACCT)**

If the customer group has option ACCT assigned, datafill field OPTION and subfields DIGINACC, NOTIMOUT, STARACPT, ACCTVAL, and POTSDGT as follows.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

Field	Subfield	Entry	Explanation and action
OPTION		ACCT	Option. Enter ACCT.
	DIGINACC	2 to 14	Digits in account code. Enter the number of digits in the account code.
	NOTIMOUT	Y or N	Time-out. Enter Y (yes) if an octothorpe (#) or interdigit time-out is not required for routing to begin after the entry of an account code. If N (no) is entered, the call does not route until either an interdigit time-out expires or an octothorpe (#) is entered.

**CUSTHEAD** (continued)

## Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	STARACPT	Y or N	Star accept. The star accept subfield specifies if the asterisk is a valid digit for the account code first or for reset dialing. Enter Y when the asterisk is a valid digit for the account code first. Enter N when the asterisk identifies the reset dialing option.
	ACCTVAL	N	Account code validation. The only valid entry for a DMS-100 is N.
	POTSDGT	Y or N	POTS digit collection. Enter Y to use POTS digit collection to collect the called number digits. Enter N to use Meridian Digital Centrex (MDC) digit collection to collect the called number digits. The default is N. This subfield applies to voluntary account code.
	ACSCRIDX	0 to 2047	Account code screening index. Enter the index into the account code screening database table ACSCRN1.  <b>Note:</b> ACSCRIDX is not applicable to the DMS-100.

**CUSTHEAD** (continued)**Authorization or account code last (ACR)**

If the customer group has option ACR assigned, datafill field OPTION and subfields AUAC and FLEXINO as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		ACR	Option. Enter ACR.
	AUAC	ACCT, ARS, AUARS, or AUTH	Authorization or account code last. Enter ACCT, if the account code must be entered last.  Enter ARS, if the authorization code is used for automatic route selection (ARS).  Enter AUARS, if the authorization code must be entered last and is used for ARS.  Enter AUTH, if the authorization or combined authorization and account code must be entered last.
	FLEXINO	0 to 63	Flexible intercept number. Enter the index into the account code screening database table ACSCRN1.

**Authorization or account code last announcement (ACRANN)**

If an announcement is required to prompt the caller for the authorization or account code after dialing, datafill field OPTION and subfield ANNCLLI as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		ACRANN	Option. Enter ACRANN.
	ANNCLLI	alphanumeric (1 to 16 characters)	Announcement CLLI. Enter the common language location identifier (CLLI) of the announcement that prompts for the authorization or account code.

**CUSTHEAD** (continued)**Authorization codes (AUTH)**

If customer group has option AUTH assigned, datafill field OPTION and subfields PARTNM, SECRECY, and COMB as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		AUTH	Option. Enter AUTH.
	PARTNM	alphanumeric (1 to 16 characters)	Authorization partition name. Enter the name assigned to the customer group in table AUTHCDE and AUTHPART.
	SECRECY	Y or N	Security. Enter N (no) if the user of the authorization code must indicate end of dialing by keying in an octothorpe (#) or awaiting the expiry of interdigit time-out. Otherwise, enter Y (yes). If an authorization code is required for DISA access, enter Y.
	COMB	Y or N	Combined authorization and account code. Enter Y if the code is a combined authorization and account code. Otherwise, enter N.

**Authorization code enforcement (AUTHENF)**

If customer group has option AUTHENF assigned, datafill field OPTION and subfield ENFTRMT as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		AUTHENF	Option. Enter AUTHENF.
	ENFTRMT	0 to 237	Extended treatment. Enter customer group treatment to send for AUTHENF.

**Basic business group ISDN (BBGI)**

If the customer group requires option BBGI, datafill field OPTION as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		BBGI	Option. Enter BBGI.

**CUSTHEAD** (continued)**BT7 emergency calls for BTUP**

If the customer group requires the BT7 emergency calls option, datafill field ANNCLLI as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
ANNCLLI		EMERCALL	Announcement CLLI. Specifies the emergency call feature.

**BTUP calling/called party category (BTUPCPC)**

If the customer group requires option BTUPCPC, datafill field OPTION and subfield BTCPC\_VALUE as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		BTUPCPC	Option. Enter BTUPCPC.
	BTCPC_VALUE	0 to 63	BTUPCPC value. Enter the BTUPCPC value.

**CUSTHEAD** (continued)

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**BTUP V2+ CLI, CPC**

If the customer group requires option BTUP V2+ CLI, CPC, datafill field OPTIONS and subfield BTUPCPC as follows.

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**CUSTHEAD** (continued)

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**Field descriptions for conditional datafill (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield</b>	<b>Entry</b>	<b>Explanation and action</b>
OPTIONS			<p>Calling and Called Party Category (CPC). This field provides information on the classification of the calling line (if available), and is set by the originating, or first interworking, BTUP node.</p> <p>This field is already implemented in the DMS switch BTUP V2 IAM and the IFAM and is fully supported. This field consists of the subfield BTUPCPC.</p>

**CUSTHEAD** (continued)**Field descriptions for conditional datafill (Sheet 2 of 2)**

Field	Subfield	Entry	Explanation and action
	BTUPCPC	0 to 63	<p>In subfield BTUPCPC, the following values are required to be generated, transited, or received:</p> <ul style="list-style-type: none"> <li>• 0—Unknown</li> <li>• 1—Ordinary residential</li> <li>• 2—Ordinary business line</li> <li>• 3—Pay On Answer (POA) Coin Collecting Box (CCB) (public, call office/renter's box, residential/renter's box, business)</li> <li>• 4—Business line A. Subdivision of value 2 (ordinary business) to identify intranetwork tariff packages (currently unspecified). Treat in the same manner as value 2.</li> <li>• 5—Business line B. Subdivision of value 2 (ordinary business) to identify intranetwork tariff packages (currently unspecified). Treat in the same manner as value 2.</li> <li>• 8—Prepayment CCB (public)</li> <li>• 9—Prepayment CCB (renter's box, residential)</li> <li>• 10—Prepayment CCB (renter's box, business)</li> <li>• 11—Service line</li> <li>• 12—CENTREX Business Exchange Services (BES)</li> <li>• 16—DPNSS 1</li> </ul>

**CUSTHEAD** (continued)**Category routing (CATRTE)**

This option is used to allow charge category routing in IBN translations.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		CATRTE	Option. Enter CATRTE to allow charge category routing in IBN translations.

**Called number parameter routing (CDNRTE)**

If called number parameter routing is required, datafill field OPTION as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		CDNRTE	Called number parameter routing. If this option is entered, the call is routed using table CDNIXLA according to the CDNNAME (called number name) provided by table CDNCHAR.  This option provides the routing functionality for the entire customer group.

**Calling party category (CPCRTE)**

This option enables routing according to the CPCNAME (calling party category name) provided by table CPCIXLA.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		CPCRTE	Calling party category routing. If this option is entered, calls are routed according to the CPCNAME in table CPCIXLA.

**Comfort tone (COMFEXCL)**

If comfort tone is excluded from the private virtual network (PVN) service for the given customer group, datafill field OPTION as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		COMFEXCL	Option. Enter COMFEXCL.

**CUSTHEAD** (continued)**Call park (PRK)**

If the customer group has the Call Park or Directed Call Park option and the maximum number of calls that can be parked is other than 100, or if announcement or music is to be given to the caller, datafill field OPTION and subfields ANNMUSIC, AUDIOGRP, and CPKMAXNO as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		CPK	Option. Enter CPK.
	ANNMUSIC	Y or N	Announcement or music. Enter Y (yes) if announcement or music, or both must be given to the call parked. Otherwise, enter N (no).
	AUDIOGRP	AUDIO1 to AUDIO512	Audio group. If the previous field ANNMUSIC is set to Y, enter the audio group datafilled in table AUDIO with the option CPARK that specifies the announcement or music that is to be applied.
	CPKMAXNO	0 to 32767	Maximum number. Enter the maximum number of calls that can be parked simultaneously for the customer group.

**Cut-through dial time-out (CUTIMOUT)**

If the Cut-through Dial feature time-out is other than 4 s, datafill field OPTION and subfield TIMEOUT as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		CUTIMOUT	Option. Enter CUTIMOUT.
	TIMEOUT	5 to 10	Cut-through dial pause. Enter the maximum time, in seconds, that the Cut-through Dial feature waits for digits. If no digits are received, the feature times out and deactivates itself.

**CUSTHEAD** (continued)**Cut-through dial pause (CUTPAUSE)**

If the Cut-through Dial feature pause is other than 3 s when a star (\*) is dialed, datafill field OPTION and subfield PAUTIME as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		CUTPAUSE	Option. Enter CUTPAUSE.
	PAUTIME	1 to 7	Cut-through dial pause. Enter the maximum time, in seconds, that the Cut-through Dial feature pauses when a star (*) is dialed.  The default value for this field is 3.

**DISA feature announcement code (DISAFAC)**

If the customer group has option DISAFAC assigned, datafill field OPTION and subfield ANNCLLI as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		DISAFAC	Option. Enter DISAFAC.
	ANNCLLI	alphanumeric (1 to 16 characters)	Announcement CLLI. Enter the name of the CLLI assigned to the announcement to prompt for the DISA feature access code.

**Expensive route delay time (ERDT)**

If the expensive route delay time is other than 6 s, datafill field OPTION and subfield ERDTTIME as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		ERDT	Option. Enter ERDT.
	ERDTTIME	0 to 10	Expensive route delay time. Enter the time, in seconds, that elapses before a call is terminated on an expensive route.  The default value for this field is 6.

**CUSTHEAD** (continued)**Emergency stand-alone prefix translator (ESAPXLA)**

If the customer group has option ESAPXLA, datafill field OPTION and subfield XLANAME as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		ESAPXLA	Option. Enter ESAPXLA.
	XLANAME	alphanumeric (1 to 8 characters)	Prefix translator name. Enter the name assigned to the prefix translator in table ESAPXLA.

**External NCOS number (EXTNCOS)**

If the external network class of service (EXTNCOS) number is other than 0, datafill field OPTION and subfield EXTNCOS as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		EXTNCOS	Option. Enter EXTNCOS.
	EXTNCOS	0 to 511	External network class of service number. Enter the NCOS assigned to calls originating from outside the customer group.  The default value for this field is 0 (zero).

**Feature translator (FETXLA)**

If the customer group has option FETXLA, datafill field OPTION and subfield XLANAME as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		FETXLA	Option. Enter FETXLA.
	XLANAME	alphanumeric (1 to 8 characters)	Translator name. Enter the translator name defined in table XLANAME. The translator name can also be referenced in table IBNXLA.

**CUSTHEAD** (continued)**International pretranslator (INPRXLA)**

If the customer group requires indexing to table INPRTRNS, datafill field OPTION and subfield INATLPRT, as follows. This option can be used for the DMS-300 switch only.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		INPRXLA	Option. Enter INPRXLA.
	INATLPRT	alphanumeric (1 to 4 characters)	International pretranslator. Enter the name assigned to the international pretranslator that can be used in table INPRTRNS.

**Loudspeaker paging answerback (LPA)**

If an MDC customer group wants option LPA, datafill field OPTION with option LPA and its subfields LPACPTO and LPAMAX as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		LPA	Option. Enter LPA.
	LPACPTO	10 to 60	LPA call park time. Enter the number of seconds a call is parked before recalling the original called party (the user of the attendant console, EBS station, or 500/2500 set).
	LPAMAX	0 to 99	Lpamax. Enter the maximum number of simultaneous LPA requests that an MDC customer group can have.

**Intergroup line screening code checking (LSCCHECK)**

If the customer group requires line screening code checking for intergroup calls, datafill field OPTION as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		LSCCHECK	Option. Enter LSCCHECK.

**CUSTHEAD** (continued)**Music on hold (MHOLD)**

If the customer group has option MHOLD assigned, datafill field OPTION and subfields MOHTH and AUDIOGRP as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		MHOLD	Option. Enter MHOLD.
	MOHTH	0 to 127	Music on hold threshold. Enter the time, in seconds, that elapses before music is applied.
	AUDIOGRP	AUDIO1 to AUDIO512	Audio group. Enter the audio group datafilled in table AUDIO with the option ATTQ that defines the announcement or music to be provided.

**Name delivery time-out (NDTIMOUT)**

If the customer group has option NDTIMOUT assigned, datafill field OPTION and subfield NDTIMER as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		NDTIMOUT	Option. Enter NDTIMOUT.
	NDTIMER	1 to 6	Name delivery timer. Enter the number of seconds a call is suspended while waiting for the return of a calling party's name from an originating node for network calls using Common Channel Signaling 7 (CCS7) protocols.  <b>Note:</b> This subfield is also used by table LTDATA for the feature ISDN PRI Calling Name Delivery (I-CNAMD) when datafill option equals (TCAP_CNAM).  The default value for this field is 3.

**CUSTHEAD** (continued)**Octothorpe translator (OCTXLA)**

If the customer group has option OCTXLA assigned in table IBNXLA, datafill field OPTION and subfield XLANAME as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		OCTXLA	Option. Enter OCTXLA.
	XLANAME	alphanumeric (1 to 8 characters)	Translator name. Enter the name assigned to the feature translator in table IBNXLA.

**Off-hook queuing announcement (OHQA)**

For option OHQA, datafill field OPTION and subfield ANNCLLI as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		OHQA	Option. Enter OHQA.
	ANNCLLI	alphanumeric (1 to 16 characters)	Announcement. Enter the code (CLLI) assigned to the Off-hook Queuing Announcement.

**Preliminary translator (PLMXLA)**

If the customer group has option PLMXLA in table IBNXLA, datafill field OPTION and XLANAME as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		PLMXLA	Option. Enter PLMXLA.
	XLANAME	alphanumeric (1 to 8 characters)	Translator name. Enter the name assigned to the preliminary translator in table IBNXLA.

**CUSTHEAD** (continued)**Private TCAP translator (PRITCXLA)**

If the customer group has option PRITCXLA assigned in table DNREVXLA, datafill field OPTION and subfield PRITCXLA as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		PRITCXLA	Option. Enter PRITCXLA.
	PRITCXLA	alphanumeric (1 to 8 characters)	Private TCAP translator name. Enter the name assigned to the private TCAP translator in table DNREVXLA.

**Public network access (PUB\_NET\_ACC)**

Complete the option record for public network access by datafilling PUB\_NET\_ACC in field NCOSOPTN, and datafill subfields PFX\_DIGS and LINEATTR\_OPT. The following table shows the option record datafill.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		PUB_NET_A CC	Option. Enter PUB_NET_ACC.
	PFX_DIGS	five digit register (0 to 9)	Prefix digits. Datafill the prefix that reuses the public network access datafill for AIN response processing.  <b>Note:</b> Simplified reverse translations does not require AIN functionality.
	LINEATTR_ OPT	LINEATTR	Line attribute index options. Enter LINEATTR to datafill the line attribute index.
	LINEATTR	alphanumeric (up to 16 characters)	Line attribute index. Datafill the line attribute index that converts the 10-digit national number into a dialable format.
	XLAPLAN	alphanumeric (up to 16 characters)	Translation plan index. Enter the index into the XLAPLAN table.
	RATEAREA	alphanumeric (up to 16 characters)	Rate area index. Enter the index into the RATEAREA table.

**CUSTHEAD** (continued)**Public TCAP translator (PUBTCXLA)**

If the customer group has option PUBTCXLA assigned in table DNREVXLA, datafill field OPTION and subfield PUBTCXLA as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		PUBTCXLA	Option. Enter PUBTCXLA.
	PUBTCXLA	alphanumeric (1 to 8 characters)	Public TCAP translator name. Enter the name assigned to the public TCAP translator in table DNREVXLA.  Enter DIAL2NAT to indicate that the group uses the automatic reverse translations utility. Use this option for ACB-type reverse translations, in which the system converts digits from dialable to national format.

**Super conference (SUPERCNF)**

If the maximum number of conferees on an attendant setup or meet-me conference call is ten or more, datafill field OPTION as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		SUPERCNF	Option. Enter SUPERCNF.

**Time-of-day network class of service (TODNCOS)**

If the option TODNCOS is required, datafill field OPTION and subfield TODNAME as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		TODNCOS	Option. Enter TODNCOS.
	TODNAME	alphanumeric (1 to 8 characters)	Time-of-day name. Enter the name assigned to the TODNCOS system in table TIMEODAY.

**CUSTHEAD** (continued)**Vacant treatment (VACTRMT)**

If the default treatment number in table IBNTREAT for all access codes in table IBNXLA for which no input has been provided is other than 0 (zero), datafill field OPTION and subfield VACTRMT as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		VACTRMT	Option. Enter VACTRMT.
	VACTRMT	0 to 63	Vacant treatment number. Enter the treatment number in table IBNTREAT to specify the routing for a call to a vacant digit or digits in table IBNXLA for which no input has been provided.  The default value for this field is 0 (zero).

**Virtual facility group look ahead (VFGLA)**

If the customer group requires option VFGLA, datafill field OPTION as follows.

**Field descriptions for conditional datafill**

Field	Subfield	Entry	Explanation and action
OPTION		VFGLA	Option. Enter VFGLA.

**Datafill example**

The following example shows sample datafill for table CUSTHEAD.

The first tuple is the default entry in table CUSTHEAD if the switching unit has POTS data lines.

The second tuple is an example of datafill for a CUSTNAME of COMKODAK.

**CUSTHEAD** (continued)**MAP display example for table CUSTHEAD**

CUSTNAME	CUSTXLA	DGCOLNM	IDIGCOL	OPTIONS
POTSDATA	POTSXLA	POTS	NIL	( VACTRMT 0) ( EXTNCOS 0) ( NDTIMOUT 6) \$
COMKODAK	CXDK	KDK	NIL	(VACTRMT 0) (EXTNCOS 0) (ACCT 5 N Y N Y) (FETXLA CUSTFEAT) (PLMXLA PXDK) (ERDT 7) (AUTH COMKODAK N N) (SUPERCNF ) (OCTXLA CUSTSHRP) (ESAPXLA ESAKODAK) \$

**Table history****MMP13**

Added the option NDGT to field DGCOLNM for individual collection of digits.

Added the option CATRTE to allow category routing for carrier pre-selection.

**NA012**

Update of option ACCT to reflect the addition of subfield POTSDGT.

Development activity 59007050 introduces changes to field LINEATTR of table CUSTHEAD. This field now accepts an alpha numeric string instead of an integer string

**NA011**

Added the XLAPLAN and RATEAREA fields.

**EUR010**

Added option CPRTE.

**NA010**

Added option BBGI under OPTIONS for feature AF7503, Uniform Usage Measurements for BBG.

Added the subfield STARACPT to the ACCT option for feature AF7484.

**APC009**

Removed virtual private network flexible dial plan option.

## **CUSTHEAD** (end)

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### **NA009**

Added the pre-defined reverse translator name DIAL2NAT under OPTIONS for feature AU2502.

Changed entry value of subfield ACCTVAL to N for the DMS-100 and added note to subfield ACSCRIDX. Table CUSTHEAD has been updated for the NA0011 release of this document. The update was made in response to a Problem Resolution System (PRS) request for the NA009 timeframe.

### **EUR008**

Added option CDNRTE. Added option PUB\_NET\_ACC and its subfields. Option NDTIMOUT added for feature AF7209, ISDN PRI Calling Name Delivery (I-CNAMD) for NIPRI.

### **NA005**

Updated option ACCT section to reflect the MDC Variable CDAR enhancement.





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## CUSTSTN

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### Table name

Customer Group Station Options

### Functional description

Table CUSTSTN is required for a switching unit with North American translations and the Meridian Digital Centrex (MDC) or Residential Enhanced Services (RES) feature.

For related information, refer to Table CUSTFAM.

Table CUSTSTN lists the station options assigned to each of the customer groups.

The following table shows the datafill required for each customer group in a switching unit with North American translations and the MDC or RES feature.

Field CUSTNAME is equal to the 1- to 16-character name assigned to the residential group.

#### Datafill required for each customer group

Customer name	Option name	Option
-----	AMBISC	AMBISC L8 Y
-----	CEPT	CEPT Y
-----	CFDATIM	CFDATIM 30
-----	CFWVAL	CFWVAL Y
-----	CFXFEAT	CFXFEAT Y
-----	CFXOPT	CFXOPT N N N N N N N N
-----	CNDB	CNDB
-----	CRRNOKSH	CRRNOKSH
-----	CSMI	CSMI A Y Y Y 30 DENYCFBL
-----	CXFER	CXFER CUSTOM NOCXFER NOCXFER NOCXFER NOCXFER N
-----	CXFERSUP	CXFERSUP ALLIBN CONF ALLPOTS CONF N

**CUSTSTN** (continued)

**Datafill required for each customer group**

Customer name	Option name	Option
-----	PCACIDS	PCACIDS PCACIDS N
-----	RAGTIM	RAGTIM 8
-----	SCVAL	SCVAL
-----	SOR	SOR
-----	USAID	USAID

If feature BC1459 (Partitioned Table Editor) is purchased, the ownership of each tuple in Table CUSTSTN is defined in Table DATAOWNER and Table OWNTAB.

The entries in Table DATAOWNER that are applicable to Table CUSTSTN are those that have the entry in field TABNAME equal to CUSTGRP and the entry in field CUSTNAME equal to the value of field CUSTNAME in Table CUSTSTN.

The entry in Table OWNTAB that is applicable to Table CUSTSTN is the one that has the entry in field TABNAME equal to CUSTSTN.

A customer group can be assigned one or more of the options listed in the following table. One entry is required for each option.

**Option and title list**

Option	Title
3WCSFLSH	Three-way Calling with Single Flash Drop
800EOD	800 Plus End Office Display
<b>Note:</b> Canada only	
ACB	Automatic Call Back
AIN	Advanced Intelligent Network
AINLATA	Advanced Intelligent Network Local Access and Transport Area
AMBISC	Variable Speed Calling Access Code
AMBZERO	Ambiguous Digit 0

**CUSTSTN** (continued)**Option and title list**

<b>Option</b>	<b>Title</b>
AMSG	Access to Messaging
AMSGDENY	Access to Messaging Deny
AR	Automatic Recall
ASP	Alternate Service Provider
ASR	Automatic Set Relocation
AUTODISP	Automatic Display Mode
BRITONUN	Basic Rate Interface Type of Number Unknown
CBQ	Call Back Queuing
CEPT	Conference of European Postal and Telecommunications
CFCW	Call Forwarding of Call Waiting
CFDATIM	Call Forward Don't Answer Time-out
CFDCET	Call Forwarding Don't Answer Continue Existing Treatment Enhancements with SS7
CFIND	Call Forward Indication
CFRA	Call Forwarding—Remote Access
CFWVAL	IBN Call Forwarding Validation
CFXFEAT	Call Forwarding
CFXOL	Call Forwarding Optional Lines
CFXOPT	Call Forwarding Option
CHD	Call Hold with Audio
CMCF	Control of Multiple Call Forwarding
CNAB	Calling Name Delivery Blocking
CNDB	Calling Name and Number Delivery Blocking per Call
	<b>Note:</b> This option controls the Caller ID Delivery and Suppression (CIDS) Suppression (CIDSSUP) and CIDS Delivery (CIDS DLV) options for ISDN BRI subscribers.

**CUSTSTN** (continued)**Option and title list**

<b>Option</b>	<b>Title</b>
CNDBO	Calling Number Delivery Blocking Override
CNDBRI	CND (Calling Name Delivery) Customer Group Control for BRI
COT	Customer Originated Trace
CPARK	Call Park
CRINTER	Call Request Intergroup
CRRNOKSH	Call Request Retrieve and Keyset Short Hunt Interaction Control
CSMI	Call Screening, Monitoring, and Intercept
CTW	Call Transfer Warning
CTFP	Call Transfer Fraud Prevention
CWD	Dial—Call Waiting
CWO	Call Waiting—Originating
CWTC	Call Waiting Conference
CXFER	Call Transfer
CXFERSUP	Call Transfer Enhanced
DCBITONE	Directed Call Pickup—Barge-In Tone
DENYCWTC	Deny Call Waiting Conference
DINALT	Denied Incoming Alternate Treatment
DISPDIGS	Display Digits
DISTCWTN	Distinctive Call Waiting Tone
DMCT	Deny Malicious Call Termination
DND	Do Not Disturb
DRING	Distinctive Ringing
EBOM	Executive Busy Override on MADN
GICNOCFW	Group Intercom No Call Forwarding

**CUSTSTN** (continued)**Option and title list**

<b>Option</b>	<b>Title</b>
GICPAGE	Group Intercom Page
INSPACT	Inspect Activate Timer
INSPDISP	Inspect Display Timer
JCNDFORM	Japan Calling Number Delivery format
KSMOH	Keypad Music On Hold (Also used by ETSI Call Hold)
LSPAO	Local Service Provider (LSP) Account Owner (AO)
LSPSO	Local Service Provider (LSP) Switch Owner (SO)
MBSCAMPO	MBS Camp-on
MCGROUP	EBS as a Message Center
MSB	Make Set Busy
N3WCRRNG	No Ringback for Three-way Call
NAMEDISP	Name Display
NFA	Network Facility Access
NFRA	Network Facility Remote Access
NUMDGCMP	Network EBS Display
PCACIDS	Privacy Change Allowed Caller ID Delivery and Suppression for ISDN
PCI	Preselection Carrier Identification
PCSOPT	Personal Call Screening Option
PHOLD	Permanent Hold
RAGRCOPT	Ring Again Recall
RAGTIM	Ring Again Timer
REASDISP	Reason Display
REDIRECT	Customer Group with No Consoles

**CUSTSTN** (continued)

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**Option and title list**

Option	Title
RND	Redirecting Number and Reason Delivery for BRI  <i>Note:</i> Changing from pre-NA011 to NA011 or higher adds the RND customer group option to Table CUSTSTN. The RND option is added for all customer groups, to provide consistency in BRI display features.
SCUTDNO	Speed Call User Toll Denied Override
SCPAUSE	Speed Calling Pause
SCVAL	Speed Calling Validation
SDS	Special Delivery Service
SDSDENY	Special Delivery Service Deny
SERVCTL	Scope Control
SLE	Screening List Editing
SOR	Station Origination Restrictions
SPL	Split Line
SPP	Station Programmable PIN
TAFAS	Trunk Answer from Any Station
UAWUCR	Universal Access for Wake-up Call Reminder
USAID	Universal Speech Activated Intelligent Dialing
VOWDN	Virtual Office Worker Directory Number

**Datafill sequence and implications**

The following tables must be datafilled before Table CUSTSTN:

- TRKGRP
- DATAOWNR
- AUDIO
- CUSTENG
- REASONS
- TRIGGRP

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**CUSTSTN** (continued)

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- OWNTAB
- DPLNSCRN

You must enter the local service provider name in Table LSPINFO before you define LSPAO or LPSO data in Table CUSTSTN.

You must datafill Table SPINFO before adding the Option ASP to Table CUSTSTN.

**Table size**

The maximum table size for Table CUSTSTN is 520 192 tuples.

**Table history****SN07 (DMS)**

Added option VOWDN (Virtual Office Worker Directory Number) for activity A00002011. See description “CUSTSTN option VOWDN”.

**MMP15**

Added option Split Line (SPL) for activity AF7423.

**NA015**

Added Option BRITONUN for activity 59022782.

**MMP14**

Changed the datafill entry for option CFRA subfield NUMDIGS to “1 to 15” for feature E.164 Compliance for Redirection Services (REDIRSRV ARCHID).

Added option CEPT for activity 59019274.

**NA014**

Added subfield RNATIMER for Table CUSTSTN option ISA.

**NA013**

Added option CTFP. Added Table DPLNSCRN that must be datafilled before Table CUSTSTN, customer group option CTFP.

**MMP12**

UAWUCR option added for activity 59008212.

**NA012**

Added option CFDCET. Added note about customer group option RND.

**CUSTSTN** (continued)

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**EUR010**

Added DURATION parameter to option CFIND.

**NA011**

Added options CWTC and DENYCWTC.

Added ISDN option RND.

**NA010**

Added options AMMSG, AMMSGDENY, ASP, and LSPSO.

**APC009.1**

Added options CFIND and UAWUCR.

**APC009**

Added option PCI.

**NA009**

Added CND Customer Group Control for ISDN BRI (customer group option CNDBRI).

Added option LSPAO with subfields PROVIDER and CONTEXT. Datafill Table LSPINFO first.

**NA008**

Added ISDN BRI options CIDSSUP, CIDSIDL, and PCACIDS.

Added Y to the example of the option AMBISC to indicate new subfield OVERRIDE.

**EUR006**

Added a reference that KSMOH is re-used by ETSI Call Hold in Table CUSTSTN.

**NA006**

Added options AINLATA and SDSDENY.

**NA005**

Added options SDS, SCUTDNO, and CSMI.

**NA004**

Added option PCSOPT.

**NA003**

Added option USAID.

**BCS36**

Added options 3WCFLSH, 800EOD, AIN, DMCT, JCNDFORM, and N3WCRRNG. Reinstated option ASR.

**BCS35**

Added options CMCF and NFRA; changed entries for field ACTLEVEL; changed range of field RAGRECTO.



## CUSTSTN option 3WCFLSH

### Three-way Calling with Single Flash Drop (3WCSFLSH)

This option determines how the second leg of a three-way calling (3WC) is treated if the third party does not answer the call. If the third party does not answer before the second flash, the second leg of the call is dropped, returning the call to a two-party call. The third flash (flash to release the second leg of the call) is not needed.

Option 3WCSFLSH is applicable on Meridian business sets (MBS) and push-button (PB) sets (Meridian 500 and 2500 series sets).

Option 3WCSFLSH is related to option CXFER. If the customer group has options CXFER and 3WCSFLSH assigned, option 3WCSFLSH is applicable to the information in tuple CXFER.

If the customer group does not have option CXFER assigned but does have option 3WCSFLSH, option 3WCSFLSH is applicable to the default CXFER tuple with type of transfer CTINTRA (refinement CXTYPE). Call transfer and 3WC calls are allowed if the first leg of the call is intra or inter, and the second leg of the call is intra.

### Datfill

The following table lists the datfill for table CUSTSTN option 3WCFLSH.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		3WCSFLSH	<i>Option name</i> Enter the name of the option, 3WCSFLSH.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	3WCSFLSH	<i>Option</i> Enter the name of the option, 3WCSFLSH.

### Datfill example

The following example shows sample datfill for table CUSTSTN option 3WCFLSH.

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**CUSTSTN option 3WCFLSH (end)**

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**MAP display example for table CUSTSTN option 3WCFLSH**

CUSTNAME	OPTNAME	OPTION
BRAMESN	3WCSFLSH	3WCSFLSH

## CUSTSTN option 800EOD

### 800 Plus End Office Display (800EOD)

This option provides the capability to display the calling party number and the dialed 800 number by the calling party on Call Management Services (CMS) and Custom Local Area Signaling Services (CLASS) terminals.

**Note 1:** Software package NTXS81AA (End office 800 Plus Caller ID & Dialed No. Disp—CMS) associated with feature AR0536 (800 Plus End-office Display for CMS Subscribers) or software package NTXS82AA (End Office 800 Plus Caller ID & Dialed #—ACD & MDC) associated with feature AR0535 (800 Plus End-office Display for ACD & Centrex Subscribers) must be present in the switch.

**Note 2:** Customer groups RESG101, RESG102, and RESG103 must be datafilled in table CUSTENG.

### Datafill

The following table lists the datafill for table CUSTSTN option 800EOD.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		800EOD	<i>Option name</i> Enter the name of the option, 800EOD.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	800EOD	<i>Option</i> Enter the name of the option, 800EOD, and datafill refinements CID and DNID.
	CID	Y or N	<i>Calling line identification</i> Enter Y (yes) to display the calling party number. Otherwise, enter N (no).
	DNID	Y or N	<i>Dialed 800 number identification</i> Enter Y to display the dialed 800 number by the calling party on CMS and CLASS terminals. Otherwise, enter N.

---

**CUSTSTN option 800EOD** (end)

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**Datafill example**

The following example shows sample datafill for table CUSTSTN option 800EOD.

**MAP display example for table CUSTSTN option 800EOD**

CUSTNAME	OPTNAME	OPTION
BRAMESN	800EOD	800EOD Y Y

## CUSTSTN option ACB

### Automatic Call Back (ACB)

This option allows the subscriber to place a call to the last station called.

### Datafill

The following table lists the datafill for table CUSTSTN option ACB.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		ACB	<i>Option name</i> Enter the name of the option, ACB.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	ACB	<i>Option</i> Enter the name of the option, ACB, and datafill refinements RINGAPPL, RINGCYCL, TONES, RINGPTRN, and CNCLACT.
	RINGAPPL	1 to 12	<i>Ring application</i> Enter the maximum number of times ringback can be applied to an activator of option ACB.  This field is used to override the setting in table RESOFC.
	RINGCYCL	2 to 7	<i>Ring cycle</i> Enter the number of 6-s ring cycles used to recall the ACB activator.  This field is used to override the setting in table RESOFC.
	TONES	Y or N	<i>Tones</i> Enter Y (yes) to indicate that tones are used as feedback to the user instead of ACB announcement.  Enter N (no) to specify that the Automatic Recall (AR) announcements as datafilled in table DRMUSERS are used to give feedback.

**CUSTSTN option ACB (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	RINGPTRN	ACBARRPor RAGRP	<i>Ring pattern</i> Enter ACBARRP for the ACB or AR ringing pattern on ringback.  Enter RAGRP for the Ring Again (RAG) ringing pattern.
	CNCLACT	Y or N	<i>Cancel activation</i> Enter Y if an ACB activation cancels all existing queued ACB requests and queues the new request instead (this way only one outstanding ACB request is queued for the line).  Enter N to continually allow lines to have ACB requests against 30 different lines concurrently.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option ACB.

**MAP display example for table CUSTSTN option ACB**

CUSTNAME	OPTNAME	OPTION
RESG211	ACB	ACB 1 2 Y RAGRP Y

## CUSTSTN option AIN

### Advanced Intelligent Network

This feature enables the operating company to create and modify services to subscribers in an evolving service-independent architecture.

### Datafill

The following table lists the datafill for table CUSTSTN option AIN.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		AIN	<i>Option name</i> Enter the name of the option, AIN.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	AIN	<i>Option</i> Enter the name of the option, AIN, and datafill refinement AINGRP.
	AINGRP	alphanumeric (up to 16 characters), or TIID	<i>Advanced intelligent network group name</i> Enter an AIN group name from field TRIGNAME in table TRIGGRP. Enter TIID to datafill the trigger item call model refinements.

### Datafill example

The following example shows sample datafill for table CUSTSTN option AIN.

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**CUSTSTN option AIN** (end)

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**MAP display example for table CUSTSTN option AIN**

CUSTNAME	OPTNAME	OPTION
COMKODAK	AIN	AIN CUSTTRIGGRP_CDP

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## CUSTSTN option AINDENY

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### Advanced Intelligent Network Deny

Table CUSTSTN (Customer Group Station Options) lists the station options assigned to each of the customer groups.

Option AINDENY is used to deny AIN (Advanced Intelligent Network) services to a customer group.

All additions, deletions, and changes to this table must be entered using the Service Order System (SERVORD). RES lines which subscribe to option AINDENY have the subscription entry in Table CUSTSTN.

### Datafill example

Data is automatically populated into this table through SERVORD.

The figure that follows shows sample datafill for Table CUSTSTN option AINDENY.

#### MAP display example for Table CUSTSTN option AINDENY

```
HOST 00 00 01 13 0 AINDENY AINDENY (DENY TIID 4 PFC123)
HOST 00 00 01 14 0 AINDENY AINDENY (DENY TIID 4 SFC234) (DENY ALL PFC)
```

### Option history

#### SN07 (DMS)

Number of DENY or RESTORE elements that can be stored is increased from 10 to 15. Feature A00002016.



## CUSTSTN option AINLATA

### Advanced Intelligent Network Local Access and Transport Area (AINLATA)

This option assigned to the customer group supports LATA parameter population for the AIN 0.1 query when a Centrex agent is triggering in the private environment.

Option AINLATA is for parameter population only and is not used for LATA screening during call processing. Ensure the consistency between the setting of this option and the LATA value used for AIN response processing.

The value in refinement LATANAME is overridden when a LATA value is datafilled in table NCOS under option AINLATA.

### Datavill

The following table lists the datafill for table CUSTSTN option AINLATA.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		AINLATA	<i>Option name</i> Enter the name of the option.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	AINLATA	<i>Option</i> Enter the name of the option, AINLATA, and datafill refinement LATANAME.
	LATANAME	alphanumeric (1 to 16 characters)	<i>LATA name</i> Enter a LATA name that has been datafilled in table LATANAME.

### Datavill example

The following example shows sample datafill for table CUSTSTN option AINLATA.

---

**CUSTSTN option AINLATA** (end)

---

**MAP display example for table CUSTSTN option AINLATA**

CUSTNAME	OPTNAME	OPTION
ABCCO	AINLATA	AINLATA LATA1

---

## CUSTSTN option AINPRECE

---

### AIN 800 CDP trigger precedence

The AINPRECE option in table CUSTSTN, together with the AIN\_800CDP\_PRECEDENCE office parameter, allows the operating company to control the precedence of 800 over CDP trigger against a customer group. The precedence between 800 and CDP trigger is determined by two options:

- Office wide option, using the office parameter
- Customer group option provisioned against a customer group

The option AINPRECE allows a customer to choose either 800 or CDP as the precedence overriding the office wide option. This option is provided for granularity on customer groups. The default value of this option, 800, matches the precedence behavior in switches prior to the introduction of this parameter. So if this option is left at its default value, there will be no perceived change in precedence behavior.

The AIN Toll Free Service trigger is not affected by the AIN 800 CDP trigger precedence feature.

### Datafill

The table that follows lists datafill for table CUSTSTN option AINPRECE

#### Field descriptions

Field	Subfield	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name.</i> Enter the customer group name.
OPTNAME		AINPRECE	<i>Option name.</i> Enter AINPRECE (the name for AIN trigger precedences).
OPTION		see subfield	<i>Option.</i> This field consists of subfield OPTION and its refinement.
	OPTION	AINPRECE	<i>Option.</i> Enter AINPRECE.

**Field descriptions**

Field	Subfield	Entry	Explanation and action
	AIN_PRECEDEN CE_TYPE	800CDP	<i>AIN_PRECEDENCE_TYPE</i> Enter 800CDP. This is the name of the 800/CDP trigger precedence option.
	PRECEDENCE		<i>PRECEDENCE</i> This sets the precedence for the customer group. Enter CDP to specify CDP trigger precedence. Enter 800 to specify 800 precedence.

**Datafill example**

The figure that follows shows sample datafill for table CUSTSTN option AINPRECE.

**MAP display example for table CUSTSTN option AINPRECE**

CUSTNAME	OPTNAME	OPTION	AIN_PRECEDENCE_TYPE	PRECEDENCE
COMKODAK	AINPRECE	AINPRECE	800CDP	CDP
RESG613	AINPRECE	AINPRECE	800CDP	800

## CUSTSTN option AMBISC

---

### Variable Speed Calling Access Code (AMBISC)

This option permits Integrated Business Network (IBN) Speed Calling feature users to dial Speed Calling access codes and Speed Calling abbreviation codes without using the \* prefix.

If customer group has option AMBISC, the following conditions apply:

- Stations with feature BC0273 (Speed Calling Short List) (SC1) only have access to abbreviation codes 2 through 9. The stations are not permitted to store numbers in Speed Calling cells corresponding to abbreviation codes 0 and 1.
- Customer groups that use digit 8 or 9 as the access code to the public network are not permitted to use abbreviation codes 8 or 9.
- Any attempt to program abbreviation codes 0, 1, 8, or 9 (with the above conditions) results in Negative Acknowledgement (NACK) treatment.
- Stations with the Speed Calling Long List (L30) (SC2) feature only have access to abbreviation codes 20 through 49. These users are not permitted to store numbers in Speed Calling cells corresponding to abbreviation codes 00 through 19. Entries in table IBNSC for abbreviation codes 20 through 49 are stored in tuples with key numbers 00 through 29 respectively.
- Stations with the Speed Calling Long List 50 (L50) (SC3) feature only have access to abbreviation codes 20 through 69. These users are not permitted to store numbers in Speed Calling cells corresponding to abbreviation codes 00 through 19. Entries in table IBNSC for abbreviation codes 20 through 69 are stored in tuples with key numbers 00 through 49 respectively.
- SC3 feature only permits access to 50 Speed Calling abbreviation codes. The Speed Calling Long List 70 Numbers (SCLL70) feature is not used.
- An attempt to program abbreviation codes 00 to 19 results in NACK treatment.
- The Speed Call Program Short (SCPS) access code is fixed at 74 and does not require an entry in table IBNXLA.
- The Speed Call Program Long (SCPL) access code is fixed at 75 and does not require an entry in table IBNXLA.
- See table DIGCOL for the digit collection required when option AMBISC is specified.
- Option AMBISC specifies the Speed Calling abbreviated codes that can be dialed by the customer group members with SC1 feature.

**CUSTSTN option AMBISC** (continued)**Datafill**

The following table lists the datafill for table CUSTSTN option AMBISC.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		AMBISC	<i>Option name</i> Enter the name of the option, AMBISC.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	AMBISC	<i>Option</i> Enter the name of the option, AMBISC, and datafill refinements LISTTYPE and OVERRIDE.
	LISTTYPE	L6 or L8	<i>List type</i> Enter L6 if the abbreviated codes that are dialed by the customer group members with feature BC0273 (Speed Calling Short List) (SC1) are 2 to 7.  Enter L8 if the abbreviated codes that are dialed by the customer group members with feature SC1 are 2 to 9.  <b>Note:</b> Enter L8 only if customer group uses a dialing plan similar to a plain ordinary telephone service (POTS) dialing plan (if digit 8 and 9 are not used as prefix digits for network access).
	OVERRIDE	Y or N	<i>Override</i> Enter Y when the AMBISC feature overrides the feature or replace selectors in table IBNXLA. Enter N when the FEAT or REPL selectors override the AMBISC feature.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option AMBISC.

Lines in customer group BRAMESN with the feature SC1 are only allowed to use abbreviated codes 2 to 7.

---

**CUSTSTN option AMBISC (end)**

---

The OVERRIDE subfield is set to Y to override the use of the feature translator and replace selector in table IBNXLA for any access code that is in the ambiguous speedcall range. The feature translator and replace selector in table IBNXLA overrides the AMBISC feature when the subfield OVERRIDE is set to N for access codes in the ambiguous speedcall range.

**MAP display example for table CUSTSTN option AMBISC**

CUSTNAME	OPTNAME	OPTION
BRAMESN	AMBISC	AMBISC L6 Y

## CUSTSTN option AMBZERO

### Ambiguous Digit 0 (AMBZERO)

This option is required if the digit 0 is ambiguous (for example, attendant access code 0 and the four- and five-digit station numbers are 0XXX or 0XXXX).

### Datafill

The following table lists the datafill for table CUSTSTN option AMBZERO.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		AMBZERO	<i>Option name</i> Enter the name of the option, AMBZERO.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	AMBZERO	<i>Option</i> Enter the name of the option, AMBZERO.

### Datafill example

The following example shows sample datafill for table CUSTSTN option AMBZERO.

#### MAP display example for table CUSTSTN option AMBZERO

CUSTNAME	OPTNAME	OPTION
GOC990	AMBZERO	AMBZERO

## CUSTSTN option AMMSG

### Access to Messaging (AMMSG)

This option offers in-session access to messaging. The Service Offering Decoupling of SDS (SODS) feature provides the separation of access to Automatic Call Back (ACB) and access to messaging services at the office level. The operating company can offer universal access to ACB and subscription access to messaging.

### Datafill

The following table lists the datafill for table CUSTSTN option AMMSG.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	Customer group name. Enter the customer group name.
OPTNAME		AMMSG	Option name. Enter the name assigned to the option, AMMSG.
OPTION		see subfield	Option. This field consists of subfield OPTION.
	OPTION	AMMSG	Option. Enter the name assigned to the option, AMMSG.

### Datafill example

The following example shows sample datafill for table CUSTSTN option AMMSG.

#### MAP display example for table CUSTSTN option AMMSG

TABLE: CUSTSTN		
CUSTNAME	OPTNAME	OPTION
COMKODAK	AMMSG	AMMSG

## CUSTSTN option AMSGDENY

### Access to Messaging Deny (AMSGDENY)

The AMSGDENY option blocks in-session access to messaging at the group level.

### Datafill

The following table lists the datafill for table CUSTSTN option AMSGDENY.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	Customer group name. Enter the customer group name.
OPTNAME		AMSGDENY	Option name. Enter the name assigned to the option, AMSGDENY.
OPTION		see subfield	Option. This field consists of subfield OPTION.
	OPTION	AMSGDENY	Option. Enter the name assigned to the option, AMSGDENY.

### Datafill example

The following example shows sample datafill for table CUSTSTN option AMSGDENY.

#### MAP display example for table CUSTSTN option AMSGDENY

TABLE: CUSTSTN		
CUSTNAME	OPTNAME	OPTION
COMBIN2	AMSGDENY	AMSGDENY

## CUSTSTN option AR

### Automatic Recall (AR)

This option allows the subscriber to place a call to the last station that called.

### Datafill

The following table lists the datafill for table CUSTSTN option AR.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		AR	<i>Option name</i> Enter the name of the option, AR.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	AR	<i>Option</i> Enter the name of the option, AR, and datafill refinements RINGAPPL, RINGCYCL, TONES, RINGPTRN, CNCLACT, and ACTLEVEL.
	RINGAPPL	1 to 12	<i>Ring application</i> Enter the maximum number of times ringback can be applied to an activator of the Automatic Recall (AR) option.  This field is used to override the setting in table RESOFC.
	RINGCYCL	2 to 7	<i>Ring cycle</i> Enter the number of 6-s ring cycles used to recall the AR activator.  This field is used to override the setting in table RESOFC.
	TONES	Y or N	<i>Tones</i> Enter Y (yes) to indicate that tones are used as a feedback to the user instead of the AR announcement.  Enter N (no) to specify that the AR announcements as datafilled in table DRMUSERS are used to give the feedback.
	RINGPTRN	ACBARRP or RAGRP	<i>Ring pattern</i> Enter ACBARRP for the Automatic Call Back (ACB) or AR ringing pattern on ringback.

**CUSTSTN option AR (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	CNCLACT	Y or N	<p>Enter RAGRP for the Ring Again (RAG) ringing pattern.</p> <p><i>Cancel activation</i> Enter Y if an AR activation cancels all existing queued AR requests and queues the new request instead (this way only one outstanding AR request is queued for the line).</p> <p>Enter N to allow lines to have AR requests against 30 different lines concurrently.</p>
	ACTLEVEL	ONELEVEL or TWOLEVEL	<p><i>Activation level</i> Enter a value to specify the required activation level.</p> <p>Enter ONELEVEL if all the subscriber must do to access the feature is to dial the feature access code.</p> <p>Enter TWOLEVEL if the user is prompted to dial a digit 1 after the feature access code and an announcement if he wishes to proceed with the AR feature, or hang up if otherwise.</p>

**Datafill example**

The following example shows sample datafill for table CUSTSTN option AR.

**MAP display example for table CUSTSTN option AR**

CUSTNAME	OPTNAME	OPTION
CENTESN	AR	AR 1 2 Y RAGRP Y ONELEVEL

## CUSTSTN option ASP

### Alternate Service Provider (ASP)

The ASP option enables all lines within a given customer group to subscribe to a service through an alternate service provider. A customer group can subscribe to multiple services through different providers, but only one provider can offer the services to a customer group. The switch must datafill all provider and service pairs in table SPINFO before option ASP.

### Datafill

The following table lists the datafill for table CUSTSTN option ASP.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	Customer group name. Enter the customer group name.
OPTNAME		ASP	Option name. Enter the name assigned to the option, ASP.
OPTION		see subfield	Option. This field consists of subfield OPTION.
	OPTION	ASP	Option. Name of the line option.
	PROVNAME	PROV_A	Provider name. Enter the provider name.
	SERVICE	AMSG	Service. Enter the type of service

### Datafill example

The following example shows sample datafill for table CUSTSTN option ASP.

#### MAP display example for table CUSTSTN option ASP

TABLE CUSTSTN		
CUSTNAME	OPTNAME	OPTION
RCCO	ASP	ASP (Prov_A AMSG) \$

## CUSTSTN option ASR

### Automatic Set Relocation (ASR)

Feature BR07718 (Automatic Set Relocation) for Meridian business set (MBS)/2500 sets enables a telephone user within the Meridian Digital Centrex (MDC)/Residential Enhanced Services (RES) environment to move the set from one location to another without the assistance of a service personnel from the operating company. The ASR feature is assigned on a customer group basis and consists of the two steps, ASR OUT and ASR IN.

### Datafill

The following table lists the datafill for table CUSTSTN option ASR.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		ASR	<i>Option name</i> Enter the name of the option, ASR.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	ASR	<i>Option</i> Enter the name of the option, ASR, and datafill refinements CUSTNAME, AREACODE, and OFFICECODE.
	CUSTNAME	alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the Automatic Set Relocation (ASR) customer group.
	AREACODE	0 to 9(3 digits)	<i>Area code</i> Enter the area code or serving numbering plan area (SNPA) (the first three digits of the directory number [DN]).
	OFFICECODE	0 to 9(3 digits)	<i>Office code</i> Enter the office code or NXX (the second three digits of the DN).

### Datafill example

The following example shows sample datafill for table CUSTSTN option ASR.

## CUSTSTN option ASR (end)

---

### MAP display example for table CUSTSTN option ASR

CUSTNAME	OPTNAME	OPTION
AYLIBN	ASR	ASR ASR1 613 021 1

---

## CUSTSTN option AUTODISP

---

### Automatic Display Mode (AUTODISP)

This option provides the capability of presenting incoming call information (for example, calling name, number) automatically on the display of Meridian business sets (MBS) as calls are presented to the set.

This option also specifies the time the information is displayed.

This option is intended for sets used in executive applications and not call coverage or answering positions, or other very high traffic applications such as Automatic Call Distribution (ACD) or Uniform Call Distribution (UCD).

### Datafill

The following table lists the datafill for table CUSTSTN option AUTODISP.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		AUTODISP	<i>Option name</i> Enter the name of the option, AUTODISP.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	AUTODISP	<i>Option</i> Enter the name assigned to the option, AUTODISP, and datafill refinement DISPTIMER.
	DISPTIMER	2 to 10	<i>Display timer</i> If the display time is other than 5 s, enter the time, in 1-s intervals, that the information is displayed.

### Datafill example

The following example shows sample datafill for table CUSTSTN option AUTODISP.

The option is assigned to customer group LONDESN and the information is displayed for 6 s.

## **CUSTSTN option AUTODISP (end)**

---

**MAP display example for table CUSTSTN option AUTODISP**

CUSTNAME	OPTNAME	OPTION
LONDESN	AUTODISP	AUTODISP 6

## CUSTSTN option BRITONUN

### Basic Rate Interface Type of Number Unknown

Option BRITONUN (basic rate interface type of number unknown) converts type of number (TON) for BRI calls from National (NA) to Unknown (UN).

If a BRI set is not ISDN Q.931 compliant, it sends a number with the pattern 9+1+NPANXXXXXX or 9+NPANXXXXXX. When this happens, TON is set to NA. The resulting translation datafill is incompatible with 10-digit AIN/LNP response translation, which also relies upon TON=NA. Option BRITONUN, applied on a customer group basis, eliminates this conflict by disabling TON-based routing.

If patch LNP40 was active in the customer's prior software, option BRITONUN is automatically added in Table CUSTSTN load at the time of software upgrade. If patch LNP40 was inactive, the option is not added at upgrade. Thus, the transition is transparent to the customer.

### Datafill

The following table lists the datafill for Table CUSTSTN option BRITONUN.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name.</i> Enter the customer group name.
OPTNAME		BRITONUN	<i>Option name.</i> Enter the name of the option, BRITONUN.
OPTION		see subfield	<i>Option.</i> This field consists of subfield OPTION.
	OPTION	BRITONUN	<i>Option.</i> This option is applied on a customer group basis. It provides the capability to disable TON-based routing for BRI originators when the incoming setup message TON = National. It resolves the conflict between BRI and AIN/LNP translations by changing the TON of BRI calls from National to Unknown. Enter the name of the option, BRITONUN.

---

## CUSTSTN option BRITONUN (end)

---

### Datafill example

The following example shows sample datafill for Table CUSTSTN option BRITONUN.

### MAP display example for Table CUSTSTN option BRITONUN

CUSTNAME	OPTNAME	OPTION
BRAMESN	BRITONUN	BRITONUN

### Limitations and restrictions

Option BRITONUN requires customers to provide separate tuples in Table RTECHAR, as indicated in the following example:

The following tuple in Table RTECHAR:

```
56KDATA (BC 56KDATA (CDN NA) $) (BC 56KDATA $) $
```

should be broken up into two tuples as shown below:

```
56K (BC 56KDATA $) $----- (for BRI)
NA56K (BC 56KDATA (CDN NA) $ ) $----- (for AIN/LNP)
```

BRITONUN disables routing based on directory number (CDN) TON for BRI-originated calls when the customer group of the originator has Option BRITONUN and TON=NA.

Before adding Option BRITONUN to a subscriber group, especially on switches not previously employing the LNP40 patch, the customer is advised to take the following actions:

- Refer to NTPs stating that BRI routing based on TON is to be discontinued for the customer group in question.
- Change the datafill accordingly.

---

## CUSTSTN option CBQ

---

### Call Back Queuing (CBQ)

This option specifies the following parameters:

- The queue priority promotion time, which is the maximum time a station is queued at a level in the priority ordered queue, is specified. This period of time is modifiable from 1 to 15 min, in 1-min increments, or 0 (zero). If set to 0 (zero), the time is infinite. Queue priority promotion does not apply.
- The time that a station with feature BV0542 (Call Back Queuing) Route Advance can be served by cheap routes is specified. When the timer expires, the station can be served by both cheap and expensive routes. This time can be modifiable from 1 to 15 min, in 1-min increments, or set to 0 (zero). If set to 0 (zero), the time is infinite. Route advancement from cheap to expensive routes does not apply.
- The assignment of the option CBQ and its associated parameters to an Integrated Business Network (IBN) station is specified as an option of the station's network class of service (NCOS) number.
- Option CBQ can apply to calls terminating on
  - outgoing IBN trunk groups
  - IBN stations belonging to another customer group
  - plain ordinary telephone service (POTS) lines

See operational measurements (OM) group OHQCBQCG for OMs associated with this option.



#### **CAUTION**

**Option CBQ cannot be used for customer groups using trunks with selectors TTTR or TTTT**

Customer groups with CBQ option cannot use trunk groups with table IBNXL selector TTTR or TTTT.

**CUSTSTN option CBQ** (continued)**Datafill**

The following table lists the datafill for table CUSTSTN option CBQ.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CBQ	<i>Option name</i> Enter the name of the option, CBQ.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CBQ	<i>Option</i> Enter the name of the option, CBQ, and datafill refinements CBQPPT, CBQRAT, CBQNUM, and CBQTYPE.
	CBQPPT	0 to 15	<i>CBQ priority promotion timer</i> Enter the time for the Call Back Queuing (CBQ) priority promotion timer, in 1-min increments.  If this field is set to 0 (zero), the time is infinite.
	CBQRAT	0 to 15	<i>CBQ route advance timer</i> Enter the time for the CBQ Route Advance timer, in 1-min increments.  If this field is set to 0 (zero), the time is infinite.
	CBQNUM	1 to 2000	<i>Number enqueued</i> This field is for future use.  Enter 1.
	CBQTYPE	ALLTYPES IBNONLYorT RKONLY	<i>CBQ types</i> Enter the CBQ type.  Enter ALLTYPES for Integrated Business Network (IBN) and plain ordinary telephone service (POTS) line.  Enter IBNONLY For IBN line plus other customer group stations.  Enter TRKONLY for IBN trunks.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option CBQ.

---

**CUSTSTN option CBQ** (end)

---

The CBQ timers are set to 1 min and stations are allowed to CBQ all types.

**MAP display example for table CUSTSTN option CBQ**

CUSTNAME	OPTNAME				OPTION
CENTESN	CBQ	CBQ	1	1	3 ALLTYPES

## CUSTSTN option CFCW

### Call Forwarding of Call Waiting (CFCW)

This option provides the capability for a Meridian Digital Centrex (MDC) Residential Enhanced Services (RES) line to have unanswered call-waiting calls forwarded according to their Call Forward Don't Answer (CFD) feature. The operating company assigns this capability for each customer group.

Option CFCW applies to only the primary member of a Multiple Appearance Directory Number (MADN) line.

To enable this option, datafill fields CUSTNAME, OPTNAME, and OPTION as described below.

### Datafill

The following table lists the datafill for table CUSTSTN option CFCW.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CFCW	<i>Option name</i> Enter the name of the option, CFCW.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CFCW	<i>Option</i> Enter the name of the option, CFCW.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CFCW.

---

**CUSTSTN option CFCW** (end)

---

**MAP display example for table CUSTSTN option CFCW**

CUSTNAME	OPTNAME	OPTION
LONDESN	CFCW	CFCW

---

## CUSTSTN option CFDATM

---

### Call Forward Don't Answer time-out (CFDATIM)

A call to a station with the feature BR0802 (Call Forward Don't Answer) (CFD) is call forwarded if the called line does not answer within a specified period of time. This time is modifiable from 12 to 325 s, in 1-s increments.

A default value of 30 s for this option is stored internally. Unless datafill is specified for this option, the option is not displayed in the table.

If a station requires a different CFD time-out, assign the feature Call Forward Don't Answer Variable Timing (CFDVT) to the line in table IBNFEAT. The time specified with the CFDVT feature overrides the time specified for option CFDATIM.

See operational measurements (OM) Group CALLFWD for OMs associated with this option.

### Datafill

The following table lists the datafill for table CUSTSTN option CFDATM.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CFDATIM	<i>Option name</i> Enter the name of the option, CFDATIM.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION, and datafill refinement and CFDATO.
	OPTION	CFDATIM	<i>CFD time-out</i> Enter the option CFDATIM.
	CFDATO	12 to 325	<i>CFD timing</i> Enter the Call Forward Don't Answer (CFD) timing period, in 1-s increments.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CFDATM.

The CFD time-out is 12 s.

---

**CUSTSTN option CFDATM** (end)

---

**MAP display example for table CUSTSTN option CFDATM**

CUSTNAME	OPTNAME	OPTION
CENTESN	CFDATIM	CFDATIM 12

## CUSTSTN option CFDCET

### Call Forwarding Don't Answer Continue Existing Treatment Enhancements with SS7

This option gives the customer group the ability to provide the required treatment for users of the CFD Continue Existing Treatment Enhancements with SS7 (CFDCET with SS7) feature. This document refers to the basic Call Forwarding Don't Answer feature as CFD. The user can provision option CFDCET as OFF, ALERT\_BASE, or CLEAR\_BASE:

- **OFF**—The originator of a call that uses CFDCET with SS7 may or may not receive continuous treatment. The originator receives audible ringing followed by busy treatment if the call is CFD over SS7 trunks to a busy station. OFF is the default treatment for a customer group if the CFDCET tuple does not exist in table CUSTSTN.
- **CLEAR\_BASE**—Use this setting to enable CFDCET with SS7 to clear the base station when the remote DN is busy. This allows the base station to originate and receive calls while the originator continues to get audible ringback treatment.
- **ALERT\_BASE**—Use this setting to enable CFDCET with SS7 to continue to ring the base station when the remote DN is busy. This setting allows the originator to complete the call to the base DN after the forward attempt to the busy remote DN fails.

### Datafill

The table that follows lists the datafill for table CUSTSTN option CFDCET.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	Customer group name. Enter the customer group name.
OPTNAME		CFDCET	Option name. Enter the name of the option, CFDCET.
OPTION		see subfield	Option. This field consists of subfield OPTION.

**CUSTSTN option CFDCET (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield	Entry	Explanation and action
	OPTION	CFDCET	Option. Enter the name of the option, CFDCET.
	CFDCETO	OFF, ALERT_BASE, CLEAR_BASE	<p>CFD continue existing treatment type. Enter one of the following:</p> <ul style="list-style-type: none"> <li>• OFF—Disable the CFDCET with SS7 feature.</li> <li>• ALERT_BASE—Continue to ring the base station when the remote DN is busy.</li> <li>• CLEAR_BASE—Stop audible ringing at the base station and allow the base station to originate and receive other calls when the remote DN is busy.</li> </ul>

**Datafill example**

The figure that follows shows sample datafill for table CUSTSTN option CFDCET.

**MAP example for table CUSTSTN option CFDCET**

CUSTNAME	OPTNAME	OPTION
IBNTST	CFDCET	CFDCET ALERT_BASE



## CUSTSTN option CFIND

### Call Forward Indication

Option Call Forward Indication (CFIND) provides a special dial tone on Integrated Business Network (IBN) lines when call forwarding is in effect. The special dial tone alerts a user that the switch is forwarding calls to the user's directory number (DN) to another DN. Apply option CFIND to IBN customer groups.

### Datafill

The following table lists the datafill for table CUSTSTN option CFIND.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric 1 to 16 characters	Customer group name. Enter the customer group name.
OPTNAME		CFIND	Option name. Enter value CFIND for Call Forward Indication. Option CFIND provides a special dial tone to indicate that call forwarding is in effect.
OPTION		CFIND	Option. Enter value CFIND for Call Forward Indication. Datafill subfields CFIND_TONE and CFIND_TONE_DURATION.
	CFIND_TONE	alphanumeric 1 to 16 characters	Call Forward Indication Tone. Enter the tone name from subfield TONE in table STN, or enter tone CFT for the CFIND special condition dial tone.  <b>Note:</b> When providing CFIND tone to a Succession line, CFT is provided regardless of the tone associated with the customer group.

## CUSTSTN option CFIND (continued)

### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	CFIND_ TONE_ DURATION	numeric (0, 250, 500, 750, 1000, 1250, 1500, 1750, 2000, 2250, 2500, 2750, 3000, 3250, 3500, 3750, 4000)	<i>Duration</i> Enter a duration for the indication tone. Duration can be set in increments of 250 ms from 0 ms to 4000 ms (4 s). The normal default value is 1000 (1 s). You must set the default value in table DEFDATA.
	CF_UNCON DITIONAL	Y or N	If this boolean is set to Y, CFIND tone is provided only for the call forward universal (CFU), call forward intragroup (CFI), and call forward fixed (CFF) If the boolean is set to N, tone is provided for all types of call forwarding. The normal default value is N. You must set the default value in table DEFDATA.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CFIND.

### MAP display example for table CUSTSTN option CFIND

CUSTNAME	OPTNAME	OPTION
RGAT	CFIND	CFIND CWT 1000 N

### Datafill example

The following example shows sample datafill for table CUSTSTN option CFIND, using tone CFT.

### MAP display example for table CUSTSTN option CFIND using tone CFT

CUSTNAME	OPTNAME	OPTION
NT720	CFIND	CFIND CFT 2000

---

**CUSTSTN option CFIND** (end)

---

**Table history**

**SN06**

Added tone CFT for activity A89005956.

## CUSTSTN option CFRA

### Call Forwarding—Remote Access (CFRA)

This option allows a station with the option Call Forwarding (CFX) in table IBNFEAT or KSETFEAT to have an additional line option CFRA.

With feature BR0781 (Call Forwarding-Remote Access) (CFRA), the subscriber is able to activate or deactivate option CFX from a remote station.

To activate or deactivate option CFX from a remote station, the subscriber must dial a direct inward system access (DISA) directory number (DN) on the base station switching unit.

If the switching unit supports both Residential Enhanced Services (RES) and Integrated Business Network (IBN) lines, the operating company can choose the number of digits required to identify their DNs for each line type. If the operating company chooses IBN CFRA calls to have only five digits, RES CFRA calls must have seven digits, and two DISA DNs are required.

The information for option CFRA provides the information needed to control the announcement variables, and to set the limits on the number of attempts at the various stages.

### Datafill

The table that follows lists the datafill for table CUSTSTN option CFRA.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CFRA	<i>Option name</i> Enter the name of the option, CFRA.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CFRA	<i>Option</i> Enter the name of the option, CFRA, and datafill refinements NUMDIGS, PINRETRY, ACCRETRY, and FDNRETRY.

**CUSTSTN option CFRA** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	NUMDIGS	1 to 15	<p><i>Number of digits</i></p> <p>Enter the number of digits in the base station's extension.</p> <p>This field is used by the announcement that asks for the base station directory number (DN) and personal identification number (PIN).</p>
	PINRETRY	1 to 7	<p><i>Personal identification number retry</i></p> <p>Enter the number of times a user can attempt to enter the base station DN and PIN.</p>
	ACCRETRY	1 to 7	<p><i>Access code retry</i></p> <p>Enter the number of times a user can attempt to enter the feature access code (activation or deactivation).</p> <p>The access code is assigned in table IBNXLA.</p>
	FDNRETRY	1 to 7	<p><i>Forward directory number retry</i></p> <p>Enter the number of times a user can attempt to enter a valid forward DN.</p>

**Datafill example**

The figure that follows shows sample datafill for table CUSTSTN option CFRA.

The first tuple is for IBN subscribers in customer group LONDESN who only need to dial a four-digit extension number. The second tuple is for RES subscribers in customer group CENTESN who enter their seven-digit DNs.

Integers 4 and 7 are the number of digits required to identify the home DN. (For RES applications this is set to 10 to be 1A equivalent. In this case the service numbering plan area [SNPA] dialed is ignored.)

Integer 2 is the number of attempts allowed to enter a correct DN and PIN.

Integer 3 is the number of attempts allowed to enter a valid access code (either activate or deactivate).

## CUSTSTN option CFRA (end)

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Integer 5 is the maximum number of attempts allowed when entering the digits identifying the forwarded-to number.

### MAP display example for table CUSTSTN option CFRA

CUSTNAME	OPTNAME	OPTION
LONDESN	CFRA	CFRA 4 2 3 5
CENTESN	CFRA	CFRA 7 2 3 5

---

## CUSTSTN option CFWVAL

---

### IBN Call Forwarding Validation (CFWVAL)

This option permits validation of the forwarding directory number (DN) at program time (when the station user activates the Call Forwarding feature).

Validation is applicable only to the Call Forwarding Universal (CFU), Call Forwarding Intragroup (CFI), Call Forwarding Busy (CFB) type P, and Call Forwarding Don't Answer (CFD) type P features.

The following two variations provided with the Call Forwarding DN validation system:

- Routing validation: The forwarding DN can be validated to determine if the number is routeable (field TERMOPTN set to N).
- Terminating validation: The forwarding DN can be validated such that terminating on the forwarding DN is completed (field TERMOPTN set to Y).

With option CFWVAL, the activation of the Call Forwarding feature remains the same. The presentation of confirmation tone indicates that the forwarding DN was successfully stored and validated according to the option used. If the Routing Validation option is chosen, then the user at the base station does not attempt to terminate on the forwarding DN. The forwarding DN is just determined as routeable. If the dialed digits are not routeable, then reorder tone is heard.

If the Terminating Validation option is chosen, then an attempt to place the call to the forwarding DN is made, and confirmation tone is not heard. If the dialed station is busy, then the Call Forwarding feature is not activated. The base station user has the option of forcing activation of the Call Forwarding feature to the busy station. If the same DN is dialed within 2 min of the original request, then the Call Forwarding feature is set active regardless of the busy or idle status of the dialed station. Confirmation tone is returned upon successful storage of the dialed digits, but this time the call is not completed. If the forwarding DN is not stored successfully, then reorder tone is heard.

It is recommended that invalid forward-to digit entry attempts be routed to vacant treatment. Table CUSTHEAD (Customer Group Head) should be datafilled with option VACTRMT if table IBNTREAT (IBN Treatment) index uses the TRMT selector to route to VACT. An S selector in table IBNTREAT cannot be used to route calls to a vacant treatment announcement. If an announcement is to be used for VAC treatment, use table TNTCNTL (Treatment Control).

On business sets, the activation sequence depends on which option is used. If the business set user has the Routing Validation option, then the activation sequence stays the same. If the Terminating Validation option is in use, then the business set user must use the feature activation code for the validation call to complete. If the user has the Terminating Validation option and uses the feature key to program the Call Forwarding feature, then the validation call does not complete, but Call Forwarding is activated if possible. The reason for the change is that if the validation call is necessary, then the user must be active on an idle DN on the business set for the call to be originated. If the user is in conversation with someone and wishes to program the Call Forwarding feature, then the CFW key can be used, but without the validation call going through (assuming that the conversation is placed on hold).

Once the validation call has gone through, it is a normal call in all aspects but one. If the call terminates on a busy line (or trunk), then the call is taken down immediately, and options such as Ring Again (RAG), Executive Busy Override (EBO), or Call Back Queuing (CBQ) are not allowed.

The lamp turned on steady indicates that the forwarding DN was stored successfully and the validation result is positive. Otherwise, the lamp is turned off.

There is a special consideration concerning the Call Forwarding DN Validation option with regards to trunks that do not return answer supervision. Because of this peculiarity, when a person has the Terminating Validation option and the call goes through, the DMS switch cannot tell if the call has been answered without audio tone detectors.

If the trunk does not return an indication that the remote station has answered, a user cannot tell whether to activate the Call Forwarding feature. The user can be talking to the intended party, receiving busy tone, or listening to a recorded announcement.

By the use of audio tone detectors, the caller knows if the user is hearing busy tone, reorder tone, or voice. The Call Forwarding feature is activated or denied as appropriate.

Usually, this is of no concern to the user at the base station. However, if the user programs the number to a station that requires a no-answer trunk, the tone detectors cannot distinguish between a recorded announcement or a person talking (it can only tell if there is a voice out there). At this point, if the user is listening to a recorded announcement, then the user can put the receiver on-hook, deactivate the Call Forwarding feature, and then reactivate the Call Forwarding feature to another station.

If the DMS switch does not have tone detectors available, either because all are in use or the switch is not equipped with any, then by default, the Call

Forwarding feature is activated for forwarding DNs that go out over a no-answer trunk (even though it is possible that the user can be hearing busy tone or an announcement). If this occurs, then the user can put the receiver on-hook, deactivate Call Forwarding, and then program Call Forwarding again.

## Datafill

The following table lists the datafill for table CUSTSTN option CFWVAL.

### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CFWVAL	<i>Option name</i> Enter the name of the option, CFWVAL.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CFWVAL	<i>Option</i> Enter the name of the option, CFWVAL, and datafill refinement TERMOPTN.
	TERMOPTN	Y or N	<i>Terminating option</i> Enter Y (yes) if the customer group has the terminating variation of option IBN Call Forwarding Validation (CFWVAL). Enter N (no) if the customer group has the routing variation of option CFWVAL.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CFWVAL.

The customer group has the terminating validation type of option CFWVAL.

**MAP display example for table CUSTSTN option CFWVAL**

CUSTNAME	OPTNAME	OPTION
CENTESN	CFWVAL	CFWVAL Y

## CUSTSTN option CFXFEAT

### CUSTSTN option CFXFEAT

This option is required if the customer group has feature BC0181 (Call Forwarding) and a 500-ms burst of ring splash is applied to the base station when an intragroup or intergroup call is forwarded and the base station is idle.

For a 500/2500 set with the Call Forward Intragroup (CFI) feature, if a call forwarded from a remote station is intragroup, ring splash is applied to the base station if it is idle. If a call forwarded from a remote station is intergroup, ring splash is not applied to the base station if it is idle.

For a 500/2500 set with the Call Forward Universal (CFU) feature, if a call forwarded from a remote station is intragroup or intergroup, ring splash is applied to the base station if it is idle.

If an Integrated Business Network (IBN) business set has the Call Forwarding feature and it is activated by dialing the access code, the same rules as above apply, except a buzz is applied to the base station if it is idle, instead of a ring splash.

### Datafill

The following table lists the datafill for table CUSTSTN option CFXFEAT.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CFXFEAT	<i>Option name</i> Enter the name of the option, CFXFEAT.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.

**CUSTSTN option CFXFEAT (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	CFXFEAT	<i>Option name</i> Enter the option CFXFEAT, and datafill refinement RINGCFI.
	RINGCFI	Y or N	<p><i>Ring splash for base station</i> Enter Y (yes) if a 500-ms burst of ring splash is applied to the base station when an intragroup call is forwarded and the base station is idle. Otherwise, enter N (no).</p> <p>Refinement RINGCFI is for intragroup forwarded calls only.</p> <p><b>Note:</b> Refinement RINGCFI does not allow an intergroup call that is forwarded to turn off ring splash.</p>

**Datafill example**

The following example shows sample datafill for table CUSTSTN option CFXFEAT.

A 500-ms burst of ring splash is applied to the base station if an intergroup call is call forwarded.

**MAP display example for table CUSTSTN option CFXFEAT**

CUSTNAME	OPTNAME	OPTION
CENTESN	CFXFEAT	CFXFEAT Y

## CUSTSTN option CFXOL

### Call Forwarding Optional Lines (CFXOL)

This option provides for setting the number of times, from one to five, that a call can be forwarded for a Meridian Digital Centrex (MDC) or a Residential Enhanced Services (RES) customer on a customer group basis.

This option is activated once it is datafilled. Subfield MAXLINK of option CFXOL defines the number of times a call is forwarded. In other words, subfield MAXLINK defines the number of links over which a call can be forwarded.

### Datafill

The following table lists the datafill for table CUSTSTN option CFXOL.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CFXOL	<i>Option name</i> Enter the name of the option, CFXOL.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CFXOL	<i>Option</i> Enter the name of the option, CFXOL, and datafill refinement MAXLINK.
	MAXLINK	1 to 5	<i>Maximum optional links</i> Enter the number of maximum optional links.  The default value is 5.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CFXOL.

The option is assigned to the CENTESN customer group with a maximum of four links.

---

**CUSTSTN option CFXOL (end)**

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**MAP display example for table CUSTSTN option CFXOL**

CUSTNAME	OPTNAME	OPTION
CENTESN	CFXOL	CFXOL 4

## **CUSTSTN option CFXOPT**

---

### **Call Forwarding Option (CFXOPT)**

This option is required if the customer group has feature BC0181 (Call Forwarding).

This option covers multiple and personal call screening of forwarded calls.

All calls are forwarded for Call Forward Busy (CFB) feature in any non-idle state.

Personal call screening allows transfer of calls forwarded back to any base station in the call forwarding chain of the transferred call.

### **Call Forward Universal and Intragroup (option PCSCFA)**

Option PCSCFA allows a remote station, to which the base station has programmed feature Call Forwarding, to terminate on the base station regardless of the state of Call Forwarding activation.

### **Call Forward Busy (option PCSCFB)**

Option PCSCFB allows a station, that has the Call Forward Busy (CFB) feature to receive a call without forwarding it, if a call has already been forwarded under CFB feature and the station is now idle. This works for calls directly to the station or through a three-way call and call transfer where the calling party is the party to whom the call is forwarded.

If the operating company selects option MULTICFB and the base station becomes idles, then option PCSCFB is meaningless since the base station is free to accept any new calls.

If the operating company selects option MULTICFB and sets CUSTSTN option PCSOPT to DIALDSET, and the base station is busy on the three-way call attempt, then the switch returns treatment to the caller. The call does not forward.

### **Call Forward Don't Answer (option PCSCFD)**

Option PCSCFD allows a station that has the Call Forward Don't Answer (CFD) feature to receive a call without forwarding it, if a call has already been forwarded under CFD feature. This option is only applicable to a three-way call or call transfer where the calling party is the party to whom the call is forwarded.

If the operating company selects option MULTICFD and sets CUSTSTN option PCSOPT to DIALDSET, then the switch forwards the call.

---

**CUSTSTN option CFXOPT** (continued)

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For the multiple call forwarding arrangement, option MULTICFX specifies whether or not multiple call forwarding is required for each of the following types of call forwarding.

**Call Forward Universal and Intragroup when activated (option MULTICFA)**

Option MULTICFA allows the ability to forward many calls at once. For example, if the base station is forwarding calls to a hunt group terminator, calls coming to the Call Forward Universal (CFU) and Call Forward Intragroup (CFI) station are forwarded until no more lines in the hunt group terminator are available.

**Call Forward Busy (option MULTICFB)**

Option MULTICFB allows the ability to forward many calls at once, for the CFB feature. For example, forwarding to a hunt group, attendant, Uniform Call Distribution (UCD) queue, or multiple access directory number (MADN) group.

**Call Forward Don't Answer (option MULTICFD)**

Option MULTICFD allows the ability to forward many calls at once, for the CFD feature.

Option CFXTRK allows forwarding of multiple calls to trunks for options MULTICFA, MULTICFB, and MULTICFD.

Option BUSYTRMT indicated whether the customer group wants Busy Line treatment on all CFU/CFI/CFF/CFB failure paths. If option BUSYTRMT is set to Y (yes), the customer group receives busy tone on all CFU/CFI/CFF/CFB failure paths. Otherwise, appropriate treatment is given based on the failure case.

The addition of option BUSYTRMT allows the customer to customize the behavior of the CFU/CFI/CFF/CFB features, such as control the type of treatment given on CFU/CFI/CFF/CFB failure paths and define when the CFB feature forwards (for example, CP\_BSY or NON-IDLE states).

When an incoming call is forwarded by the CFB feature and hears busy tone because the remote station is in a busy talking state, the caller can activate the Ring Again (RAG) feature. The RAG feature only activates if the base station is in a busy talking state. Otherwise, the RAG feature request is denied.

The RAG and CFB features interaction described above does not work when the base station is in a non-busy talking state. A subscriber can only activate RAG feature on a station that is in the call processing busy (CP\_BSY) state. This is a basic restriction for RAG feature.

**CUSTSTN option CFXOPT** (continued)

If the CFB base station is in a manual busy (MANB) state and forwards a call to a remote station that is busy talking, the caller is blocked from activating the RAG feature.

**CAUTION****Possible inconsistency in call forwarding**

Do not use the TTTR selector in table IBNXLA for routes that can be call forwarded to. If any type of call forward validation is used (and regular calls as well), the internal field that houses the digit register (CCB.CHB.XLAB.CALLED\_DR) is processed in a way that causes inconsistencies in the way that the final call forwarding digits are eventually stored. It can result in the improper operation of the Call Forwarding feature.

**Datafill**

The following table lists the datafill for table CUSTSTN option CFXOPT.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CFXOPT	<i>Option name</i> Enter the name of the option, CFXOPT.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CFXOPT	<i>Option</i> Enter the name of the option, CFXOPT, and datafill refinements PCSCFA, PCSCFB, PCSCFD, MULTICFA, MULTICFB, MULTICFD, CFXTRK, and BUSYTRMT.
	PCSCFA	Y or N	<i>Personal call screening for Call Forward Universal/Call Forward Intragroup</i> Enter Y (yes) if stations with line features Call Forward Universal (CFU) and Call Forward Intragroup (CFI) are allowed personal call screening. Otherwise, enter N (no).

**CUSTSTN option CFXOPT** (continued)**Field descriptions (Sheet 2 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
	PCSCFB	Y or N	<i>Personal call screening for Call Forward Busy</i> Enter Y if stations with line feature Call Forward Busy (CFB) are allowed personal call screening. Otherwise, enter N.
	PCSCFD	Y or N	<i>Personal call screening for Call Forward Don't Answer</i> Enter Y if stations with line features Call Forward Don't Answer (CFD) are allowed personal call screening. Otherwise, enter N.
	MULTICFA	Y or N	<i>Multiple call forwards for Call Forward Universal/Call Forward Intragroup</i> Enter Y if stations with line feature CFU and CFI are allowed multiple call forwards. Otherwise, enter N.
	MULTICFB	Y or N	<i>Multiple call forwards for Call Forward Busy</i> Enter Y if stations with line feature CFB are allowed multiple call forwards. Otherwise, enter N.
	MULTICFD	Y or N	<i>Multiple call forwards for Call Forward Don't Answer</i> Enter Y if stations with line feature CFD are allowed multiple call forwards. Otherwise, enter N.
	CFXTRK	Y or N	<i>Multiple call forwards to trunks</i> Enter Y if call forwarding of multiple call to trunks for option MULTICFA, MULTICFB, and MULTICFD is allowed. Otherwise, enter N.
	BUSYTRMT	N or Y	<i>Busy treatment</i> Enter Y if the station receives busy tone on all CFU/CFI/CFF/CFB failure paths.  Enter N if the station receives the appropriate treatment on all CFU/CFI/CFF/CFB failure paths.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option CFXOPT.

### **CUSTSTN option CFXOPT (end)**

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All multicall forwarding options for customer group LONDESN are set to Y. The personal screening is set to Y for CFU and CFI features and set to N for CFB and CFD features.

Stations receive busy tone on all CFU/CFI/CFF/CFB failure paths.

CFB calls are forwarded when the base station is in a non-idle state.

#### **MAP display example for table CUSTSTN option CFXOPT**

CUSTNAME	OPTNAME	OPTION
LONDESN	CFXOPT	CFXOPT Y N N Y Y Y Y Y

## CUSTSTN option CHD

### Call Hold with Audio (CHD)

This option provides announcement or music to the held party for 500/2500 sets assigned feature BC0948 (Call Hold) (CHD) in table IBNLINES. If this option is not specified, lines with feature CHD still have the call hold function, but the held party hears silence.

The announcement or music provided is specified in table AUDIO for the chosen audio group, under option CHD.

Feature CHD holds a call for any length of time provided neither party goes on-hook. The CHD feature is activated by flashing the hook and dialing the CHD access code specified in table IBNXLA.

### Datafill

The following table lists the datafill for table CUSTSTN option CHD.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CHD	<i>Option name</i> Enter the name of the option, CHD.
OPTION		see subfield	<i>Option</i> This field consists of subfields OPTION and its refinements.
	OPTION	CHD	<i>Option</i> Enter the name of the option, CHD, and datafill refinement AUDIOGRP.
	AUDIOGRP	AUDIO1toAUDIO512	<i>Audio group</i> Enter the audio group, datafilled in table AUDIO, that specifies the announcement or music applied to the held party.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CHD.

In this example a line held by the CHD feature for customer group LONDESN hears announcement or music specified in table AUDIO for audio group AUDIO1.

## CUSTSTN option CHD (end)

---

### MAP display example for table CUSTSTN option CHD

CUSTNAME	OPTNAME	OPTION
LONDESN	CHD	CHD AUDIO1

## CUSTSTN option CMCF

### Control of Multiple Call Forwarding (CMCF)

This option allows the operating company to limit the number of simultaneous calls that can be forwarded by a Meridian Digital Centrex (MDC) customer line. Different limits can be specified for intragroup and external calls. These limits are assigned to the customer group. Additional simultaneous call forwarding on a line can be specified at the line level.

### Datafill

The following table lists the datafill for table CUSTSTN option CMCF.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CMCF	<i>Option name</i> Enter the name of the option, CMCF.
OPTION		see subfield	<i>Option</i> This field consists of subfields OPTION and its refinements.
	OPTION	CMCF	<i>Option</i> Enter the name of the option, CMCF, and datafill refinements NCFI and NCFE.
	NCFI	1 to 1023	<i>Number of call forwarding intragroup</i> Enter a value to specify the number of simultaneous calls that can be forwarded by a member of the customer group to a directory number (DN) belonging to the same customer group.
	NCFE	1 to 1023	<i>Number of call forwarding external</i> Enter a value to specify the number of simultaneous calls that can be forwarded by a member of the customer group to a DN outside the customer group.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CMCF.

## CUSTSTN option CMCF (end)

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MAP display example for table CUSTSTN option CMCF

CUSTNAME	OPTNAME	OPTION
LONDESN	CMCF	CMCF 23 20

## CUSTSTN option CNAB

### Calling Name Delivery Blocking (CNAB)

This option blocks the delivery of the calling name.

### Datafill

The following table lists the datafill for table CUSTSTN option CNAB.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CNAB	<i>Option name</i> Enter the name of the option, CNAB.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CNAB	<i>Option</i> Enter the name of the option, CNAB.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CNAB.

#### MAP display example for table CUSTSTN option CNAB

CUSTNAME	OPTNAME	OPTION
BRAMESN	CNAB	CNAB

## CUSTSTN option CNDB

### Calling Name and Number Delivery Blocking per Call (CNDB)

This option provides the capability of overriding the datafill in table RESOFC for the Calling Name Delivery Blocking (CNDB) feature.

This option allows subscribers to control the display of their directory numbers (DN) to the terminating station for each call.

It also allows subscribers to suppress their DN and name to the termination station for each call (nodal or network calls).

Subscribers within a customer group with option CNDB have the ability of using any of Calling Name and Number Delivery Blocking (CNDB), Calling Number Blocking (CNB), and Calling Number Name Blocking (CNNB) features for any call they originate.

Subscribers wishing to make a call using one of the CNDB, CNB, or CNNB features, can take the receiver off-hook and dial one of the CNDB, CNB, or CNNB feature access codes. They receive a special dial tone at this point. Subscribers then can proceed with dialing the called number.

Option CNDB can only be provided in a switching unit with the Calling Name and Number Delivery Blocking software.

### Datafill

The following table lists the datafill for table CUSTSTN option CNDB.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CNDB	<i>Option name</i> Enter the name assigned to the option, CNDB.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CNDB	<i>Option</i> Enter the name assigned to the option, CNDB.

---

**CUSTSTN option CNDB (end)**

---

**Datafill example**

The following example shows sample datafill for table CUSTSTN option CNDB.

**MAP display example for table CUSTSTN option CNDB**

CUSTNAME	OPTNAME	OPTION
BRAMESN	CNDB	CNDB

## CUSTSTN option CNDBO

### Calling Number Delivery Blocking Override (CNDBO)

This option overrides the calling line identification display (CLID) presentation restrictions at the terminating end of a call and can be used for calls terminating on emergency services agents to display calling party numbers that are otherwise restricted. Calling name delivery is unaffected.

If the customer group option CNDBO is assigned on a customer group basis through table CUSTSTN, then all agents in that customer group have CLID presentation restriction override. Agents that are not authorized to override presentation restrictions cannot be assigned to that customer group.

If the customer group option CNDBO is not used, the CNDBO line option must be assigned to each line in the customer group individually.

### Datafill

The following table lists the datafill for table CUSTSTN option CNDBO.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CNDBO	<i>Option name</i> Enter the name of the option, CNDBO.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CNDBO	<i>Option</i> Enter the name of the option, CNDBO.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CNDBO.

---

**CUSTSTN option CNDBO** (end)

---

**MAP display example for table CUSTSTN option CNDBO**

CUSTNAME	OPTNAME	OPTION
BRAMESN	CNDB	CNDBO

## CUSTSTN option COT

### Customer Originated Trace (COT)

This option allows a recipient subscriber of a harassing call to request an automatic trace of a call.

### Datafill

The following table lists the datafill for table CUSTSTN option COT.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		COT	<i>Option name</i> Enter the name of the option, COT.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	COT	<i>Option</i> Enter the name of the option, COT, and datafill refinements TONES and ENF1LEVL.
	TONES	Y or N	<p><i>Tones</i> This field is used to specify the type of feedback to the user.</p> <p>Enter Y (yes) to specify that the feature confirmation tone is used instead of the Customer Originated Trace (COT) confirmation (COTCONF) announcement and feature reorder tone is used instead of the COT failure (COTFAIL) announcement.</p> <p>Enter N (no) to specify that the type of confirmation and failure feedback depends on the setting of fields COTCONF and COTFAIL of table RESOFC.</p>

**CUSTSTN option COT (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
ENF1LEVL		Y or N	<p><i>Enable first 1-level</i> Enter Y to specify that the COT level activation for the customer group is one level regardless of the setting of field ACTLEVEL of the COT tuple in table RESOFC.</p> <p>Enter N to specify that field ACTLEVEL of the COT tuple in table RESOFC controls the COT activation level for the customer group.</p>

**Datafill example**

The following example shows sample datafill for table CUSTSTN option COT.

Feature confirmation tone is used for customer group BRAMESN and the COT level activation is one level.

**MAP display example for table CUSTSTN option COT**

CUSTNAME	OPTNAME	OPTION
BRAMESN	COT	COT Y Y

## CUSTSTN option CPARK

### Call Park (CPARK)

This option allows stations who have feature BV0534 (Call Park) (PRK) assigned in table IBNLINES or KSETFEAT to park one call against its own directory number (DN) or allows stations who have feature BV1535 (Directed Call Park) (DCPK) assigned in table IBNLINES or KSETFEAT to park one call against any DN that is assigned as a member of the customer group. The parked call can then be retrieved from any station by dialing a feature code and the directory number against which the call is parked.

The time a station can park a call is from 12 to 240 s or infinite.

The maximum number of calls that can be parked is defined in the option CPK assigned in table CUSTHEAD.

If option CPARK is not provided, the default value is 60 s.

Option CPARK allows the attendant to park calls against any DN in the customer group.

The Attendant Call Park feature requires two keys, PARK and UNPK, assigned on the attendant console or assigned to two of the wild card key access codes.

For the maximum time an attendant can park a call, see option ACCPKTIM in table CUSTCONS.

### Datafill

The following table lists the datafill for table CUSTSTN option CPARK.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CPARK	<i>Option name</i> Enter the name of the option, CPARK.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.

**CUSTSTN option CPARK (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	CPARK	<i>Option</i> Enter the name of the option, CPARK, and datafill refinement CPKRECTO.
	CPKRECTO	0 to 240	<i>Call Park recall time-out</i> Enter the Call Park recall time-out period, in 1-s intervals.  If this field is set to 0 (zero), time is infinite and no time-out occurs.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option CPARK.

In this example the Call Park recall time-out is 60 s.

**MAP display example for table CUSTSTN option CPARK**

CUSTNAME	OPTNAME	OPTION
LONDES	CPARK	CPARK 60

## CUSTSTN option CRINTER

### Call Request Intergroup

This option is required if call request is allowed between customer groups.

### Datafill

The following table lists the datafill for table CUSTSTN option CRINTER.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name.</i> Enter the customer group name.
OPTNAME		CRINTER	<i>Option name.</i> Enter the name of the option, CRINTER.
OPTION		see subfield	<i>Option.</i> This field consists of subfield OPTION.
	OPTION	CRINTER	<i>Option.</i> Enter the name of the option, CRINTER.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CRINTER.

#### MAP display example for table CUSTSTN option CRINTER

CUSTNAME	OPTNAME	OPTION
BRAMESN	CRINTER	CRINTER

## CUSTSTN option CRRNOKSH

### Call Request Retrieve and Keyset Short Hunt Interaction Control (CRRNOKSH)

This option provides the capability to control the interaction between the call request retrieve (CRR) feature and the keyset short hunt (KSH) feature. The operating company assigns this capability for each customer group.

If option CRRNOKSH is present, CRR calls do not follow hunting as defined by the KSH feature. If option CRROKSH is absent, CRR calls follow hunting as defined by the KSH feature. Option CRROKSH only applies to CRR calls.

### Datafill

The following table lists the datafill for table CUSTSTN option CRRNOKSH.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CRRNOKSH	<i>Option name</i> Enter the name of the option, CRROKSH.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CRRNOKSH	<i>Option</i> Enter CRRNOKSH.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CRRNOKSH.

#### MAP display example for table CUSTSTN option CRRNOKSH

CUSTNAME	OPTNAME	OPTION
BRAMESN	CRRNOKSH	CRRNOKSH

## CUSTSTN option CSMI

### Call Screening, Monitoring, and Intercept

CSMI allows end users of Network Based Answering Services (NBAS) to monitor and intercept calls being handled by the NBAS. Call monitoring allows the end user to listen to a message as it is being left in the end user's voice mailbox in the NBAS. Call interception allows the end user to connect to the call to speak directly to the caller.

### Datafill

The following table lists the datafill for table CUSTSTN option CSMI.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CSMI	<i>Option name</i> Enter CSMI.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CSMI	<i>Option</i> Enter the name of the option, CSMI, and datafill refinements CSMISTATE, CONNEC3W, and SCRTIMER.
	CSMISTATE	A or I	<i>CSMI state</i> Enter A if CSMI is active on this line. Enter I if CSMI is inactive.
	CONNEC3W	Y or N	<i>Three-way connection</i> This subfield indicates how call interception is to occur. When set to N, the interception establishes a two-way connection between the caller and the end user. When set to Y, the interception establishes a three-way call between the two parties and the NBAS.

**CUSTSTN option CSMI (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	SCRTIMER	see subfields	<i>Screening timer</i> This subfield consists of subfields SCRACTIVE and SCR DUR.
	SCRACTIVE	Y or N	<i>Screening active</i> This subfield indicates what factor determines the duration of the screening timer. When set to Y, the duration of the screening timer is determined by the value in subfield SCR DUR. When set to N, the duration of the screening timer is determined by office parameter CSMI_SCREENING_TIMER.
	SCR DUR	0 to 120	<i>Screening timer duration</i> This subfield indicates the duration (in seconds) of the screening period (that is, the duration when the CSMI end user can begin to monitor the call once a ring splash is received). Monitoring ceases after the timer expires. (Entering a value of 0 indicates that the screening period lasts as long as the forwarded call.)  <b>Note:</b> This field only displays if subfield SCRACTIVE was set to Y.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option CSMI.

**MAP display example for table CUSTSTN option CSMI**

CUSTNAME	OPTNAME	OPTION
COMDEMOS	CSMI	CSMI A N Y Y 20

## CUSTSTN option CTW

### Call Transfer Warning (CTW)

This option, assigned to a customer group, provides lines assigned to the customer group with a series of distinct warning tones to alert conferees in a three-way call or call transfer that the controlling (transferring) party is still connected to the call. This prevents a situation where the controlling party can monitor a conversation without the knowledge of the other two parties.

### Datafill

The following table lists the datafill for table CUSTSTN option CTW.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CTW	<i>Option name</i> Enter the name of the option, CTW.
OPTION		see subfield	<i>Option name</i> This field consists of subfield
	OPTION	CTW	<i>Option</i> Enter the name of the option, CTW.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CTW.

#### MAP display example for table CUSTSTN option CTW

CUSTNAME	OPTNAME	OPTION
GOC990	CTW	CTW

---

## CUSTSTN option CWD

---

### Dial—Call Waiting (CWD)

This option permits a station, which has line feature BC0947 (Dial—Call Waiting) (CWD) assigned in table IBNLINES, to impose call waiting on an intragroup call, if the called party is busy and not assigned the Exempt Call Waiting (CWX) option in table IBNLINES, and have announcement or music provided to the waiting party.

This feature can be activated in the following ways:

- When the calling party goes offhook, the party can dial the call waiting activation code, followed by the directory number of the called party.
- When the calling party encounters a busy signal, the party can flash and dial the call waiting activation code.

While call waited, the originator hears either audible ringback tone, recorded announcement, or music, as datafilled in the specified audio group in table AUDIO under option CWD.

If option CWD is not provided, the DMS automatically defaults to audible ringback tone.

### Datafill

The following table lists the datafill for table CUSTSTN option CWD.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CWD	<i>Option name</i> Enter the name of the option, CWD.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CWD	<i>Option</i> Enter the name of the option, CWD, and datafill refinement ANNMUSIC.

**CUSTSTN option CWD (end)**

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
ANNMUSIC		Y or N	<i>Announcement or music</i>  Enter Y (yes) if announcement or music is given to the waiting party and datafill refinement AUDIOGRP.  Otherwise, enter N (no). No further datafill is required.
AUDIOGRP		AUDIO1 to AUDIO512	<i>Audio group</i>  If the entry in refinement ANNMUSIC is Y, enter the audio group datafilled in table AUDIO whose option CWD defines the announcement or music applied.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option CWD.

Announcement or music is provided to stations with option CWD while call waiting is defined in table AUDIO for AUDIO5.

**MAP display example for table CUSTSTN option CWD**

CUSTNAME	OPTNAME	OPTION
GOC990	CWD	CWD Y AUDIO5

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**CUSTSTN option CWO**


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**Call Waiting—Originating (CWO)**

This option permits a station, which has line feature BC0949 (Call Waiting—Originating) (CWO) assigned in table IBNLINES, to impose call waiting on an intragroup call if the called party is busy and not assigned the Exempt Call Waiting (CWX) option in table IBNLINES, and provide announcement or music to the waiting party.

While call waited, the originator hears either audible ringback tone, recorded announcements or music, as datafilled in the specified audio group in table AUDIO under option CWO.

If option CWO is not provided, the DMS automatically defaults to audible ringback tone.

**Datafill**

The following table lists the datafill for table CUSTSTN option CWO.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CWDO	<i>Option name</i> Enter the name of the option, CWO.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CWO	<i>Option</i> Enter the name of the option, CWO, and datafill refinement ANNMUSIC.

**CUSTSTN option CWO** (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ANNMUSIC	Y or N	<p><i>Announcement/music</i></p> <p>Enter Y (yes) if announcement or music is given to waiting party and datafill refinement AUDIOGRP.</p> <p>Otherwise, enter N (no). No further datafill is required.</p>
	AUDIOGRP	AUDIO1 to AUDIO512	<p><i>Audio group</i></p> <p>If the entry in refinement ANNMUSIC is Y, enter the audio group datafilled in table AUDIO whose option CWO specifies the type of announcement or music provided.</p>

**Datafill example**

The following example shows sample datafill for table CUSTSTN option CWO.

**MAP display example for table CUSTSTN option CWO**

CUSTNAME	OPTNAME	OPTION
GOC990	CWO	CWO Y AUDIO6

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## CUSTSTN option CWTC

---

### Call Waiting Conference

The Call Waiting Conference (CWTC) option assigns the CWTC functionality to a subscriber line. The subscriber can conference a waiting party.

### Datafill

The following table lists the datafill for table CUSTSTN option CWTC.

#### Field descriptions

Field	Subfield	Entry	Explanation and action
OPTNAME		CWTC	Option name. Enter the name of the option, CWTC.
OPTION		see subfield	Option. This field consist of subfield option.
	OPTION	CWTC	Option. Enter the name of the option, CWTC.

### Datafill example

The following example shows sample datafill for table CUSTSTN option CWTC.

#### MAP display example for table CUSTSTN option CWTC

CUSTNAME	OPTNAME	OPTION
COMKODAK	CWTC	CWTC

## CUSTSTN option CXFER

---

### Call Transfer (CXFER)

This option specifies the type of call transfer that is possible for each station in the customer group.

If a station is assigned the Integrated Business Network (IBN) line feature Call Transfer (CXR), the type of call transfer defined with the feature overrides this option.

If customer group has the CXR feature, specify which of the following transfer types is required:

- Specify type CTINC if the ability to transfer all incoming calls is required. The first leg of the call must be intergroup and the second leg of the call must be intragroup.
- Specify type CTOUT if the ability to transfer all incoming and outgoing calls is required. The first leg of the call must be intergroup and the second leg of the call must be intragroup.
- Specify type CTALL if the ability to transfer all incoming and outgoing calls is required. The first and second legs of the call can be intergroup or intragroup.
- Specify type ATTRCLF if the call is always transferred to the attendant.
- Specify type NCT if the call is transferred to the attendant for incoming calls where the first leg of the call is intergroup.
- Specify type CTINTRA if the ability to transfer all incoming and outgoing calls is required. The first leg of the call can be intergroup or intragroup and the second leg of the call must be intragroup.
- Specify type CUSTOM if given a type of call for the first leg; the customer gets to select the type of the second leg of the call. If the call transfer type is CUSTOM, call transfer type can be specified for the following four types of call: originating intergroup (ORGINTER), originating intragroup (ORGINTRA), terminating intergroup (TRMINTER), and terminating intragroup (TRMINTRA).

A default value of CTINTRA for option CXFER is stored internally. Unless datafill is specified for this option, the option is not displayed in the table.

**CUSTSTN option CXFER** (continued)**Datafill**

The following table lists the datafill for table CUSTSTN option CXFER.

**Field descriptions**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CXFER	<i>Option name</i> Enter the name of the option, CXFER.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
OPTION		CXFER	<i>Option name</i> Enter the name of the option, CXFER, and datafill refinement CXTYPE.
CXTYPE		ATTRCLF CUSTOM CTALL CTINC CTINTRA CTOUTorNCT	<i>Call transfer type</i> Enter the type of call transfer applicable to the customer group. If the entry is CUSTOM, see the following table. If the entry is other than CUSTOM, no further datafill is required.

**CUSTSTN option CXFER** (continued)**CXTYPE = CUSTOM**

If the entry in refinement CUSTOM, datafill refinements ORGINTER, ORGINTRA, TRMINTER, TRMINTRA, and XFERRCL as described in the following table.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
ORGINTER		AC, INTER, INTRA, NOCXFER, or TRATER	<p><i>Originating intergroup</i></p> <p>Enter the type of call transfer for originating intergroup calls.</p> <p>Enter AC if the terminator on the second leg can be attendant console.</p> <p>Enter INTER if the second leg of the call can be an intergroup call.</p> <p>Enter INTRA if the second leg of the call can be an intragroup call.</p> <p>Enter TRATER if the second leg of the call can be an intergroup or intragroup call.</p>
ORGINTRA		AC, INTER, INTRA, NOCXFER, or TRATER	<p><i>Originating intragroup</i></p> <p>Enter the type of call transfer for originating intragroup calls.</p>
TRMINTER		AC, INTER, INTRA, NOCXFER, or TRATER	<p><i>Terminating intergroup</i></p> <p>Enter the type of call transfer for terminating intergroup calls.</p>
TRMINTRA		AC, INTER, INTRA, NOCXFER, or TRATER	<p><i>Terminating intragroup</i></p> <p>Enter the type of call transfer for terminating intragroup calls.</p>
XFERRCL		Y or N	<p><i>Call transfer recall</i></p> <p>Enter Y (yes) if transferred calls can recall the transferring station when the recall timer expires and datafill refinements XRCLTIM and METHOD.</p> <p>Otherwise, enter N (no). No further datafill is required.</p>

**CUSTSTN option CXFER (end)****Field descriptions for conditional datafill (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
XRCLTIM		12 to 120	<i>Call transfer recall timer</i> If the entry in refinement XFERRCL is Y, enter the recall timer length (in seconds).
METHOD		DIALor STD	<i>Method</i> If the entry in refinement XFERRCL is Y, enter the method of call transfer. Enter DIAL to activate call completion with trunk optimization (CCTO). Enter STD to select the existing CXR transfer feature.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option CXFER.

In this example all calls can be transferred.

**MAP display example for table CUSTSTN option CXFER**

CUSTNAME	OPTNAME	OPTION			
LONDESN	CXFER	CXFER	CTALL	N	STD

## CUSTSTN option CXFERSUP

---

### Call Transfer Enhanced (CXFERSUP)

This option is provided to accommodate the following trunking situation.

In large tandem tie trunk networks, a call can be routed through many switching units before reaching its destination. The switching unit cannot always receive answer or disconnect signals, or both from distant switching units. The switching unit is not aware of the no-disconnect trunks between far-end switching units and expects proper disconnect supervision. If the proper disconnect supervision is not received, trunks can be hung back-to-back after transfer. If poor supervision is involved in a call, these calls can be blocked from transfer, by suitably datafilling this option.

To restrict the Call Transfer option to suitably supervised calls, consider the agents involved in the call. Various trunk groups are examined to determine which combinations of agents can be expected to provide difficulties, based on what is already known about answer or disconnect supervision, or both.

After the second leg of the call is dialed, the agents that were left in the transferred call are checked to determine what type of supervision can be expected from them. If both agents provide poor supervision, then the Call Transfer option is only allowed to progress to the conference stage. If the controller abandons, the call is taken down. If one agent provides poor supervision, the most supervised agent assumes calling party privileges and the customer through datafill in table CUSTSTN, can select how far the call transfer option is allowed to progress. The customer can choose to hear a warning tone when a poorly supervised configuration is detected.

Since the agent left in the transferred call from the first leg of the call is the originator of that leg, there is no concern about answer supervision for that agent. Since a no-disconnect trunk is idled when disconnect is received by DMS from the other party, the other party in the transferred call must provide disconnect supervision. Two agents, where terminating (operator) hold or joint hold is applicable, are not allowed in the transferred call.

The agents considered as the terminator of the first leg are as follows:

1. answered line (Integrated Business Network [IBN], plain ordinary telephone service (POTS), P-phone)
2. ringing line (IBN, POTS, P-phone)
3. IBNTI/IBNT2 no-disconnect trunks
4. IBNTI/IBNT2 answer disconnect (ansdisc) trunks
5. IBNTI/IBNT2 disconnect only trunks

**CUSTSTN option CXFERSUP** (continued)

The agents considered as the terminator of the second leg are as follows:

1. answered line (IBN, POTS, P-phone)
2. ringing line (IBN, POTS, P-phone)
3. IBNTO/IBNT2 no disconnect trunks
4. IBNTO/IBNT2 answer disconnect (ansdisc) trunks
5. IBNTO/IBNT2 disconnect only trunks

The following table indicates which combinations of agents are allowed, denied, and datafillable.

**Agent combinations**

Terminator of first leg	Terminator of second leg				
	1	2	3	4	5
1					
2					
3			N	N	N
4			D		D
5			D	D	N

*where* Blank = Call transfer allowed  
N = Call transfer not allowed. The Call Transfer option is allowed to progress to the conference stage only. If the controller abandons, the call is taken down.  
D = The customer can provide datafill in table CUSTSTN to indicate how far the Call Transfer option is allowed to progress.

The agents considered as the originator of the first leg are as follows:

1. line (IBN, POTS, P-phone)
2. IBNTI/IBNT2 nodisc trunks
3. IBNTI/IBNT2 answer disconnect trunks
4. IBNTI/IBNT2 disconnect only trunks

The agents considered as the terminator of the second leg are as follows:

1. answered line (IBN, POTS, P-phone)
2. ringing line (IBN, POTS, P-phone)
3. IBNTO/IBNT2 no disconnect trunks

**CUSTSTN option CXFERSUP** (continued)

- 4. IBNTO/IBNT2 answer disconnect trunks
- 5. IBNTO/IBNT2 disconnect only trunks

The following table indicates which combinations of agents are allowed, denied, and datafillable.

**Agent combinations**

	Terminator of first leg		Terminator of second leg		
	1	2	3	4	5
1					
2					
3			N	D	N
4			D		D
5			N	D	N

*where* Blank = Call transfer allowed  
 N = Call transfer not allowed. The Call Transfer option is allowed to progress to the conference stage only. If the controller abandons, the call is taken down.  
 D = The customer can provide datafill in table CUSTSTN to indicate how far the Call Transfer option is allowed to progress.

One of the following three values can be assigned to the call transfer types. In the scenarios marked datafillable (D) in Table "Agent combinations" above, the following types apply:

- Type CONF allows only a conference type of call transfer, that is, if the controller abandons, the call comes down. If the warning tone is supplied, tone is heard by the controller after the second leg of the call has been dialed.
- Type ALLOW allows call transfer under any circumstance. This type is provided to minimize the problems that inadequate answer or disconnect, or both can cause. Datafill the type ALLOW type only if adequate supervision is provided. If the warning tone is supplied, the tone is heard by the controller after the second leg of the call has been dialed.
- Type DENY causes call denial of transfer when the particular configuration is detected. Reorder tone is returned to the controller if the

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**CUSTSTN option CXFERSUP** (continued)

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warning tone is not supplied. If the warning tone is supplied, then the warning tone is returned to the controller.

Warning tone consists of six short (100 ms) high tone (480 Hz). The tone is provided by the line module.

If the option CXFERSUP is not equal to the default value of CXFERSUP N ALLIBN CONF ALLPOTS CONF, then add option CXFERSUP to table CUSTSTN.

A warning tone can be supplied to indicate to the controller that supervision problems can arise if the call is transferred.

If all IBN trunks receive the same type of call transfer, the transfer type is equal to ALLIBN and the type of call transfer is equal to ALLOW, CONF, or DENY.

If different values of call transfer are required for the different IBN trunk group types, specify the type of call transfer (ALLOW, CONF, or DENY) for the various trunk group types.

If all POTS trunks receive the same type of call transfer, transfer type is equal to ALLPOTS and the type of call transfer is ALLOW, CONF, or DENY.

If different values of call transfer are required for the different POTS trunk group types, specify the type of call transfer (ALLOW, CONF, or DENY) for the various trunk group types.

A default value of CXFERSUP ALLIBN CONF ALLPOTS CONF N for option CXFERSUP is stored internally. Unless datafill is specified for this option, the option is not displayed in table CUSTSTN.

## Datafill

The following table lists the datafill for table CUSTSTN option CXFERSUP.

### Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CXFERSUP	<i>Option name</i> Enter the name of the option, CXFERSUP.

**CUSTSTN option CXFERSUP** (continued)

## Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CXFERSUP	<i>Option name</i> Enter the name of the option, CXFERSUP, and datafill the following refinements.
	CXTKIBN	see subfield	<i>Call transfer IBN trunks</i> This field consists of subfield IBNTKSEL.
	IBNTKSEL	ALLIBN or IBNTRKS	<i>All IBN trunks</i> Enter ALLIBN if all Integrated Business Network (IBN) trunks receive the same type of call transfer and datafill refinement ALLTRKS.  Enter IBNTRKS if the transfer type for IBN trunks is dependent on the trunk group type and datafill refinements ADSCNDSC, ADSCDSC, ANSNDSC, ANSDSC, and FANSFANS.
	ALLTRKS	ALLOWCONF or DENY	<i>Call transfer for IBN trunks</i> If the entry in subfield IBNTKSEL is ALLIBN, datafill this refinement, then go to subfield CXTKPOTS on the following pages..  If call transfer is allowed on IBN trunks, enter ALLOW.  If only a conference type of call transfer is allowed on IBN trunks, enter CONF.  If call transfer is not allowed on IBN trunks, enter DENY.

**CUSTSTN option CXFERSUP** (continued)

## Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	ADSCNDSC	ALLOWCONF orDENY	<p><i>Call transfer type</i></p> <p>If the entry in subfield IBNTKSEL is IBNTRKS, datafill this refinement. Specify call transfer type if terminator on first leg is a trunk group type IBNTO or IBNT2 answer disconnect trunk and terminator on second leg is a trunk group type IBNTO or IBNT2 no-disconnect trunk.</p> <p>If call transfer is allowed, enter ALLOW.</p> <p>If only a conference type of call transfer is allowed, enter CONF.</p> <p>If call transfer is not allowed, enter DENY.</p>
	ADSCDSC	ALLOWCONF orDENY	<p><i>Call transfer type</i></p> <p>If the entry in subfield IBNTKSEL is IBNTRKS, datafill this refinement. Specify call transfer type if terminator on first leg is a trunk group type IBNTO or IBNT2 answer disconnect trunk and terminator on second leg is a trunk group type IBNTO or IBNT2 disconnect only trunk.</p>
	ANSNDSC	ALLOWCONF orDENY	<p><i>Call transfer type</i></p> <p>If the entry in subfield IBNTKSEL is IBNTRKS, datafill this refinement. Specify call transfer type if terminator on first leg is a trunk group type TO, T2, P2, or PX answered agent and terminator on second leg is a trunk group type IBNTO or IBNT2 no-disconnect trunk.</p>
	ANSDSC	ALLOWCONF orDENY	<p><i>Call transfer type</i></p> <p>If the entry in subfield IBNTKSEL is IBNTRKS, datafill this refinement. Specify call transfer type if terminator on first leg is a trunk group type TO, T2, P2, or PX trunk and terminator on second leg is a trunk group type IBNTO or IBNT2 disconnect only trunk.</p>

**CUSTSTN option CXFERSUP** (continued)

## Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	FANSFANS	ALLOW CONForDENY	<p><i>Call transfer type</i></p> <p>If the entry in subfield IBNTKSEL is IBNTRKS, datafill this refinement. Specify the call transfer type that is used to determine call transfer action when the first leg of three-way calling (3WC) contains an outgoing fake answer trunk and the second leg does not have answer supervision.</p> <p>Go to subfield CXTKPOTS.</p>
	CXTKPOTS	see subfield	<p><i>Call transfer POTS trunks</i></p> <p>This field consists of subfield POTSTKSEL.</p>
	POTSTKSEL	ALLPOTS orPOTSTRKS	<p><i>All POTS trunks</i></p> <p>Enter ALLPOTS if all plain ordinary telephone sets (POTS) receive the same type of call transfer and datafill refinement ALLTRKS.</p> <p>Enter POTSTRKS if the transfer type for POTS trunks is dependent on the trunk group type and datafill refinements ADSCRV, ANSRV, WKNDSC, WKDSC, WKRV, WKWK, and CXFERTON.</p>
	ALLTRKS	ALLOWCONF orDENY	<p><i>Call transfer for POTS trunks</i></p> <p>If the entry in subfield POTSTKSEL is ALLPOTS, datafill this refinement. If call transfer is allowed on POTS trunks, enter ALLOW.</p> <p>If only a conference type of call transfer is allowed on POTS trunks, enter CONF.</p>
	ALLTRKS (continued)		<p>If call transfer is not allowed on POTS trunks, enter DENY.</p> <p>No further datafill is required.</p>

**CUSTSTN option CXFERSUP** (continued)

## Field descriptions (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	ADSCRV	ALLOWCONF orDENY	<p><i>Call transfer type</i></p> <p>If the entry in subfield POTSTKSEL is POTSTRKS, datafill this refinement. Specify call transfer type if terminator on first leg is trunk group type IBNTO or IBNT2 answer disconnect trunk and terminator on second leg is trunk group type A5, OC, SC, OS, RC, AN, AI, and DA trunk, with a reversal for the ANITYPE.</p>
	ANSRV	ALLOWCONF orDENY	<p><i>Call transfer type</i></p> <p>If the entry in subfield POTSTKSEL is POTSTRKS, datafill this refinement. Specify call transfer type if terminator on first leg is trunk group type TO, T2, P2, or PX trunk and terminator on second leg is trunk group type A5, OP, OC, SC, OS, RC, AN, AI, and DA trunk, with a reversal for the ANITYPE.</p>
	WKNDSC	ALLOW CONF orDENY	<p><i>Call transfer type</i></p> <p>If the entry in subfield POTSTKSEL is POTSTRKS, datafill this refinement. Specify call transfer type if terminator on first leg is trunk group type A5, OP, OC, SC, or OS trunk with a wink for the ANITYPE and terminator on second leg is trunk group type IBNTO or IBNT2 no-disconnect trunk.</p>
	WKDSC	ALLOW CONForDENY	<p><i>Call transfer type</i></p> <p>If the entry in subfield POTSTKSEL is POTSTRKS, datafill this refinement. Specify call transfer type if terminator on first leg is trunk group type A5, OP, OC, SC, or OS trunk with a wink for the ANITYPE and terminator on second leg is trunk group type IBNTO or IBNT2 disconnect only trunk.</p>

**CUSTSTN option CXFERSUP (end)**

**Field descriptions (Sheet 6 of 6)**

Field	Subfield or refinement	Entry	Explanation and action
	WKRV	ALLOW CONForDENY	<i>Call transfer type</i> If the entry in subfield POTSTKSEL is POTSTRKS, datafill this refinement. Specify call transfer type if terminators on first and second leg are trunk group types A5, OP, OC, SC, or OS trunk with a wink for the ANITYPE.
	WKWK	ALLOW CONForDENY	<i>Call transfer type</i> If the entry in subfield POTSTKSEL is POTSTRKS, datafill this refinement. Specify call transfer type if terminators on first and second leg are trunk group types A5, OP, OC, SC, or OS trunk with a wink for the ANITYPE.
	CXFERTON	Y or N	<i>Call transfer tone</i> If the entry in subfield POTSTKSEL is POTSTRKS, datafill this refinement. If a warning tone is supplied, enter Y (yes). Otherwise, enter N (no).

**Datafill example**

The following example shows sample datafill for table CUSTSTN option CXFERSUP.

All IBN and POTS trunks are allowed transfer and a warning tone is required.

**MAP display example for table CUSTSTN option CXFERSUP**

CUSTNAME	OPTNAME	OPTION
LONDESN	CXFERSUP	CXFERSUP ALLIBN CONF ALLPOTS CONF N

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## CUSTSTN option DCBITONE

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### Directed Call Pickup—Barge In Tone (DCBITONE)

This option is required in switching units with feature BC0950 (Directed Call Pickup—Barge In), and specifies whether a warning tone is given to the parties of an established call when a third party who has attempted to pick up the call is entering the connection.

Tone circuits in table STN with the code EBOT supply the warning tone.

### Datafill

The following table lists the datafill for table CUSTSTN option DCBITONE.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		DCBITONE	<i>Option name</i> Enter the name of the option, DCBITONE.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	DCBITONE	<i>Option</i> Enter the name of the option, DCBITONE.
	DCBITONE	Y or N	<i>Directed call pickup—barge in tone</i> Enter Y (yes) if warning tone is required. Otherwise, enter N (no).

### Datafill example

The following example shows sample datafill for table CUSTSTN option DCBITONE.

DCBITONE is required.

## CUSTSTN option DCBITONE (end)

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### MAP display example for table CUSTSTN option DCBITONE

CUSTNAME	OPTNAME	OPTION
GOC990	DCBITONE	DCBITONE Y

## CUSTSTN option DENYCWTC

### Deny Call Waiting Conference

The Deny Call Waiting Conference (DENYCWTC) option prevents the CWTC functionality on a per-line basis. The operating company can prevent the CWTC functionality on an exact line by assigning DENYCWTC option to that line.

### Datafill

The following table lists the datafill for table CUSTSTN option DENYCWTC.

#### Field descriptions

Field	Subfield	Entry	Explanation and action
OPTNAME		DENYCWTC	Option name. Enter the name of the option, DENYCWTC.
OPTION		see subfield	Option. This field consist of subfield option.
	OPTION	DENYCWTC	Option. Enter the name of the option, DENYCWTC.

### Datafill example

The following example shows sample datafill for table CUSTSTN option DENYCWTC.

#### MAP display example for table CUSTSTN option DENYCWTC

CUSTNAME	OPTNAME	OPTION
COMKODAK2	DENYCWTC	DENYCWTC

## CUSTSTN option DINALT

### Denied Incoming Alternate Treatment (DINALT)

This option allows Integrated Business Network (IBN) lines with feature Direct Incoming Number (DIN) assigned to route direct incoming dialed (DID) calls to a treatment datafilled in table IBNTREAT for each customer group.

If a station with DIN feature assigned receives an incoming or DID call with unmatching terminating restriction codes (TRC) and alternate terminating restriction codes (ALTTRC) and has option DINALT datafilled in table CUSTSTN, the call is intercepted and sent to the treatment datafilled in table IBNTREAT. The selection of intercepts include a tone, an announcement, or routing to an attendant console.

If the line has DIN feature without option DINALT datafilled, then the call is routed to an attendant console or blank directory number (BLDN) treatment based upon any matches between the station's TRCs and ALTTRCs.

### Datafill

The following table lists the datafill for table CUSTSTN option DINALT.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		DINALT	<i>Option name</i> Enter the name of the option, DINALT.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	DINALT	<i>Option</i> Enter the name of the option, DINALT, and datafill refinement DIN_TRMT.
	DIN_TRMT	0 to 63	<i>Denied incoming treatment</i> Enter the Integrated Business Network (IBN) treatment number.

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**CUSTSTN option DINALT (end)**

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**Datafill example**

The following example shows sample datafill for table CUSTSTN option DINALT.

**MAP display example for table CUSTSTN option DINALT**

CUSTNAME	OPTNAME	OPTION
AYLIBN	DINALT	DINALT 0

## CUSTSTN option DISPDIGS

### Display Digits (DISPDIGS)

This option is only required if a customer has display sets that are spread over more than one customer group, and incoming call or calling line information is displayed on the terminator's display set.

In a system other than a multipoint communication layer (MCL) Centrex in the United Kingdom, the number of digits displayed for intragroup calls must be specified (such as the average number of extension digits).

For MCL Centrex, the number of digits is 10 if the full national number (FNN) is displayed instead of the padded directory number (DN) with the Calling Number Display feature.

### Datafill

The following table lists the datafill for table CUSTSTN option DISPDIGS.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		DISPDIGS	<i>Option name</i> Enter the name of the option, DISPDIGS.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	DISPDIGS	<i>Option</i> Enter the name of the option, DISPDIGS, and datafill refinement NUMODIGS.
	NUMODIGS	1 to 12	<i>Number of digits</i> Enter the number of digits displayed.

### Datafill example

The following example shows sample datafill for table CUSTSTN option DISPDIGS.

The number of digits displayed on a display set for an intragroup call is 4.

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**CUSTSTN option DISPDIGS** (end)

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**MAP display example for table CUSTSTN option DISPDIGS**

CUSTNAME	OPTNAME	OPTION
LONDESN	DISPDIGS	DISPDIGS 4

## CUSTSTN option DISSTCWTN

### Distinctive Call Waiting Tone (DISTCWTN)

This option is required if a distinctive call waiting tone is required for the waiting party on a Call Waiting call external to the busy station's customer group.

The call waiting tone is provided by the service circuit NT3X68AC (call waiting tone generator circuit card) that has the code DISTCWT and is assigned in table STN. The tone consists of 440-Hz tone at -13 dBm.

### Datafill

The following table lists the datafill for table CUSTSTN option DISSTCWTN.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		DISTCWTN	<i>Option name</i> Enter the name of the option, DISTCWTN.
	OPTION	see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	DISTCWTN	<i>Option</i> Enter the name of the option, DISTCWTN.

### Datafill example

The following example shows sample datafill for table CUSTSTN option DISSTCWTN.

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**CUSTSTN option DISSTCWTN (end)**

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**MAP display example for table CUSTSTN option DISSTCWTN**

CUSTNAME	OPTNAME	OPTION
LONDESN	DISTCWTN	DISTCWTN

## CUSTSTN option DMCT

### Deny Malicious Call Termination (DMCT)

This option allows Meridian Digital Centrex (MDC) subscribers or Automatic Call Distribution (ACD) groups with feature AR0462 (Deny Malicious Call Termination) (DMCT) to identify callers from whom they do not wish to receive calls. These callers are routed to an announcement that indicates that the subscriber they called is not accepting their call.

This feature is supported for calls originating from lines within the same office, and for calls originating on Japanese Public Network 7 (JPN7) ISDN user part (ISUP) trunks.

### Datavfill

The following table lists the datavfill for table CUSTSTN option DMCT.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		DMCT	<i>Option name</i> Enter the name of the option, DMCT.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	DMCT	<i>Option</i> Enter the name of the option, DMCT.
	MAXSIZE	numeric (1 to 50)	<i>Maximum size</i> Enter the maximum number of caller-identifications (ID) that can be added to any Deny Malicious Call Termination (DMCT) list assigned to a subscriber in the customer group.  If refinement MAXSIZE is reduced in size from a higher value, no entries are removed from the list. The list, however, is not permitted to grow beyond the new size.

**CUSTSTN option DMCT** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	MAXSIZE (continued)		Refinement MAXSIZE is only used by individual subscribers.  Automatic Call Distribution (ACD) groups use the maximum size of 50.  The default for this field is 12.
	ADDCOM	0 to 9	<i>Add command</i>  Enter the digit that any subscriber in the group that has option DMCT assigned uses to add a caller ID to their DMCT list while in an editing session.  The default for this field is 2.
	EMPTYCOM	0 to 9	<i>Empty command</i>  Enter the digit that any subscriber in the group that has option DMCT assigned uses to remove all caller IDs from their DMCT list while in an editing session.  The default for this field is 60.
	TIMEOUT	1 to 40	<i>Time-out</i>  Enter the waiting period, in seconds, for any digit while in a DMCT list editing session.
	TRMT	alphanumeric (4 characters)	<i>Treatment</i>  Enter the treatment provided if the subscriber enters an invalid digit or allows the time-out period to expire while in an editing session. The treatment must be previously datafilled in table TMTCNTL.TREAT.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option DMCT.

Up to 49 callers can be added to the subscriber's screening list. Each caller ID is added and removed using digit 4. The editing session disconnects if an invalid digit is entered or the time-out period of 4 s expires.

## CUSTSTN option DMCT (end)

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### MAP display example for table CUSTSTN option DMCT

CUSTNAME	OPTNAME	OPTION
LONDESN	DMCT	DMCT 49 4 4 4 DISC

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## CUSTSTN option DND

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### Do Not Disturb (DND)

Feature BV0587 (Do Not Disturb) (DND) includes the following capabilities:

- Selected single station diversion Permits the attendant to cut off a single station from receiving direct inward dialing (DID) and station-to-station calls.
- Selected group station diversion Permits the attendant to cut off selected groups of stations from receiving DID and station-to-station calls.
- All station diversion Permits the attendant to cut off all stations that are organized into diversion groups from receiving DID and station-to-station calls.
- Attendant completion of calls to diverted stations While one of the above forms of diversion is active, the attendant can complete a call to the affected station. (For example, the attendant has override capability.)
- Attendant control of station diversion The attendant can activate and deactivate the above types of diversion.

There can be up to a maximum of 64 DND groups.

Lines assigned to a DND group are assigned the DND feature in table IBNFEAT.

A DND key is required on the attendant console, or an access code for the Wild Card key is required to activate or deactivate feature DND.

Incoming call indicator (ICI) 13 is assigned in table FNMAP if incoming calls are routed to the attendant and incoming call identification is required.

The time schedules for the DND groups are assigned in table DNDSCHED.

## CUSTSTN option DND (end)

### Datafill

The following table lists the datafill for table CUSTSTN option DND.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		DND	<i>Option name</i> Enter the name of the option, DND.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	DND	<i>Option</i> Enter the name of the option, DND, and datafill refinement NUMGRPS.
	NUMGRPS	1 to 63	<i>Number of groups</i> Enter the number of Do Not Disturb (DND) groups required.

### Datafill example

The following example shows sample datafill for table CUSTSTN option DND.

The number of DND groups is 20.

#### MAP display example for table CUSTSTN option DND

CUSTNAME	OPTNAME	OPTION
LONDES	DND	DND 20

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## CUSTSTN option DRING

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### Distinctive Ring (DRING)

This option is required for distinctive ringing for customer groups that have feature BV0533 (Ring Again) (RAG) or feature BV0542 (Call Back Queuing) (CBQ).

Integrated Business Network (IBN) stations with the RAG or CBQ features are notified by coded ringing, code 4, when their request is served. This is part of the queuing feature package and is not optional.

A call terminating on an IBN station is subject to distinctive ringing if the customer bought optional feature BU0586 (Distinctive Ringing), and the feature is datafilled. Default ringing is coded ringing code 0. If distinctive ringing is specified, coded ringing codes 1 through 5 (depending on datafill selection) are used.

When a call terminates on an IBN station (and DRING is a valid option), the call type is checked against a list of call types the customer has specified to receive distinctive ringing. If the call type is not on the list, the subscriber hears coded ringing code 0. If the call type is on the list, the subscriber hears one of coded ringing codes 1 through 5.

Customers can specify the ringing cadences for different types of calls, as follows:

- intragroup calls
- intergroup calls
- IBN trunk calls owned by the customer group
- group intercom (GIC) calls
- recalls
- Uniform Call Distribution (UCD) calls
- inbound Automatic Call Distribution (ACD) calls
- outbound ACD calls
- all other IBN lines and trunks

The DRING option does not affect the audible ringback heard by the calling party.

To enable option DRING, the office parameter DSR\_OFFICE in table OFCOPT must be set to Y (yes) and the option DRING must be added in table CUSTSTN.

**CUSTSTN option DRING** (continued)**Datafill**

The following table lists the datafill for table CUSTSTN option DRING.

**Field descriptions (Sheet 1 of 4)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		DRING	<i>Option name</i> Enter the name of the option, DRING.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	DRING	<i>Option</i> Enter the name of the option, DRING, and datafill the following refinements.
	INTRNL	Y or N	<i>Internal</i> Enter Y (yes) if intragroup calls are eligible for distinctive ringing. Otherwise, enter N (no). Intragroup calls include calls from Integrated Business Network (IBN) stations in the same customer group or attendants (originating a call) in the same customer group.
	DRINGTYP	1 to 8	<i>Distinctive ringing type</i> Enter the numerical value corresponding to ringing cycles. Ringing cycles 1, 2, 3, 4, and 5 are from Bell Canada specifications.

**CUSTSTN option DRING** (continued)

## Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DRINGTYP (continued)		<p>Ringing cycles 6, 7, and 8 are Distinctive Alerting and Call Waiting Indications from Bellcore specifications.</p> <p>1 = 1.5 s on, 4.5 s off</p> <p>2 = 1.5 s on, 0.5 s off, 1.5 s on, 2.5 s off</p> <p>3 = 1.5 s on, 0.5 s off, 0.5 s on, 3.5 s off</p> <p>4 = 1.5 s on, 0.5 s off, 0.5 s on, 0.5 s off, 0.5 s on, 2.5 s off</p> <p>5 = 1.5 s on, 0.5 s off, 0.5 s on, 0.5 s off, 1.0 s on, 2.0 s off</p> <p>6 = 1.0 s on, 0.5 s off, 1.0 s on, 3.5 s off</p> <p>7 = 0.5 s on, 0.5 s off, 0.5 s on, 0.5 s off, 1.0 s on, 3.0 s off</p> <p>8 = 0.5 s on, 0.5 s off, 1.0 s on, 0.5 s off, 0.5 s on, 3.0 s off</p> <p>Each ringing cycle is repeated.</p>
	EXTRNL	Y or N	<p><i>External</i></p> <p>Enter Y if intergroup calls are eligible for distinctive ringing. Otherwise, enter N.</p> <p>Intergroup calls include calls from IBN stations in other customer groups, attendants (originating a call) from other customer groups, or attendants (extending a call) from the same or a different customer group.</p>
	DRINGTYP	1 to 8	<p><i>Distinctive Ringing Type</i></p> <p>See previous explanation in refinement DRINGTYP.</p>
	TRKS	ALL, NO, or SEL	<p><i>Trunks</i></p> <p>Enter ALL if IBN trunks owned by the customer group are subject to distinctive ringing.</p> <p>Enter NO if no IBN trunks owned by the customer group are subject to distinctive ringing.</p>

**CUSTSTN option DRING** (continued)

## Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
			Enter SEL if selected IBN trunks are subject to distinctive ringing.
	DRINGTYP	1 to 8	<i>Distinctive ringing type</i> See previous explanation in refinement DRINGTYP on the following pages.
	GIC	Y or N	<i>Group intercom</i> Enter Y if group intercom calls are eligible for distinctive ringing. Otherwise, enter N.
	DRINGTYP	1 to 8	<i>Distinctive ringing type</i> See previous explanation in refinement DRINGTYP on the following pages.
	RECALL	Y or N	<i>Recall</i> Enter Y if recall type calls are eligible for distinctive ringing. Otherwise, enter N.
	DRINGTYP	1 to 8	<i>Distinctive ringing type</i> See previous explanation in refinement DRINGTYP on the following pages.
	UCD	Y or N	<i>Uniform call distribution</i> Enter Y if uniform call distribution (UCD) type calls are eligible for distinctive ringing. Otherwise, enter N.
	DRINGTYP	1 to 8	<i>Distinctive ringing type</i> See previous explanation in refinement DRINGTYP on the following pages.
	REST	Y or N	<i>Remainder</i> Enter Y if everything else is subject to distinctive ringing. Otherwise, enter N. Everything else includes IBN trunks owned by other customer groups, plain ordinary telephone service (POTS) lines, and POTS trunks.

**CUSTSTN option DRING** (end)**Field descriptions (Sheet 4 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
	DRINGTYP	1 to 8	<i>Distinctive ringing type</i> See previous explanation in refinement DRINGTYP on the following pages.
	ACD	Y or N	<i>Automatic Call Distribution</i> Enter Y if Automatic Call Distribution (ACD) type calls are eligible for distinctive ringing. Otherwise, enter N.
	DRINGTYP	1 to 8	<i>Distinctive ringing type</i> See previous explanation in refinement DRINGTYP on the following pages.
	MAKECALL	Y or N	<i>Make outbound call</i> Enter Y if distinctive ringing is desired for an outbound ACD call. Otherwise, enter N.
	DRINGTYP	1 to 8	<i>Distinctive ringing type</i> See previous explanation in refinement DRINGTYP on the following pages.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option DRING.

In this example Distinctive Ringing option is supplied on intragroup calls, all IBN trunks owned by the customer groups, group intercom calls, recalls, and all other types of calls excluding UCD, ACD, and MAKECALL.

**MAP display example for table CUSTSTN option DRING**

CUSTNAME	OPTNAME	OPTION
LONDES	DRING	DRING Y 1 N ALL 2 Y 3 Y 4 N Y 5 N N

## CUSTSTN option EBOM

### Executive Busy Override on MADN (EBOM)

This option allows a caller with the Executive Busy Override (EBO) feature to barge in on electronic business sets (EBS) and 2500/500 business sets assigned to a Multiple Appearance Directory Number (MADN) group of either single call arrangement (SCA) or multiple call arrangement (MCA). If the group is a MADN MCA group, the barge-in occurs on the primary member.

An Executive Busy Override Exempted (EBX) option can be assigned for each MADN member to prevent barge-in on a MADN group with feature AF1923 (Executive Busy Override on MADN) while allowing barge-in on those members not assigned EBX option. Option EBX is assigned for each MADN member of group type SCA. If option EBX is assigned to a MADN member MCA group, only the primary member's line is checked for EBX option, but it applies to the entire group.

### Datafill

The following table lists the datafill for table CUSTSTN option EBOM.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		EBOM	<i>Option name</i> Enter the name of the option, EBOM.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	EBOM	<i>Option</i> Enter the name of the option, EBOM.

### Datafill example

The following example shows sample datafill for table CUSTSTN option EBOM.

---

**CUSTSTN option EBOM** (end)

---

**MAP display example for table CUSTSTN option EBOM**

CUSTNAME	OPTNAME	OPTION
NEPIBN1	EBOM	EBOM

## CUSTSTN option GICONCFW

### Group Intercom No Call Forwarding (GICONCFW)

This option makes the interaction between the two features consistent and all group intercom (GIC) calls do not follow the Call Forwarding (CF) chain.

Assign this option if the customer group requires that GIC calls to an Integrated Business Network (IBN) business set or a 2500 set that has the Call Forwarding (CFX) option does not follow the CF chain.

In order for this option to work properly with sets that have already been assigned option GIC, remove option GIC temporarily before assigning option GICONCFW. Once option GICONCFW is assigned, reassign option GIC.

### Datafill

The following table lists the datafill for table CUSTSTN option GICONCFW.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		GICONCFW	<i>Option name</i> Enter the name of the option, GICONCFW.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
		GICONCFW	<i>Option</i> Enter the name of the option, GICONCFW.

### Datafill example

The following example shows sample datafill for table CUSTSTN option GICONCFW.

In this example GIC calls to an IBN business set or a 2500 set that has option CFX do not follow the CF chain.

---

**CUSTSTN option GICNOCFW** (end)

---

**MAP display example for table CUSTSTN option GICNOCFW**

CUSTNAME	OPTNAME	OPTION
NEPIBN1	GICNOCFW	GICNOCFW

## CUSTSTN option GICPAGE

### Group Intercom Page (GICPAGE)

This option allows a member of a group intercom (GIC) group to dial another Integrated Business Network (IBN) business set user in the same GIC group, and automatically activate the called set's speaker, for paging purposes. The called party can then answer the call, if a two-way conversation is desired.

### Datafill

The following table lists the datafill for table CUSTSTN option GICPAGE.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		GICPAGE	<i>Option name</i> Enter the name of the option, GICPAGE.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	GICPAGE	<i>Option</i> Enter the name of the option, GICPAGE.

### Datafill example

The following example shows sample datafill for table CUSTSTN option GICPAGE.

#### MAP display example for table CUSTSTN option GICPAGE

CUSTNAME	OPTNAME	OPTION
NEPIBN1	GICPAGE	GICPAGE

---

## CUSTSTN option INSPACT

---

### Inspect Activate Timer (INSPACT)

This option is used to decide how long the Inspect feature stays active when it is not used by the user. The default is 10 s.

If the inspect activate timer is other than 10 s, datafill option INSPACT.

### Datafill

The following table lists the datafill for table CUSTSTN option INSPACT.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		INSPACT	<i>Option name</i> Enter the name of the option, INSPACT.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	INSPACT	<i>Option</i> Enter the name of the option, INSPACT, and datafill refinement ACTTIMER.
	ACTTIMER	5 to 60	<i>Activate timer</i> Enter the time period, in 1-s intervals, that option INSPACT can be active and not used. The default for this field is 10. Entries outside this range are not valid.

### Datafill example

The following example shows sample datafill for table CUSTSTN option INSPACT.

In this example the activate time is 30 s.

## CUSTSTN option INSPACT (end)

---

### MAP display example for table CUSTSTN option INSPACT

CUSTNAME	OPTNAME	OPTION
NEPIBN1	INSPACT	INSPACT 30

## CUSTSTN option INSPDISP

### Inspect Display Timer (INSPDISP)

This option is used to decide how long each inspect message stays on the display of the telephone set. The default is 5 s.

When the inspect display timer expires, the display is cleared if the set is idle. The display is updated with its previous information (before inspection) if the set is not idle and the inspect display timer expires.

If the inspect display timer is other than 5 s, datafill option INSPDISP as follows.

### Datafill

The following table lists the datafill for table CUSTSTN option INSPDISP.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		INSPDISP	<i>Option name</i> Enter the name of the option, INSPDISP.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	INSPDISP	<i>Option</i> Enter the name of the option, INSPDISP, and datafill refinement DISPTIMER.
	DISPTIMER	2 to 30	<i>Display timer</i> Enter the time period, in 1-s intervals, the Inspect feature is displayed. The default for this field is 5. Entries outside this range are not valid.

### Datafill example

The following example shows sample datafill for table CUSTSTN option INSPDISP.

## **CUSTSTN option INSPDISP (end)**

---

In this example the display time is 15 s.

### **MAP display example for table CUSTSTN option INSPDISP**

CUSTNAME	OPTNAME	OPTION
KANIBN	INSPDISP	INSPDISP 15

---

## CUSTSTN option ISA

---

### In-Session Activation

In-Session Activation (ISA) provides operating companies with the capability to offer call completion services, such as Automatic Call Back (ACB), Message Delivery Service (MDS), and Universal Voice Messaging (UVM), to end users who encounter a busy or ring/no answer (RNA) condition.

In-Session Activation enables end users to access a call completion service without having to first hang up and then dial an access code.

### Datafill

The following table lists the datafill for table CUSTSTN option ISA.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTNAME		ISA	<i>Option name</i> This field specifies the name of the option, which in this case is ISA for In-Session Activation.
OPTION		ISA	<i>Option</i> This field specifies the option. When ISA is entered, the refinements described below must be datafilled.
	STATE	A or I	<i>State</i> This field specifies the activation state of ISA for the whole customer group. An entry of A indicates that ISA is active for the whole customer group, and an entry of I, indicates that ISA is inactive.
	BSYLOCAL	1 through 16 alphanumeric characters, or NILMENU	<i>Busy local</i> This field specifies the menu identifier that corresponds to the announcement to be played when a busy condition is encountered for a local call. When NILMENU is entered, ISA is not invoked.

**CUSTSTN option ISA** (continued)

## Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	BSYTOLL	1 through 16 alphanumeric characters, or NILMENU	<i>Busy toll</i> This field specifies the menu identifier that corresponds to the announcement to be played when a busy condition is encountered for a toll call. When NILMENU is entered, ISA is not invoked.
	RNALocal	1 through 16 alphanumeric characters, or NILMENU	<i>Ring/no answer local</i> This field specifies the menu identifier that corresponds to the announcement to be played when an RNA condition is encountered for a local call. When NILMENU is entered, ISA is not invoked.
	RNATOLL	1 through 16 alphanumeric characters, or NILMENU	<i>Ring/no answer toll</i> This field specifies the menu identifier that corresponds to the announcement to be played when an RNA condition is encountered for a toll call. When NILMENU is entered, ISA is not invoked.
	RNATIMER	12 through 72	<i>Ring/no answer timer</i> This field specifies the number of seconds before the ISA announcement is started when an RNA condition is encountered. The default value is 30 seconds.  <b>Note:</b> This field only appears when the value in either RNALocal or RNATOLL is other than NILMENU.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option ISA.

---

**CUSTSTN option ISA** (end)

---

**MAP display example for table CUSTSTN option ISA**

CUSTNAME	OPTNAME	OPTION
RESGRP	ISA	ISA A MENU1 MENU2 NILMNEU MENU3 12

## CUSTSTN option JCNDFORM

### Japan Calling Number Delivery format (JCNDFORM)

This option dictates the format used when delivering the calling directory number (DN) to members of a customer group. Activation information must be provided for customer groups that have subscribers wishing to have information displayed in the JCND format. Option JCNDFORM controls whether display of Calling Line Identification (CLID) is allowed for calls terminating to members of the customer group when the call originates from a Japan Public Network 7 (JPN7) ISDN user part (ISUP) trunk.

### Datafill

The following table lists the datafill for table CUSTSTN option JCNDFORM.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		JCNDFORM	<i>Option name</i> Enter the name of the option, JCNDFORM.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	JCNDFORM	<i>Option</i> Enter the name of the option, JCNDFORM, and datafill refinement ACTIVE.
	ACTIVE	Y or N	<i>Active</i> Enter Y (yes) if option JCNDFORM is active on a line. Calling line identification (CLID) is displayed.  Otherwise, enter N (no). No display of CLID appears.

### Datafill example

The following example shows sample datafill for table CUSTSTN option JCNDFORM.

---

**CUSTSTN option JCNDFORM** (end)

---

**MAP display example for table CUSTSTN option JCNDFORM**

CUSTNAME	OPTNAME	OPTION
LONDESN	JCNDFORM	JCNDFORM Y

## CUSTSTN option KSMOH

### Keypad Music On Hold (KSMOH)

This option provides music to a basic two-party call on any key set directory number (DN) line. It is an optional extension to the Keypad Hold/Autohold feature.

The following restrictions apply to option KSMOH:

- Each keypad DN must have an associated customer group datafilled in field CUSTGRP in table KSETLINE. There are no restrictions on the number of customer groups that can have the same KSMOH AUDIOGRP.
- Option KSMOH is valid on Meridian business sets (MBS) (except ISDNKSET, PDATA, and DATA sets) and integrated voice data (IVD) sets.

*Note:* MBSs are also known as P-phones or electronic telephone sets (ETS). IVD sets are also known as Meridian 2000 and 3000 series digital sets.

- Option KSMOH must be datafilled in table IVDINV for IVD sets or in table KSETINV for business sets.
- Option KSMOH does not apply to feature keys on which holdable calls are presented, for example the three-way call (3WC) key.
- Option KSMOH is not activated if other features are already active on the call and is deactivated if any other feature is activated while KSMOH is active on the call.
- Option KSMOH does not support attendant console (AC) interaction. It is not activated if an AC is already attached to the call and is deactivated if an AC is attached while KSMOH is active on the call.

### Datafill

The following table lists the datafill for table CUSTSTN option KSMOH.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name.</i> Enter the customer group name.
OPTNAME		KSMOH	<i>Option name.</i> Enter the name of the option, KSMOH.

**CUSTSTN option KSMOH** (end)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
OPTION		see subfield	<i>Option.</i> This field consists of subfield OPTION.
	OPTION	KSMOH	<i>Option.</i> Enter the name of the option, KSMOH, and datafill refinement AUDIOGRP.
	AUDIOGRP	AUDIO1 to AUDIO512	<i>Audio group.</i> Enter the audio group, datafilled in table AUDIO, that specifies the announcement or music applied to the held party.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option KSMOH.

Music is applied to audio group 5.

**MAP display example for table CUSTSTN option KSMOH**

CUSTNAME	OPTNAME	OPTION
LONDES	KSMOH	KSMOH AUDIO5

## CUSTSTN option LSPAO

### Local service provider account owner

This option supports the administration and provisioning of local service providers (LSP). The 1996 Telecom Reform Act (TRA) defines an LSP as a local exchange carrier (LEC). The LEC can lease lines or switching capabilities from an incumbent LEC (ILEC). Or, a competitive local exchange carrier (CLEC) can lease lines or trunk facilities from and ILEC to provide subscriber service.

LSPAO provisioning provided by this option is limited to lines and private trunks. An LSPAO provides service on a loop basis. If several subscribers are associated with the same loop, a single LSPAO provides service to all subscribers of that loop. (This circumstance occurs for multiparty lines or multi-terminal BRI loops.)

This feature allows the LSPAO to be associated on a per-DN or per-subscriber basis.

### Datafill

The following table lists the datafill for table CUSTSTN option LSPAO.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		LSPAO	<i>Option name</i> Enter the name assigned to the option, LSPAO.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	LSPAO	<i>Option</i> Enter the name assigned to the option, LSPAO and datafill refinements PROVIDER and CONTEXT.

**CUSTSTN option LSPAO (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	PROVIDER	alphanumeric (1 to 16 characters)	<i>Provider name</i> Enter a provider name. The provider name must exist in table LSPINFO.
	CONTEXT	U = unbundled N = native R = Resold	<i>Line type</i> This field indicates whether the customer group is unbundled, native, or resold.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option LSPAO.

**MAP display example for table CUSTSTN option LSPAO**

TABLE: CUSTSTN				
CUSTNAME	OPTNAME	OPTION		
COMKODAK	LSPAO	LSPAO	CLEC1	U

## CUSTSTN option LSPSO

### Local Service Provider Switch Owner (LSPSO)

Option LSPSO assigns a local service provider switch owner to a customer group. Use the LSPSO option only in a multi-jurisdictional environment on customer groups outside the jurisdiction where the switch resides.

In a single-jurisdictional environment, Nortel recommends that you use only the new OFCENG (office engineering) parameter DEFAULT\_LSPSO. The software does not prevent customers from assigning the LSPSO option to customer groups in a single-jurisdictional environment.

### Datafill

The following table lists the datafill for table CUSTSTN option LSPSO.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	Customer group name. Enter the customer group name.
OPTNAME		LSPSO	Option name. Enter the name of the option, LSPSO.
OPTION		see subfield	Option. This field consists of the subfield OPTION.
	OPTION	LSPSO	Option. Enter the name of the option, LSPSO.
	PROVIDER	alphanumeric (1 to 16 characters)	Provider name. Enter a provider name from table LSPINFO.

### Datafill example

The following example shows sample datafill for table CUSTSTN option LSPSO.

---

**CUSTSTN option LSPSO** (end)

---

**MAP display example for table CUSTSTN option LSPSO**

```
>CUSTSTN
```

```
CUSTNAME      OPTNAME      OPTION
```

---

```
COMKODAK      LSPSO        LSPSO        CLEC1
```

## CUSTSTN option MBSCAMPO

### MBS Camp-on (MBSCAMPO)

This customer group option holds a default time for the recall of a line after a call is transferred. This option also enables the Meridian business set (MBS) camp-on (MBSCAMPO) treatment to change.

### Datafill

The following table lists the datafill for table CUSTSTN option MBSCAMPO.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		MBSCAMPO	<i>Option name</i> Enter the name of the option, MBSCAMPO.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	MBSCAMPO	<i>Option</i> Enter the name of the option, MBSCAMPO, and datafill refinements MBSCAMPT, MBSCAUDO, and ANNMUSIC.
	MBSCAMPT	0 to 240	<i>MBS camp-on time</i> For a time of 0 (zero), calls are transferred to the busy line and not recalled. The transferred call waits until it is answered or the calling party hangs up. For a time of 12 to 240 s, the transferring line is recalled in the amount of time specified.
	MBSCAUDO	see subfield	<i>MBS audio</i> This refinement consists of subfield ANNMUSIC and refinement AUDIOGRP.

**CUSTSTN option MBSCAMPO (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	ANNMUSIC	Y or N	<i>Announcement/music</i> Enter Y (yes) and datafill refinement AUDIOGRP if an announcement or music is required. Otherwise, enter N (no). No further datafill is required.
	AUDIOGRP	AUDIO1 to AUDIO512	<i>Audio group</i> Enter the audio group and datafill table AUDIO with the announcement or music.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option MBSCAMPO.

**MAP display example for table CUSTSTN option MBSCAMPO**

CUSTNAME	OPTNAME	OPTION
BRAMESN	MBSCAMPO	MBSCAMPO 20 Y AUDIO5

## CUSTSTN option MCGROUP

### EBS as a Message Center (MCGROUP)

This option is used to control whether all electronic business sets (EBS) stations with feature AL0206 (EBS as a Message Center) act as a single group or as separate entities within the customer group.

If this option is assigned to a customer group, then all the EBS message centers within that customer group act as a single entity.

Message center (MC) message waiting requests can be left against stations by one MC and deleted by another MC.

Only one MC message waiting request can be left against any station in the customer group.

If option MCGROUP is not assigned to the customer group, the MC stations act as separate entities.

### Datavfill

The following table lists the datavfill for table CUSTSTN option MCGROUP.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		MCGROUP	<i>Option name</i> Enter the name of the option, MCGROUP.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	MCGROUP	<i>Option</i> Enter the name assigned to the option, MCGROUP.

### Datavfill example

The following example shows sample datavfill for table CUSTSTN option MCGROUP.

---

**CUSTSTN option MCGROUP** (end)

---

**MAP display example for table CUSTSTN option MCGROUP**

CUSTNAME	OPTNAME	OPTION
BRAMESN	MCGROUP	MCGROUP

## CUSTSTN option MSB

### Make Set Busy (MSB)

This option specifies the treatment number in table IBNTREAT to which incoming calls to directory numbers on a P-phone that has the make set busy (MSB) option are diverted when the MSB key is activated.

Intragroup calls blocked by option MSB are always routed to a busy tone.

P-phone or data units with feature MSB are assigned option MSB in table KSETFEAT.

If no datafill is provided for this option, it automatically defaults to a busy tone.

If the customer group has option MSB and calls route to other than a busy tone when this option is activated, datafill option MSB as follows.

### Datafill

The following table lists the datafill for table CUSTSTN option MSB.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		MSB	<i>Option name</i> Enter the name of the option, MSB.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	MSB	<i>Option</i> Enter the name of the option, MSB, and datafill refinement MSBTRMT.
	MSBTRMT	0 to 63	<i>Make set busy treatment</i> Enter the treatment number that is assigned in table IBNTREAT for routing of calls to a P-phone with the MSB feature when the feature is activated.

---

**CUSTSTN option MSB (end)**

---

**Datafill example**

The following example shows sample datafill for table CUSTSTN option MSB.

In this example, calls to a P-phone with the MSB feature are routed to treatment number 2 when the feature is activated.

**MAP display example for table CUSTSTN option MSB**

CUSTNAME	OPTNAME	OPTION
BRAMESN	MSB	MSB 2

## CUSTSTN option N3WCRRNG

### No Ringback for Three-way Call

If option N3WCRRNG is present, and the controller disconnects while the second party is on hold, the controller is idled and is not rung again by the party on hold. The party on hold and the add-on party, if applicable, are sent to disconnect treatment.

### Datafill

The following table lists the datafill for table CUSTSTN option N3WCRRNG.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		N3WCRRNG	<i>Option name</i> Enter the name of the option, N3WCRRNG.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	N3WCRRNG	<i>Option</i> Enter the name of the option, N3WCRRNG.

### Datafill example

The following example shows sample datafill for table CUSTSTN option N3WCRRNG.

#### MAP display example for table CUSTSTN option N3WCRRNG

CUSTNAME	OPTNAME	OPTION
BRAMESN	N3WCRRNG	N3WCRRNG

---

**CUSTSTN option N3WCRRNG** (end)

---

**MAP display example for table CUSTSTN option N3WCRRNG**

CUSTNAME	OPTNAME	OPTION
BRAMESN	N3WCRRNG	N3WCRRNG

## CUSTSTN option NAMEDISP

### Name Display (NAMEDISP)

This option is required to display a name for calling and called parties on an electronic business set (EBS) with display.

This option is provided for Integrated Business Network (IBN) call display (excluding attendant consoles) for intragroup calls or intergroup calls with customer group transparency.

### Datafill

The following table lists the datafill for table CUSTSTN option NAMEDISP.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		NAMEDISP	<i>Option name</i> Enter the name of the option, NAMEDISP.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	NAMEDISP	<i>Option</i> Enter the name of the option, NAMEDISP.

### Datafill example

The following example shows sample datafill for table CUSTSTN option NAMEDISP.

#### MAP display example for table CUSTSTN option NAMEDISP

CUSTNAME	OPTNAME	OPTION
CENTESN	NAMEDISP	NAMEDISP

---

**CUSTSTN option NFA**


---

**Network Facility Access (NFA)**

This option provides feature NC0418 (Network Facility Access) (NFA) for subscribers of the DMS-100 or DMS-100/200, directly connecting a subscriber line to an intelligent processor (IP) and its services. The two modes of access are implicit (auto) and explicit (dialed).

In implicit mode, the subscriber is directly connected to the IP simply by taking the receiver off-hook. The subscriber can interact with the IP or can revert to regular call processing by dialing as normal.

In explicit mode, the subscriber must first dial an NFA feature explicit access code. Once the connection to the IP is established, the subscriber can interact with the IP and enter digits for the IP to interpret. If the digits are dial pulse (DP), the digits are converted to dual-tone multifrequency (DTMF) digits by the DMS before being relayed to the IP.

**Datafill**

The following table lists the datafill for table CUSTSTN option NFA.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		NFA	<i>Option name</i> Enter the name of the option, NFA.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	NFA	<i>Option</i> Enter the name of the option, NFA, and datafill refinements IMPLTKGP and STDSC.

**CUSTSTN option NFA (end)**

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	IMPLTKGP	NFA	<p><i>Implicit trunk group</i></p> <p>Enter the trunk group over which an implicit connection is made for lines in the customer group.</p> <p>The trunk group chosen must already be datafilled in table TRKGRP with a group type of NFA.</p>
	STDSC	0 to 9, #, * (1 to 5 digits)	<p><i>Stuttered dial tone service code</i></p> <p>If the line currently has stuttered dial tone, enter the service code that is outpulsed over the IMPLTKGP trunk during an implicit connection.</p>

**Datafill example**

The following example shows sample datafill for table CUSTSTN option NFA.

**MAP display example for table CUSTSTN option NFA**

CUSTNAME	OPTNAME		OPTION
RESG211	NFA	NFA	COMDEAS2W 44

## CUSTSTN option NFRA

### Network Facility Remote Access (NFRA)

This option provides functionality to customer groups that contain subscribers who have are assigned feature NC0418 (Network Facility Access) (NFA) remote access as well as each customer group that is specified in a direct inward system access (DISA) directory number (DN) containing the NFRA DISA option.

### Datafill

The following table lists the datafill for table CUSTSTN option NFRA.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		NFRA	<i>Option name</i> Enter the name of the option, NFRA.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	NFRA	<i>Option</i> Enter the name of the option, NFRA, and datafill refinements REMTRKGP, REMSC, and NUMDIGS.
	REMTRKGP	NFA	<i>Remote trunk group</i> Enter the name of the trunk group over which a remote connection is made. This value must first be datafilled in table TRKGRP with a group type of NFA.
	REMSC	0 to 9, #, *(1 to 5 digits)	<i>Remote service code</i> Specify the remote code outpulsed over the NFA trunk during a remote access.
	NUMDIGS	1 to 10	<i>Number of digits</i> Enter the number of digits needed to identify the originator's home telephone number.

**CUSTSTN option NFRA (end)**

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	NUMDIGS (continued)		<p>The value of this field depends on the dialing plan used by the customer group.</p> <p>The number in this field is used in the announcement that prompts for the originator's home telephone number and personal identification number (PIN).</p>

**Datafill example**

The following example shows sample datafill for table CUSTSTN option NFRA.

**MAP display example for table CUSTSTN option NFRA**

CUSTNAME	OPTNAME		OPTION
RESG211	NFRA	NFRA	COMDEAS2W 99999 7

## CUSTSTN option NUMDGCMP

### Network EBS Display (NUMDGCMP)

This option is used by the electronic business sets (EBS) display software to determine whether the directory number (DN) of the connected party received through a Common Channel Signaling System 7 (CCS7) network call is presented on the EBS display.

This option specifies the number of trailing digits used for comparing the dialed number and the connected number.

The connected number is displayed on the EBS if numbers are not the same.

Value of 0 (zero) means no comparison; the connected number is always displayed.

### Datafill

The following table lists the datafill for table CUSTSTN option NUMDGCMP.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		NUMDGCMP	<i>Option name</i> Enter the name of the option, NUMDGCMP.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	NUMDGCMP	<i>Option</i> Enter the name of the option, NUMDGCMP, and datafill refinement NUMDIGCMP.
	NUMDIGCMP	0 to 10	<i>Number of digits compared</i> Enter the number of trailing digits used for comparing the dialed number and the connected number.  The connected number is displayed on the electronic business set (EBS) if the numbers are not the same.

## CUSTSTN option NUMDGCMP (end)

---

### Datafill example

The following example shows sample datafill for table CUSTSTN option NUMDGCMP.

### MAP display example for table CUSTSTN option NUMDGCMP

CUSTNAME	OPTNAME	OPTION
RESG211	NUMDGCMP	NUMDGCMP 5

## CUSTSTN option PCACIDS

### Privacy Change Allowed Caller ID Delivery and Suppression

PCACIDS provides the operating company the ability to allow and deny originator (customer group) control of the default privacy status by way of the presentation indicator (PI). The PI is delivered in the calling name information element (CGNIE) of the ISDN SETUP message.

Privacy change status control is afforded according to the PCACIDS line option, the PCACIDS customer group option, and the PCACIDS office parameter. The DN option takes precedence over the customer group option and the office parameter ISDNBRI\_PRIVACY\_CHANGE\_ALLOWED, and the customer group option takes precedence over the office parameter. The customer group option affects all DNs on a BRI line in the customer group.

### Datafill

The following table lists the datafill for table CUSTSTN option PCACIDS.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		PCACIDS	<i>Option name</i> Enter the name assigned to the option, PCACIDS.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	PCACIDS	<i>Option</i> Enter the name assigned to the option, PCACIDS.
		Y or N	<i>Allow PI</i> Enter Y if the originators in the customer group are allowed to change the default privacy status by way of the PI in the CGNIE of the SETUP message. Enter N if the originators are denied control over privacy status.

## **CUSTSTN option PCACIDS (end)**

---

### **Datafill example**

The following example shows sample datafill for table CUSTSTN option PCACIDS.

### **MAP display example for table CUSTSTN option PCACIDS**

TABLE: CUSTSTN

CUSTNAME OPTNAME OPTION

---

ISDNGRP PCACIDS PCACIDS Y

## CUSTSTN option PCSOPT

### Personal Call Screening Option (PCSOPT)

This option is required to activate PCS functionality for Call Forwarding. The operating company can choose one of four PCS options to determine PCS functionality on a customer group basis.

The default PCS option does not require datafill. See "Personal Call Screening of Call Forwarding" in the MDC translations section of this document for a detailed description of this functionality.

### Datafill

The following table lists the datafill for table CUSTSTN option PCSOPT.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		PCSOPT	<i>Option name</i> Enter the name of the option, PCSOPT.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	PCSOPT	<i>Option</i> Enter the name of the option, PCSOPT, and datafill refinement PCS_OPTION.
	PCS_OPTION	DIALDSET, PCSFIRST, IMCFBASE	<i>PCS option</i> Enter one of the PCS options. DIALDSET indicates PCS to the dialed CF base only. PCSFIRST indicates PCS and Multiple Call Forwarding Active/Busy/Don't Answer (MultiCFA/B/D) interaction to the dialed CF base only (all subsequent CF base stations in the CF chain use only the MultiCFA/B/D capability). IMCFBASE indicates PCS to the immediate CF base only.

## CUSTSTN option PCSOPT (end)

---

### Datafill example

The following example shows sample datafill for table CUSTSTN option PCSOPT.

#### MAP display example for table CUSTSTN option PCSOPT

CUSTNAME	OPTNAME	OPTION
IBNTST	PCSOPT	PCSOPT DIALDSET

---

## CUSTSTN option PHOLD

---

### Permanent Hold (PHOLD)

This option allows an Integrated Business Network (IBN) station with a 500/2500 set and the Hold (HLD) option to hold an active call without attendant assistance.

The party on hold, if the line is off-hook, hears either audible ringback tone, recorded announcement, or music, as datafilled in the specified audio group in table AUDIO under option PHOLD.

If option PHOLD is not provided, it automatically defaults to audible ringback tone.

The period of time the call can be held is modifiable, from 12 to 1023 s, in 1-s increments.

Option PHOLD specifies if the station is recalled or reminded each time the feature times out.

With recall, if station is on-hook at time-out, the station receives ringing. If station is off-hook at time-out, the station receives receiver off-hook (ROH) tone for 5 s.

With reminder, the station receives 500 ms of ringing when time-out occurs and station is on hook.

Option PHOLD is activated by switchhook flashing and dialing the PHOLD access code.

If no feature control blocks are available, the station is given reorder tone.

If the customer group has the Reminder Ring option, timing does not commence until station goes on-hook after activating the option.

If customer group has the recall option, timing does not commence until the feature data block is linked to the call condense block.

**CUSTSTN option PHOLD** (continued)**Datafill**

The following table lists the datafill for table CUSTSTN option PHOLD.

**Field descriptions (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		PHOLD	<i>Option name</i> Enter the name of the option, PHOLD.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	PHOLD	<i>Option</i> Enter the name of the option, PHOLD, and datafill refinements HLDTIME, PHOLDOPT, and ANNMUSIC.
	HLDTIME	12 to 1023	<i>Hold time</i> Enter the time, in one 1-s intervals, before the station that has activated option PHOLD is recalled or reminded that option is activated.
	PHOLDOPT	HLDREM orHLDRCL	<i>Permanent hold option</i> Enter HLDRCL if station is recalled (ringing or receiver off hook {ROH} tone) after each time-out occurs.  Enter HLDREM if station is reminded (500 ms of ringing) after each time-out occurs.

**CUSTSTN option PHOLD (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	ANNMUSIC	Y or N	<i>Announcement or music</i> Enter Y (yes) if announcement or music, or both given to the call are parked and datafill refinement AUDIOGRP. Otherwise, enter N (no). No further datafill is required.
	AUDIOGRP	AUDIO1 or AUDIO512	<i>Audio group</i> If the entry in refinement ANNMUSIC is Y, enter the audio group datafilled in table AUDIO whose option PHOLD specifies the applied announcement or music.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option PHOLD.

On permanent hold, a reminder is given every 15 s. The announcement or music provided while stations are on hold is defined in table AUDIO for AUDIO7.

**MAP display example for table CUSTSTN option PHOLD**

CUSTNAME	OPTNAME	OPTION
RESG211	PHOLD	PHOLD 15 HLDREM Y AUDI

## CUSTSTN option RAGRCOPT

---

### Ring Again Recall (RAGRCOPT)

This option is required for customer groups with the Ring Again Recall feature to idle electronic business set (EBS).

With this option, the recall is made only if all of the directory number (DN) keys on the EBS are idle.

If any of the DN keys on the EBS are in use, the recall is not made until the called station is not busy and all of the DNs on the EBS are idle.

### Datafill

The following table lists the datafill for table CUSTSTN option RAGRCOPT.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		RAGRCOPT	<i>Option name</i> Enter the name of the option, RAGRCOPT.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	RAGRCOPT	<i>Option name</i> Enter the name of the option, RAGRCOPT.

### Datafill example

The following example shows sample datafill for table CUSTSTN option RAGRCOPT.

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**CUSTSTN option RAGRCOPT** (end)

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**MAP display example for table CUSTSTN option RAGRCOPT**

CUSTNAME	OPTNAME	OPTION
RESG213	RAGRCOPT	RAGRCOPT

## CUSTSTN option RAGTIM

### Ring Again Timer (RAGTIM)

This option is required for customer groups with feature BV0533 (Ring Again) (RAGTIM). Option RAGTIM defines the time, in 1-s intervals, that ring code 4 is applied to alert a line with the Ring Again feature that the called party, who was busy, is now idle.

A default value of 8 s for this option is stored internally. Unless datafill is specified for this option, the option is not displayed in the table.

### Datafill

The following table lists the datafill for table CUSTSTN option RAGTIM.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		RAGTIM	<i>Option name</i> Enter the name of the option, RAGTIM.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	RAGTIM	<i>Option name</i> Enter the name of the option, RAGTIM, and datafill refinements RAGRECTO and RAGCANTO.
	RAGRECTO	8 to 32	<i>Ring Again recall time-out</i> If the customer group has the Ring Again feature, enter the time, in 1-s intervals, that ring code 4 is applied to alert a line with the Ring Again feature, that the called party who was busy, is now idle.
	RAGCANTO	0 to 30	<i>Ring Again cancellation time-out</i> Enter the time, in 1-min intervals, that the no dial Ring Again feature request remains active.  Enter 0 (zero) if the time-out is not required.

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**CUSTSTN option RAGTIM (end)**

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**Datafill example**

The following example shows sample datafill for table CUSTSTN option RAGTIM.

**MAP display example for table CUSTSTN option RAGTIM**

CUSTNAME	OPTNAME	OPTION
BRAMESN	RAGTIM	RAGTIM 30 1

## CUSTSTN option REASDISP

### Reason Display (REASDISP)

This option is required to display a reason for various Integrated Business Network (IBN) features on an electronic business set (EBS) with display.

The Reason Name Display feature is provided for IBN call display (excluding attendant consoles) for intragroup calls or intergroup calls with customer group transparency.

The reason messages are defined in table REASONS.

### Datafill

The following table lists the datafill for table CUSTSTN option REASDISP.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		REASDISP	<i>Option name</i> Enter the name of the option, REASDISP.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	REASDISP	<i>Option name</i> Enter the name of the option, REASDISP, and datafill refinement REASTYPE.
	REASTYPE	alphanumeric (1 to 16 characters)	<i>Reason type</i> Enter the name assigned to the block of data in table REASONS that contains the reason messages.

### Datafill example

The following example shows sample datafill for table CUSTSTN option REASDISP.

---

**CUSTSTN option REASDISP** (end)

---

**MAP display example for table CUSTSTN option REASDISP**

CUSTNAME	OPTNAME	OPTION
LONDESN	REASDISP	REASDISP DEFAULTSET

## CUSTSTN option REDIRECT

### Customer Group with No Consoles (REDIRECT)

This option is required for customer groups that have no attendant consoles.

This option provides a means of redirecting calls that are automatically routed to the attendant consoles assigned to the customer group.

The calls are directed to a subgroup in another customer group that is equipped with attendant consoles.

The call types that are redirected, and their treatments if the option redirect is not provided, are listed in table Table , "Call types and treatments" on page -682.

#### Call types and treatments

Type of call	Treatment
Call transfer (NCT, ATTRCLF, and CUSTOM)	Ignore flash
Direct inward dial access	Trunk on-hook line permanent signal (PSIG)
Denied incoming	Blank directory number (BLDN)
Toll diversion to attendant	Toll denied (TDND)
Meet-me Conference (attendant flash recall)	Ignore flash
Integrated Business Network (IBN) automatic line (flashes)	Ignore flash
Do Not Disturb (DND) (individual station)	Not allowed

### Datafill

The following table lists the datafill for table CUSTSTN option REDIRECT.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		REDIRECT	<i>Option name</i> Enter the name of the option, REDIRECT.

**CUSTSTN option REDIRECT (end)****Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
OPTION		see subfield	<i>Option</i> This field consist of subfield OPTION.
	OPTION	REDIRECT	<i>Option</i> Enter the name of the option, REDIRECT, and datafill refinements CUSTNAME and SUBGROUP.
	CUSTNAME	alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the name assigned to the customer group to which attendant type calls are redirected.
	SUBGROUP	0 or 7	<i>Subgroup number</i> Enter the subgroup number in the customer group to which attendant type calls are redirected.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option REDIRECT.

Attendant calls are routed to subgroup 0 of customer group KANIBN.

**MAP display example for table CUSTSTN option REDIRECT**

CUSTNAME	OPTNAME	OPTION
AYLIBN	REDIRECT	REDIRECT KANIBN 0

---

## CUSTSTN option RND

---

### Redirecting Number and Reason Delivery (RND)

Option RND controls redirecting number delivery for ISDN call forwarding. This option applies to BRI lines in a customer group.

### Datafill

The following table lists the datafill for table CUSTSTN option RND.

#### Field descriptions

Field	Subfield	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	Customer group name. Enter the customer group name.
OPTNAME		RND	Option name. Enter the name assigned to the option, RND.
OPTION		see subfield	Option. This field contains subfield OPTION.
	OPTION	RND	Option. Enter the name assigned to the option, RND.

### Datafill example

The following example shows sample datafill for table CUSTSTN option RND.

#### MAP display example for table CUSTSTN option RND

CUSTNAME	OPTNAME	OPTION
ISDNGRP	RND	RND

---

## CUSTSTN option SCPAUSE

---

### Speed Call Pause (SCPAUSE)

This option allows a subscriber of feature NC0001 (End-to-end Signaling via Speed Call) to place pauses in a digit string for speed calling.

Feature NC0001 allows the user to place a call to another station, then outpulse a series of tones to that station, with imbedded pauses, from a speed call cell. The terminating station can be directly connected to the originating station (such as a line-to-line call), or can be connected by using a series of trunks to the originating station (such as a line-to-trunk call).

Feature NC0001 is activated in the same manner as with basic speed call. The user takes the receiver off-hook, receives dial tone, dials an asterisk (or asterisk substitute), then dials the address code of a speed call cell. Electronic business set (EBS) users can take the receiver off-hook, press the speed call key, then dial the address code. The digit string in the speed call cell is then interpreted by the feature. Depending on the format of the digit string, the feature routes to a terminating station (as a basic speed call does), and does or does not outpulse tones to the terminating station over the voice connection. The functionality of the feature is divided into two stages: the routing stage and the signaling stage. When the routing stage is complete, the signaling stage optionally takes place.

Feature NC0001 is activated by dialing the code addressing a speed call cell in the user's speed call list. The code consists of an asterisk, plus one or two digits representing the address of the cell in the list. An EBS user need not dial the asterisk, if the user first presses the speed call key. These activation methods are unchanged from basic speed call.

The routing stage is similar to the functionality of basic speed call. Digits in a speed call cell are used to place a call as though the user dialed the digits directly.

The signaling stage takes place depending on the form of the digit string programmed into the speed call cell. An imbedded asterisk is used to separate the digit string into a routing part and a signaling part. The digits before the first imbedded asterisk are used to place the call. If digits are placed after the first imbedded asterisk, these digits are outpulsed as tones over the voice connection to the terminating station. The user of the speed call cell hears nothing from the terminating station during the outpulsing. If an asterisk is not imbedded in the digit string, the entire digit string is used to place the call and no signaling is performed, as in basic speed call.

The user can program the speed call cell to insert pauses between the outpulsing of groups of tones. A pause is represented by the insertion of an

## **CUSTSTN option SCPAUSE** (continued)

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asterisk into the digit string. The asterisk placed between the routing part, and the signaling part of the digit string, is a pause symbol. The feature always pauses between the placing of the call, and the outputting of tones. The feature does not wait for answer on the terminating station. If the terminating station has not answered by the end of the pause period, no outputting is done. The call continues.

It is the user's responsibility to ensure that any pauses that are programmed are of appropriate duration to satisfy any time requirements of the call being made (for example, the time for the terminator to answer).

Additional asterisks, or strings of asterisks, can be imbedded into the signaling part of the digit string. In this case, the tones are outputted in groups. Pauses in outputting are taken according to the position of the additional asterisks in the digit string. An asterisk string represents a single long pause. The duration of this long pause is the sum of the pause time represented by each asterisk in the asterisk string. An asterisk string can be used in place of the first imbedded asterisk. This allows the terminating station a longer time period to answer before the outputting of tones begins.

Datafill determines the specified length of the pause generated by each asterisk. This datafill, in seconds, is for each customer group (table CUSTSTN). By default, the option is not included in the customer group datafill. This indicates that feature NC0001 is disabled. Basic speed call functionality is then in effect. Asterisks are not interpreted as pauses unless feature BV0981 (Cut Through Dialing) is in effect and no signaling is performed.

A tone is outputted for a duration of 70 ms. The duration of the time gap between tones outputted in succession is also 70 ms (also known as interdigital timing). Both of these time values are fixed, and are not affected by datafill.

**CUSTSTN option SCPAUSE (end)****Datafill**

The following table lists the datafill for table CUSTSTN option SCPAUSE.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		SCPAUSE	<i>Speed call pause</i> Enter the name of the option, SCPAUSE.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	SCPAUSE	<i>Option</i> Enter the name of the option, SCPAUSE, and datafill refinement SCTIME.
	SCTIME	1 to 7	<i>Speed call pause time</i> Enter the length of time, in 1-s intervals, for the pause imbedded in a digit string. This pause is inserted by entering an asterisk or its equivalent in a keypad.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option SCPAUSE.

**MAP display example for table CUSTSTN option SCPAUSE**

CUSTNAME	OPTNAME	OPTION
RESG213	SCPAUSE	SCPAUSE 1

## CUSTSTN option SCUTDNO

### Speed Call User Toll Denied Override

This option assigns Speed Call User Toll Denied Override (SCUTDNO) to Meridian Digital Centrex (MDC) customer groups. This option affects lines in the customer group which are speed call users (those lines with SCU station option assigned). When this option is assigned, calls originated by lines with the SCU option using a speed call code will use the NCOS value of the speed call list controller to translate the number stored in the speed-call list. This NCOS modification is only performed if the line with the SCU option is not toll denied through having the toll denied boolean set in the table SCUFEAT tuple corresponding to the line.

SCUTDNO is required when lines with the SCU option have option PIC assigned to a long distance carrier other than the default carrier. This ensures that AMA records receive the call code associated with the preferred carrier.

### Datafill

The following table lists the datafill for table CUSTSTN option SCUTDNO.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		SCUTDNO	<i>Option name</i> Enter the name of the option, SCUTDNO.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	SCUTDNO	<i>Option</i> Enter the name of the option, SCUTDNO.

### Datafill example

The following example shows sample datafill for table CUSTSTN option SCUTDNO.

---

**CUSTSTN option SCUTDNO** (end)

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**MAP display example for table CUSTSTN option SCUTDNO**

CUSTNAME	OPTNAME	OPTION
SCCUST	SCUTDNO	SCUTDNO

## CUSTSTN option SCVAL

### Speed Calling Validation (SCVAL)

This option is assigned to Residential Enhanced Services (RES) customer groups that require option SCVAL. This option affects customer group members having the station options speed call short (SCS) or speed call long (SCL). When they program their speed call (SC) cells, the digit string keyed in is validated.

This option must not be assigned to customer groups containing Integrated Business Network (IBN) or Integrated Business System (IBS) lines.

### Datafill

The following table lists the datafill for table CUSTSTN option SCVAL.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		SCVAL	<i>Option name</i> Enter the name of the option, SCVAL.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	SCVAL	<i>Option</i> Enter the name of the option, SCVAL.

### Datafill example

The following example shows sample datafill for table CUSTSTN option SCVAL.

#### MAP display example for table CUSTSTN option SCVAL

CUSTNAME	OPTNAME	OPTION
RESG213	SCVAL	SCVAL

## CUSTSTN option SDS

### Special Delivery Service

Customer group option SDS (Special Delivery Service) assigns the EBCR service to every line in a customer group that is eligible for this service(s), except lines in the customer group that have line option SDSDENY assigned to them. To use customer group option SDS, field SDSSUBS in table SDSINFO has an entry SUBSCR (Subscription mode).

For more information on the EBCR service refer to "Enhanced Busy Call Return" in the RES translations section.

### Datafill

The following table lists the datafill for table CUSTSTN option SDS.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	Customer group name. This field specifies the customer group name.
OPTNAME		SDS	Option name. This field specifies the name of the option.
OPTION		SDS	Option. This field specifies the option.

### Datafill example

The following example shows sample datafill for table CUSTSTN option SDS.

#### MAP display example for table CUSTSTN option SDS

CUSTNAME	OPTNAME	OPTION
CFSIBN	SDS	SDS

## CUSTSTN option SDSDENY

### Special Delivery Service Deny

Customer group option SDSDENY (Special Delivery Service Deny) prevents the offering of Enhanced Busy Call Return (EBCR) service to all lines in a customer group, except lines that have line option SDS. To use customer group option SDSDENY, field SDSSUBS in table SDSINFO should be set to UNIVER (Universal mode).

For more information on the EBCR service refer to "Enhanced Busy Call Return" in the RES translations section.

### Datafill

The following table lists the datafill for table CUSTSTN option SDSDENY.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	Customer group name. This field specifies the customer group name.
OPTNAME		SDSDENY	Option name. This field specifies the name of the option.
OPTION		SDSDENY	Option. This field specifies the option.

### Datafill example

The following example shows sample datafill for table CUSTSTN option SDSDENY.

#### MAP display example for table CUSTSTN option SDSDENY

CUSTNAME	OPTNAME	OPTION
<hr/>		
CFSIBN	SDSDENY	SDSDENY

---

## CUSTSTN option SERVCTL

---

### Scope control (SERVCTL)

This option allows the display scope control of features for Integrated Business Network (IBN) phones to be consolidated to the access feature group (AFG). Operating companies can give nodal intra-customer group display capability to every line in a customer group without having to associate every line in a customer group with a feature group.

There is no scope control on Calling Line Identification (CLID) display to the attendant console (AC). If the calling number is available and the AC has the display option, the number is presented to the AC and no scope checking is done.

Interaction of AFG display scope control with the AC is not supported.

Each line must have a feature group in order to have display capability beyond nodal intra-customer group display. Refinements NAMEDISP and REASDISP establish the base nodal intra-customer group display capability for every line in a customer group and then the feature group is used to give selective lines of the customer group extra display capabilities.

### Datafill

The following table lists the datafill for table CUSTSTN option SERVCTL.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		SERVCTL	<i>Option name</i> Enter the name of the option, SERVCTL.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	SERVCTL	<i>Option</i> Enter the name of the option, SERVCTL.

### Datafill example

The following example shows sample datafill for table CUSTSTN option SERVCTL.

## CUSTSTN option SERVCTL (end)

---

### MAP display example for table CUSTSTN option SERVCTL

CUSTNAME	OPTNAME	OPTION
RESG213	SERVCTL	SERVCTL

---

## CUSTSTN option SLE

---

### Screening List Editing (SLE)

This option can only be provided in a switching unit with the Residential Enhanced Services (RES) software.

For each call screening feature, a list of directory numbers (DN) identifying incoming calls for special treatment is maintained by the switch.

Calls selected for this special treatment are normally identified by the DN of the party originating the call.

The list of DNs can be created and modified by the individual subscriber. The DNs can take on a plain ordinary telephone service (POTS) or a Meridian Digital Centrex (MDC) dialing plan (such as 2- to 11-digit DNs).

The subscriber also has the ability to activate and deactivate the service that uses the associated screening list.

Option SLE provides the interface to the subscriber for carrying out the above activities.

For visual screening list editing (VSLE), field VSLEXLA does or does not have the same translator as used for audio screening list editing (SLE) in field SLEXLA. If the same translator is used, certain limitations are associated and implicit confirmation is not supported for VSLE. That is, in audio SLE, the digits 0 and 1 are used in the following three ways:

- as single-digit commands for help and list review
- as the first digit of all two-digit commands
- as the confirmation and rejection commands for removing one or more entries from a screening list

For the ERASE ALL or ALL PRIVATE entries, audio SLE allows only confirmation and rejection commands, while the 0 and 1 for VSLE results in ambiguity in the translation of menu codes. VSLE allows for implicit confirmation allowing the user to enter either the TURNON/TURNOFF or ADD commands in addition to the UNDO (that is, reject) and explicit confirmation (that is, scroll keys) commands. As a result, VSLE cannot differentiate between implicit and explicit confirmation. Implicit confirmation is not supported for VSLE if the same translator is used for both audio and visual SLE.

**CUSTSTN option SLE** (continued)**Datafill**

The following table lists the datafill for table CUSTSTN option SLE.

**Field descriptions (Sheet 1 of 4)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		SLE	<i>Option name</i> Enter the name of to the option, SLE.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	SLE	<i>Option name</i> Enter the name of to the option, SLE, and datafill the following refinements.
	MAXTIME	5 to 60	<i>Maximum time</i> Enter the amount of time, in 1-min intervals, that a screening list editing (SLE) session can be invoked.
	CONFCODE	N, 0 to 9, B, C, D, E, or F	<i>Confirmation code</i> Enter the single-digit code that is used to indicate YES when an SLE session prompts for confirmation of any action.
	RJCTCODE	N, 0 to 9, B, C, D, E, or F	<i>Reject code</i> Enter the single-digit code that is used to indicate NO when an SLE session prompts for confirmation of any action.
	SLEXLA	alphanumeric (1 to 8 characters)	<i>SLE translator name</i> Enter the name of the primary translator in table IBNXLA that is used to identify SLE command inputs.

**CUSTSTN option SLE** (continued)

## Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	VSLEXLA	alphanumeric (1 to 8 characters)	<i>VSLE translator name</i> Enter the name of the primary translator in table IBNXLA that is used to identify visual SLE (VSLE) command inputs.
	TIMEOUTS	1 to 7	<i>Time-outs</i> Enter the number of consecutive times that the user can time out before the session automatically terminates.
	ENABLED	Y or N	<i>SLE feature enabled</i> Enter Y (yes) if subscribers with one or more SLE feature are able to use them. Otherwise, enter N (no).
	OCTOCODE	alphanumeric (1 to 16 characters)	<i>Octothorpe code</i> Enter the command that is indicated by the use of the octothorpe key (#).
	STARCODE	alphanumeric (1 to 16 characters)	<i>Star code</i> Enter the command that is indicated by the use of the asterisk key (*).
	CONFOPT	Y or N	<i>Confirmation option</i> Enter Y if the confirmation prompts for those commands that alter data. Otherwise, enter N.  <b>Note:</b> The remote directory number is always confirmed, regardless of the setting of this field.
	INVINPUT	1 to 7	<i>Invalid input</i> Enter the number of consecutive times that the user can provide invalid input before the session automatically terminates.
	CONFIRM	10 to 100	<i>Confirm</i> Enter the amount of time, in 0.1-s intervals, that SLE waits before timing out after prompting for confirmation.

**CUSTSTN option SLE** (continued)

## Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	REMOTEDN	10 to 100	<i>Remote directory number</i> Enter the amount of time, in 0.1-s intervals, that SLE waits before timing out after prompting for the remote directory number.
	COMMAND	10 to 100	<i>Command</i> Enter the amount of time, in 0.1-s intervals, that SLE waits before timing out after prompting for a command input.
	DATA	10 to 100	<i>Data</i> Enter the amount of time, in 0.1-s intervals, that SLE waits before timing out after prompting for some data input.
	DTREVIEW	10 to 50	<i>Digitone list review timing</i> Enter the amount of time, in 0.1-s intervals, that SLE pauses between entries during list review for a Digitone subscriber.
	DPREVIEW	10 to 50	<i>Dial pulse list review timing</i> Enter the amount of time, in 0.1-s intervals, that SLE pauses between entries during list review for a dial pulse subscriber.
	DTINTERD	10 to 90	<i>Digitone interdigital timing</i> Enter the amount of time, in 0.1-s intervals, that SLE waits for subsequent digits after the first digit is entered, for Digitone subscribers.

**CUSTSTN option SLE (end)****Field descriptions (Sheet 4 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
	NON10ICM	Y or N	<p><i>Non ten-digit incoming call memory directory number</i></p> <p>Enter Y if reverse translation is performed so that the DNs added from the incoming call memory can be fed back with the appropriate digit count.</p> <p>The default value for this field is N.</p>
	VSLETIMEOUT	0 to 60	<p><i>Visual Screening List Editing time-out</i></p> <p>Enter the time, in 10-s increments, that visual screening list editing (VSLE) waits for input after prompting the user.</p>

**Datafill example**

The following example shows sample datafill for table CUSTSTN option SLE.

The values shown for fields MAXTIME, CONF CODE, RJCTCODE, TIMEOUTS, INVINPUT, CONFIRM, REMOTEDN, COMMAND, DATA, DTREVIEW, DPREVIEW, DTINTERD, DPINTERD, MINSLEDN, MAXSLEDN, and NON10ICM, are the recommended values.

**MAP display example for table CUSTSTN option SLE**

CUSTNAME	OPTNAME	OPTION
RESG213	SLE	SLE 30 1 0 CNDN PXN4 3 N NILCMD NILCMD Y 2 55 70 80 60 25 35 20 25 7 11 N 30

## CUSTSTN option SOR

### Station Origination Restrictions (SOR)

This option is assigned to Integrated Business Network (IBN) Meridian Digital Centrex (MDC) customer groups that require option SOR.

This option allows the directory number (DN) with the option SOR in table IBNLINES or KSETLINE to apply a restriction level (0, 1, 2, 3, or 4) against another DN or a group of DNs in the same customer group. To group DNs, option SOR must be applied against the IBN line in table IBNFEAT or against a business set in table KSETFEAT.

A level 0 restriction permits completion of all calls allowed by the network class of service (NCOS). A level 1 restriction allows completion of only intragroup calls and calls specified in an exception list. A level 2 restriction allows completion of only the intragroup calls. A level 3 restriction allows completion of only the calls specified in an exception list. A level 4 restriction allows completion of only 911 emergency calls.

The number of SOR groups and the exception list are datafilled in table SORLIST.

The access code for the option SOR is datafilled in table IBNXLA.

### Datafill

The following table lists the datafill for table CUSTSTN option SOR.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		SOR	<i>Option name</i> Enter the name of the option, SOR.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	SOR	<i>Option</i> Enter the name of the option, SOR.

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**CUSTSTN option SOR** (end)

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**Datafill example**

The following example shows sample datafill for table CUSTSTN option SOR.

**MAP display example for table CUSTSTN option SOR**

CUSTNAME	OPTNAME	OPTION
RESG213	SOR	SOR

## CUSTSTN option SPP

### Station Programmable PIN (SPP)

This option makes feature BR0781 (Call Forwarding Remote Access) (CFRA) personal identification numbers (PIN) non-unique by allowing subscribers to change the PIN number from their own phone through a feature access code. This functionality is called station programmable PIN (SPP) and is assignable on a customer group basis. Lines that have the customer group SPP datafilled in table CUSTSTN are required to change the PIN with the SPP function before feature CFRA can be used.

### Datafill

The following table lists the datafill for table CUSTSTN option SPP.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		SPP	<i>Option name</i> Enter the name of the option, SPP.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	SPP	<i>Option</i> Enter the name of the option, SPP, and datafill refinement RETRIES.
	RETRIES	1 to 3	<i>Retries</i> Enter the number of allowable retries of the personal identification number (PIN) during the SPP process before being routed to error treatment.  The retry count does not include the first PIN entry. It is only used to determine the number of reattempts.

### Datafill example

The following example shows sample datafill for table CUSTSTN option SPP.

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**CUSTSTN option SPP** (end)

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**MAP display example for table CUSTSTN option SPP**

CUSTNAME	OPTNAME	OPTION
RESG213	SPP	SPP 3

## CUSTSTN option TAFAS

### Trunk Answer from Any Station (TAFAS)

This option allows answering of incoming attendant seeking calls from any station, if all attendant positions are unattended, by dialing an answer code in response to a common audible ringing device (bell or buzzer).

### Datafill

The following table lists the datafill for table CUSTSTN option TAFAS.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		TAFAS	<i>Option name</i> Enter the name of the option, TAFAS.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	TAFAS	<i>Option</i> Enter the name of the option, TAFAS.

### Datafill example

The following example shows sample datafill for table CUSTSTN option TAFAS.

#### MAP display example for table CUSTSTN option TAFAS

CUSTNAME	OPTNAME	OPTION
RESG213	TAFAS	TAFAS

## CUSTSTN option USAID

### BAS SAID Universal Access (USAID)

This feature gives customers the ability to provide public access to Speech Activated Intelligent Dialing (SAID) services. This access is provided by the USAID option applied to Direct Inward System Access (DISA) directory numbers (DN). This option allows DISA DNs to be used as Universal Speech Activated Intelligent Dialing (USAID) DNs. There is no restriction on the sets that originate calls to the USAID DN. Calls do not have to originate on the same switch as the USAID DN.

Flexible billing is provided for this feature. The datafill of each DISA DN used for USAID access specifies if AMA records should be generated per access or for intelligent peripheral (IP) dialing. Furthermore, records can bill the calling party, or the USAID access DN when used as a special billing number.

This feature is based on the protocol set out in the SAID Network Interface Specification for explicit connections to intelligent peripherals (IP).

### Datafill

The following table lists the datafill for table CUSTSTN option USAID.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric	<i>Customer group name</i> This field determines the customer group to which the tuple attributes are assigned.
OPTNAME		USAID	<i>Option name</i> This field determines the option name assigned. Enter the name of the option, USAID.
OPTION		USAID	<i>Option</i> This field defines the option. See subfields REMTRKGP, REMSC, USERID_LEN, and USAID_CLID_BLK_SC.
	TRKGP	alphanumeric (up to 16 characters)	Trunk group. This subfield determines the trunk group over which an explicit SAID connection is made.

**CUSTSTN option USAID (end)**

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	SC	0 through 9, # and *	Service code. This subfield determines the service code to be outpulsed over the NFA trunk to the IP.
	USERID_LENGTH	zero, seven or ten	User identification length. This subfield indicates the length of the SAID user identification to be outpulsed to the IP.
	USAID_CLID_BLOCKING_SERVICE_CODE	0 through 9, \$, #, and * (1 to 5 digits)	USAID CLID blocking service code. This subfield stores the service code for CLID blocking. It must be datafilled in order for a service code to be outpulsed when CLID blocking is in effect.

**Datafill example**

The following example shows sample datafill for table CUSTSTN option USAID.

**MAP display example for table CUSTSTN option USAID**

CUSTNAME	OPTNAME	OPTION
IBNSTS	USAID	USAID USAIDTRKG 9999 zero 6

## CUSTSTN option CNDBO

### Calling Number Delivery Blocking Override (CNDBO)

This option overrides the calling line identification display (CLID) presentation restrictions at the terminating end of a call and can be used for calls terminating on emergency services agents to display calling party numbers that are otherwise restricted. Calling name delivery is unaffected.

If the customer group option CNDBO is assigned on a customer group basis through table CUSTSTN, then all agents in that customer group have CLID presentation restriction override. Agents that are not authorized to override presentation restrictions cannot be assigned to that customer group.

If the customer group option CNDBO is not used, the CNDBO line option must be assigned to each line in the customer group individually.

### Datafill

The following table lists the datafill for table CUSTSTN option CNDBO.

### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		CNDBO	<i>Option name</i> Enter the name of the option, CNDBO.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION.
	OPTION	CNDBO	<i>Option</i> Enter the name of the option, CNDBO.
	CNDBOTYPE	ALL	Determines whether CNDBO option will be valid for all calls terminating to subscribers at this customer group in existing way by being datafilled as ALL, or the option will be valid only on calls which both originating and terminating subscribers are in that customer group by being datafilled as INTRAONLY

## **Table history**

### **(I)SN08**

This module has been updated with feature A00005962 CLIR Removal for Centrex Intragroup Calls for the North American market.

## CUSTSTN option VOWDN

### Virtual Office Worker Directory Number (VOWDN)

The VOWDN option in table CUSTSTN supports the Virtual Office Worker feature, and affects the OPTNAME and OPTION fields.

### Datafill

The table that follows lists datafill for table CUSTSTN option VOWDN.

#### Field descriptions

Field	Subfield	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer group name</i> Enter the customer group name.
OPTNAME		VOWDN	<i>Option name</i> Enter VOWDN.
OPTION		see subfield	<i>Option</i> This field consists of subfield OPTION and its refinement.
	OPTION	VOWDN	<i>Option</i> Enter VOWDN.
	NCOS	0 to 511	<i>Network Class of Service</i> NCOS specifies the network-class-of-service to be associated with all physical sets with the VOWDN line option assigned in the corresponding customer group.
	SUBGRP	0 to 7	<i>Subgroup number</i> SUBGRP specifies the sub-group associated with the same physical sets.
	VOWAUTH	Y (Yes) or N (No)	<i>VOW authorization</i> A boolean value specifying whether or not the VOW authorization code is required within the associated customer group during use of the VOWIN feature access code.

**CUSTSTN option VOWDN** (continued)**Field descriptions**

<b>Field</b>	<b>Subfield</b>	<b>Entry</b>	<b>Explanation and action</b>
	SWAUTH	Y (Yes) or N (No)	<i>Personal authorization</i> A boolean value specifying whether or not the personal (SW) authorization code is required within the associated customer group during use of the VOWIN feature access code.
	AUDIT	Y (Yes) or N (No)	<i>Audit</i> A boolean value specifying whether the associated customer group is to be audited
	HOUR	0 to 23	<i>Hour</i> This field is prompted only if AUDIT = Y. It specifies the hour at which the audit is to be executed against the corresponding customer group. 0 denotes midnight (12.00 a.m.), 12 denotes noon (12.00 p.m.).
	CFW	Y (Yes) or N (No)	<i>Call forwarding</i> A boolean value specifying whether or not call forwarding interactions with VOW logins and logouts are enabled.
	PCCLEN	4 to 10	<i>PCC length</i> PCCLEN specifies the length of the passcode values for VOWs in the corresponding customer group.
	VOWLCC	alphanumeric	<i>VOW line class code</i> VOWLCC specifies the line class code of the sets within the customer group which are to make use of VOW functionality (that is, those sets to which the VOWDN and VOW line options may be assigned).

**Note on PCCLEN**

The PCCLEN value has a direct relationship on the VOWPID value specified through the use of the VOW line option and on the VOWPID field in table VOWINV. When initially set through the VOW line option, the VOWPID value must have a length matching the PCCLEN value in the associated VOWDN tuple in table CUSTSTN. Once a VOW's passcode has been set, it

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## CUSTSTN option VOWDN (end)

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can be changed by the user through the use of the VOWPCC feature access code in table IBNXLA or by switch personnel by changing the VOWPID field in the appropriate tuple in table VOWINV. When changed, the passcode must have a length matching the PCCLLEN value in the associated VOWDN tuple in table CUSTSTN.

If the value of the PCCLLEN field in the VOWDN tuple in table CUSTSTN changes, the associated VOWPID fields in table VOWINV will immediately be impacted. If the PCCLLEN value is changed to a smaller value, then the VOWPID values for VOWs in the corresponding customer group will be truncated to match the new PCCLLEN value (for example, changing the PCCLLEN value from 6 to 4 will change a VOWPID value of '123456' to '1234'). If the PCCLLEN value is changed to a larger value, then the corresponding VOWPID values will be right-padded with zeros up to the new PCCLLEN value (for example., changing the PCCLLEN value from 6 to 8 will change a VOWPID value of '123456' to '12345600').

**Note:** If the PCCLLEN value for a customer group is changed, all VOW's within the corresponding customer group must be notified of the resulting impact to their passcode values. If this notification does not occur, the VOW's within the customer group will not be able to log in.

### Datafill example

The figure that follows shows sample datafill for table CUSTSTN option VOWDN.

#### MAP display example for table CUSTSTN option VOWDN

```

CUSTNAME OPTNAME OPTION
-----
BNRRCH VOWDN VOWDN 0 0 Y Y Y 0 Y 7 PSET
BNRRTP VOWDN VOWDN 0 40 Y N N N 4 M2616

```

### Option history

#### SN07 (DMS)

CUSTSTN option VOWDN introduced by feature A00002011, Virtual Office Worker.



**CUSTTIID****Table name**

Customer Group Trigger Item Identification Table

**Functional description**

Table CUSTTIID administers the subscription links from customer group subscription to trigger items as defined in table TRIGITM. The trigger items subscribed in this table are only applicable if the customer group in table CUSTSTN contains the reserved trigger group TIID.

The PFC Office Administration feature (A59022533) requires datafill in table CUSTTIID. This table needs to be provisioned for the assignment of specific feature code and public feature code (SFC/PFC) on a customer group.

**Datafill sequence and implications**

The following tables must be datafilled before table CUSTTIID.

- TRIGITM
- CUSTENG

**Table size**

The system dynamically allocates table size from 0 to 1000 tuples.

**Datafill**

The following table lists datafill for table CUSTTIID.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CUSTNAME		alphanumeric (1 to 16 characters)	<i>Customer name.</i> Datafill the customer group name as defined in table CUSTENG
TIID			<i>Trigger item identifier</i> Consists of subfields TDP and TINAME.
	TDP	1, 3, 4, 17, 19, 20, 30, 32, 33	<i>Trigger detection point</i> Enter the standard 2-digit number that represents the desired TDP.

**CUSTTIID** (end)

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	TINAME	alphanumeric (1 to 8 characters)	<i>Trigger item name</i> Datafill this field to identify the trigger item as defined in table TRIGITM.
TRIGACT		ON, OFF	<i>Trigger active</i> Datafill this field with value ON to activate the identified trigger item. Datafill this field with value OFF to deactivate the identified trigger item.

**Datafill example**

The following example shows sample datafill for table CUSTTIID.

**MAP display example for table CUSTTIID**

CUSTNAME		TIID	TRIGACT
RESG200	4	CDP2	OFF
RESG200	4	CDP1	OFF
RESG200		19 OCPB1	OFF
RESG200		19 OCPB2	OFF

**Table history**

**NA015**

Feature 59022533, PFC Office Administration added SFC/PFC information.

**NA010**

Feature AJ5123 AIN O\_BNA Trigger Screening (OTS) introduces table CUSTTIID.

**CXGRP****Table name**

Customer Group Options Table

**Functional description**

Table CXGRP is required in local (or combined local and toll) switching units to define the options associated with a digital trunk group type PX (private exchange).

The PX trunk group provides two-way (incoming and outgoing) digital service to a private automatic branch exchange (PABX) for either direct inward dialing (DID), direct outward dialing (DOD), or both.

**Datafill sequence and implications**

The following tables must be datafilled before table CXGRP:

- BANDSETS
- OCCINFO
- OCCNAME
- TRKGRP

You must enter the provider name in table LSPINFO before you define the PXOPTION option LSPA0 and LSPSO.

**Table size**

0 to 511 tuples

*Note 1:* Table size prior to NA008 was 0 through 255 tuples.

*Note 2:* Tuples 0-31 in table CXGRP are reserved.

**Datafill**

The following table lists datafill for table CXGRP.

**Field descriptions (Sheet 1 of 8)**

Field	Subfield or refinement	Entry	Explanation and action
CUSTKEY			Customer group key. Datafill subfield CSTGRPKEY.
	CSTGRPKEY	numeric (32 to 511)	Enter the customer group key.

**CXGRP** (continued)

## Field descriptions (Sheet 2 of 8)

Field	Subfield or refinement	Entry	Explanation and action
SPB		Y or N	Special billing. If the customer group has special billing, enter Y (yes) and datafill refinement BILLNO as described in the following. Otherwise, enter N (no).
	BILLNO	string of up to 11 digits	Billing number. Enter the billing number, which must be a string of either seven or ten digits.
CTD		Y or N	Carrier toll denial. To deny toll access for one or more carriers, enter Y and datafill refinement CARRIERS as described in the the following. Otherwise, enter N.
	CARRIERS	vector of up to 21 carrier names	Toll denial carriers. Enter up to 3 carrier names for which toll access is denied. A list of valid carrier names is found in table OCCNAME.
FCTDNTER		Y or N	Full Carrier Toll Inter-LATA. Option FCTDNTER allows subscribers of Equal Access End Offices (EAEOs) to be denied access to all carriers when making inter-local access and transport area (Inter-LATA) calls. To datafill this option, enter Y and datafill refinement CARRIERS as described in the the following. Otherwise, enter N.
	CARRIERS	vector of up to 21 carrier names	Toll denial carriers. Enter up to 3 Inter-LATA carrier (IC) names for which toll access is denied. A list of valid carrier names is found in table OCCNAME.
FCTDNTRA		Y or N	Full Carrier Toll Intra-LATA. Option FCTDNTRA allows subscribers of EAEOs to be denied access to all carriers when making Intra-LATA calls. To datafill this option, enter Y and datafill refinement CARRIERS as described in the the following. Otherwise, enter N.
	CARRIERS	vector of up to 21 carrier names	Toll denial carriers. Enter up to 3 Intra-LATA carrier (IC) names for which toll access is denied. A list of valid carrier names is found in table OCCNAME.

**CXGRP** (continued)**Field descriptions (Sheet 3 of 8)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
FCTDINT		Y or N	Full Carrier Toll Deny for International Carriers. To enter datafill for this field, enter Y and enter datafill in subfield CARRIERS.
	CARRIERS	vector of up to 21 carrier names	Toll denial carriers. Enter up to 21 international carriers.
EWATS		Y or N	Enhanced WATS. To enable enhanced wide area telephone service (EWATS) for this customer group, enter Y and datafill refinements EWATYPE, TREAT, INTRALAT, SAC, BAND, LATANM, and WCINFO and subfields BANDSET and WIC. Otherwise, enter N.
	EWATYPE	EOWATS or ETWATS	Enhanced WATS type. Enter EOWATS for enhanced outward WATS. Enter ETWATS for enhanced two-way WATS.
	TREAT	alphanumeric (up to 4 characters)	Treatment. Enter the EWATS treatment. For example, unauthorized outward WATS (OUTWATS) call treatment (UNOW).
	INTRALAT	Y or N	Intra-LATA. Enter Y if the customer group allows Intra-LATA calls. Otherwise, enter N.
	SAC	Y or N	Service access code. Enter Y if the customer group allows service access code calls. Otherwise, enter N.
	BAND	numeric (0 to 126)	Band. Enter the band, from table WATSBAND, that is assigned to the facility used in the billing record.
	LATANM	alphanumeric (up to 10 characters)	LATA name. Enter the LATA name that is required for the equal access translations.

**CXGRP** (continued)

## Field descriptions (Sheet 4 of 8)

Field	Subfield or refinement	Entry	Explanation and action
EWATSI	WICINFO	vector of up to 5 carrier-bandset pairs; see refinements	WATS interexchange carrier (WIC) information. This field is a vector that consists of one or more multiples of refinements WIC and BANDSET. Each entry in refinement BANDSET must be paired with a carrier in refinement WIC. Up to five pairs can be entered, the first of which is the primary WIC.
	WIC	alphanumeric (up to 16 characters)	WATS interexchange carrier. Enter a WIC to use with this facility.
	BANDSET	alphanumeric (up to 8 characters)	Bandset. Enter the allowable calling area defined in table BANDSETS.
		Y or N	Enhanced WATS for Intra-LATA. To enable the Enhanced WATS for Intra-LATA feature for this customer group, enter Y and datafill refinement LWICINFO and subfields CARRIER and BANDSET. Otherwise, enter N. To enable EWATSI, field EWATS in this table (table CXGRP) must also be assigned.
	LWICINFO	vector of up to 5 carrier-bandset pairs	Intra-LATA WATS interexchange list. This field is a vector that contains up to five combinations of CARRIER and BANDSET information. Up to five pairs can be entered.
	CARRIER	alphanumeric (up to 16 characters)	Carrier name. A list of valid carrier names is found in table OCCNAME.
	BANDSET	alphanumeric (up to 8 characters)	Bandset. Enter the allowable calling area defined in table BANDSETS.

**CXGRP** (continued)**Field descriptions (Sheet 5 of 8)**

Field	Subfield or refinement	Entry	Explanation and action
PXOPTION		ATC, CLI, CNAM, CNUM, CPH, FANI, FNT, HOT, INTPIC, LCDR, LPIC, LSPAO, LSPSO, ONI, RMR, RMT, TDN, TDV, WATS	<p>Customer group options. Enter up to 14 options for each group.</p> <p>For the automatic time and charge option, enter ATC.</p> <p>For the calling line identification option, enter CLI.</p> <p>For the calling name option, enter CNAM and datafill refinement CLGNAME.</p> <p>For the calling number option enter CNUM and datafill refinements CLGNUM and BLKPRES.</p> <p>For the called party hold option, enter CPH.</p> <p>For the flexible automatic number identification option, enter FANI and datafill refinement FANIDIGS.</p> <p>For the free number terminating option, enter FNT.</p> <p>For the hotel/motel option, enter HOT.</p> <p>For the international primary carrier option, enter INTPIC. Field INTPIC contains subfields CARRIER and CHOICE. For subfield CARRIER, enter the alphanumeric that represents the selected international carrier name. (Table OCCNAME contains a list of valid carrier names.) For subfield CHOICE, enter Y or N to allow or disallow the choice for Carrier Access Code (CAC) dialing.</p> <p>For the local call detail recording option, enter LCDR.</p>

**CXGRP** (continued)

**Field descriptions (Sheet 6 of 8)**

Field	Subfield or refinement	Entry	Explanation and action
PXOPTION (continued)			<p>For the intra-LATA primary inter-LATA carrier option, enter LPIC and datafill refinement CARRIER with an alphanumeric representing the carrier. The datafill of the LPIC option prompts for field LCHOICE. Special checks are made when SOC goes from IDLE to ON to determine if it is the first time that the SOC has been turned on after a one night process (ONP). After an ONP, field LCHOICE is set to Y if the LPIC option is a valid option.</p> <p>For the local service provider account owner option, enter LSPAO followed by the PROVIDER field. The PROVIDER entry is the local service provider account owner name. The PROVIDER field is alphanumeric and can be up to 16 characters.</p> <p>For the local service provider switch owner option, enter LSPSO followed by the PROVIDER field. The PROVIDER entry is the local service provider switch owner name. The PROVIDER field is alphanumeric and can be up to 16 characters. Use the LSPSO option only in a multi-jurisdictional environment on customer groups outside the jurisdiction where the switch resides. In a single-jurisdictional environment, Nortel recommends that you use only the new OFCENG parameter DEFAULT_LSPSO. The software does not prevent customers from assigning the LSPSO option to customer groups in a single-jurisdictional environment.</p>

**CXGRP** (continued)

## Field descriptions (Sheet 7 of 8)

Field	Subfield or refinement	Entry	Explanation and action
PXOPTION (continued)			For the operator number identification option, enter ONI.
			For the answer supervision local calls option, enter RMR.
			For the answer supervision toll calls option, enter RMT.
			For the toll denied option, enter TDN.
			For the toll diverted option, enter TDV.
			For the WATS service option, enter WATS and datafill refinement TYPEWATS.
	CLGNAME	1 through 15 characters	Calling Name. For the calling name (CNAM) option datafill refinement CLGNAME. CLGNAME defines the name of the calling PX trunk group. CLGNAME can be left blank.
	CLGNUM	10 digits	Calling Number. For the calling number (CNUM) option datafill refinement CLGNUM. CLGNUM defines the number of the calling PX trunk group. CLGNUM can be left blank.
	CONTEXT	N, U, or R	Enumerated type. Enter N for native, U for unbundled, or R for resold.
	BLKPRES	Y or N	Block Presentation. For the calling number (CNUM) option datafill refinement BLKPRES. Enter Y to block the number (CNUM) and or the name (CNAM) of the PX trunk group. Otherwise, enter N.
	FANIDIGS	numeric (00 to 99)	Flexible automatic number identification digits. If field FANI is set to Y in table OCCINFO, datafill this refinement. Enter the flexible automatic number identification (FANI) digit pair to outpulse to the carrier. The carrier accepts FANI digits only if the value of field FANI in table OCCINFO is Y.

**CXGRP** (continued)

## Field descriptions (Sheet 8 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	CARRIER	alphanumeric (up to 16 characters)	Carrier name. If the entry in field PXOPTION is LPIC or INTPIC, datafill this refinement. Table OCCNAME contains a list of valid carrier names  For LPIC, enter the Intra-ATA carrier name.  For INTPIC, enter the international carrier name.
	LCHOICE	Y or N	LPIC choice. The LCHOICE entry (Y or N) determines if the LPIC subscriber is permitted to dial 10XXX/101XXXX codes. In field LCHOICE, either Y or N must be entered; this field does not have a default value.
	PROVIDER	alphanumeric (up to 16 characters)	Provider choice. Refinement used for PXOPTION LSPAO and LSPSO..
	TYPEWATS	INWATS, OUTWATS, or TWWATS	Type of WATS. If the entry in refinement PXOPTION is WATS, datafill refinement TYPEWATS. For outgoing WATS or two-way WATS, enter OUTWATS or TWWATS respectively and datafill refinements TREAT and OWATZON. For incoming WATS, enter INWATS. No further refinements need to be datafilled.
	TREAT	alphanumeric (up to 4 characters)	Treatment. Enter the extended treatment code.
	OWATZONE	numeric (0 to 12)	OUTWATS zone. Enter the zone assigned to this WATS trunk group.
	CHOICE	Y or N	Choice. Enter Y or N to allow or disallow the choice for CAC dialing.

**Datafill example**

The following example shows sample datafill for table CXGRP.

For customer group 69, special billing is enabled and carrier toll denial is disabled. The selected customer group options are LCDR, RMR, RMT, and LPIC.

**CXGRP** (continued)

For customer group 90, Enhanced OutWATS with intra-LATA and service access-code call capability is enabled and three WATS interexchange carriers are specified.

**MAP display example for table CXGRP**

CUSTKEY									
SPB									
CTD	FCTDNTER	FCTDNTRA	FCTDNTR	FCTDINT	EWATS	EWATSI	PXOPTION		
69									
			Y	3485921388					
N	Y	\$	Y	TEST	Y (CARRIER1)\$	C111	SOR323	(LCDR (RMR) (RMT)	\$
N	LPIC	C222	Y	\$					
90	N	N	N	N	Y	EOWATS	VACT	Y	Y
					1	LATA1	(CAR3	0THRU1)	\$
							Y	(CAR4	0THRU1)
									\$
50	N	Y	(ABC)	\$	N	N	N	N	(LSPSO)
									9876
									\$

**Table history****NA011**

Added field FCTDINT and its subfield CARRIER.

**NA010**

Added option LSPSO and subfield PROVIDER.

**NA009**

Added option LSPAO and subfield PROVIDER. Subfield PROVIDER uses CONTEXT. Field CONTEXT specifies whether a line is native to the switch, unbundled, or resold.

**NA008**

Added PXOPTIONS CNAM with refinement CLGNAME, and CNUM with refinements CLGNUM and BLKPRES boolean, for feature PX calling line identification (PXCLID).

## **CXGRP (end)**

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### **NA007**

The following changes were made in this release:

- Refinement INTPIC was added to field PXOPTION to include the International PIC feature (AF6483).
- Subfield CHOICE was added to field PXOPTION for the INTPIC entry to include the choice for CAC dialing for the International PIC feature.
- The explanation for subfield CARRIER in field PXOPTION was updated to include the INTPIC entry for the International PIC feature.
- Field EWATSI with subfield LWICINFO and refinements CARRIER and BANDSET were added in accordance with the IntraLATA PIC for Enhanced WATS feature (AF6479).

### **NA006**

The following changes were made in this release:

- Subfield LCHOICE was added for the LPIC entry in field PXOPTION in accordance with the IntraLATA PIC Enhancements feature.
- Option FCTDNTER (Full Carrier Toll Denied InterLATA) and option FCTDNTRA (Full Carrier Toll Denied IntraLATA) were added in accordance with the IntraLATA PIC Enhancements feature.

**D3MAINTD****Table name**

DMS-300 Maintenance Data Table

**Functional description**

Maintenance data for each trunk group appears in table D3MAINTD. Automatic transmission measuring equipment (ATME) uses this data. Other international maintenance features in the gateway switch use this data. Table CLLIMITCE does not cover these features.

**Datafill sequence and meaning**

You do not need to enter data in other tables before you enter data in table D3MAINTD.

**Table size**

0 to 8191 tuples

The entry for table TRKGRP in table DATASIZE controls the size of table D3MAINTD.

**Datafill**

Datafill for table D3MAINTD appears in the following table.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	<i>Common language location identifier.</i> Enter the common language location identifier (CLLI) assigned to the trunk group. The operating company assigns the CLLI in table CLLI.
FTRANS		Y or N	<i>Forward transfer signal (ring forward).</i> Enter Y (yes) for trunks that support ring forward signaling. These trunks are R1, No.5 and No.6 signaling trunks. For other conditions, enter N (no).
ECHO		Y or N	<i>Echo suppressor.</i> Enter Y when the trunk group has echo suppressors. This entry disables the echo suppressor for automatic transmission measuring equipment (ATME) tests. For other conditions, enter N. Refer to table TRKGRP.

**D3MAINTD** (end)

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
TASI		Y or N	<i>Time assignment speech interpolation.</i> Enter Y when the arrangement of the trunk is for time assignment speech interpolation (TASI). This entry sends TASI locking tone for ATME tests. For other conditions, enter N. Refer to table TRKGRP.
POWR		HI or LO	<i>Power.</i> Enter the power level for use when a choice of power levels for the test is present. Enter HI when the power level is 0 dBm0 or LO when the power level is 10 dBm0 for ATME measurement tests.
MWFREQ		HI or LO	<i>Milliwatt frequency.</i> Enter HI (1020 Hz) for international milliwatt (mW) frequency or LO (1004 Hz) for domestic mW frequency when access to the 104 test trunk occurs.
ATMEFREQ		HI or LO	<i>ATME frequency.</i> Enter HI (1004 Hz) or LO (804 Hz) to define the base frequency for the ATME2 absolute power level measurements.
QINDEX		0 to 31	<i>Q index.</i> Enter the QINDEX value to access in table ATMEQ.

**Datafill example**

Sample datafill for table D3MAINTD appears in the following example.

**MAP example for table D3MAINTD**

CLLI								QINDEX
TATSLCM	Y	N	N	LO	HI	HI	1	

---

**DABILL**

---

**Table name**

Directory Assistance Billing Table

**Functional description**

Table DABILL in conjunction with table DATRKOPT specifies call types that are billable based on the prevailing tariffs. Calls arriving on trunk groups specified as BILLRQD (billing required) in table DATRKOPT are further classified as billed or toll free by field SERVNAME (service name) in table DABILL.

Table DABILL also specifies the following information:

- calling number required for billing information
- requested number required for billing information
- DA indication made in the automatic message accounting (AMA) record
- surcharge applied for the call completion
- call completion based on call type or service class.

For directory assistance (DA) calls incoming on IT or ATC type trunks, datafill field SRVCLS as UNSPEC (unspecified) in table DABILL as these type of calls do not have automatic number identification (ANI) or a trunk group station class to indicate the calling service feature (coin, station, hotel, or restricted).

For related information, refer to table DATRKOPT.

**Datafill sequence and implications**

Table SPLDNID must be datafilled before table DABILL.

**Table size**

This table is dynamically allocated with a minimum size of 177 words and a maximum size of 12 626 words. Normally, only 1443 words are allocated.

Table DABILL requires one word for each tuple.

**DABILL** (continued)**Datafill**

The following table lists datafill for table DABILL.

**Field descriptions (Sheet 1 of 3)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
DABKEY		see subfields	Directory assistance billing key. Directory assistance (DA) call types are calls that are billable based on prevailing tariffs. This field is the key to the table and consists of subfields COTYPE, SRVCLS, and RBILNUM.
	COTYPE	alphanumeric (up to 16 characters)	Call origination. Enter the DA call origination type. Refer to table TOPS for a complete list of call origination types.
	SRVCLS	COIN HOTEL RESTRICT STATION or UNSPEC	Service class. Enter the service class of the call.  Enter COIN for coin calls and datafill refinement RBILNUM.  Enter HOTEL for hotel-originated calls. No refinements require datafill.  Enter RESTRICT for restricted calls and datafill refinement RBILNUM.  Enter STATION for station-originated calls. No refinements require datafill.  Enter UNSPEC for unspecified. No refinements require datafill.  For DA calls incoming on IT or ATC type trunks, enter UNSPEC.
	RBILNUM	0 to 100 or blank	Restricted billing class number. If the entry in subfield SRVCLS is COIN or RESTRICT, datafill this refinement. Enter a valid restricted billing class number as previously defined in table SPLDNID.

**DABILL** (continued)**Field descriptions (Sheet 2 of 3)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
REQNUM		Y or N	<p>Requested number. Enter Y (yes) if the requested number is required. Otherwise, enter N (no). The requested number refers to the number specified in the DA database query.</p> <p>For an international toll call recording (INTC) call type, if field SERVNAME is set to something other than TOLLFREE, field REQNUM must be set to Y.</p>
CLGREQ		Y or N	<p>Calling number required. This field specifies whether the calling number is required to complete the DA call. Enter Y if the calling number of the call type and service class specified in field SERVNAME is required. Otherwise, enter N.</p> <p>If field SERVNAME is not set to TOLLFREE, and field COTYPE is not set to 555, HOM555, or FOR555, then field CLGREQ must be set to Y.</p> <p>If the SERVNAME field is not set to TOLLFREE, and field COTYPE is 555, HOM555, or FOR555 and field SRVCLS is set to UNSPEC, then field CLGREQ can be set to N.</p>
SERVNAME		alphanumeric (up to 16 characters)	Service name. Enter a valid customer-defined name for service rating names used in tables SERVNAME and SRVRS.
ENHAMA		Y or N	Enhanced automatic message accounting. Enter Y to enable enhanced automatic message accounting (AMA). Otherwise, enter N.

**DABILL** (end)

**Field descriptions (Sheet 3 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
CCSURCHG		Y or N	Call completion surcharge. Enter Y to indicate that a surcharge is applied for the completion of DA and intercept calls, and indicated in AMA. Otherwise, enter N.
DACC		ALL, AUTO, NONE, or OH	<p>Directory assistance call completion. This field specifies the type of DA call completion that a given DA call can receive based on the call type and service class.</p> <p>ALL indicates that both OH and AUTO call completion are provided.</p> <p>AUTO (automatic) indicates that only automatic call completion is provided.</p> <p>NONE indicates that DA call completion is not provided.</p> <p>OH (operator-handled) indicates that only operator-handled call completion is provided.</p>

**Datafill example**

The following example shows sample datafill for table DABILL.

**MAP display example for table DABILL**

DABKEY	REQNUM	CLGREQ	SERVNAME	ENHAMA	CCSURCHG	DACC
411	COIN	23	Y	Y	LOCALDA	Y
	AUTO					y

**Table history**

**BCS36**

Table SPLDNID was added to the datafill sequence.

---

**DACCLRS**

---

**Table name**

DA Call Completion Local Rate Step Table

**Functional description**

Table DACCLRS provides a method for calculating charges for directory assistance (DA) call completion to a local number. It specifies the schedule and rate step required to determine the charges based on a tariff name and local schedule type.

Table DACCLRSI is an inactive duplicate of table DACCLRS.

Feature V0178 (TOPS Mass Table Control) permits data changes in table DACCLRS to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table DACCLRSI, and then, when all the required changes are entered, swap the contents of table DACCLRS with table DACCLRSI.

For further information on feature V0178, refer to table CHARGEI.

For related information, refer to table DATRKOPT.

**Datafill sequence and implications**

The following tables must be datafilled before table DACCLRS.

- SCHED
- CLGTRF
- SPLDNID
- TARIFF

**Table size**

The maximum size of table DACCLRS is 128 tuples.

**DACCLRS** (end)

**Datafill**

The following table lists datafill for table DACCLRS.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
TARIFF		see subfields	Tariff name. This field consists of subfields TARIFF and SCHTYPE.
	TARIFF	alphanumeric (1 to 32 characters)	Tariff name. Enter the tariff name for a call assigned on the originating numbering plan area (NPA) and NXX in table CLGTRF. The tariff name must be a valid name in table TARIFF.
	LC_TYPE	STD or SPL	Schedule type. Enter a local schedule type. Enter STD (standard) unless the calling number has an entry in table SPLDNID indicating that it is to receive a special rate. Enter SPL (special rate) if a special rate is indicated in table SPLDNID.
SCHNAME		alphanumeric (1 to 16 characters)	Schedule name. Enter the schedule name that is used for the call. The schedule name must be a valid name from table SCHED.
RATESTEP		0 to 999	Rate step. This field indicates the rate step used for calculating charges for the call.

**Datafill example**

The following example shows sample datafill for table DACCLRS.

**MAP display example for table DACCLRS**

TARIFF	SCHNAME	RATESTEP
TARIFF1 STD	LOCALDA	350

---

**DACCLRSI**

---

**Table name**

DA Call Completion Local Rate Step Inactive Table

**Functional description**

Refer to table DACCLRS.

Feature V0178 (TOPS Mass Table Control) permits data changes in table DACCLRSI to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table DACCLRS, and then, when all the required changes are entered, swap the contents of table DACCLRS with table DACCLRSI.

For further information on feature V0178, refer to table CHARGEI.

**Datafill sequence and implications**

Refer to table DACCLRS.

**Table size**

Refer to table DACCLRS.

**Datafill**

Refer to table DACCLRS.

**Datafill example**

Refer to table DACCLRS.

---

## DACCSUR

---

### Table name

Directory Assistance Call Completion Surcharge Table

### Functional description

Table DACCSUR provides a method for applying a surcharge to completed directory assistance (DA) calls. Each tuple contains six fields that provide a method for applying different surcharges based on the originating class of service.

Table DACCSURI is an inactive duplicate of table DACCSUR.

Feature V0178 (TOPS Mass Table Control) permits data changes in table DACCSUR to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table DACCSURI, and then, when all the required changes are entered, swap the contents of table DACCSUR with table DACCSURI.

For further information on feature V0178, refer to table CHARGEI.

For related information, refer to table DATRKOPT.

### Datafill sequence and implications

There is no requirement to datafill other tables prior to table DACCSUR.

### Datafill

The following table lists datafill for table DACCSUR.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CCTYPE		AUTO or OH	Call completion type. Enter AUTO for automatic or OH for operator-handled call completion type.
UNSPEC		0 to 255	Unspecified. Enter the amount of surcharge applied to calls whose originating class of service is unknown.
STA		0 to 255	Station. Enter the amount of surcharge applied to calls whose originating class of service is station.

**DACCSUR** (end)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
HOTEL		0 to 255	Hotel. Enter the amount of surcharge applied to calls whose originating class of service is hotel.
COIN		0 to 255	Coin. Enter the amount of surcharge applied to calls whose originating class of service is coin.
REST		0 to 255	Restricted. Enter the amount of surcharge applied to calls whose originating class of service is restricted.

**Datafill example**

The following example shows sample datafill for table DACCSUR.

**MAP display example for table DACCSUR**

CCTYPE	UNSPEC	STA	HOTEL	COIN	REST
AUTO	0	0	25	25	0

## **DACCSURI**

---

### **Table name**

Directory Assistance Call Completion Surcharge Inactive Table

### **Functional description**

Refer to table DACCSUR.

Feature V0178 (TOPS Mass Table Control) permits data changes in table DACCSUR to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table DACCSURI, and then, when all the required changes are entered, swap the contents of table DACCSUR with table DACCSURI.

For further information on feature V0178, refer to table CHARGEI.

For related information, refer to table CHARGEI.

### **Datafill sequence and implications**

Refer to table DACCSUR.

### **Table size**

Refer to table DACCSUR.

### **Datafill**

Refer to table DACCSUR.

### **Datafill example**

Refer to table DACCSUR.

**DANIID****Table name**

Double ANI Identification Table

**Functional description**

Table DANIID contains two-digit Automatic Number Identification (ANI) information digits for non-equal access central offices.

The two-digit codes conform to BELLCORE automatic message accounting (BCAMA) format. If a two-digit code exists in table DANIID, module code 306 information is added to the BCAMA record. This occurs in local, or non-TOPS (Traffic Operator Position System) toll offices.

If a two-digit code does not exist in table DANIID, the BCAMA record is not modified.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table DANIID.

**Table size**

0 to 99 tuples

**Datafill**

The following table lists datafill for table DANIID.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
DANI		01 to 99 (2 digits)	<i>Double Automatic Number Identification digit identifier</i>  Enter the Automatic Number Identification (ANI) digit identifier. Entry 00 is not a valid entry.

**Datafill example**

The following example shows sample datafill for table DANIID.

**DANIID** (end)

---

**MAP display example for table DANIID**

DANI

---

01

10

95

---

**DARSTBIL**

---

**Table name**

Directory Assistance Restricted Billing Table

**Functional description**

Table DARSTBIL provides the same function for directory assistance (DA) calls as table RESTBIL does for toll and assist (TA) calls. Table DARSTBIL is indexed by a restricted billing class number from table SPLDNID and specifies the allowable methods of billing for DA calls for each restricted billing class entered.

The restricted billing class number assigned to a particular directory number (DN) in table SPLDNID is used as the index into both table RESTBIL and DARSTBIL. This imposes a restriction that two DNs that have the same billing restrictions for TA, but different billing restrictions for DA service (or vice versa), must be assigned different restricted billing class numbers in table SPLDNID.

Field AMARBC, from either table RESTBIL or DARSTBIL, is used as the index into table RESTAMA rather than the actual restricted billing class in table SPLDNID.

For related information, refer to table DATRKOPT.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table DARSTBIL.

**Table size**

This is a fixed size table and requires 606 words of data store.

**DARSTBIL** (continued)**Datafill**

The following table lists datafill for table DARSTBIL.

**Field descriptions**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
BILCLASS		0 to 100	Billing class. Enter a valid restricted billing class number. Valid numbers are defined in table SPLDNID.
AMARBC		0 to 100	Automatic message accounting restricted billing class. Recorded on automatic message accounting (AMA) billing record for directory assistance (DA) calls and used for interactions with other features (such as RESTAMA and AABS [Automated Alternate Billing Service]).
SCRNDISP		alphanumeric (up to 8 characters)	Screen display. Enter an arbitrary name to be displayed on the Traffic Operator Position System (TOPS) screen in place of the class-of-service field for a particular billing class.
BILTYPES		3RD, CC, COL, PD, SPLCLD, or SPLCLG	<p>Billing types. Enter up to six allowable billing types for a defined billing class. If less than six types are required, end the list with a \$ (dollar sign).</p> <p>Enter 3RD for calling third-number billing.</p> <p>Enter CC for calling credit card.</p> <p>Enter COL for collect (AUTOCOL).</p> <p>Enter PD for sent paid.</p> <p>Enter SPLCLG for calling special billing.</p> <p>Enter SPLCLD for called special billing.</p>

**Datafill example**

The following example shows sample datafill for table DARSTBIL.

---

**DARSTBIL** (end)

---

**MAP display example for table DARSTBIL**

BILCLASS	AMARBC	SCRNDISP	BILTYPES		
21	21	21HOTEL	( COL)	( CC)	( 3RD) \$

## DART

---

### Table name

Dump and Restore Table

### Functional description

Table DART is a read-only table that determines the datafill order during a dump and restore procedure. The table provides an automated method to replace the sequence list that determines the datafill order. Application of a table uses list determines the datafill order. Each table in the system must specify the tables that the table requires when initialization of the system occurs. The required tables are tables that require data entry before or after the specified table. Table DART contains an entry for each table. The table uses list determines how the system sorts these entries to provide the datafill order.

The XFER (transfer) utility uses the data in table DART to record restore statistics for tables. Examples of statistics are timing and tuple counts.

The command interpreter (CI) command TABAUDIT (table audit) uses table DART to determine the table datafill order before data integrity checks.

The command TABAUDIT allows the user to specify the following:

- the tables to verify
- when the verification occurs
- the type of data integrity report
- the destination of the report

The functions of command TABAUDIT that affect table DART are as follows:

- Schedule the verification of one table in table DART.
- Schedule the verification of a range of tables in table DART.
- Schedule the verification of tables in table DART.
- Generate a data integrity report for tables in table DART.
- Generate a data integrity report for verified tables.
- Generate a list of tables that command TABAUDIT does not check.
- Generate a data integrity report for one table.
- Display the status of the scheduler.
- Activate or deactivate the scheduler.
- Clear scheduling information.

**DART** (continued)

- Specify select tables to include in a table range.
- Specify select tables not to check.

**Datafill sequence and meaning**

You do not have to enter data in other tables before you enter data in table DART.

The system enters data in table DART when entry occurs in table CUSTAB.

**Table size**

0 to 2048 tuples

The number of tables in the operating company office determines the number of tuples in table DART. Table size is set to the maximum number of tables in the system. Parameter `MAX_NUM_OF_TABLES` in module `TABUSES` determines table size. After the table has datafill, the system sorts the table. After the sort, the system allocates store for table DART with the correct number of tuples.

**Datafill**

Datafill for table DART appears in the following tuple.

**Field descriptions (Sheet 1 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
TABKEY		see subfield	<i>Table key.</i> This field is the key to the table and contains subfield TABNAME.
	TABNAME	alphanumeric (to a maximum of 32 characters)	<i>Table name.</i> This field contains the name of the table for dump and restore. The entry in this field is the same table name that table CUSTAB defines.
CHKCNT		0 to 4294967295	<i>Check count.</i> This field contains the number of tuples for the table that subfield TABNAME specifies. The command <code>TABAUDIT</code> calculates this number.

**DART** (continued)

## Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
CHKFAIL		0 to 4294967295	<i>Check failure.</i> This field contains the number of tuples that do not check for the table that subfield TABNAME specifies. Command TABAUDIT calculates this number.  Updates occur to this field when TABAUDIT runs.
CHKDATE		see subfields	<i>Check date.</i> This field contains a timestamp that indicates when the check for the table occurs. This field contains subfields MONTH, DAY and YEAR.  Updates occur to this field when TABAUDIT runs.
	MONTH	JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, or DEC	<i>Month.</i> This field contains the month the check for this table occurs.
	DAY	1 to 31	<i>Day.</i> This field contains the day of the month the check for this table occurs.
	YEAR	1976 to 3000	<i>Year.</i> This field contains the year the check for this table occurs.
CHKTIME		see subfields	<i>Check time.</i> This field contains a timestamp that indicates when the check for this table occurs. This field contains subfields HOUR, MINUTE and SECOND.  Updates occur to this field when TABAUDIT runs.
	HOUR	0 to 9 (2 digits)	<i>Hour.</i> This field contains the hour the check for the table occurs.
	MINUTE	0 to 9 (2 digits)	<i>Minutes.</i> This field contains the minute of the hour the check for the table occurs.
	SECOND	0 to 9 (2 digits)	<i>Seconds.</i> This field contains the seconds of the hour the check for the table occurs.

**DART** (continued)

## Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
INCLUDE		Y or N	<i>Include.</i> Enter Y (yes) when the automated table audit (tabaudit) is to verify the table. For other conditions, enter N (no).
DRAREA		see subfields	<i>Dump and restore area.</i> This field contains subfield DUMPREST.
	DUMPREST	Y or N	<i>Dump and restore.</i> Enter Y when dump and restore is required. Enter data in refinements RESTCNT, RESTFAIL, RESTDATE, RESTTIME and RESTTYPE.  Enter N when dump and restore is not required. Table DART does not require additional data entry.
	RESTCNT	0 to 4294967295	<i>Restore count.</i> This field contains the number of tuples now restored.  The dump and restore driver updates this field when a dump and restore is in progress.
	RESTFAIL	0 to 4294967295	<i>Restore fail.</i> This field contains the number of tuples in each table that fails to restore.
	RESTDATE	see subfields	<i>Restore date.</i> This field contains a timestamp that indicates when the restore occurs for the table. This field contains subfields MONTH, DAY and YEAR.
	MONTH	JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, or DEC	<i>Month.</i> This field contains the month the restore for the table occurs.
	DAY	1 to 31	<i>Day.</i> This field contains the day the restore for the table occurs.
	YEAR	1976 to 3000	<i>Year.</i> This field contains the year the restore for the table occurs.

**DART** (continued)**Field descriptions (Sheet 4 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
	RESTTIME	see subfields	<i>Restore time.</i> This field contains a timestamp that indicates when the restore for the table occurs. This field contains subfields HOUR, MINUTE and SECOND.
	HOUR	0 to 9 (2 digits)	<i>Hour.</i> This field contains the hour of the day the restore for the table occurs.
	MINUTE	0 to 9 (2 digits)	<i>Minutes.</i> This field contains the minutes of the hour the restore occurs for the table.
	SECOND	0 to 9 (2 digits)	<i>Seconds.</i> This field contains the seconds of the hour the restore for the table occurs.
	RESTTYPE	EXTERNAL LOGICAL PHYSICAL or SPECIFIC	<i>Restore type.</i> This field contains the restore type to support different restore procedures. The restore types are external, logical, physical, or table specified.

**Datafill example**

Sample datafill for table DART appears in the following example.

**MAP example for table DART**

INCLUDE	TABKEY	CHKCNT	CHKFAIL	CHKDATE	CHKTIME
				DRAREA	
	CUSTFLDS	0	0	JAN 1 1976	00 00 00
N				N	
	DART	0	0	JAN 1 1976	00 00 00
N Y	0	0	JAN 1 1976	00 00 00	EXTERNAL

**Table history**  
**NA009**

The TABAUDIT replaced the CHECKTAB utility in NA009.

**BCS36**

Table DART was introduced in BCS36.

**Additional information**

This section provides information on dump and restore for table DART.

**Dump and restore**

Normal dump and restore procedures apply. The restore for fields CHKCNT, CHKFAIL, CHKDATE, CHKTIME, and INCLUDE requires a reformat.

# DATAOWNR

## Table name

Data Owner Table

## Functional description

The customer data change (CDC) system enables the operating company to allow non-operating-company users to view or change certain data on the switch. Users access the data either through service orders or the partitioned table editor (PTE). The concept of data ownership is used to determine exactly what data a particular CDC user is given access to. Specific portions of switch data are assigned to owners. Each owner is identified by a unique owner name that corresponds to one or more CDC users.

Table CDCLOGON maps owners to users. One owner name can be assigned to many users. Tables CDCLENS and CDCDNS assign owners to lines and directory numbers, respectively. Table DATAOWNR assigns owners to the data shown in the following table.

Non-operating-company users can view or change data assigned to their owner name, and can also view data assigned to owners that are defined as PUBLIC owners.

The following table shows switching unit data assigned by table DATAOWNR.

### Switching unit data (Sheet 1 of 2)

Data	Table	Tuples	Table DATAOWNR field TABNAME
authorization code partition names	AUTHPART	-	AUTHPART
customer groups	CUSTHEAD	-	CUSTGRP
digit collection	DIGCOL	127	DIGCOL
digit manipulation keys	DIGMAN	32767	DIGMAN
ESN network class of service screening	COSMAP	-	COSMAP
feature groups	FTRGDEFS	-	FTRGRP
integrated business network (IBN) routes	IBNRTE, IBNRT2, IBNRT3, IBNRT4	1023, 1023, 1023, 1023	IBNRTE, IBNRT2, IBNRT3, IBNRT4

**DATAOWNR** (continued)**Switching unit data (Sheet 2 of 2)**

Data	Table	Tuples	Table DATAOWNR field TABNAME
line attributes	LINEATTR	2047	LINEATTR
line screening codes	NCOS	31	LSC
line screening flag numbers	LSCFLAGS	-	LSCFLAGS
local calling areas	LCASCRCN	1023	LCANAME
owners	OWNER	-	OWNER
standard pretranslator names	STDPRTCT	256	STDPRT
protocol manipulation indices	PACMAN	256	PACMAN
screening classes	SCRNCLAS	256	SCRNCL
serving translation schemes	HNPACONT, FNPACONT	30	STS
time of day system names	TODHEAD	-	TODNAME
translator names	XLANAME	1023	XLANAME
trunk groups	TRKGRP	-	CLLI
attendant console function key mapping	FNMAP	-	CLLI
virtual facility group data	VFGDATA	8096	VFGDATA
virtual facility groups	FIRTGRPS	4095	VIRTGRP

The fields in the data schema tables listed in the previous table that can be changed by the owner are defined in the service order or PTE documentation.

If a particular owner name does not appear in table DATAOWNR, users assigned to that owner have no access to the data shown in the previous table.

**Datafill sequence and implications**

Table OWNER must be datafilled before table DATAOWNR.

**Note:** The owner names datafilled in table DATAOWNR must be defined in Table OWNER

## **DATAOWNR** (end)

---

### **Table size**

0 to 4096 tuples

Memory is automatically allocated for this table.

### **Datafill**

The datafill in table DATAOWNR is used to determine the entries in specific tables that can be changed by non-operating-company users.

---

## DATAOWNER datafill for AUTHPART

---

### Authorization code partition names

For each entry in table AUTHPART that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for AUTHPART.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfield	<i>Key</i> This field consists of subfield TABNAME.
	TABNAME	AUTHPARTL CANAME	<i>Table name</i> Enter AUTHPART or LCANAME. If entry is LCANAME, subfield LCANAME requires datafill.
	LCANAME	1 to 4 characters	<i>Local calling area name</i> Enter the local calling area name.
	AUTHNAME	alphanumeric (up to 16 characters)	<i>Authorization code partition name</i> Enter the name assigned to the authorization code partition. This name is datafilled in field PARTNM of table AUTHPART.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for AUTHPART.

In this example, owner CARLING has access to the entries in table AUTHPART that have the value BNR in field PARTNM.

## DATAOWNER datafill for AUTHPART (end)

---

MAP display example for table DATAOWNER datafill for AUTHPART

KEY	OWNER
AUTHPART BNR	CARLING
LCANAME LCA1	OWNER1

### Table history

#### NA010

Changed to support increased range of LCANAMES.

---

## DATAOWNER datafill for COSMAP

---

### Electronic Switched Network (ESN) network class of service screening

For each entry in table COSMAP that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This datafill and the datafill defined in table OWNTAB determines the entries in tables COSDATA and COSMAP that can be changed by non-operating-company users.

Access to table COSMAP must be limited to change-only access for non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for COSMAP.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and COSNAME.
	TABNAME	COSMAP	<i>Table name</i> Enter COSMAP.
	COSNAME	alphanumeric (up to 16 characters)	<i>Network class of service map name</i> Enter the name assigned to the network class of service (NCOS) map. This name is datafilled in field NAME of table COSMAP.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for COSMAP.

## **DATAOWNER datafill for COSMAP (end)**

---

In this example, owner CARLING has access to the entries in table COSMAP that have a value of COSMAP1 in field NAME.

### **MAP display example for table DATAOWNER datafill for COSMAP**

KEY	OWNER
COSMAP	COSMAP1 CARLING

---

## DATAOWNER datafill for CUSTHEAD

---

### Customer groups

For each entry in table CUSTHEAD that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data and the data defined in table OWNTAB determines the entries in tables CODEBLK, CUSTCONS, CUSTHEAD, CUSTSMR, CUSTSTN, IBNTREAT, NCOS, and SUBGRP that can be changed by non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for CUSTHEAD.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and CUSTNAME.
	TABNAME	CUSTGRP	<i>Table name</i> Enter CUSTGRP.
	CUSTNAME	alphanumeric (up to 16 characters)	<i>Customer group name</i> Enter the name that is assigned to the customer group. This name is datafilled in field CUSTNAME of table CUSTHEAD.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for CUSTHEAD.

In this example, owner CARLING has access to the entries in tables CODEBLK, CUSTCONS, CUSTHEAD, CUSTSMR, CUSTSTN, IBNTREAT, NCOS, and SUBGRP that have the name BNRMC assigned in field CUSTNAME.

## DATAOWNER datafill for CUSTHEAD (end)

---

### MAP display example for table DATAOWNER datafill for CUSTHEAD

KEY	OWNER
CUSTGRP BNRMC	CARLING

---

## DATAOWNER datafill for DIGCOL

---

### Digit collection

For each entry in table DIGCOL that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

Datafill in table DATAOWNER and the datafill as described below in table OWNTAB determine the entries in table DIGCOL that can be changed by non-operating-company users.

Access to table DIGCOL must be limited to change-only access for non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for DIGCOL.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and DATANAME.
	TABNAME	DIGCOL	<i>Table name</i> Enter DIGCOL.
	DATANAME	alphanumeric (up to 8 characters)	<i>Name of digit collection table</i> Enter the name assigned to the digit collection table. This name is datafilled in field DATNAME of table DIGCOL.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for DIGCOL.

In this example, owner CARLING has access to the entries defined in table OWNTAB for the digit collection table with the name BNR1.

## DATAOWNER datafill for DIGCOL (end)

---

### MAP display example for table DATAOWNER datafill for DIGCOL

KEY	OWNER
DIGCOL BNR1	CARLING

---

## DATAOWNER datafill for DIGMAN

---

### Digit manipulation indices

For each entry in table DIGMAN that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This datafill is checked against the datafill in table OWNTAB to determine if the entry in table DIGMAN can be changed by non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for DIGMAN.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and DMIKEY.
	TABNAME	DIGMAN	<i>Table name</i> Enter DIGMAN.
	DMIKEY	1 to 32 766	<i>Digit manipulation key</i> Enter the number of the digit manipulation index. This number is datafilled in field DMIKEY of table DIGMAN.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for DIGMAN.

In this example, owner CARLING has access to digit manipulation index 3 in table DIGMAN.

## DATAOWNER datafill for DIGMAN (end)

---

MAP display example for table DATAOWNER datafill for DIGMAN

KEY		OWNER
DIGMAN	3	CARLING

## DATAOWNER datafill for FTRGDEFS

### Feature groups

Individual feature groups can be included in the set of data that is owned by a CDC user. In order to provide CDC users with access to the data associated with a particular feature group, the feature group must be added to table DATAOWNER and associated with an owner.

Feature group ownership allows CDC users with the capability to access the data associated with the groups they own in tables FTRGDEFS and FTRGOPTS.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for FTRGDEFS.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and FTRGRP.
	TABNAME	FTRGRP	<i>Table name</i> Enter FTRGRP.
	FTRGRP	alphanumeric (up to 8 characters)	<i>Name of feature group</i> Enter the name assigned to the feature group. This name is datafilled in field FTRGRP of table FTRGDEFS.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

An example of datafill for table DATAOWNER in which individual feature groups are assigned to an owner is shown below.

## DATAOWNER datafill for FTRGDEFS (end)

---

### MAP display example for table DATAOWNER datafill for FTRGDEFS

KEY	OWNER
FTRGRP	BNR05IBN CARLING
FTRGRP	BNR14IMBS CARLING

---

## DATAOWNER datafill for HNPACONT or FNPACONT

---

### Serving translation schemes

For each serving translation scheme in table HNPACONT or table FNPACONT that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data and the data defined in table OWNTAB determines which entries in tables HNPACONT and FNPACONT and their associated subtables can be changed by non-operating-company users.

Access to table HNPACONT must be limited to change-only or read-only access for non-operating-company users.

All entries for the subtables associated with table HNPACONT are accessible to the user, unless the entry for the subtable in table SUBSPROT specifies otherwise.

Access to table FNPACONT must be limited to read-only for non-operating-company users.

If table FNPACONT has a subtable FNPACODE, the subtable FNPACODE and its associated subtable RTEREF must be made unavailable to non-operating-company users by datafilling the appropriate entries in table SUBPROT.

If table FNPACONT has a subtable FNPASTS, then FNPASTS must be read-only and field COMMON\_FNPA in subtable FNPASTS must be set to N, to ensure that a separate route reference subtable is created for each FNPASTS subtable.

All entries for the subtables STSCODES and RTEREF associated with an FNPASTS table are accessible to the user.

**DATAOWNER datafill for HNPACONT or FNPACONT (end)**

**Datafill**

The following table lists the datafill for table DATAOWNER datafill for HNPACONT or FNPACONT.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and STS.
	TABNAME	STS	<i>Table name</i> Enter STS.
	STS	000 to 999	<i>Serving translation scheme</i> Enter the number assigned to the serving translation scheme. This number is datafilled in field STS of table HNPACONT or FNPACONT.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

**Datafill example**

The following example shows sample datafill for table DATAOWNER datafill for HNPACONT or FNPACONT.

In this example, owner CARLING has access to the entries in tables FNPACONT and HNPACONT that have the number 001 assigned in field STS.

**MAP display example for table DATAOWNER datafill for HNPACONT or FNPACONT**

KEY		OWNER
STS	001	CARLING

---

## DATAOWNER datafill for IBNRTE, IBNRT2, -3, or -4

---

### Integrated Business Network (IBN) routes

For each entry in table IBNRTE, IBNRT2, IBNRT3, or IBNRT4 that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This datafill is checked against the datafill defined in table OWNTAB to determine if the entry in table IBNRTE, IBNRT2, IBNRT3, or IBNRT4 can be changed by non-operating-company users.

Access to tables IBNRTE, IBNRT2, IBNRT3, and IBNRT4 must be limited to change-only or read-only access for non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for IBNRTE, IBNRT2, -3, or -4.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i>  This field consists of subfields TABNAME and RTE.
	TABNAME	IBNRTE IBNRT2 IBNRT3orIBN RT4	<i>Table name</i>  Enter IBNRTE, IBNRT2, IBNRT3, or IBNRT4.
	RTE	1 to 1023	<i>IBN route index</i>  Enter the number of the IBN route index. This number is datafilled in field RTE of table IBNRTE.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i>  Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for IBNRTE, IBNRT2, -3, or -4.

## **DATAOWNER datafill for IBNRTE, IBNRT2, -3, or -4 (end)**

---

In this example, owner CARLING has access to the IBN route index 4 in table IBNRTE.

### **MAP display example for table DATAOWNER datafill for IBNRTE, IBNRT2, -3, or -4**

KEY		OWNER
IBNRTE	4	CARLING

---

## DATAOWNER datafill for LCASCRCN

---

### Local calling areas

For each entry in table LCASCRCN that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data and the data defined in table OWNTAB determines the entries in table LCASCRCN that can be changed by non-operating-company users.

The owner has access to all entries that appear in the LCASCR subtable associated with the table LCASCRCN entry.

Access to table LCASCRCN must be limited to change-only access for non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for LCASCRCN.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and LCANAME.
	TABNAME	LCANAME	<i>Table name</i> Enter LCANAME.
	LCANAME	alphanumeric (up to 4 characters)	<i>Local calling area name</i> Enter the local calling area name. This name is datafilled in field LCANAME of table LCASCRCN.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for LCASCRCN.

## **DATAOWNER datafill for LCASCRCN (end)**

---

In this example, owner CARLING has access to the entries in table LCASCRCN with the name OTWA in field LCANAME.

### **MAP display example for table DATAOWNER datafill for LCASCRCN**

KEY	OWNER
LCANAME	OTWA CARLING

---

## DATAOWNER datafill for LINEATTR

---

### Line attributes

For each entry in table LINEATTR that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data is checked against data defined in table OWNTAB to determine if the entry in table LINEATTR can be changed by non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for LINEATTR.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and LAIDX.
	TABNAME	LINEATTR	<i>Table name</i> Enter LINEATTR.
	LAIDX	alphanumeric (1 to 16 characters)	<i>Line attribute index</i> Enter the index number of the line attribute. This number is datafilled in field LNATTIDX of table LINEATTR.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for LINEATTR.

In this example, owner CARLING has access to line attribute 14 in table LINEATTR.

## DATAOWNER datafill for LINEATTR (end)

---

MAP display example for table DATAOWNER datafill for LINEATTR

KEY		OWNER
LINEATTR	14	CARLING

---

## DATAOWNER datafill for LSCFLAGS

---

### Line screening code flag numbers

For each entry in table LSCFLAGS that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data is checked against data defined in table OWNTAB to determine if the entry in table LSCFLAGS can be changed by non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for LSCFLAGS.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and LSCNO.
	TABNAME	LSCFLAGS	<i>Table name</i> Enter LSCFLAGS.
	LSCNO	0 to 255	<i>Line screening code number</i> Enter the LSC flag number. This number is datafilled in field LSCNO of table LSCFLAGS.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for LSCFLAGS.

In this example, owner CARLING has access to the line screening code 3 in table LSCFLAGS.

## DATAOWNER datafill for LSCFLAGS (end)

---

MAP display example for table DATAOWNER datafill for LSCFLAGS

KEY		OWNER
LSCGLAGS	3	CARLING

---

## DATAOWNER datafill for NCOS

---

### Line screening codes

For each line screening code (LSC) in table NCOS for which an owner can view or change the associated data, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data is used to check the ownership of field LSC in table NCOS.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for NCOS.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and LSCNO.
	TABNAME	LSC	<i>Table name</i> Enter LSC.
	LSCNO	0 to 31	<i>Line screening code number</i> Enter the LSC number. This number is datafilled in field LSC of table NCOS.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the OWNER. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for NCOS.

In this example, owner CARLING has access to the line screening code 3 in table NCOS.

## DATAOWNER datafill for NCOS (end)

---

MAP display example for table DATAOWNER datafill for NCOS

KEY		OWNER
LSC	3	CARLING

---

## DATAOWNER datafill for OWNER

---

### Owners

For each entry in table OWNER that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for OWNER.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and OWNER.
	TABNAME	OWNER	<i>Table name</i> Enter OWNER.
	OWNER	alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for OWNER.

In this example, owner CARLING has access to the entry in table OWNER that has a value of CARLING in field OWNER.

#### MAP display example for table DATAOWNER datafill for OWNER

KEY	OWNER	
OWNER	CARLING	CARLING

## DATAOWNER datafill for PACMAN

### Protocol manipulation indexes

For each entry in table PACMAN that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data is checked against data defined in table OWNTAB to determine if the entry in table PACMAN can be changed by non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for PACMAN.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and PMI.
	TABNAME	PACMAN	<i>Table name</i> Enter PACMAN.
	PMI	0 to 255	<i>Protocol manipulation Index</i> Enter the protocol manipulation index number. This number is datafilled in field PMI of table PACMAN.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for PACMAN.

In this example, owner CARLING has access to the protocol manipulation index 5 in table PACMAN.

---

**DATAOWNER datafill for PACMAN (end)**

---

**MAP display example for table DATAOWNER datafill for PACMAN**

KEY		OWNER
PACMAN	5	CARLING

## DATAOWNER datafill for SCRNCCLAS

### Screening classes

For each entry in table SCRNCCLAS that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as described below.

This data and the data defined in table OWNTAB determines the entries in table SCRNCCLAS that can be changed by non-operating-company users.

The owner has access to all entries that appear in the CLSVSCR subtable associated with the table SCRNCCLAS entry.

Access to table SCRNCCLAS must be limited to change-only access for non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for SCRNCCLAS.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and UNIT.
TABNAME		SCRNCCL	<i>Table name</i> Enter SCRNCCL.
UNIT		alphanumeric (up to 4 characters)	<i>Unit</i> Enter the class of service name. This name is datafilled in field SYMBOL of table SCRNCCLAS.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for SCRNCCLAS.

---

**DATAOWNER datafill for SCRNCAS** (end)

---

**MAP display example for table DATAOWNER datafill for SCRNCAS**

KEY	OWNER
SCRNCAS	IBN CARLING

## DATAOWNER datafill for STDPRTCT

### Pretranslator name

For each entry in table STDPRTCT that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data and the data defined in table OWNTAB determines the entries in table STDPRTCT that can be changed by non-operating-company users.

The owner has access to all entries that appear in the STDPRT subtable associated with the table STDPRTCT entry.

Access to table STDPRTCT must be limited to change-only access for non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for STDPRTCT.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and EXTPRTNM.
	TABNAME	STDPRT	<i>Table name</i> Enter STDPRT.
	EXTPRTNM	alphanumeric (up to 8 characters)	<i>Standard pretranslator name</i> Enter the name of the standard pretranslator subtable. This name is datafilled in field EXTPRTNM of table STDPRTCT.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for STDPRTCT.

---

**DATAOWNER datafill for STDPRTCT (end)**

---

In this example, owner CARLING has access to the standard pretranslator subtable with the name INC1.

**MAP display example for table DATAOWNER datafill for STDPRTCT**

KEY	OWNER
STDPRT	INC1 CARLING

## DATAOWNER datafill for TODHEAD

### Time of day system names

For each entry in table TODHEAD that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data and the data defined in table OWNTAB determines the entries in tables DAYOWEEK, DAYOYEAR, TIMEODAY, and TODHEAD that can be changed by non-operating-company users.

Access to table TODHEAD must be limited to change-only access for non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for TODHEAD.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and TODNAME.
	TABNAME	TODNAME	<i>Table name</i> Enter TODNAME.
	TODNAME	alphanumeric (up to 8 characters)	<i>Time of day name</i> Enter the name assigned to the time of day system. This name is datafilled in field TODNAME of table TODHEAD.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for TODHEAD.

---

**DATAOWNER datafill for TODHEAD (end)**

---

In this example, owner CARLING has access to the entries in tables DAYOWEEK, DAYOYEAR, TIMEODAY, and TODHEAD associated with the time of day system that has the name CUST01.

**MAP display example for table DATAOWNER datafill for TODHEAD**

KEY	OWNER
TODNAME	CUST01 CARLING

---

## DATAOWNER datafill for TRKGRP and FNMAP

---

### Trunk groups

For each entry in tables TRKGRP and FNMAP that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for TRKGRP and FNMAP.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and CLLI.
	TABNAME	CLLI	<i>Table name</i> Enter CLLI.
	CLLI	alphanumeric (up to 12 characters)	<i>Common language location identifier</i> Enter the common language location identifier (CLLI) assigned to the entry in table TRKGRP field GRPKEY or table FNMAP field CONSCLLI.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for TRKGRP and FNMAP.

In this example, owner CARLING has access to the entries in table TRKGRP that have a value of NTLAUR in field GRPKEY and the entries in table FNMAP that have a value of BNRMCCON1 in field CONSCLLI.

---

**DATAOWNER datafill for TRKGRP and FNMAP (end)**

---

**MAP display example for table DATAOWNER datafill for TRKGRP and FNMAP**

KEY		OWNER
CLLI	NTLAUR	CARLING
CLLI	BNRMCCON1	CARLING

## DATAOWNER datafill for VFGDATA

### Virtual facility group data

Each entry in table VFGDATA contains the data for one end of a virtual facility group (VFG). Each end of a VFG can be an Integrated Business Network (IBN) VFG or a plain old telephone service (POTS) VFG, each end can be either incoming or outgoing.

For each entry in table VFGDATA that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data and the data defined in table OWNTAB determines the entries in tables VFGDATA and VFGENG that can be changed by non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for VFGDATA.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i>  This field consists of subfields TABNAME, VIRTGRP, and TYPEDIR.
	TABNAME	VFGDATA	<i>Table name</i>  Enter VFGDATA.
	VIRTGRP	alphanumeric (up to 6 characters)	<i>Virtual facility group</i>  Enter the name assigned to the virtual facility group. This name is datafilled in field VFGNAME of table VFGDATA.
	TYPEDIR	IBNVIIBNVO POTSVIorPO TSVO	<i>Virtual facility group type and direction</i>  Enter the virtual facility group type (IBN or POTS) and direction (incoming or outgoing) specifier that is datafilled in field TYPDIR of table VFGDATA.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i>  Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

---

**DATAOWNER datafill for VFGDATA (end)**

---

**Datafill example**

The following example shows sample datafill for table DATAOWNER datafill for VFGDATA.

In this example, owner CARLING has access to the entries in tables VFGDATA and VFGENG that have fields VFGNAME and TYPDIR equal to INWAT1 and IBNVI respectively, and OWAT1 and POTSV0 respectively.

**MAP display example for table DATAOWNER datafill for VFGDATA**

KEY	OWNER
VFGDATA INWAT1 IBNVI	CARLING
VFGDATA OWAT1 POTSV0	CARLING

## DATAOWNER datafill for VIRTGRPS

### Virtual facility groups

For each entry in table VIRTGRPS that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

Access to table VIRTGRPS must be enabled for operating-company personnel only. Access to tables VFGDATA and VFGENG can be enabled for non-operating-company users.

This data and the data defined in table OWNTAB determines the entries in table VIRTGRPS that can be changed by operating-company personnel.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for VIRTGRPS.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and VIRTGRP.
	TABNAME	VIRTGRP	<i>Table name</i> Enter VIRTGRP.
	VIRTGRP	alphanumeric (up to 6 characters)	<i>Virtual facility group name</i> Enter the name assigned to the virtual facility group. This name is datafilled in field KEY of table VIRTGRPS.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for VIRTGRPS.

In this example, owner TELCO has access to the entries in table VIRTGRPS that have the virtual facility group name INWAT1.

---

**DATAOWNER datafill for VIRTGRPS (end)**

---

**MAP display example for table DATAOWNER datafill for VIRTGRPS**

KEY	OWNER
VIRTGRP INWAT1	TELCO

## DATAOWNER datafill for XLANAME

### Translator names

For each entry in table XLANAME that an owner can view or change, datafill fields KEY and OWNER in table DATAOWNER as follows.

This data and the data defined in table OWNTAB determines the entries in tables XLANAME and IBNXLA that can be changed by non-operating-company users.

Access to table XLANAME must be limited to change-only access for non-operating-company users.

### Datafill

The following table lists the datafill for table DATAOWNER datafill for XLANAME.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	<i>Key</i> This field consists of subfields TABNAME and XLANAME.
	TABNAME	XLANAME	<i>Table name</i> Enter XLANAME.
	XLANAME	alphanumeric (up to 8 characters)	<i>Translator name</i> Enter the name assigned to the digit translator. This name is datafilled in field XLANAME of table XLANAME.
OWNER		alphanumeric (up to 8 characters)	<i>Owner</i> Enter the name assigned to the owner. This name is datafilled in field OWNER of table OWNER.

### Datafill example

The following example shows sample datafill for table DATAOWNER datafill for XLANAME.

---

**DATAOWNER datafill for XLANAME (end)**

---

In this example, owner CARLING has access to the entries in tables XLANAME and IBNXLA that are associated with the digit translator name BNCT.

**MAP display example for table DATAOWNER datafill for XLANAME**

KEY	OWNER
XLANAME	BNCT CARLING

---

## DATASIZE

---

### Table name

Data Size Table

### Functional description

Table DATASIZE specifies the table size for tables that require input from the operating company for the table length.

After the initial input, the value of field SIZE can be changed only by Northern Telecom (Nortel).

If a value in field SIZE for any tuple in table DATASIZE is changed, then the value must be activated by performing a NORESTARTSWACT. When a SIZE value is changed but not activated by a NORESTARTSWACT before the next software load upgrade, problems occur during the software load upgrade process. Field SIZE can also be changed by Nortel as part of the software load upgrade process.

If table DATASIZE is required for the switching unit, then the end user must specify the maximum number of entries required before the next extension.

Table DATASIZE is initially datafilled with default values for field SIZE. To change the default values, use the command REP (replace).

Tables for which the size is dependant on input from the operating company are listed in the following table . The maximum table size for each table is included for reference. The minimum table size for tables listed is 0 (zero), unless indicated otherwise. The maximum entry allowed for field SIZE in table DATASIZE is 32767.

#### List of tables for which the size is dependent on input from the operating company (Sheet 1 of 2)

Table name	Maximum table size
AIODGRP	255
AIODMEM	255
CLLI	8192
CPOS	128
DESTNODE	253
NWMAOCR	64
NWMPPLN	256

**DATASIZE** (continued)**List of tables for which the size is dependent on input from the operating company (Sheet 2 of 2)**

Table name	Maximum table size
TRKGRP	8191
<p><b>Note 1:</b> Other tables may appear as tuples for field DATSKEY, depending on the specific software load.</p> <p><b>Note 2:</b> Up to BCS35, for tables DCROPT, DESTKEY, TKTONODE, field SIZE in table DATASIZE is not used and must be set to 0 (zero). For BCS36 and up, these entries are deleted from table DATASIZE.</p> <p><b>Note 3:</b> Table SPECCONN has a default value of 1000 tuples. This value increased from 100 to 1000 tuples in BCS34. As a result, the minimum table size for table SPECCONN up to BCS36 is 1000 tuples. Table SPECCONN cannot be sized any smaller than the default value. For CSP02 and up, table SPECCONN is no longer sized in table DATASIZE.</p>	

**Datafill sequence and implications**

Table SYSDATA must be datafilled before table DATASIZE.

**Table size**

Memory allocation is performed dynamically. An average of 14 words of store is used for each tuple. However, when the tuples are assigned in sequential order (for example, **CARRIN/TRNKOUT 1 0, 1 1, 1 2, 1 3**), an average of 8 words of store is used per tuple.

**Datafill**

The following table lists datafill for table DATASIZE.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
DATSKEY		alphanumeric (up to 8 characters)	Data key. Enter the table name. See table Table , "List of tables for which the size is dependent on input from the operating company" on page -786.
SIZE		0 to 32767	Size. Enter the size of the table required before the next extension.

**Datafill example**

The following example shows sample datafill for table DATASIZE.

**DATASIZE** (end)

---

**MAP display example for table DATASIZE**

DATSKEY	SIZE
CLLI	800

**Table history**

**CSP04**

Table PSNAILUP is now self-sizing and, therefore, is no longer a valid entry in table DATASIZE. Tables XLAMAP, PXLAMAP, and NLUPCLLI no longer require a restart and, therefore, are no longer valid entries in table DATASIZE.

**CSP03**

Tables CONF3PR, CONF6PR, TFANINT, OCCTSINT, RESOFC, and TRKSGRP no longer require a restart and, therefore, are no longer valid entries in table DATASIZE.

**CSP02**

Tables NWMSC, NWMSD, SCGRP, SDGRP, SPECCONN, TODHEAD, and TONES no longer require a restart and, therefore, are no longer valid entries in table DATASIZE.

---

**DATRKOPT**

---

**Table name**

Directory Assistance Trunk Options Table

**Functional description**

Table DATRKOPT specifies the various directory assistance (DA) options on a trunk group basis for Traffic Operator Position System (TOPS), intertoll (IT), access to carrier (ATC), and Integrated Business Network (IBN) trunk groups. Table DATRKOPT is indexed by the incoming trunk group's common language location identifier (CLLI).

The following additional tables specify other DA options on trunking, billing, and call completion services:

- Table DABILL specifies a service name to indicate if a call is billable, and whether a calling number and requested number are required. It is indexed by call type and service class.
- Table DACCSUR specifies which types of calls are billable. This table is indexed by call origination type and service class of the call.
- Table DACCLRS provides a method of calculating charges for DA call completion to a local number. It specifies the schedule and the rate step required to determine charges based on a tariff name and local schedule type.
- Table DARSTBIL provides the same function for DA calls as table RESTBIL provides for toll and assist (TA) calls. Table DARSTBIL specifies the allowable methods of billing for DA calls for each restricted billing class entered.
- Table ADACCOPT specifies the billing options that can be offered to the subscriber.

**Datafill sequence and implications**

The following tables must be datafilled after table DATRKOPT.

- CLLI
- TRKGRP(IBNTO)
- TRKGRP(IBNTI)
- TRKGRP(IBNT2)

An IBN trunk CLLI must be datafilled in an IBN TRKGRP table (see previous list) prior to being datafilled in table DATRKOPT.

**DATRKOPT** (continued)

An IBN trunk CLLI must be deleted from table DATRKOPT before it can be deleted from an IBN TRKGRP table.

**Table size**

0 to 8191 tuples

Table DATRKOPT requires less than 1-kbyte of data store. The size of this table is dynamic.

**Datafill**

The following table lists datafill for table DATRKOPT.

**Field descriptions (Sheet 1 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		alphanumeric (1 to 16 characters)	Group key. Enter the common language location identifier (CLLI) name of the trunk group on which the directory assistance (DA) call arrived. The trunk group CLLI name must be a valid Traffic Operator Position System (TOPS), intertoll (IT), access to carrier (ATC), or Integrated Business Network (IBN) trunk CLLI name in table CLLI.
MULTREQ		numeric (0 to 127)	Multiple requests. Enter the number of multiple DA requests that are allowed for a DA call on a trunk group basis. If this field is set to 0 (zero), a DA call is not eligible for a multiple DA request. This is indicated on the DA Screen/DA Billing Screen on DA call arrival.

**DATRKOPT** (continued)

## Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
DACC		AUTO, OH ALL, or NONE	<p>Directory assisted call completion. Enter the type of call completion, on a trunk group basis, for which a DA call is eligible.</p> <p>AUTO. (Automatic) indicates that only automatic DA call completion is provided on the trunk group.</p> <p>OH. (Operator-handled) indicates that only operator-handled DA call completion is provided on the trunk group.</p> <p>ALL. Indicates that both AUTO and OH call completion are provided on the trunk group.</p> <p>NONE. Indicates that DA call completion is not provided for the trunk group.</p>
INTCC		Y or N	<p>Intercept call completion. Enter Y (yes) to indicate that package Automated Intercept Call Completion (AINTCC) is available on the incoming TOPS trunk group and audio response unit (ARU) answer is not to be propagated for automatic intercept calls. INTCC can only be set to Y if the TOPS office has the optional AINTCC software package.</p> <p>Enter N (no) to indicate that the DMS cannot allow call completion and ARU answer is to be propagated for automatic intercept calls on the incoming trunk group.</p> <p>The default value for this field is N.</p>
BILLRQD		Y or N	<p>Billing required. Enter Y if DA calls arriving on this trunk group are billed in a TOPS office. Enter N if DA calls are billed at the end office.</p>
CLGNRQD		Y or N	<p>Calling number required. Enter Y if the calling number is required for some of the DA calls arriving on the trunk group for automatic message accounting (AMA). Otherwise, enter N.</p>

**DATRKOPT** (continued)**Field descriptions (Sheet 3 of 3)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
REQNRQD		Y or N	Requested number required. Enter Y if the requested number is required for some of the DA calls arriving on the trunk group for AMA. Otherwise, enter N.
LANGUAGE		PRIMARY, SECOND- ARY, PRIMSEC, SECPRIM	<p>Language. Enter the language mark of the trunk on a trunk group basis. This enables the TOPS offices to play recorded announcements for auto intercept calls accordingly.</p> <p>PRIMARY - Announcements are given in the primary language only (set by table VROPT parameter PRIMARY_LANGUAGE).</p> <p>SECONDARY - Announcements are given in the secondary language only (set by table VROPT parameter SECONDARY_LANGUAGE).</p> <p>PRIMSEC - Announcements are given in the primary language first, then in the secondary language.</p> <p>SECPRIM - Announcements are given in the secondary language first, then in the primary language.</p>

**Datafill example**

The following example shows sample datafill for table DATRKOPT.

**DATRKOPT** (end)**MAP display example for table DATRKOPT**

GRPKEY	MULTREQ	DACC	INTCC	BILLRQD	CLGNRQD	REQNRQD	LANGUAGE
COMSRVTRK	1	AUTO	N	Y	Y	Y	
PRIMARY							
DAONLYTRK	0	OH	N	N	Y	N	
SECONDARY							
INTCONLYTRK	0	OH	N	N	N	Y	
SECONDARY							
DAOICTRK1	3	AUTO	N	Y	Y	Y	
PRIMARY							
DAOICTRK2	0	NONE	N	N	N	N	
PRIMARY							

**Table history****TOPS04**

Corrected reference error in field LANGUAGE for parameters PRIMARY\_LANGUAGE and SECONDARY\_LANGUAGE.

## DAYOWEEK

---

### Table name

Day of Week Table

### Functional description

Table DAYOWEEK is used to define the required Time of Day (TOD) system for each day of the week. The result of this table is used only if table DAYOYEAR is not datafilled for the current day of the year. This makes it possible to put in standard results for each day of the week, and set up special holidays in table DAYOYEAR.

In some instances, such as something occurring every other week, it may be simpler to define all the relevant days at the beginning of the year in table DAYOYEAR, rather than change the table DAYOWEEK entry back and forth every other week.

If the Partitioned Table Editor feature is purchased for an IBN switching unit, the ownership of each tuple in this table is defined in tables DATAOWNR and OWNTAB.

The entries in table DATAOWNR that apply to this table have the entry in field TABNAME equal to TODNAME and the entry in field TODNAME equal to the value of field TODNAME in this table.

The table OWNTAB entry that applies to this table has the entry in field TABNAME equal to DAYOWEEK.

### Datafill sequence and implications

The following tables must be datafilled before table DAYOWEEK.

- DAYTYPES
- TODHEAD

### Table size

0 to 1785 tuples

**DAYOWEEK** (continued)**Datafill**

The following table lists datafill for table DAYOWEEK.

**Field descriptions**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
TODNAME		alphanumeric (1 to 8 characters) or NILTODNM	<i>Time of day name</i> Enter NILTODNM or the time of day name predefined in table TODHEAD.
WEEKDAY		MON, TUE, WED, THU, FRI, SAT, SUN	<i>Weekday</i> Enter the day of the week to which this entry applies.
DAYTYPE		alphanumeric (1 to 8 characters) or NILDAY	<i>Type of day</i> Enter NILDAY or the type of day name, predefined in table DAYTYPES, that is assigned to the day of the week.

**Datafill example**

The following example shows sample datafill for table DAYOWEEK.

The example defines the daytypes assigned to the days of the week for TOD system LONTODN.

---

**DAYOWEEK** (continued)

---

**MAP display example for table DAYOWEEK**

TODNAME	WEEKDAY	DAYTYPE
LONTODN	MON	WEEKDAY
LONTODN	TUE	WEEKDAY
LONTODN	WED	WEEKDAY
LONTODN	THU	WEEKDAY
LONTODN	FRI	WEEKDAY
LONTODN	SAT	SATDAY
LONTODN	SUN	SUNDAY

The following example specifies the datafill that can be used when calls are to be routed differently after business hours. Two daytypes are specified, WEEKDAY for Monday to Friday, and WEEKEND for Saturday and Sunday.

---

**DAYOWEEK** (end)

---

**MAP display example for table DAYOWEEK**

TODNAME	WEEKDAY
	DAYTYPE
GOCTODN	MON WEEKDAY
GOCTODN	TUE WEEKDAY
GOCTODN	WED WEEKDAY
GOCTODN	THU WEEKDAY
GOCTODN	FRI WEEKDAY
GOCTODN	SAT WEEKEND
GOCTODN	SUN WEEKEND

**Table history****EUR006**

The size of table DAYOWEEK was increased from 217 to 1785 tuples

## DAYOYEAR

---

### Table name

Day Of Year Table (DAYOYEAR)

### Functional description

Table DAYOYEAR defines any special days of the year for the time of day (TOD) system that override values in table DAYOWEEK.

The definition of floating holidays occurs each year. Holiday definition occurs any time after the holiday occurs in the current year and less than one year before the holiday occurs the following year. For example, the holiday can be March 28 this year and April 5 next year. When this event occurs, wait until April 6 this year to the date to April 5 .

You can install feature BC1459 (Partitioned Table Editor) in an Integrated Business Network (IBN) switch. If you install this feature, tables DATAOWNER and OWNTAB define the ownership of each tuple in this table.

The entries in table DATAOWNER that apply to table DAYOYEAR have the same entries in subfield TODNAME. These entries are the same entries as the entries in field TODNAME in this table.

The entry in table OWNTAB that applies to this table has the entry DAYOYEAR in field TABNAME.

### Datafill sequence and meaning

You must enter data in the following tables before you enter data in table DAYOYEAR.

- TODHEAD
- DAYTYPES.

### Table size

0 to 93 330 tuples

**DAYOYEAR** (continued)**Datafill**

Datafill for table DAYOYEAR appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
TODNAME		alphanumeric (1 to 8 characters) or NILTODNM	<i>Time of day name.</i> Enter the time of day name set in table TODHEAD.
MONTH		JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, or DEC	<i>Month.</i> Enter the month for which this entry applies.
DAY		numeric (1 to 31)	<i>Day.</i> Enter the day of the month for which this entry applies.
DAYTYPE		alphanumeric (1 to 8 characters) or NILDAY	<i>Type of day.</i> Enter the type of day name of the day of the year. Table DAY TYPES sets the type.

**Datafill example**

Sample datafill for table DAYOYEAR appears in the following example.

The example defines the DAYTYPES of the statutory and public service holidays for TOD systems GROUP1, GROUP2 and GROUP3.

## DAYOYEAR (end)

---

### MAP example for table DAYOYEAR

TODNAME	MONTH	DAY	DAYTYPE	
GROUP1	JAN	1	STATHOL	New Year's Day
GROUP1	APR	6	STATHOL	Easter
GROUP1	DEC	24	PSHOL	CHRISTMAS EVE (public service only)
GROUP1	DEC	25	STATHOL	Christmas Day
GROUP1	DEC	26	STATHOL	Boxing Day
GROUP2	JAN	2	STATHOL	Statutory Holiday
GROUP3	JUL	2	PSHOL	Public Service Holiday

### Table history

#### EUR006

The size of table DAYOYEAR increases from 8192 to 93330 tuples in EUR006.

**DAYTYPES****Table name**

Type Of Day Table (DAYTYPES)

**Functional description**

This table defines the names of all the DAYTYPES necessary in the Time of Day (TOD) system. You must enter a DAYTYPE in the TOD before the system can use the entry in tables TODHEAD, DAYOWEEK, DAYOYEAR and TIMEODAY.

When the table defines the names, you cannot change or delete these names. You must remove all the references to these names in the four tables before you change or delete the names.

**Datafill sequence and meaning**

You do not need to enter data in other tables before you enter data in table DAYTYPES.

**Table size**

1 to 1024 tuples

**Datafill**

Datafill for table DAYTYPES appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
DAYTYPE		alphanumeric (1 to 8 characters)	<p><i>Type of day.</i> Enter the name of the type of day. Normal entries are:</p> <ul style="list-style-type: none"> <li>• WEEKDAY</li> <li>• WEEKEND</li> <li>• XMAS</li> <li>• HOLIDAY</li> <li>• JULY4</li> <li>• the days of the week</li> <li>• any other day or set of days that is treated in a different method.</li> </ul>

## DAYTYPES (end)

---

### Datavill example

Sample datavill for table DAYTYPES appears in the following example.

Some normal day types for the TOD system appear in the example.

### MAP example for table DAYTYPES

DAYTYPE
PSHOL
SATDAY
STATHOL
WEEKDAY
WEEKEND
SUNDAY
HOLIDAY

---

**DCACCTL**

---

**Table name**

Destination Code Access Control Table (DCACCTL)

*Note:* This table is active only on DMS-300 Gateway switches.

**Functional description**

Table DCACCTL changes the route of the call. These changes appear in tables MMA0-9 or OVNTRNSL. The value of the discrimination digit or calling party category indicator (CPCI) determines changes in the route of the call.

The discrimination digit or CPCI used is one of the following:

- The discrimination digit or CPCI that the trunk receives.
- The discrimination digit or CPCI that table CCTRNSL inserts.
- The discrimination digit or CPCI that table CCTRNSL updates.

Field DISDRLST, discrimination digit result, contains one of the following:

- D if the call is to route to vacant code treatment.
- P if the call routes by the previous route in table MMA0-9 or OVNTRNSL.
- E1 to E8 if the route is in table DESTCTL with EX (X = 1 to 8) as one of the indices to the table.

**Datafill sequence and meaning**

You do not need to enter data in other tables before you enter data in table DCACCTL.

**Table size**

4096 tuples

**DCACCTL** (continued)

**Datafill**

Datafill for table DCACCTL appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action															
DCACDISD		see subfields	<i>Destination code access name and discrimination digit.</i> This field is the key to the table and contains subfields DCAC and DISD.															
	DCAC	alphanumeric (a maximum of 16 characters)	<i>Destination code access name.</i> Enter the name that the operating company defines to represent one of the indexes in table DCACCTL. This index is in table MMA0-9 and table OVNTRNSL.															
	DISD	0 to 9, B to F or N	<i>Discrimination digit or calling party category indicator.</i> Enter one of the following values:  <table border="1"> <thead> <tr> <th>Entry value</th> <th>Decimal</th> </tr> </thead> <tbody> <tr> <td>1 to 9</td> <td>1 to 9</td> </tr> <tr> <td>0</td> <td>10</td> </tr> <tr> <td>B</td> <td>11</td> </tr> <tr> <td>C</td> <td>12</td> </tr> <tr> <td>D</td> <td>13</td> </tr> <tr> <td>E</td> <td>14</td> </tr> <tr> <td>F</td> <td>15</td> </tr> </tbody> </table>	Entry value	Decimal	1 to 9	1 to 9	0	10	B	11	C	12	D	13	E	14	F
Entry value	Decimal																	
1 to 9	1 to 9																	
0	10																	
B	11																	
C	12																	
D	13																	
E	14																	
F	15																	
DISDRLST		D, E1 to E8 or P	<i>Discrimination digit result.</i> Enter D if the call routes to vacant treatment.  Enter one of E1 to E8 to provide part of the index in table DESTCTL if specification of the changed route occurs. The route changes because of the discrimination digit or the calling party category indicator (CPCI).  Enter P if the call takes the previous route that table MMA0-9 or table OVNTRNSL specify.															

---

**DCACCTL** (end)

---

**Datafill example**

Sample datafill for table DCACCTL appears in the following example.

**MAP example for table DCACCTL**

DCACDISD DISDRSLT		
D0000	1	P

## DCACNM

---

### Table name

Destination Code Access Control Names Table (DCACNM)

*Note:* This table is active only on DMS-300 Gateway switches.

### Functional description

The destination code access control names appear in table DCACNM.

### Datafill sequence and meaning

You do not need to enter data in other tables before you enter data in table DCACNM.

### Table size

0 to 256 tuples

The system allocates memory.

### Datafill

Datafill for table DCACNM appears in the following table.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
VALUE		0 to 255	<i>Value.</i> Enter a different value for each entry in field SYMBOL.  Enter 0 if the entry in field SYMBOL is NIL. A destination code access control name is not present.  Any entry outside the range indicated for this field is not correct.
SYMBOL		alphanumeric (a maximum of 32 characters)	<i>Destination code access control name.</i> Enter the destination code access control name that the operating company defines. All names in the switch appear here.

### Datafill example

Sample datafill for table DCACNM appears in the following example.

**MAP example for table DCACNM**

VALUE	SYMBOL
0	NIL
1	D000
2	D001
3	D002

# DCANETID **EXPIRED PAGE. TABLE OBSOLETE**

## Table name

Dynamically Controlled Routing (DCR) Office (DCA) Network Table

## Functional description

Table DCANETID defines the various DCA networks to which the incoming or two-way trunk groups on a given switch may belong. DCA networks referenced in table TKTONODE (Dynamically Controlled Routing (DCR) Office Trunk Groups from DCR Offices) must belong to one of the following DCA networks:

- the FOREIGN DCA network
- the DEFAULT DCA network
- a specific, user-defined DCA network defined in table DCANETID

The FOREIGN DCA network is used by the operating company to indicate that a specific trunk group in table TKTONODE originates from a network other than one to which the node belongs. By default, the FOREIGN DCA network always applies to table DCANETID.

The DEFAULT DCA network identifies the default DCA network for the switch. The following trunk groups will always belong to the default DCA network:

- all incoming trunk groups for which DCA information is not datafilled in table TKTONODE
- all trunk groups for which DCA information is datafilled in table TKTONODE with DCANETID set to default

Table DCANETID is limited to seven tuples. Six of the tuples are distinct, user-defined DCA networks datafilled by the operating company. The seventh tuple is the FOREIGN network that appears in the table by default.

## Datafill sequence and complications

Table TKTONODE must be datafilled after table DCANETID.

## Table size

1 to 7 tuples

**EXPIRED PAGE. TABLE OBSOLETE**

**DCANETID** (end)

**Datafill**

The following is an example of a datafill for table DCANETID.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
NETNAME		alphanumeric (1 to 12 characters)	<i>network name</i> Enter the name of the DCA network.
SNETNAME		alphanumeric (1 to 12 characters)	<i>short network name</i> Enter the short network name that is used for displaying network information. This name must be unique within the DCANETID table.

**Datafill example**

The following is an example of a datafill for table DCANETID.

**MAP display example for table DCANETID**

NETNAME	SNETNAME
DCANETWORK1	DCA1
DCANETWORK2	DCA2
FOREIGN	FRGN

**Table history**

**NA004**

Table DCANETID was introduced.

---

## DCHINV

---

### Table name

D-channel Handler Inventory Table

### Functional description

Table DCHINV contains engineering information for DCHs on peripheral modules (PM) with integrated services digital network (ISDN) capabilities. This information includes

- the DCH identification number
- the type and number of the host PM
- the product engineering code (PEC) of the DCH
- the load file name of the DCH
- the port that the DCH uses

### PM types supported by table DCHINV (Sheet 1 of 2)

PM	Definition
ALGC	Austrian line group controller
ARCC	Austrian remote cluster controller
DTC	Digital trunk controller
LGC	Line group controller
LTC	Line trunk controller
PLGC	Pulse code modulation (PCM) 30 line group controller
PRCC	PCM30 remote cluster controller
RCO2	PCM30 remote switching center (RSC)-Synchronous Optical Network (SONET) (RSC-S) (also known as an offshore remote cluster controller 2)
RCC2	Remote cluster controller 2 (also known as a DS-1 RSC-S)
RCCI	ISDN remote cluster controller
SMA	Subscriber carrier module-100 access
SMA2	Enhanced Subscriber carrier module-100 access
SMU	Subscriber carrier module-100 urban

**DCHINV** (continued)**PM types supported by table DCHINV (Sheet 2 of 2)**

<b>PM</b>	<b>Definition</b>
SRCC	SONET remote cluster controller
TMS	Traffic Operator Position System (TOPS) message switch

*Note:* The standard names for extended multiprocessor system (XMS)-based peripheral modules (XPM) are LTC, LGC, and RSC-S.

Table DCHINV allows an operating company to define a DCH on the peripheral (P)-side of the XPM.

**Datafill sequence and implications**

Table LTCPSINV must be datafilled before table DCHINV.

All remote PMs specified in field PMTYPE in table DCHINV must be specified first in tables RCCINV and RCCPSINV.

**Table size**

0 to 256 tuples

**DCHINV** (continued)**Datafill**

The following table lists datafill for table DCHINV.

**Field descriptions (Sheet 1 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
DCHNO		0 to 255	<i>D-channel handler number</i>  Enter the external identification number used by the system to represent a specific DCH.
PMTYPE		ALGC, ARCC, DTC, LGC, LTC, PLGC, PRCC, RCC2, RCCI, RCO2, SMA, SMA2, SMU, SRCC, or TMS	<i>Peripheral module type</i>  Enter the PM type to indicate where the DCH is located. Up to ten DCHs can be defined for each PM. See the previous table for a definition of PM types.  Table DCHINV enables the use of a PLGC with an ISDN signaling processor (ISP) optional card (DCHs are only allowed on ISDN PMs).  Table DCHINV also enables datafill and call processing using ISDN services on a PRCC. The PRCC is connected to either a two-processor or unified processor (UP) PLGC that is equipped with an ISDN signaling preprocessor (ISP) card. A PRCC can exist in the same office with an RCO2, but not an RCC2.

**DCHINV** (continued)

## Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
PMTYPE(continued)			<p>An RCO2 with an ISP card can be added. DCH can be datafilled on the P-side port of an RCO2 on the same ports as RCC2.</p> <p>A subscriber carrier module-100 urban (SMU) provisioned with an enhanced ISP card can only assign P-side ports to DCHs.</p> <p>If eight integrated digital terminals (IDT) are datafilled on the P-side of one SMA, no DCHs can be datafilled on the P-side of that SMA. If an SMA has any DCHs datafilled on its P-side, a maximum of seven IDTs can be datafilled on the P-side of that SMA.</p> <p>Any entry outside the range indicated for this field is invalid.</p> <p><b>Note:</b> All ISP cards are provisioned in table LTCINV.</p> <p><b>Note:</b> TMS is not datafilled with ISP in table LTCINV as the datafill is done automatically by the system.</p>
PMNO		0 to 127 or 0 to 255	<p><i>Peripheral module number.</i></p> <p>Enter the PM number to indicate where the DCH is located. Enter a value between 0 (zero) and 127 for an NT40 switch, or 0 (zero) and 255 for a DMS SuperNode switch.</p>
DCHPEC		BX02AA or BX02BA	<p><i>D-channel handler product engineering code</i></p> <p>Enter the product engineering code (PEC) of the DCH.</p> <p>For BCS35 and up, enter BX02BA to identify the enhanced DCH card. BX02BA can be used in an ISDN LGC (LGCI), ISDN LTC (LTCI), LGC offshore (LGCO), and RCO2.</p> <p>Any entry outside this range is invalid.</p>

**DCHINV** (end)

**Field descriptions (Sheet 3 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
LOAD		alphanumeric (up to 8 characters)	<i>Load file name</i> Enter the load file name of the DCH.
PORT		0 to 63 or 0 to 19 (for XPMs)	<i>DS-1/PCM30 port.</i> Enter the DS-1 or PCM30 port that the DCH uses  DCH ports must be datafilled beginning on port 19 and working downward on odd ports on PMs LGC, LTC, PLGC, PRCC, RCCI, SMA, SMU, and SRCC.  For PCM30 TMS, the highest equipped DCH port is 15.  DCH ports on RCC2 and RCO2 must be datafilled on ports 1, 9, or 17 if the DCH is on the main shelf, or ports 10, 11, 12, 13, 14, 15, or 18 if the DCH is on the extension shelf.

**Datafill example**

The following example shows sample datafill for table DCHINV.

**MAP display example for table DCHINV**

DCHNO	PMTYPE	PMNO	DCHPEC	LOAD	PORT
1	PLGC	0	BX02AA	DCH36A	17
2	PLGC	0	BX02AA	DCH36A	19

**Table history**

**NA004**

Added SMA2 as an entry to field PMTYPE and to the table PM types supported by table DCHINV.

**BCS36**

Added values ALGC and ARCC to field PMTYPE.

---

**DCICDEF**

---

**Table name**

Disallowed Card Issuer Code Definition

**Functional description**

Table DCICDEF) is a digilator table that is used along with tables TOPSTOPT and DCICSET to block calling cards on either a DN or trunk group basis.

Table DCICDEF contains the card issuer codes, key CODEDIGS, obtained from CIID or CCITT calling cards. It also contains field CODEID, which is the card issuer code returned from the OLNS LIDB or table DCICSET. If a CODEDIDS match is found and the CODEID matches a card issuer code returned from the OLNS LIDB or table DCICSET, then the IntraLATA Carrier calling card used for the call is disallowed.

Functionality DCIB allows the Local Exchange Carrier (LEC) to block subscribers from using Card Issuer Identifier (CIID) and International Telegraph and Telephone Consultative Committee (CCITT) calling cards issued by the InterLATA Carriers (IC) if the LEC and IC do not have a mutual honoring agreement.

**Datafill sequence and meaning**

There is no requirement to enter datafill into other tables before table DCICDEF.

**Table size**

0 to 16384 tuples.

Table DCICDEF is a digilator table, so the amount of memory used varies according to datafill. If memory conservation is important, band tuples to reduce memory requirements.

## DCICDEF (end)

### Datafill

The table that follows lists datafill for table DCICDEF.

#### Field descriptions

Field	Subfield	Entry	Explanation and action
CODEDIGS		1 to 6 digits	Code digits. This field is the table key and is the card issuer code that identifies the issuer of the calling card. It is a prefix of the calling card number. There in no default value for this field.  This field is a digilator, similar to subtable STDPRTCT.STDPRT. Therefore, it is not possible to datafill two tuples that begin with the same digits and have different digit lengths. For example, tuples 23 23 and 231 231 cannot be used in the same table.
CODEID		up to 6 digits	Code identification. This field is a card issuer code returned from either the OLNS LIDB or table DCICSET. The card issuer code is assigned by Bellcore to identify card issuer companies.

### Datafill example

The figure that follows shows sample datafill for table DCICDEF.

#### MAP display example for table DCICDEF

CODEDIGS	CODEID
201099	201099
20119	201099
61911	909090
891222	891222

### Table history

#### TOPS09

This table was created by feature AN1843 in functionality Disallowed Card Issuer Blocking, ABS00014.

---

**DCICSET**

---

**Table name**

Disallowed Card Issuer Code Set

**Functional description**

Table DCICSET is used along with tables TOPSTOPT and DCICDEF to block calling cards on a trunk group basis. Table DCICSET contains up to 5 card issuer codes for use in table DCICDEF. Table DCICSET is indexed by table TOPSTOPT, field DCICIDX.

If DCIB is preformed on a DN basis, which uses an OLNS query, then table DCICSET is not used.

This table is used if the following are true:

- the DCIB SOC is ON
- The trunk is present in table TOPSTOPT
- The trunk is not eligible for OLNS, that is field OLNSQRY = NONE.

Functionality DCIB allows the Local Exchange Carrier (LEC) to block subscribers from using Card Issuer Identifier (CIID) and International Telegraph and Telephone Consultative Committee (CCITT) calling cards issued by the InterLATA Carriers (IC) if the LEC and IC do not have a mutual honoring agreement.

**Datafill sequence and meaning**

Enter datafill into table DCICSET before table TOPSTOPT.

**Table size**

1 to 512 tuples

## DCICSET (end)

### Datafill

The table that follows lists datafill for table DCICSET.

#### Field descriptions

Field	Subfield	Entry	Explanation and action
DCIBIDX		0 to 511	Disallowed card issuer blocking index. This field is the table key from table TOPSTOPT, field DCIBIDX.  DCIBIDX 0 is a default tuple that may not be deleted or changed. This default tuple allows the LEC to turn off DCIB on a trunk group basis without turning the DCIB SOC to IDLE.
CODEIDS		up to 5 numbers, each 6 digits	Code identifications. This field is the set of card issuer codes. The card issuer code is assigned by Bellcore to identify card issuer companies and is used in table DCICDEF. This field can have up to five entries of six digit numbers. For DCIBIDX 0, CODEIDS is empty.

### Datafill example

The figure that follows shows sample datafill for table DCICSET.

#### MAP display example for table DCICSET

DCIBIDX	CODEIDS
0	
1	891333 606060 \$
2	909090 \$

The above example shows default tuple 0, which cannot be changed or deleted.

### Table history

#### TOPS09

This table was created by feature AN1843 in functionality Disallowed Card Issuer Blocking, ABS00014.

### Additional information

**DCMEINV****Table name**

Digital Circuit Multiplication Equipment Inventory Table

**Functional description**

Table DCMEINV contains an inventory of the digital circuit multiplication equipment (DCME) interfaces to a DMS office. Table DCMEINV points to DCMEMTC. Table DCMEMTC contains configurations for DCME operational parameters.

**Datafill sequence and Meaning**

Enter data in table DCMEMTC before table DCMEINV.

After table DCMEINV, enter trunk members on trunk groups with the DCME option set in table TRKSGRP.

You cannot enter data in table DCMEINV in the following conditions:

- The carriers of the PCM30 digital trunk controller (DTC) are not offline (OFFL).
- The carriers in table LTCPSINV are not channel associated signaling type.
- Table DCMEMTC does not contain the maintenance parameter that MTCPARM uses.
- The value of field MTC is not N when field TRM is N.

**Table size**

The table can contain 0 to 2048 tuples.

The system dynamically allocates table size.

**Datafill**

Datafill for table DCMEINV appears in the following table.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
DCMENAME		see subfield	<i>Digital circuit multiplication equipment name.</i> This field contains subfield INVKEY.
	INVKEY	alphanumeric (vector of 12 characters)	<i>Inventory key.</i> This field is the key to table DCMEINV. Enter a maximum of 2048 DCMEs.

**DCMEINV** (continued)

## Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
MTCPARM		DEFAULT	<i>Maintenance parameters.</i> This field starts at DEFAULT. Table DCMEMTC defines the maintenance parameters applied to this DCME.
CSLNKTAB		see subfields	<i>C-side link table.</i> This field is a vector of a maximum of 10 supported links. This field contains subfields LINKNO, PMTYPE, DEQNO, DEQCKTNO, SIGBITS, TRM and MTC. If less than 10 links are necessary, end the list with a \$.
	LINKNO	0 to 9	<i>Link number.</i> Enter a number to represent the link number.
	PMTYPE	PM_TYPE	<i>Peripheral module type.</i> Enter the PM_TYPE.
	DEQNO	0 to 511	<i>Digital equipment number.</i> Enter a number to represent the digital equipment number.
	DEQCKTNO	0 to 15	<i>Digital equipment circuit number.</i> Enter a number to represent the digital equipment circuit number.
	SIGBITS	AB, CD, or NONE	<i>Signaling bits.</i> This field indicates if the DMS-DCME bearer service selection signaling uses bits AB or bits CD of TS16. The bits are on the PCM30 multiframe.  Enter NONE if the system does not use bits AB or CD.
	TRM	Y or N	<i>Transmission resource management.</i> Enter Y if this DCME link supports TRM signals.  If this DCME link does not support TRM signals, enter N.
	MTC	Y or N	<i>Maintenance signals.</i> Enter Y if table DCMEMTC defines the maintenance parameters for this DCME.

**Datafill example**

Sample datafill for table DCMEINV appears in the following example.

---

**DCMEINV** (end)

---

**MAP example for table DCMEINV**

DCMENAME	MTCPARAM	CSLNKTAB
10	DEFAULT	(0 PDTC 4 0 AB Y Y) \$

**Table history****TL06**

This feature was added to DMS100 release TL06.

## DCMEMTC

---

### Table name

Digital Circuit Multiplication Equipment Maintenance Table

### Functional description

Table DCMEMTC allows table DCMEINV to have different configurations for certain digital circuit multiplication equipment (DCME) operational parameters. Table DCMEMTC names the DCME operational parameters so that table DCMEINV can reference the parameters. Table DCMEMTC customizes the maintenance and operation of each DCME.

### Datafill sequence and meaning

You do not need to enter data in other tables before you enter data in table DCMEMTC.

Enter data in table DCMEMTC before you enter data in table DCMEINV.

You must enter maintenance parameters in table DCMEMTC before table DCMEINV can use the parameters as values in field MTCPARM.

You cannot change or delete a tuple in table DCMEMTC if table DCMEINV references the tuple.

### Table size

1 to 10 tuples

### Datafill

Datafill for table DCMEMTC appears in the following table.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
PARMSET		see subfield	<i>Parameter set.</i> This field is the name of a set of parameters and contains subfield MTC_KEY.
	MTC_KEY	vector of a maximum of 8 characters	<i>Maintenance key.</i> Enter the maintenance key.

**DCMEMTC** (continued)

## Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
MINALCT		1 to 300	<i>Minor alarm circuits.</i> Enter the number of circuits on digital circuit multiplication equipment (DCME). The DCME must receive channel out-of-service or spare signals. Spare signals are not defined. The DCME must receive channel out-of-service signals before the minor external equipment alarm occurs.
MAJALCT		1 to 300	<i>Major alarm circuits.</i> Enter the number of circuits on DCME that must receive channel out-of-service or spare. Spare signals are not defined. The circuits must receive the signals before the major external equipment alarm occurs.
CRITALCT		1 to 300	<i>Critical alarm circuits.</i> Enter the number of circuits on DCME that must receive channel out-of-service or spare signals. Spare signals are not defined. The circuits must receive the signals before the major external equipment alarm occurs.
OMTHRESH		0 to 32767	<i>Operational measurement threshold.</i> Enter the number of times a bearer service becomes unavailable before the system generates a log report. Enter the number of times a bearer service becomes unavailable if the monitor and test feature are available.  Enter 0 to generate a log report for one occurrence of No Bearer Service acknowledgement.
SIGREC		SR20 or SR40	<i>DCME signal recognition time.</i> Enter the general recognition time for the DCME signals. Enter SR20 for 20 ms or SR40 for 40 ms.

**DCMEMTC** (end)

**Field descriptions (Sheet 3 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
BEARACK		50 to 250	<i>Bearer service acknowledgement timeout.</i> Enter one of the following two values. Enter the time, in increments of 0.01 s, the DMS switch waits for DCME acknowledgement of a bearer service request. Enter the time a spare signal must remain while the DMS switch waits for the acknowledgement before the system assumes an error. The time is in increments of 0.01 s.
SPARSIG		50 to 250	<i>Spare signal recognition time.</i> Enter the time applied before recognition of a spare signal for all other cases than those already described. A spare signal is not defined. The time is in increments of 0.01 s.
ACK3K1		Y or N	<i>Acknowledgement for 3.1-kHz bearer service requests.</i> Enter Y if the DMS switch must request 3.1-kHz bearer service and the system sends a special service acknowledgement. Otherwise, enter N and the system treats the calls as speech calls.

**Datafill example**

Sample datafill for table DCMEMTC appears in the following example.

**MAP example for table DCMEMTC**

PARAMSET	MINALCT	MAJALCT	CRITALCT	OMTHRESH	SIGREC	BEARACK	SPARSIG	ACK3K1
DEFAULT	100	150	200	500	SR20	200	200	N

---

**DCMINV**

---

**Table name**

Digital Carrier Module Inventory Table

**Functional description**

Table DCMINV contains the following assignment data for each digital carrier module (DCM):

- floor, row, bay position, and base mounting position of each DCM
- frame type and number where the DCM mounts
- network assignments
- the name assigned to the issue of the peripheral module (PM) software. For a list of available names, see the batch change supplement (BCS) for the appropriate software release.
- the set of executive programs the DCM requires. For a list of available names, refer to the BCS for the appropriate software release.
- specifies if the DCM is for a remote line module (RLM) or Traffic Operator Position (TOPS) optical carrier (OC) datalink application.
- specifies if the DCM P-side links must be placed out of service when the values exceed out-of-service limit for frame or slip.

**Datafill sequence and meaning**

You do not need to enter data in other tables before you enter data in table DCMINV.

**Table size**

The system automatically allocates memory in segmented blocks. Each block can accommodate a maximum of 16 DCMs.

The maximum number of DCMs is 512.

**DCMINV** (continued)**Datafill**

Datafill for table DCMINV appears in the following table.

**Field descriptions (Sheet 1 of 2)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
DCMNM		see subfields	<i>Digital carrier module number.</i> This field contains subfields DCMTYPE and DCMNO.
	DCMTYPE	DCM or DES	<i>Digital carrier module.</i> Enter DCM for digital carrier module DES for digital echo suppressor.
	DCMNO	0 to 511	<i>Digital carrier module number.</i> Enter the digital carrier module number.
FRTYPE		DCE	<i>Frame type.</i> Enter the DCE (digital carrier equipment) frame where the digital carrier module mounts.
FRNO		0 to 511	<i>Frame number.</i> Enter the frame number of the DCE frame where the digital carrier module mounts.
SHPOS		04, 18, 32, 51, or 65	<i>Shelf position.</i> Enter the base mounting position of the DCM on the DCE frame.  An entry outside this range is not correct.
FLOOR		0 to 99	<i>Floor.</i> Enter the floor or remote location number where the DCE frame mounts.
ROW		A to H J to N P to Z AA to HH JJtoNN and PP to ZZ	<i>Row.</i> Enter the row of the DCE frame location.
FRPOS		0 to 99	<i>Frame position.</i> Enter the bay position of the DCE frame.

**DCMINV** (continued)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
EQPEC		2X31AA 2X31AB 2X31AC 2X31AK 2X31AH 2X31AJ 2X31AL 2X12AA 2X12AD	<i>Equipment product engineering code.</i> Enter the product engineering code (PEC) of the DCM. The PECS of the DCM are 2X31AA, AB, AC, AK, AH, AJ, or AL. The PECs of the DES module are 2X12AA or AD.
LOAD		alphanumeric (one to eight characters)	<i>Load.</i> Enter the name assigned to the issue of the PM software. For a list of available names refer to the batch change supplement for the appropriate BCS.
LKDATA		see subfields	<i>Link data.</i> For switches equipped with the junctored network (JNET), this field contains subfields NMPAIR and NMPORT.  For switches equipped with the enhanced network (ENET), this field contains subfields ENSHELF, ENSLOT, ENLINK, and ENDS30.

**Junctored Network (JNET)**

If the switch has JNET, the following two fields form a vector of a maximum of four multiples. The method you must follow to enter data for each subfield appears in the following table.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Explanation and action
	NMPAIR	0 to 31	<i>Port A network module number.</i> Enter the network module number assigned to the digital carrier or echo suppressor module.
	NMPORT	0 to 63	<i>Port A network module port number.</i> Enter the network module port number assigned to the digital carrier or echo suppressor module.

**DCMINV** (continued)**Enhanced Network (ENET)**

If the switch has ENET, the following fields form a vector of a maximum of four multiples. The method you must follow to enter data for each subfield appears in the following table.

**Field descriptions for conditional datafill (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	ENSHELF	0 to 7	<i>ENET shelf number.</i> Enter the network shelf number assigned to the digital carrier or echo suppressor module.
	ENSLOT	<i>for ENET</i> 128k10to16, 25 to 32 <i>for ENET 16k,</i> 13 to 19	<i>ENET slot number.</i> Enter the crosspoint slot number assigned to the digital carrier or echo suppressor module.
	ENLINK	0 to 18	<i>ENET link number.</i> Enter the crosspoint link number assigned to the digital carrier or echo suppressor module.
	ENDS30	0 to 15	<i>ENET DS30.</i> This field defaults to 0, because DS30 links do not use field ENDS30. Fiber links can use the range 0 to 15.
	EXECS	ADCMEX ADCMIX ATVDCMEX BTRSPTS DCMCSC DCMEX DCM25EX DCM250EX DCM300 DESEX FXODCMEX MOCDM- TEX PFXEX R2GWEX TRSCCS TRSID TRSTRF TRS327 TRS727	<i>Executive programs.</i> Enter the set of executive programs that the DCM requires. Entries MOCDCMTEX and R2GWEX are only for DCMT.  Entries outside this range are not correct.

**DCMINV** (continued)**Field descriptions for conditional datafill (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
	USER	RLM, OCDL, or NONE	<i>User.</i> Enter RLM if DCM is for a remote line module. Enter OCDL if DCM is for a TOPS OC datalink. The entry for field EQPEC must be 2X31AC or 2X31AJ. Otherwise, enter NONE.
	VARINFO	vector from 1 to 5 multiples	<i>Variable information.</i> This field depends on the value of field DCMSEL. If you set field DCMSEL to DCM, field VARINFO is a vector. The vector contains one to five entries of subfields PSLINKS, CARRIDX, or SETACTN. If you set field DCMSEL to DES, then field VARINFO does not have entries. Field VARINFO does not have entries because the DES does not have P-side links equipped.
	DCMSEL	DCM or DES	<i>DCM selector.</i> Enter DCM or DES.

**Digital Carrier Module (DCM)**

If the entry for field DCMSEL is DCM, enter data in the following subfields:

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Explanation and action
	PSLINKS	0 to 4	<i>P-side links.</i> Enter the link number equipped in the DCM.
	CARRIDX	alphanumeric (a maximum of 16 characters)	<i>Carrier index.</i> Enter the template name for the DCM. Table CARRMTC field TEMPLNM defines this entry. The default value is DEFAULT.
	SETACTN	Y or N	<i>Set action.</i> Enter Y to put the link out of service if the values exceed the out-of-service limit for frame or slip. In other conditions, enter N.

**Datafill example**

Sample datafill for table DCMINV appears in the following example.

**DCMINV** (end)

**MAP example for table DCMINV**

DCMNM	FRTYPE	FRNO	SHPOS	FLOOR	ROW	FRPOS	EQPEC	LOAD	LKDATA	VARINFO
						EXECS	USER			
DCM	2	TME	2	32	1	B 9	2X31AC	ADCMA02		
								0 25 0 0		
								1 10 1 0		
								2 32 2 0		
								3 14 3 0		
						DCMEX	RLM			
DCM (0 DEFAULT N) (1 DEFAULT N) (2 DEFAULT N) (3 DEFAULT N)										
(4 DEFAULT N) \$										

**DCNTAB****Table name**

Data Change Notification

**Functional description**

The Data Change Notification Table contains information about tables that TelePATH monitors.

This table is read-only and can only change when the system transfers data during a One Night Process (ONP). During an ONP, the system updates the new software load with data from the old software load.

TelePATH is an Operational Support System that provides a DMS switch. TelePATH uses a datalink to send and receive table datafill to and from a switch.

**Datafill sequence and meaning**

Does not apply. This table is a read-only table.

**Table size**

Does not apply. This table is a read-only table.

**Datafill**

Datafill for table DCNTAB appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
TNAME		alphanumeric (16 characters)	This field contains the name of the table that TelePATH monitors.
LOST		N or Y	Set this field to Y. If the system discards data changes to the selected table and does not transfer changes to TelePATH.

**Datafill example**

Sample datafill for table DCNTAB appears in the following example.

## DCNTAB (end)

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### MAP example for table DCNTAB

TNAME	LOST
-----	
CLLI	N

### Table history

#### BASE08

Table DCNTAB was introduced in BASE08.

### Additional information

There is no additional information.

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**DCOUNT**

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**Table name**

TOPS Discounts Table

**Functional description**

Table DCOUNT contains the information used for calculating discounts on charges in the Traffic Operator Position System (TOPS). Each rate schedule has its set of discount parameters.

Feature V0178 (TOPS Mass Table Control) permits data changes in table DCOUNT to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table DCOUNTI, and then, when all the required changes are entered, swap the contents of table DCOUNT with table DCOUNTI.

For further information on feature V0178, refer to table CHARGEI.

Depending on the time of day and the date that a call is made, the system determines a discount factor (if any). Field DISC indicates whether the discount percentage or ratio (in fields D1 to D6) are used, or the quoted rate (in table CHARGE) is used. Table DCOUNT also indicates whether discounted rates are used for the initial period or after a specified time. Discounts do not apply to the class charge or surcharges.

Domestic and overseas coin calls require the addition of a 30- and 120-s allowance time respectively. The addition of this time can cause the start time of the call to be pushed into the next rate break set. If the coin allowance causes a call to be pushed into the next rate break set, the discounts of the two sets are compared, and the higher discount is applied to the call. If the call is non-coin, the start time should remain true. See table RBKSET.

**Overseas Operator Center (OOC)**

Table DCOUNT provides the type and actual discount information. It also indicates whether the discount applies to the initial period or not. If the call extends over the different discount periods, then more than one discount applies. The discount applies only for the conversation period and does not apply to class charge or surcharges.

**Caribbean expansion plan (CEP) international TOPS (ITOPS)**

Calls requiring operator assistance result in a charge to the customer that is calculated by a downstream process using the call information (for example, call type, destination, answer time, and duration of call). There are cases,

## DCOUNT (continued)

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however, when the charges for a call must be quoted to the customer. This is true for the following call types:

- hotel calls
- coin calls
- calls requiring time-and-charges quote

In all three cases, the International TOPS (ITOPS) calculates the charges for the call. For hotel calls, these charges are reported to the hotel billing information center (HOBIC) for quoting; in the latter two cases, the operator quotes the charges.

### CEP dialing plan

The dialing plan for the Caribbean islands is based on the North American plan (NPA-NXX-XXXX). The islands have numbering plan area (NPA) 809, with each island having one or more unique NXXs associated with it.

### CEP ITOPS rating zones

The following terminology is used to define the different CEP ITOPS rating zones:

- **Local** calls completed within the same rate zone as the calling customer (calls within the same NXX are always considered to be in the local rate zone)
- **Domestics** calls completed within NPA 809, but to an NXX in a different rate zone as the calling customer
- **North American** calls completed from NPA 809 to any destination based on the NPA-NXX dialing plan (other than domestic calls)
- **International (or overseas)** calls completed from NPA 809 to a foreign country not based on the NPA-NXX dialing plan (outside World Zone 1)

**DCOUNT** (continued)**Datafill sequence and implications**

Table SCHED must be datafilled before table DCOUNT.

**Field descriptions (Sheet 1 of 4)**

Field	Subfield or refinement	Entry	Explanation and action
SCHNAME		alphanumeric (1 to 16 characters)	Name of rate schedule. Enter the rate schedule name. This name must be specified in table SCHED.
OVERLAY		see subfield	Name of rate schedule overlay. This field consists of subfield DISC.
	DISC	NODISC PCENT QUOTED RATIO	Discount type. Enter one of the following discount types:  Enter NODISC when discounts do not apply. No refinements require datafill.  Enter PCENT when discounts D1 to D6, given as percentages, are used and datafill refinements RPSB, DINP, D1, D2, D3, D4, D5, and D6.  Enter QUOTED when the appropriate charge table is used instead of fields D1 through D6 and datafill refinement RPSB.  Enter RATIO when D1 to D6, given as ratios, are used and datafill refinements RPSB, DINP, D1, D2, D3, D4, D5, and D6.
	RPSB	Y or N	Rate period specific billing algorithm. If the entry in subfield DISC is PCENT, QUOTED, or RATIO, datafill this refinement. Enter Y (yes) to determine the discount rate for each rate period specific billing algorithm. The call is billed for each applicable discount rate (that is, if the call is initiated in one rate period and lapses to another, both discount rates are applied to their respective parts of the call).  Enter N (no) if this algorithm is not used.  The default is N.

**DCOUNT** (continued)**Field descriptions (Sheet 2 of 4)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
	DINP	Yor N	<p>Discount initial period. If the entry in subfield DISC is PCENT or QUOTED, datafill this refinement. Discounts can be applied to the overtime charge or to the combined initial and overtime charge.</p> <p>Enter Y if the discount is to apply to the combined initial and overtime charge. Otherwise enter N. The type of discount selected applies to reduced rate tables D1 to D6.</p>
	D1	0 to 99	<p>Discount percentage or ratio. If the entry in subfield DISC is PCENT or QUOTED, datafill this refinement. Depending on the date and the time of day a discount percentage or a ratio of D1 can be selected.</p> <p>If the discount is given in percentage, enter the percentage discount.</p> <p>If the discount is given in ratio, enter the single-digit numerator followed by the single-digit denominator; for example, enter 13 for a discount of 1/3.</p>
	D2	0 to 99	<p>Discount percentage or ratio. If the entry in subfield DISC is PCENT or QUOTED, datafill this refinement. Depending on the date and the time of day, a discount percentage or a ratio of D2 can be selected.</p> <p>If the discount is given in percentage, enter the percentage discount.</p> <p>If the discount is given in ratio, enter the single-digit numerator followed by the single-digit denominator; for example, enter 13 for a discount of 1/3.</p>

**DCOUNT** (continued)**Field descriptions (Sheet 3 of 4)**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
	D3	0 to 99	<p>Discount percentage or ratio. If the entry in subfield DISC is PCENT or QUOTED, datafill this refinement. Depending on the date and the time of day, a discount percentage or a ratio of D3 can be selected.</p> <p>If the discount is given in percentage, enter the percentage discount.</p> <p>If the discount is given in ratio, enter the single-digit numerator followed by the single-digit denominator; for example, enter 13 for a discount of 1/3.</p>
	D4	0 to 99	<p>Discount percentage or ratio. If the entry in subfield DISC is PCENT or QUOTED, datafill this refinement. Depending on the date and the time of day, a discount percentage or a ratio of D4 can be selected.</p> <p>If the discount is given in percentage, enter the percentage discount.</p> <p>If the discount is given in ratio, enter the single-digit numerator followed by the single-digit denominator; for example, enter 13 for a discount of 1/3.</p>

## DCOUNT (continued)

### Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	D5	0 to 99	Discount percentage or ratio. If the entry in subfield DISC is PCENT or QUOTED, datafill this refinement. Depending on the date and the time of day, a discount percentage or a ratio of D5 can be selected.  If the discount is given in percentage, enter the percentage discount.  If the discount is given in ratio, enter the single-digit numerator followed by the single-digit denominator; for example, enter 13 for a discount of 1/3.
	D6	0 to 99	Discount percentage or ratio. If the entry in subfield DISC is PCENT or QUOTED, datafill this refinement. Depending on the date and the time of day, a discount percentage or a ratio of D6 can be selected.  If the discount is given in percentage, enter the percentage discount.  If the discount is given in ratio, enter the single-digit numerator followed by the single-digit denominator; for example, enter 13 for a discount of 1/3.

### Datafill example

The following example shows sample datafill for table DCOUNT.

The following example also shows datafill using North American TOPS.

### MAP display example for table DCOUNT

SCHNAME	OVERLAY
ONTQUE RATIO Y N 13 12 23 0 0 0	

**DCOUNT** (end)

The following example shows datafill using the CEP ITOPS.

In table DCOUNT, for rate schedule CANADA, discount D1 is 20% of the charges while discount D2 is 30% of the total charges. For schedule USA, discount D1 is 1/4 off the total charges while discount D2 is 1/3 off. There are no discounts available for schedule LOCAL.

In the other two fields; the first field specifies whether rate period specific billing is used on the call. This takes into account changes in the rate break while a call is in progress. The second field specifies whether the discount applies to the initial period.

**MAP display example for table DCOUNT**

SCHNAME	OVERLAY
CANADA PCENT N N 20 0 0 0 0 0	
USA RATIO N N 14 13 0 0 0 0	
LOCAL NODISC	
UK QUOTED N	

## **DCOUNTI**

---

### **Table name**

TOPS Discounts Inactive Table

### **Functional description**

Refer to table DCOUNT.

Feature V0178 (TOPS Mass Table Control) permits data changes in table DCOUNTI to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table DCOUNT, and then, when all the required changes are entered, swap the contents of table DCOUNT with table DCOUNTI.

For further information on feature V0178, refer to table CHARGEI.

### **Datafill sequence and implications**

Refer to table DCOUNT.

### **Table size**

Refer to table DCOUNT.

### **Datafill example**

Refer to table DCOUNT.

---

**DCRNETID**

---

**Table name**

Dynamically Controlled Routing Network Identification Table

**Functional description**

Table DCRNETID is used to input the dynamically controlled routing (DCR) network information. Each DCR network that the DMS switch is a member of must be defined in table DCRNETID. The table must contain at least one network name if the node is operating as a DCR node. For multiple network access, table DCRNETID keeps track of all the DCR networks to which this node belongs.

**Datafill sequence and implications**

There is no requirement to datafill other tables prior to table DCRNETID.

The following tables must be datafilled after table DCRNETID:

- DESTKEY
- DESTNODE
- DCROPT
- TKTONODE
- OFRT subtable of tables HNPACONT and FNACONT
- RTEREF subtable of tables HNPACONT and FNACONT

**Table size**

Table size is controlled by office parameter NUM\_DCR\_NP\_ACCESS in table OFCENG.

**DCRNETID** (continued)**Datafill**

The following table lists datafill for table DCRNETID.

**Field descriptions**

<b>Field</b>	<b>Subfield or refinement</b>	<b>Entry</b>	<b>Explanation and action</b>
NETNAME		alphanumeric (1 to 12 characters)	Dynamically controlled routing network name. This field is the key to the table. Enter the dynamically controlled routing (DCR) network name.
SNETNAME		alphanumeric (1 to 4 characters)	Short dynamically controlled routing network name. Enter the short DCR network name used by the CI (command interpreter) MAP network management level display.
NETTYPE		HPR, LDR, or RDR	Dynamically controlled routing network type. Enter the DCR network type: HPR (high performance routing), LDR (local dynamic routing), or RDR (regional dynamic routing).
FHR		ACTIVE or ENABLED	Fixed hierarchical routing. Enter ACTIVE if the switch is operating in fixed hierarchical routing (FHR) mode. Enter ENABLED if the switch is allowed to operate in FHR mode, but is not currently operating in FHR mode.  DISABLED is not a valid entry. This entry indicates that the switch is not allowed to operate in FHR mode.  The default is ACTIVE.
NONTANDM		ACTIVE, DISABLED, or ENABLED	Nontandem. Enter ACTIVE if the switch is operating in nontandem mode. Enter DISABLED if the switch is not allowed to operate in nontandem mode. Enter ENABLED if the switch is allowed to operate in nontandem mode, but is not currently operating in nontandem mode.
TANDEM		ACTIVE, DISABLED, or ENABLED	Tandem. Enter ACTIVE if the switch is operating in tandem mode. Enter DISABLED if the switch is not allowed to operate in tandem mode. Enter ENABLED if the switch is allowed to operate in nontandem mode, but is not currently operating in tandem mode.

**DCRNETID** (end)**Datafill example**

The following example shows sample datafill for table DCRNETID.

**MAP display example for table DCRNETID**

NETNAME	SNETNAME	NETTYPE	FHR	NONTANDM	TANDEM
DCR_NET_1	DCR1	HPR	ACTIVE	ENABLED	ENABLED

**Table history****BCS36**

Table DCRNETID was introduced.

**Supplementary information**

This section provides information on dump and restore procedures for table DCRNETID.

**Dump and restore**

The network name is required for tables DESTKEY, DESTNODE, DCROPT, TKTONODE, OFRT, and RTEREF. The name can be supplied by inserting the first tuple into table DCRNETID on the restore side before the datafill is transferred from the dump side. Otherwise, the default name TELECOM\_DCR is automatically inserted as the only tuple in table DCRNETID (field NETNAME) during the dump and restore process.

The defaults for the remaining fields in table DCRNETID are as follows:

- The entry in field SNETNAME is TLCM.
- The entry in field NETTYPE is HPR.
- The entry in field FHR is ACTIVE.
- Field NONTANDM is set to ENABLED unless there is a dump-side DCRNONTANDEM tuple in table DCROPT that has field ENABLE set to N. In this case, field NONTANDM in table DCRNETID is set to DISABLED.
- Field TANDEM is set to ENABLED unless there is a dump-side DCRTANDEM tuple in table DCROPT that has field ENABLE set to N. In this case, field TANDEM in table DCRNETID is set to DISABLED.

## DCROPT

---

### Table name

Dynamically Controlled Routing Mode of Operation Control Table

### Functional description

For BCS36 and up, information previously contained in table DCROPT is now recorded in table DCRNETID. Table DCROPT remains for dump and restore purposes only. Tuples can no longer be added to this table.

Prior to BCS36, table DCROPT was used by the operating company monitoring the office to control the different modes of operation introduced by feature BV1534, Dynamically Controlled Routing (DCR).

### Datafill sequence and implications

There is no requirement to datafill other tables prior to table DCROPT.

### Table size

For BCS36 and up, table size is 0 (zero).

Prior to BCS36, extension from 0 (zero) to 3 tuples is automatic. Field SIZE in table DATASIZE was not used and must be set to 0 (zero).

**DCROPT** (continued)**Datafill**

The following table lists datafill for table DCROPT.

**1Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
OPTKEY		FHR, DCRTAN-, DEM, or DCRNONTA NDEM	<p>Mode of operation. Enter the possible modes of operation of the switch.</p> <p>Enter FHR for fixed hierarchical routing.</p> <p>Enter DCRTANDEM to indicate to the network processor (NP) that the switch can be used as Dynamically Controlled Routing (DCR) tandem switch if field ENABLE is set to Y (yes).</p> <p>Enter DCRNONTANDEM to indicate to the NP that the switch can be used as DCR non-tandem switch if field ENABLE is set to Y.</p> <p>Tuples cannot be deleted once they are added.</p>

**DCROPT** (continued)**1Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
ENABLE		Y or N	<p><i>Enable mode of operation</i></p> <p>Enter Y (yes) to indicate that the operating company administering the office allows the NP to place the switch in the associated mode of operation.</p> <p>Enter N (no) to indicate DCRTANDEM and DCRNONTANDEM modes of operation only since the fixed hierarchical mode of operation cannot be disabled.</p> <p>If a currently active mode is disabled, a message is sent to the NP to request a mode change. Field ACTIVE is not updated until the NP acknowledges the mode change. Field ACTIVE is automatically updated to FHR if both DCR tandem and DCR non-tandem are disabled and DCR routing is also disabled.</p>
ACTIVE		Y or N	<p>Active mode of operation. This field is set by the NP to indicate the mode of operation selected.</p> <p>It cannot be changed by the operating company administering the office except indirectly by changing field ENABLE of the associated mode of operation.</p> <p>Exactly one of the ACTIVE fields from the possible three tuples can be set to Y at one time. The others are set to N.</p> <p>Enter Y for FHR and N for DCRTANDEM and DCRNONTANDEM, which corresponds to the initial values.</p>

**Datafill example**

The following example shows sample datafill for table DCROPT.

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**DCROPT** (end)

---

**MAP display example for table DCROPT**

OPTKEY	ENABLE	ACTIVE
FHR	Y	N
DCRNONTANDEM	Y	Y
DCRTANDEM	Y	N

**Table history****BCS36**

Statements that information in table DCROPT is now recorded in table DCRNETID were added.

**Supplementary information**

This section provides information on dump and restore for table DCROPT.

**Dump and restore**

During dump and restore, table DCROPT is used to transfer the DCR operation mode states from table DCROPT, on the dump side, to table DCRNETID on the restore side.

## DCTDIAL

---

### Table name

Data Call Tester Dialing Table

### Functional description

Data call tester (DCT) is a network tool that allows the operating company to test data calls between integrated bit error ratio test (IBERT) devices or between an IBERT and an external bit error ratio test (BERT) device, or between an IBERT and a trunk loopback (TRKLPBK) to run BERT. The tool is used on the DMS-100, DMS-200, and the DMS-100/200. The data call is originated by user commands from the DCT level of the MAP (maintenance and administration position).

Table DCTDIAL is used to dial to a far-end switch, or to dial from one IBERT line card (ILC) to another ILC on the same switch.

Table DCTDIAL contains the directory numbers (DN) and parameters of the originating BERT that can be called by the DCT application from an originating DMS switch.

Field INDEX is used by the system as a parameter to the DIAL command at the DCT level of the MAP (maintenance and administration position).

Entries used by the DIAL command are not editable if tests are running. For example, if the user is executing the DIAL 1,2 command, the tuples whose indices are 1 and 2 cannot be edited until the entire DIAL command is completed. Entries in table DCTDIAL associated with delayed tests cannot be edited until the tests are complete.

For related information, refer to table DNIBERT.

### Datafill sequence and implications

There is no requirement to datafill other tables prior to table DCTDIAL.

### Table size

0 to 2048 tuples

Table size is allocated dynamically.

**DCTDIAL** (continued)**Datafill**

The following table lists datafill for table DCTDIAL.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
INDEX		see subfield	<i>Index</i> This field is the key to the table and consists of subfield DCTKEY.
	DCTKEY	1 to 2048	<i>Data call tester key</i> Enter a unique integer for each tuple in table DCTDIAL.
COMMENT		alphanumeric (up to 10 characters)	<i>Comment</i> This field is user-definable.
DN		0 to 9(up to 24 digits)	<i>Directory number</i> Enter a directory number (DN) of a remote bit error ratio test (BERT) termination.
RATE		56K or 64K	<i>Transmission rate</i> Enter the transmission rate, 56 kilobytes per second (kbps), or 64 kbps. The default is 56K.
PATTERN		511 or 2047	<i>CCITT bit error ratio test pattern</i> Enter the CCITT BERT pattern. The default is 2047.
SYNC		10 to 300	<i>Synchronize</i> Enter the time limit, in seconds, for BERT to synchronize after the call is established. The default is 10.

**Datafill example**

The following example shows sample datafill for table DCTDIAL.

## DCTDIAL (end)

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### MAP display example for table DCTDIAL

INDEX	COMMENT	DN	BITRATE	PATTERN	SYNCH
11	BITBUCKET	8195559876	64K	2047	30

### Table history

#### BCS36

Table DCTDIAL was introduced.

### Supplementary information

This section provides information on dump and restore procedures for table DCTDIAL.

#### Dump and restore

Normal dump and restore procedures apply.

**DCTS****Table name**

Destination Code Traffic Summary Table

**Functional description**

Table DCTS defines the destination codes for traffic data collection by operational measurement (OM) group DCTS. OM group DCTS separates data by the destination code specified.

Only destination codes for outgoing and two-way trunks can be datafilled in table DCTS.

**Datafill sequence and implications**

Datafill table DCTS before table TRKDCTS.

**Table size**

Up to 1024 tuples

**Datafill**

The following table lists datafill for table DCTS.

**Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
DCTSKEY		0 to 999999	<i>Destination code</i> Enter a destination code for which OM group DCTS is required to accumulate traffic data. Valid entries are up to 6 digits in length.
DCTSKEY		0 to 99999999	<i>Destination code</i> Enter a destination code for which OM group DCTS accumulates traffic data. Valid entries are up to eight digits in length.  Do not enter destination codes that are part of an earlier defined destination code. For example, if 123 exists as a defined destination code, neither 12 nor 1234 can be entered for traffic data collection.

**Datafill example**

The following example shows sample datafill for table DCTS.

## DCTS (end)

---

In the example, office traffic data is required for the following destination codes:

- 322
- 41
- 6677

### MAP display example for table DCTS

DCTSKEY
322
41
6677

## Table history

### APC010

Feature AU2916, DCTS and Answer OM Enhancements, increased the size of table DCTS from 512 to 1024 tuples. This feature also increased the number of digits allowed in field DCTSKEY.

### APC009

AU2718 added table DCTS to the APC100 product.

### GL03

Valid entries for field DCTSKEY changed.

### BCS34

Table DCTS was introduced to the DMS100i product.

**DDTAB****Table name**

Data Dictionary Table (DDTAB)

**Functional description**

Table DDTAB displays the data schema information of the data dictionary (DD) in the form of standard table tuples. Table DDTAB also sends schema change information to TelePATH as DCN records. The table improves the ability of the TelePATH system to monitor the DMS switch, and is for internal use.

TelePATH is an operational support system (OSS) for a DMS switch. TelePATH uses a datalink to send and receive table datafill to and from a switch.

This table is a read-only table. The table cannot be augmented or changed by operating company personnel.

**Datafill sequence and implications**

There is no requirement to datafill other tables before table DDTAB.

**Table size**

DDTAB is a read-only table. The system controls the size of the table.

**Datafill**

The following table lists datafill for table DDTAB.

**Field descriptions (Sheet 1 of 5)**

Field	Subfield or refinement	Entry	Explanation and action
NAME		1 to 32 characters	Name. This is a vector, 1 to 32 characters long, that contains the type name. The term "type" indicates the software codes added to the data dictionary during loadbuild. There is one entry in the data dictionary for each type in the data dictionary. This field is the key to the table.
TID		0 to 65535	Type identification. This is an integer value that corresponds to the internal type identification.

**DDTAB** (continued)

## Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
BITSIZE		-32768 to 32767	Bit size. This is an integer value, measured in bits, that represents the internal size of an instance of the type.
CHARSIZE		-32768 to 32767	Character size. This is an integer value that contains the number of characters required to represent the largest external instance of this type.
ASPINF			Aspect information. This is an area with refinements that contains additional information if the type has a format aspect bound to it. This field consists of subfield FMTASP.
	FMTASP	N or Y	Format aspect. "Y" indicates that the type has a format aspect bound against it. When set to "Y", the following subfields are present: MODNAME, EDITION, and PROCNAME.
	MODNAME	1 to 22 characters	Module name. This is a vector, 1 to 22 characters long, that indicates the name of the module that implements the input procedure for this format aspect.
	EDITION	4 characters	Edition. This is a table, 4 characters long, that indicates the version and the issue of the MODNAME on the switch.
	PROCNAME	1 to 64 characters	Procedure name. This is a vector, 1 to 64 characters long, that indicates the name of the input procedure for this format aspect.
INFO			Information. This is an area with refinements that contains additional information about the kind of type in the tuple.

**DDTAB** (continued)**Field descriptions (Sheet 3 of 5)**

Field	Subfield or refinement	Entry	Explanation and action
	MARK	AREA, DEFINED, DESC, INVALID, NUMERIC_RANGE, OVERLAY, PROC, PTR, SET, STRING_RANGE, STRUCTURE, SYMBOLIC_RANGE, TABLE, UNDEFINED, VECTOR	<p>Mark.</p> <p>If the entry is AREA, the following subfields appear: NUMFLDS, FATHER, and SON. Refer to MARK = AREA for additional information.</p> <p>If the entry is DEFINED, the subfield FATHER appears. Refer to MARK = DEFINED for additional information.</p> <p>If the entry is DESC, the following subfields appear: SUBTYPE and STRIDE. Refer to MARK = PTR, SET, or DESC for additional information.</p> <p>The entries INVALID, OVERLAY, PROC, and UNDEFINED have no additional information. These types do not accept any input on output. The system displays only the used space field.</p> <p>If the entry is NUMERIC_RANGE, the following subfields appear: BOTTOM and TOP. Refer to MARK = NUMERIC_RANGE for additional information.</p> <p>If the entry is PTR, the following subfields appear: SUBTYPE and STRIDE. Refer to MARK = PTR, SET, or DESC for additional information.</p>

**DDTAB** (continued)

## Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action	
FLDNAMES			<p>If the entry is SET, the following subfields appear: SUBTYPE and STRIDE. Refer to MARK = PTR, SET, or DESC for additional information.</p> <p>If the entry is STRUCTURE, the subfield NUMFLDS appears. Refer to MARK = STRUCTURE for additional information.</p> <p>If the entry is STRING_RANGE, the following subfields appear: NUMSYS, MAXLEN, and MULTI. Refer to MARK = STRING_RANGE for additional information.</p> <p>If the entry is SYMBOLIC_RANGE, the following subfields appear: NUMSYMS and MAXLEN. Refer to MARK = SYMBOLIC_RANGE for additional information.</p> <p>If the entry is TABLE, the following subfields appear: SUBTYPE, BOTTOM, and TOP. Refer to MARK = TABLE for additional information.</p> <p>If the entry is VECTOR, the following subfields appear: SUBTYPE and MAXNUM. Refer to MARK = VECTOR for additional information.</p>	
			Field names. This is a subtable that contains information about fields of the type. This subtable has tuples if the type is an area, structure, or vector. This subtable has the following subfields: INDEX, FLDNAME, FLDTYPE, BOFFSET, and BSIZE.	
	INDEX		-32768 to 32767	Index. This is an integer that represents the number of the field starting from 1.
	FLDNAME		1 to 32 characters	Field name. This is a vector, 1 to 32 characters long, that indicates the name of the field.
	FLDTYPE		1 to 32 characters	Field type. This is a vector, 1 to 32 characters long, that indicates the type of the field.

**DDTAB** (continued)**Field descriptions (Sheet 5 of 5)**

Field	Subfield or refinement	Entry	Explanation and action
AREAREFS	BOFFSET	-32768 to 32767	Bit offset. This is an integer that represents the bit offset of the field within the structure or area.
	BSIZE	-32768 to 32767	Bit size. This is an integer that represents the size of the field in bits.
			Area Refinements. This is a subtable that contains information about refinements bound for the father area. There is one subtable tuple for each area refinement. This subtable has the following refinements: INDEX, SELVAL, and REFTYPE.
	INDEX	-32768 to 32767	Index. This is an integer that represents the selector value in internal decimal format.
	SELVAL	1 to 32 characters	Selector value. This is a vector, 1 to 32 characters long, that indicates the selector value.
STRINGS	REFTYPE	1 to 32 characters	Refinement type. This is a vector, 1 to 32 characters long, that indicates the type of the refinement.
			Strings. This is a subtable that contains information about symbols of the type. There is one subtable tuple for each string or symbol. This subtable has the following refinements: INDEX, and STRING.
	INDEX	-32768 to 32767	Index. This is an integer that represents the number bound to this string.
	STRING	1 to 32 characters	String. This is a vector, 1 to 32 characters long, that indicates the value of the string.

**DDTAB** (continued)

The following table describes the subfields if MARK = AREA.

**Field descriptions MARK = AREA**

Field	Subfield or refinement	Entry	Explanation and action
	NUMFLDS	-32768 to 32767	Number of fields. This is an integer that represents the number of fields in this area, but excludes the father.
	FATHER	N or Y	Father. This is a BOOL set to `Y' if this type is a refinement of another area. If set to `Y', the following subfield is present: TID.
	SON	N or Y	Son. A BOOL set to `Y' if this area has a SELECTOR field.
	TID	1 to 64 characters	Type identification. This indicates the type of the father area. A vector, 1 to 64 characters long, that occurs if father is `Y'.
	SELECTOR	1 to 32 characters	Selector field name. This is a vector, 1 to 32 characters long, that occurs if son is `Y'.

The following table describes the subfields if MARK = STRUCTURE.

**Field descriptions MARK = STRUCTURE**

Field	Subfield or refinement	Entry	Explanation and action
	NUMFLDS	-32768 to 32767	Number of fields. This is an integer that represents the number of fields in this structure.

The following table describes the subfields if MARK = VECTOR.

**Field descriptions MARK = VECTOR**

Field	Subfield or refinement	Entry	Explanation and action
	SUBTYPE	1 to 32 characters	Subtype. This is a type identification that indicates the type of the vector elements. Subtype is a vector, 1 to 32 characters long.
	MAXNUM	-32768 to 32767	Maximum number. This is the maximum size of the vector.

**DDTAB** (continued)

The following table describes the subfields if MARK = TABLE.

**Field descriptions MARK = TABLE**

Field	Subfield or refinement	Entry	Explanation and action
	SUBTYPE	1 to 32 characters	Subtype. This is a type identification that indicates the type of the table elements. Subtype is a vector, 1 to 32 characters long.
	BOTTOM	integer	Bottom. This is an integer that represents the bottom of the table range.
	TOP	integer	Top. This is an integer that represents the top of the table range.

The following table describes the subfields if MARK = SYMBOLIC\_RANGE.

**Field descriptions MARK = SYMBOLIC\_RANGE**

Field	Subfield or refinement	Entry	Explanation and action
	NUMSYMS	-32768 to 32767	Number of symbols. This is an integer that represents the number of symbols in the range.
	MAXLEN	-32768 to 32767	Maximum length. This is an integer that represents the character length of the longest symbol in the range.

The following table describes the subfields if MARK = STRING\_RANGE.

**Field descriptions MARK = STRING\_RANGE**

Field	Subfield or refinement	Entry	Explanation and action
	NUMSYMS	-32768 to 32767	Number of symbols. This is an integer that represents the number of strings in the range.
	MAXLEN	-32768 to 32767	Maximum length. This is an integer that represents the character length of the longest string in the range.
	MULTI	N or Y	Multiple range. This is a BOOL set to "Y" if the string range is a multiple range.

**DDTAB** (continued)

The following table describes the subfields if MARK = NUMERIC\_RANGE.

**Field descriptions MARK = NUMERIC\_RANGE**

Field	Subfield or refinement	Entry	Explanation and action
	BOTTOM	-2147483648 to 2147483647	Bottom. This is an integer that represents the bottom of the numeric range.
	TOP	-2147483648t o2147483647	Top. This is an integer that represents the top of the numeric range.

The following table describes the subfields if MARK = PTR, SET, or DESC.

**Field descriptions MARK = PTR, SET, or DESC**

Field	Subfield or refinement	Entry	Explanation and action
	SUBTYPE	1 to 32 characters	Subtype. This is a type identification, 1 to 32 characters long, that represents the type of the elements.
	STRIDE	-32768 to 32767	Stride. This is an integer that represents the bit size of the elements.

The following table describes the subfields if MARK = DEFINED.

**Field descriptions MARK = DEFINED**

Field	Subfield or refinement	Entry	Explanation and action
	FATHER	1 to 32 characters	Father. This is a type identification, 1 to 32 characters long, that represents the type of the defining type.

**Datafill example**

The following example shows sample datafill for table DDTAB.

## MAP display example for table DDTAB

NAME	TID	BITSIZE	CHARSIZE	ASPINF
FLDNAMES	AREAREFS	STRINGS		INFO
COMMON_NAME	19	133	1	N
( 0)	( 0)	( 0)	DEFINED	SIXTEEN_CHAR_VECTOR
SIX_CHAR_COUNT	20	3	1	N
( 0)	( 0)	( 0)	NUMERIC_RANGE	0 6

## Table history

## BASE11

TID field range changes to 0 to 65535 (from -32768 to 32767).

Subfields BOTTOM and TOP for field NUMERIC RANGE change to -2147483648 to 2147483647 (from -32768 to 32767).

## BASE10

Documented table DDTAB.

---

## DDU

---

### Table name

Disk Drive Unit Table

### Functional description

The input/output controller (IOC) assignments for a maximum of ten disk drive units (DDU) appear in table DDU.

The system can boot an image from DDUs that have an IOC assignment for the following disk drive controller cards:

- NT1X55AA
- AB
- CA
- DA
- FA

The Field Descriptions Table describes this condition.

### IOC assignments

Card slot and base circuit number on shelf with product engineering code (PEC):						
NT1X61AA		NT1X61AB		NT2X76nn		
IOC number	Slot	Circuit	Slot	Circuit	Slot	Circuit
0	12	16	04	00	21	00
0	04	00	06	04	19	04
1	12	16	04	00	21	00
1	04	00	06	04	19	04

**Note:** nn = AB (replaced), AM, AN, AP, AR, AS, AT, and AW

Refer to table MTD for the disk drives that contain fixed assignments for the IOC.

**DDU** (continued)

*Note:* A switch that has magnetic tapes as the primary storage device does not require DDUs.

Refer to table MTD for related information.

**Datafill sequence and meaning**

Enter data in table IOC before table DDU.

Northern Telecom provides the input for table DDU.

**Table size**

The system automatically allocates memory for ten DDUs.

**Datafill**

Datafill for table DDU appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Description and action
DDUNO		0 to 9	<i>Disk drive unit number.</i> Enter the number assigned to the disk drive unit (DDU).
IOCNO		0 to 19	<i>Input/output controller number.</i> Enter the number of the input/output controller (IOC) that has the DDU assigned.
IOCKTNO		0, 4, 8, 12, 16, 20, 24, 28, or 32	<i>Input/output controller circuit number.</i> Enter the number of the IOC circuit that has the DDU assigned.  Any entry outside the range for this field is not correct.
EQPEC		1X55AA 1X55AB 1X55CA 1X55DA or 1X55FA	<i>Product engineering code.</i> Enter the product engineering code (PEC) of the DDU controller card.  Any entry outside the range for this field is not correct.

**Datafill example**

Sample datafill for table DDU appears in the following example.

## DDU (end)

---

An example of datafill for table DDU for a switching unit equipped with three DDUs appears in the following example.

### MAP example for table DDU

DDUNO	IOCNO	IOCCKTNO	EQPEC
0	0	4	1X55AA
1	1	4	1X55AA
0	0	4	1X55FA

### Table history

#### CSP02

Entry value 1X55FA was added to field EQPEC in CSP02.

## DEFDATA

---

### Table name

Default Data Table

### Functional description

Feature BC1036 (Default Data) allows a user to specify default values for data types defined in the DMS switch. Use table DEFDATA to specify these default values. The data type name and the default value for that data type appears in table DEFDATA. With this table, you can add, change, or delete the default value for a specified data type.

Use table DEFDATA to specify default data for logical tuple types in tables. You can input data to a table in a string of fields or as separate fields. You must determine the logical tuple type for which a default data is necessary before you enter data in table DEFDATA. Refer to the Additional information section for a complete example on how to determine logical tuple types.

The prompt mode allows you to enter data one field at a time. You must enter a value for each field. The table does not define default data for the logical tuple. When this condition occurs the default value for each field appears after the field name. The default value for the tuple key field does not appear. For each field, you can specify a required value or enter a carriage return to accept the default value appears.

If the table does not define defaults for the logical tuple, the prompt mode only displays a default value for a field. This condition occurs when the field is an area, or a refinement for an area. The table can define defaults for a logical tuple and an area or refinement for an area in the tuple. When this condition occurs you receive the default defined for the complete tuple.

### Datafill sequence and meanings

You do not need to enter data in other tables before you enter data in table DEFDATA.

### Table size

0 to 1000 tuples

The system allocates memory dynamically for a maximum of 1000 tuples.

**DEFDATA** (continued)**Datafill**

Datafill for table DEFDATA appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Description and action
DATATYPE		alphanumeric (1 to 32 characters)	<i>Data type.</i> Enter the name of the data type that requires a default value.
DEFAULT		alphanumeric (1 to 32 characters)	<p><i>Default values.</i> This field contains two parts. The first part is the data type entry in field DATATYPE. The second part contains the default values for the specified data type. You must enter the key field of the tuple as part of the default. The default value does not appear in table editor prompt mode. Refer to example.</p> <p>A blank space must separate each value you enter in field DEFAULT.</p> <p>The default data has a limit of 46 words of data. The default data is the second part of field DEFAULT.</p>
	SPECIAL_T ONE_INDEX	SPECIAL_T ONE_INDEX	<p>Special tone index. This tuple provides a default value for CFIND in table CUSTSTN. The value tones include CFT, for CFIND special condition dial tone.</p> <p>Note: When providing CFIND tone to a Succession line, CFT is provided regardless of the tone provisioned for the customer group associated with the line.</p>

**Datafill example**

Sample datafill for table DEFDATA appears in the following example.

A data type of METERING\_DATA\_INDEX with a default value of 0 (zero) appears in the example.

**DEFDATA** (continued)**MAP example for table DEFDATA**

DATATYPE	DEFAULT
METERING_DATA_INDEX	METERING_DATA_INDEX 0

**Datafill example**

The following example shows sample datafill for table DEFDATA using SPECIAL\_TONE\_INDEX.

**MAP example for table DEFDATA**

DATATYPE	DEFAULT
SPECIAL_TONE_INDEX	SPECIAL_TONE_INDEX CFT

**Additional information**

This section provides information on how to enter default data types in table DEFDATA.

**Defining a default tuple for a logical tuple type**

To define a default tuple for the logical tuple of a table, the logical tuple type name of the table is necessary. At the MAP terminal, table command RANGE displays the logical tuple type.

In the following example, table TERMDEV determines the logical tuple type name.

**DEFDATA** (continued)**Determining logical tuple type name**

```
TABLE:  TERMDEV
```

*Example input:*

**>RANGE**

*Example of a MAP response:*

```

1 TERMDDES          EIGHT_CHAR_VECTOR
2 IOCNO             IOC_NUMBER
3 IOCCKTNO         IOC_CCT_NO
4 TERMTYPE         CONSOLE_TYPE
5 BAUDRATE         BAUDRATES
6 INTYPE           COMMUNICATION_INTERFACES
7 EQPEC           PEC
8 PARITY           PARITYS
9 COMCLASS        COMMANDSET
LOGICAL TUPLE TYPE:  TTY_TUPLE
```

In this example, the name of the logical tuple type is TTY\_TUPLE. A default tuple for logical tuple type TTY\_TUPLE appears in table DEFDATA as follows:

DATATYPE	DEFAULT
TTY_TUPLE	TTY_TUPLE TERM5 0 0 VT100 B1200 CL 1X67AB NONE ALL

Entry of the TTY\_TUPLE occurs twice. The first entry is the entry in field DATATYPE. The second entry of TTY\_TUPLE occurs as the first part of the entry in field DEFAULT. Enter the complete default tuple in field DEFAULT in one string. Separate the data type and all default values with single spaces.

The input for table TERMDEV at the MAP terminal after you define the results appears in the following example.

---

**DEFDATA** (continued)

---

Datfill input for table TERMDEV table DEFDATA is datafilled

```
TABLE:  TERMDEV
Example input:
>ADD
  TERMDDES :
>TERM5
  IOCNO: 0
>
  IOCCKTNO: 0
>24
  TERMTYPE: VT100
>
  BAUDRATE: B1200
>
  INTYPE: CL
>
  EQPEC: 1X67AB
>1X67BC
  PARITY: NONE
>
  COMCLASS: ALL
>
```

The default value for each field, appears after the field name. This condition does not apply to TERMDDES, the key. The user selected values for fields circuit number (field IOCCKTNO) and the card type (field EQPEC). The user also selects the default values. The system enters the defaults in table DEFDATA in all other fields.

Table DEFDATA requires two tuples to provision Call Forward Indication (CFIND) in table CUSTSTN.

## DEFDATA (end)

---

### Datfill input for table DEFDATA

```
TABLE: DEFDATA
```

*Example input:*

```
>add
```

```
DATATYPE:
```

```
>special_tone_index
```

```
DEFAULT:
```

```
>special_tone_index cwt
```

```
TUPLE TO BE ADDED:
```

```
    SPECIAL_TONE_INDEX  SPECIAL_TONE_INDEX CWT
```

In this example, the name of the tuple types are SPECIAL\_TONE\_INDEX and CFIND\_TONE\_DURATION\_TYPE. The default tuples appear in table DEFDATA as follows.

```
DATATYPE
```

```
DEFAULT
```

---

```
SPECIAL_TONE_INDEX  SPECIAL_TONE_INDEX CWT  
CFIND_TONE_DURATION_TYPE CFIND_TONE_DURATION_TYPE 1000
```

### Table history

#### SN06

Added subfield SPECIAL\_TONE\_INDEX for activity A89005956.

## **DELAYOP**

---

### **Table name**

TOPS Delayed Outpulsing Table

### **Functional description**

This table is deleted in release TOPS14 by feature 59015901 in functionality EOL for TOPS14.

**DESTDATA****ATTENTION**

This table applies to new or modified content for SN07(DMS) that is valid through the current release.

**DESTDATA****Datafill sequence and implications**

This read only table is dynamically (automatically) datafilled during the addition of patchable peripheral modules (the peripheral module may receive PRSUs) to their appropriate inventory table. These peripheral modules include XPMs, ISNs, and SPMs. The first tuples of this table include the core and Message Switches.

**Table size**

The table may contain up to 8192 entries.

**Datafill**

Datafilling is done dynamically.

**Fields and subfields for table DESTDATA**

Field	Subfield or refinement
DESTINDX	DESTDATA_KEY
NEXTDEST	DESTINDEX
CLASSID	CLASSID
DESTID	DESTID_VECTOR
LOADNAME	LOADNAME_CHAR_VECTOR
UPGLOAD	LOADNAME_CHAR_VECTOR
UPGRADE	BOOL
HOLD	BOOL

## Table history

### SN07(DMS)

New table DESTDATA created as part of activity Q01083765.

---

**DESTCTL**

---

**Table name**

Destination Control Table

**Functional description**

Table DESTCTL specifies a call route that depends on the following three requirements:

- the destination of the call
- the screening class of the incoming trunk (the origination of the call)
- the discrimination digit result obtained through analysis of the discrimination digit in table DCACCTL

The table result is one of the following actions:

- route the call to a treatment
- route the call according to the previous route. The previous route is from table OVNTRNSL or tables MMA0 to MMA9.
- route the call through one of the tables OVR0 to OVR9 and the specified route index

Field POECSCRN screens calls according to one of the following:

- the path of entry characteristic of the call that trunk group datafill indicates
- the network indicator received in an incoming British Telecom User Part (BTUP) initial final address message (IFAM) or initial address message (IAM)

Fields POECSCRN, SCRNSEL and SERVPROF are only available on gateway (GW) trunk group types.

**Datafill sequence and meanings**

Enter data in table DESTNM before you enter data in table DESTCTL.

**Table size**

0 to 446 400 tuples

The system dynamically allocates memory.

**DESTCTL** (continued)**Datafill**

Datafill for table DESTCTL appears in the following table.

**Field descriptions**

Field	Subfield or refinement	Entry	Description and action
DESTSCRN		see subfields	<i>Destination screening</i> This field contains subfields SCRNCL, DEST, and DISDSELR.
	SCRNCL	alphanumeric (one to four characters)	<i>Screening class</i> Enter one of the names in field SCRNCL in table TRKGRP. This field defines the origination of the call. This field is one of the indexes to table DESTCTL.
	DEST	alphanumeric (1 to 16 characters)	<i>Destination name</i> Enter one of the names in field DEST in tables MMA0 to MMA9 or table OVNTRNSL. This field defines the destination of the call. This field is one of the indexes to table DESTCTL.
	DISDSELR	E1, E2, E3, E4, E5, E6, E7, or E8	<i>Discrimination digit selector</i> Enter one of the values E1 to E8 that appear in field DISDRSLT in table DCACCTL.  Entries outside the indicated range are not correct.
SCRNRTE		see subfields	<i>Screening route.</i> This field contains subfield TRCD.
	TRCD	D, P, or T	<i>Table route call treatment selector.</i> If the call routes to a treatment, enter D and enter refinement TREAT.  If the call routes through the previous route that tables MMA0 to MMA9 specify, enter P. Enter refinements POECSCRN and SCRNSEL.  If the call routes through a table and index, enter T. Enter refinements TABID, POESCRN, and SCRNSEL.  Entries outside the indicated range are not correct.

**DESTCTL** (continued)**TRCD = D**

If the entry in subfield TRCD is D, enter refinement TREAT as the following description describes.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Description and action
	TREAT	alphanumeric (four characters)	<i>Treatment.</i> Enter the office treatment to which the system routes the call. Entries must be correct values in table TMTCNTL, subtable TREAT.

**TRCD = P**

If the entry in subfield TRCD is P, enter refinements POECSCRN and SCRNSEL as the following table describes.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Description and action
	POECSCRN	Y or N	<i>Path of entry characteristic screening.</i> Enter Y (yes) to use path of entry characteristic screening. For all other conditions, enter N (no).
	SCRNSEL	Y or N	<i>Service screening selector.</i> Enter Y to use service screening by destination. Enter refinement SERVPROF. For all other conditions, enter N for the previous service profile (if any) from translations that screen the call.  Field SERVSCRN in table POECSCRN can override this field.
	SERVPROF	NUL RCNAM1 or RCNAM2	<i>Service profile.</i> If the entry in refinement SCRNSEL is Y, enter this refinement. Enter one of the service profiles in table SERVPROF. Enter NUL if the destination does not have services.

**DESTCTL** (continued)**TRCD = T**

If the entry in subfield TRCD is T, enter refinements TABID, POECSCRN, and SCRNSEL as the following table describes.

**Field descriptions for conditional datafill**

Field	Subfield or refinement	Entry	Explanation and action
	TABID	OVR0 OVR1 OVR2 OVR3 OVR4 OVR5 OVR6 OVR7 OVR8 or OVR9	<i>Table identifier.</i> Enter the table name to which the system routes the call.  Entries outside the indicated range are not correct.
	KEY	1 to 1023	<i>Key.</i> Enter the index to the table that field TABID specifies.
	POECSCRN	Y or N	<i>Path of entry characteristic screening.</i> Enter Y (yes) to use path of entry characteristic screening. For all other conditions, enter N (no).
	SCRNSEL	Y or N	<i>Service screening selector.</i> Enter Y to use service screening by destination. Enter refinement SERVPROF. For all other conditions, enter N for the previous service profile, if any, from translations that screen the call.  Field SERVSCRN in table POECSCRN can override this field.
	SERVPROF	NUL RCNAM1 or RCNAM2	<i>Service profile.</i> If the entry in refinement SCRNSEL is Y, enter this refinement. Enter one of the service profiles in table SERVPROF. Enter NUL if the destination does not have services.

**Datafill example**

Sample datafill for table DESTCTL appears in the following example.

---

**DESTCTL** (end)

---

**MAP example for table DESTCTL**

DESTSCRN			SCRNRTE
SCRN1	PTT4	E1	D VACT

## DESTKEY

---

### Table name

Dynamically Controlled Routing Destination Node Names Table

### Overview

Dynamically controlled routing (DCR) is designed to avoid congestion in a given network of switches by routing calls through the path most likely to succeed between two nodes of that network. Each member of a subgroup of DMS offices sends information about its toll traffic to a centralized network peripheral (NP). The NP processes this information and sends back tandem recommendations, on an office-destination basis, to each of the communication offices. The DCR tables are listed below.

- DESTKEY
- DESTNODE
- DCROPT
- TKTONODE

In addition to the four DCR tables listed above, the following selectors and parameters are affected by the DCR feature:

- Selectors DCRT and NODE in route tables OFRT, HNPACONT.RTEREF, and FNPACONT.RTEREF
- Parameter NUM\_DCR\_EXT\_BLKs in table OFCENG

### Functional description

Table DESTKEY is used to input all DCR destinations, including destinations accessible in more than two DCR links. When the addition of a new DCR network destination is required, the common language location identifier (CLLI) of the destination must first be added to table DESTKEY. The following figure shows an example of a DCR network.

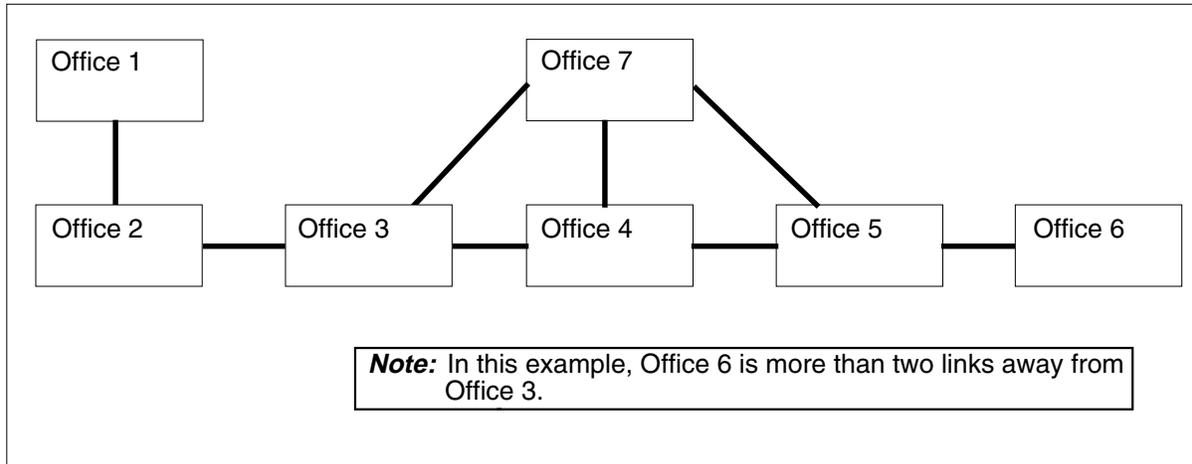
**DESTKEY** (continued)**Example of a DCR network****Datafill sequence and implications**

Table DCRNETID must be datafilled before table DESTKEY.

The following tables must be datafilled after table DESTKEY.

- DESTNODE
- TKTONODE
- RTEREF
- OFRT
- OFR2
- OFR3
- OFR4
- HNPACONT.RTEREF
- FNPACONT.RTEREF (route selectors DCRT or NODE)

**Table size**

The extension of table DESTKEY from 0 up to 252 tuples is automatic.

## DESTKEY (end)

### Datafill

The following table lists datafill for table DESTKEY.

#### Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DESTKEY		see subfield	<i>Destination key</i> This field consists of one or more entries of subfield DESTNAME.
	DESTNAME	alphanumeric (up to 16 characters)	<i>Destination node name</i> Enter a DCR destination office CLLI for each DCR destination accessible with toll links, including destinations more than two links away.  A tuple can be deleted only if no reference to the DCR destination exists in any other table.

### Datafill example

The following example shows sample datafill for table DESTKEY.

The example shows datafill in Office\_3 (see the previous figure for an example of a DCR network).

#### MAP display example for table DESTKEY

```

DESTKEY
DESTNAME
-----
OFFICE_1
OFFICE_2
OFFICE_4
OFFICE_5
OFFICE_6
OFFICE_7
    
```

### Table history

#### BCS36

The following changes were made to table DESTKEY:

- added field NETLIST
- changed example of a DCR network (see the previous figure)

**DESTNM****Table name**

Destination Control Names Table

**Functional description**

The destination control names and associated traffic and accounting destination codes appear in table DESTNM.

**Datafill sequence and meaning**

You do not need to enter data in other tables before you enter data in table DESTNM.

**Table size**

0 to 2048 tuples

The system allocates memory dynamically.

**Datafill**

Datafill for table DESTNM appears in the following table.

**Field descriptions (Sheet 1 of 2)**

Field	Subfield or refinement	Entry	Description and action
DEST		alphanumeric (a maximum of 16 characters)	<i>Destination control name.</i> Enter the destination control that the operating company defines. This field must contain all names in use in the DMS switch.  This field does not allow destination names that start with the letters EX.
ADNUM		0 to 2047	<i>Administration number.</i> Enter an administration number.

**DESTNM** (end)

**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Description and action
TDC		0 to 2047	<i>Traffic destination code.</i> Enter an unsigned integer that is different for each TDC. If the entry in field DEST is NIL, enter 0. A NIL entry indicates that a destination code access control name is not present.
ADC		0 to 320	<i>Accounting destination code.</i> Enter an unsigned integer that is different for each ADC. Zero (0) is the null value and is only correct for null tuples. The ADC integer indicates an identifier for the operating company that owns the terminating gateway switch.

**Datafill example**

Sample datafill for table DESTNM appears in the following example.

**MAP example for table DESTNM**

DEST	ADNUM	TDC	ADC
NIL	3	0	0
SUI1	5	1	1
NIL	8	2	3

**Table history**

**BCS35**

Revisions to field DEST occurred in BCS35 to state that the field does not allow destination names that start with EX.

---

**DESTNODE**

---

**Table name**

Dynamically Controlled Routing Destination Office Route Table

**Functional description**

Table DESTNODE contains a tuple for every destination office reachable in one or two links from the present office. Table DESTNODE is used to select a Dynamically Controlled Routing (DCR) route to each destination. For multiple network access it is necessary to specify the DCR network name of the DCR destination node.

The following fields are associated with each tuple:

- the network processor recommended office (NPREC) to tandem to the destination office
- the direct route (DIRSEL and refinements) from the present office to the destination office
- the exceptional route (EXCSEL and refinements) used whenever the network processor (NP) recommended tandems fail or when the NP cannot recommend any tandems

For related information, refer to table DESTKEY.

**Datafill sequence and implications**

The following tables must be datafilled before table DESTNODE:

- DESTKEY
- DCRNETID
- OFRT
- OFR2
- OFR3
- OFR4

A tuple can be deleted from table DESTNODE even if the (DCR) destination is referenced in one of the route reference tables (or subtables).

**Table size**

0 to 1512 (6 × 252) tuples

The maximum number of tuples is 252 for each DCR network. Table size is dynamically allocated during datafill.

**DESTNODE** (continued)**Datafill**

The following table lists datafill for table DESTNODE.

**Field descriptions (Sheet 1 of 3)**

Field	Subfield or refinement	Entry	Explanation and action
DESTKEY		see subfields	<i>Destination node key</i> This field consists of subfields NETNAME and DESTNAME.
	NETNAME	alphanumeric	<i>Destination network name</i> Enter a valid network name from table DCRNETID.
	DESTNAME	alphanumeric	<i>Destination node name</i> Enter the name of each destination office positioned one or two links (trunks) away from the present office. Names datafilled in table DESTKEY are the only valid entries.
NPREC		CONT BLOCK NILREC	<i>NP routing recommendation</i> This field represents the destination office that must be used as a tandem to get to the office datafilled in field DESTKEY. Values in this field can only be modified through software communication with the NP. This is a read-only field.  The possible value types that appear in this field are as follows: <ul style="list-style-type: none"> <li>• a destination name indicating a tandem destination</li> <li>• BLOCK - indicating that a call is to be blocked</li> <li>• CONT - indicating that exceptional routing (EXCSEL) is to be used</li> <li>• NILREC - indicating the absence of a recommendation</li> </ul> Enter NILREC as the default value for initial datafill. Field NPREC is read only and cannot be changed. BLOCK, CONT, and other valid NPREC field values (the latter group is found in table DESTKEY) can also be used to satisfy the table editor.

**DESTNODE** (continued)

## Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
OTSRTE		see subfields	<i>Outpulsing scheme routes</i> This field consists of subfields OSID and DIRSEL. These subfields define up to 55 outpulsing schemes and the route associated with each scheme.
	OSID	1 to 55	<i>Outpulsing scheme identification</i> Enter the outpulsing scheme identification (ID) number and complete the associated direct route fields (DIRSEL and refinements) and exceptional route fields (EXCSEL and refinements). Up to 55 outpulsing schemes can be defined for each entry in field DESTKEY. There is no requirement to enter the outpulsing scheme ID numbers in numerical order. The same outpulsing scheme ID number must not be entered twice in field DESTKEY.
	DIRSEL	S, T, or NIL	<i>Direct route selector</i> If a single common language location identifier (CLLI) with standard digit manipulation is sufficient to define the direct route, enter S and datafill refinements CLLI, then go to field EXCSEL.  If the direct route has alternatives, or requires nonstandard digit manipulation enter T in this field and datafill refinements DIR_TABNAME and DIR_INDEX, then go to field EXCSEL.  If there is no direct route to the destination office, enter NIL and go to field EXCSEL.
	CLLI	alphanumeric (up to 16 characters)	<i>Direct route common language location identifier</i> If the entry in field DIRSEL is S, datafill this refinement. Enter the direct route CLLI.

**DESTNODE** (continued)

## Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
EXCSEL	DIR_TAB-NAME	OFRT, OFR2, OFR3, or OFR4	<i>Direct route table name</i> If the entry in field DIRSEL is T, datafill this refinement. Enter the OFRx table name for the direct route.  The route list in table OFRx is valid if it contains only routes with route selectors S, N, MN, TS, NQ, or CND.
	DIR_INDEX	0 to 1023	<i>Direct route table OFRx index</i> If the entry in field DIRSEL is T, datafill this refinement. Enter the direct route reference index into table OFRx.
		T or NIL	<i>Exceptional route selector</i> If the destination has exception routes, enter T in this field and datafill both the OFRx table name in refinement EXC_TABNAME and the route index in refinement EXC_INDEX.  If there is no exceptional route to the destination office, enter NIL. No further datafill is required.
	EXC_TAB-NAME	OFRT, OFR2, OFR3, or OFR4	<i>Exceptional route table name</i> If the entry in field EXCSEL is T, datafill this refinement. Enter the OFRx table name for the exceptional route.
	EXC_INDEX	0 to 1023	<i>Exceptional route table OFRx index</i> If the entry in field EXCSEL is T, datafill this refinement. Enter the exceptional route reference index into table OFRx.

**Datafill example**

The following example shows sample datafill for table DESTNODE.

**DESTNODE** (end)

```

DESTKEY  NPREC
                                               OTSRTE
-----
DCR_NET_1 MTL05  TORO6
(1 S CLLIMTL05 T OFRT 23) (2 T OFRT 36 T OFRT 25) (3 S
CLLIQUE03 NIL) $

DCR_NET_2 MTL277 TORO266
(1 S CLLIMTL277 T OFR2 11) (2 T OFR2 25 T OFR2 30) (3 S
CLLIQUE99 NIL) $

DCR_NET_3 DESTNODE_CLLI_1 DESTNODE_CLLI_N
(1 S TRK_CLLI_1 NIL) $

```

**Table history****SHR07**

The default value for field NPREC was changed to NILREC.

**BCS36**

The following items were added:

- table DCRNETID was referenced for network names
- datafill sequence was changed to include table DCRNETID
- table size was changed to 1512
- example was revised
- table size is dynamically allocated during datafill

## DFINV

---

### Table name

Distribution Frame Inventory Table

### Functional description

Table DFINV stores information for up to a maximum of 31 distribution frames located at the host or remote switch. The distribution frames are numbered consecutively commencing at zero.

This is a read-only table. The information for this table is provided by Northern Telecom.

### Datafill sequence and implications

There is no requirement to datafill other tables prior to table DFINV.

### Table size

Memory is allocated for 31 tuples.

### Datafill

The following table lists datafill for table DFINV.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DFNO		0 to 30	<i>Distribution frame number</i> This field contains the number assigned to the distribution frame. Any entry outside the range indicated for this field is invalid.
DFNAME		alphanumeric (up to 8 characters)	<i>Distribution frame name</i> This field contains the name assigned to the distribution frame.

**DFINV** (end)**Field descriptions (Sheet 2 of 2)**

Field	Subfield or refinement	Entry	Explanation and action
MAXZONE		0 to 999	<i>Maximum zone number</i>  This field contains the highest zone number that can be assigned on the distribution frame.
SITE		alphanumeric (up to 4 characters) or HOST	<i>Site</i>  This field contains the site name of the distribution frame location. If the site is not remote, the entry is equal to HOST.

**Datafill example**

The following example shows sample datafill for table DFINV.

The example shows input for distribution frame 0, which has the name MDF1 with 20 zone located at the host switch.

**MAP display example for table DFINV**

DFNO	DFNAME	MAXZONE	SITE
0	MDF1	19	HOST





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