

UNIVERGE SV9500

FP95-115 V5

Data Programming Manual - ACD

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UNIVERGE SV9500 ACD - FEATURE LIST (1 / 4)

INDEX		FEATURE NAME	PIR/ Peripheral Box	MARKET INFORMATION				Analog			Dterm / DT			PHS	PCS	Vo WLAN	SP Controlled Std.SIP	SIP Handler- Controlled Std.SIP (Single Line)	SIP Handler- Controlled Std.SIP (Multi Line)	Hotel	CCIS	FCCS	Location Diversity	SR-MGC	REMARKS
				North America	Australia	Countries	EMEA	PIR	UG50	MC	Digital Terminal	UG50	IP Terminal *1												
[A-31A]	ABANDONED CALL SEARCH - ACD		X	X	X	X	-	-	-	X	-	X	X	N	N	N	N	-	-	N	-	X	N	X	
[A-34A]	ASSISTANCE - ACD AGENT - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[A-35A]	AUTOMATIC ANSWER - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[A-37A]	AVAILABILITY - ACD POSITION - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[A-80A]	ANNOUNCEMENTS - ACD		X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	N	-	X	N	X	
[A-85A]	AGENT PERSONAL QUEUE - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	*1: Agent Personal Queue: AADT increased from 1-59 -> 1-200. (59 - 200 not supported in North America)
[A-86A]	AUTO WORK MODE FOR PBX CALLS - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[A-91A]	ANALOG ACD POSITION - ACD		X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	N	-	X	N	X	
[A-93A]	ALTERNATE NIGHT CCV - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[A-133A]	AGENT ANYWHERE - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	N	
[A-140A]	ACD-ACCESS - ACD		N	X	X	X	-	-	-	-	-	-	-	X	X	X	-	-	-	N	-	X	N	X	
[A-145A]	ACD INCOMING PILOT NUMBER RESTRICTION - ACD		N	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	N	-	X	-	X	
[B-20A]	BREAK MODE - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	*: The S6 enhancement increased the supported Break types from 1-9 -> 1-99. Only 1-9 are supported in North America.
[B-21A]	BAD CALL NOTIFICATIONS - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[C-35A]	CALL DISTRIBUTION TO AGENTS - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[C-67A]	CALL TRANSFER TO SPLIT QUEUE - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[C-68A]	CALL WAITING INDICATION - LCD DISPLAY/CW LAMP - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[C-70A]	CALLING PARTY IDENTIFICATION - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[C-108A]	CALL CONTROL VECTOR - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[C-110A]	CALL WAITING LAMP WITH CHIME - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[C-127A]	CALL FORWARDING - SPLIT - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	N	

UNIVERGE SV9500 ACD - FEATURE LIST (2 / 4)

LEGEND																									
<p>* - There are some restrictions. X - Applicable — - Not Applicable N - Not Available</p>																									
<p>A - Administration Station for Hotel System G - Guest Station for Hotel System XX - Feature developed by NEC Corporation of America Countries - Asia, Latin America, Middle East, Russia SP Controlled Std.SIP - Connection test is required in advance. SIP Handler-Controlled Std.SIP (Single/Multi Line) - Connection test is required in advance. SIP Handler-Controlled Std.SIP (Multi Line) - North America ONLY</p>																									
INDEX	FEATURE NAME	PIR/ Peripheral Box	MARKET INFORMATION				Analog			Dterm / DT				PHS	PCS	Vo WLAN	SP Controlled Std.SIP	SIP Handler-Controlled Std.SIP (Single Line)	SIP Handler-Controlled Std.SIP (Multi Line)	Hotel	CCIS	FCCS	Location Diversity	SR-MGC	REMARKS
			North America	Australia	Countries	EMEA	PIR	UG50	MC	Digital Terminal	UG50	IP Terminal *1	Soft Phone												
[C-191A]	CALL RECOVER - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	X	-	N	-	X	N	X	
[C-199A]	CONNECTION DISPLAYS - ACD		X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	N	-	X	N	N	
[C-205A]	CONSULTATION HOLD RELEASE - ACD		X	X	X	X	X	X	X	X	-	X	X*1	X	X	X	X	-	-	N	-	X	-	X	*: This feature is available since S5. *1: When the softphone is used as an agent position (Operating agent), this feature is not available because DISC key to a Soft key cannot be used.
[D-133A]	DO NOT DISTURB - SPLIT - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[D-171A]	DTMF SENDING DURING MONITORED STATUS - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	N	*: This feature is available since S6.
[E-6A]	EMERGENCY/RECORDER - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[F-10A]	FUNCTION GROUPS (SPLITS) - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[F-25A]	FLEXIBLE ID CODES - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[F-40A]	FLEXIBLE SPLIT MEMBERSHIP - ACD		N	X	X	X	X	X	X	X	-	X	X	X	-	-	-	-	-	N	-	X	N	X	*: This feature is available since S6 and only available for the ACD system where "ACDP CAPACITY EXPANSION [A-144A]" is in service.
[H-20A]	HOLIDAYS SCHEDULING - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[H-31A]	HOT SPLIT - ACD		X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	X	-	N	-	X	N	X	
[I-99A]	INFOLINK DATA MESSAGES - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	X	-	N	-	N	N	N	
[L-19A]	LOGON/LOGOFF - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[L-48A]	LANGUAGE DEFAULT - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[L-92A]	LOGOFF WARNING - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[M-28A]	MONITORING - ACD SUPERVISOR - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X*1	N	X	*: Silent Monitor (Multi-Path Monitor) connection for SIP Multiple Line Terminals is available since S5. *1:P2P FCCS only.
[M-29A]	MULTIPLE CUSTOMER GROUPS - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[M-79A]	MULTIPLE SUPERVISORS - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[M-88A]	MIS OPERATOR SELECTION - ACD		X	N	N	N	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	N	N	N	
[M-89A]	MONITOR ME - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[M-90A]	MULTI-SPLIT AGENT - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	

UNIVERGE SV9500 ACD - FEATURE LIST (3 / 4)

INDEX	FEATURE NAME	PIR/ Peripheral Box	MARKET INFORMATION				Analog			Dterm / DT				PHS	PCS	Vo WLAN	SP Controlled Std.SIP	SIP Handler- Controlled Std.SIP (Single Line)	SIP Handler- Controlled Std.SIP (Multi Line)	Hotel	CCIS	FCCS	Location Diversity	SR-MGC	REMARKS
			North America	Australia	Countries	EMEA	PIR	UG50	MC	Digital Terminal	UG50	IP Terminal *1	Soft Phone												
			PIR	MG																					
[M-110A]	MULTI-LINE SUPPORT - ACD TERMINAL - ACD	PIR	X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	N	N	X	
		MG	X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	N	N	X	
[N-12A]	NIGHT SERVICE - ACD		X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	N	-	X	N	X	
[N-14A]	NON-ACD CALL - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[O-19A]	OVERFLOW OUTSIDE - ACD		X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	N	-	X	N	X	
[P-21A]	PRIORITY QUEUING - ACD		X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	N	-	X	N	X	
[P-40A]	PILOT NUMBERS - ACD		X	X	X	X	X	X	X	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[P-45A]	PERSONAL EMERGENCY AND ASSIST - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[P-86A]	PREDICTIVE DIALING - ACD		X	X	X	X	X	X	X	X	-	X	X	X	X	-	-	-	-	N	-	X	N	N	
[P-88A]	PATTERN SWITCHING FOR PILOT NUMBER GROUP - ACD		-	X	X	X	X	X	X	X	-	X	X	-	-	-	-	-	-	N	X	X	N	X	
[Q-1A]	QUEUING - ACD		X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	N	-	X	N	X	
[R-19A]	RELEASE - ACD POSITION - ACD		X	X	X	X	-	-	-	X*	-	X*	X	-	-	-	-	-	-	N	-	X	N	X	*: Available only for DT300/ DT700 Series
[R-145A]	RING DELAY - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[S-91A]	SPLITS - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	*: CCV Indexes 1201 - 2000 not supported in North America.
[S-97A]	SPLIT DISPLAY - ACD POSITION - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[S-98A]	SPLIT SELECTION - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[S-108A]	STRANDED CALL ROUTING - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[S-153]	SPLIT CONNECTION RESTRICTION - ACD		N	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[S-164]	SR-MGC with ACD		X	X	X	X	-	X	X	-	-	X	X	-	-	-	-	-	-	N	-	N	N	X	*: Since S5, you can choose the SR-MGC backup method from "ACD" or "UCD".(For countries except North America)
[T-24A]	TRUNK TROUBLE REPORT - MIS - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[T-49A]	TALLY COUNT - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[T-50A]	TIME OF DAY/WEEK ROUTING - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	
[T-51A]	TALLY-OH CODES - ACD		X	N	N	N	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	N	
[T-85A]	TALLY REQUIRED - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	

UNIVERGE SV9500 ACD - FEATURE LIST (4 / 4)

INDEX		FEATURE NAME	PIR/ Peripheral Box	MARKET INFORMATION				Analog			Dterm / DT				PHS	PCS	Vo WLAN	SP Controlled Std.SIP	SIP Handler- Controlled Std.SIP (Single Line)	SIP Handler- Controlled Std.SIP (Multi Line)	Hotel	CCIS	FCCS	Location Diversity	SR-MGC	REMARKS
				North America	Australia	Countries	EMEA	PIR	UG50	MC	Digital Terminal	UG50	IP Terminal *1	Soft Phone												
[W-5A]		WORK MODE - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	X	-	N	-	X	N	X	
[W-6A]		WORK MODE TIME LIMIT - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	X	-	N	-	X	N	X	
[Z-1A]		ZIP TONE - ACD		X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-	-	N	-	X	N	X	

LEGEND

- * - There are some restrictions.
- X - Applicable
- - Not Applicable
- N - Not Available

- A - Administration Station for Hotel System
- G - Guest Station for Hotel System
- XX - Feature developed by NEC Corporation of America
- Countries - Asia, Latin America, Middle East, Russia
- SP Controlled Std.SIP - Connection test is required in advance.
- SIP Handler-Controlled Std.SIP (Single/Multi Line) - Connection test is required in advance.
- SIP Handler-Controlled Std.SIP (Multi Line) - North America ONLY

REMARKS
*1: This list does not include availability of the cradle type of SIP Multiple Line terminal. Features available on the cradle type of SIP Multiple Line terminal differ depending on the application installed in it.

UNIVERGE SV9500 Data Programming Manual - ACD

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CHAPTER 1 INTRODUCTION



1. GENERAL

This manual describes the system outline and procedures of installation/installation tests, operations, maintenance and data assignment of the ACD (Automatic Call Distribution) System.

1.1 Configuration of This Manual

The configuration of this manual is shown in Configuration of this Manual.

Configuration of this Manual

CHAPTER	TITLE	CONTENTS
2	GENERAL INFORMATION	This chapter explains the concept, function and configuration of the ACD System.
3	INSTALLATION	This chapter explains the procedures of installation and or installation tests of the ACD System.
4	OFFICE DATA DESIGN	This chapter explains the office data design divided into the basic ACD data and each ACD features.
5	ACD SERVICE FEATURES FUNCTIONAL TEST PROCEDURES	This chapter explains the test procedure of each ACD service feature.
6	COMMANDS AND JOB SPECIFICATIONS	This chapter explains the commands used in the ACD System. It includes sample programming sheets that may be copied and used to help configure a system.
7	SYSTEM OPERATIONS	This chapter explains the operating methods of Agent/Supervisory Position; and explains the restart processing of the ACD System.
8	SYSTEM MAINTENANCE	This chapter explains the maintenance, diagnoses (according to system messages), and fault repair of the ACD System.
APPENDIX A	GLOSSARY	This appendix gives explanations of ACD-related terms.
APPENDIX B	FIELD VALUES FOR ACD SCREENS	This appendix gives descriptions of all data values entered into PC-Pro command screens when configuring and managing an ACD system.
APPENDIX C	ACD SERVICE IN FCCS NETWORK	This appendix gives descriptions of the ACD service activated between two FCCS nodes through FCCS link.

1.2 Related Reference Manuals

For maintenance to be performed on the ACD System, there are the operations pertaining to ACD functions and those pertaining to the Telephony Server itself. Since this manual explains only the operations pertaining to ACD functions, related reference manuals explaining the procedures of the Telephony Server must be used together with this manual when performing maintenance on the ACD System as a whole.

Such reference manuals and their relation with this manual are shown in Related Reference Manuals.

Related Reference Manuals

MANUAL NAME	RELATION TO THIS MANUAL
Appliance Model Installation Manual	When performing installation/installation tests, use the manuals named in conjunction with CHAPTER 2: GENERAL INFORMATION and CHAPTER 3: INSTALLATION located in this manual
Operations and Maintenance Manual	Maintenance operations can be performed by referring to the manual listed in addition to CHAPTER 7: SYSTEM OPERATIONS and CHAPTER 8: SYSTEM MAINTENANCE in this manual.
Command Manual	Refer to CHAPTER 6: COMMANDS AND JOB SPECIFICATIONS in this manual, and the manual listed when programming the office data other than ACD system.

1.3 Precaution on using the ACD features

CAUTION: The use of a monitoring, recording or listening devices to eavesdrop, monitor or record telephone conversations or other sound activities, whether or not contemporaneous with its transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to the telephone conversation, such as using a beep tone or other notification methods or require the consent of all parties to the telephone conversation, prior to monitoring or recording a telephone conversation. Some of these laws incorporate strict penalties.



CHAPTER 2
GENERAL INFORMA-
TION

1. GENERAL

This chapter will provide the user with a basic working knowledge of the ACD System. It also explains how to use documents furnished with the ACD System.

The contents of this chapter and how to follow the information are outlined as follows:

1.1 System Specifications

The System Specifications section describes the ACD System equipment configuration, functions and specifications, interface conditions for external equipment, and other related subjects.

Persons having little or no basic working knowledge of the ACD System (concerning equipment configuration, component functions, etc.) should read and thoroughly understand this chapter before proceeding.

1.2 Glossary of Terms

The terms used throughout the manual are listed and described in the section titled Glossary of Terms.

2. SYSTEM SPECIFICATIONS

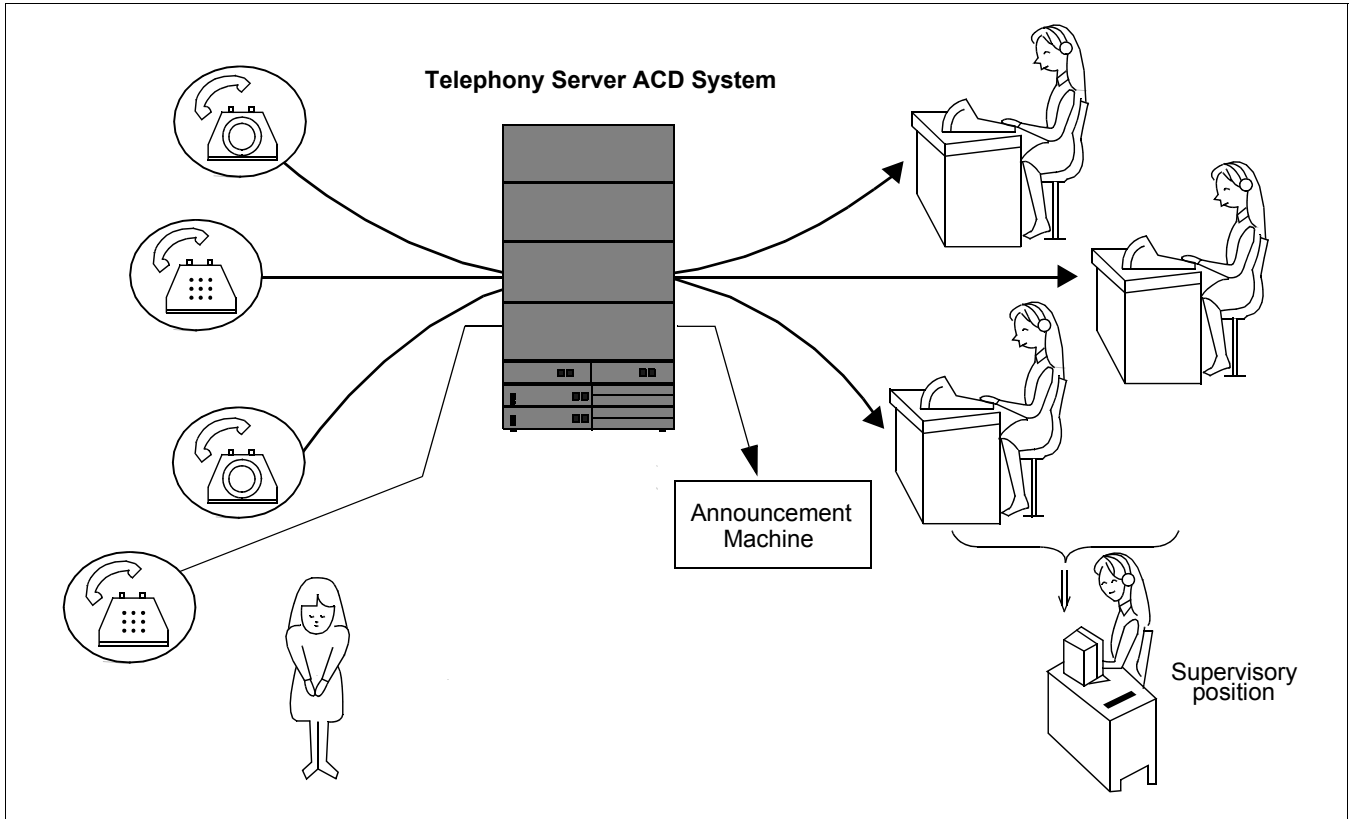
2.1 General

This section describes the concept, functions and configuration of the ACD System.

The make up of this chapter is shown below:

- Functional Outline: Describes the outline of the ACD system.
- System Configuration: Describes the configuration of the ACD system.
- MIS: Describes the general of MIS functions.
- Interface Between ACD and MIS: Describes the interface condition to be used with the ACD and MIS.
- Equipment Related to ACD System: Describes the related equipment used with the ACD system.

Functional Outline of the Telephony Server ACD System



2.2 Functional Outline

Presently, telephone reception services are provided to a wide variety of businesses including mail orders and travel reservations. However, as the number of customers increase, these services are often subjected to complaints such as telephone calls not answered for long periods of time, or the telephones being busy.

The ACD Agent Positions receiving these calls also have problems which make their operators busy, such as calls being concentrated on specific ACD positions.

To solve the problems of customers and telephone operators, the ACD (Automatic Call Distribution) system provides a range of service features. The addition of the MIS (Management Information System) to the ACD system saves excessive personnel expenses and communications costs based on calculations of the optimum number of operators and trunks.

The ACD system can connect large amount of incoming calls automatically to the groups composed of ACD Agent Positions. These calls are processed in the order of their arrival, and distributed evenly among the ACD Agent Positions.

When all ACD Agent Positions handling incoming calls are busy or their splits have already finished the service, the ACD system can transmit various announcements to the calling customers.

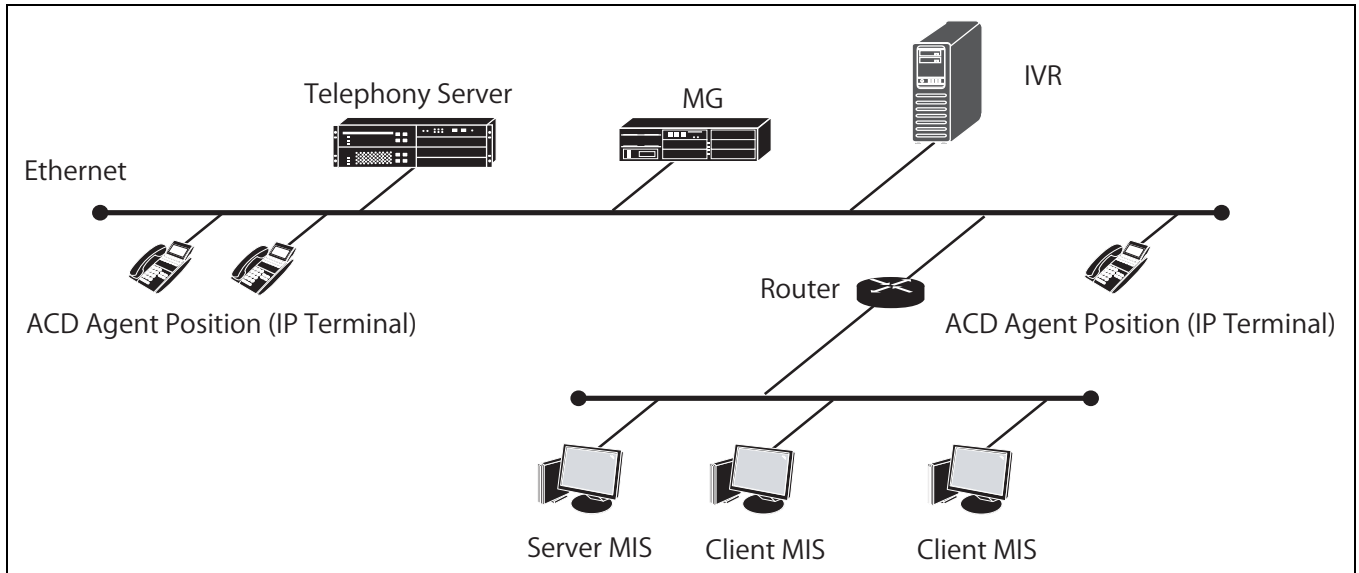
The supervisor is able to supervise the ACD Agent Positions. The supervisor can monitor the performance of each agent and change the system administration style in order to optimize the personnel arrangement.

2.3 System Configuration

2.3.1 Outline of System Configuration

The ACD system can be implemented in the Built-in Type configuration, with which the ACDP is built in the MGC of the Telephony Server.

The configuration of the ACD system is defined as follows.



Note: “Ethernet” is a registered trademark of XEROX CORPORATION.

2.3.2 Equipment/Terminals Accommodating in ACD/OAI System

The following equipment and terminals can be used in the ACD/OAI system.

In a Single-path connection, an audio breakup occurs at the start/end of the monitoring when IP devices are used. To prevent this problem, enable Silent Monitor (Multi-path Monitor).

Note: To enable Silent Monitor (Multi-path Monitor), the following are required, set “1” for ASYDL/ASYDN, SYS1, Index 874, Bit 0 to enable Multi-path Monitor Connection.

Availability of Telephony Devices for ACD/OAI System

X: Available, C: Conditionally Available, N: Not Available, -: Not Applicable

Terminal/Equipment		ACD	OAI	Silent Monitor		Remarks	
				Agent/Supervisor	Opposite Party		
Digital terminal	DT400 Series	DT430	C	C	N	N	DESI-Less terminal is not supported.
		DT410	N	×	N	N	
	DT300 Series	DT330	C	C	N	N	DESI-Less terminal is not supported.
		DT310	N	×	N	N	
	Dterm Series <i>i</i>		×	×	N	N	
IP terminal	DtermIP		×	×	×	×	Note 1, Note 2
	Dterm Series <i>i</i> with IP adapter		×	×	×	×	Note 1
Softphone	Soft Client SP350		×	×	×	×	Note 1, Note 2, Note 3, Note 15
	DtermSP30 Note 4		×	×	×	×	Note 1, Note 2
SIP Multiple Line terminal	DT800 Series	DT830	C	C	C	×	DESI-Less terminal is not supported. Note 1, Note 2, Note 3
		DT830G	×	×	×	×	Note 1, Note 2, Note 3
		DT820	N	C	N	×	Supported for 6 button type and 8 button type (DESI-Less) only. For DESI-Less terminal, 16 button type and 32 button type are not supported. Note 1, Note 2, Note 3
	DT700 Series	DT770G	N	N	N	N	
		DT750	N	×	N	×	Note 1, Note 2, Note 3
		DT730	C	C	C	×	DESI-Less terminal is not supported. Note 1, Note 2, Note 3
		DT730G	×	×	×	×	Note 1, Note 3
		DT710	N	×	N	×	Note 1, Note 2, Note 3
	DtermIP (SIP)		×	×	N	N	Note 1

X: Available, C: Conditionally Available, N: Not Available, -: Not Applicable

Terminal/Equipment			ACD	OAI	Silent Monitor		Remarks
					Agent/Supervisor	Opposite Party	
SIP terminal	SP Controlled	WLAN Handset (MH Series)	N	×	N	N	MH250
		Standard SIP Voice terminal (Third-party SIP terminal)	N	N	N	N	
		Standard SIP Video terminal (Third-party SIP terminal)	N	N	N	N	
	SIP Handler Controlled	Standard SIP Voice terminal (Third-party SIP terminal)	C	C	N	N	Note 5, Note 10, Note 11
		Standard SIP Video terminal (Third-party SIP terminal)	N	N	N	N	
PS	PHS/PCS		N	×	N	N	
VS32 Note 6	VS32 CARD [SCA-VS32VA]		×	×	-	-	with Voice Compression (VC) Note 14
	VS32 BOX [MG-VS32VA]						
Analog MC	Analog 2MC		×	×	-	N	
	8LC Card [SCA-8LCC/SCA-8LCC-EMEA]		×	×	-	N	
	8LC Card [SCA-8LCA/SCA-8LCA-EMEA]						
MC&MG-COT	MCMG Card [SCA-4LC2COTA]		×	×	-	N	
	MCMG Box [MG-4LC2COTA]						
	MC&MG-COT with PFT		×	×	-	N	
	MCMG Card [SCA-7COTA]		×	×	-	N	

X: Available, C: Conditionally Available, N: Not Available, -: Not Applicable

Terminal/Equipment		ACD	OAI	Silent Monitor		Remarks
				Agent/Supervisor	Opposite Party	
MG-COT	MG-COT Card [SCA-6COTC]	×	×	-	N	
	MG-COT Card [SCA-6COTB]	×	×	-	N	
	MG-COT Card [SCA-6COTA]	×	×	-	N	
MG(BRI)	MG(BRI) Card [SCA-2BRIA]	×	×	-	N	
	MG(BRI) Box [MG-2BRIA]					
	MG-BRI	×	×	-	×	Note 2
MG(PRI)	MG(PRI) Card [SCA-24PRIA]	×	×	-	×	Note 2, Note 7, Note 12
	MG(PRI) Box [MG-24PRIA]					
	MG(PRI) Card [SCA-30PRIA]	×	×	-	×	Note 2, Note 7, Note 13
	MG(PRI) Box [MG-30PRIA]					
MG-T1(SIP)	MG-T1(SIP) Card [SCA-24DTIA]	-	-	-	N	
MG(SIP)	MG-SIP16 Card [SCA-16SIP-MGA]	×	×	-	×	Note 2, Note 8
	MG-SIP16 Box [MG-16SIP-MGA]					Note 2, Note 8
	MG-SIP16 Card [SCA-16SIP-MG(US)]	×	×	-	×	Note 8
	MG-SIP96	×	×	-	×	Note 8
	MG-SIP128 [MG-128SIP-MGL-A]	×	×	-	×	Note 8
	MG-SIP128 [MG-128SIP-MGG-B/MG-128SIPMGG]	×	×	-	×	Note 8
	MG-SIP128 [MG-128SIP-MGJ-B/MG-128SIPMGJ]	×	×	-	×	Note 8
Software-based MG-SIP	×	×	-	×	Note 8	
IPG Digital		N	N	N	N	
IPG Analog		N	N	N	N	
Internal PHC		×	×	-	N	CCIS over IP Note 9

X: Available, C: Conditionally Available, N: Not Available, -: Not Applicable

Terminal/Equipment		ACD	OAI	Silent Monitor		Remarks			
				Agent/Supervisor	Opposite Party				
Circuit card accommodated in PIR	PRT	×	×	-	×				
	BRT	×	×	-	N				
	COT	×	×	-	N				
	Three-party Conference Trunk	×	×	-	N	CFT embedded in PIR			
UG50	Multi-slot	ELC	UG50 (DLC)	×	×	×	×		
		LC	UG50 (LC) [Proprietary Protocol/SIP]	×	×	-	N		
		PRT	UG50 (PRT 1.5M) [Proprietary Protocol/SIP]	C	C	-	C	Available for Proprietary Protocol only.	
			UG50 (PRT 2M) [Proprietary Protocol/SIP]	C	C	-	C	Available for Proprietary Protocol only.	
		COT	UG50 (COT-TYPE1)	×	×	-	N		
			UG50 (COT-TYPE2) [Proprietary Protocol/SIP]	×	×	-	N		
		PGT	UG50 (PGT-TYPE1)	×	×	-	N		
			UG50 (PGT-TYPE2) [Proprietary Protocol/SIP]	×	×	-	N		
		IPG	UG50-IPG (Digital)		N	N	-	N	
			UG50-IPG (Analog)		N	N	-	N	
		Retrofit	LC	UG50-2MC	×	×	-	N	
				UG50-8LC	×	×	-	N	
	PRT		UG50-24PRIA [Proprietary Protocol/SIP]	C	C	-	C	Available for Proprietary Protocol only.	
			UG50-30PRIA [Proprietary Protocol/SIP]	C	C	-	C	Available for Proprietary Protocol only.	

X: Available, C: Conditionally Available, N: Not Available, -: Not Applicable

Terminal/Equipment				ACD	OAI	Silent Monitor		Remarks
						Agent/Supervisor	Opposite Party	
UG50	Retrofit	MC&MG-COT	UG50-4LC2COTA (COT)	×	×	-	N	
			UG50-4LC2COTA (PGT)	×	×	-	N	
			UG50-6COT [Proprietary Protocol/SIP]	×	×	-	N	

Note: Equipment and terminals not listed in the above table are not supported in ACD/OAI system.

Note: ACD/OAI system does not support the following:

- VoIP Encryption [V-27]
- Attendant Console

Note 1: When ACD/OAI keys which have assigned with AOKC command are pressed continuously, no tone is provided.

Note 2: When the party you are calling does not support Silent Monitor (Multi-Path Monitor), Single-Path Monitor is used. When the following terminals/equipment uses Silent Monitor (Multi-Path Monitor), the firmware shown below is required.

Terminal/Equipment	Available Firmware
DtermSP30	Software Version 18 or later (Proprietary Protocol only)
DT820	Firmware Issue 1.0.0.0 or later
DT830	Firmware Issue 3.0.0.0 or later
DT830G	Firmware Issue 3.0.0.0 or later
DT710	Firmware Issue 5.0.0.0 or later
DT730	Firmware Issue 5.0.0.0 or later
DT730G	Firmware Issue 1.0.0.0 or later
DT750	Firmware Issue 5.0.0.0 or later
Soft Client SP350	R5 or later
MG(PRI) Card [SCA-24PRIA] (Proprietary Protocol mode)	Available since the first version
MG(PRI) Box [MG-24PRIA] (Proprietary Protocol mode)	

Terminal/Equipment	Available Firmware
MG(PRI) Card [SCA-24PRIA] (SIP mode)	Firmware SP-3884 MG PRI PROG-A Issue 21 or later
MG(PRI) Box [MG-24PRIA] (SIP mode)	
MG(PRI) Card [SCA-30PRIA] (SIP mode)	
MG(PRI) Box [MG-30PRIA] (SIP mode)	
MG-SIP16	Available since the first version
MG-SIP16 Card [SCA-16SIP- MG(US)]	
MG-SIP16 [SCA-16SIP- MG(US)-B]	
MG-SIP96	
MG-SIP128 [MG-128SIPMGL- A]	
MG-SIP128 [MG-128SIPMGG]	
MG-SIP128 [MG-128SIPMGG- B]	
MG-SIP128 [MG-128SIPMGJ]	
MG-SIP128 [MG-128SIPMGJ- B]	
Software-based MG-SIP	
MG-SIP16 Card [SCA-16SIPM- GA]	Firmware SP-3905 MG SIP (16) PROG-A 02.01.00.00 or later
MG-SIP16 Box [MG-16SIPM- GA]	
UG50 (PRT 1.5M) [Proprietary Protocol/SIP]	Available since the first version (Proprietary Protocol on- ly)
UG50 (PRT 2M) [Proprietary Protocol/SIP]	
UG50-24PRIA [Proprietary Protocol/SIP]	
UG50-30PRIA [Proprietary Protocol/SIP]	

Note 3: To enable Silent Monitor (Multi-path Monitor) connection on SIP Multiple Line terminal, set "1" for ASYDL/ASYDN, SYS1, Index 679, Bit 1 (Multiple Session for SIP Multiple Line Terminals is enabled). You need to re-register the terminals to reflect the change.

Note 4: DtermSP30(SIP) can be used as ACD Agent Position. When using DtermSP30 with Thin-Client terminal, refer to the Softphone User Guide and the manual of the Thin-Client terminal. DtermSP30 (VPCC mode) is available to use with Thin-Client terminal since version 18. Under the condition that a USB handset (with hook switch) is used along with DtermSP30, the SPEAKER key will light up when the handset user goes Off-Hook. It does not affect the terminal's operation.

Note 5: NEC Connection test is required in advance.

Note 6: The following firmware is required to be equipped on VS32.

Terminal/Equipment	Available Firmware
VS32 CARD [SCA-VS32VA]	SP-3891 CA-VS32 PROG-A or later
VS32 BOX [MG-VS32VA]	

Note 7: In ACD/OAI system, this equipment is available also in SIP mode. Check the firmware version in the below table. UG50 is not supported.

Terminal/Equipment	Available Firmware
MG(PRI) Card [SCA-24PRIA]	SP-3884 MG PRI PROG-A Issue 21 or later
MG(PRI) Box [MG-24PRIA]	
MG(PRI) Card [SCA-30PRIA]	
MG(PRI) Box [MG-30PRIA]	

Note 8: To use Silent Monitor (Multi-Path Monitor) connection on SIP Multiple Line terminal, enable "multisession" of set command on the MG side. For details on the setting of the configuration command, refer to Peripheral Equipment Description (IP Devices) for all the MG-SIP except Software-based MG-SIP. For the Software-based MG-SIP, see the Software-based MG-SIP chapter in Prepackaged Server Model Installation and Operation Manual. Software-based MG-SIP can use ACD only from FP95-112 V2 and if it is registered to Appliance Server model.

Note 9: Internal PHC does not support all the monitoring related functions including silent monitoring (Multi-Path Monitor).

Note 10: This terminal can be used as a Hot position only in the ACD system. For the details, refer to HOT SPLIT - ACD [H-31A] in the Data Programming Manual -ACD.

Note 11: When this terminal is used in the OAI system, there are restrictions depending on the facilities. For details, refer to SIP Handler Controlled SIP terminal in OAI System in the Data Programming Manual -OAI.

Note 12: In case of using Silent Monitor (Multi-Path Monitor), set the payload cycle to 20ms or longer.

Note 13: In case of using Silent Monitor (Multi-Path Monitor), set the payload cycle to 30ms or longer. When you set the payload cycle to 20ms the number of channels available will be 23. Because of that, set all the unnecessary channels to make-busy.

Note 14: In the ACD system, this equipment can be used only in proprietary protocol mode.

Note 15: SP350 can use VPCC mode since R4. Refer to the Softphone User Guide and the manual of the Thin-Client terminal.

2.3.3 ACD System Capacity

[ACD System Capacity for the countries except North America]

ACD System is depending on the Agent Client License Software to decide the quantity of ACD Agent.

Note: For using an additional method, the system of the program must be upgraded in advance.

Note: Client License Software (including ACD Agent License) can be merged up to 96.

ACD System Capacity for the countries except North America

	DESCRIPTION	ACDP Client License Software Note 3	
		15000 Agent Positions (Maximum)	2000 Agent Positions (Maximum)
		Default setting	ACDP Retrofit is enabled Note 4 Note 5
1	Quantity of ACD Tenant/System	9	9
2	Number of Split/ACD Tenant	900	250
3	Number of Split/System	900	250
4	Quantity of ACD Agent Position/Split	Depends on the number of Client License Software	Depends on the number of Client License Software
5	Quantity of ACD Agent Position/ACD Tenant		
6	Quantity of ACD Agent Position/System		
7	Quantity of Line Group/System	898	254
8	Quantity of ACD Line/Line Group	255	255
9	Quantity of ACD Line/System	40000	6000
10	Quantity of Queuing Call/Split	700	700
11	Number of Queue Level/Split	250	250
12	Quantity of Queuing Call/System	40000	6000
13	Acceptable number of ACD calls (from stations) at the same time (terminated to ACD pilot number from station)/System Note 1	5000	500
14	Acceptable number of ACD calls (from stations) at the same time (terminated to ACD pilot number from trunk)/System Note 1	20000	3000
15	Kind of ID Code/System Note 2	5 × the number of Client License Software (Up to 40000)	5 × the number of Client License Software (Up to 40000)
16	Maximum Number of Digits for ID Code	9	9
17	Kind of Monitor Number	48000 Note 6	4000
18	ACD Call Control Vector (CCV)	2000	900

	DESCRIPTION	ACDP Client License Software Note 3	
		15000 Agent Positions (Maximum)	2000 Agent Positions (Maximum)
		Default setting	ACDP Retrofit is enabled Note 4 Note 5
19	Week Schedule Number	900 Note 7	250
20	IVR Port	255	255

Note 1: If exceeding the acceptable number, Ringback Tone (RBT) is heard.

Note 2: A maximum number of the ID code types is dependent on the numbering plan for the system.

Note 3: The number of Agent positions must be same as or smaller than the capacity of MIS.

Note 4: Management Information Systems (MIS) is unsupported if ACDP Retrofit is out of service (ASYDL, SYS1, Index 1193, Bit 7=0).

Note 5: If ACDP Retrofit is in service, the quantities per system are those given in this column.

Note 6: There are the following conditions:

- Monitor Numbers are available up to 40000 for Personal Pilot Numbers. Also, up to 8000 Monitor Numbers are available for ACD Pilot Numbers.
- To use more than 4096 monitor numbers in a stand-alone environment, set a single FPC number other than 0 to ASYDL, SYS1, Index 512/533/865/866. System restart is required after setting this system data.

Note 7: A maximum number is 400 for the ACD scheduling for the type of reception services.

2.4 MIS

Note: MIS is only available for North America.

The MIS (Management Information System) expands the benefits of the telephone reception services of the ACD system by providing efficient administration.

The number of handled ACD calls, system capacity and functions of the MIS vary depending on whether it is based on a MIS. The MIS calculates the traffic related to the ACD calls and issues reports. The basic purpose of MIS is to provide statistical data to be used in calculations of the number of agents required and the amount of C.O. trunk traffic.

System administration can be optimized by the supervisor, by setting the average delay time response of the trunk group or split between 20 and 40 seconds. If the delay time is less than 20 seconds, agents become idle, thus the number of agents can be reduced. When delay time is more than 40 seconds, the number of agents should be increased. (Note the number of agents is dependent on the customers.)

From the MIS, the supervisor can change the office data related to the ACD, including the C.O. call destination, overflow condition and the number of agents.

[Precautions for Use of MIS]

When using the MIS, please note the following points:

- In the event the customer uses the MIS on a 24-hour basis, be sure to install the MIS in an air-conditioned room to ensure normal operation and preventing the hard disk from overheating.
- Be sure to perform shutdown procedure before powering off the MIS personal computer. If the power is turned off without running the procedure, statistical data on the hard disk will be corrupted or destroyed.
- Be sure to take anti-power shortage measures such as installing UPS. Sudden disruption of power could cause the corruption of the statistical data stored in the hard disk.
- When any data modification is made from MIS (or from PCPro), data modification from PCPro (or MIS) cannot be made for about 90 seconds after the modification to avoid data conflict.
- The network must be segmented by a router into the one that houses the Telephony Server, PCPro, OAI host computer, and IVR, and the other that houses Server MIS and Client MIS.
- When using MIS, ACDP retrofit must be enabled with ASYDL, SYS1, Index 1193, Bit 7=1 (ACDP Retrofit = Valid (Up to 2000 Agents)). Also, Number of Monitor Numbers to Use (ASYDL, SYS1, Index 1187, Bit 0 to Bit 3) and 16-digit OAI Station Number Information in Terminal Identifier (ASYDL, SYS1, Index 867, Bit 7) cannot be used.

2.5 Interface Between ACD and MIS

The table below shows the interface condition between ACD system and MIS.

Interface Condition

INTERFACE CONDITION	
Physical Interface	10BASE-T/100BASE-TX
Communication protocol	TCP/IP
Data Transmission Speed	10 Mbps/100 Mbps

Note: Client MIS and Server MIS need to be connected to the node providing ACDP.

2.6 Equipment Related to ACD System

2.6.1 ACD Agent Position

1. Function

This type of ACD Agent Position is comprised of a telephone, jack set and a headset.

2. Specifications

- DT700 series
- DT300 Series
- DtermIP
- Dterm Series *i*

For specifications of the Desktop terminal, refer to the pertinent manual.

3. Outer View

The figure below shows the outer view of the ACD Agent Position.

Outer View of ACD Agent Position

[Example]:

DT700/DT300 Series



DtermIP/Dterm Series *i*



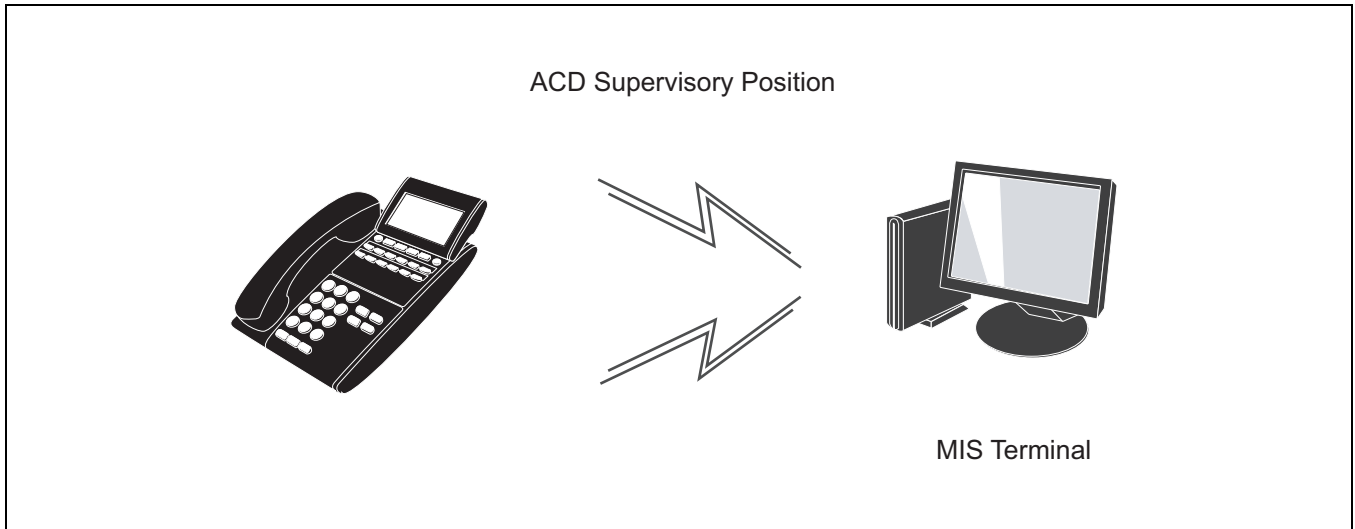
2.6.2 Supervisory Position

1. Function

The supervisory position is equipped with the ACD Agent Position functions and the display terminal. It is used as the supervisor of splits to manage the ACD system operations by overriding calls to ACD Agent Positions, call monitoring, ACD Agent Position status display, etc.

The supervisor position consists of an ACD Agent Position and a display with keyboard (MIS terminal). Some supervisor positions are not equipped with the MIS terminal.

Supervisory Positions



2.6.3 CTI Middleware

1. Function

In the ACD system, by connecting to CTI middleware and in collaboration with a CRM application, it is possible to display a client information screen while receiving a call. Also, advanced level data base routing features not possible only for the ACD system such as last call routing or creating a routing map based on clients data become possible.

2. Service Conditions

Note: See the proper manual for each device service conditions.

(a) The maximum numbers in the ACD system for the categories below are as follows:

- The number of OAI connections per one ACDP: 16
- The number of Infolink connections: 8
- The number of Status Monitor Facility Requests (SMFR) available to set for ACD agent positions, Supervisor positions, ACD trunks and ACD pilot numbers: 8 (one is occupied with ACDP.)

(b) When the calls are controlled by CTI middleware, after the infolink message Iq that is received when registering a queue, it is necessary to request a call route with the infolink message IF. In this case, set 0.5 seconds as the time interval between the Iq and IF messages to CTI middleware. Also, consider measures for failures as the resending of the IF message if a negative acknowledge (NACK) with the IY message is replied.

Also, when ACDCCV is operating, if there is a transfer to an ACD pilot number or a personal call pilot number, the ACDCCV processing before the transfer stops. If there is a transfer to a number that is not an ACD pilot number or a personal call pilot number, when the transfer is completed (ACK is notified with the IY message) the ACDCCV processing before the transfer stops. However, if due to reasons such as the transfer destination being in the middle of a call and the transfer is not completed (NACK is notified with the IY message), ACDCCV processing in the transfer destination is resumed after 10 seconds.

Note: Do not perform a route with SCF FN=4 of OAI.

- (c) If an attended call to an Agent position or Supervisory position is transferred to a number not managed by ACD such as business extension number (any number not registered with the ACDPSN or ACD-PLT commands) using the infolink message IF, do not assign the call again to a number managed by ACD when the call has not reached the number destination and an agent position is intermediating.
 - (d) In FCCS Network, set the waiting timer in the application side to 90 seconds for the time interval between the opening of Status Monitor Facility Notification (SMFN) (Subscribe) and the performing of SMFR through the application.
 - (e) When information is monitored with the CTI middleware, it is necessary to use the infolink message IH. Do not use SCF FN=6 of OAI.
 - (f) Do not use SCF FN=10 of OAI for connecting to ACD pilot numbers or personal call pilot number. Only when a call is connected from a two way call state to a pilot number, SCF FN=10 of OAI can be used.
-

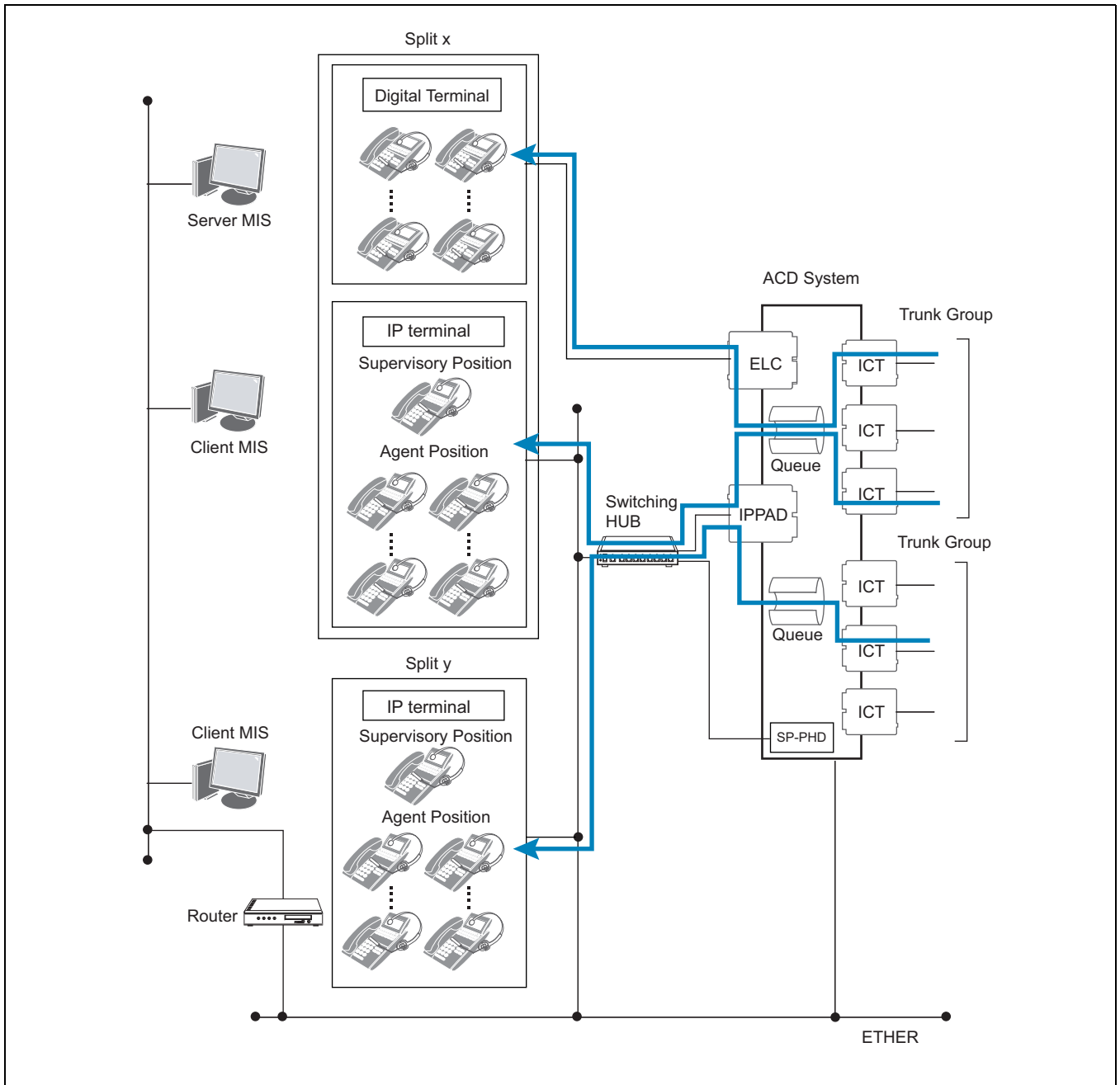
- (g) Do not use SCF FN=5 from CTI middleware in the ACD system if ACDCCV is operating. Use SCF FN=5 only after transferring to OAI monitor number with the infolink message IF and ACDCCV processing stops.
- (h) SMFN is not supported for DAT cards or VS32. Do not use SMFRs for these devices.
- (i) After ACD system performs Call Recover (CALL RECOVER - ACD [C-191A]) due to the fact that an ACD agent position does not answer the transferred call, do not use a transfer order of the infolink message IF from CTI middleware.
However, when CTI middleware performs a Call Recover order (SCF FN=10 (Connecting a line to an ACD Pilot Number)) if an ACD agent position does not answer the transferred call (**Note 3**), you can use a transfer order (SCF FN=4 (Routing an ACD incoming call in queue)) from CTI middleware.

Note 3: Do not set Call Recover (CALL RECOVER - ACD [C-191A]) by ACD system that will be triggered by unanswered transferred call in an ACD agent position.

3. GLOSSARY OF TERMS

This section defines ACD-related terms.

The ACD System Configuration

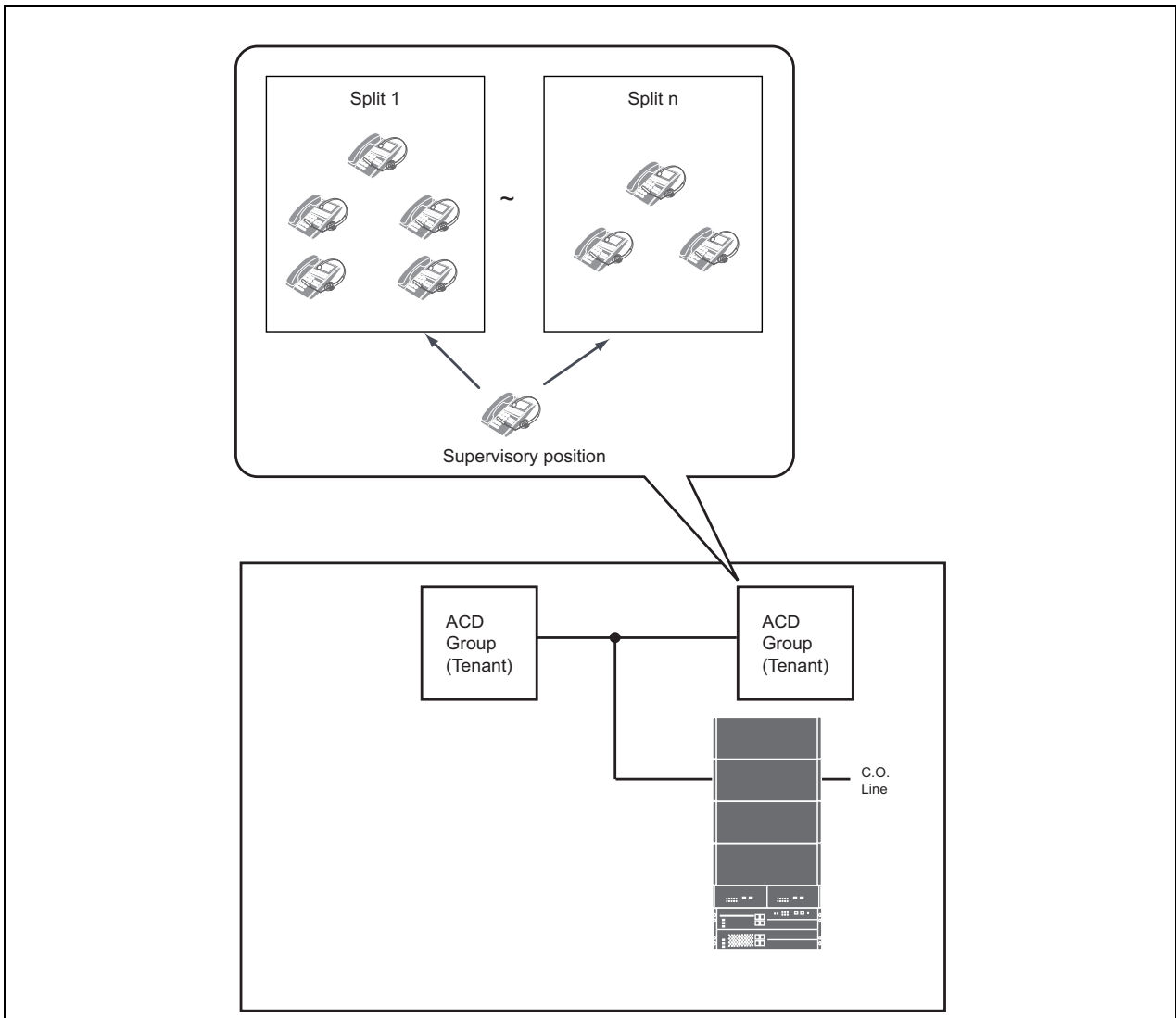


- **Trunk Group**
A group, organized according to routes, of trunks which transmits calls incoming to or originated from the ACD System.
- **ACD Group (Tenant)**
An ACD system can be divided into groups according to the user firms or departments. The ACD group is the unit of such a division. Its configuration is as shown in the table below.

Note: The following data must be assigned on an ACD tenant basis:

- Trunk Group
- ACD Pilot Number
- Split
- Announcement Equipment
- Transferring Destination (STN)
- Transferring Destination (TRK)

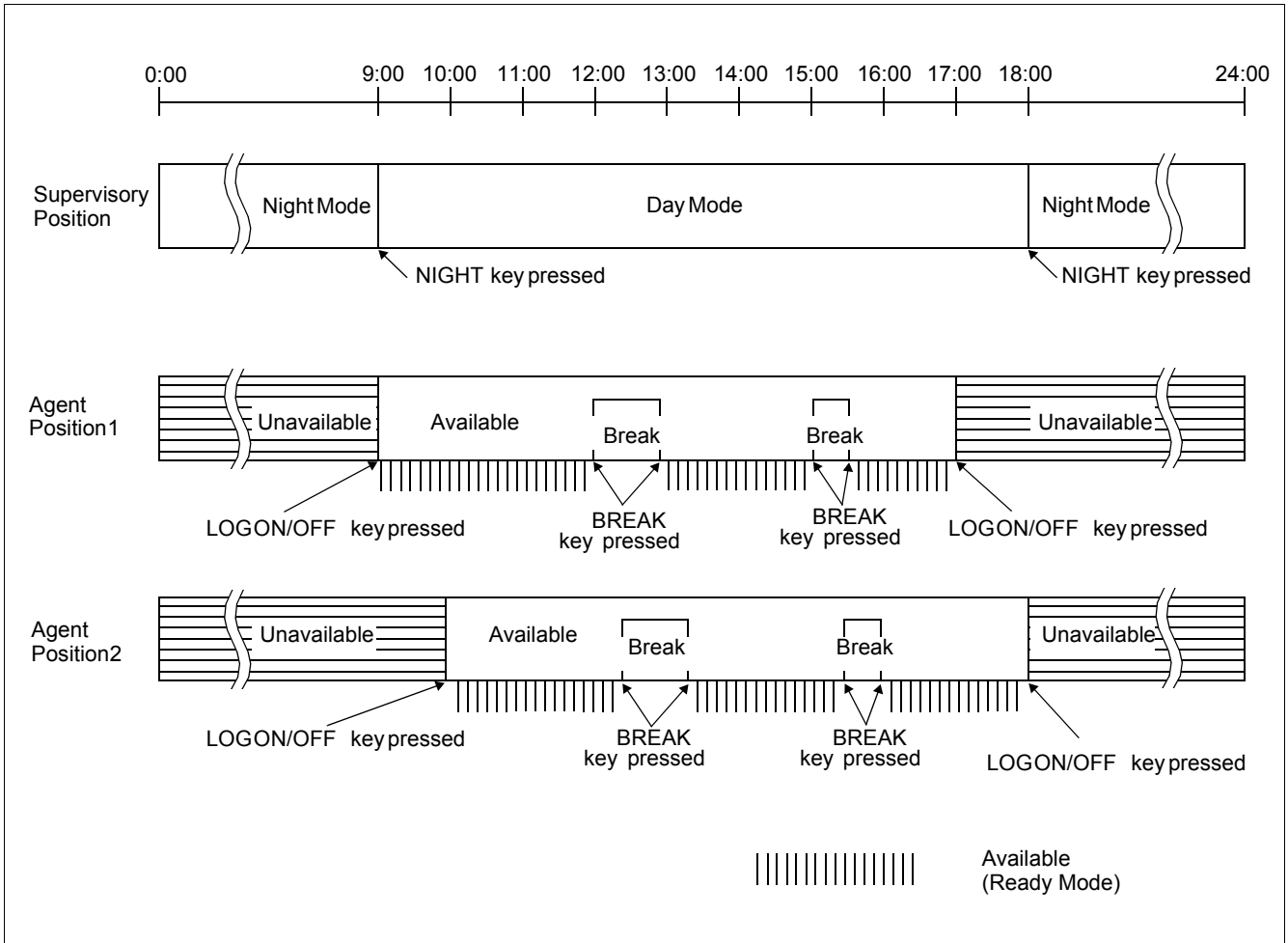
ACD Group Configuration



- Split**
 The unit of division of an ACD group according to functions. Each split is composed of a queue to hold incoming calls temporarily, ACD Agent Positions to answer the incoming calls, and a group supervisory position.
- Queue**
 The queue is the area in which calls incoming to the ACD system wait for handling. Each split has multiple queues.
 When all of the ACD Agent Positions of a queue are busy, the calls assigned to that queue will wait. as ACD Agent Positions become idle, the calls are distributed to the ACD Agent Positions according to first-in, first-out condition. However, since queues are assigned different priority levels, the calls in higher-priority queues are distributed before the calls in lower-priority queues.

- **Overflow**
An ACD call waiting in a queue of a split that cannot be connected to an ACD Agent Position assigned to the queue (overflow origination) once a predetermined period of time had elapsed, the call is sent to the queue of another split (overflow destination) where it can wait for an ACD Agent Position to become idle in both queues. This allows the ACD call to be answered by the first available agent.
- **Overflow Threshold**
The period of time between the origination of an ACD call and its overflow.
- **Inflow Threshold**
Specific value defined by number of waiting calls in the overflow destination.
- **ACD Agent Position**
All agent positions belong to any ACD group and an ACD call is originated/picked up from the agent position. Also, when Client/Server MIS system is used, ACD Agent Positions may have the Client MIS.
- **Group Supervisory Position**
The position assigned the ACD Agent Position supervisory functions, such as monitoring of ACD Agent Positions and assistance of ACD Agent Positions, as well as the functions of an ACD Agent Position. It may be equipped with the MIS Terminal (DTE) which can display the status of the ACD subsystem.
- **Agent**
The operator using an ACD Agent Position to handle calls via the ACD system. Every agent can be assigned an ID code to log on to the ACD system. For the purpose of effective use, the agent can use to connect the client MIS.
- **Group Supervisor**
This is the manager who uses a supervisory position to assist ACD Agent Positions, monitor them, supervise their status using the MIS terminal, and change the system configuration of an ACD group. Every supervisor can be assigned an ID code.
- **MIS Terminal (DTE)**
This is the MIS Data Terminal Equipment used to display the ACD system status and/or change the system configuration.

Concept of Operation Mode



- **Day/Night Mode**
The day and night mode determine the destination of incoming ACD calls on a per-split basis. Set the day mode when starting the ACD call reception service, and set the night mode to end the ACD call reception service in the evening or before the agent leaves position.
- **Ready Mode**
This is the status of an ACD position (including group or system supervisory position) after starting the reception service. In this state, the position can answer ACD calls.
- **Work Mode**
This is the state of an ACD position (including supervisory position) in which it restricts the termination of incoming ACD calls. The agent may then perform nonverbal tasks, such as the creation of a business slip. The Work mode can be set either automatically at the same as the end of conversation with an incoming call (Automatic After Call Work mode) or manually by pressing the WORK key as needed.

- **Break Mode**
This is the state of an ACD position (including supervisory position), which is activated by the agent pressing the BREAK key to disallow the termination of incoming ACD calls before the agent temporarily leaves the position.
- **ACD Trunk in an FCCS Network**
ACD trunks can be accommodated in the multiple nodes within the FCCS network. And via the trunk in the remote node, ACD calls can be originated or picked up from the agent accommodated in the node that provides ACDP.
- **Agent Anywhere**
With this function, ACD Agent Positions can be installed in multiple nodes of an FCCS Network and that ACD calls can be distributed with ACD agents in the terminated node. Those ACD Agent Positions are controlled by one ACDP in an FCCS Network.
- **Expanding ACD capacity**
With the ACD Option Service Software, the built-in ACDP capacity will be expanded and more than 499 agent positions can be installed.
- **Split of Supervisors (see MULTIPLE SUPERVISORS - ACD [M-79A])**
Split formed by multiple supervisors. It is beneficial when more than one supervisor to serve a split of agents.
- **Agent Client License Software**
The number of ACD Agent Positions is decided depending on the use of ACD Client License Software. Licenses can be added individually (additional method). You can establish up to 15000 agent positions by obtaining licenses enough for 15000 positions.



CHAPTER 3 INSTALLATION



1. GENERAL

This chapter describes the installation and test procedures of the ACD System.

The installation of the ACD system is completed by the installation of the MIS, MIS interface, and terminal equipment such as agent positions and supervisory positions.

Because the installation procedures required for the Telephony Server are the same as for the business system, this manual describes only with the terminal equipment related to the MIS and ACD positions. For information on installation procedures related to the Telephony Server, refer to the Appliance Model Installation Manual.

2. PRECAUTIONS

2.1 Essential/Critical Information

In order to prevent accidents or equipment damage from occurring while installation is being performed, each Telephony Server manual provides **WARNING**, **CAUTION**, and **Note** indications to draw the technician's attention to specific matters.

1. Meaning

Note: Indicates an item which requires special attention.

WARNING: Personal injury may result if the warning is not heeded.

CAUTION: Damage to the equipment and/or the system may result if the caution is not heeded.

2. Locations of Indicators

WARNING and **CAUTION** indications are located at the top of the page. Descriptions are included as part of the procedures on the page.

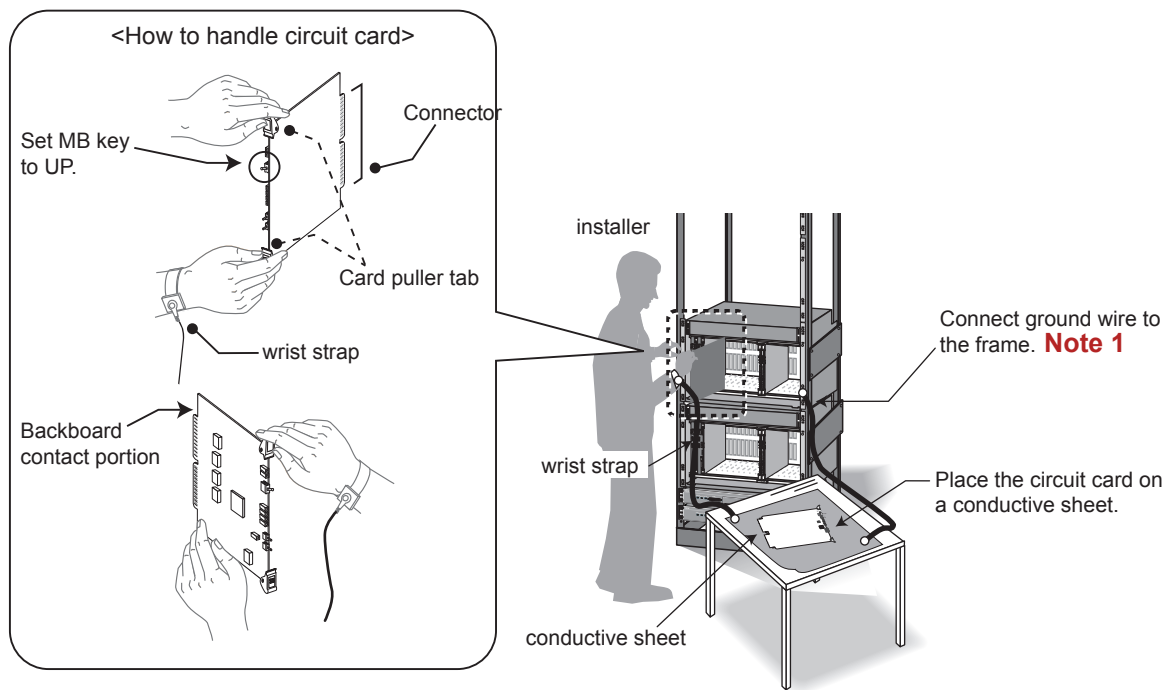
Static Caution Indication



This manual provides Static Caution indicators (see the figure “Static Caution Indication”) on page where work involving static-sensitive components is described.

The 3M Model 8012 Portable Field Service Kit, shown in “How to use the Service Kit” is recommended as an effective countermeasure against static electricity. The kit is available from NEC.

How to use the Service Kit



Note 1: A ground wire should be connected to the frame which is not coated by an insulating material.

3. INSTALLATION PROCEDURES

3.1 Peripheral Equipment Installation

This section explains the installation procedures of the following peripheral equipment for the ACD System.

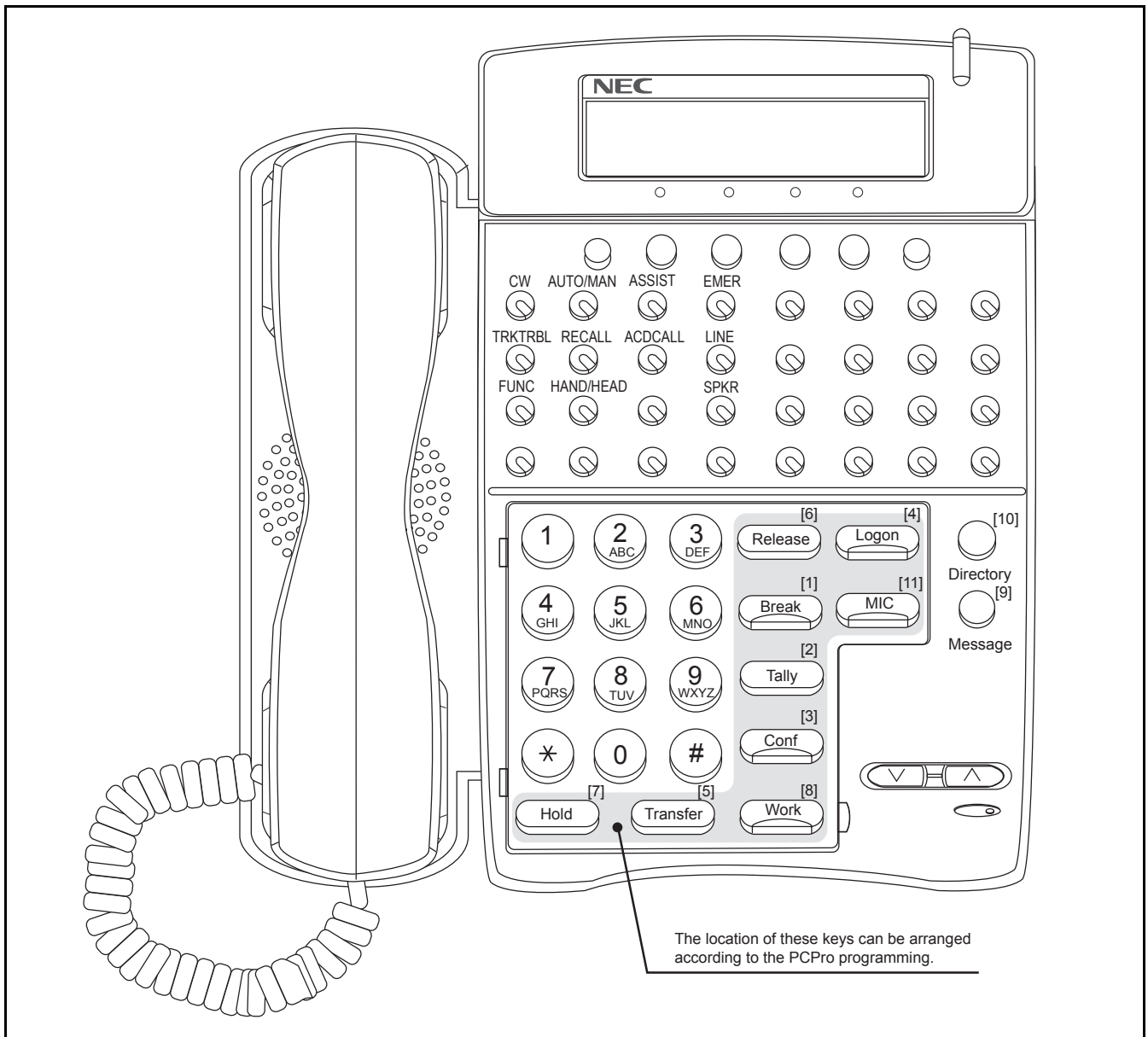
- 3.1.1 Installation of ACD Agent Position
- 3.1.2 Installation of ACD Supervisory Position
- 3.1.3 Installation of MIS
- 3.1.4 Installation of Emergency Recorder
- 3.1.5 Installation of Announcement Machine
- 3.1.6 Installation of IVR/Host

3.1.1 Installation of ACD Agent Position

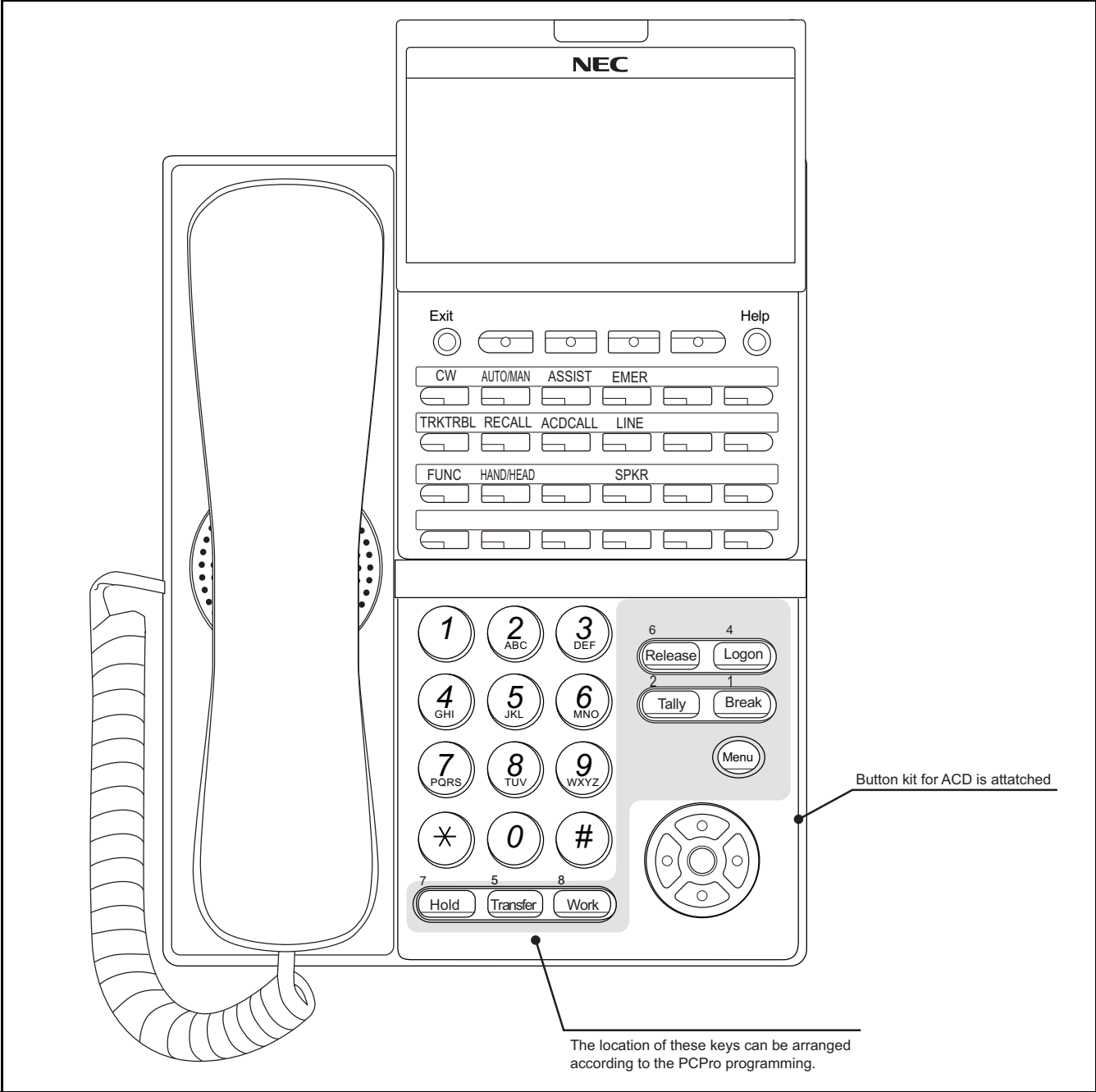
- For the cable connection between the Agent Position and the Telephony Server, refer to the related manuals.
- Attach the provided keys pads/labels to identify the names of the keys. For the Feature Key data assignments, refer to Section 2.4 “ACD Agent/Supervisory Position Data Assignment” in CHAPTER 4 and AKYD command in the Data Programming Sheets.

Note: Key Pads on ACD Agent Position Keyboard are available as options. For details relating to the Key Pads, refer to the manual for the Key Pad.

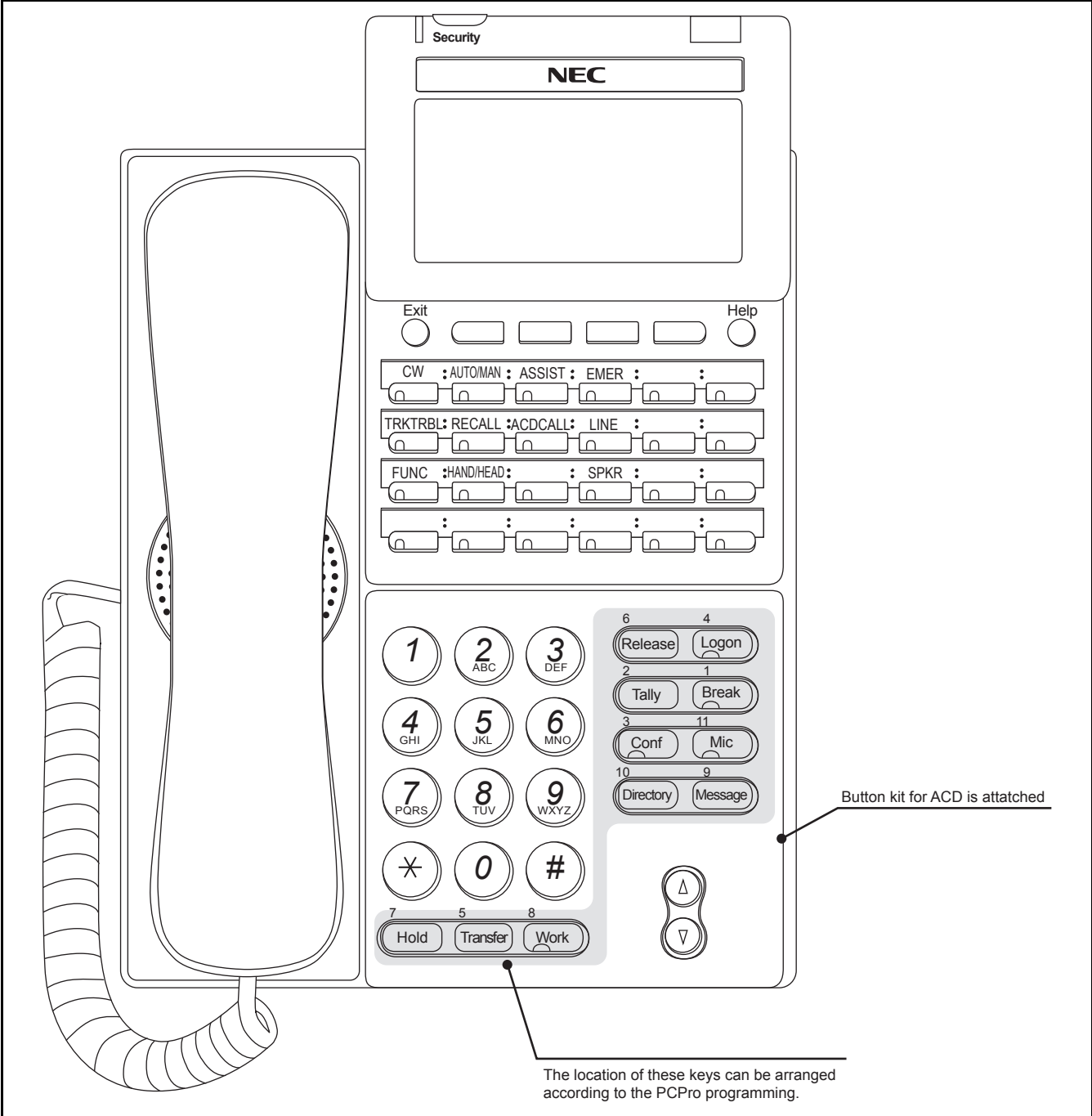
Key Pads on ACD Agent Position Keyboard (Dterm Series i)



Key Pads on ACD Agent Position Keyboard (DT800 Series/DT400 Series)



Key Pads on ACD Agent Position Keyboard (DT700 Series/DT300 Series)

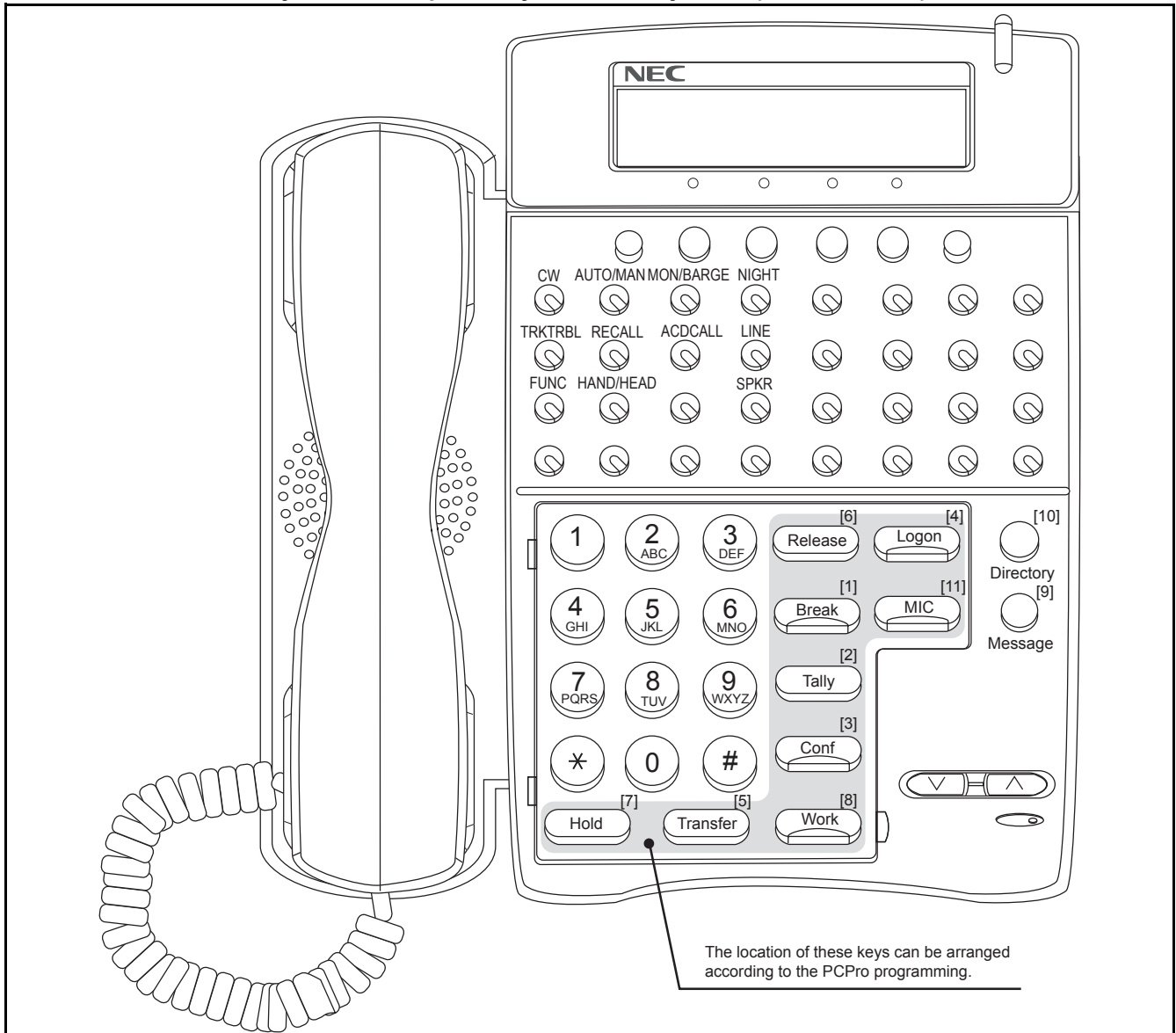


3.1.2 Installation of ACD Supervisory Position

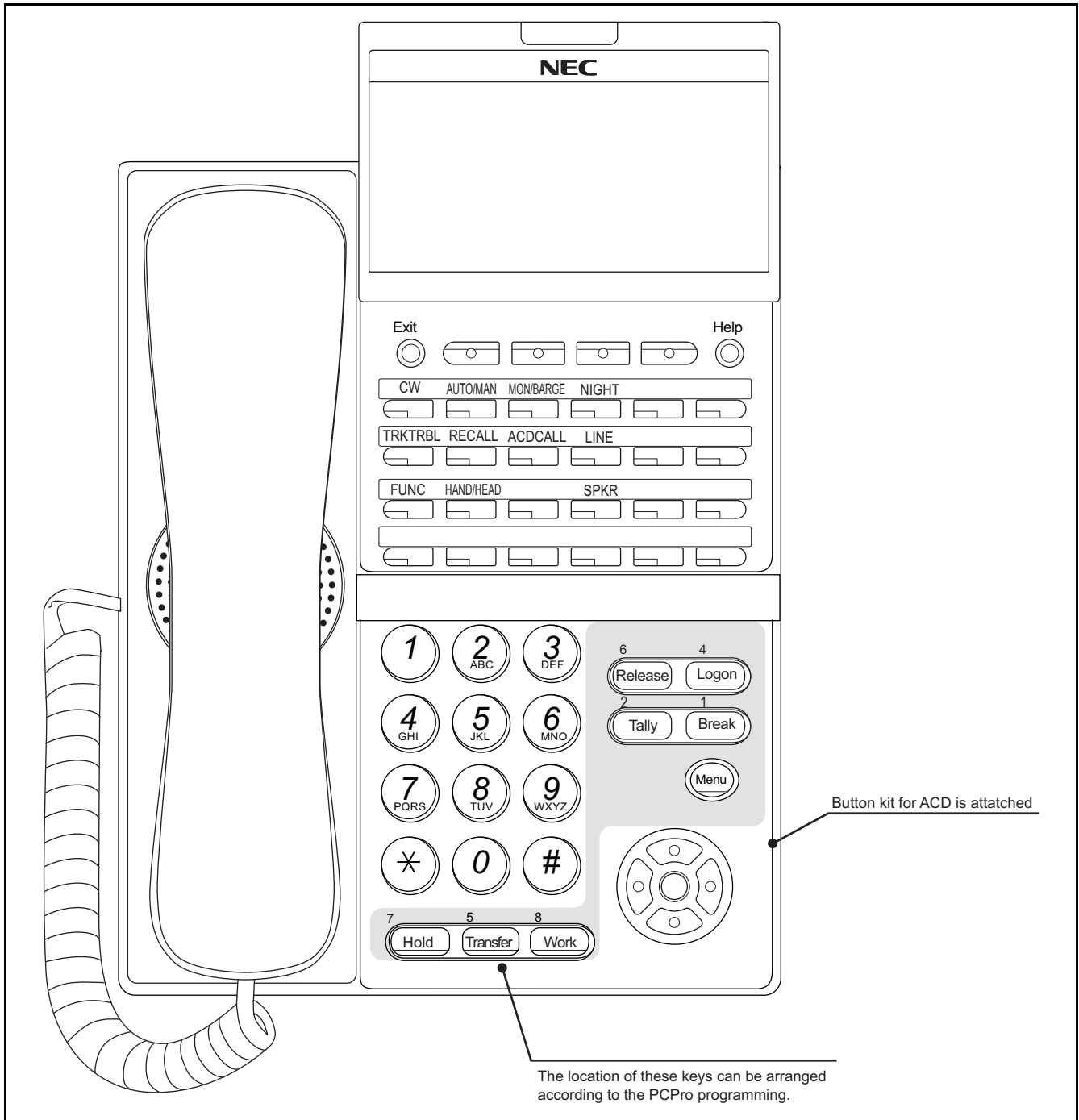
- For the cable connection between the Supervisory Position and the Telephony Server, refer to the related manuals.
- Attach the provided key pads/labels to identify the names of the keys. For the Feature Key data assignments, refer to Section 2.4 “ACD Agent/Supervisory Position Data Assignment” in CHAPTER 4 and AKYD command in the Data Programming Sheets.

Note: Key Pads on ACD Supervisory Position Keyboard are available as options. For details relating to the Key Pads, refer to manual for the Key Pad.

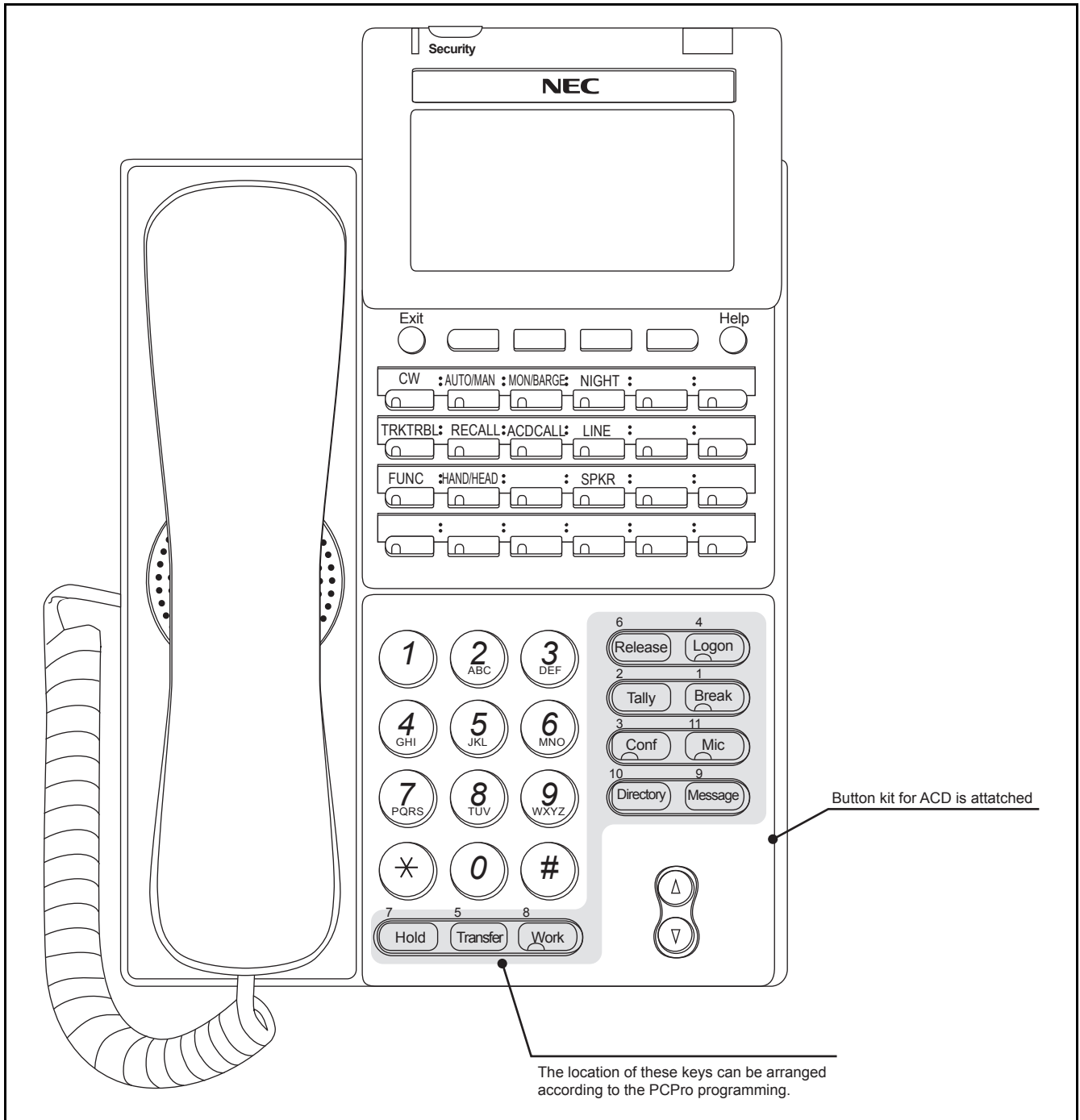
Key Pads on Supervisory Position Keyboard (Dterm Series i)



Key Pads on Supervisory Position Keyboard (DT800 Series/DT400 Series)



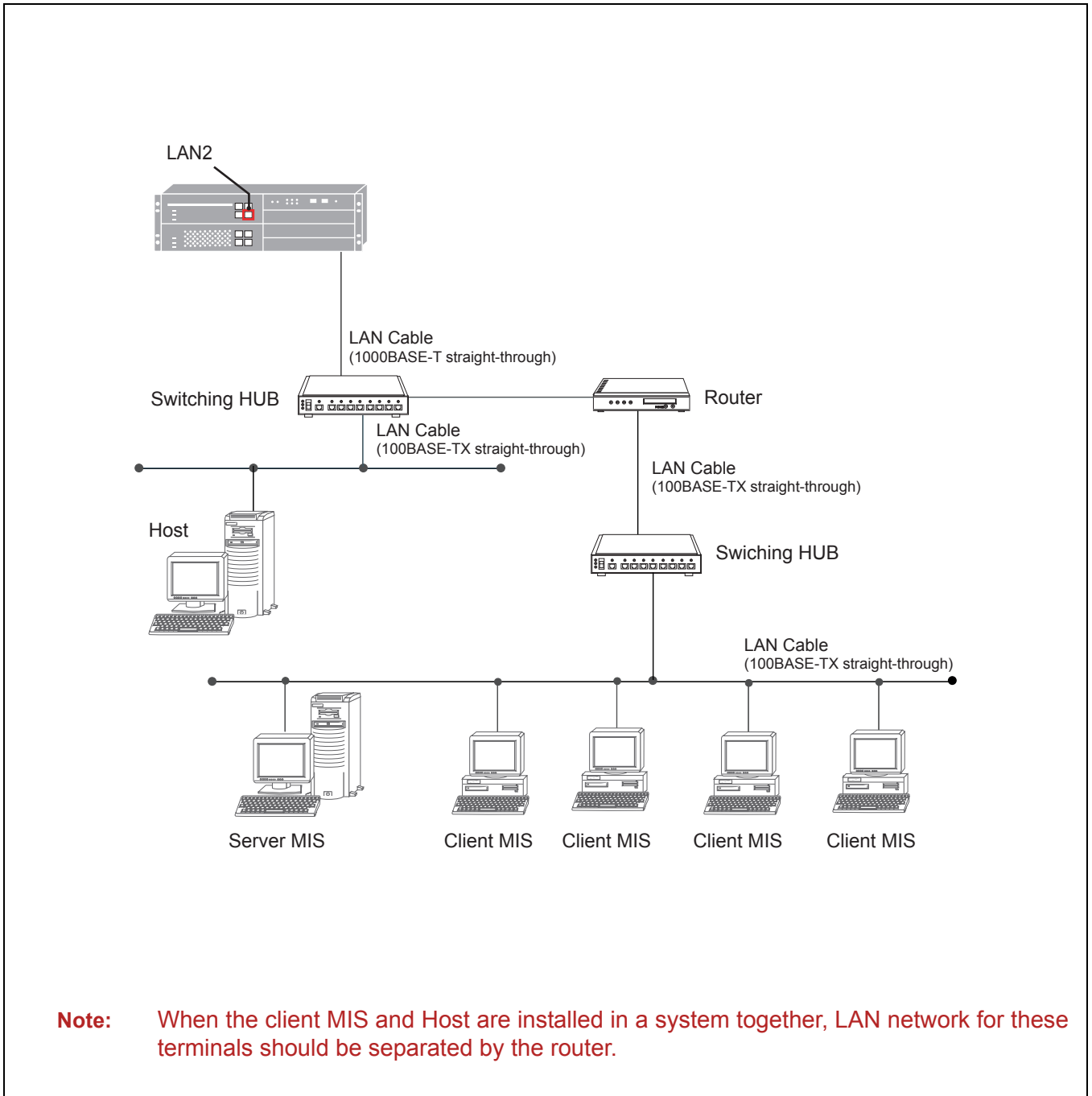
Key Pads on Supervisory Position Keyboard (DT700 Series/DT300 Series)



3.1.3 Installation of MIS

Figure below shows the cable connection between the MIS and the Telephony Server.

Cable Connection between MIS and the Telephony Server

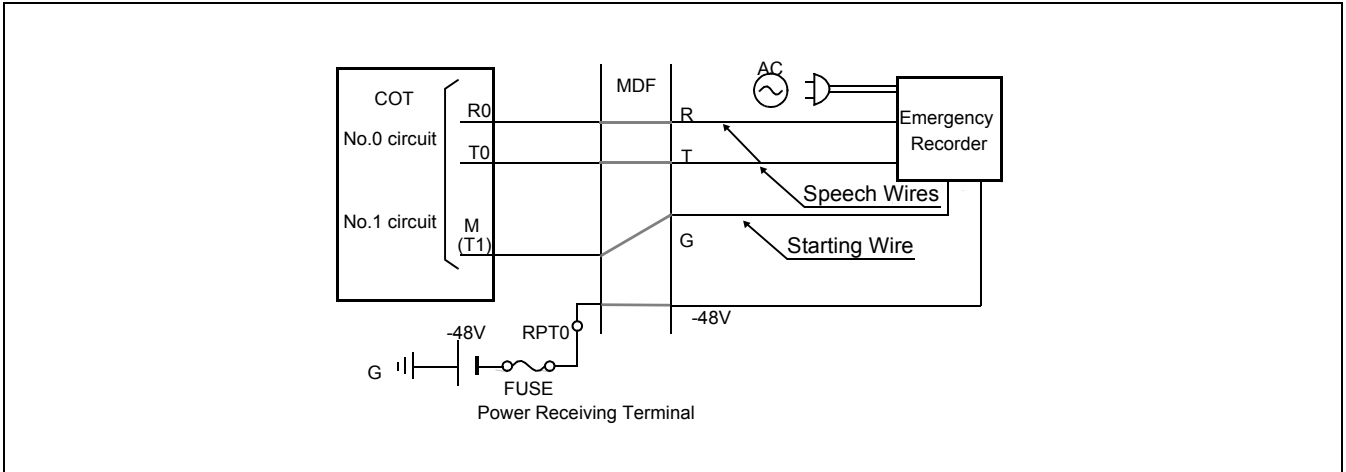


3.1.4 Installation of Emergency Recorder

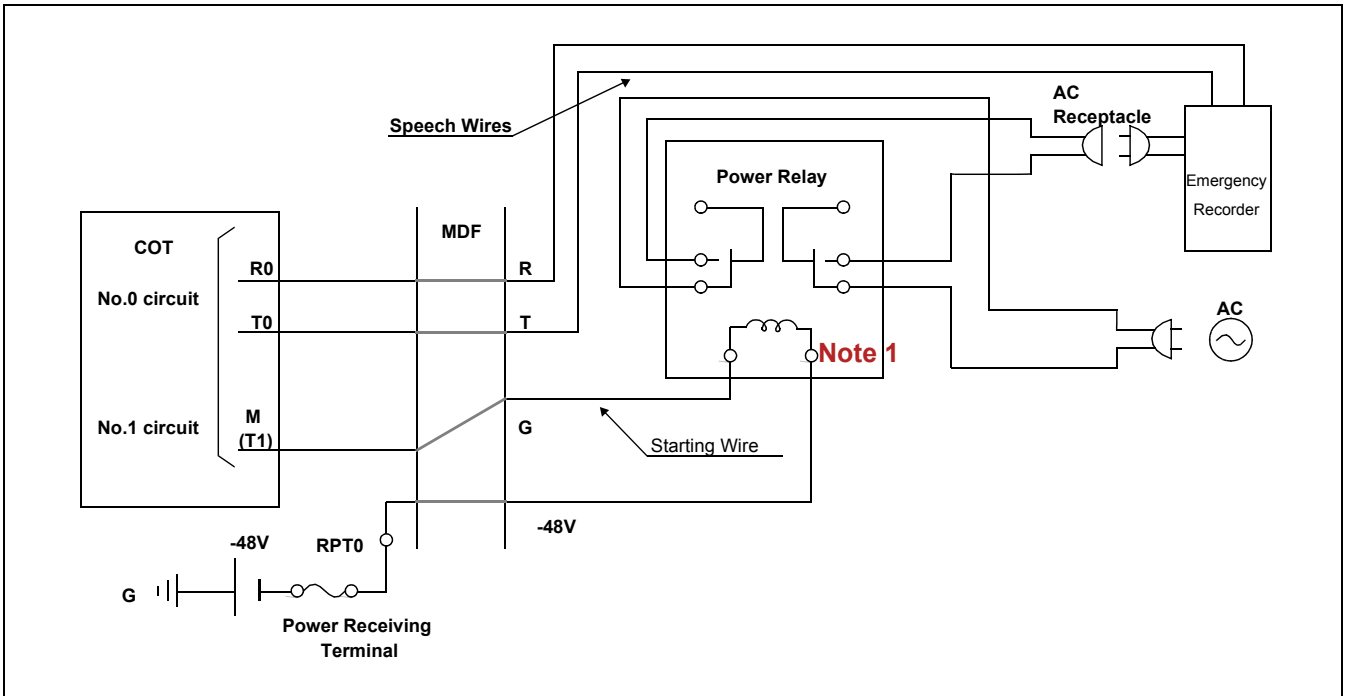
For the cable connection of Emergency Recorder, refer to Peripheral Equipment Description.

The following figures show connection of Emergency Recorder.

**Connection of Emergency Recorder
(When Emergency Recorder Has Starting Terminal)**



**Connection of Emergency Recorder
(When Emergency Recorder Does Not Have Starting Terminal)**



Note 1: In case a power relay is used, select an optimum relay by confirming the Emergency Recorder's current drain.

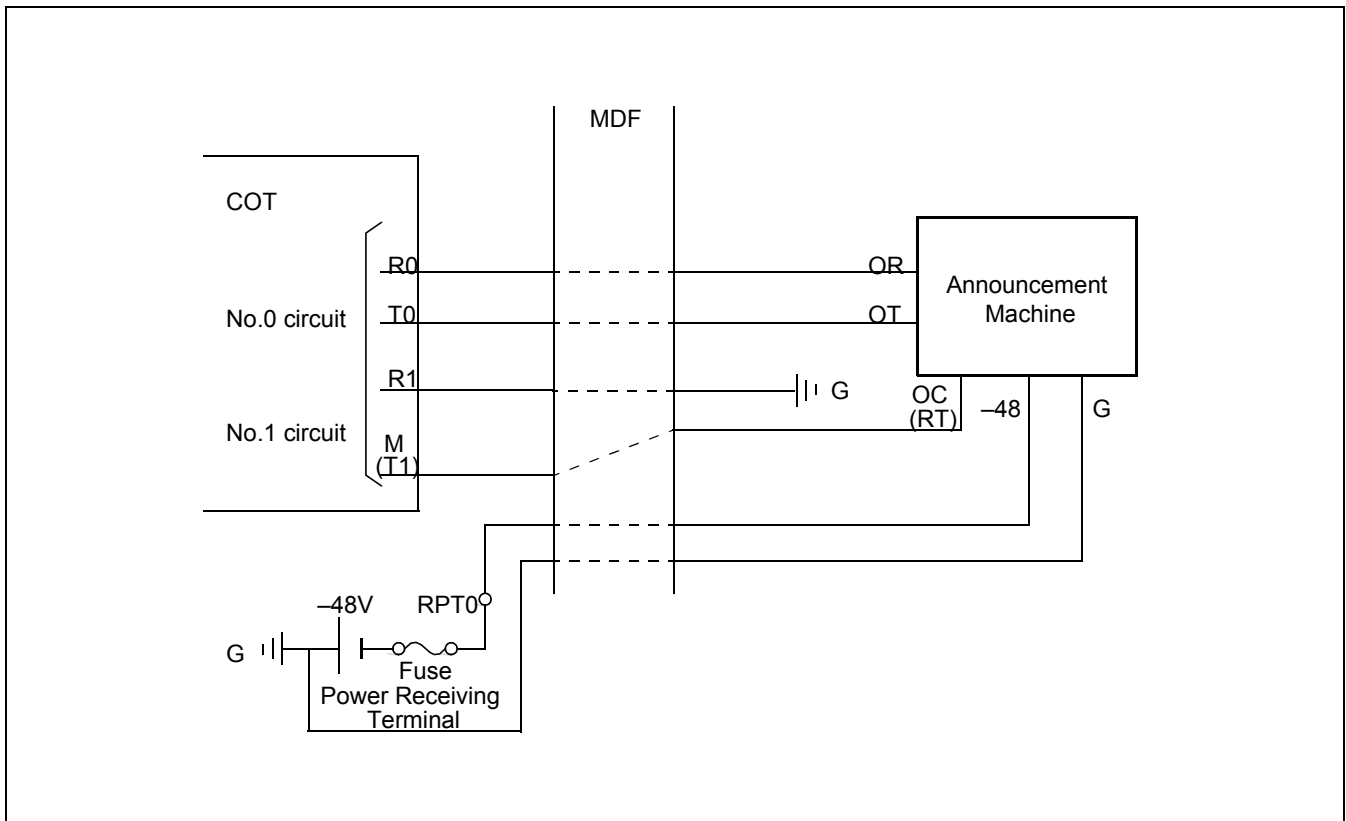
3.1.5 Installation of Announcement Machine

The standard announcement machine available is a DAT card. The DAT can be used by simply inserting it in the proper slot of PIR.

If a non-standard announcement machine is used, the connection method and the announcement trunk to be used as interface vary depending on the machine.

An example of connection is shown in Figure below.

Connection of Announcement Machine



3.1.6 Installation of IVR/Host

Figure below shows the cable connection between IVR/Host and the Telephony Server.

System Configuration (when Host is installed)

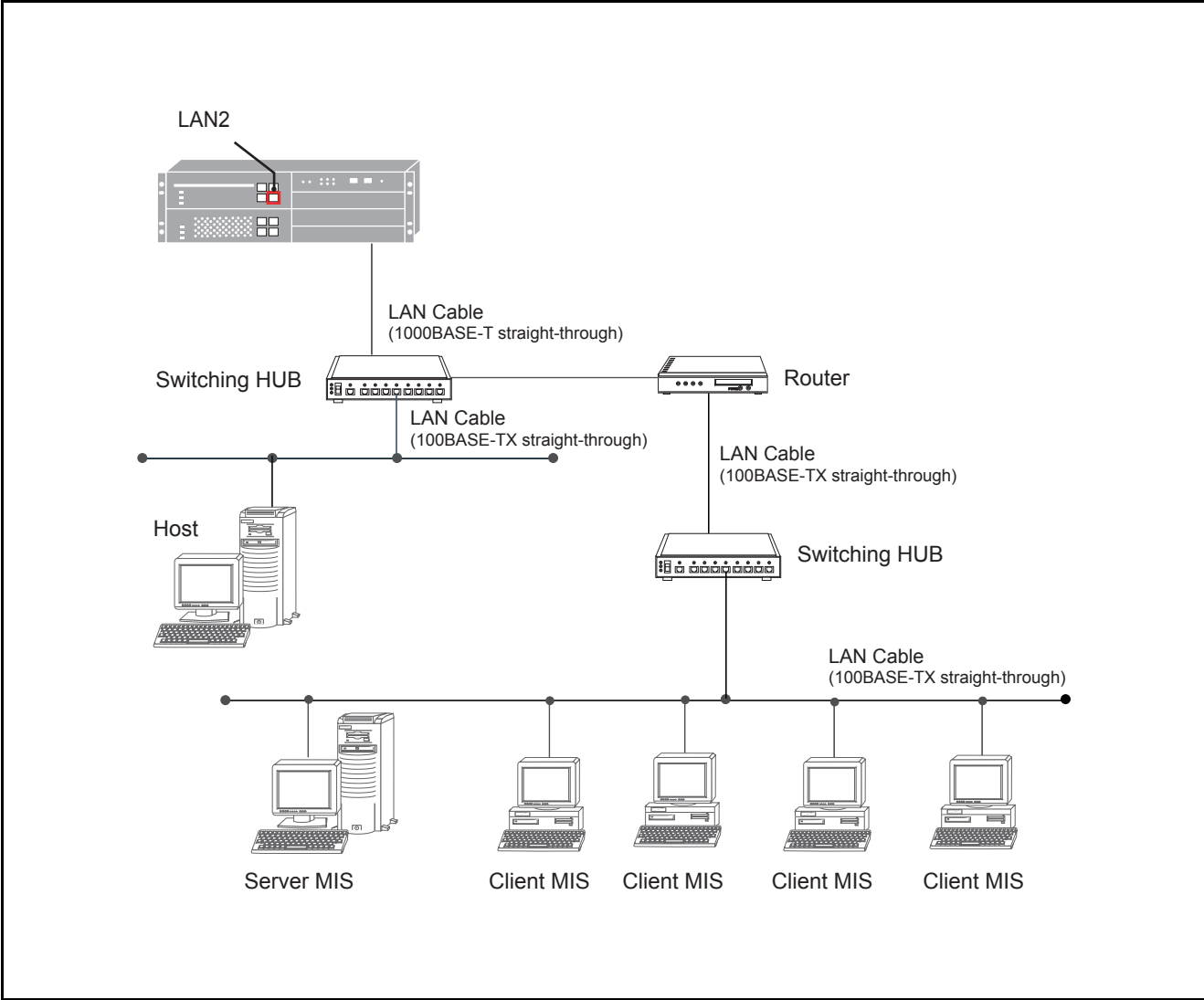
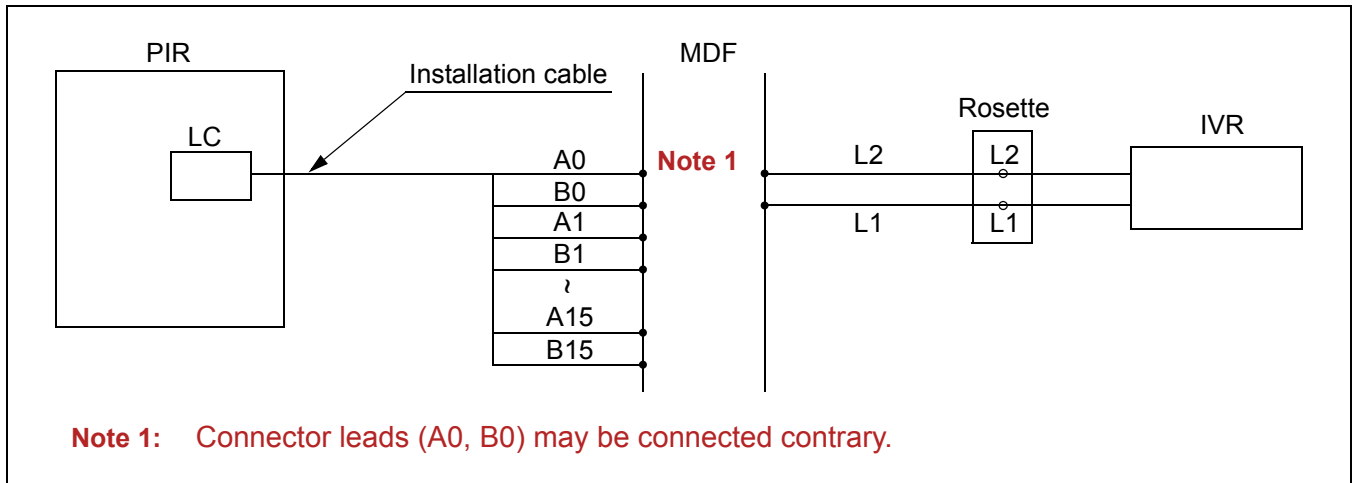


Figure below shows the cable connection between IVR and the LC card.

Connection between IVR and LC card



4. SYSTEM START-UP PROCEDURE FOR ADDING ACD FEATURES

This section explains the installation procedure for adding the ACD feature to the Telephony Server in on-line operation. For more detailed information of start-up procedure, see Appliance Model Installation Manual.

STEP 1: Save all data to the Flash Card using the MEM_HDD command.

Note: Perform this for both Flash Cards in System #0 and #1. (Do not save the ACD data memory.)

STEP 2: Turn OFF all the power of the Telephony Server in the order of the SV9500 Server --> PIR0 --> PIR1 --> PIRn.

STEP 3: Merge the Standard Service Software with the following software, referring to Chapter 6 “SYSTEM STARTUP” of the Appliance Model Installation Manual. **Note 1**

For Central/South America:

- ACD Client License Software for expanding ACD Capacity (up to 2000 Agent Positions) **Note 3**
- ACD Option Service Software for AGENT ANYWHERE-ACD feature (SV95 NW-ACD/OAI LICS) **Note 3**

For the Countries except Central/South/North America and Australia:

- ACD Client License Software for expanding ACD Capacity (up to 15000 Agent Positions) **Note 2**
- ACD Option Service Software for AGENT ANYWHERE-ACD feature (SV95 NW-ACD/OAI LICS) **Note 3**

Note 1: Telephony Server Maintenance Menu may be used to merge the Standard Service Software with the ACD Option Service Software.

Note 2: This software is required when making a maximum allowable number of ACD agent positions expand.
When using ACD Trunk in an FCCS Network or AGENT ANYWHERE, merge this software only at the node which accommodates ACDP.

Note 3: This software is required when adding AGENT ANYWHERE feature to the system that already provides ACD feature.
When using ACD Trunk in an FCCS Network or AGENT ANYWHERE, merge this software at all the nodes which provide the AGENT ANYWHERE feature.

STEP 4: Initialize the system (perform IPL, DM loading). **Note 4**
PROGRAM=“LOAD”
SYSTEM DATA=“OVERRIDE/LOAD”

STEP 5: Turn ON all the power of the Telephony Server in the order of PIR0 --> PIR1 --> PIRn --> SV9500 Server. **Note 4**

Note 4: When the system initial (IPL, DM load) is performed, ACD incoming calls terminated before the system message [6-H] “2033” is output are not distributed to any positions. Therefore, be sure to make the incoming trunk circuit card busy before the system initial (By doing so, the incoming call is in Busy Tone connection at the least).

- STEP 6: Assign the System data written in NDM.
This data is necessary when using the ACD FCCS services.
ASYDN SYS1
Index 514- NDM usage
Index 533- FPC of the node that provides C-VNDM
- STEP 7: Assign the basic system data for ACD system, referring to Chapter 4, “2.1 ACD System Configuration” in this manual.
- STEP 8: Check the station-to-station connection and confirm no fault status occurs or system messages are output (such as cable connection fault, LCD display fault, memory alarm fault, abnormal interrupt, etc.).
- STEP 9: Program the ACD office data. Also, program the FCCS data to make ACD service effective through FCCS network, if necessary. Refer to Chapter 4 “Office Data Design”.
- STEP 10: Broadcast VNDM data from VNDM Center Node to all VNDM Local Node in FCCS network, by using CBCV command. (This is necessary when using the ACD FCCS services.)
- STEP 11: Save the DM, ACD data memory into the Flash Card by using MEM_HDD.



CHAPTER 4

OFFICE DATA DESIGN



1. GENERAL

This chapter explains the office data design for the ACD system.

2. BASIC OFFICE DATA ASSIGNMENT

This section explains how to assign the basic office data. Items covered in this section are as follows.

- 2.1 ACD System Configuration
- 2.2 ACD Tenant Data Assignment
- 2.3 Split Data Assignment
- 2.4 ACD Agent/Supervisory Position Data Assignment
- 2.5 ACD Agent ID Code Assignment
- 2.6 ACD Incoming Route Assignment
- 2.7 Call Control Vectors (CCV) Assignment
- 2.8 ACD Schedule Data Assignment
- 2.9 Multiple Queueing
- 2.10 Overflow
- 2.11 Announcement (Delay/Night/Holiday) Data Assignment
- 2.12 DAT Card
- 2.13 VS32 ACD Announcement
- 2.14 VS32 Announcement Multiple Connection
- 2.15 ACD Pilot Number Assignment
- 2.16 Back-up UCD
- 2.17 ACD FCCS Data Assignment
- 2.18 ACDP Automatic Logoff
- 2.19 ACDP Quick Initialization
- 2.20 Program Upgrade with ACDP Quick Initialization
- 2.21 Geographic Redundancy - ACD (Stand Alone System) *For countries other than North America
- 2.22 Geographic Redundancy - ACD (FCCS Networking via IP) *For North America

2.1 ACD System Configuration

2.1.1 Assignment of System Data

Note: If any of the following commands is modified, system must be initialized.

- ASYD command
 - SYS1, Index 2, Bit 0 (ACDP is mounted)
 - SYS1, Index 31, Bit 0 to Bit 3 (Mounting capacity of Common Memory)
 - SYS1, Index 47, Bit 4 (Tone Control is enabled)
 - SYS1, Index 207, Bit 0 to Bit 1 (ACDP is mounted)

- ASYDL command
 - SYS1, Index 864, Bit 0 (Built-in IP, ACDP is used)
 - SYS1, Index 864, Bit 3 (Multiple ACDP/IP)
 - SYS1, Index 864, Bit 2 (AGENT ANYWHERE/OAI Terminal Anywhere)
 - SYS1, Index 864, Bit 4 to Bit 5 (Assign the maximum number of ports of Status Monitoring for terminal (SMFN)/Clear Status Monitor Facility Notification (SMFN) when the FCCS Link down)
 - SYS1, Index 866, Bit 0 to Bit 7 (Fusion Point Code for Centralized ACDP)
 - SYS1, Index 1192, Bit 4 (Maximum Number of ACD Overflows)
 - SYS1, Index 1193, Bit 7 (ACDP Retrofit)

- ASYDN command
 - SYS1, Index 533, Bit 0 to Bit 7 (FPC that accommodates center VND)
 - SYS1, Index 864, Bit 3 (Multiple ACDP/IP)
 - SYS1, Index 1192, Bit 4 (Maximum Number of ACD Overflows)

ACD system basic data is as follows. For details of system data, refer to Command Manual.

Basic ACD data

- ASYD

ASYD			
SYS1	Index 2	Bit 0	01 Hex (ACDP is mounted)*
	Index 31	Bit 0 to Bit 3	04 Hex (Mounting capacity of Common Memory)*
	Index 32	Bit 7	1 (SMDR/CS report is in service) Note 1
	Index 47	Bit 4	1 (Tone Control is enabled) Note 2
	Index 61	Bit 5	0 (UCD Call Waiting Display is out) Note 3
	Index 69	Bit 0	1 (Whether returns transferred call to transferring party after Recall Timer expires or not is depending on the setting of SF1104 of the ASFC command)
	Index 70	Bit 6	1 (Announcement Trunks used for delay announcements/night announcements are provided)
	Index 79	Bit 6	0 (ACD/OAI in service)*

ASYD			
SYS1	Index 80	Bit 3	0 (Static ACD messages (Break, Ready, etc.) is displayed on the top line of the LCD)
	Index 89	Bit 3	0/1 (CPU ACT/STBY changeover is not in service/in service)*
	Index 207	Bit 0	1 (ACDP is mounted)
		Bit 1	fixed to 0
	Index 241	Bit 2	1 (Call Processing Event Notification)*
		Bit 3	1 (Details of SCF Error Notification)
	Index 448	Bit 1	1 (ACDP specifications UP)
		Bit 3	1 (Send out ringer to an agent position in the Do Not Disturb or Ringer Mute mode when a Non-ACD call or ACD call arrives (including the calls that arrive at a Multi-line))
Index 449	Bit 0	SFC call origination from the first party notification 0/1=Ineffective/Effective Note 4	
	Bit 2	Access to Announcement trunk is controlled 0=by the timer 1=by the DAT	

- ASYDL

ASYDL				
SYS1	Index 513		01 Hex (LDM usage)*	
	Index 515~518		IP address (Hex) for the Telephony Server over External LAN* Note 5	
	Index 519~522		Subnet Mask (Hex) for the Telephony Server over External LAN* Note 5	
	Index 523~526		Default Gateway Address for External LAN* Note 5 Gateway Address (IP Address of Router) of Network connecting the Telephony Server	
	Index 864	Bit 0		1 (Built-in IP, ACDP is used)* (When Built-in IP/ACDP is used, Index 864, b4 must be assigned as data "1", and Index 864, b5 must be assigned as "0.")
		Bit 1		Output the system message when TCP-IP connection is normally disconnected* 0/1=Effective/Ineffective
		Bit 4		Assign number of ports of Status Monitoring for terminal (SMFN) 0/1=2 ports/8 ports (Normal Setting) Note 6, Note 7, Note 15
		Bit 5		Clear SMFN when the FCCS Link is down 0/1=Clear (Normal Setting)/Not Clear Note 6, Note 8

ASYDL			
SYS1	Index 867	Bit 3	Improvement of SCF6 Request for Monitor Connection. 0/1 = Out of service/In service
		Bit 4	16-digit OAI Station Number Information in Terminal Identifier (Number of digits for ACD station number) 0/1=Invalid/Valid Note 9
	Index 870	Bit 4	1: Improvement of SCF (FN=7) (Call Transfer) is in service (Checking of transfer destination before Call Hold). Note 20
	Index 874	Bit 3	1: ACDP Automatic Logoff is in service.
	Index 876	Bit 0 to Bit 3	Switchback Pause Timer when Transfer Call by SCF (FN=7) is unavailable. Note 11 128ms x Data value (2-F) 2 = 256ms (recommended) 1 = Not used 0 = Out of service
	Index 1083	Bit 1	1: Disables Peer to Peer Bandwidth Control [P-75].
	Index 1145	Bit 5	MG (SIP) Guard Timer for Consecutive Incoming Calls 0/1 = Invalid/Valid Note 17, Note 18
	Index 1185	Bit 4	SSF Monitoring Information Clear when the application is disconnected 0/1 = Valid/Invalid Note 14
	Index 1187	Bit 0 to Bit 3	Number of Monitor Numbers to Use (default is 4095) Note 12, Note 19
		Bit 4	Assign port number of Service Status Facility Monitoring (SSFM) and Service Status Facility Notification (SSFN)
		Bit 7	SCF20 monitor support Valid/Invalid = 0/1 Note 13
	Index 1189	Bit 0	1: Quick automatic restart of monitoring upon retrieving the held call is enabled. Note 14
	Index 1190	Bit 7	1: Improvement of ACDP Processing Performance is in service. Note 16
	Index 1192	Bit 4	Maximum Number of ACD Overflows Note 14, Note 16 0 = 3 times 1 = 9 times
Index 1193	Bit 7	ACDP Retrofit Note 10, Note 16 0 = Invalid (Up to 15000 Agents) 1 = Valid (Up to 2000 Agents)	

- ASYDN

ASYDN			
SYS1	Index 867	Bit 7	16-digit OAI Station Number Information in Terminal Identifier 0/1 = Invalid/Valid Note 9, Note 16
	Index 874	Bit 3	1: ACDP Automatic Logoff is in service.
	Index 1144	Bit 4	0: DM cache feature is in service.
	Index 1145	Bit 5	MG (SIP) Guard Timer for Consecutive Incoming Calls 0/1 = Invalid/Valid Note 17, Note 18
	Index 1185	Bit 4	SSFN Monitoring Information Clear when the application is disconnected 0/1 = Valid/Invalid Note 14
	Index 1186	Bit 6	Automatic VNDM Reestablishment
	Index 1187	Bit 0 to Bit 3	Number of Monitor Numbers to Use is up to 48000 (default setting is 4095).
	Index 1189	Bit 0	1: Quick automatic restart of monitoring when a monitored Agent retrieves the held call is in service.
	Index 1190	Bit 6	Improvement of Processing Performance (OAI) is in service.
	Bit 7	0: Improvement of ACDP Processing Performance is in service.	

Note: Unless removed, System data marked with “*” should already be programmed in the system start-up procedure.

Note 1: This setting is necessary for sending SMFN answer notification of a Trunk.

Note 2: Tone Control is enabled in order for the caller dialed Monitor Number (PPN/ACD Pilot Number) to hear Busy Tone. When this function is disabled, BT connection cannot be established.

Note 3: UCD Call Waiting Display service cannot be used for ACD System.

Note 4: When the call is originated automatically from the Non-ACD line on the agent position used with the OAI application system, be sure to set to “1”.

Note 5: This data is assigned by ADTM. The assigned ADTM data is automatically written into the System Data.

Note 6: This identical data value must be assigned to all nodes.

Note 7: When “Status Monitor Facility Request (SMFR), FN=126” is used, always assign 0 (2 ports).

Note 8: Although this data is valid only when Index 864, Bit 4=1 (8 ports), this bit must be assigned as data “0” when Index 864, Bit 4=0 (2 ports).

Note 9: When ACDP Retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), set the value to 0.

Note 10: Note the following conditions for this setting.

- This data assignment is required when using less than 2000 agent positions. If your system does not use ACDP Retrofit, this data assignment is not necessary.
- When using MIS, assign the following system data before setting the basic office data for ACD and ACD service features.
ASYDL, SYS1, Index 1193, Bit 7=1 (ACDP Retrofit = Valid (Up to 2000 Agents))
- You need to resume ACDP when you changed this data.
- ACD data assigned when ACDP Retrofit is disabled cannot be used after enabling ACD Retrofit. In that case, ACD data needs to be assigned again. Also, when ACD data assigned when ACDP Retrofit is disabled cannot be used after disabling ACD Retrofit.
- When ACDP Retrofit is enabled and a language other than “1: Japanese” and 6: Japanese (Kanji)” is set for the LANG parameter of the ACDTN command, the agent positions hear a chime when a monitoring is requested from the ACDP at the ACDP restarting. When ACDP Retrofit is disabled, a chime does not ring.

Note 11: When setting this data, consider the following:

- This data is available only when call forwarding destinations are stations or trunks.
- When the Pause Timer value is not set, Busy Tone (BT) or RTP warning tone is generated if switchback of speech path fails.
- When the intermediate party failed to transfer a call, the held station continues to hear music on hold until the switchback of speech path is complete.
* The time required for switchback of speech path is in proportion to the assigned Pause Timer value. Required Pause Timer value for switchback of speech path is depends on the network condition.

Note 12: When setting a value other than the default value, refer to the Command Manual.

Note 13: In an FCCS network, assign the data by ASYDN.

Note 14: This feature reduces the automatic response time of supervisory position, allowing call monitoring to be available in a shorter time after retrieval of the call. However the supervisor’s position continues ringing until the monitoring is resumed. If this feature is disabled, it may take four to six seconds before call monitoring re-starts, and a short ROT can be heard at the resumption of the monitoring.

Note 15: When your system is UMGi/RNIP system, assign Index 864, Bit 4=1 (8 ports) and Index 1187, Bit 4=1 (8 ports).

To change the number of ports:

STEP 1: Disconnect the application.

STEP 2: Change the number of ports with the system data.

For SMF port: Change the data for Index 864, Bit 4.

For SSF port: Change the data for Index 1187, Bit 4.

STEP 3: Reconnect the application.

Execute the ACDIZ command to the system.

STEP 4: Set the system to be monitored with the application.

Note 16: This system data is not available for North America.

Note 17: When using MG (SIP), be sure to set it to “1”(Valid).

Note 18: Value of Guard Timer for Incoming Call is always same as value of Guard Timer for Outgoing Call, so set the value of Guard Timer for Outgoing Call (ASYD, SYS1, Index 474, Bit 4 to Bit 6) when setting the value of the value of Guard Timer for Incoming Call.

Note 19: Note the following:

- Monitor numbers can be used up to 48000 within the whole system, not each individual ACDP.
- When ASYDL/ASYDN, Index 864, Bit 4=0 is assigned (the maximum two ports are used for Status Monitoring for terminal (SMFN)), monitor numbers can be used up to 4095.
- To prevent the situation of ACD system from becoming uncontrollable, after you change the number of monitor numbers:
 - a.) Do not reduce the number of monitor numbers to be used.
 - b.) Do not set the maximum number of ports of SMFN as two ports.
- If ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), do not change the default value.
- The larger the setting value of the system data is, the more it takes to transfer VNDM data. The number of used monitor numbers cannot be reduced. Plan well and assign the appropriate number of monitor numbers to use.

Data Assignment				Available Setting Value of Monitor Number
bit3	bit2	bit1	bit0	
0	0	0	0	1-4095 (default value)
0	0	0	1	1-8191
0	0	1	0	1-12287
0	0	1	1	1-16383
0	1	0	0	1-20479
0	1	0	1	1-24575
0	1	1	0	1-28671
0	1	1	1	1-32767
1	0	0	0	1-36863
1	0	0	1	1-40959
1	0	1	0	1-45055
1	0	1	1	1-48000
1	1	0	0	1-48000
1	1	0	1	1-48000
1	1	1	0	1-48000

Data Assignment				Available Setting Value of Monitor Number
bit3	bit2	bit1	bit0	
1	1	1	1	1-48000

- To use more than 4096 monitor numbers in a stand-alone environment, set a single FPC number other than 0 to ASYDL, SYS1, Index 512/533/865/866. System restart is required after setting this system data.

Note 20: Note the following:

- This data is available only when transfer destination is a station.
- When this data is not set, if switchback of speech path fails due to busy status of transfer destination, Busy Tone (BT) or RTP warning tone is generated.
- When this data is set, if transfer destination is busy, STATION HUNTING [S-7/S-8/S-9] and CALL FORWARDING - BUSY LINE [C-2] result in an error.

ACD tenant related data

STEP 1: ASYD- SYS1, Index 8 - the maximum number of tenant in the system (including tenant of both the business system and the ACD system)

STEP 2: ASYD - SYS1, Index 92, 93 and 94, Bit 0 - Separate or Common Tenant Data table development for the respective commands. 0/1=Separate/Common
 Index 92, Bit 0 (ASYD, SYS2) *Normally assign "0".*
 The others than above in Index 92, 93 and 94, Bit 0: Depends on the Command Manual.
Normally assign "1" Note 1

Note 1: When data "1" is assigned, data must be assigned for Tenant 1 (TN=1) in the respective commands.

SCF (FN=1) call originating notification

The function is used to notify the status of the calling party to the Host computer when call is originated automatically via SCF (FN=1) and a Non-ACD line from an agent position.

ASYD, SYS1, Index 449, Bit 0 - SCF Call origination from the first party notification

0/1=Ineffective/Effective **Note 1**

Note 1: When the call is originated automatically from the Non-ACD line on the agent position used with the OAI application system, be sure to set to "1".

Changing Tone to be sent from the calling party

ASYD, SYS1, Index 47, Bit 4=1 (Tone to be sent is controlled via SCF <FN=127>)

Note: After this data is changed, system initialization must be performed. When the system initialization cannot be performed, modify this data via the following procedure.

- a) Delete all the existing Pilot Numbers via ACDPLT
- b) Modify this data
- c) Re-assign the Pilot Numbers via ACDPLT

Note: MC-MG(COT) is not supported.

FCCS data

See Section 2.17, ACD FCCS Data Assignment.

Improvement of Processing Performance (OAI/ACD)

When you assign the following system data, processing performance for OAI/ACD will be improved.

STEP 1: ASYDL/ASYDN

ASYDL/ASYDN			
SYS1	Index 1190	Bit 7	0 (Improvement of ACDP processing performance is in service) Note 1

Note 1: This system data is not available for North America.

STEP 2: ASYDN

ASYDN			
SYS1	Index 1144	Bit 4	0 (DM cache feature is in service)
	Index 1190	Bit 6	0 (Improvement of processing performance (OAI) is in service)

Monitor

STEP 1: ASYDL

ASYDL			
SYS1	Index 679	Bit 1	Multiple Session for SIP Multiple Line Terminals 0/1 = Out of Service/In Service
	Index 867	Bit 3	Improvement of SCF6 Request for Monitor Connection in ACD feature 0/1 = Out of service/In service
	Index 869	Bit 6	Monitor Function for IP terminals 0/1 = Out of service/In service
		Bit 7	Monitor Function for DtermIP-LAN 0/1 = Multi-path Connection/Single-path Connection
	Index 874	Bit 0	Multi-Path Monitor Connection 0/1 = Disabled/Enabled
	Index 1187	Bit 7	SCF20 monitor support 0/1 = In service /Out of service
	Index 1194	Bit 3	0 (Restriction of Monitoring Hot Split is in service)
	Index 1199	Bit 6	Restriction of Monitor Release by IHo Note 2, Note 3 0/1 = Disabled/Enabled

Note 2: Available since FP95-113 V3. When this system data is assigned “1”, use the Infolink Message “IHn” to release the monitoring.

Note 3: This system data is not available for North America.

STEP 2: ASYDN

ASYDN			
SYS1	Index 679	Bit 1	Multiple Session for SIP Multiple Line Terminals 0/1 = Out of Service/In Service
	Index 867	Bit 3	Improvement of SCF6 Request for Monitor Connection in ACD feature 0/1 = Out of service/In service
	Index 869	Bit 6	Monitor Function for IP terminals 0/1 = Out of service/In service
		Bit 7	Monitor Function for DtermIP-LAN 0/1 = Multi-path Connection/Single-path Connection
	Index 874	Bit 0	Multi-Path Monitor Connection 0/1 = Disabled/Enabled
	Index 1187	Bit 7	SCF20 monitor support 0/1 = In service /Out of service

Routine Backup

- ASYD

ASYD			
SYS1	Index 86	Bit 0	System Message [7-0] is registered when no errors are detected by the Routine Diagnosis Program (Refer to Index 89 and 90) 0/1 = Not Registered/Registered
		Bit 1	System Message [7-P] is registered when an error is detected by the Routine Diagnosis Program (Refer to Index 89 and 90) 0/1 = Not Register/Register
	Index 87	Bit 0 to Bit 7	Hour data is assigned using a decimal number (Military Time)
	Index 88	Bit 0 to Bit 7	Minute data is assigned using a decimal number (Military Time)
	Index 90	Bit 1	Routine Backup 0/1 = No/Yes
	Index 306	Bit 1	ACD Data Memory Saving 0/1 = Out of service/In service

SR-MGC

- ASYDL

ASYDL			
SYS1	Index 844	Bit 0 to Bit 7	The number of SR-MGCs to which office data copy from MGC to SR-MGC is executed per day 01 ~ FF HEX. = 1 ~ 255 SR-MGCs
	Index 845	Bit 0 to Bit 7	The number of SR-MGCs to which office data copy from MGC to SR-MGC is executed per day 01 ~ FF HEX. = 1 ~ 255 SR-MGCs
	Index 846	Bit 4	Terminals registered in SR-MGC are able to perform terminal reset by using the Visitor key 0/1= Available/Not available
	Index 847	Bit 6	SR-MGC office data copy method (high-speed method/regular method) 0/1 = Auto/Fixed to regular method
	Index 852	Bit 5	IP terminal registration changeover from SR-MGC to MGC 0/1 = Manual/Automatic changeover
	Index 1193	Bit 4	SR-MGC Saving Method 0/1= ACD/UCD

ACDP Quick Initialization

STEP 1: ASYDL

ASYDL			
SYS1	Index 1191	Bit 1	Logical Port Assignment 0/1 = Out of service/In service
	Index 1193	Bit 0	ACDP Quick Initialization 0/1 = Out of service/In service
		Bit 1 to Bit 3	Copying Cycle of VNDM to STBY side b3 b2 b1 0 0 0: 5 minutes (default) 0 0 1: 30 seconds 0 1 0: 1 minute 0 1 1: 3 minutes 1 0 0: 5 minutes 1 0 1: 10 minutes 1 1 0: 30 minutes 1 1 1: 60 minutes
	Index 1233	Bit 0 to Bit 7	System Reset Delay Timer for Non-Load Initialize 00 (Hex) = Out of Service 01~FF (Hex) = 1 ~ 255 seconds
	Index 1234	Bit 0 to Bit 7	System Reset Delay Timer for Office Data Load & System Initialize (due to memory retained reset failure) 00 (Hex) = Out of Service 01~FF (Hex) = 1 ~ 255 seconds
	Index 1236	Bit 0 to Bit 7	System Reset Delay Timer for Program & Office Data Load & System Initialize 00 (Hex) = Out of Service 01~FF (Hex) = 1 ~ 255 seconds
	Index 1347	Bit 0	PBUS over IP Module 0/1 = Out of service/In service
		Bit 1	Memory Copy from ACT to STBY 0/1 = Stop/Start
Index 1348	Bit 4 to Bit 7	Cycle of Abnormal Detection for Health Check between ACT side and STBY side	

STEP 2: ASYDN

ASYDN			
SYS1	Index 1191	Bit 1	Logical Port Assignment 0/1 = Out of service/In service
	Index 1193	Bit 0	ACDP Quick Initialization 0/1 = Out of service/In service
		Bit 1 to Bit 3	Copying Cycle of VNDM to STBY side b3 b2 b1 0 0 0: 5 minutes (default) 0 0 1: 30 seconds 0 1 0: 1 minute 0 1 1: 3 minutes 1 0 0: 5 minutes 1 0 1: 10 minutes 1 1 0: 30 minutes 1 1 1: 60 minutes
		Bit 0	PBUS over IP Module 0/1 = Out of service/In service
		Bit 1	Memory Copy from ACT to STBY 0/1 = Stop/Start
	Index 1348	Bit 0 to Bit 3	Cycle of Executing a Health Check between ACT side and STBY side
		Bit 4 to Bit 7	Cycle of Abnormal Detection for Health Check between ACT side and STBY side

Other

STEP 1: ASYDL

ASYDL			
SYS1	Index 803	Bit 1	Consultation Hold Release 0/1 = Out of service/In service
	Index 868	Bit 5	Fix Direct Inward Dialing number to 12 digits (SMFR) Note 1 0/1=Invalid/Valid
	Index 869	Bit 1	ACD Holiday Schedule on Pilot Number basis 0/1 = Out of service/In service
	Index 873	Bit 0	Restriction on the connection of PPN/Pilot number 0/1 = Allowed/Restricted
		Bit 1	Restriction on the connection of Monitor 0/1 = Allowed/Restricted
		Bit 6	ACD Holiday Schedule (Schedule for type of reception services) 0/1 = Out of service/In service
	Index 874	Bit 1	Caller ID Display per split group 0/1 = Invalid/Valid
	Index 1192	Bit 4	Maximum Number of ACD Overflows 0/1 = 3 times/9 times
		Bit 6	Flexible Split Membership 0/1 = Out of Service/In service
		Bit 7	Work Mode Setting with Flexible Split Membership 0/1 = Out of Service/In service
	Index 1193	Bit 5	Use of Infolink message by non-supported facility version 1 Note 2 0/1 = Out of Service/In service
	Index 1194	Bit 0	Extension of Programmable Announcement Messages 0/1 = Disabled/Enabled
		Bit 1	Break Type Expansion 0/1 = 9 break types (default)/99 break types
		Bit 4	VS32 Announcement Multiple Connection 0/1 = Disabled/Enabled
Bit 5 to Bit 7		VS32 Release Guard Timer b7 b6 b5 0 0 0: 1 second (default) 0 0 1: 2 seconds 0 1 0: 4 seconds 0 1 1: 6 seconds 1 0 0: 8 seconds 1 0 1: 8 seconds 1 1 0: 8 seconds 1 1 1: 8 seconds	

ASYDL			
SYS1	Index 1199	Bit 1	Sound to be sent at the end of ACD announcement Note 3 0/1 = Music On Hold (MOH)/Ringback Tone (RBT)
		Bit 2	Connection display control from PCPro Note 3, Note 5 0/1 = Disabled/Enabled
	Index 1200	Bit 1	Auto Break of Hot position with Standard SIP-IVR 0/1 = Disabled/Enabled Note 4 Note 5
	Index 1240	Bit 1	Consultation Hold Release - ACD 0/1 = Out of service/In service

STEP 2: ASYDN

ASYDN			
SYS1	Index 803	Bit 1	Consultation Hold Release 0/1 = Out of service/In service
	Index 868	Bit 5	Fix Direct Inward Dialing number to 12 digits (SMFR) Note 1 0/1=Invalid/Valid
	Index 1192	Bit 4	Maximum Number of ACD Overflows 0/1 = 3 times/9 times
	Index 1194	Bit 0	Extension of Programmable Announcement Messages 0/1 = Disabled/Enabled
		Bit 1	Break Type Expansion 0/1 = 9 break types (default)/99 break types
		Bit 4	VS32 Announcement Multiple Connection 0/1 = Disabled/Enabled
		Bit 5 to Bit 7	VS32 Release Guard Timer b7 b6 b5 0 0 0: 1 second (default) 0 0 1: 2 seconds 0 1 0: 4 seconds 0 1 1: 6 seconds 1 0 0: 8 seconds 1 0 1: 8 seconds 1 1 0: 8 seconds 1 1 1: 8 seconds
	Index 1199	Bit 1	Sound to be sent at the end of ACD announcement Note 3 0/1 = Music On Hold (MOH)/Ringback Tone (RBT)
	Index 1200	Bit 1	Auto Break of Hot position with Standard SIP-IVR 0/1 = Disabled/Enabled Note 4 Note 5
	Index 1240	Bit 1	Consultation Hold Release - ACD 0/1 = Out of service/In service

Note 1: This feature cannot be used with INFOLINK DATA MESSAGES - ACD [I-99A] in North America.

Note 2: This data is normally fixed to 0.

Note 3: This feature is available since FP95-112 V2.

Note 4: This feature is available since FP95-113 V3.

Note 5: This system data is not available in North America.

2.1.2 Assignment of Unit Data

Since Monitor Numbers are critical factors for the implementation of the ACD system, be sure to make them available for use by assigning Unit data to MG 0 with the AUNT command.

2.2 ACD Tenant Data Assignment

Assign the ACD tenant data, which may be independent from tenant for Business system, in ACDTN command. Tenant is developed by the same concept as one of Node (1-9).

- (1) The ACDTN data is one of the most important data for ACD system configuration. Especially, the user must program so as not to change NSPL data in future. In case the NSPL data is changed, all data concerned with ACD function must be changed also.
- (2) Since data related to MIS connection is assigned using TN 1, the following data must be set even when TN 1 is not used for the ACD system.
TN=1, NSPL=1, PRI=1, LANG=0 **the data to be entered in other parameter is optional*

Note: Do not delete this programming data while the ACD system is used.

STEP 1: ACDTN -TN: Tenant Number (1~9)
 NAME: ACD tenant name (up to 20 characters)
 NSPL: The number of split in the designated tenant (1-900)
 ANTNO: Personal Announcement Number (0-200) **Note 1**
 PRI: Priority order of queuing for an individual call (1-250)
 LANG: Default Language (0-6)
 0 = English
 1 = Japanese
 2 = Spanish
 3 = Italian
 4 = French
 5 = German
 OPENO: Dial number for the operator call (maximum of 6 digits)
 IVR NO: Not used
 ANSTM: Answer timer (0-60 sec.)

- Note 1:** Specify an announcement number in the range of 0 to 58 when:
- Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0)

2.3 Split Data Assignment

STEP 1: ASDT (for Digital terminal such as DT300 Series, Dterm Series *i*)
/AISTL (for IP/SIP terminal such as DT700 Series, DtermIP, IP Enabled Dterm, a SIP Multiple Line terminal and a Softphone)
-Make sure that the agent/supervisory position was already assigned.

STEP 2: ACDPSN -Make sure that the tenant data and the split number were already assigned correctly.

Note: Be sure that one supervisory position which can operate NIGHT SERVICE - ACD [N-12A] is assigned per split.

STEP 3: ACDSPL -Assign the split data.

TN:	Tenant number (1-9)
SPLIT:	Split number (1-900)
NAME (optional):	Name of split (20 characters.) Note 1
LOGID:	0/1=Logon ID is not required/Required
AFTER:	0/1=Work/Ready mode after the ACD position is released
ANMD:	0/1=Automatic/Manual operation to answer the ACD calls after logging on
QUEUE FLAG:	Unit of Queue flagging Note 2 0/1=number/percent
QUEUE:	Maximum number of Queue Depth 1-700 for QUEUE FLAG=0 5-1000 for QUEUE FLAG=1
CWCHM:	0/1=Call Waiting Lamp/Chime is not available/Available
WMT:	Work Mode Timer time out (0-9999 sec.)
RMON:	The function of ASSIST key 0/1=Assist/Monitor Me
BRKTP:	0/1=Break mode is not available/Available
NIGHT:	Night destination (Two to six digits) Note 3
ASIST:	Assistance call destination. (Two to six digits) Note 3
EMGCY:	Emergency call destination. (Two to six digits) Note 3
RECD:	Recorder equipment number (0-5, 0 = Recorder equipment is not used) Note 3
DNDS:	0/1=DO NOT DISTURB - SPLIT is available/Not available Note 4
WKRST:	0/1=Work mode is available/Not available
AWPI:	Work mode for the ACD call when connecting with a non-ACD call 0=Work Mode is not available 1=Available when the non-ACD call is terminated 2=Available when the non-ACD call is answered 3=Available when the non-ACD call is terminated/answered
AWPO:	Work mode for the ACD call when originating a non-ACD call 0/1=Not available/Available

Note 1: When NAME of route (programmed in ACDTG) or NAME of monitor number (programmed in ACDPLT) is assigned, skip this parameter.

Note 2: QUEUE FLAG=1 (Maximum Queue value is described with the percentage of all agent positions)

Note 3: This data is valid when CCV is designated for the procedure of handling ACD call (CCV/W=0 in ACDPLT).

Note 4: Assign 1 to reject ACD call queuing when all agents have been logged off in the split.

ARPR:	Work mode after a non-ACD call is released 0/1=Not available/Available
COND:	0=overflow is out of service 1=inflow threshold (a value of the call waiting in the queue of the destination split) is decided by the number of idle operator in the split 2=the fixed number of ACD calls are overflowed
COND DETAIL:	For COND=0, fixed "0" For COND=1, Idle Split Counter (1-250) For COND=2, Queue Counter (1-699)
CWON:	Threshold value for CW lamp ON (0-700) Note 5 * "0"=CW lamp is out of service When the number of calls exceeds the value, CW lamp lights
CWFL:	Threshold value for CW lamp flashing (0-700) Note 5 * "0"=CW lamp is out of service When the number of calls exceed the value, CW lamp starts to flash
ST CCV NO:	Stranded Calls CCV Index (0-2000. 0=Not available) Note 6, Note 7
ST CCV STP:	Stranded Calls CCV Step (1-20) Note 6
CRT:	Call Recover Time (0-255. 0=Not available)
A-WMT:	Analog Work Mode Timeout (0-9999 sec.)
HSPL:	0/1=HOT SPLIT is out of service/in service
AGT-Q:	0/1=Agent queuing options is not available/available
AWPRST:	0/1=Work mode cancel timer is used/not used when programming AWPI=1~3, AWPO=1, set to "1"
PCS:	0/1=TALLY REQUIRED is out of service/in service
LOFFW:	Necessary Number of agents logged on to the split 0=LOGOFF WARNING is Not available 1~9=Maximum number of agents logged on to the split ALL=Logoff Warning is executed when the number of log-in user is less than that of queueing calls.

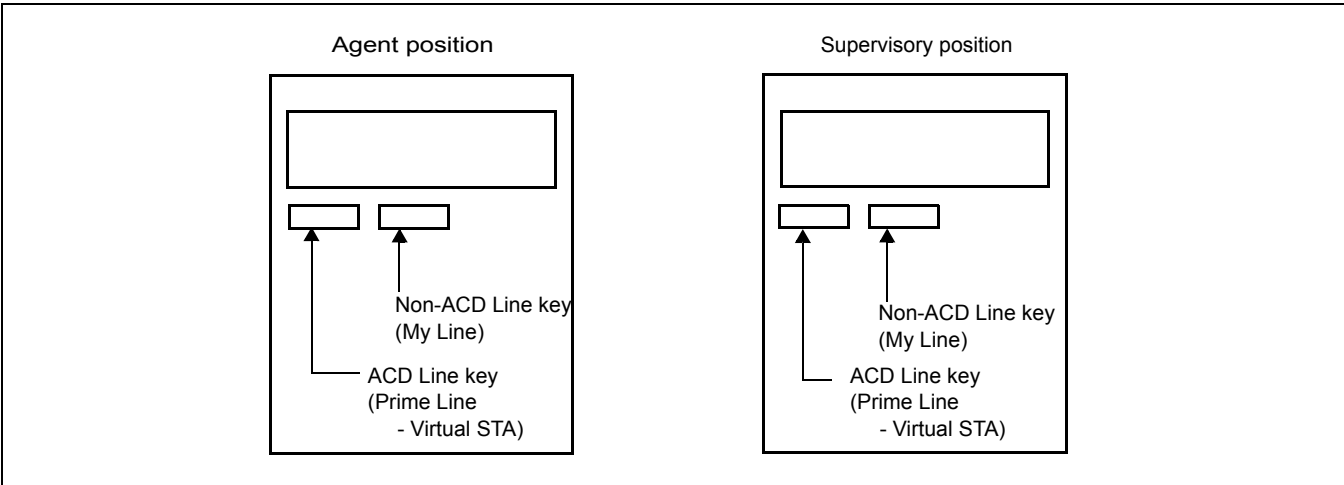
Note 5: CWON < CWFL < maximum number of queuing calls

Note 6: Available for North America only.

Note 7: Assign ST CCV NO in the range of 1 to 1200.

2.4 ACD Agent/Supervisory Position Data Assignment

ACD Line/Non-ACD Line keys on ACD Position



[Service Conditions]

On ACD Agent Positions or Supervisory Positions, ACD lines and non-ACD lines may be used only to handle ACD calls except for manual transfer of a non-ACD call. Agents or Supervisors must use only the functions that are assigned to the Line/Feature Keys on the Agent or Supervisory Position, and never use any Access Codes for supplementary services, including Call Forwarding, Call Hold, Call Park, Voice Mail and Voice Call.

[Assignment Procedure]

STEP 1: ASDT (for Digital terminal such as DT300 Series, Dterm Series *i*)
/AISTL (for IP/SIP terminal such as DT700 Series, DtermIP, IP Enabled Dterm, a SIP Multiple Line terminal and a Softphone)

- Assign the station data as follows.
 - Agent/Supervisory position
Non-ACD Line:TEC12, RSC/SFC = 1-15
ACD Line:TEC18 (Virtual LENS), RSC/SFC = 1-15

Note: The identical SFC (Service Feature Restriction Class) cannot be assigned on Non-ACD Line and ACD Line.

Note: Non-ACD Line and ACD Line must be accommodated in the same IMG.

Note: When using IP terminal such as DtermIP, IP Enabled Dterm for an agent/supervisory position, SP-PHD (data assignment by ALIDL command) is required.

Note: Assign only SFI as mentioned in this manual. Do not assign any Business SFI (such as Call Forwarding Don't Answer, Call Forwarding All, Call Forwarding Busy, Call Pickup and so on) to an ACD Line.

Note: When the Agent/Supervisory position receives an ACD call while DND feature being set to Non-ACD Line, the Agent/Supervisory position will not ring.
To enable Agent/Supervisory position to ring while DND feature being set to Non-ACD Line, assign the data for ASYD, SYS1, Index 448, Bit 3=1.

STEP 2: AOKC- Assign OP-CODE to KEY-CODE.

The standard settings are shown below.

KEY-CODE	F-KIND	OP-CODE	ACD key (Function)	Remarks (AKYD FKY No.)
1	1	187	Auxiliary Work (Break)	34
2	2	252	Auto/Manual	35
3			-	36
4	2	253	After Call Work	37
5	1	188	Night	38
6	2	250	Trunk Trouble Report	39
7	1	189	Tally	40
8	2	254	Assistance	41
9	2	255	Emergency/Recorder	42
10	1	190	LOG ON/OFF	43
11	-	-	ACD Answer	44
12	1	191	Monitor/Barge	45
13			-	46
14	2	249	Call Waiting Lamp	47
15-31			-	

STEP 3: AKYD- Assign the ACD Position key Data

- Non-ACD Line = My Line
- ACD Line = Prime Line (S = 1: Inhibited) **Note 1**

Note 1: The S (Suppression - OG from Prime Line) parameter must be set to 1 to block outgoing calls from ACD lines. Note that it does not prevent non-ACD calls from being transferred to an ACD pilot number. For details, see CALL TRANSFER TO SPLIT QUEUE - ACD [C-67A].

For more information concerned with the Feature/Flex Key setting, see AKYD command descriptions on Command Manual. The face layout for the standard key arrangement below is shown in ACD Agent Position and ACD Supervisory Position in Chapter 3.

Standard Key Arrangement of DT830G/DT830/DT430

AGENT POSITION			SUPERVISOR POSITION		
KYN	FKY	FUNCTION	KYN	FKY	FUNCTION
1	47	Call Waiting Lamp (CW)	1	47	Call Waiting Lamp (CW)
2	35	Auto/Manual (AUTO/MAN)	2	35	Auto/Manual (AUTO/MAN)
3	41	Assistance (ASSIST)	3	45	Monitor/Barge (MON/BARGE)
4	42	Emergency Recorder (EMER)	4	38	Night Mode (NIGHT)
5	39	Trunk Trouble Report (TRKTRBL)	5	39	Trunk Trouble Report (TRKTRBL)
6	57	Recall (RECALL)	6	57	Recall (RECALL)
7	-	ACD Call (ACD CALL)	7	-	ACD Call (ACD CALL)
8	-	Non-ACD Call (LINE)	8	-	Non-ACD Call (LINE)
9	16	Function (FUNC)	9	16	Function (FUNC)
10	125	Hand set/Head set (HAND/HEAD)	10	125	Hand set/Head set (HAND/HEAD)
11	-		11	-	
12	52	Speaker (SPKR)	12	52	Speaker (SPKR)
13	-		13	-	
14	-		14	-	
15	-		15	-	
16	-		16	-	

Note: Assign Feature keys (FKY) within Key Number (KYN) 1 to 16.

Note: To allow Agent positions to monitor calls, assign Monitor/Barge function to a Feature key of Desktop terminals for ACD Agent Position.

FLEX Key Arrangement of DT830G/DT830/DT430

KYN2	FKY	FUNCTION
1	34	Break Mode (Break)
2	40	Tally (Tally)
3	-	
4	43	Log On/Off (Logon)
5	18	Transfer (Transfer)
6	59	Release (Release)
7	20	Non-Exclusive/Exclusive Hold (Hold)
8	37	After Call Work (Work)

- Note:** Note the following conditions:
- When you need to rearrange the Feature/Flex Key, you may change the data after LOG OFF.
 - When you change the Feature/Flex Key without LOG OFF, ACDP initialization is necessary.
 - When MON/BARGE, EMER, LINE, CONF key are used, CFT trunk data or VS32 should be programmed in ATRK.
 - When using Digital terminals, initialize (MB key: OFF → ON → OFF) the ELC circuit card which accommodates Agent/Supervisory positions after the completion of AKYD data assignment.
 - Be sure to turn the SPEAKER Key to OFF while ACD call reception service is available.

Standard Key Arrangement of DT730G/DT730/DT330 and Dterm Series *i*

AGENT POSITION			SUPERVISOR POSITION		
KYN	FKY	FUNCTION	KYN	FKY	FUNCTION
1	47	Call Waiting Lamp (CW)	1	47	Call Waiting Lamp (CW)
2	35	Auto/Manual (AUTO/MAN)	2	35	Auto/Manual (AUTO/MAN)
3	41	Assistance (ASSIST)	3	45	Monitor/Barge (MON/BARGE)
4	42	Emergency Recorder (EMER)	4	38	Night Mode (NIGHT)
5	39	Trunk Trouble Report (TRKTRBL)	5	39	Trunk Trouble Report (TRKTRBL)
6	57	Recall (RECALL)	6	57	Recall (RECALL)
7	-	ACD Call (ACD CALL)	7	-	ACD Call (ACD CALL)
8	-	Non-ACD Call (LINE)	8	-	Non-ACD Call (LINE)
9	16	Function (FUNC)	9	16	Function (FUNC)
10	125	Hand set/Head set (HAND/HEAD)	10	125	Hand set/Head set (HAND/HEAD)
11	-		11	-	
12	52	Speaker (SPKR)	12	52	Speaker (SPKR)
13	-		13	-	
14	-		14	-	
15	-		15	-	
16	-		16	-	

Note: Assign Feature keys (FKY) within Key Number (KYN) 1 to 16.

Note: To allow Agent positions to monitor calls, assign Monitor/Barge function to a Feature key of Desktop terminals for ACD Agent Position.

FLEX Key Arrangement of DT730G/DT730/DT330 and Dterm Series *i*

KYN2	FKY	FUNCTION
1	34	Break Mode (Break)
2	40	Tally (Tally)
3	13	Three-Way Calling (Conf)
4	43	Log On/Off (Logon)
5	18	Transfer (Transfer)
6	59	Release (Release)
7	20	Non-Exclusive/Exclusive Hold (Hold)
8	37	After Call Work (Work)
9	147	Message (Message)
10	15	Speed Calling - System (Directory)
11	51	Microphone (Mic)

Note: Note the following conditions:

- When you need to rearrange the Feature/Flex Key, you may change the data after LOG OFF.
- When you change the Feature/Flex Key without LOG OFF, ACDP initialization is necessary.
- When MON/BARGE, EMER, LINE, CONF key are used, CFT trunk data or VS32 should be programmed in ATRK.
- When using Digital terminals such as DT330 and Dterm Series *i*, initialize (MB key: OFF→ON→OFF) the ELC circuit card which accommodates Agent/Supervisory positions after the completion of AKYD data assignment.
- In the case of the use of DtermSP30/Soft Client SP350, it is required to assign the same Feature/Flex Key as DT730G/DT730/DT330/Dterm Series *i*.
- Be sure to turn the SPEAKER Key to OFF while ACD call reception service is available.

STEP 4: ACDPSN-Assign the ACD position

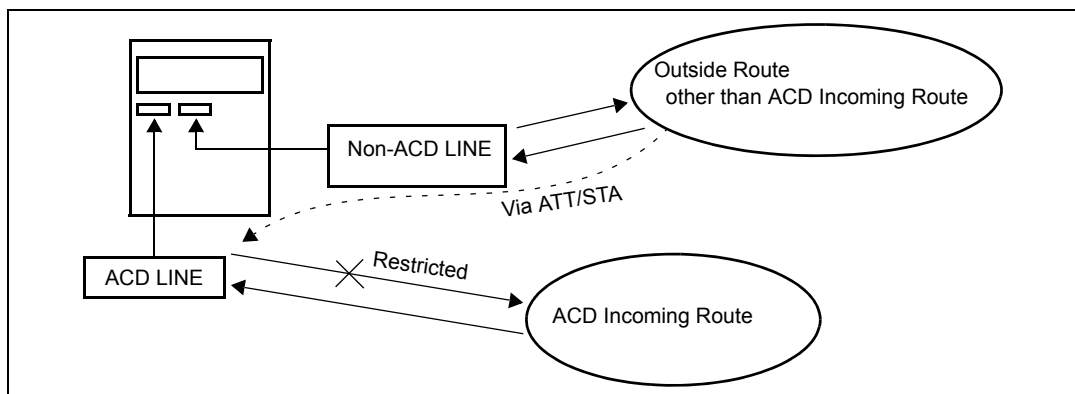
- TN: Tenant No. 1-9
- NACD: My Line No. used as a non-ACD line for a personal call **Note 2, Note 3**
- ACDL: ACD Line (Virtual Line) **Note 2, Note 3**
- PTYPE: 0 = Agent Position
1 = Supervisory Position
- SPLC: Split to belong **Note 4**
0 = All Split
1 = Specified Split
- SPL1: Split Group Number (1~900)
Valid for SPLC = 1

Note 2: *, # cannot be used for station (ACD Line, Non-ACD Line) number.

Note 3: Assign this parameter within two to six digits.

Note 4: When MIS system is used, normally assign "0".

STEP 5: ARSC- Assign the route restriction class data for non-ACD line.



STEP 6: ASFC- Assign the Service Feature Restriction Class data

- SFI95 (Direct Call Restriction)
ACD Line: SFI95 = 1 (Restricted)
Non-ACD Line: SFI95 = 0 (Allowed)
- SFI132 (Non-ACD line incoming call Restriction while ACD line is busy)
- SFI263 (Ring Volume in Headset Mode) **Note 5**
RES=0: Adjust the Ringer Tone Volume 20 dB lower than the actual volume setting
RES=1: Same as the actual volume setting

Note 5: For information on the conditions for use of this feature, see RING VOLUME IN HEADSET MODE [R-62] in Data Programming Manual - Business.

Note: Assign only SFI as mentioned in this manual. Do not assign any Business SFI (such as Call Forwarding Don't Answer, Call Forwarding All, Call Forwarding Busy, Call Pickup and so on) to an ACD Line.

STEP 7: ATNR-Assign the tenant restriction data for non-ACD calls

- When ACD tenant is different from Node tenant, set the Non-ACD Line to be allowed to connect to the business tenant.
- Agent position
 - STEP 1: Log off the agent position.
 - STEP 2: Delete the agent position data in ACDPSN.
 - STEP 3: Delete the function key data of the agent position in AKYD.
 - STEP 4: Delete the station data of the agent position in ASDT.
- Supervisory position
 - STEP 1: Log off both the agent position and the supervisory position.
 - STEP 2: Delete the Split data in ACDSPL.
 - STEP 3: Delete the supervisory position data in ACDPSN.
 - STEP 4: Delete the function key data of the supervisory position in AKYD.
 - STEP 5: Delete the station data of the supervisory position in ASDT.

2.5 ACD Agent ID Code Assignment

Each operator can log on to a split by using ACD Agent ID Code (hereinafter referred to as ID Code).

1. When ID Code is necessary

[Single logon]

STEP 1: ACDSPL - LOGID=1 (Required)

STEP 2: ACDSPN - Assign whether you specify the split or not.

SPLC: Split Assignment
 0 = Any Split
 1 = Specified Split

STEP 3: ACDLOG - Assign Logon ID and the related data of services activated individually by the programmed ID code.

LID: Logon ID (Max. 9 digits) **Note 1**
 NAME: Logon ID Name (up to 14 characters)
 LANG: Default language
 0 = English
 1 = Japanese
 2 = Spanish
 3 = Italian
 4 = French
 5 = German
 SPLIT: Available Split number (1-900) **Note 2, Note 3**
 PRIO: Priority for handling ACD calls in multiple splits/the agents preference level when AGT-Q=1 in ACDSPL (1-99)
 MULTS: 0=Single split
 PARN: Dial number of individual Assistance call (Two to six digits) **Note 4**
 PERN: Dial number of individual Emergency call (Two to six digits) **Note 4**
 PPN: Pilot number for an individual call (Two to six digits) **Note 4**
 MXQD: Maximum Queue Depth for an incoming call routed to the agent (0-999) **Note 4**
 GOCF NO: CCV No. to be routed when the individual call encounters busy status (1-2000) **Note 2.**
 GOCF STP: CCV step number to be forwarded when the individual call encounters busy status (1-20)
 OVFT: Overflow Timeout (0-9999 sec.)
 GOCO NO: CCV number to be routed when the time limit (OVFT) is over (1-2000) **Note 2.**
 GOCO STP: CCV step number to be routed when the time limit (OVFT) is over (1-20)
 PCWCM: 0=Call waiting chime is not available
 1=Call waiting chime is rung only once (at the first time)
 2=Call waiting chime is rung every time
 NAMES: Abbreviation of Logon ID Name (max. 5 characters)

[Multiple logon/Selective logon]

STEP 1: ACDSPL - LOGID=1 (Required)

STEP 2: ACDSPN - Assign whether you specify the split or not.

SPLC: Split Assignment
0 = Any Split

STEP 3: ACDLOG - Assign Logon ID and the related data of services activated individually by the programmed ID code.

LID: Logon ID (Max. 9 digits) **Note 1**

NAME: Logon ID Name (up to 14 characters)

LANG: Default language

0 = English

1 = Japanese

2 = Spanish

3 = Italian

4 = French

5 = German

SPLIT: Available Split number (1-900) **Note 2**

PRIO: Priority for handling ACD calls in multiple splits/the agents preference level when AGT-Q=1 in ACDSPL (1-99)

MULTS: 0/1=Single split/Multi split **Note 3**

PARN: Dial number of individual Assistance call (Two to six digits)

PERN: Dial number of individual Emergency call (Two to six digits)

PPN: Pilot number for an individual call (Two to six digits)

MXQD: Maximum Queue Depth for an incoming call routed to the agent (0-999) **Note 4**

GOCF NO: CCV No. to be routed when the individual call encounters busy status (1-2000)

GOCF STP: CCV step number to be forwarded when the individual call encounters busy status (1-20)

OVFT: Overflow Timeout (0-9999 sec.)

GOCO NO: CCV number to be routed when the time limit (OVFT) is over (1-2000)

GOCO STP: CCV step number to be routed when the time limit (OVFT) is over (1-20)

PCWCM: 0=Call waiting chime is not available

1=Call waiting chime is rung only once (at the first time)

2=Call waiting chime is rung every time

NAMES: Abbreviation of Logon ID Name (max. 5 characters)

Note 1: Numeric numbers (0-9) is available. "*" or "#" cannot be used. "0" cannot be used as the first number.

Note 2: Enter the space for all splits available.

Note 3: Assign "0" for selective logon or "1" for multiple logon.

Note 4: Available for 0-9999 when additional method is used.

2. When ID Code is not necessary

STEP 1: ACDSPL - LOGID=0 (ID is not used)

STEP 2: ACDSPN - SPLC=1 (Specified Split)
SPL1:Split Number

2.6 ACD Incoming Route Assignment

STEP 1: ARTD- Route data for the ACD incoming route.
CDN51 (ACD) = 0, do not assign “1”.

Note: When changing the route class data, the circuit card must be initialized.

Note: To change the data for existing route (RT), initialize or reboot the trunk device such as circuit card, MG, or VS32.

STEP 2: ATRK- Assign the ACD incoming trunk.

STEP 3: ACDTG-Assign the ACD Trunk Group data.

TN: ACD tenant (1-9)
ACDRT: ACD route No. (1-898) **Note 1**
NAME: ACD trunk group name (up to 20 characters) **Note 2**
QPRTY: Queue Priority (1-250)
TRK: Trunk No. (1-255) **Note 1**

Note 1: Assign the same RT No. and Trunk No. in these parameters as in the Telephony Server side.

Note 2: ACD position shows ACD Name corresponding to the route when you assign the name on this command. In this case, the name data assignment on ACDPLT command can be skipped.
If you need the indication of name corresponding to the monitor number, assign the name on ACDPLT command.
(A system uses the name information which is determined on either ACDTG or ACDPLT.)

STEP 4: MBTK/MBRT- Cancel the make busy status.

2.7 Call Control Vectors (CCV) Assignment

CCV stands for “Call Control Vectors” which specifies ACD call processing pattern (Index 1 to 2000). And each CCV provides 20 steps. The system handles ACD calls in accordance with the condition specified in CCV table.

When a system provides the MIS, Tenant (TN) No., Split No. and CCV Index No. are related as listed below.

TN	Split No.	Day CCV No.	Night CCV No.
1	1	1	2
1	2	3	4
1	3	5	6
⋮	⋮	⋮	⋮
1	N	2N-1	2N
2	1	2(N+1)-1	2(N+1)
2	2	2(N+2)-1	2(N+2)
2	3	2(N+3)-1	2(N+3)
⋮	⋮	⋮	⋮
2	M	2(N+M)-1	2(N+M)
3	1	2(N+M+1)-1	2(N+M+1)
3	2	2(N+M+2)-1	2(N+M+2)
⋮	⋮	⋮	⋮

Note: N, M stands for the max. number of the agent split of ACDTN data.

Note: When Day/Night changing over is performed according to the week schedule table (ACD-PLT CCV/W=1: Week schedule), it is impossible for MIS to change over Day/Night.

Note: When one split uses multiple CCVs on a day, the system configuration, such as ACD call processing, of CCV allocated as above can be changed by MIS. However, when week schedule is used (ACDPLT CCV/W = 1), the ACD System configuration (ACD Pilot No. data) can not be changed by MIS.

ACDCCV-

TN:	Tenant number (1-9)
CCVNO:	CCV index number (1-2000)
CCV STP:	CCV step number (1-20)
CCVACT:	CCV Step Control Data
CCVACT DATA:	Details of CCV Control Data
GOCCV:	CCV index number (1-2000 for CCVACT=3) (0-2000 for CCVACT=12)
GOSTP:	CCV step number (1-20 for CCVACT=3) (0-20 for CCVACT=12)
TRFDC:	Dialed number for transferred destination Note 2
IVRDN:	IVR Access number assigned as the pilot number in ASHU/ASHUN (max. 6 digits)
Split:	Split Number* used for CCVACT=21-26, 29, and 30 For CCVACT=21 and 22: 1-900 For CCVACT=23-26: 1-900 For CCVACT=29 and 30: 1-900 Note 1
ETA:	ETA threshold value in a specified split (1-9999)* used for CCVACT=21, 22
COMP:	Comparable Threshold Value for a specified split * used for CCVACT=23-26 For CCCVACT=23 (0-100) Note 3 For CCVACT=24 and 25 (1-100) Note 3 For CCVACT=26 (0-500%) (at intervals of 10%)
COND:	Condition for the Combination with the previous step (0/1=AND/OR) * used for CCVACT=23-26
BRAC:	Bracket (0/1=Not used/Used) * used for CCVACT=23-26
EWTA:	EWTA threshold value in a specified split (1-9999) used for CCVACT=29 or 30 Note 4

Note 1: If ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), assign Split in the range of 1 to 127.

Note 2: When transferring the trunk call, which is unavailable for Abandoned Call Search [A-31], to the trunk outside, Trunk Ineffective Hold may occur.

Note 3: For the values 20 or smaller: Any number from 0/1 to 20 (0/1, 2-20)
For the values 22 or larger: at intervals of 2 (22, 24-100)

Note 4: If ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), assign EWTA in the range of 1 to 511.

Example:
CCV NO=1

CCV STP	CCVACT	CCVACT DATA	GOCCVSTP	Call Control Operation
1	10 (Queue Assign)	10		Queued to the split No. 10
2	1 (Pause) (a)	15		15 seconds takes before announcement connection
3	2 (Announcement)	1		Announcement No. 1 is provided
4	1 (Pause) (b)	5		5 seconds takes before Conditional Queue Assign
5	8 (Conditional Queue Assign)	2		The call is overflowed to split No. 2 and queued to the split No. 2 also
6	12 (Jump CCV when the queue is busy)	-	8	Since the queuing is not available jump to Step No. 8
7	11 (End CCV)			(skip)
8	1 (Pause) (c)	30		30 seconds takes before announcement connection
9	2 (Announcement)	3		Announcement No. 3 is provided
10	1 (Pause) (d)	20		20 seconds takes before the next step
11	4 (Hang up)			The call is forced to release
12	11 (End CCV)			

Note: Whole time for PAUSE in a CCV should be programmed not to exceed 999 seconds. In this case, you should program (a) + (b) + (c) + (d) \leq 999 (sec.).

CCV NO=2

CCV STP	CCVACT	CCVACT DATA	GOCCVSTP	Call Control Operation
1	2 (Announcement)	5		Announcement No. 5 is provided
2	1 (Pause)	10		10 seconds takes before the next step
3	5 (Transfer)	1	1:5678	Transferred to the station 5678 that is assigned at the 1st number at "DRFDC"
4	11 (End CCV)			

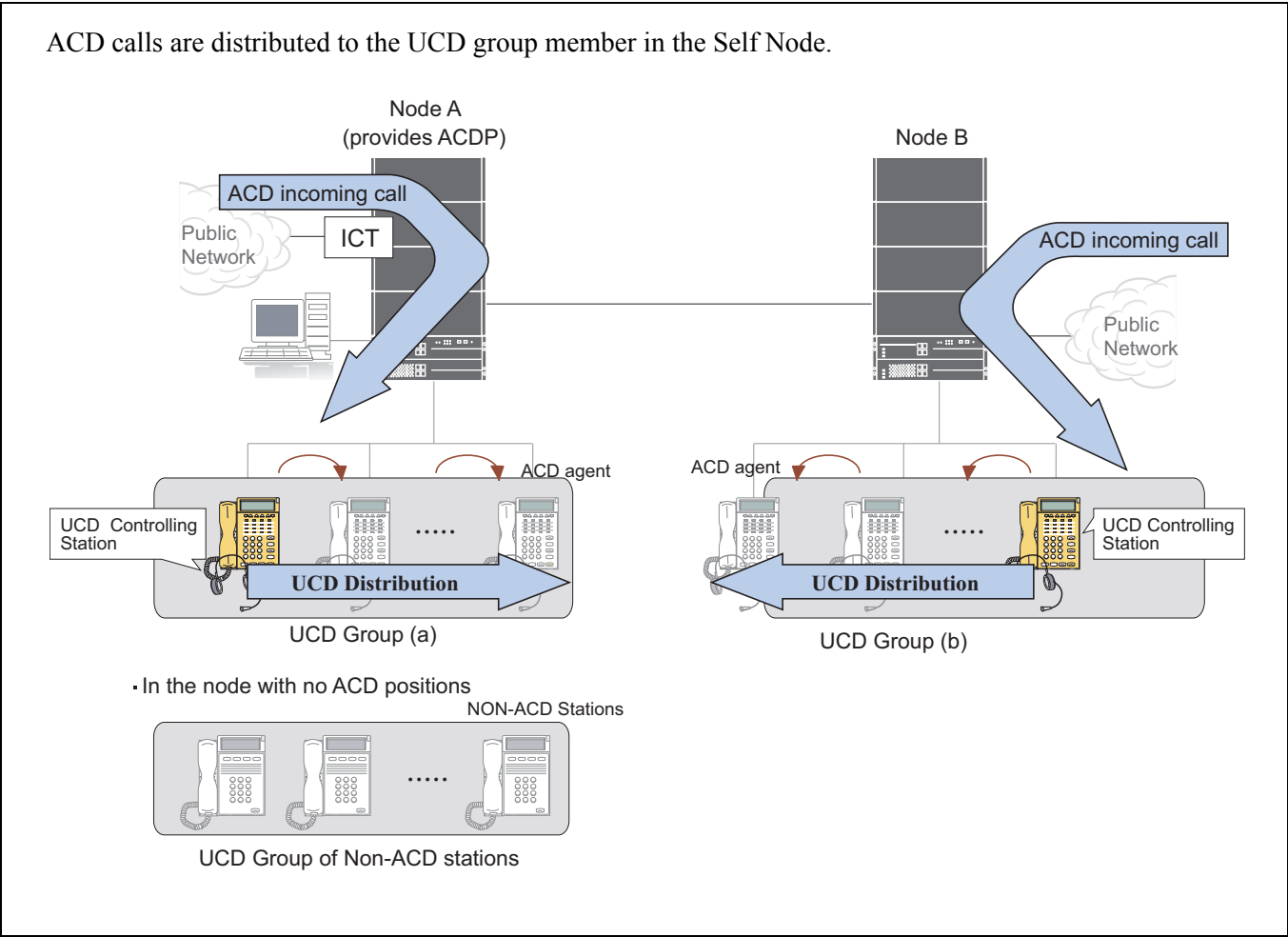
<Back-up UCD for FCCS service>

Design of UCD station

Assign the ACD positions in the Self Node as UCD controlling station at each node. By this programming, ACD incoming calls terminated to the trunk in the Self Node can be distributed to the UCD group member in the Self Node even when link down or the remote system down is occurred.

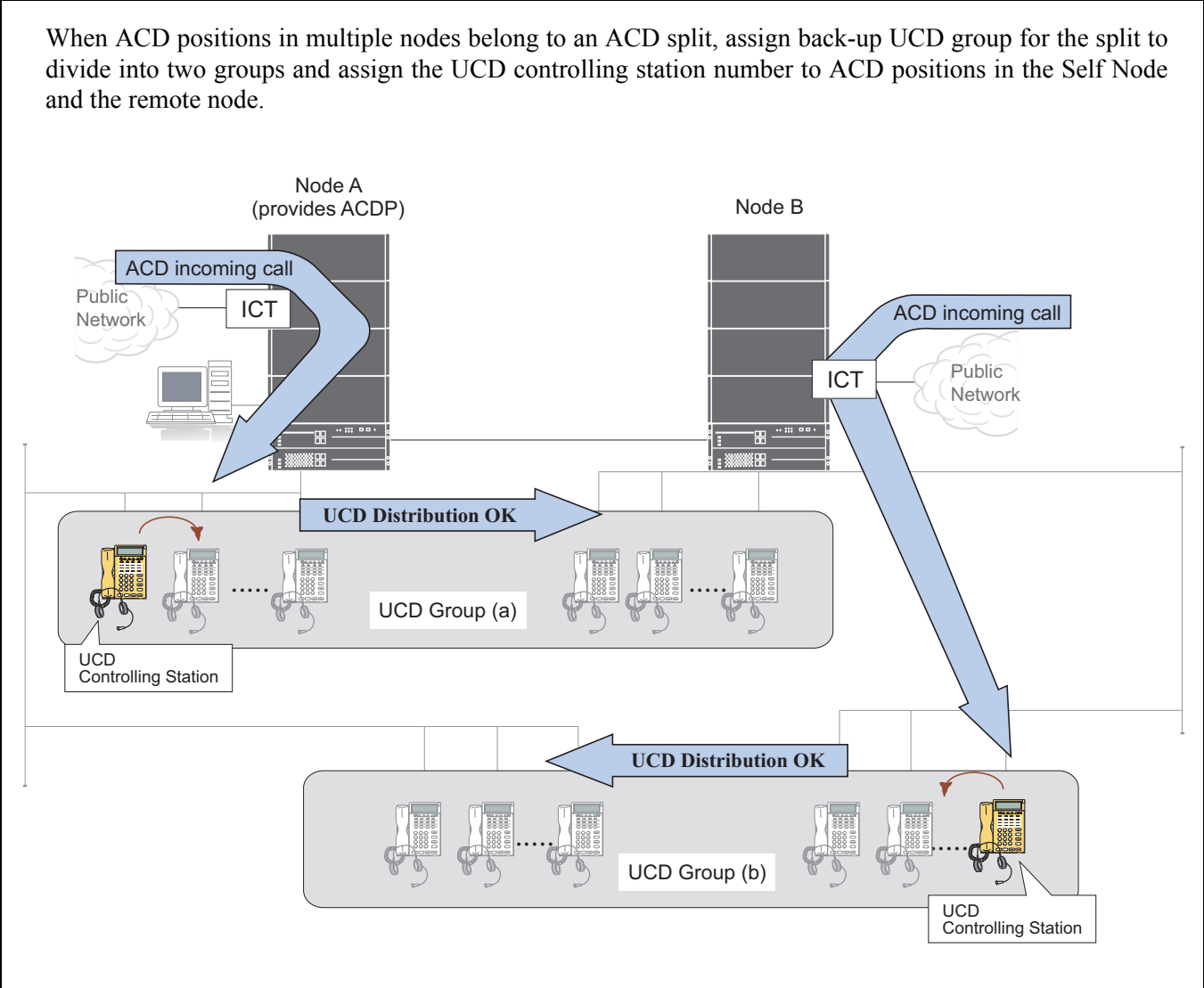
When there is no ACD positions in the node, the back-up UCD group may be organized by the non-ACD position.

- Pattern 1 when a back-up UCD group is formed by ACD positions in a node.



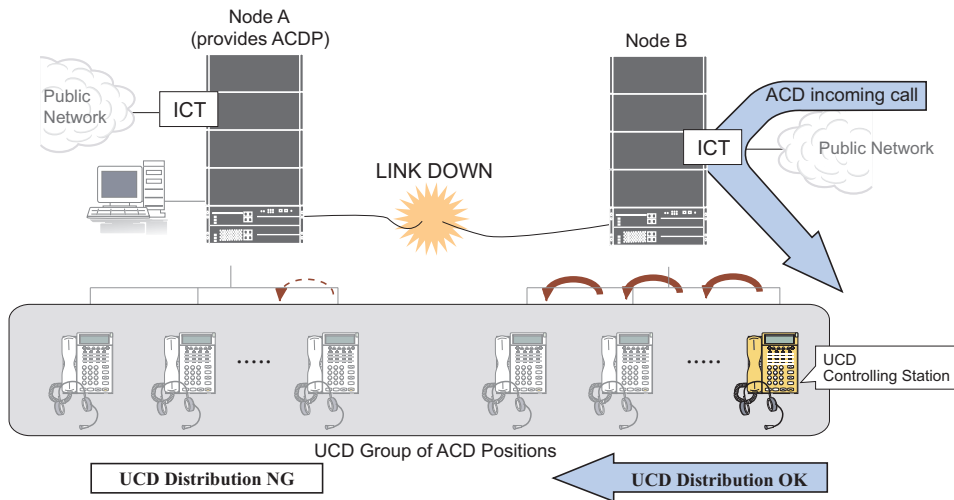
- Pattern 2 when a back-up UCD group is formed by ACD positions in multiple nodes.

When ACD positions in multiple nodes belong to an ACD split, assign back-up UCD group for the split to divide into two groups and assign the UCD controlling station number to ACD positions in the Self Node and the remote node.

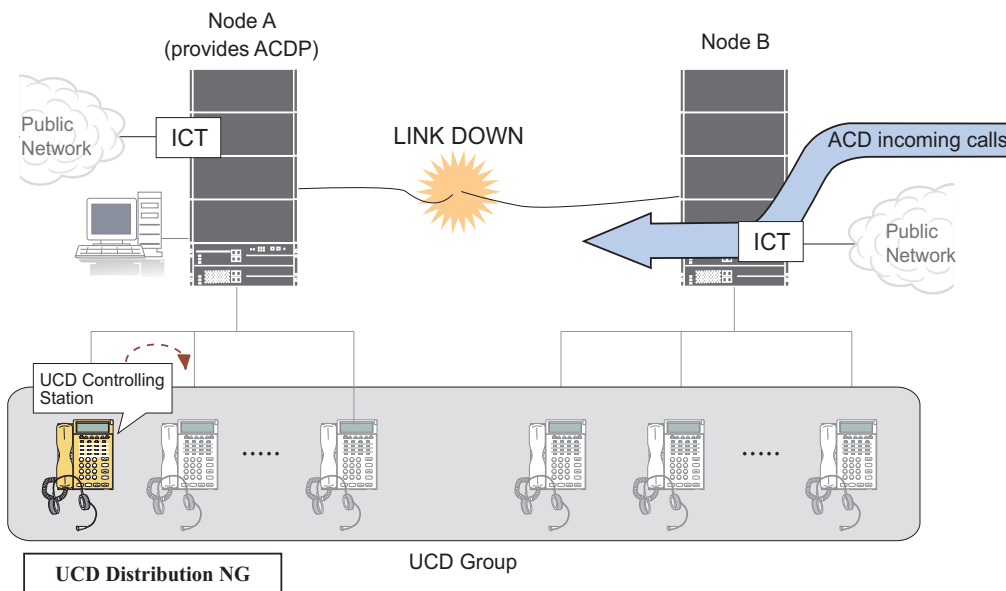


When a UCD group is organized by ACD positions in multiple nodes, ACD incoming calls can not be distributed to ACD positions in the node where UCD controlling station is not accommodated when the link to be connected the nodes is down.

ACD incoming calls terminated at the trunk in Node B are distributed to UCD group members in Node B. **Note 5**



ACD incoming calls are not distributed to any position and the caller hears the reorder tone.



Note 5: Even though the FCCS link (first selected route) has a down as shown in the figure, the ACD incoming call (to Node B) can be distributed to UCD group members of Node A, if alternate route is available. However, this is made effective only when Back-up UCD group is provided between Node A and B (without using Back-up UCD, the ACDP in Node A cannot control the incoming ACD call to Node B, in this case).

STEP 1: ASHU (Station Hunting - UCD)/ASHUN (for FCCS network)
Assign UCD group data

Note: ASHU command data and ASHUN command data can not be used in a system.

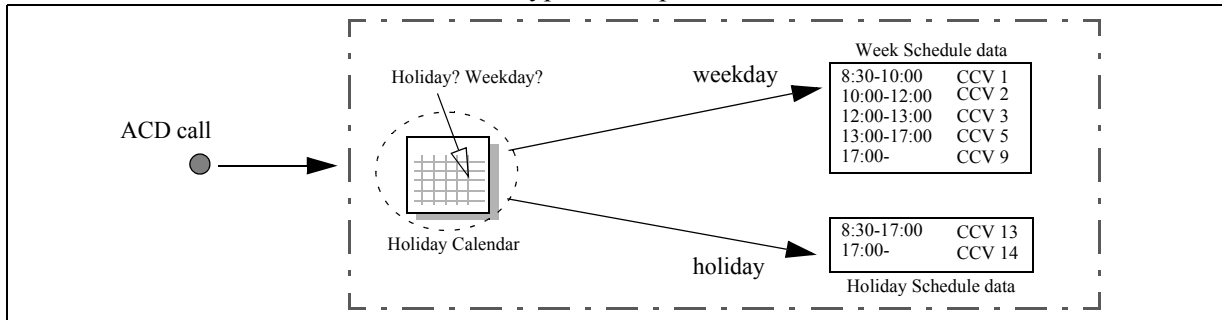
STEP 2: AMNO (Monitor Number)/AMNON (for FCCS network)

- Check the checkbox of UCD.
- Assign the control station number (max. 5 digits) of the back-up UCD per Monitor number.

Note: The number of digits for each Monitor Number must be the same.

2.8 ACD Schedule Data Assignment

An ACD incoming call can be processed by using either Week Schedule data or Holiday Schedule data. Holiday or Weekday can be specified by referring to Holiday Calendar data. Holiday Schedule data can be created on a tenant basis, ACD Pilot Number basis or the type of reception services.



2.8.1 ACD Scheduling on a Tenant Number basis

STEP 1: ACDPLT - Assign the schedule number (1-900) to "WEEKNO" for each pilot number.

STEP 2: ACDWS - Assign the week schedule data.

TN: Tenant number (1-9)
 SCH: Week day Schedule number (1-900) **Note 1**
 WEEK: Day of week
 MON = Monday
 TUE = Tuesday
 WED = Wednesday
 THU = Thursday
 FRI = Friday
 SAT = Saturday
 SUN = Sunday
 HOUR, MINUTE: CCV start time **Note 2**
 CCVNO: CCV no. (1-2000)
 CCVSTP: CCV step no. (1-20)

Note: When assigning schedules, write the data after sorting.

Note 1: The same Week day Schedule number (SCH) cannot be set to a different Tenant number (TN).

Note 2: Monday's table starts from "00:02". The others start from "00:00".

STEP 3: ACDHS - Assign the holiday schedule data.

TN: Tenant number (1-9)
 SCH: Holiday Schedule Number (1-3)
 HOUR, MINUTE: CCV start time
 CCVNO: CCV number (1-2000)
 CCVSTP: Start CCV step number (1-20)

STEP 4: ACDHC - Assign the holiday schedule data to the month in which the schedule data is used.

TN: Tenant number (1-9)
 MONTH: Month that uses the schedule data (1-12)
 DAY: Date (1-31)

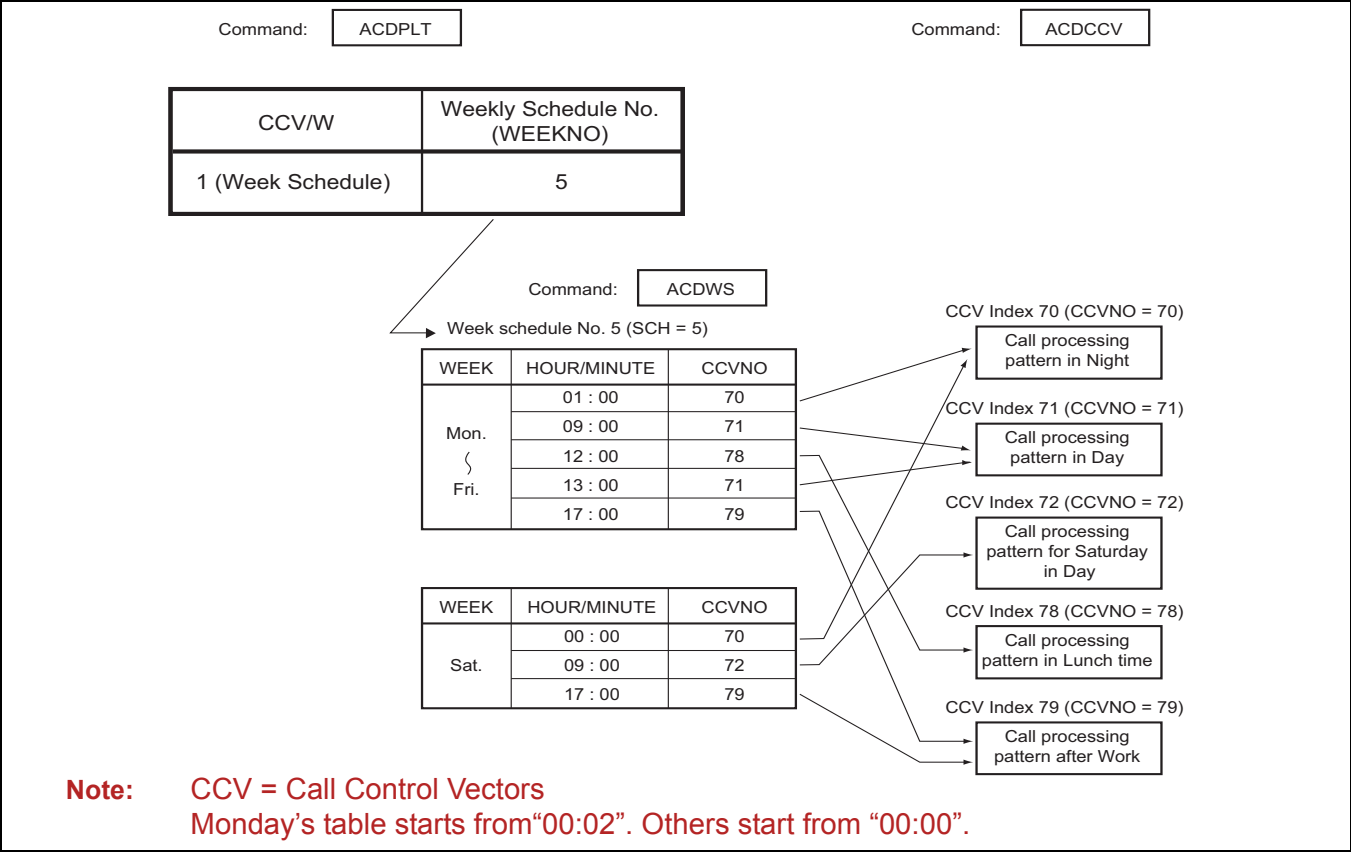
SCH: Schedule Pattern Number (0-3) **Note 3**

Note 3: Note the following point.

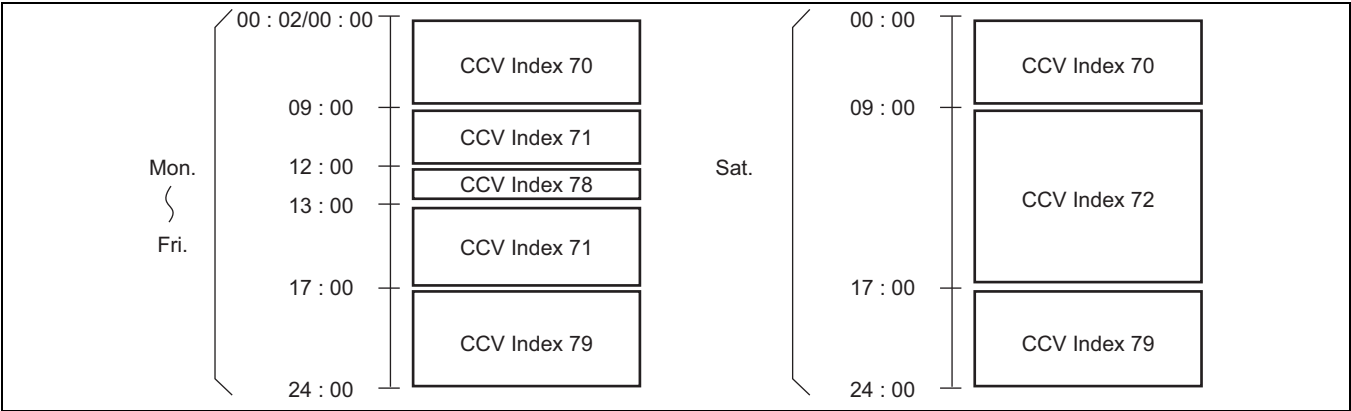
- The value to be assigned to SCH (Schedule Pattern Number) corresponds to SCH (Holiday Schedule Number) assigned with the ACDHS command.
- When “0” is assigned to SCH (Schedule Pattern Number), Week Schedule will be enabled.

Example:

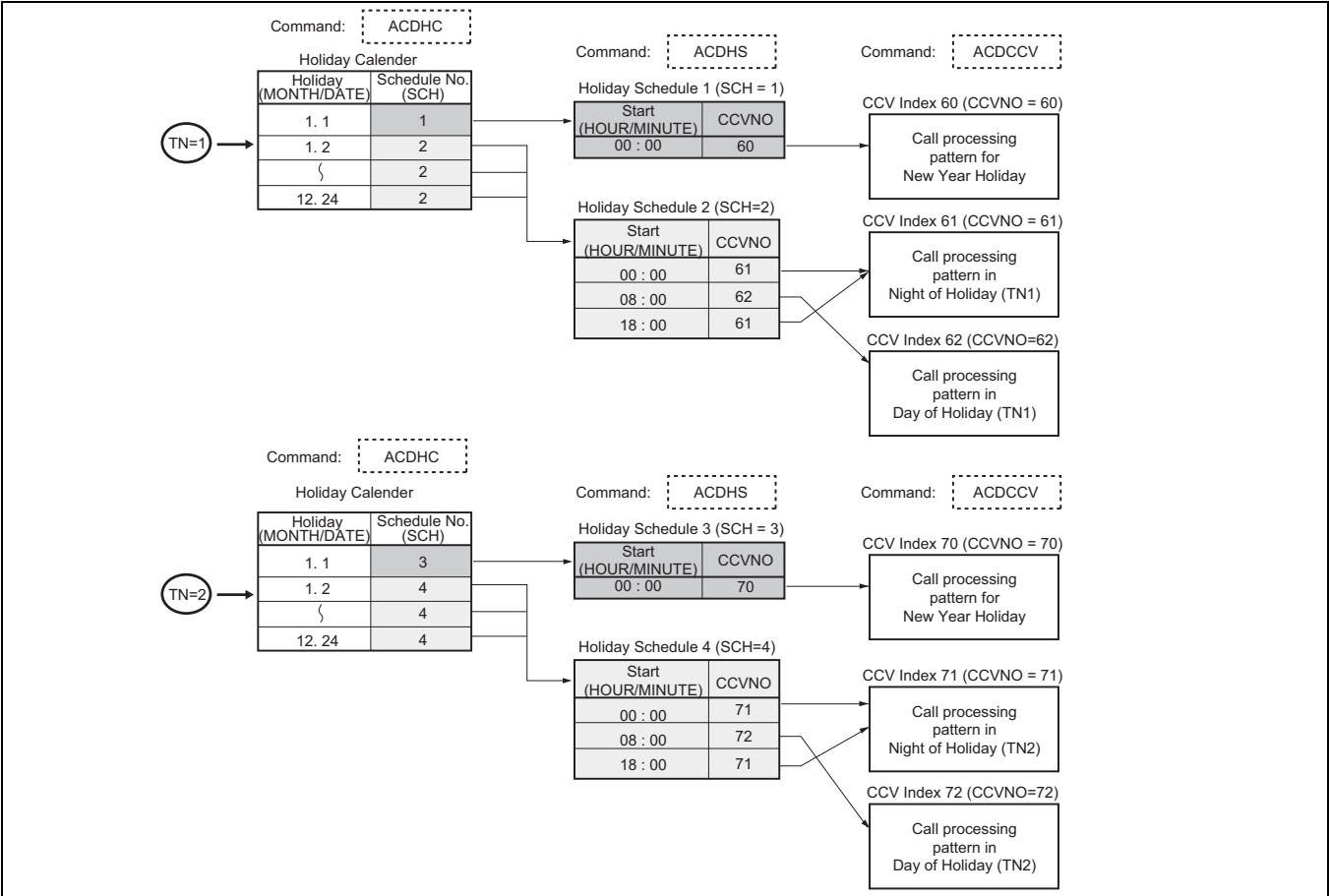
- Week Schedule
Week schedule is specified by the following combination.



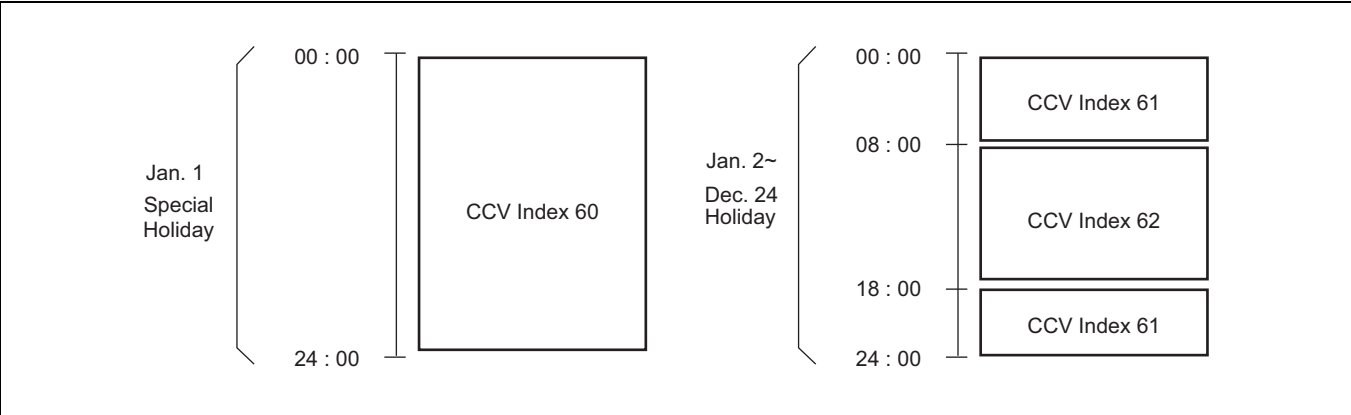
Time tables for ACD call processing patterns can be programmed per a day of week.



- Holiday Schedule (on Tenant basis)
 Holiday Schedule is specified by the following combination.



When an ACD call terminates to a system, the system handles the ACD incoming call in accordance with the call processing pattern. For example, the ACD call is routed to the predetermined holiday announcement in the specific time.



2.8.2 ACD Scheduling for the type of reception services

This scheduling allows the user to assign holiday calendar and holiday schedule for the type of reception services. Up to 255 different holiday schedules can be programmed for handling incoming calls.

STEP 1: ASYDL - Assign the following system data for Holiday Schedule:
SYS 1, Index 869, Bit 1=0 (Holiday Schedule on Pilot Number basis is out of service).

STEP 2: ASYDL - Assign the following system data for Holiday Schedule:
SYS 1, Index 873, Bit 6=1 (Holiday Schedule for the type of reception services is in service).

STEP 3: ACDWS -Assign the week schedule data.

TN:	Tenant number (1-9)
SCH:	Week day Schedule number (1-900) Note 1
WEEK:	Day of week
	MON = Monday
	TUE = Tuesday
	WED = Wednesday
	THU = Thursday
	FRI = Friday
	SAT = Saturday
	SUN = Sunday
HOUR, MINUTE:	CCV start time Note 2
CCVNO:	CCV no. (1-2000)
CCVSTP:	CCV step no. (1-20)

Note: When assigning schedules, write the data after sorting.

Note 1: The same Week day Schedule number (SCH) cannot be set to a different Tenant number (TN).

Note 2: Monday's table starts from "00:02". Others start from "00:00".

STEP 4: ACDHCE - Assign the calendar data for the type of reception services.

WEEKNO:	Schedule Number (1-400)
MONTH:	Month that uses the schedule data (1-12)
DAY:	Date (1-31)
SCH:	Schedule Number for the holiday (0-255) Note 3, Note 4

Note 3: Schedule Number for the holiday is related to Schedule Number for the holiday assigned by ACDHSE.

Note 4: When assigning SCH = "0", ACDWS becomes effective. This means that WEEK of ACDWS related to WEEKNO assigned by ACDPLT will be used.

STEP 5: ACDHSE - Assign the schedule data for the type of reception services.

SCH:	Schedule Number for the holiday (1-255) Note 5
HOUR, MINUTE:	CCV start time

CCVNO: CCV number (1-2000)
 CCVSTP: Start CCV step number (1-20)

Note 5: Schedule Number for the holiday is related to Schedule Number for the holiday assigned by ACDHCE.

STEP 6: ACDPLT - Assign the schedule number (1-900) to “WEEKNO” for each ACD Pilot Number.

M_NO: Pilot Number (Monitor Number) (2 to 6 digits) **Note 7, Note 9**
 Numbers 0 to 9 may be used. **Note 8**
 * or # may not be used. 1st DC= “0” may not be used either.
 CCV/W: 1 = Week Schedule
 WEEKNO: Schedule Number (1-900) **Note 6**

Example:

M_NO: 2000	M_NO: 2100
CCV/W: 1	CCV/W: 1
WEEKNO: 1	WEEKNO: 100

Note 6: Schedule Number is related to SCH assigned by ACDWS and is related to WEEKNO assigned by ADDHC.

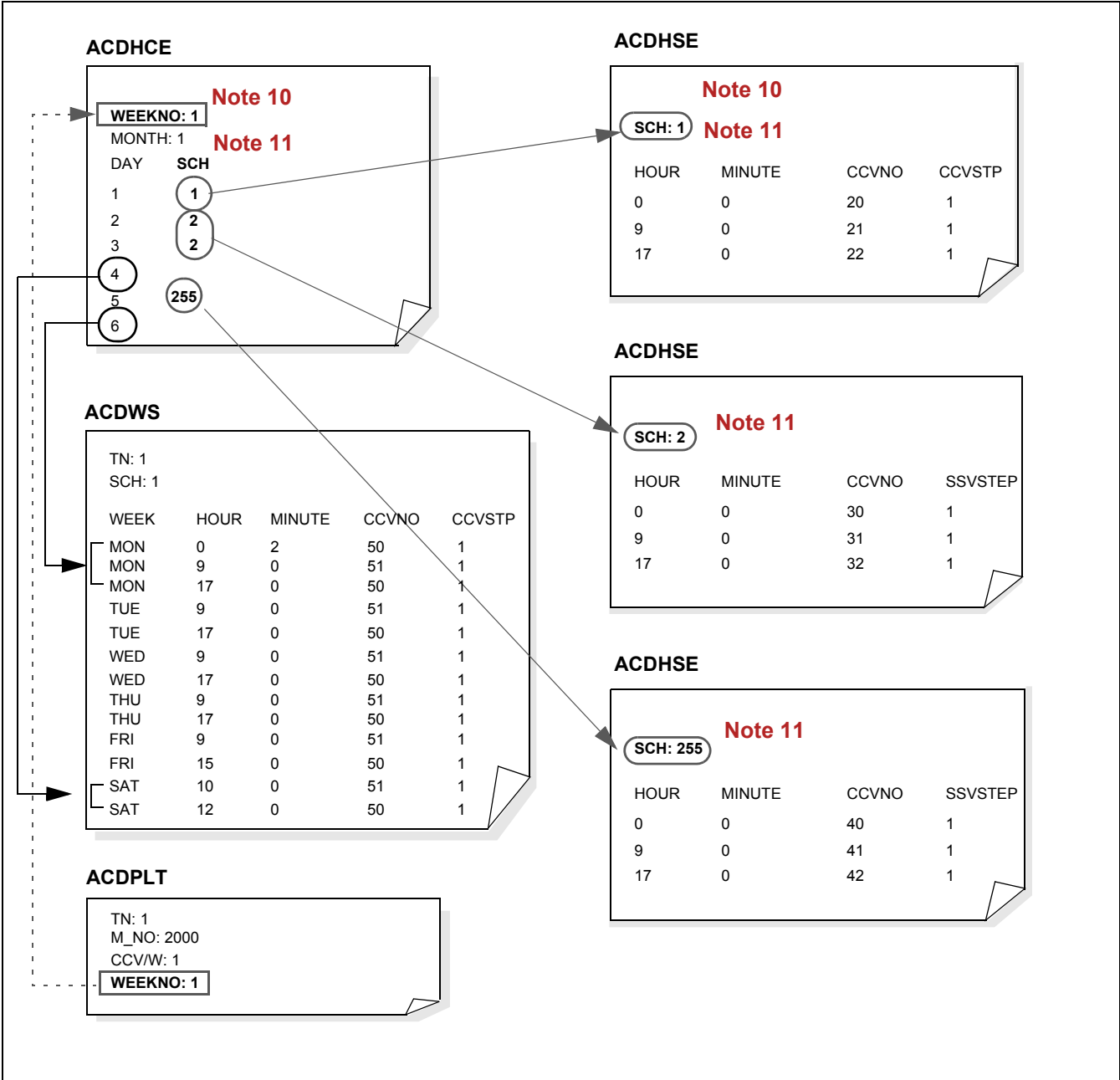
Note 7: The monitor number is the same as the pilot number assigned in ACDPLT and must match the numbering plan of the System.

Note 8: ACD System does not function when a one-digit number is assigned.

Note 9: The number of digits for each Pilot Number must be the same.

When assigning the data, consideration should be given to the whole schedule. The following examples show the relationship between each command.

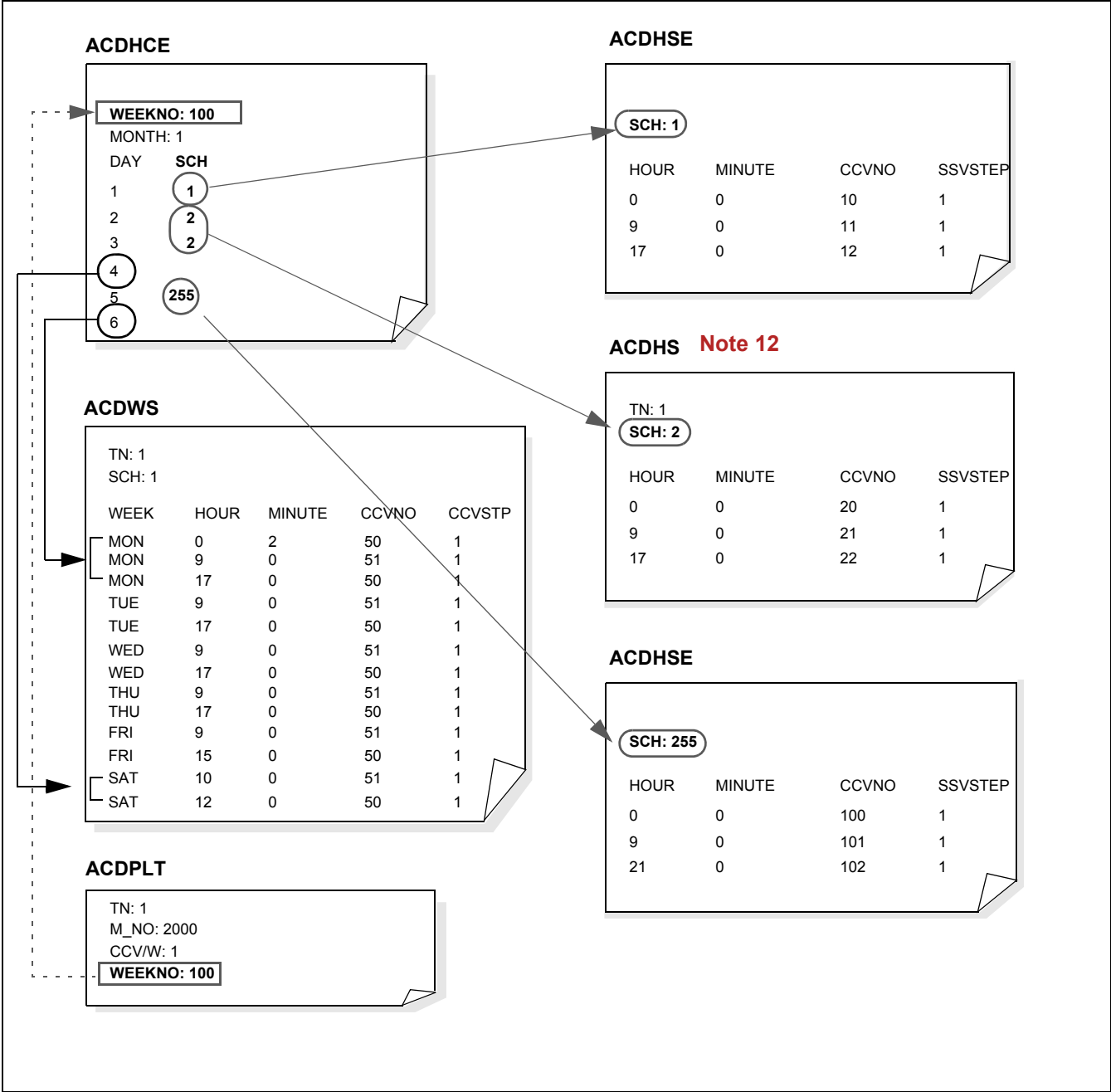
Sample Data Assignment 1



Note 10: WEEKNO (up to 400) used for ACDHCE corresponds to WEEKNO (up to 900) that is assigned by ACDPLT.

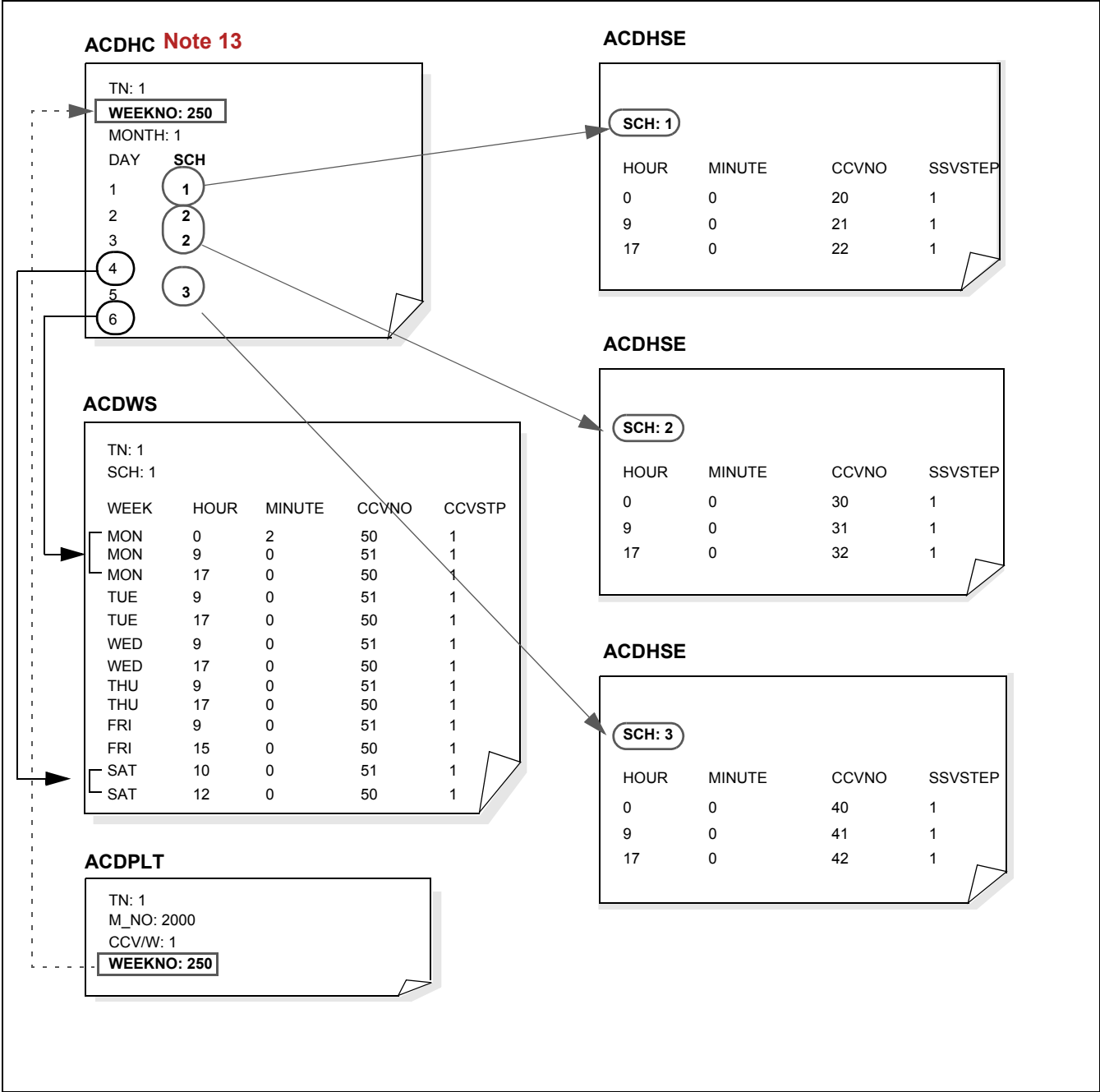
Note 11: SCH used for ACDHCE corresponds to that of ACDHSE. SCH of ACDHCE ranges from 0 to 255.

Sample Data Assignment 2



Note 12: If there is no data corresponding to ACDHSE data, the data of ACDHS will become effective.

Sample Data Assignment 3



Note 13: When there is no data corresponding to ACDHCE, the data of ACDHC will become effective. SCH that is assigned by ACDHC corresponds to that of ACDHSE. If there is no ACDHSE data, ACDHS data will become effective.

1. When this feature has been set, the priority of holiday schedule is as follows:
Holiday Schedule for type of reception services > Holiday Schedule (TN basis) > Weekly Schedule
2. If there is no calendar data for the type of reception services (ACDHCE) that corresponds Schedule Number (WEEKNO: up to 900) assigned by ACDPLT, the existing holiday calendar data (ACDHC) becomes effective. If there is no schedule data for the type of reception services (ACDHSE) that corresponds holiday schedule pattern number (SCH) assigned by holiday calendar data for the type of reception services (ACDHCE), the existing holiday schedule data (ACDHS) becomes effective. See the sample data assignment.
3. This feature can be used with ACD Scheduling on a Tenant Number basis.
4. The following is the enhancement procedure from ACD Scheduling on a Pilot Number basis to this feature.

Note: After enhancing this feature, ACD Scheduling on a Pilot Number basis is not available and ACDHCE/ ACDHSE command cannot be used.

<ENHANCEMENT PROCEDURE>

- STEP 1: Back up the ACD data memory (including ACD Scheduling on a Pilot Number basis) onto the Flash Card by using the MEM_HDD command.
- STEP 2: Merge the Standard Service Software and Office data.
- STEP 3: ASYDL - Assign the following system data for using Holiday Schedule:
SYS 1, Index 869, Bit 1=0 (Holiday Schedule on Pilot Number basis is out of service).
- STEP 4: ASYDL - Assign the following system data for using Holiday Schedule:
SYS 1, Index 873, Bit 6=1 (Schedule for the type of reception services is in service).
- STEP 5: Remove the holiday schedules by using ACDHCE or ACDHSE command.

Holiday schedule: Holiday Calendar information on a Pilot Number basis
Holiday schedules on a Pilot Number basis

STEP 6: ACDHCE - Assign the calendar data for the type of reception services.
WEEKNO: Schedule Number (1-400)
MONTH: Month that uses the schedule data (1-12)
DAY: Date (1-31)
SCH: Schedule Number for the holiday (0-255) **Note 14, Note 15**

STEP 7: ACDHSE - Assign the schedule data for the type of reception services.
SCH: Schedule Number for the holiday (1-255) **Note 16**
HOUR, MINUTE: CCV start time
CCVNO: CCV number (1-2000)
CCVSTP: Start CCV step number (1-20)

Note 14: Schedule Number for the holiday is related to Schedule Number for the holiday assigned by ACDHSE.

Note 15: When assigning SCH = "0", ACDWS becomes effective. This means that WEEK of ACDWS related to WEEKNO assigned by ACDPLT will be used.

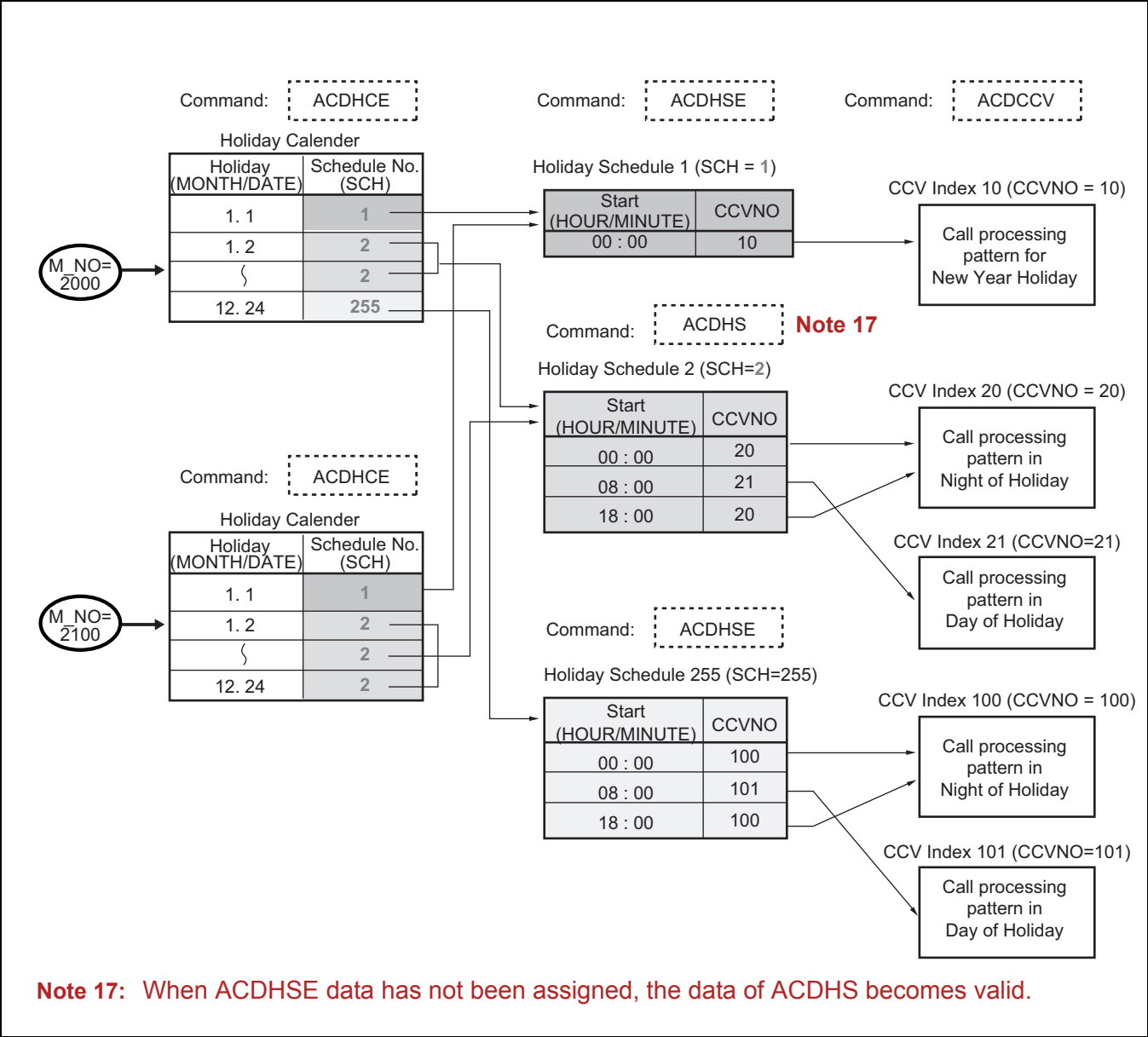
Note 16: Schedule Number for the holiday is related to Schedule Number for the holiday assigned by ACDHCE.

Example:

- Schedule for the type of reception services
Schedule is specified by the following combination.

Note: Note the following point.

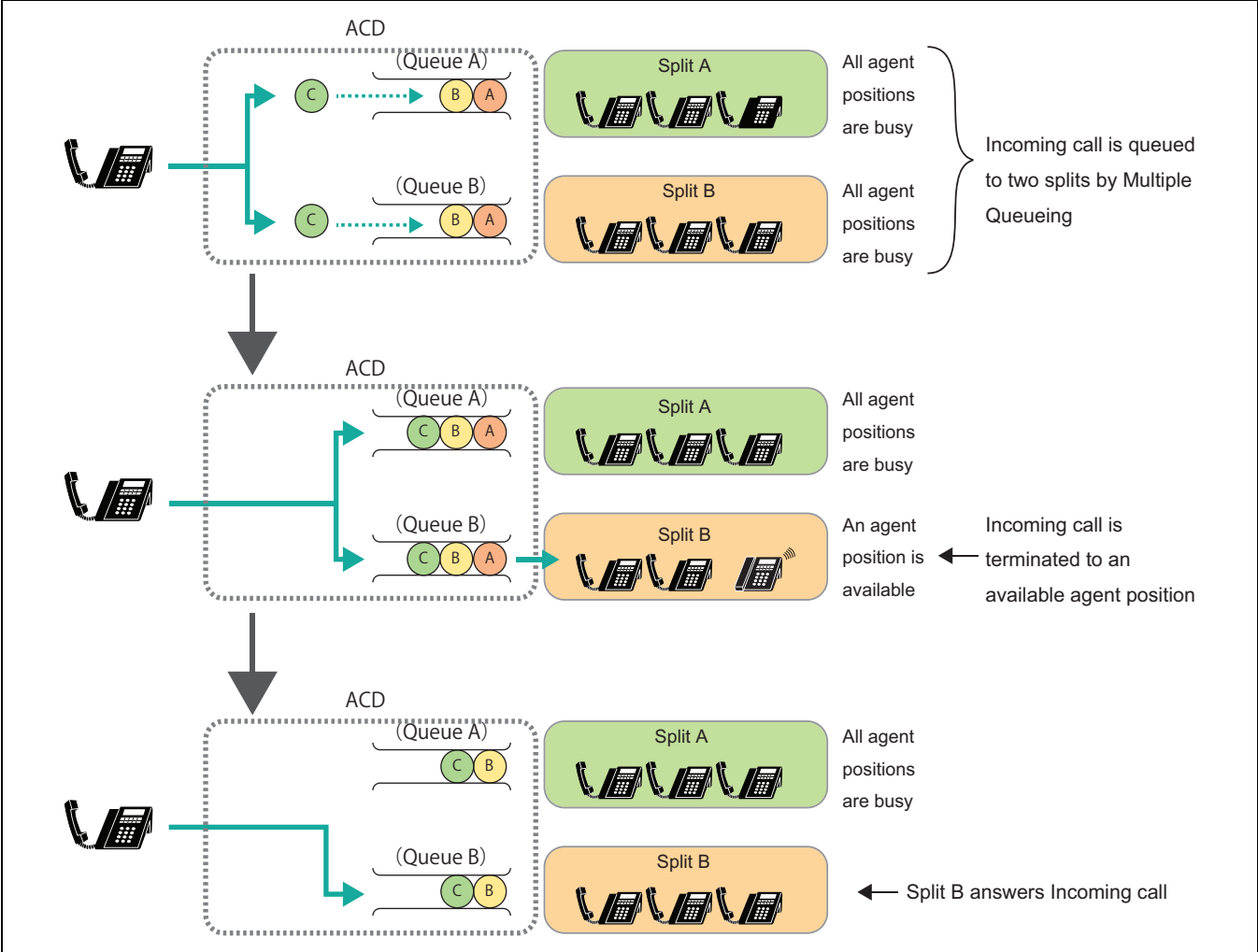
- The ACDHCE/ACDHC command data will be disabled when no date (MONTH and DAY parameters) is specified or "SCH=0" is assigned.
- The ACDHSE/ACDHS command data will be disabled when no data is assigned to the SCH parameter.



2.9 Multiple Queueing

General Description

This feature allows an ACD incoming call to queue to multiple splits. A call center where multiple splits covers the same work can efficiently distribute the calls by this feature.



Operating Procedure

None.

Service Conditions

To choose Maximum Number of ACD Multiple Queueing (4 times/10 times), assign system data (ASYDL/ASYDN, SYS1, Index 1192, Bit 4).

Note: Maximum Number of ACD Multiple Queueing is only 4 times when ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1). If you set 10 times for the maximum number of ACD Multiple Queueing when ACDP retrofit is enabled, the setting will be invalid so the maximum number is set 4 times actually.

Programming

Settings for Multiple Queueing and Call Control after Multiple Queueing can be assigned by ACDCCV. Refer to “2.7 Call Control Vectors (CCV) Assignment” in this chapter and “ACDCCV: Assignment of ACD CCV Data” in Chapter 6 in this manual.

STEP 1: ASYDL/ASYDN **Note 1**

SYS1

Index 1192, Bit 4: Maximum Number of ACD Multiple Queueing (0/1 = 4 times/10 times)

Note: Initialize Internal ACDP on a standalone basis with the ACDIZ command after the above system data is changed.

Note 1: For an FCCS network, follow the directions below:

- Use the ASYDN command to set up this system data for the ACD Trunk for FCCS configuration where AGENT ANYWHERE - ACD [A-133A] is enabled.
- Use the ASYDL command to set up this system data for the Multiple ACDPs configuration where the Multiple Agent Anywhere feature is enabled. Perform this setup for each network.
- Perform Internal ACDP Initialization (with the ACDIZ command) on an ACDP node basis.

STEP 2: ACDCCV - Assignment of ACD CCV Data

Assign the split number of Multiple Queueing to CCV. Refer to “2.7 Call Control Vectors (CCV) Assignment” in this chapter and “ACDCCV: Assignment of ACD CCV Data” in Chapter 6 in this manual.

2.9.1 Multiple Logon and Multiple Queueing Association

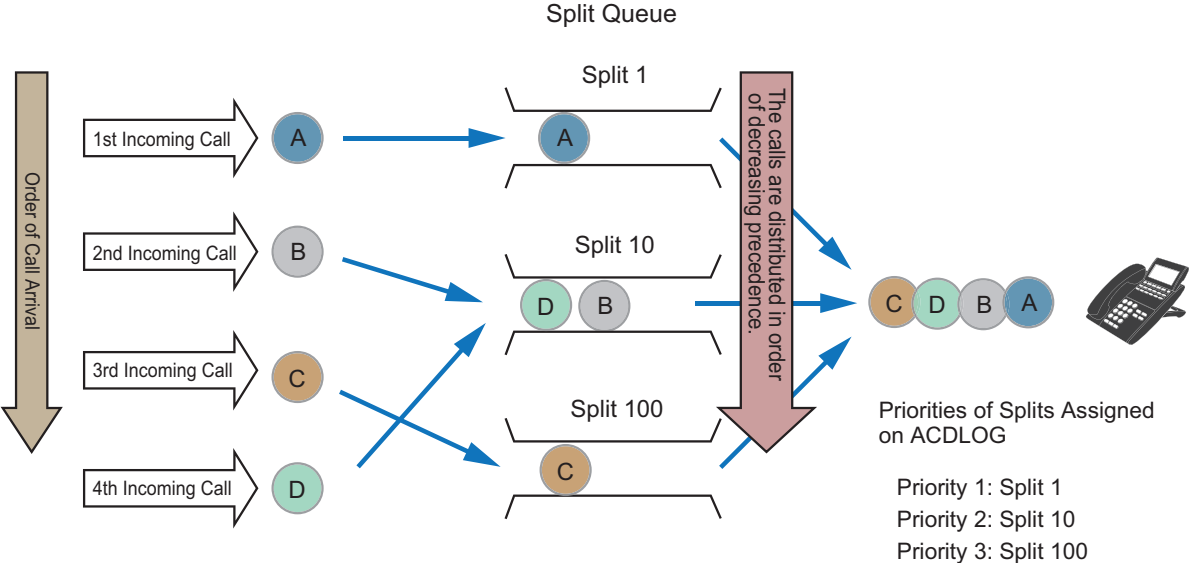
Multiple Logon (or [M-90A] MULTI-SPLIT AGENT - ACD) and Multiple Queueing are closely associated. The following explains about the association between these two services.

When multiple splits have waiting calls, those calls are distributed in accordance with the following priority order.

- The call is distributed first from the split whose priority order is set to be high with the ACDLOG command.
- When multiple splits have the same priority, the longest waiting call is distributed first.

<Example 1>
Assurance between ACD Call Queueing and Multiple Logon

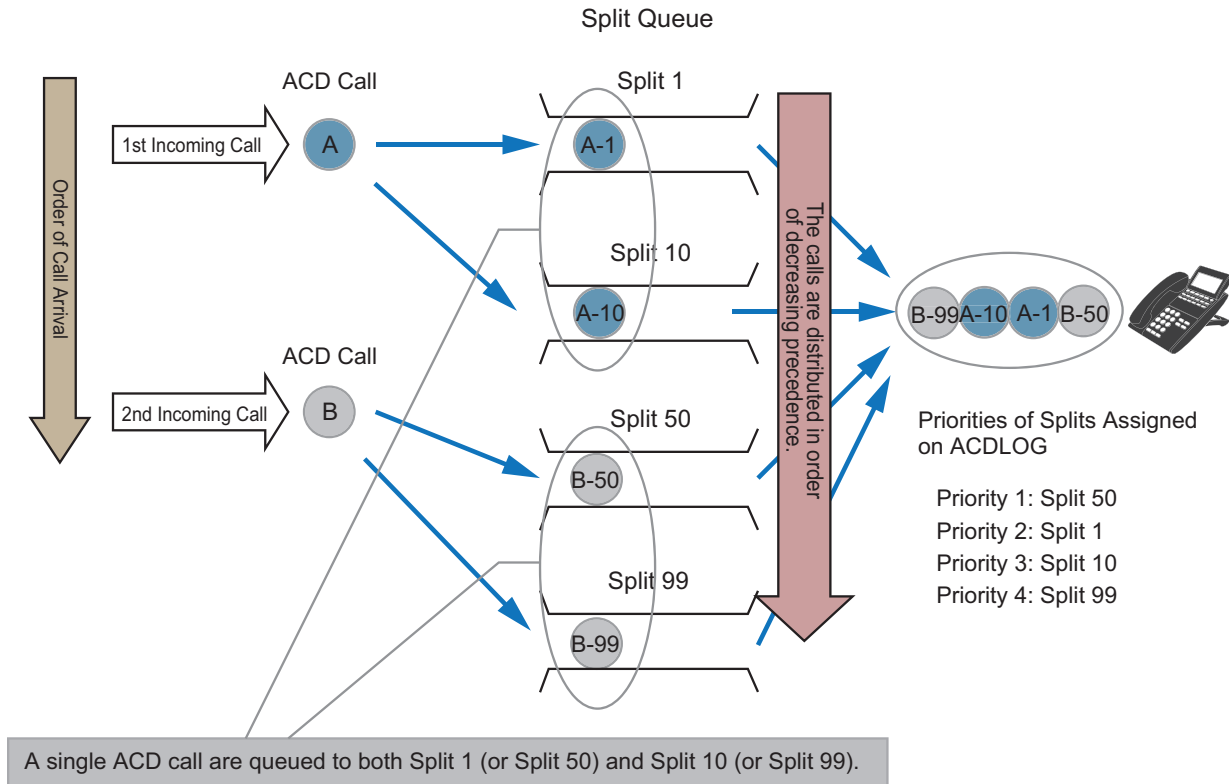
- As an example, the following figure shows the assurance with priorities assigned with the ACD-LOG command when ACD incoming calls are queued to Split 1, Split 10 and Split 100.



<Example 2>

Assurance between ACD Call Multiple Queueing and Multiple Logon

- As an example, the following figure shows the assurance with priorities assigned with the ACD-LOG command when ACD call 1' is queued to both Split 1 and Split 2 and ACD call 2' is queued to both Split 50 and Split 99.



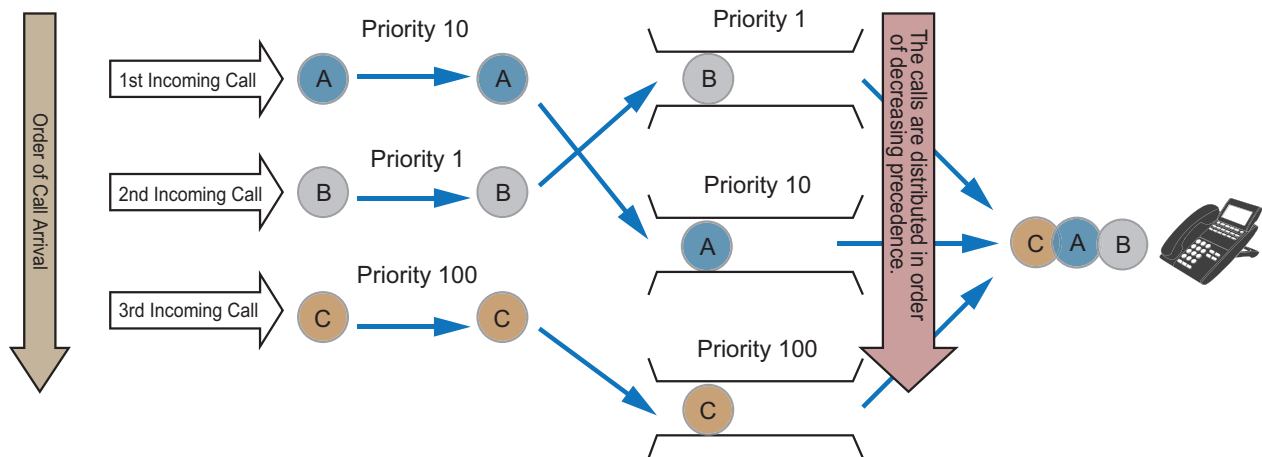
Note: When the same priority is set for Split 1 (or Split 50) and Split 10 (Split 99), the call is distributed in the order registered on the ACDLOG command.

2.9.2 Queue Priority

A priority (from 1 to 250) can be set for each incoming call to be queued to the split. The calls are distributed in order of decreasing precedence. All the ACD calls are to be queued to a split corresponding to priorities in the sequence of arrival. This will enable you to manage the priorities of ACD calls on the distribution process.

* Priorities (1-250) are assigned for each split.

Priorities are assigned to each queue of a split. Incoming calls to the split are routed to a queue according to their priority orders. When any of the agent positions of the split becomes available to receive a new ACD call, the highest priority call is distributed to the agent position.



Priorities of queues are assigned by the following commands.

<ACDTG>

- Priorities can be assigned to incoming calls routed from the appropriate ACD route.

<ACDPLT>

- Priorities can be assigned to incoming calls routed from the trunk. When priorities are assigned to the ACD route with the ACDTG command, the call with the higher priority is allowed to be given priority.
- Priorities can be assigned to calls routed from stations (Desktop terminals, analog terminals, PBX line from agent position or PS).
- Priorities can be assigned even when a target call has a held party and it is routed from a station or a trunk which is not registered with the ACDTG command.

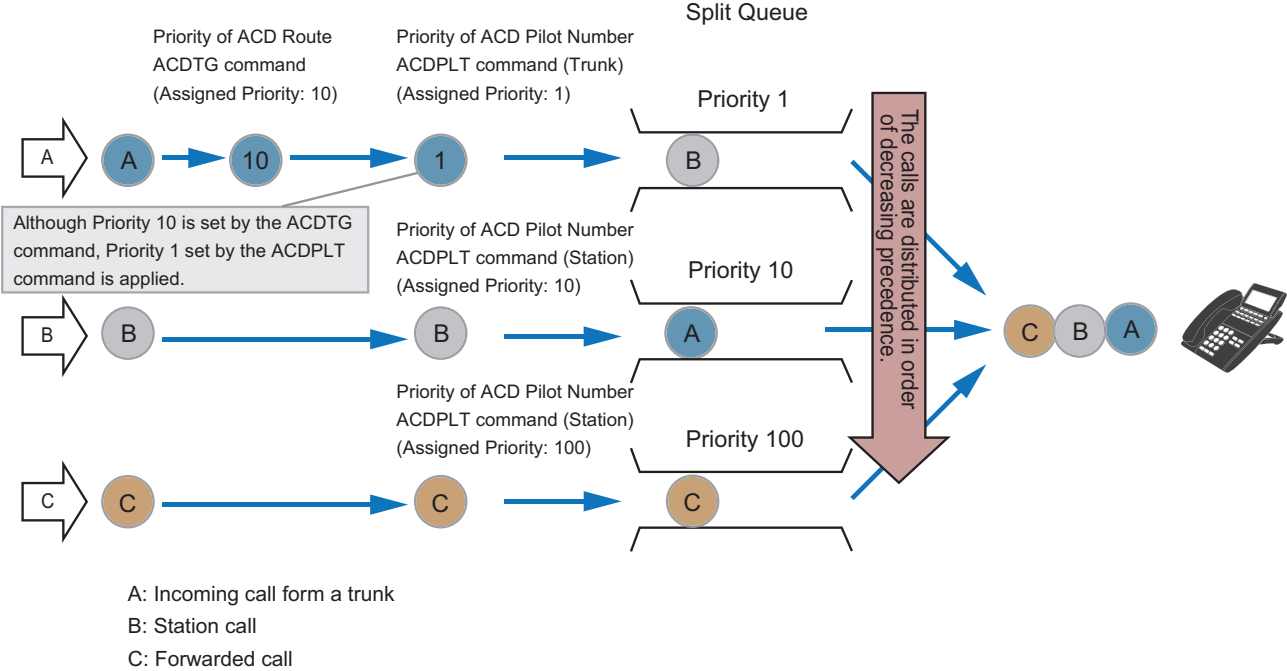
<ACDTN>

- Priorities can be assigned to an individual call (PPN) which is forwarded by CCV after encountering overflow timeout or reception disabled state (first destination party is logged off or on break mode).

As an example, the following explains about the association between priorities assigned with the above commands.

<Example 1>
Association between Priorities Assigned with ACDTG and ACDPLT

Association between the priorities of each command assigned for an incoming call (trunk call/station call/forwarded call) that is queued to Split 1.



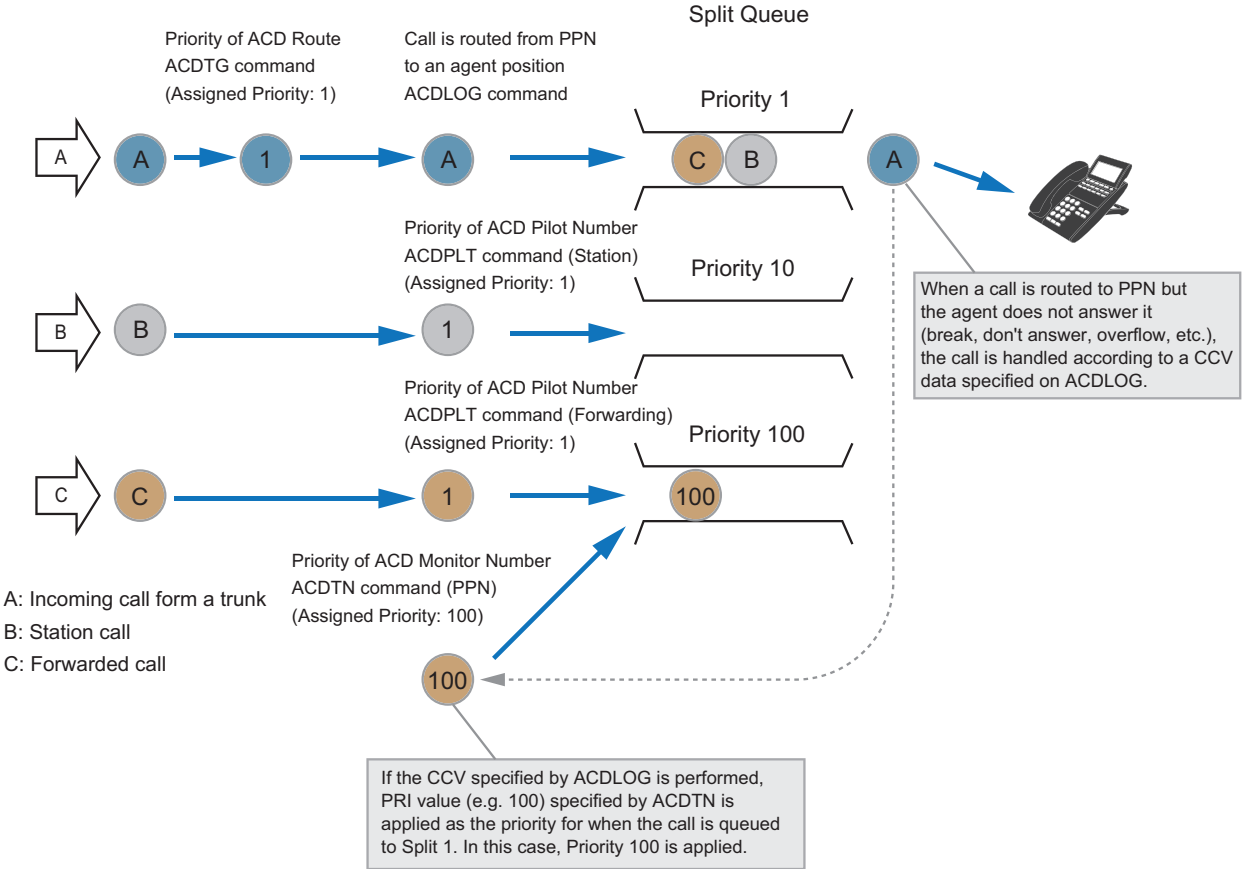
<Example 2>

Association with ACDTN when an incoming call is routed to a pilot number for an individual call (PPN)

Conditions:

- Calls A, B and C have the same priority 1.
- All the splits to which the calls are queued have the same priority 1.

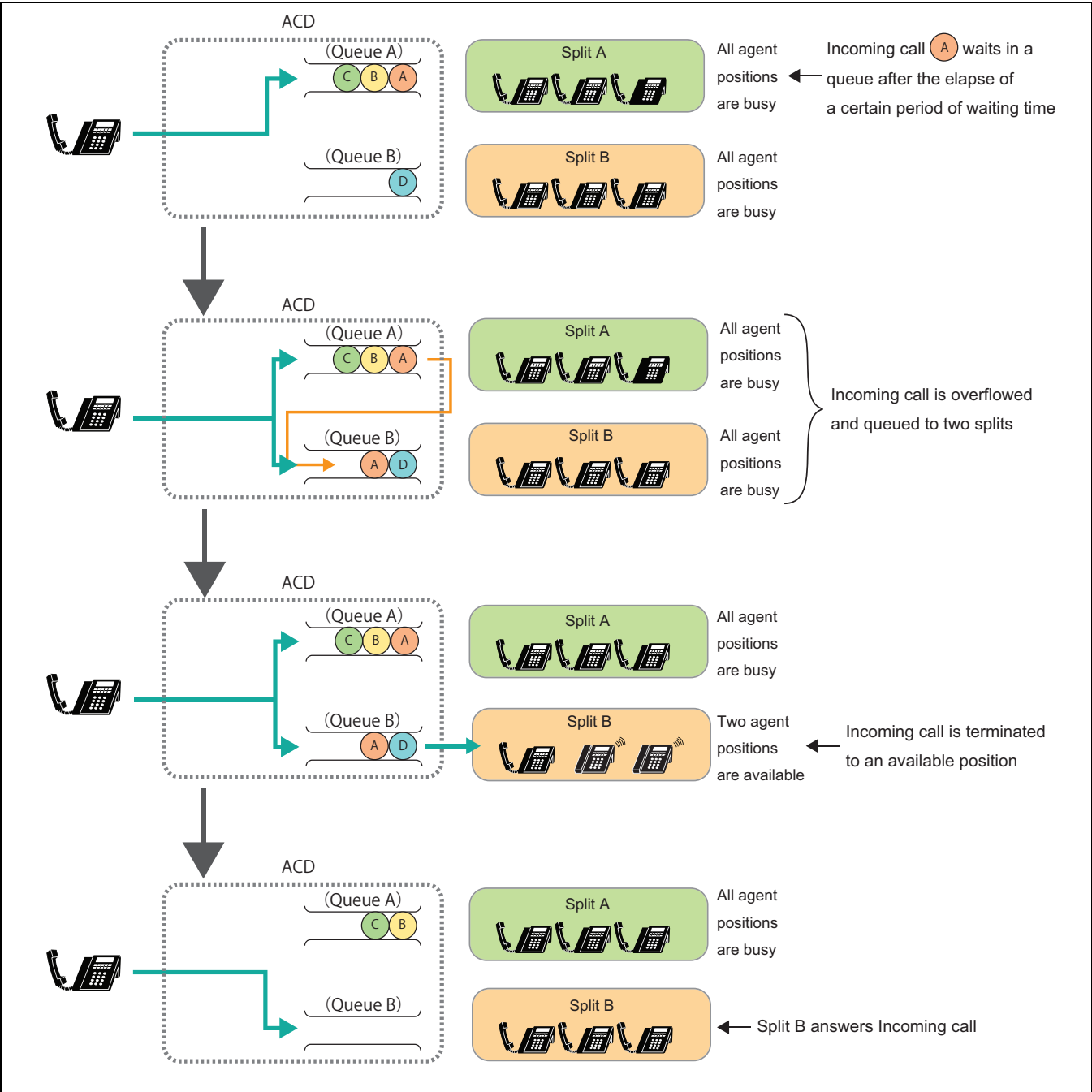
* Call A routed from a trunk is distributed an agent position as an individual call (PPN).



2.10 Overflow

General Description

Overflow is the feature that allows an incoming call to queue to multiple splits at a time, and distributes the incoming call to the split that is registered in the second or later queue by Call Control Vectors (CCV). Overflow is executed after the elapse of a certain period of waiting time when all the agent positions in the original split are busy. Thus, customer's waiting time is minimized by this feature when there are multiple splits.



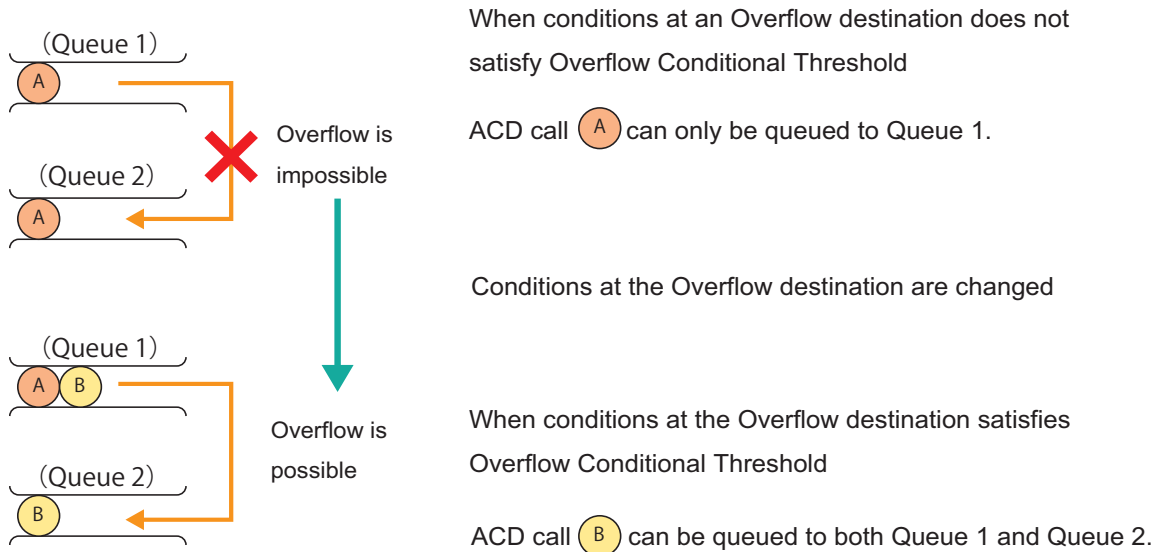
Use PCPro commands to change the data related to Overflow.

Changing Data	Command	Client MIS
Overflow Destination	ACDCCV	Pilot No. Data Change
Overflow Conditional Threshold	ACDSPL	Split Data Change
Overflow Start Time	ACDCCV	Pilot No. Data Change
Overflow Call Priority Order Up	ACDCCV	Pilot No. Data Change

* When you set Overflow Conditional Threshold;

Whether calls are overflowed or not depends on conditions at an Overflow destination.
 Besides, if the condition at an Overflow destination is changed to accept an overflowed call;
 - the call is overflowed when Overflow Time of an ACD call elapses after the change is made.
 - the call is not overflowed when Overflow Time of an ACD call elapses before the change is made.

(Example)



Operating Procedure

None.

Service Conditions

- To choose Maximum Number of ACD Overflows (3 times/9 times), assign system data (ASYDL/ASYDN, SYS1, Index 1192, Bit 4). **Note 1**

Note: Maximum Number of ACD Overflows is only 3 times when ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1). If you set 9 times for the maximum number of ACD Overflows when ACDP retrofit is enabled, the setting will be invalid so the maximum number is set 3 times actually.

Note 1: This enhancement is not available in North America.

2. An incoming call can be queued to maximum 10 splits including the split that the call is originally terminated to.
3. Schedules of Call Control related to the Overflow time (the time taken until calls are overflowed) and the delay announcement, etc. can be set by Office Data.
4. At a split where an incoming call, which is overflowed more than 10 times, is queued, a call is only distributed when there is an agent position that is available immediately. If there is no agent position available, a call is not registered in a queue. Besides, a call is not registered in a queue when CALL RECOVER - ACD [C-191A] is applied to the distributed call.

	Queued 10 times or less	Queued more than 10 times
A call is distributed when there is an agent position available immediately.	X	X
A call is registered in queue and distributed when an agent position becomes available.	X	N
A call is distributed when there is an available agent position after CALL RECOVER - ACD [C-191A]	X	N
A call is registered in queue and distributed when an agent position becomes available after CALL RECOVER - ACD [C-191A]	X	N

Data Programming

Settings for Overflow and Call Control after Overflow can be assigned by ACDCCV.

Refer to “2.7 Call Control Vectors (CCV) Assignment” in this chapter and “ACDCCV: Assignment of ACD CCV Data” in Chapter 6 in this manual.

STEP 1: ASYDL/ASYDN - System Data (LDM/NDM) **Note 2**

SYS1, Index 1192, Bit 4: 0/1 (Maximum Number of ACD Overflows is 3 times/9 times) **Note 3**

Note: Initialize Internal ACDP on a standalone basis by the ACDIZ command after the above system data is changed.

Note 2: For FCCS, follow the directions below.

- Use the ASYDN command for ACD Trunk FCCN/AGENT ANYWHERE - ACD [A-133A].
- Assign the setting for each network by the ASYDL command for Multiple ACDPs/ Multiple Agent Anywhere
- Assign the Internal ACDP Initialization setting by the ACDIZ command for ACDP node.

Note 3: This enhancement is not available in North America.

STEP 2: ACDSPL - Assignment of ACD Split Data

Assign Overflow Conditional Threshold

COND=0: Rejected

COND=1: Agent Available

COND=2: Calls in Queue

- Assign COND=0 for when a split rejects Overflow

COND DETAIL: Conditional Threshold Detail

COND=0: No data (0)

COND=1: Agent Available (1- 250)

COND=2: Calls in Queue (1- 699)

- Assign COND=1 for when a split accepts overflowed calls depending on the number of available agent positions.

(Example)

Condition	A split accepts an overflowed call when the number of available agent positions are 3 or more, and the number of rejects it when available agent positions are less than 3.
Settings	COND=1 COND DETAIL=3

- Assign COND=2 for when a split accepts the limited number of overflowed calls.

(Example)

Condition	A split accepts 6 overflowed calls. The 7th overflowed call is accepted after one of the calls in the queue is ended. The 7th call cannot be accepted if Overflow Time is elapsed.
-----------	---

Settings	COND=2 COND DETAIL=6
----------	----------------------

STEP 3: ACDCCV - Assignment of ACD CCV Data

Assign the split number of an original Overflow split and an Overflow destination split to CCV. CALL CONTROL VECTOR - ACD [C-108A] needs to be set prior to use this data setting. Refer to “2.7 Call Control Vectors (CCV) Assignment” in this chapter and “ACDCCV: Assignment of ACD CCV Data” in Chapter 6 in this manual.

2.11 Announcement (Delay/Night/Holiday) Data Assignment

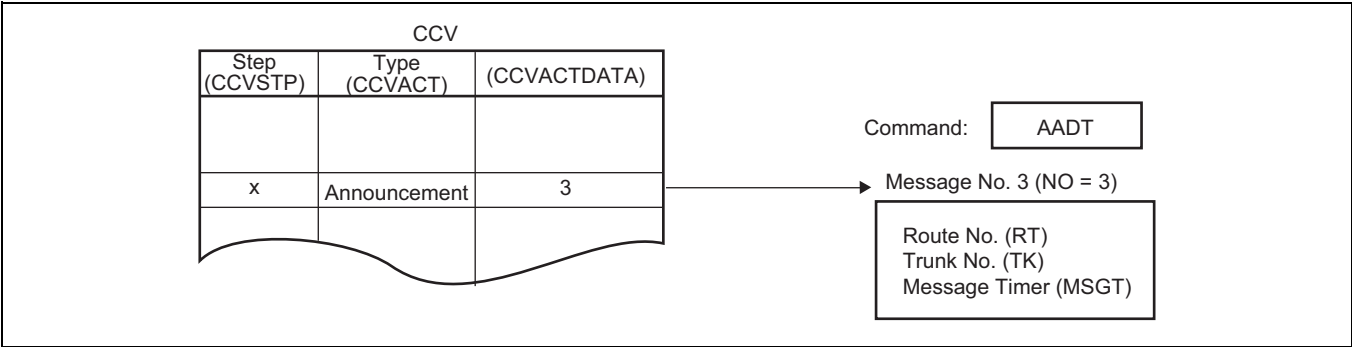
A maximum of 200 announcements, such as delay announcements, Night announcements and Holiday announcements, can be programmed in the system. You should record each message by yourself. **Note 1**, **Note 2**

The announcement service is applicable to ACD incoming calls from outside, or transferred from an Attendant, Agent or Non-ACD station. Note that the announcement service is not applicable to ACD incoming calls from the station that places a station/trunk call on hold.

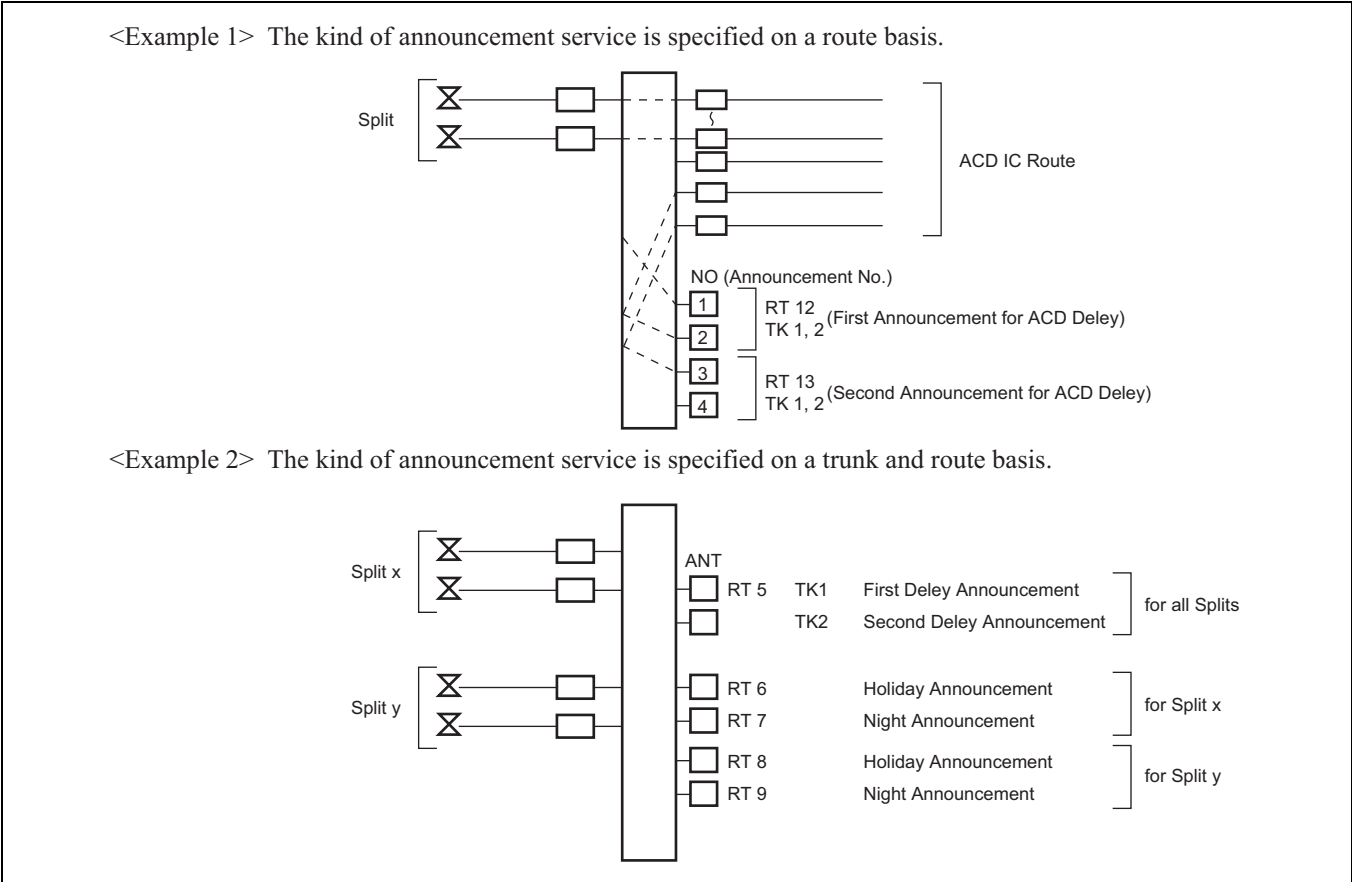
- Note 1:** In the following cases, up to 58 announcements can be programmed in the system:
- AADT command is executed.
 - Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0)

Note 2: This enhancement is not available in North America.

- Relationship between CCV and Announcement Message



- Announcement Routes Arrangement
Announcement routes are arranged as follows.



- Announcement trunk
The DAT card or VS32 Announcement device is used for the announcement trunk and messages are recorded in the DAT. DAT cards are mounted in universal slots in the PIR. It is not necessary to install the MDF when using the DAT VS32 Announcement device.

2.12 DAT Card

The message is recorded for a maximum of 4 circuits or 8 circuits depending on the card. The designated timer (mode), which is set by the switch of the DAT card, decides the number of trunk to be used.

Maximum of 4 circuits card:

- PA-4DATB-A

PA-4DATB-A Card (When SP-702)

Announcement mode (timer) Note 1	Circuit to be used	Number of Trunks to be used	Kind of Messages
16 seconds	0	1	4
	1	1	
	2	1	
	3	1	
32 seconds	0, 1	2	2
	2, 3	2	
60 seconds	0 - 3	2	1

PA-4DATB-A Card (When SP-882)

Announcement mode (timer) Note 1	Circuit to be used	Number of Trunks to be used	Kind of Messages
64 seconds	0	1	4
	1	1	
	2	1	
	3	1	
128 seconds	0, 1	2	2
	2, 3	2	
240 seconds	0 - 3	4	1

Note 1: For the switch settings of SP-702 and SP-882 see PA-4DATB-A in CARDS IN 8U-PIR - CIRCUIT CARD DESCRIPTION.

Maximum of 8 circuits card:

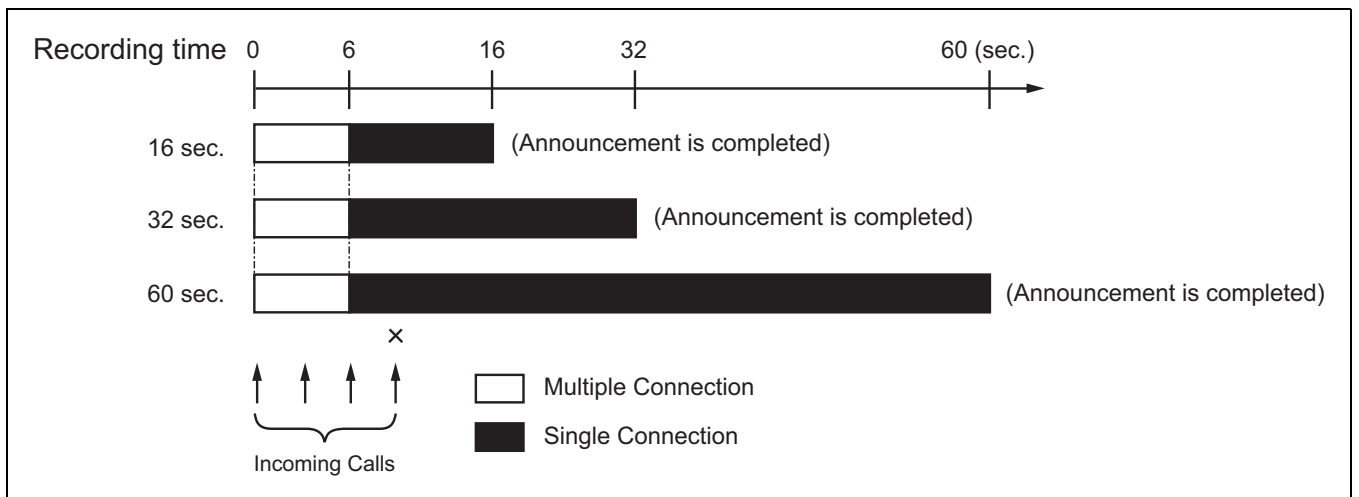
- CH-DATA

CH-DATA Card

Announcement mode (timer)	Circuit to be used	Number of Trunks to be used	Kind of Messages
64 seconds	0	1	8
	1	1	
	2	1	
	3	1	
	4	1	
	5	1	
	6	1	
	7	1	
128 seconds	0, 1	2	4
	2, 3	2	
	4, 5	2	
	6, 7	2	
256 seconds	0 - 3	4	2
	4 - 7	4	
512 seconds	0 - 7	8	1

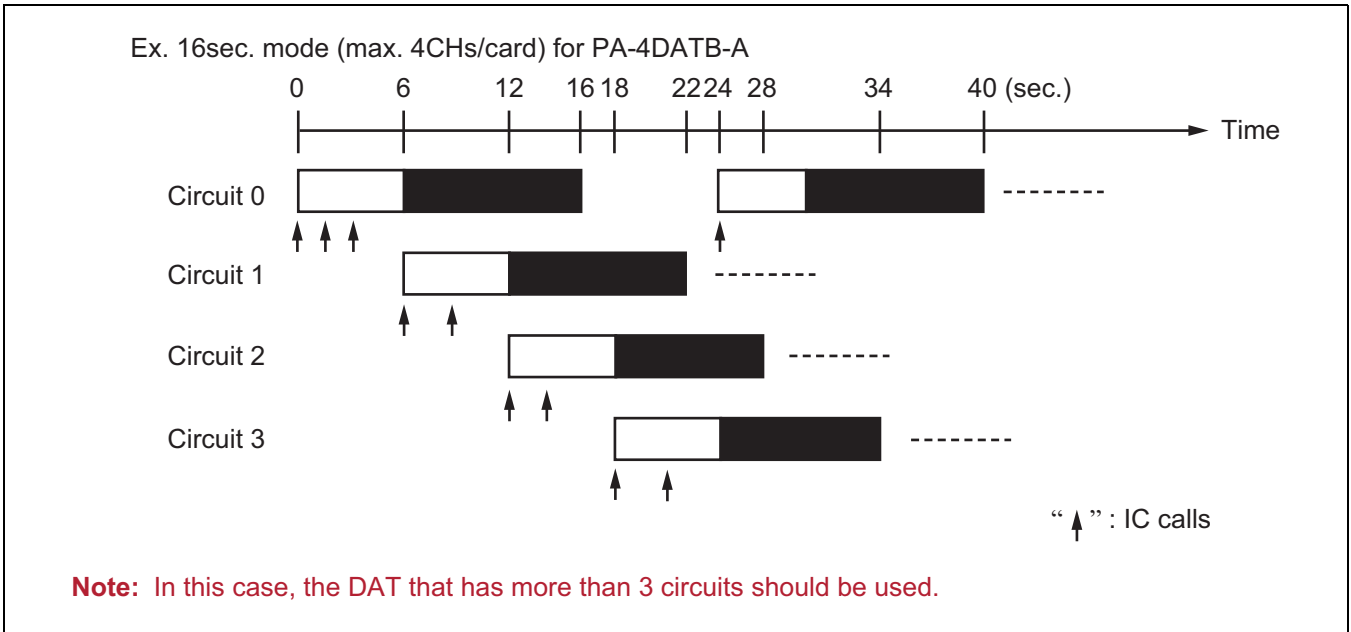
- How to record using DAT

1. The figure below shows the announcement message modes with the example of PA-4DATB-A (when SP-702) used in the ACD system.



Note: For the switch settings see PA-4DATB-A in CARDS IN 8U-PIR - CIRCUIT CARD DESCRIPTION.

2. After the announcement starts to play, Multiple Connection is provided for six seconds (fixed). Thus, in the part of shown in the illustration above, record a silence or some music, and in the part of , record an announcement message.
3. Prepare the required number of circuits so that all incoming calls can be connected with the DAT using Multiple Connection.



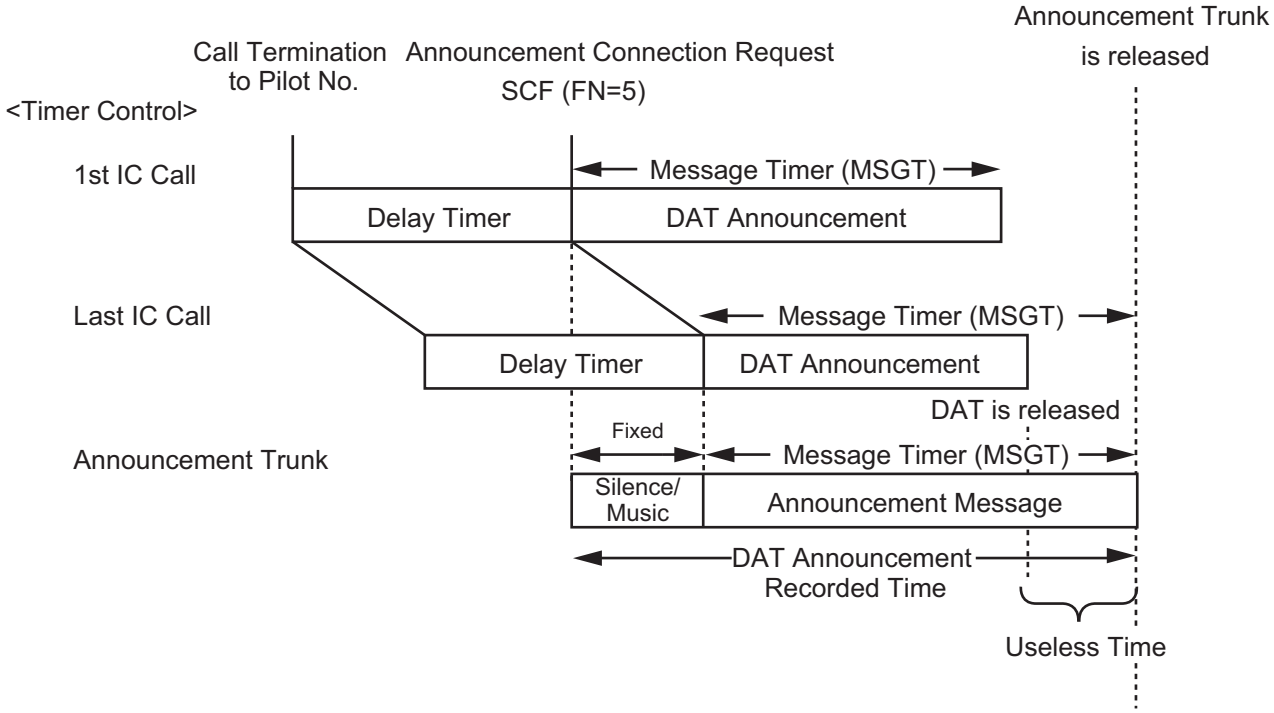
4. DAT control

When the DAT control is enabled, the waiting timer is variable in the range of 0, 2 to 30 seconds. If all callers in a waiting state abandon their calls or are served while announcement messages are played, the announcement trunk is released.

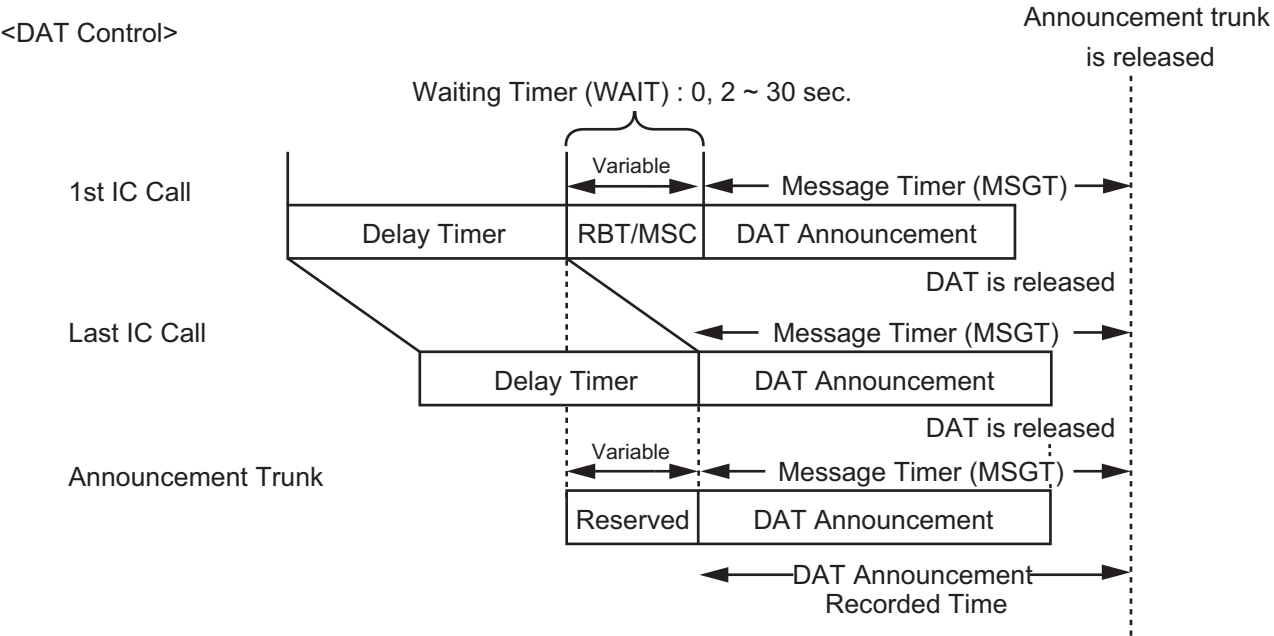
Up to 10 calls can share an announcement trunk by Multiple Connection. DAT control is effective when ASYD, SYS1, Index 449, Bit 2=1.

Note: When using DAT, if any of the following services are used, incoming trunks and announcement trunks must be in the same node:

- ACD Trunk for FCCS
- AGENT ANYWHERE - ACD [A-133A]
- CCIS over IP (PHC)



Note: When DAT Control is disabled (Timer Control), incoming calls are directly routed to an announcement trunk on Announcement Connection Request. In this case, the first call connected to an announcement trunk can hear the DAT announcement from the beginning, but subsequent calls multi-connected to the same trunk will hear it from the middle.



Note: When DAT Control is enabled, incoming calls are connected to Ringback Tone (RBT) or Music On Hold on Announcement Connection Request. When the Waiting Timer (WAIT) expires, all those calls routed to the same announcement trunk can hear the announcement message from the beginning.

Data Programming

[When the DAT control is invalid]

STEP 1: ASYD- SYS1, Index 449, Bit 2=0: Timer control

STEP 2: ASYDL/ASYDN- SYS1, Index 1194, Bit 0: Extension of Programmable Announcement Message
 0 = Disabled
 1 = Enabled

Note: When ACD Trunk for FCCS is used, this feature is only available via FCCS over IP network (Not available via DTI-FCCS.).

Note: This feature must be disabled in the system using Attendant services.

Note: This enhancement is not available in North America.

STEP 3: ARTD- Assign Route data for Announcement Route.
 CDN2 (ONSG) = 2 (PB)
 CDN6 (TCL) = 4 (Tie Line)
 CDN28 (ANS) = 0 (Access to announcement trunk is controlled by the current operation (Timer Control))

Note: To change the data for existing route (RT), initialize or reboot the trunk device such as circuit card, MG, or VS32.

STEP 4: ATRK- Assign Trunk data for Announcement Trunk.

STEP 5: AADT/AADTL/AADTN-Assign Announcement/Dictation Trunks. **Note 2**

TYPE: 1 = Announcement Trunk

NO: Announcement number (1-200) **Note 3, Note 4, Note 5**

D: 1 = Disconnect Timer is available

CP: Announcement Connection Pattern **Note 6**
 0 = Multi connection

MSGT: Message Timer (2-120 sec.) **Note 7**

Assign 16 sec./32 sec./60 sec. in the case of PA-4DATB-A (SP-702).

Assign 64 sec./128 sec./240 sec. in the case of PA-4DATB-A (SP-882).

Assign the time according to the set record time in the case of CH-DATA

WAIT: Waiting Timer (0-30) **Note 6**

Set the value to 0.

RT: RT No.

TRK: TRK No.

STEP 6: MBTK/MBRT-Cancel the make busy status.

STEP 7: ARRC- Make the tandem connection between the announcement route and ACD route allow

[When DAT control is valid]

STEP 1: ASYD- SYS1, Index 449, Bit 2=1: DAT control function

Note: When any of the following services are used, incoming trunks and announcement trunks must be in the same node:

- ACD Trunk for FCCS
- AGENT ANYWHERE - ACD [A-133A]
- CCIS over IP (PHC)

Note: To enable DAT control, this system data assignment (ASYD, SYS1, Index 449, Bit 2=1) is required for every node in the network.

STEP 2: ASYDL/ASYDN- SYS1, Index 1194, Bit 0: Extension of Programmable Announcement Message
0 = Disabled
1 = Enabled

Note: When ACD Trunk for FCCS is used, this feature is only available via FCCS over IP network. (Not available via DTI-FCCS.)

Note: This feature must be disabled in the system using Attendant services.

Note: This enhancement is not available in North America.

STEP 3: ARTD- Assign Route data for Announcement Route.
CDN2 (ONSG) = 2 (PB)
CDN6 (TCL) = 4 (Tie Line)
CDN28 (ANS) = 1 (Answer and Release Timings are determined by DAT itself or the external announcement equipment)

Note: To change the data for existing route (RT), initialize or reboot the trunk device such as circuit card, MG, or VS32.

STEP 4: ATRK- Assign Trunk data for Announcement Trunk.

STEP 5: AADT/AADTL/AADTN-Assign Announcement/Dictation Trunks. **Note 2**

TYPE: 1 = Announcement Trunk

NO: Announcement number (1-200) **Note 3, Note 4, Note 5**

D: 1 = Disconnect Timer is available

CP: Announcement Connection Pattern **Note 6, Note 8**

0 = Multi connection

1 = Single connection

MSGT: Message Timer (0-120 sec.) **Note 7**

Assign 16 sec./32 sec./60 sec. in the case of PA-4DATB-A (SP-702).

Assign 64 sec./128 sec./240 sec. in the case of PA-4DATB-A (SP-882).

Assign the time according to the set record time in the case of CH-DATA.

WAIT: Waiting Timer (2-30 sec. 2 sec. increments) **Note 6**

RT/LGRT: RT No.

TRK: TRK No. (1-255)

Note 2: If DAT control is enabled (ASYD, SYS1, Index 449, Bit 2=1), set up the data so that all incoming calls are connected to the announcement trunk within the same node by using the AADT/AADTL command instead of the AADTN command.

Note 3: If you want to add announcement number by using this command, you must enable Extension of Programmable Announcement Message (ASYDL, SYS1, Index 1194, Bit 0=1) first. If disabling Extension of Programmable Announcement Message (ASYDL, SYS1, Index 1194, Bit 0=0), first reduce announcement number to 58 or less.

Note 4: In the following cases, up to 58 announcements can be programmed in the system:

- AADT command is executed.
- Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0)

Note 5: This enhancement is not available in North America.

Note 6: "CP" and "WAIT" are available when SYS1, Index 449, Bit 2=1.

Note 7: "MSGT" is not available when SYS1, Index 449, Bit 2=1. (Normally assign "0" with that data programming)

Note 8: When a DAT card uses 5 or more channels, set CP=0 (multi connection).

STEP 6: MBTK/MBRT-Cancel the make busy status.

STEP 7: ARRC- Make the tandem connection between the announcement route and ACD route allow

Note: For more details of DAT cards, see the CIRCUIT CARD DESCRIPTION manual.

2.13 VS32 ACD Announcement

VS32 ACD Announcement feature is applicable to ACD incoming calls from IP terminals or IP media converter. The maximum number of announcement messages available depends on the settings of Extension of Programmable Announcement Messages. For details, refer to “Data Programming” section.

[Extension of Programmable Announcement Messages is enabled]

A maximum of 200 announcements such as delay announcement are available. **Note 1**

Announcement No. of ACDCCV/AADT (NO)	Announcement Sound Source
1 - 200 Note 3	WAV file stored in VS32 Note 2

Note 1: This enhancement is not available in North America.

Note 2: When Extension of Programmable Announcement Messages is enabled, external message source connected to VS32 cannot be identified by Announcement number of ACDCCV/AADT. In the following cases, you need to set the ANP parameter of AIVSL command to 255 (External Input Interface).

- To play a message of VS32 external input source (labeled with Announcement number 51-58) at an existing office
- To use a new external input source connected to VS32

Note 3: It is 1 - 58 in case of using the AADT command.

[Extension of Programmable Announcement Messages is disabled]

A maximum of 58 announcements such as delay announcement are available. Announcement Numbers (NO) from 51 to 58 are used only for announcement that is supplied from VS32 external input.

Announcement No. of ACDCCV/AADT/AADTL/AADTN (NO)	Announcement Sound Source
1 - 50	WAV file stored in VS32
51-58	Sound source supplied from VS32 external input

- The setting of the ANP parameter of AIVSL command overrides the setting of the Announcement number of ACDCCV/AADT command. When announcement trunk data is assigned by using AIVSL command, Announcement message specified by the ANP parameter [0-255] will be given priority:
- The setting of the REP parameter of AIVSL command will be applied to the repeat pattern of an announcement message. For message timer, however, the setting value of the MSGT parameter of AADT/ AADTL/ AADTN command has priority over the one of AIVSL.
- When playing back an announcement message, the message specified by ACDCCV and AADT commands will be played back regardless of RT and/or TR No. that have been assigned to the VS32.

	ACD Announcement by DAT	ACD Announcement by VS32
How to assign Announcement Equipment	RT No. assigned by AADT	
How to specify Announcement	RT No. assigned by AADT	Announcement No. assigned by ACDCCV and AADT

- Sound source files that correspond to the announcement number specified by ACDCCV and AADT must be stored in the VS32. If not, a continuous tone of 1 kHz is provided for 10 seconds.
- The sound source files can be created by a sound recorder software such as the Sound Recorder that comes with Microsoft Windows. The sound format is CCITT μ -Law, 8 kHz, 8 bit monaural, 7 kbps. The first three characters of the file name must correspond to the announcement number as shown below.

Relationship between Announcement Number and File Name

NO (Announcement Number)	File Name of Sound Source (Example)
1	001welcome.wav
2	002delay.wav
3	003letgo.wav
:	:
200 Note 4	200abandon.wav

Note 4: In the following cases, up to 58 announcements can be used in the system:

- AADT command is executed.
 - Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0)*
** This enhancement is not available in North America.*
- As Connection Pattern for ACD announcement, single connection only is supported.
 - If the playback time of the WAV file stored in VS32 is shorter than the playback time assigned by ACDCCV/AADT/AADTL/AADTN command, the same announcement is repeated from the beginning.
 - In case of FCCS Network, the setting of VS32 is necessary for each node.

- Hardware types of VS32 supported in this feature are listed below:

VS32 Conference Server Hardware Type	Firmware Version
VS32 BOX [MG-VS32VA]/ VS32 Card [SCA-VS32VA]	SP-3891 CA-VS32 PROG-A Issue 3A or later (*Proprietary Protocol mode or SIP mode can be select- ed)
	SP-3891 CA-VS32 PROG-A Issue 2A or earlier (*operating in Proprietary Protocol mode only)

- When you use the ACDCCV command to create a CCV with multiple steps in which the caller is connected to VS32, make sure that trunks of Multiple connection and trunks of Single connection (**Note 5**) are not mixed in the announcement trunks used for the CCV.

Note 5: For details, see the Connection Pattern parameter of the AADT/AADTL/AADTN command.

Data Programming

STEP 1: ASYD- SYS1, Index 449, Bit 2: 1 = DAT control

Note: To enable DAT control, this system data assignment is required for every node in the network.

STEP 2: ASYDL/ASYDN- SYS1, Index 1194, Bit 0: Extension of Programmable Announcement Message
0 = Disabled
1 = Enabled

Note: When ACD Trunk for FCCS is used, this feature is only available via FCCS over IP network.(Not available via DTI-FCCS.)

Note: This feature must be disabled in the system using Attendant services.

Note: This enhancement is not available in North America.

STEP 3: ARTD- Assign Route data for Announcement Route.
CDN1 (OSGS) = 2 (Second Dial Tone)
CDN2 (ONSG) = 2 (PB)
CDN5 (TF) = 1 (OGT)
CDN6 (TCL) = 4 (Tie Line)
CDN7 (L/T) = 1 (Trunk)
CDN28 (ANS) = 0 (No answer signal is given)

Note: All CDNs other than the above should be set "0".

Note: To change the data for existing route (RT), initialize or reboot the trunk device such as circuit card, MG, or VS32.

STEP 4: AIVSL- Assign the (VS) data

VS-CH: Assign the channel number of the announcement trunk (VS).
 KIND=ANNC
 RT: Assign Route number
 TK: Assign Trunk number
 LENS: Assign Line Equipment Numbers
 TN: Assign Tenant number

STEP 5: AADT/AADTL/AADTN- Assign Announcement/Dictation Trunks. **Note 6**

TYPE:1 = Announcement Trunk
 NO: Announcement number (1-200) **Note 7, Note 8**
 D: 1 = Disconnect Timer is available
 CP: Announcement Connection Pattern **Note 9**
 1 = Single connection
 MSGT:Message Timer (2-120 sec.) **Note 9**
 WAIT:Waiting Timer (0 sec.) **Note 9, Note 10**
 RT/LGRT:RT No. **Note 11**
 TRK:TRK No. **Note 12**

STEP 6: MBTK- Cancel the make busy status.

STEP 7: ARRC- Allow the connection between Incoming Route and Dummy Route.
 ICRT = 1~255 (Incoming Route Number)
 OGRT = RT No. assigned by the AIVSL/AADT/AADTL/AADTN command
 ARI-A_RES =1 (Allowed)
 ARI-D_RES =1 (Allowed)

STEP 8: ACDCCV ACD Call Control Vector
 Tenant number (1-9)
 CCVNO: CCV index number (1-2000)
 CCVACT: 2 (Announcement)
 CCVACT DATA: Announcement No. (1-200) **Note 8, Note 13**

Note: ACDTN, ACDPLT etc. need to be assigned other than the above.

Note 6: If you want to add announcement number by using this command, you must enable Extension of Programmable Announcement Message (ASYDL, SYS1, Index 1194, Bit 0=1) first. If disabling Extension of Programmable Announcement Message (ASYDL, SYS1, Index 1194, Bit 0=0), first reduce announcement number to 58 or less.

Note 7: In the following cases, up to 58 announcements can be programmed in the system:

- AADT command is executed.
- Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0)

Note 8: This enhancement is not available in North America.

Note 9: “CP” and “WAIT” are available when SYS1, Index 449, Bit 2=1. “MSGT” is not available when SYS1, Index 449, Bit 2=1. (Normally assign “0” with that data programming)

Note 10: If values other than “0” are set to a parameter, an error will occur.

Note 11: RT No. is assigned by the AIVSL command.

Note 12: TRK No. is assigned by the AIVSL command.

Note 13: Specify an announcement number in the range of 1 to 58 when:

- Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0)

2.14 VS32 Announcement Multiple Connection

The following settings are available with the multiple connection of VS32:

- Up to three Announcement Trunks can be assigned per VS32.
- Up to 10 calls can be connected at the same time per Announcement Trunk. **Note 1**

Note 1: A maximum of eight Announcement Trunks registered with the AIVSL command can be assigned by the AADT/AADTL/AADTN command. Therefore, the maximum of 80 ACD incoming calls terminated to a pilot number can be connected to delay Announcement simultaneously.

Ch	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
1	Announcement Trunk									Announcement Trunk									Announcement Trunk									-	-								
2	Announcement Trunk									Announcement Trunk									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	Announcement Trunk									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Announcement Trunk														

Service Conditions

- To enable this feature, assign the following system data:
 - Assign the system data (ASYDL/ASYDN, Index 1194, Bit 4=1) to enable VS32 Announcement Multiple Connection.
 - Assign the value of call release guard timer during waiting for available channel of VS32 to the system data (ASYDL/ASYDN, Index 1194, Bit 5 to Bit 7).

Note: There is no need to initialize the system to enable/disable this feature.
- A telephony system with multiple VS32 voice servers can have a mixture of Announcement Single connections and Multiple connections.

Note: Within a VS32 voice server, you cannot have a mixture of Announcement Single connections and Multiple connections.

Note: When mixing Announcement Single and Multiple connections in a telephony system, assign different Route Class Data to Announcement Single connection routes and Multiple connection routes.
- Only FCCS over IP connection is available for an ACD-FCCS. DTI -FCCS connection is not available.
- This feature is not available in CCIS over IP. When you use VS32 as announcement equipment, set the connection pattern to be Single connection.

5. When using DAT control (ASYD, SYS1, Index 449, Bit 2=1) in an ACD-FCCS, do not use AADTN command to assign ACD Announcement data, but the AADT/AADTL command so that the Announcement connection will be within a node.
6. When this feature is used, payload setting for each IP device to be connected to VS32 Announcement Trunk must be common. Since voice level may be changed due to PAD setting value between IP devices when a voice path is established, PAD value needs to be adjusted with PAD/EC Control IP/PHC Support feature.
7. This feature cannot be used in conjunction with Attendant Console services. If a call connected to the Announcement Trunk is transferred to an Attendant Console by SCF4, the operation is not guaranteed.
8. This feature is available only for ACD Announcement connection with the AADT/AADTL/AADTN command. This feature is not available for UCD Delay Announcement with the AUAD/AUADL/AUADN command and other announcement services with the AAED/AAEDL/AAEDN command.

Note: When the type of Announcement data on the AADT/AADTL/AADTN command is Dictation Trunk (TYPE=2: DCT), this feature is not available.

9. The maximum of 34 Announcement Trunks per LP is available for simultaneous use. The Announcement Trunks are also used as DAT Announcement Trunks. Therefore, the maximum number of simultaneous use (34 trunks per LP) is also the maximum number for DAT and VS32 together.
10. Because this feature enables to register 10 calls to a single Announcement Trunk, the maximum of 340 calls is allowed per LP. In the case of registering more than 34 Announcement Trunks to LP, distribute the trunks to register to multiple LP.
11. Assign the Route Class Data for an Announcement Trunk to enable Answer signal (CDN28 ANS=1) from Trunk side with the ARTD command. When Answer signal is disabled, only single connection is available.
12. Assign the following data for the announcement detailed data related to VS32 with the AIVSL command.
 - ANP (Announcement Pattern)
Assign a message number (No: Message Number) on Announcement data (AADT/AADTL/AADTN).
 - REP (Repeat Pattern)
Assign repeat pattern of an announcement to 0 (Play it once only).

If the above data is not assigned, an announcement will repeat in the case of an Announcement multiple connection with DAT Control being in service. While an announcement repeats, Announcement Trunk is not released.

13. This feature is not available for digital/analog trunks and terminals accommodated in PIR. When using digital/analog trunk and terminals, configure them to connect to a DAT card. After the configuration is completed, Announcement multiple connection using both VS32 and a DAT card accommodated in PIR is available.

Note: Announcement multiple connection to DAT trunk from MG and IP station can be used as before.

14. The behavior differences of VS32 Announcement multiple connection between DAT control is in service and not in service are as follow:

	DAT Control Out of Service	DAT Control In Service
Announcement Wait Time	Fixed 6 seconds	Waiting Timer (WAIT) value on AADT/AADTL/AADTN (WAIT: 0 to 30 sec.)
Number of Multiple Connections	A maximum of 10 calls	A maximum of 10 calls
Starting Time of Announcement	When 6 seconds have elapsed or a connection request for 10th call is made	When the assigned Waiting Time has elapsed or a connection request for 10th call is made
Disconnection Time of Announcement	When Message Timer (MSGT) of AADT/AADTL/AADTN expires. (MSGT: 2 to 120 sec.) Note: Message Timer starts when Announcement Connection Request is sent.	When all calls in announcement connection are released or announcement playback is completed

15. Regardless of whether DAT Control is enabled or not, incoming calls are connected to Ringback Tone (RBT) or Music On Hold on Announcement Connection Request. When Announcement Wait Time expires, all those calls routed to the same announcement trunk hear the announcement from the beginning.
16. When 11 or more incoming calls connect to the same Announcement Trunk, the 11th and subsequent calls are transferred to another trunk. If there is no available Announcement Trunk, the call will not be connected (the calling party continues to hear Ringback Tone).
17. When you use the ACDCCV command to create a CCV with multiple steps in which the caller is connected to VS32, make sure that trunks of Multiple connection and trunks of Single connection (Note 4) are not mixed in the announcement trunks used for the CCV.

Note 2: For details, see the Connection Pattern parameter of the AADT/AADTL/AADTN command.

Data Programming

STEP 1: ASYD - SYS1, Index 449, Bit 2=0/1: DAT Control in service/out of service

Note: In case of ACD-FCCS, assign the same setting to all nodes.

STEP 2: ASYDL/ASYDN

SYS1, Index 1194, Bit 4=1: VS32 Announcement Multiple Connection in service

SYS1, Index 1194, Bit 5 to Bit 7: VS32 Release Guard Timer

b7	b6	b5	VS32 Release Guard Timer
0	0	0	1 second (default)
0	0	1	2 seconds
0	1	0	4 seconds
0	1	1	6 seconds
1	0	0	8 seconds
1	0	1	8 seconds
1	1	0	8 seconds
1	1	1	8 seconds

Note: There is no need to change in normal cases.

Note: In case of ACD-FCCS, assign the same setting to all nodes.

STEP 3: ARTD/ARTDN

Assign the Route Class Data

RT: RT number

CDN1 (OSGS) = 2 (Second Dial Tone)

CDN2 (ONSG) = 2 (PB) 60 msec. interval

CDN5 (TF) = 1 (OGT)

CDN6 (TCL) = 4 (Tie Line/Announcement Trunk)

CDN7 (L/T) = 1 (Trunk)

CDN28 (ANS) = 1 (Answer signal is given) (Fixed)

All CDNs other than the above should be set to "0".

Note: To change the data for existing route (RT), initialize circuit cards.

STEP 4: ALRTN

LGRT: Logical Route number for Announcement trunk

FPC: FPC number of the node registered to VS32 Announcement trunk

RT: Logical Route Number of VS32 Announcement trunk registered with ARTD/ARTDN.

STEP 5: ARRC/ARRCN

ICRT: Logical Route number for ACD incoming route

OGRT: Logical Route number for VS32 Announcement trunk

ARI-A-RES=1: (Allowed)

ARI-D-RES=1: (Allowed)

STEP 6: AIVSL

VS-ID: Assign MAC address of VS32

CH: Channel number of Announcement trunk **Note 3**

KIND=ANNC

TN: Assign Tenant number

LENS: Accommodation location of Announcement trunk assigned with the ATRK command

RT: Route number of Announcement trunk assigned with the ARTD command

TK: Trunk number for Announcement trunk

ANP: Assign the source of announcement to be played. **Note 4**

REP=0: Assign the Repeat Pattern to “Play it once only”

Note 3: Assign every 10 channel to an Announcement Trunk. Do not assign other data to last registered 9 channels. If other data is assigned, no tone will be returned in the case of multi connection to an Announcement Trunk.

Note 4: Assign the Announcement Number assigned with the AADT/AADTL/AADTN command.

STEP 7: MBTK

Assign the Make Idle status to the Announcement trunk.

RT: Route number of Announcement Trunk

TK: Trunk number of Announcement Trunk

MB=0: Make Idle

STEP 8: AADT/AADTL/AADTN

[DAT Control is out of service]

TYPE1: Announcement Trunk

NO: Announcement Number (1 - 200) **Note 5**

D=1: Disconnect Timer is available (Fixed)

MSGT: Message Timer (2 - 120 sec.) **Note 5**

CP=0: Multi connection (Fixed)

WAIT = 0: Waiting timer in case of multi connection (Fixed)

RT/LGRT: Route Number of Announcement Trunk **Note 6**

TK: Trunk Number of Announcement Trunk

[DAT Control is in service] **Note 7**

TYPE1: Announcement Trunk

NO: Announcement Number (1-200) **Note 5**

D=1: Disconnect Timer is available (Fixed) **Note 8**

MSGT: Message Timer (2-120 sec.) **Note 8**

CP=0: Multi connection

WAIT: Waiting timer in case of multi connection (2-30 sec.)

RT/LGRT: Route number of Announcement Trunk **Note 6**

TK: Trunk number of Announcement Trunk

- Note 5:** The number of Announcement Numbers to be assigned is limited up to 58 when this feature is used and the following conditions are applied.
- The AADT command is used.
 - Extension of Programmable Announcement Message is disabled (ASYDL, SYS1, Index 1194, Bit 0=0).
- Note 6:** When registering the route number of VS32 Announcement Trunk and DAT to an Announcement number, do not mix their route number.
- Note 7:** When DAT Control is enabled in the ACD-FCCS configuration, assign the setting to use the Announcement Trunk of Self Node with the AADT/AADTL command.
- Note 8:** When DAT Control is in service, Disconnect Timer assigned with the AADT/AADTL/AADTN command is ignored.
- Note 9:** When DAT Control is out of service, set the Message Timer (MSGT) to a value that is equal to the duration of the announcement plus six seconds of Announcement Wait Time.

2.15 ACD Pilot Number Assignment

ACD Pilot Numbers can be assigned up to 8000 (when ACDP Retrofit is enabled, up to 4000 can be assigned).

STEP 1: AMNO/AMNOL/AMNON (Assignment of Monitor Number)

AMNO- Assign Monitor Number.

- TN: Tenant number of Monitor number
- MNO: Monitor number (2 to 6 digits) **Note 1, Note 10**
Numbers 0 to 9 may be used. **Note 2**
* or # may not be used. 1st DC= "0" may not be used either.
- NMI: Monitor Number Index (1-4095) **Note 3**
- Follow the UCD when Monitor Status is not Requested from AP.
Click the check box to follow the UCD when monitor status is not requested from AP.
- STN: UCD control station number

Note 1: The monitor number is the same as the pilot number assigned in ACDPLT and must match the numbering plan of the System.

Note 2: ACD System does not function when a one-digit number is assigned.

Note 3: Assign different NMI for each Monitor number.

AMNOL/AMNON-Assign Monitor Number for LDM/NDM.

- UGN: User Group Number (1-255)
- L_MNO/N_MNO: Local/Network Monitor Number (2 to 6 digits) **Note 10**
Numbers 0 to 9 may be used. **Note 4**
* or # may not be used. 1st DC= "0" may not be used either.
- L_NMI/N_NMI: Local/Network Monitor Number Index (1-48000) **Note 2**
- Follow the UCD when Monitor Status is not Requested from AP.
Click the check box to follow the UCD when monitor status is not requested from AP.
- TELN: UCD Pilot Telephone Number

Note 4: ACD System does not function when a one-digit number is assigned.

Note 5: Assign different L_NMI/N_NMI for each Local/Network Monitor number.

STEP 2: ACDPLT-Assign the ACD Pilot Number.

- TN: Tenant number (1-9)
- M_NO: Pilot number (Monitor number) (2 to 6 digits) **Note 10**
Numbers 0 to 9 may be used. **Note 6**
* or # may not be used. 1st DC= "0" may not be used either.
- NAME: Pilot name (up to 20 characters)
- TRKPRI: Priority (1-250) **Note 7**
When the pilot number is dialed by station in the remote node

- INPRI: Priority (1-250) **Note 7**
When the pilot number is dialed by station in the Local Node
- TRPRI: Priority (1-250) **Note 7**
When the call is transferred from the station by dialing the pilot number
- CCV/W: 0/1 = CCV/Week schedule
- CCVNO: CCV Index number (1-2000) Valid for CCV/W = 0 **Note 3**
- CCVSTP: CCV step number (1-20) Valid for CCV/W = 0

Note 6: ACD System does not function when a one-digit number is assigned.

Note 7: When priority is not taken for each incoming call type, assign all "1" in these parameter.
Priority order - 1>250

Note 8: MIS can not change the ACD Pilot No. data when CCV/W = 1.

STEP 3: ACNO/ACNOL/ACNON (Assignment of Conversion Number Data) **Note 9**

ACNO- Assign Conversion Number data for the ringdown trunk route.

- RT: External Route Number
- TN: Tenant number of Monitor number
- MNO: Monitor number (2 to 6 digits) **Note 10**
Numbers 0 to 9 may be used.

ACNOL/ACNON-Assign Conversion Number data for LDM/NDM.

- RT/LGRT: External Route Number/External Logical Route Number
- UGN: User Group Number
- L_MNO/N_MNO: Local/Network Monitor Number (2 to 6 digits) **Note 10**
Enter the ACD Pilot Number specified with the ACDPLT and AMNO commands.
Numbers 0 to 9 may be used.

Note 9: This data needs to be assigned to ringdown trunks.

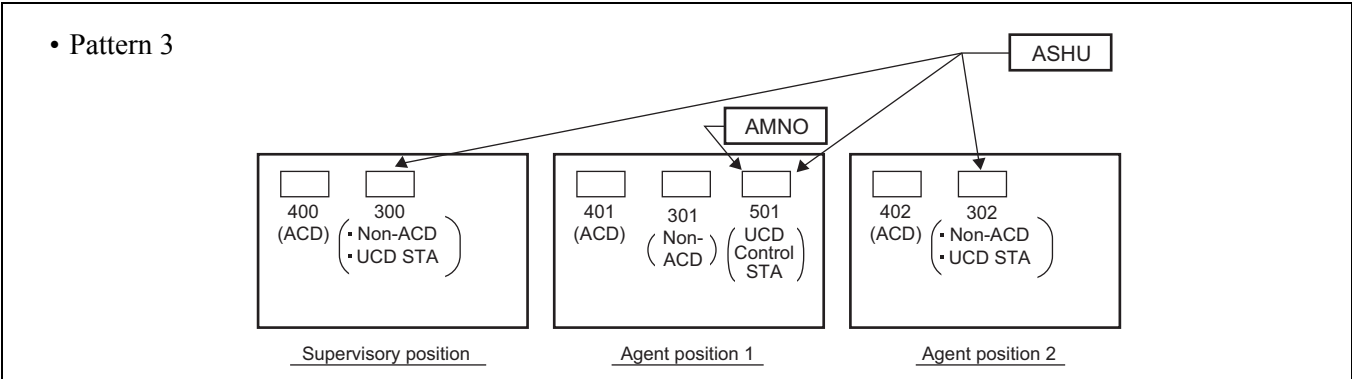
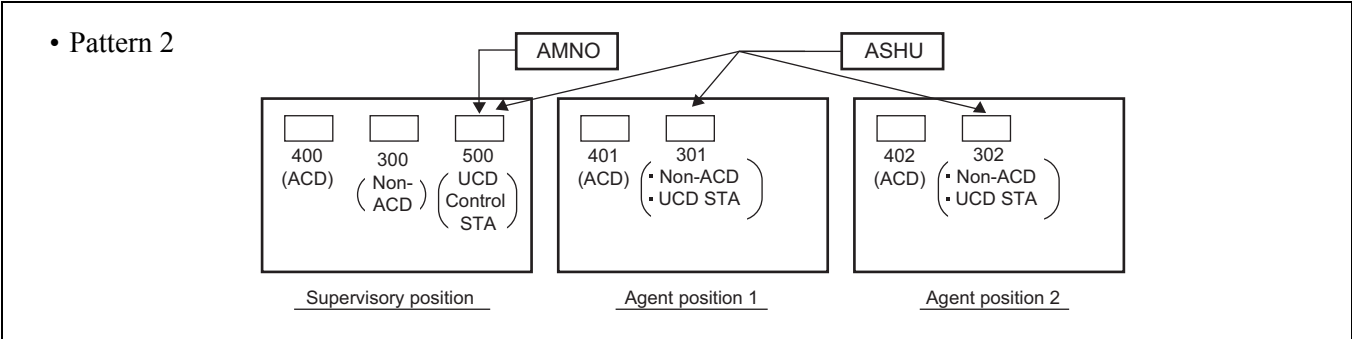
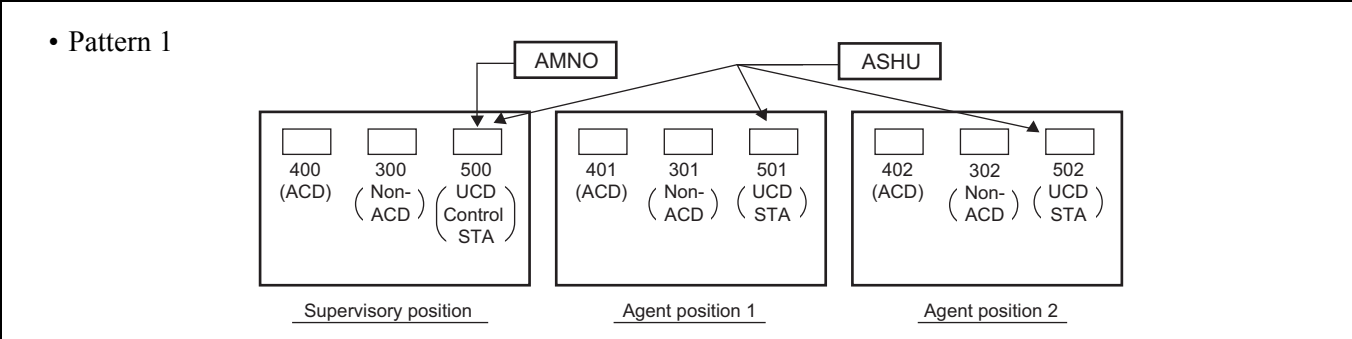
Note 10: The number of digits for each Monitor Number must be the same.

Note: A balance between ACD route and Monitor/Pilot No. for ACD Split is 1:1.

2.16 Back-up UCD

When a system provides the back-up UCD group, ACD calls will be routed to the back-up UCD group even if ACD system is corrupted.

Design of UCD station



2.17 ACD FCCS Data Assignment

This section explains the general information of ACD in an FCCS Network and also, network establishment conditions, data programming. For the function differences, this information is classified into the following two functions.

- Function1 - ACD agents in a node providing ACDP can be handled the ACD incoming calls via access to ACD trunks in the remote node. This is called “ACD Trunk for FCCS” in this manual.
- Function2 - ACD agents in multiple nodes can be handled ACD incoming calls since multiple ACDPs can be provided in an FCCS Network. This is called “Multiple ACDPs in an FCCS Network” in this manual.

Note: As to another FCCS feature, [A-133A] AGENT ANYWHERE-ACD, which allows to handle ACD calls terminated at the trunk in the remote node from ACD positions in any node (Irrespective of the self or remote node, or providing ACDP or not), see Section 3. ACD SERVICE FEATURE in this chapter for details.

Basic Conditions for ACD FCCS Network:

- (1) Location Diversity [L-55] is not available in ACD FCCS Network.
- (2) Telephone Number (two to six digits) is used for the station number type (both Non-ACD line and ACD line) to activate ACD system through FCCS Network.
- (3) Logical Route (1-898: route numbers more than 898 are not available) is used for the route type to activate ACD system through FCCS Network. Tables below show which data programming is changed in accordance with these conditions in terms of data and command kinds.

Basic Office Data

Data Description	Notice
Monitor number	1. AMNON is used in place of AMNO 2. Telephone number for Monitor number (pilot number) is assigned in ALGNN command before the monitor number data assignment. 3. ACNON is used in place of ACNO
Announcement data	AADTN is used in place of AADT
Back up-UCD data	ASHUN is used in place of ASHU. See “Uniform Call Distribution (UCD) [U-1]” in Data Programming Manual - Business.
Other data	Logical route number (1-898) and telephone number (two to six digits) are used.

ACD Command Data

(See Chapter 6 “COMMANDS AND JOB SPECIFICATIONS” for details of each command.)

Data Description	Notice
ACDANA	Telephone number (monitor number = pilot number) should be set in AMNON before this command
ACDCCV	Telephone number is programmed when the transferred destination is a station (TRFDC)
ACDIVR	Telephone number is programmed for Access number to IVR. Note 1
ACDLOG	Telephone number is programmed in PARN, PERN
ACDPLT	Telephone number (monitor number = pilot number) should be set in AMNON before this command
ACDPSN	Telephone number is programmed in NACD and ACDL.

Data Description	Notice
ACDSPL	Telephone number is programmed in ASIST, NIGHT, and EMGCY
ACDTG	Logical route (1-898) is programmed in ACDRT
ACDTN	Telephone number is programmed in IVRNO and OPENO.

Note 1: This command is available in North America only.

- (4) The following operation codes (OP-CODE) are not available for OAI system when OAI and ACD system are used together in the same FCCS Network. For details, see AOKC command in Command Manual.

MSF (F-KIND=1): OP-CODE=185~191

TMF (F-KIND=2): OP-CODE=248~255

- (5) Proper number of connection trunk must be prepared to prevent the traffic congestion. When all the connection trunks are busy, ACD incoming calls cannot be provided with the alternate route by AFRFL command. In case of such a situation, program the CCV step as shown below. Using this data setting, ACD calls distribution to transfer to another agent position is available using the alternate routing function.

Transfer (CCVACT=5) is assigned at CCV step 20.

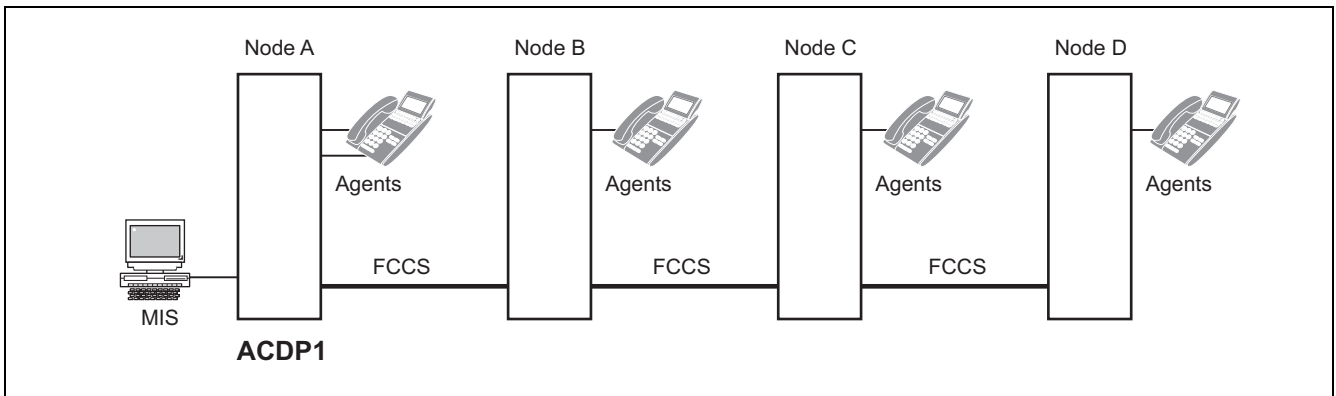
The system is designed to select the alternating route assigned in step 20 automatically in case of the connection trunk all busy.

CCV for ACD Calls Transfer (in case of Traffic Congestion)

CCV step	CCVACT	Remarks
1	Queue Assign	
2	Pause	
3	Announcement	
4	End CCV	Be sure to assign "End CCV" by CCV Step 19 so that the call proceeded in right order is not processed with CCV step 20 "Transfer".
:		
:		
20	Transfer	Examples of alternating route (dialed number of the transfer destination) <ul style="list-style-type: none"> • Monitor Number in the Self Node • Monitor Number in the remote node via outgoing trunk route

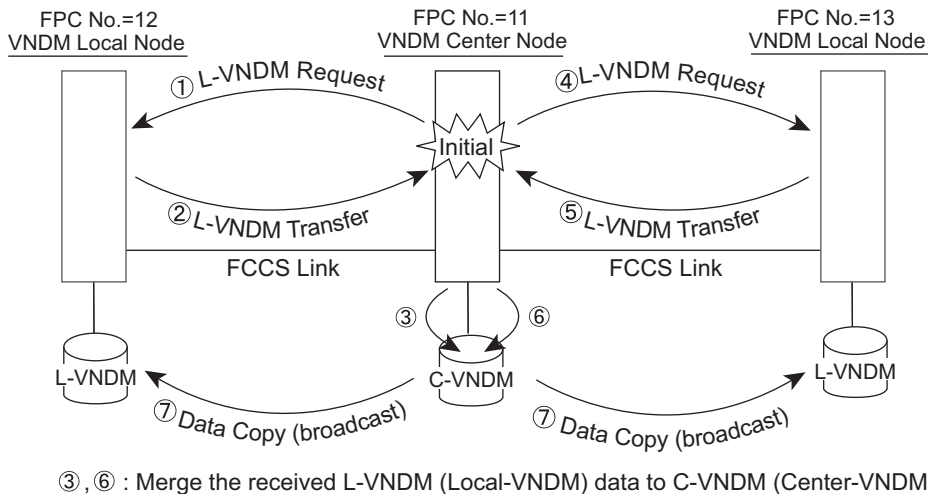
- (6) A maximum of 4 nodes can be connected as “tandem” nodes providing the OAI FCCS services.

Example: Tandem Connection over FCCS Link (Agent Anywhere network)



- (7) Back-up UCD data programming is necessary when the monitor number is used in the node providing no ACDP.
- (8) When System Initialization or ACDP Initialization are executed at VNDM Center Node (the node accommodating the master VNDM data) or the other VNDM Local Node in an FCCS network, re-establishing VNDM data in the FCCS network is automatically carried out to restart ACD FCCS service.

Example: When System initialization is executed at VNDM Center node, re-establishing VNDM data is automatically carried out as follows (VNDM Center node requests the all VNDM Local nodes in the FCCS network to send their L-VNDM data to VNDM Center node, in order of lower FPC number):



- (9) In FCCS Network, set the waiting timer in the AP to 90 seconds for the time interval between the opening of SMFN facility (Subscribe) and the performing of SMFR facility through the AP.

VNDM (Variable Network Data Memory)

- VNDM is the data memory concerning Monitor number and OAI Facilities (Subscriber) Information.
- VNDM is controlled by one node (VNDM Center Node) in an FCCS network and transferred to the other nodes.

Note: If the Program Load or Non Load initialization is executed, this processing will not be carried out. When VNDM Local Node is re-started up even though VNDM Center Node remains in a system down state, VNDM Local Node waits a maximum of 10 minutes for the VNDM Center Node's start up. After 10 minutes of the waiting, VNDM Local Node comes on-line as a Standalone ACDP (The system message "26-Y" is issued.). If VNDM Center Node is re-started up after VNDM Local Node has been re-started as a Standalone ACDP, the FCCS link can be automatically re-established (The system message "26-Z" is issued.).

2.17.1 ACD Trunk for FCCS

General Description

To use the ACD services in an FCCS Network, any ACD calls can be picked up from ACD positions in a node, provided that ACDP uses ACD trunk in the remote node.

Note: ACD calls terminated at the trunk in the remote node can be handled by ACD positions in any node. (irrespective of the self or remote node, or providing ACDP or not.) For details, see AGENT ANYWHERE - ACD [A-133A] in Section 4 of this chapter.

Service Conditions

1. ACD Agent Positions and announcement trunks/dictation trunks (DAT or COT) can be accommodated in the node providing ACDP only.
2. The node that accommodates the ACDP is one node only in an FCCS Network.
3. When the system performs the system changeover, the LED on an ACD Agent Position may not light correctly.

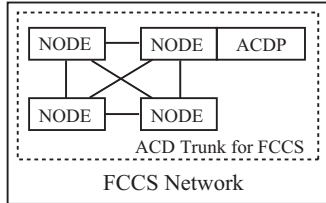
Note: If the state of the LCD seems not to operate correctly, the agent position needs to log on again. For example, DND key does not light even if an agent position answers an ACD call.

Network Configurations:

Examples:

– AVAILABLE

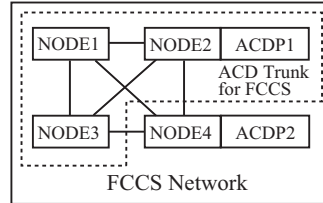
(a) One ACDP manages all nodes in FCCS network



(b) Two ACDPs manage individual system at each.

- ACDP2 manages only NODE4. (NODE4 is ACD stand-alone system.)

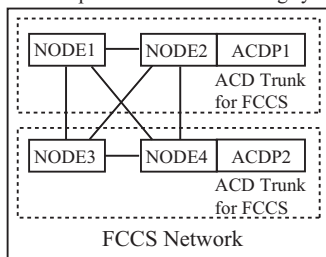
Note 1



– UNAVAILABLE

(c) Two ACDPs manage the same nodes in FCCS network.

Multiple ACD for Networking systems can not exist in an FCCS Network.



Note 1: Do not transfer the ACD call between ACD for FCCS system and ACD stand-alone system in this network.

4. In case this feature is used in DTI-FCCS configuration, the following condition is applied.

If a calling party is released at the same time as an agent position receives an ACD incoming call and answers it, the agent position is not released automatically, and the agent position hears ROT.

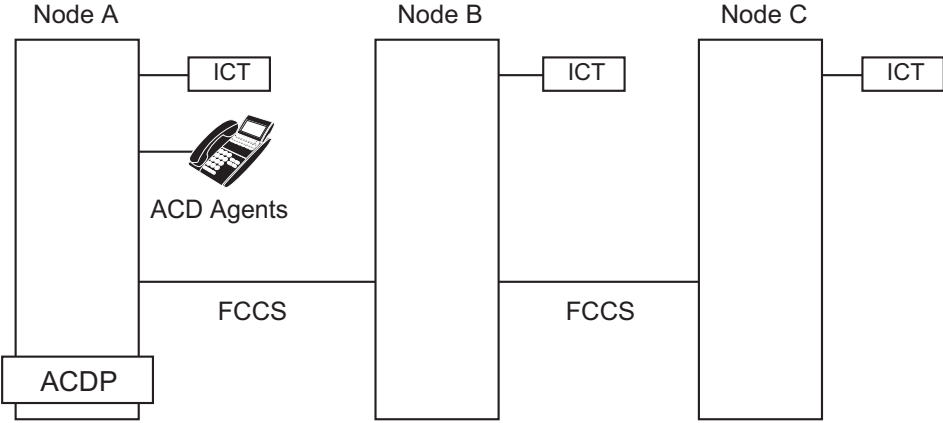
In this case, the agent position should be released manually.

5. There is a condition of the initialization for each node in ACD trunk-FCCS.

a) When initializing nodes not providing ACDP, be sure to initialize nodes providing ACDP as well.

The diagram below shows an example of nodes required to be initialized at the time of initializing each node.

Note: If initialization is not performed on nodes providing ACDP, the ACD system will not operate properly.



ACD trunk-FCCS

Initial Node	Node requires Initialization
Node A (node providing ACDP)	None
Node B (node not providing ACDP)	Node A (node providing ACDP)
Node C (node not providing ACDP)	Node A (node providing ACDP)

- b) Be sure to follow the order of system start-up due to the conditions of initialization.
 - (1) Start up nodes not providing ACDP. (Node B/Node C in random order)
 - (2) Start up a node providing ACDP. (Node A)

Data Programming

- STEP 1: ASYDL - ACD FCCS data. This data must be set to all nodes to be provided ACD service.
- SYS1, Index 512: FPC number of the Self Node (1-253)
 - SYS1, Index 533: FPC number of the node that has the C-VNDM (1-253)
(assign the FPC number of the node providing ACDP)
 - *SYS1, Index 865: FPC of the node providing IP. (When IVR is used, this data is necessary)
 - *SYS1, Index 866: FPC of the node providing built-in ACDP.

Note: The same value (FPC) must be set to these indexes.

Note: Assign 0 for the node using ACD service in the Self Node only.

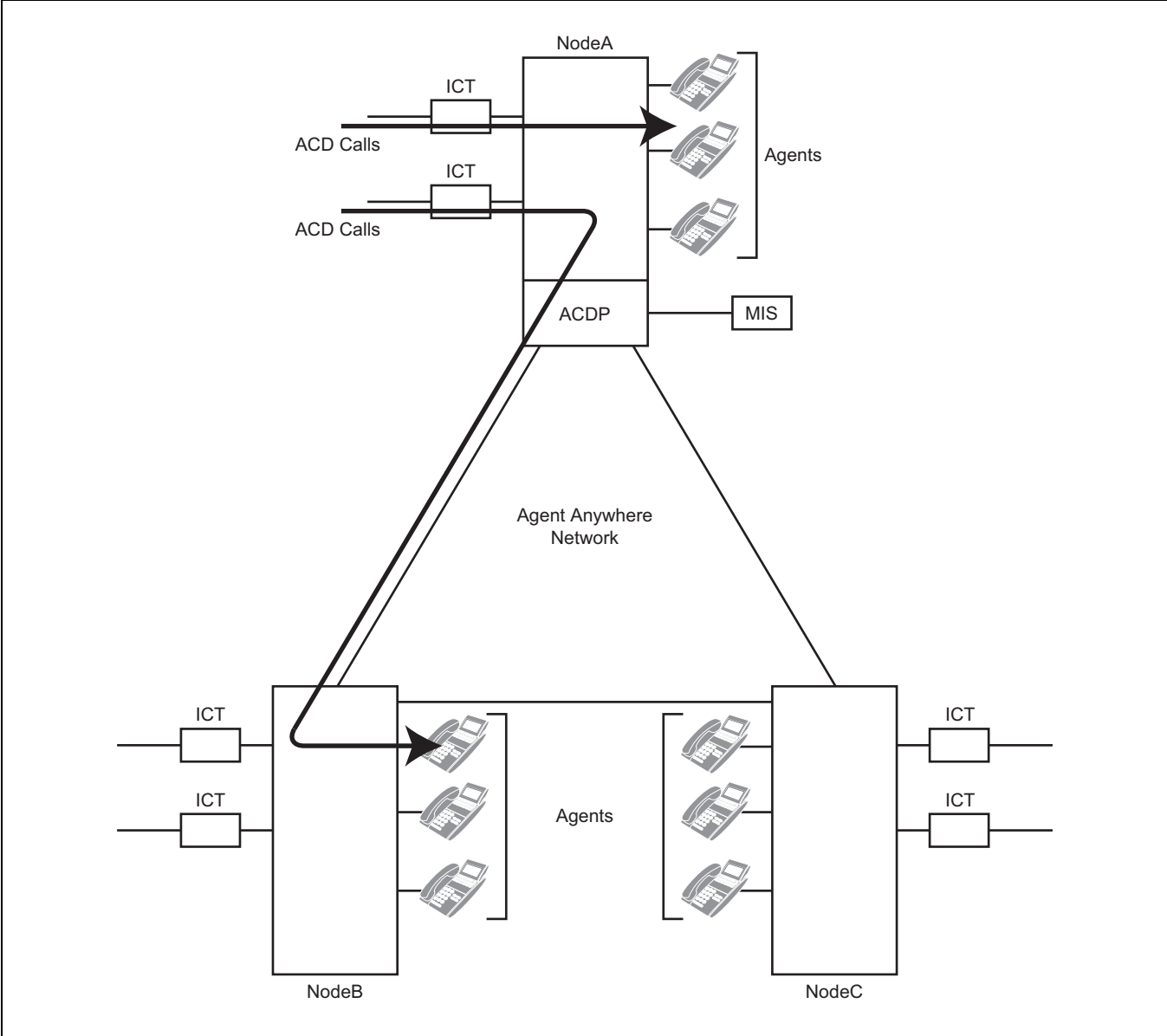
- STEP 2: ASYDN
- SYS1, Index 514: NDM usage
 - SYS1, Index 533: FPC number of the node that has the C-VNDM (1-253)
(assign the FPC number of the node providing ACDP)
- STEP 3: Data programming procedures other than STEP 1, 2 are the same as that of the non-FCCS system (ACD stand-alone system). However, note that which data is necessary for the node providing ACDP. The others than below are set to all FCCS nodes in which ACD trunks or ACD agents are installed.
- Data required for the node that accommodates ACDP:
- ASYD - SYS1, Index 2, Bit 0:1=ACDP is used
 - SYS1, Index 207, Bit 0:1=ACDP is mounted
 - SYS1, Index 207, Bit 1:fixed to 0
 - ASYDL - SYS1, Index 864, Bit 0:1=Built-in ACDP is used

Note: Command data such as AKYD, AOKC, ASFC is set to all nodes in an FCCS Network.

2.17.2 Agent Anywhere

General Information

This feature allows ACD positions to be installed in multiple nodes of an FCCS Network. These agent positions are controlled by one ACDP in an FCCS Network.



ACD calls can be distributed with ACD agents in the terminated node. And a split can consist of ACD positions belonging to multiple nodes.

Service Conditions

1. Telephone Number (two to six digits) is used for the station number type (both Non-ACD line and ACD line) to activate ACD system through FCCS Network.
2. The following data must be set to all nodes to be provided ACD service.

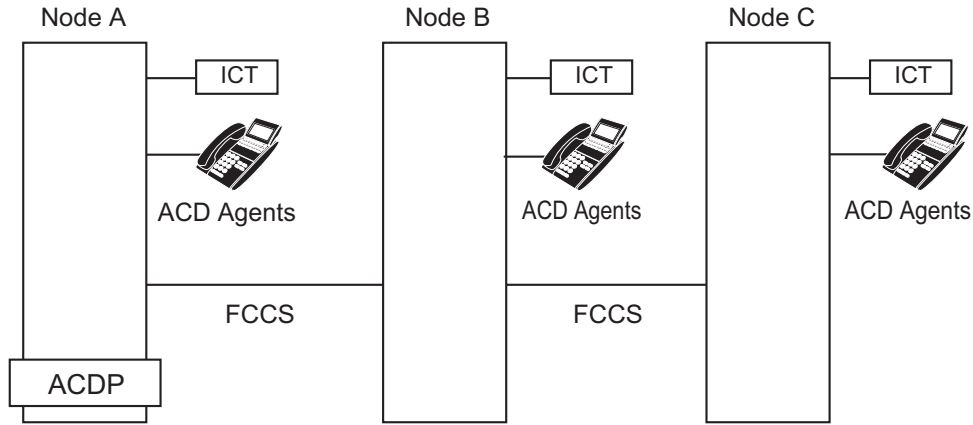
ASYDL, SYS1, Index 865: FPC of the node providing IP. (When IVR is used, this data is necessary)

ASYDL, SYS1, Index 866: FPC of the node providing built-in ACDP.
3. The following operation codes (OP-CODE) are not available for OAI system when OAI and ACD system are used together in the same FCCS Network. For details, see AOKC command in Command Manual.

MSF (F-KIND=1): OP-CODE=185~191

TMF (F-KIND=2): OP-CODE=248~255
4. The node that has the most ACD Agent Positions must be specified for the node providing ACDP.
5. After the system initialization is complete (when the system message 6-H “Bad Call Notification”, print code 2033 is output) in the node providing the ACDP, it will take around 5 minutes until the ACD service becomes effective in the all nodes. (It depends on the quantity of the ACD data. The shortest time is 30 sec.) The reason for taking this much time: It is because of the time to complete transferring the ACD data written in the Variable Network Data Memory (VNDM) to all nodes.
6. The pilot number (including the personal monitor number and the dialed number for ANALOG ACD POSITION-ACD [A-91A]) has to be registered in the Network Data Memory (programmed in AMNON). After the ACD pilot number is registered or deleted, it takes around 5 minutes until the new ACD pilot number becomes effective in all nodes. (It depends on the quantity of the ACD data. The shortest time is 30 sec.) When registering or deleting ACD pilot number, the VNDM data is automatically transferred to all nodes. Thus, the registration or deletion of the pilot number has to be done in low traffic.
7. The node providing the ACDP must be initialized when all the other nodes are in on-line mode.
8. There is a condition of the initialization for each node in Agent Anywhere-ACD [A-133].
 - a) When initializing nodes not providing ACDP, be sure to initialize nodes providing ACDP as well.

The diagram below shows an example of nodes required to be initialized at the time of initializing each node.



Agent Anywhere Network

Initial Node	Node requires Initialization
Node A (node providing ACDP)	None
Node B (node not providing ACDP)	Node A (node providing ACDP)
Node C (node not providing ACDP)	Node A (node providing ACDP)

- b) Be sure to follow the order of system start-up due to the conditions of initialization.
 - (1) Start up nodes not providing ACDP. (Node B/Node C in random order)
 - (2) Start up a node providing ACDP. (Node A)
- 9. When you initialize the node not providing ACDP, you must also initialize the node providing the ACDP.
- 10. Back-up UCD data programming is necessary when the monitor number is used in the node providing no ACDP.
- 11. When you add a node/nodes to the network, you have to initialize the node that accommodates the ACDP. Until you complete the initialization of the node providing the ACDP, you can not use the ACD Agent Position or the ACD trunk in the additional node.
- 12. The MIS must be installed in the node providing the ACDP.
- 13. Proper number of connection trunk must be prepared to prevent the traffic congestion. When all the connection trunks are busy, ACD incoming calls cannot be provided with the alternate route by AFRFL command. In case of such a situation, program the CCV step as shown below. Using this data setting, ACD calls distribution to transfer to another agent position is available using the alternate routing function.

Transfer (CCVACT=5) is assigned at CCV step 20.

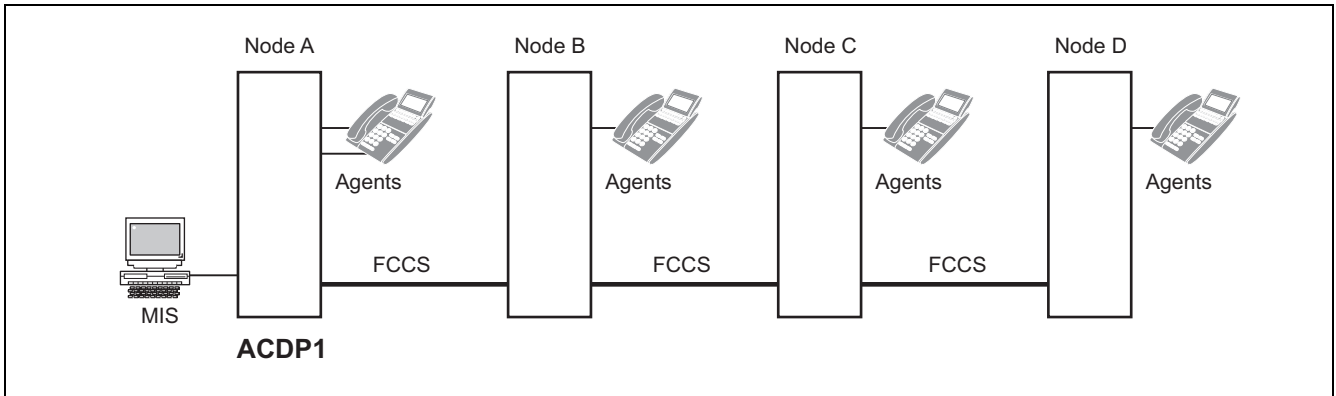
The system is designed to select the alternating route assigned in step 20 automatically in case of the connection trunk all busy.

CCV for ACD Calls Transfer (in case of Traffic Congestion)

CCV step	CCVACT	Remarks
1	Queue Assign	
2	Pause	
3	Announcement	
4	End CCV	Be sure to assign "End CCV" by CCV Step 19 so that the call proceeded in right order is not processed with CCV step 20 "Transfer".
:		
:		
20	Transfer	Examples of alternating route (dialed number of the transfer destination) • Monitor Number in the Self Node • Monitor Number in the remote node via outgoing trunk route

14. A maximum of 4 nodes can be connected as "tandem" nodes providing the OAI FCCS services.

Example: Tandem Connection over FCCS Link (Agent Anywhere network)



15. When the system performs the system changeover, the LED on an ACD Agent Position may not light correctly.

Note: If the state of the LCD seems not to operate correctly, the agent position needs to log on again. For example, DND key does not light even if an agent position answers an ACD call.

16. Logical Route (1-898: route numbers more than 898 are not available) is used for the route type to activate ACD system through FCCS Network. Tables below show which data programming is changed in accordance with these conditions in terms of data and command kinds.

Basic Office Data

Data Description	Notice
Monitor number	1. AMNON is used in place of AMNO 2. Telephone number for Monitor number (pilot number) is assigned in ALGNN command before the monitor number data assignment. 3. ACNON is used in place of ACNO
Announcement data	AADTN is used in place of AADT
Back up-UCD data	ASHUN is used in place of ASHU. See “Uniform Call Distribution (UCD) [U-1]” in Data Programming Manual - Business.
Other data	Logical route number (1-898) and telephone number (two to six digits) are used.

ACD Command Data

(See Chapter 6 “COMMANDS AND JOB SPECIFICATIONS” for details of each command.)

Data Description	Notice
ACDANA	Telephone number (monitor number = pilot number) should be set in AMNON before this command
ACDCCV	Telephone number is programmed when the transferred destination is a station (TRFDC)
ACDIVR	Telephone number is programmed for Access number to IVR. Note 1
ACDLOG	Telephone number is programmed in PARN, PERN
ACDPLT	Telephone number (monitor number = pilot number) should be set in AMNON before this command
ACDPSN	Telephone number is programmed in NACD and ACDL.
ACDSPL	Telephone number is programmed in ASIST, NIGHT, and EMGCY
ACDTG	Logical route (1-898) is programmed in ACDRT
ACDTN	Telephone number is programmed in IVRNO and OPENO.

Note 1: This command is available in North America only.

17. In case this feature is used in DTI-FCCS configuration, the following condition is applied.

If a calling party is released at the same time as an agent position receives an ACD incoming call and answers it, the agent position is not released automatically, and the agent position hears ROT. In this case, the agent position should be released manually.

Data Programming

- STEP 1: ASYDL - ACD FCCS data. This data must be set to all nodes to be provided ACD service.
- SYS1, Index 512: FPC number of the Self Node (1-253)
 - SYS1, Index 533: FPC number of the node that has the C-VNDM (1-253)
(assign the FPC number of the node providing ACDP)
 - *SYS1, Index 865: FPC of the node providing IP. (When IVR is used, this data is necessary)
 - *SYS1, Index 866: FPC of the node providing built-in ACDP.

Note: The same value (FPC) must be set to these indexes.

Note: Assign 0 for the node using ACD service in the Self Node only.

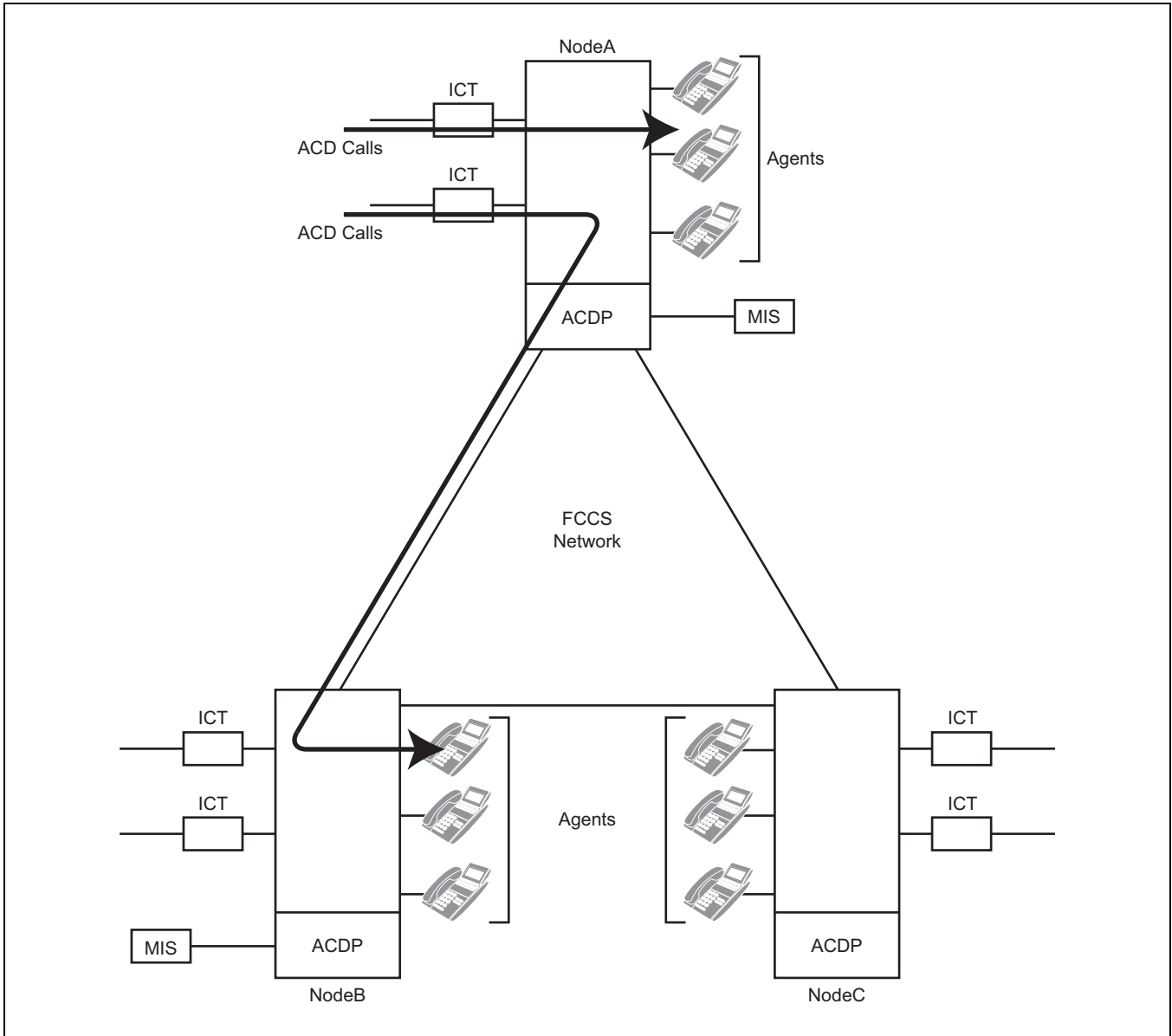
- STEP 2: ASYDN
- SYS1, Index 514: NDM usage
 - SYS1, Index 533: FPC number of the node that has the C-VNDM (1-253)
(assign the FPC number of the node providing ACDP)
- STEP 3: Data programming procedures other than STEP 1, 2 are the same as that of the non-FCCS system (ACD stand-alone system). However, note that which data is necessary for the node providing ACDP. The others than below are set to all FCCS nodes in which ACD trunks or ACD agents are installed.
- Data required for the node that accommodates ACDP:
- ASYD - SYS1, Index 2, Bit 0:1=ACDP is used
 - SYS1, Index 207, Bit 0:1=ACDP is mounted
 - SYS1, Index 207, Bit 1:fixed to 0
 - ASYDL - SYS1, Index 864, Bit 0:1=Built-in ACDP is used

Note: Command data such as AKYD, AOKC, ASFC is set to all nodes in an FCCS Network.

2.17.3 Multiple ACDPs in an FCCS Network

General Information

This feature allows accommodating two or more ACDPs in an FCCS Network. Establishing the CCIS line is not necessary to use ACD function through the network any more. Network user can transfer ACD calls to the remote node with FCCS line and FCCS service can be used by establishing an FCCS Network. As for ACD incoming calls, call terminated to ACD trunk can be distributed to the remote node regardless of the Self Node or the remote node.



Also, more than one ACDP using “AGENT ANYWHERE” feature can be placed on the FCCS network (Multiple ACDPs on an FCCS Network).

Service Conditions

1. ACDP can be accommodated in all FCCS nodes.
2. Maximum number of Status Monitoring Requests to a terminal (including Trunk) is decided by the system data (max. 8 ports available including ACDP, UAP(**Note 1**)). Note that the normal operation is not guaranteed if Status Monitoring is requested to a terminal from more than the number of ports (for example, the case DID Trunk is managed by more than the designated number of ACDPs). Do not establish such a network configuration.

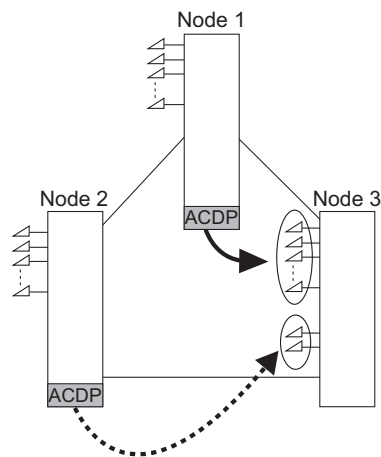
Note 1: UAP for Status Monitoring Request using SMFR. Status Monitoring Request from UAP is available by using the ports other than ports used for Status Monitoring Request from ACDP.

- More than one node can accommodate the “ACDP” on the FCCS network (before the software enhancement, only one node can be equipped with ACDP). At this time, each of the “ACDP nodes” can use the “ACDP Trunk for FCCS” and ACD stand-alone functions. However, “AGENT ANYWHERE” feature can be used by only one of the “ACDP nodes”.

In addition, the “AGENT ANYWHERE” feature can also be used by more than one ACDP system on the FCCS network.

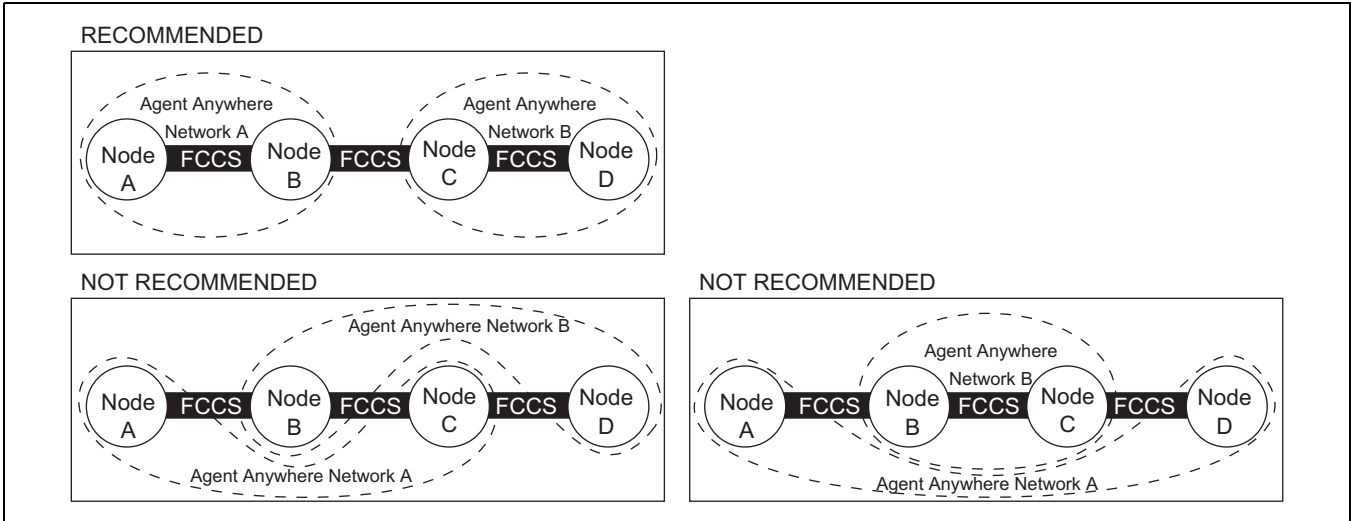
- The destination node (ACDP) for ACD incoming calls is designated on a monitor number basis using ACDPLT command (ACD trunk basis). Note that the destination node can be assigned only one per monitor number using ACDPLT command (The same monitor number can not be assigned at multiple nodes using ACDPLT).
- Agent positions to be controlled from different ACDPs cannot be accommodated in a node.

Both ACDPs in Node 1 and Node 2 can not control ACD positions in Node 3.



- When a DID Trunk is managed by multiple ACDPs, the trunk information (CA, AF message) is sent to each MIS. Accordingly, the number of originating static report which is concerned with the trunk group and the trunk to be processed by the other ACDPs is included in the report.
- When new node (nodes) is added to the network, the node that accommodates ACDP must be initialized.
- When multiple Agent Anywhere networks are activated via tandem connection of FCCS links, each controlling nodes should not be control the one’s Agent Anywhere nodes across the node of the other Agent Anywhere Network, because of excess Node-to Node load.

Multiple Agent Anywhere Networks via tandem connection of FCCS links



9. When ACD system is not operated normally after the assignment of monitor number data, broadcast the VNDM data by using the CBCV command. By using the CBCV command, the VNDM data can be broadcast to all the VNDM Local Nodes in an FCCS network from the VNDM Center Node.
10. When the system performs the system changeover, the LED on an ACD Agent Position may not light correctly.

Note: If the state of the LCD seems not to operate correctly, the agent position needs to log on again. For example, DND key does not light even if an agent position answers an ACD call.

11. Proper number of connection trunk must be prepared to prevent the traffic congestion. When all the connection trunks are busy, ACD incoming calls cannot be provided with the alternate route by AFRFL command. In case of such a situation, program the CCV step as shown below. Using this data setting, ACD calls distribution to transfer to another agent position is available using the alternate routing function.

Transfer (CCVACT=5) is assigned at CCV step 20.

The system is designed to select the alternating route assigned in step 20 automatically in case of the connection trunk all busy.

CCV for ACD Calls Transfer (in case of Traffic Congestion)

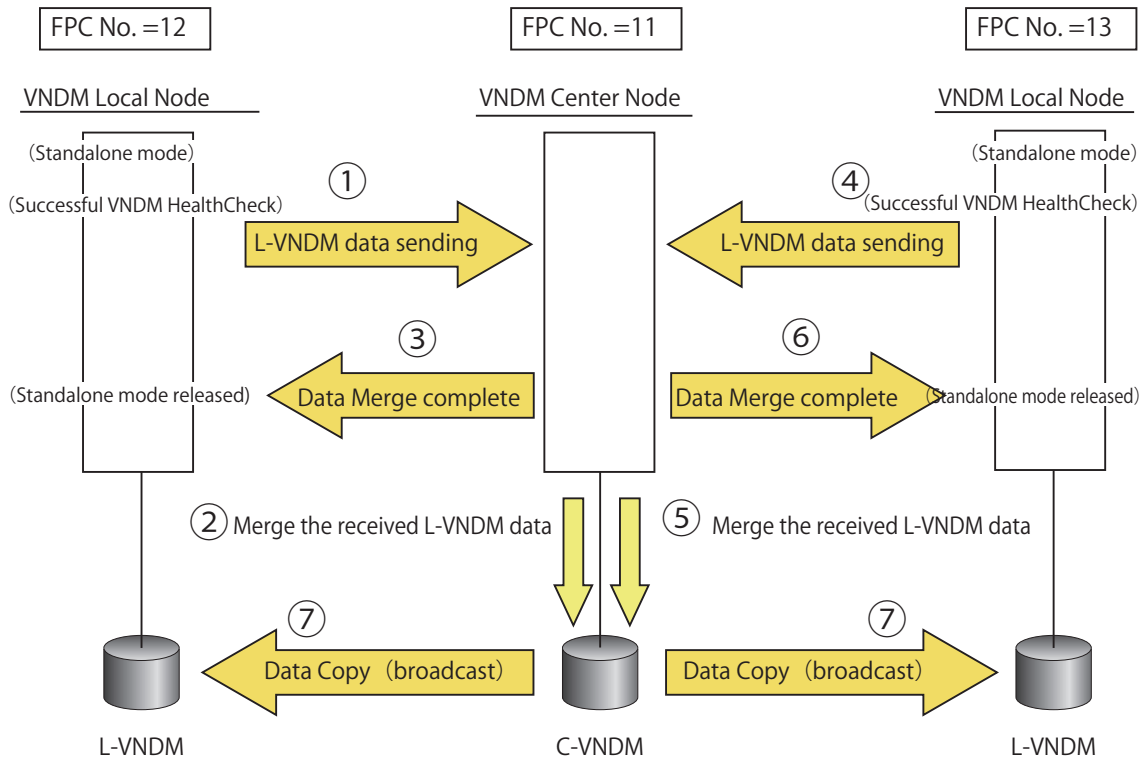
CCV step	CCVACT	Remarks
1	Queue Assign	
2	Pause	
3	Announcement	
4	End CCV	Be sure to assign "End CCV" by CCV Step 19 so that the call proceeded in right order is not processed with CCV step 20 "Transfer".
:		
:		
20	Transfer	Examples of alternating route (dialed number of the transfer destination) <ul style="list-style-type: none"> • ACD Pilot Number in the Self Node • Monitor Number in the remote node via outgoing trunk route

If load initialization is executed due to a failure of the VNDM Center Node or the VNDM Local Node, the VNDM data reconfiguration process will automatically start in order to recover the ACD FCCS service.

Note: When Non-Load initialization is executed, the data reconfiguration process will not start.

Note: When starting the VNDM Local Node even though the VNDM Center Node remains in a system down state, the VNDM Local Node waits for 10 minutes until the VNDM Center Node starts. If the VNDM Local Node is still not launched after 10 minutes, the VNDM Local Node comes on-line on ACD standalone mode. (The system message "26-Y" will be output) When the VNDM Center Node is up, ACD standalone mode will be automatically released from the VNDM Local Node once Health Check (64 sec. cycle) is performed on the VNDM Center Node. Then the VNDM Local Node will be accommodated in ACD FCCS. (The system message "26-Z" for releasing ACD standalone mode will be output)

Below is an overview of the reconfiguration process.



- VNDM: The data memory concerning Monitor Number and OAI Facilities (Subscriber) Information.
- C-VNDM: Center-VNDM, which is accommodated in VNDM Center Node.
- L-VNDM: Local-VNDM, which is accommodated in all the Local Nodes in the FCCS network.

Network Configurations:

The following are some examples of ACD system configuration predictable in an FCCS Network. For details of setting, see “Data Programming” in this section.

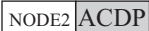
LEGEND

Type I : Non-ACD system (as an example for comparing with the other systems)



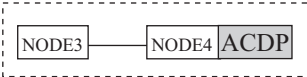
Note 1: ACD calls can be transferred to this system from other ACD systems via the data programming of NODE 3 in Type III.

Type II : ACD stand-alone system (ACD system provides ACD function in the self-node only)



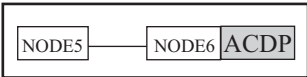
Note 2: ACD calls can be transferred to this system from other ACD systems via the data programming of NODE4 in Type III.

Type III : Systems using (ACD Trunk for FCCS)



NODE3 - System providing ACD trunks only
NODE4 - System providing ACD trunks and agent positions

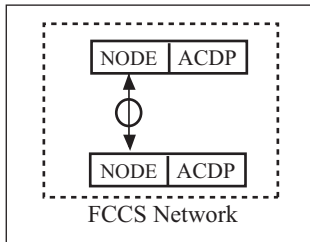
Type IV : Systems using (AGENT ANYWHERE-ACD)



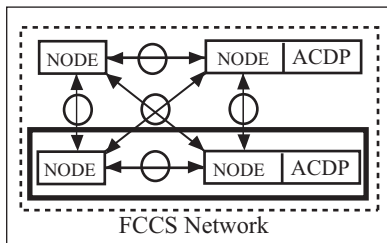
NODE5 - System providing ACD trunks and agent positions
NODE6 - System providing ACD trunks and agent positions
Additionally, the node providing VNDM (CN of VNDM) and NCN

FCCS Network (Example)

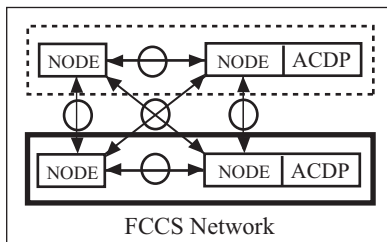
The following are some examples of network configurations. ACD incoming calls in a node can be terminated to any nodes depending on the setting. And also, call transfer is available for each other.



(1) System using "ACD Trunk for FCCS" × n



(2) Systems using "ACD Trunk for FCCS" (non-ACD system + ACD stand-alone system + System using "Agent Anywhere-ACD")



(3) Systems using "ACD Trunk for FCCS" + System using "Agent Anywhere-ACD"

12. In case this feature is used in DTI-FCCS configuration, the following condition is applied.

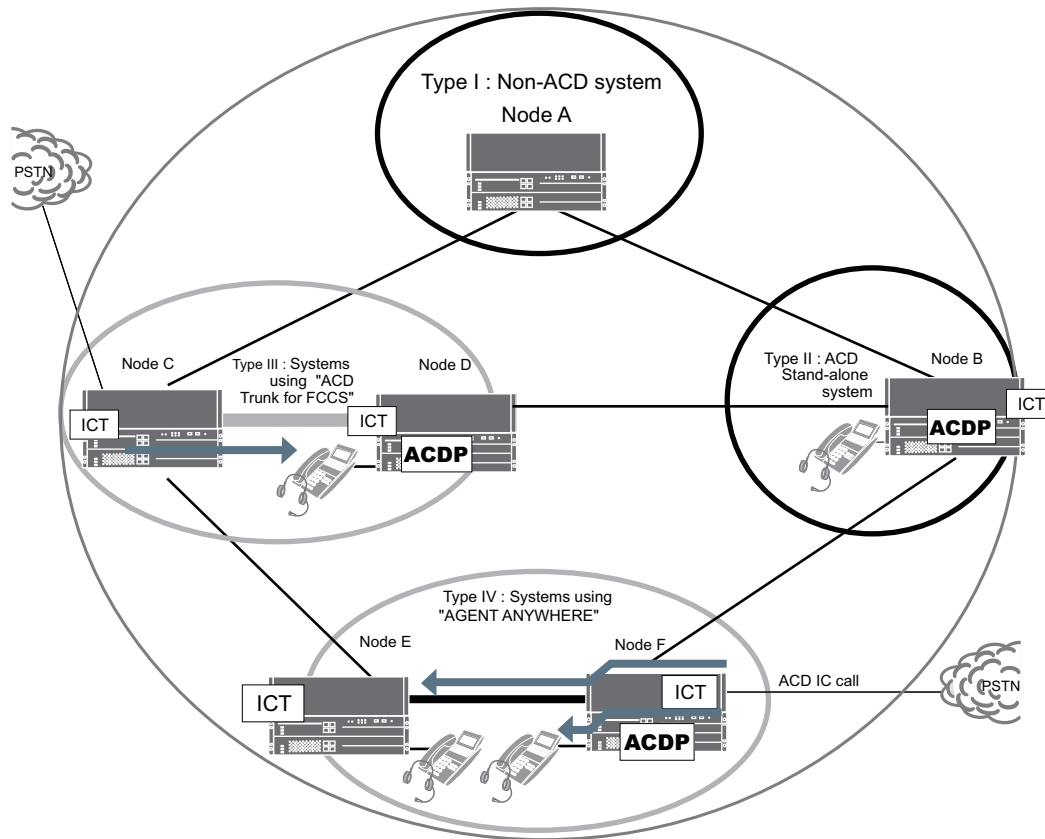
If a calling party is released at the same time as an agent position receives an ACD incoming call and answers it, the agent position is not released automatically, and the agent position hears ROT. In this case, the agent position should be released manually.

Data Programming

This section shows data programming divided into the types of ACD system in the figure below.

Network Configuration of ACD systems

The following is the network configuration of ACD system in an FCCS Network.



LEGEND

- Type I : Non-ACD system (as an example for comparing with the other systems)
ACD calls may be transferred to this system from other ACD systems via the data programming of Node C.
- Type II : ACD Stand-alone system (ACD system provides ACD function in the Self Node only)
ACD calls may be transferred to this system from other ACD systems via the data programming of Node D.
- Type III : Systems using "ACD Trunk for FCCS"
Node C – System providing ACD trunks only
Node D – System providing ACD trunks and ACD positions
- Type IV : Systems using "AGENT ANYWHERE"
Node E – System providing ACD trunks and ACD positions
Node F – System providing ACD trunks and ACD positions
Also, the node providing C-VNDM and NCN

(1) The following is the quick reference table of data programming for each ACD system type according to the previous page.

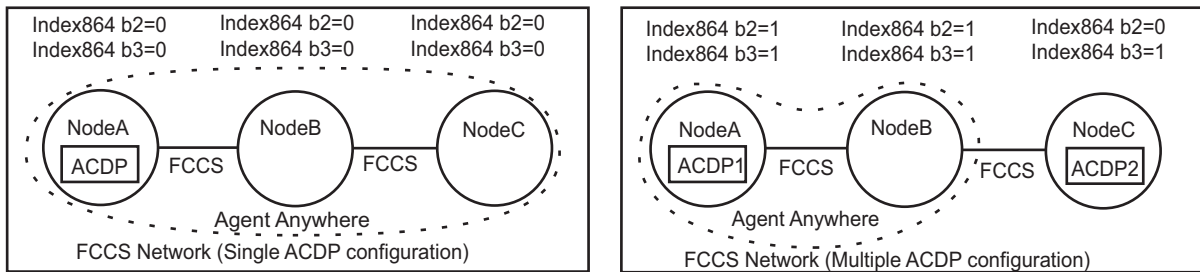
ACD Software and Data Programming		Type and Node	I	II	III		IV	
		Node A	Node B	Node C	Node D	Node E	Node F	
ACD Software								
1	ACD Option Service software (for basic ACD Service) (SV85 ACD CLOP(1) LICS)			⊙		⊙		⊙
2	ACD Option Service Software for “AGENT ANYWHERE-ACD” (SV85 NW-ACD/OAI LICS)	⊙	⊙	⊙	⊙	⊙	⊙	⊙
System Data								
3	ACDP in service/out of service (ASYD, SYS1, Index 2, Bit 0)	0	1	0	1	0	1	
4	CM Usage Note 2 (ASYD, SYS1, Index 31, Bit 0 to Bit 3)	0	4	4	4	4	4	4
5	OAI in service/out of service (ASYD, SYS1, Index 79, Bit 6)	1	0	0	0	0	0	0
6	ACDP Mounting Status (ASYD, SYS1, Index 207, Bit 0)	0	1	0	1	0	1	
7	ACDP Mounting Status (ASYD, SYS1, Index 207, Bit 1)	0	0	0	0	0	0	0
8	OAI Call Processing Event Notification (ASYD, SYS1, Index 241, Bit 2)	0	1	1	1	1	1	1
9	SCF Return Error Detail Notification (ASYD, SYS1, Index 241, Bit 3)	0	1	1	1	1	1	1
10	Built-in ACDP is used/not used (ASYDL, SYS1, Index 864, Bit 0)	0	1	0	1	0	1	
11	“AGENT ANYWHERE-ACD” in service/out of service (ASYDL, SYS1, Index 864, Bit 2) Note 3	0	0	1	1	1	1	1
12	“MULTIPLE ACDPs in an FCCS Network” in service/out of service Note 4 (ASYDL, SYS1, Index 864, Bit 3)	0	1	1	1	1	1	1
13	FPC no. of the node providing IP (ASYDL, SYS1, Index 865)	0	0	Note 5	Note 5	Note 5	Note 5	Note 5
14	FPC no. of the node providing ACDP (ASYDL, SYS1, Index 866)	0	0	Node D	Node D	Node F	Node F	
15	Number of ports for SMFN (terminal) (ASYDL, SYS1, Index 864, Bit 4)	0	Note 6	Note 6	Note 6	Note 6	Note 6	Note 6
16	SMFN Status Monitor Clearing (ASYDL, SYS1, Index 864, Bit 5)	0	Note 7	Note 7	Note 7	Note 7	Note 7	Note 7

ACD Software and Data Programming		Type and Node					
		I	II	III		IV	
		Node A	Node B	Node C	Node D	Node E	Node F
17	FPC no. of Center Node providing VNDM (ASYDL/ASYDN, SYS1, Index 533)	Note 8	Note 8	Note 8	Note 8	Note 8	Note 8
18	ACD data (See item (2) in this section)		○		○		○

- ◎ : the software is installed to be linked with the standard service software using Telephony Server Maintenance Menu.
- : the node requires ACD data programming.

Note 2: When CM is used for another function, this setting may be changed.

Note 3: This data setting is required (i.e., assign 1) only when the AGENT ANYWHERE service is used in the Multiple ACDP Network configuration. In other words, this data setting takes effect only when SYS1, Index 864, Bit 3=1. Therefore, this data setting is not necessary (i.e., assign 0) when the AGENT ANYWHERE service in the Single ACDP Network configuration is used.



Note 4: All FCCS nodes in the network are used for “MULTIPLE ACDPs in an FCCS Network”, this data may be assigned using ASYDN.

Note 5: This data is required for UAP connection.

Note 6: Assign the number of ports for status Monitor Facility Notification (SMFN). The identical data value must be assigned at all nodes on FCCS Network. (When “Status Monitor Facility Request (SMFR), FN=126” is used, always assign 0 (2 ports).)

- ASYDL, SYS1, Index 864, Bit 4: 0/1
- 0=2 ports
- 1=8 ports (Normal Setting)

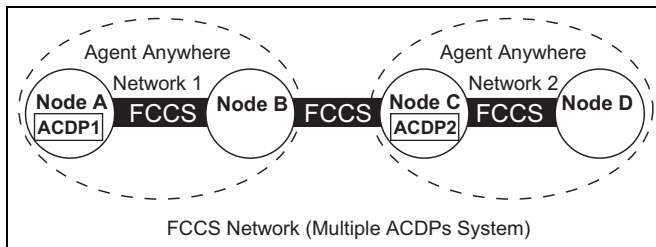
Note 7: Although this data is valid only when Index 864, Bit 4=1 (8 ports), this bit must be assigned as data “0” when Index 864, Bit 4=0 (2 ports). The identical data value must be assigned at all nodes on FCCS Network.

- ASYDL, SYS1, Index 864, Bit 5: 0/1
- 0=Status Monitor Facility Notification (SMFN) is cleared when the FCCS Link is down.
- (Normal Setting)

1=Status Monitor Facility Notification (SMFN) is not cleared when the FCCS Link is down.

Note 8: Assign the FPC no. of ACDP node using “AGENT ANYWHERE” when an FCCS Network provided MULTIPLE ACDPs is also provided “AGENT ANYWHERE”. While in the network not provided “AGENT ANYWHERE” (actually, the node may be changed into the node provided “ACD Trunk for FCCS”) assign the FPC no. of ACDP node using “ACD Trunk for FCCS” (In this example, FPC no. of Node D or Node F is applied with this condition).

(2) When the multiple ACDPs for “AGENT ANYWHERE” are used in an FCCS network, “ASYDL, SYS1, Index 866” data programming is as follows:



Node A: SYS1, Index 866=FPC of the Self Node
 Node B: SYS1, Index 866=FPC of the Node A
 Node C: SYS1, Index 866=FPC of the Self Node
 Node D: SYS1, Index 866=FPC of the Node C

- (3) Some notices for ACD commands data programming are described below.
- a.) When the DID trunk is controlled by multiple ACDPs, the identical ACDTG command data can be programmed at the nodes of ACDPs.
 - b.) Do not duplicate to assign the monitor number in ACDPLT data, agent position’s number (including analog ACD position’s number and agent position’s number in a “Hot Split”) in ACDPSN, and IVR access number in ACDIVR command data at multiple ACDP nodes. **Note 9**

Note 9: ACDIVR command is available in North America only.

- (4) Some notices for commands data programming are described below.
See Figure “Network Configuration of ACD systems” for network configuration of ACD systems.

Type of Networks and Nodes Command Data	I	II	III		IV	
	Node A	Node B	Node C	Node D	Node E	Node F
AMNO(Monitor Number Data)		N/L		N		N
(Back-up UCD) Note 10		F		F		F
ACNO (Conversion Number Data)		N/L		N		N
AADT(Announcement/Dictation Data)		N		N		N
AOKC(OAI key code data)		○		○		○
AKYD (Key data for Desktop Terminal)		○		○		○
ASFC(Service Feature Restriction Class data)		○		○		○
ASHU (Station Hunting Group-UCD data)		F		F		F

- : Assign data by the corresponding commands written in DM.
- N : Assign data by the corresponding commands written in NDM.
- L : Assign data by the corresponding commands written in LDM when the call is not terminated from other nodes.
- F : UCD for FCCS service must be used for the back-up UCD.

Note 10: When a COT card is used for back-up UCD, assign the UCD pilot number for the destination of RT and TK for COT card using ACSI command data.

The system may not be operated normally if the above-mentioned data (especially, system data in item 1) is not programmed correctly or the required software (also, described in item 1) is not installed yet. Data to be checked in case of the following faults are shown below.

Note: The data marked “*” means system must be initialized after data change.

- (a) ACD data can not be programmed.
 - Data Programming
 - ACDP in service/out of service (ASYD, SYS1, Index 2, Bit 0)
 - ACDP Mounting Status (ASYD, SYS1, Index 207, Bit 0 to Bit 1)
 - Built-in ACDP is used/not used (ASYDL, SYS1, Index 864, Bit 0)
- (b) The agent can not log on to a position.
 - Software to be installed
 - Software install for “AGENT ANYWHERE” (SV85 NW-ACD/OAI LICS)
 - Data Programming
 - FPC number of the VNDM Center Node (ASYDN, SYS1, Index 533)
(By using CBCV command, broadcast the VNDM data from the VNDM Center Node to all the VNDM Local Node in FCCS Network.)
 - “AGENT ANYWHERE” is in service/out of service (ASYDL, SYS1, Index 864, Bit 2)
 - “MULTIPLE ACDPs in an FCCS Network” is in service/out of service (SYS1, Index 864, Bit 3)

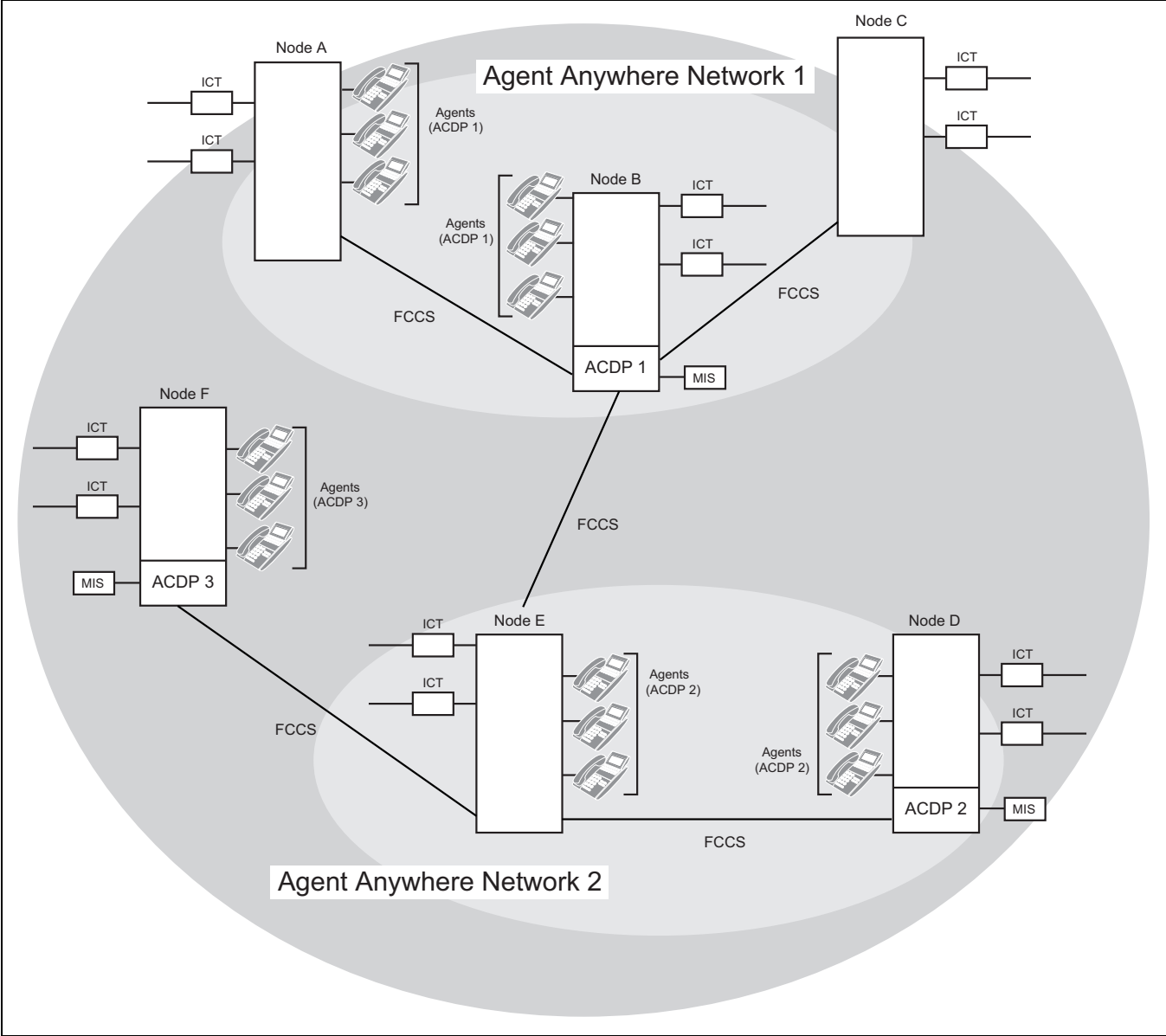
- (c) ACD incoming calls are routed to Busy Tone connection/ACD incoming calls are distributed by back-up UCD function.
- Software to be installed
 - Software install for “AGENT ANYWHERE” (SV85 NW-ACD/OAI LICs)
 - Data Programming
 - FPC number of the VNDM Center Node (ASYDN, SYS1, Index 533)
(By using CBCV command, broadcast the VNDM data from the VNDM Center Node to all the VNDM Local Node in FCCS Network.)
 - “AGENT ANYWHERE” is in service/out of service (ASYDL, SYS1, Index 864, Bit 2)
 - “MULTIPLE ACDPs in an FCCS Network” is in service/out of service (ASYDL, SYS1, Index 864, Bit 3)
 - FPC number of the node providing ACDP (ASYDL, SYS1, Index 866)
- (d) ACD incoming calls released before connecting with the ACD positions are not deleted from the queue (Abandoned Call Search is ineffective)/ACD positions are not automatically released from the connection with an ACD call after the call is released.
- Data Programming
 - CM usage (ASYD, SYS1, Index 31, Bit 0 to Bit 3)
 - OAI Call Processing Event Notification (ASYD, SYS1, Index 241, Bit 2)
 - Number of ports for SMFN (terminal) (ASYDL, SYS1, Index 864, Bit 4 and Bit 5)
- (e) ACD Agent Position is locked up after transferring an ACD call to another position in the remote node.
- Data Programming
 - Number of ports for SMFN (terminal) (ASYDL, SYS1, Index 864, Bit 4 and Bit 5)
 - Others
 - Check the destination node is NODE1 or NODE2 in Figure “Network Configuration of ACD systems”. If Node A or Node B is required to be transferred ACD calls from other ACD systems, data programming and software install of Node C to Node A, data programming and software install of Node D to Node B are required.
- (f) ACD incoming calls are not distributed using alternate routing function when system is down or connection trunks are all busy.
- Data Programming
 - SCF Return Error Detail Notification (ASYD, SYS1, Index 241, Bit 3=1) (*)
 - ACD data programming (see ACDCCV command data in item 4) (*)
- (g) LCD display is not operated normally on ACD Agent Positions.
- Data Programming
 - Number of ports for SMFN (terminal) (ASYDL, SYS1, Index 864, Bit 4 and Bit 5)
 - ACD data programming (ACD positions data in ACDPSN command is duplicated at multiple nodes) (*)

Note: The data marked “*” means system must be initialized after data change.

2.17.4 Multiple Agent Anywhere

General Information

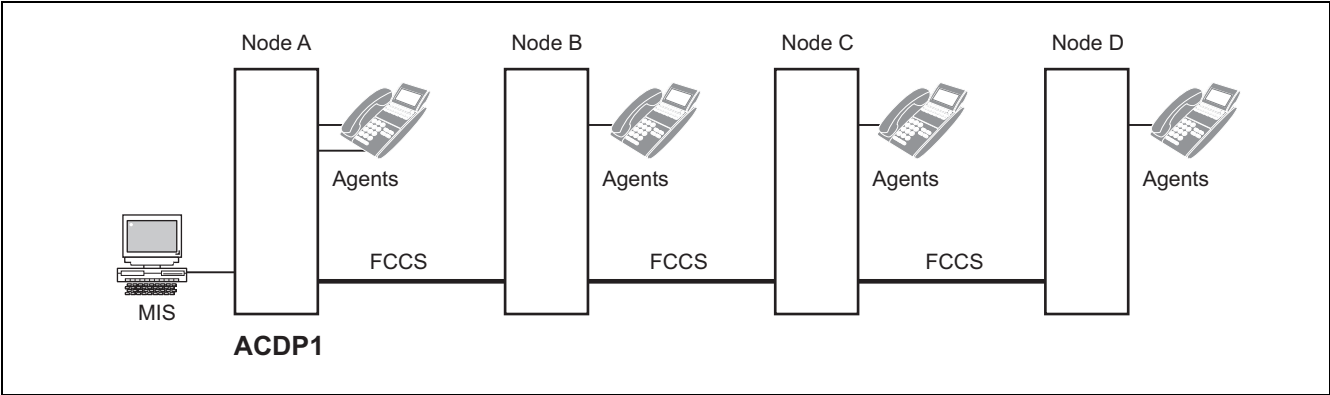
This feature allows an FCCS Network to accommodate two or more Agent Anywhere networks, thus enabling a multiple ACDP system consisting of multiple ACDP networks.



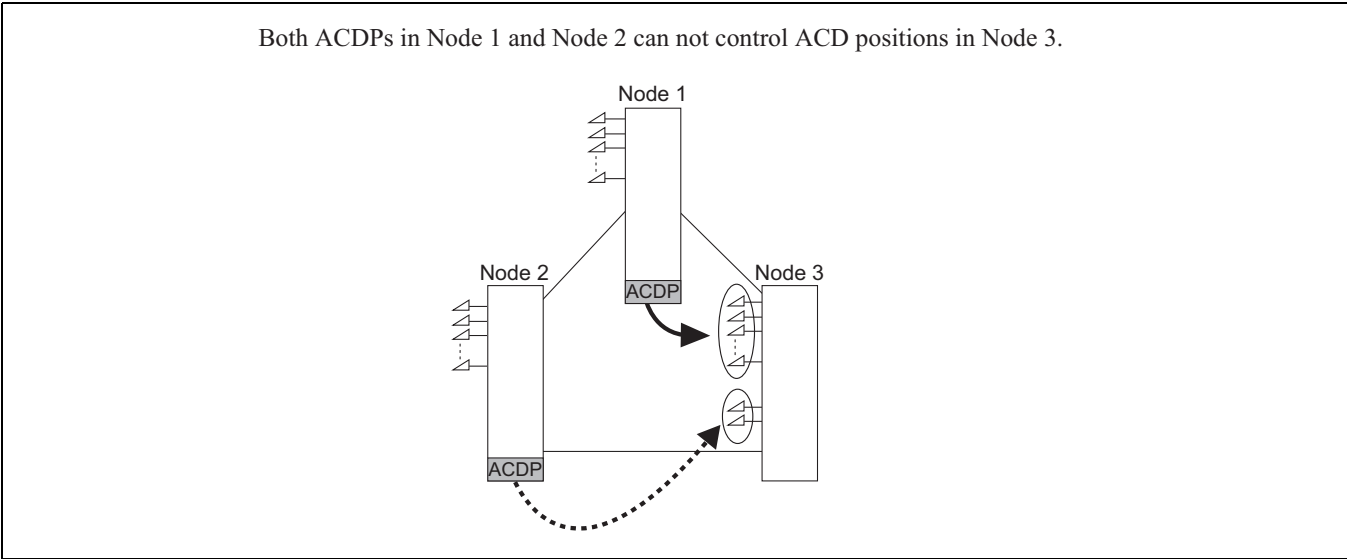
Service Conditions

- 1. A maximum of 4 nodes can be connected as “tandem” nodes providing the OAI FCCS services

Example: Tandem Connection over FCCS Link (Agent Anywhere network)



- 2. Telephone Number (two to six digits) is used for the station number type (both Non-ACD line and ACD line) to activate ACD system through FCCS Network.
- 3. Agent positions to be controlled from different ACDPs cannot be accommodated in a node.



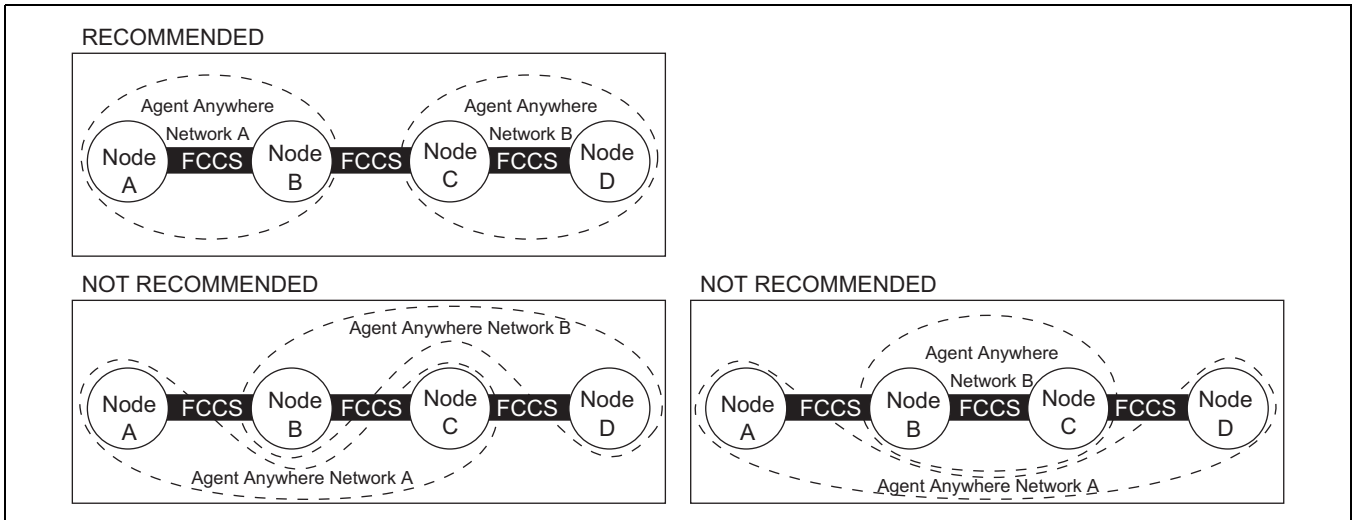
- 4. The following operation codes (OP-CODE) are not available for OAI system when OAI and ACD system are used together in the same FCCS Network. For details, see AOKC command in Command Manual.

MSF (F-KIND=1): OP-CODE=185~191

TMF (F-KIND=2): OP-CODE=248~255

- When multiple Agent Anywhere networks are activated via tandem connection of FCCS links, each controlling nodes should not be control the one's Agent Anywhere nodes across the node of the other Agent Anywhere Network, because of excess Node-to Node load.

Multiple Agent Anywhere Networks via tandem connection of FCCS links



- Maximum number of Status Monitoring Requests to a terminal (including Trunk) is decided by the system data (max. 8 ports available including ACDP, UAP (**Note 1**)). Note that the normal operation is not guaranteed if Status Monitoring is requested to a terminal from more than the number of ports (for example, the case DID Trunk is managed by more than the designated number of ACDPs). Do not establish such a network configuration.

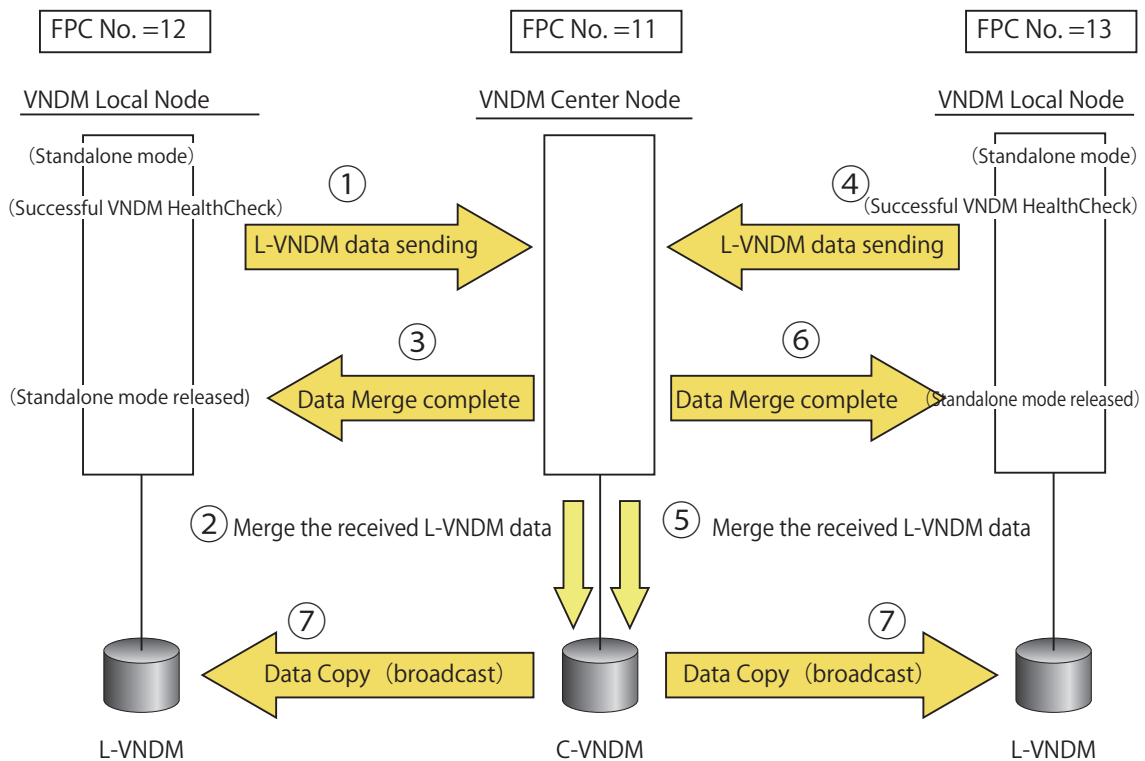
Note 1: UAP for Status Monitoring Request using SMFR. Status Monitoring Request from UAP is available by using the ports other than ports used for Status Monitoring Request from ACDP.

- When a DID Trunk is managed by multiple ACDPs, the trunk information (CA, AF message) is sent to each MIS. Accordingly, the number of originating static report which is concerned with the trunk group and the trunk to be processed by the other ACDPs is included in the report.
- If load initialization is executed due to a failure of the VNDM Center Node or the VNDM Local Node, the VNDM data reconfiguration process will automatically start in order to recover the ACD FCCS service.

Note: When Non-Load initialization is executed, the data reconfiguration process will not start.

Note: When starting the VNDM Local Node even though the VNDM Center Node remains in a system down state, the VNDM Local Node waits for 10 minutes until the VNDM Center Node starts. If the VNDM Local Node is still not launched after 10 minutes, the VNDM Local Node comes on-line on ACD standalone mode. (The system message “26-Y” will be output) When the VNDM Center Node is up, ACD standalone mode will be automatically released from the VNDM Local Node once Health Check (64 sec. cycle) is performed on the VNDM Center Node. Then the VNDM Local Node will be accommodated in ACD FCCS. (The system message “26-Z” for releasing ACD standalone mode will be output)

Below is an overview of the reconfiguration process.



- VNDM: The data memory concerning Monitor number and OAI Facilities (Subscriber) Information.
 - C-VNDM: Center-VNDM, which is accommodated in VNDM Center Node.
 - L-VNDM: Local-VNDM, which is accommodated in all the Local Nodes in the FCCS network.
9. Back-up UCD data programming is necessary when the monitor number is used in the node providing no ACDP.

10. Proper number of connection trunk must be prepared to prevent the traffic congestion. When all the connection trunks are busy, ACD incoming calls cannot be provided with the alternate route by AFRFL command. In case of such a situation, program the CCV step as shown below. Using this data setting, ACD calls distribution to transfer to another agent position is available using the alternate routing function.

Transfer (CCVACT=5) is assigned at CCV step 20.

The system is designed to select the alternating route assigned in step 20 automatically in case of the connection trunk all busy.

CCV for ACD Calls Transfer (in case of Traffic Congestion)

CCV step	CCVACT	Remarks
1	Queue Assign	
2	Pause	
3	Announcement	
4	End CCV	Be sure to assign "End CCV" by CCV Step 19 so that the call proceeded in right order is not processed with CCV step 20 "Transfer".
:		
:		
20	Transfer	Examples of alternating route (dialed number of the transfer destination) <ul style="list-style-type: none"> • ACD Pilot Number in the Self Node • Monitor Number in the remote node via outgoing trunk route

11. The pilot number (including the personal monitor number and the dialed number for ANALOG ACD POSITION-ACD [A-91A]) has to be registered in the Network Data Memory (programmed in AMNON). After the ACD pilot number is registered or deleted, it takes around 5 minutes until the new ACD pilot number becomes effective in all nodes. (It depends on the quantity of the ACD data. The shortest time is 30 sec.) When registering or deleting ACD pilot number, the VNDM data is automatically transferred to all nodes. Thus, the registration or deletion of the pilot number has to be done in low traffic.
12. The MIS must be installed in the node providing the ACDP.
13. The destination node (ACDP) for ACD incoming calls is designated on a monitor number basis using ACDPLT command (ACD trunk basis). Note that the destination node can be assigned only one per monitor number using ACDPLT command (The same monitor number can not be assigned at multiple nodes using ACDPLT).
14. When ACDP Initialization is executed at a VNDM Local Node, the VNDM Center Node to which the Local Node belongs must also be initialized.
15. When the system performs the changeover, the LED on an ACD Agent Position may not light correctly.

Note: If the state of the LCD seems not to operate correctly, the agent position needs to log on again. For example, DND key does not light even if an agent position answers an ACD call.

16. In case this feature is used in DTI-FCCS configuration, the following condition is applied.

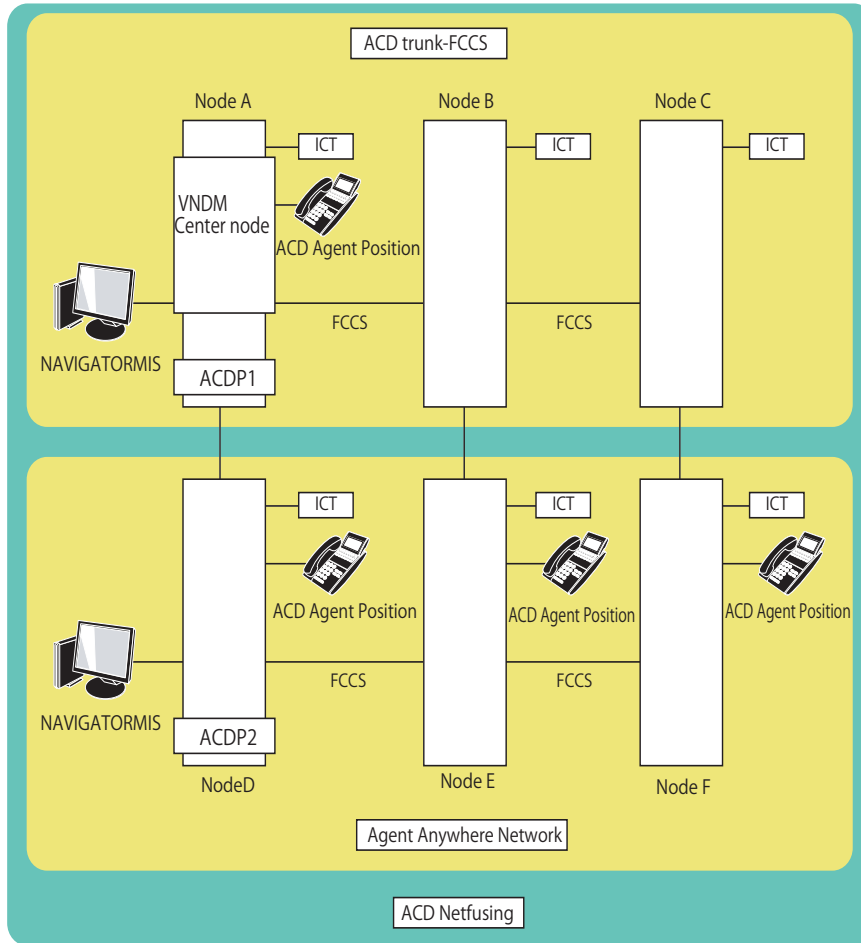
If a calling party is released at the same time as an agent position receives an ACD incoming call and answers it, the agent position is not released automatically, and the agent position hears ROT. In this case, the agent position should be released manually.

17. There are conditions of the initialization for each node in Multiple Agent Anywhere.

- When initializing nodes not providing ACDP, be sure to initialize nodes providing ACDP as well.
- When initializing nodes providing ACDP on VNDM Center, be sure to initialize nodes providing ACDP on VNDM Local as well.

Note: If initialization is not performed on nodes providing ACDP, the ACD system will not operate properly.

(a) The diagram below shows an example of nodes required to be initialized at the time of initializing each node.



Initial Node	Node requires Initialization
Node A (VNDM Center Node providing ACDP)	Node D
Node B(VNDM Center Node not providing ACDP)	Node A (VNDM Center Node providing ACDP) Node D (VNDM Local Node providing ACDP) Initialization is required in the exact order as written.
Node C (VNDM Center Node not providing ACDP)	Node A (VNDM Center Node providing ACDP) Node D (VNDM Local Node providing ACDP) Initialization is required in the exact order as written.
Node D (VNDM Local Node providing ACDP)	None
Node E (VNDM Local Node not providing ACDP)	Node A (VNDM Center Node providing ACDP) Node D (VNDM Local Node providing ACDP) Initialization is required in the exact order as written.
Node F (VNDM Local Node not providing ACDP)	Node A (VNDM Center Node providing ACDP) Node D (VNDM Local Node providing ACDP) Initialization is required in the exact order as written.

(b) Start up the system following the order written below due to the conditions of the initialization.

(1) Start up nodes not providing ACDP. (Node B/ Node C/ Node E/ Node F in random order)

(2) Start up VNDM Center Node providing ACDP. (Node A)

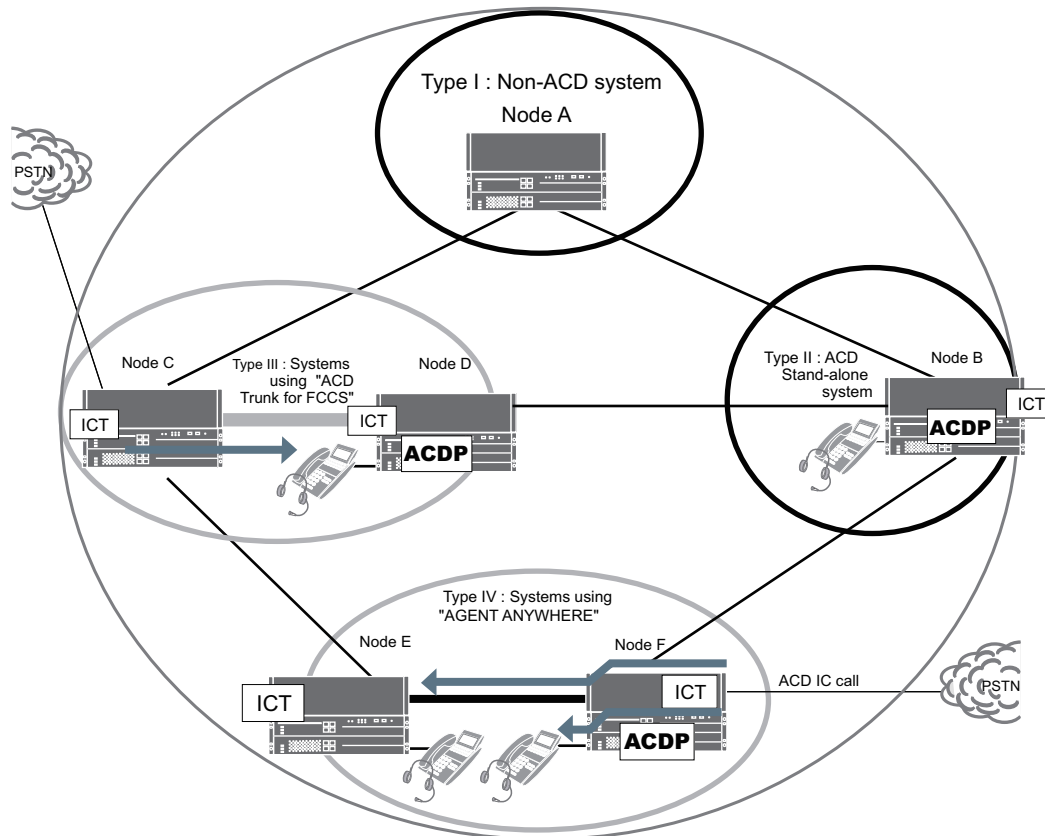
(3) Start up VNDM Local Node providing ACDP. (Node D)

Data Programming

The data programming for this feature is basically the same as that of Multiple ACDP. This section shows data programming divided into the types of ACD system in the figure below.

Network Configuration of ACD systems

The following is the network configuration of ACD system in an FCCS Network.



LEGEND

- Type I : Non-ACD system (as an example for comparing with the other systems)
ACD calls may be transferred to this system from other ACD systems via the data programming of Node C.
- Type II : ACD Stand-alone system (ACD system provides ACD function in the Self Node only)
ACD calls may be transferred to this system from other ACD systems via the data programming of Node D.
- Type III : Systems using "ACD Trunk for FCCS"
Node C – System providing ACD trunks only
Node D – System providing ACD trunks and ACD positions
- Type IV : Systems using "AGENT ANYWHERE"
Node E – System providing ACD trunks and ACD positions
Node F – System providing ACD trunks and ACD positions
Also, the node providing C-VNDM and NCN

(1) The following is the quick reference table of data programming for each ACD system type according to the previous page.

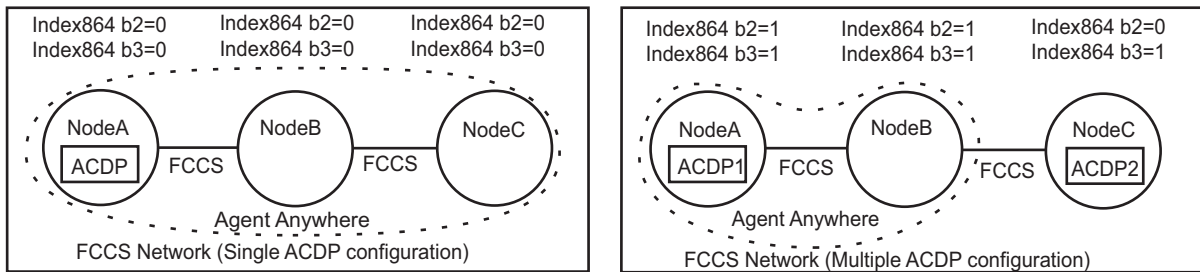
ACD Software and Data Programming		Type and Node		III		IV	
		I	II	Node C	Node D	Node E	Node F
		Node A	Node B	Node C	Node D	Node E	Node F
ACD Software							
1	ACD Option Service software (for basic ACD Service) (SV85 ACD CLOP(1) LICS)		⊙		⊙		⊙
2	ACD Option Service Software for “AGENT ANYWHERE-ACD” (SV85 NW-ACD/OAI LICS)	⊙	⊙	⊙	⊙	⊙	⊙
System Data							
3	ACDP in service/out of service (ASYD, SYS1, Index 2, Bit 0)	0	1	0	1	0	1
4	CM Usage Note 2 (ASYD, SYS1, Index 31, Bit 0 to Bit 3)	0	4	4	4	4	4
5	OAI in service/out of service (ASYD, SYS1, Index 79, Bit 6)	1	0	0	0	0	0
6	ACDP Mounting Status (ASYD, SYS1, Index 207, Bit 0)	0	1	0	1	0	1
7	ACDP Mounting Status (ASYD, SYS1, Index 207, Bit 1)	0	0	0	0	0	0
8	OAI Call Processing Event Notification (ASYD, SYS1, Index 241, Bit 2)	0	1	1	1	1	1
9	SCF Return Error Detail Notification (ASYD, SYS1, Index 241, Bit 3)	0	1	1	1	1	1
10	Built-in ACDP is used/not used (ASYDL, SYS1, Index 864, Bit 0)	0	1	0	1	0	1
11	“AGENT ANYWHERE-ACD” in service/out of service (ASYDL, SYS1, Index 864, Bit 2) Note 3	0	0	1	1	1	1
12	“MULTIPLE ACDPs in an FCCS Network” in service/out of service Note 4 (ASYDL, SYS1, Index 864, Bit 3)	0	1	1	1	1	1
13	FPC no. of the node providing IP (ASYDL, SYS1, Index 865)	0	0	Note 5	Note 5	Note 5	Note 5
14	FPC no. of the node providing ACDP (ASYDL, SYS1, Index 866)	0	0	Node D	Node D	Node F	Node F
15	Number of ports for SMFN (terminal) (ASYDL, SYS1, Index 864, Bit 4)	0	Note 6	Note 6	Note 6	Note 6	Note 6

ACD Software and Data Programming		Type and Node		III		IV	
		I	II	Node C	Node D	Node E	Node F
		Node A	Node B				
16	SMFN Status Monitor Clearing (ASYDL, SYS1, Index 864, Bit 5)	0	Note 7	Note 7	Note 7	Note 7	Note 7
17	FPC no. of Center Node providing VNDM (ASYDL/ASYDN, SYS1, Index 533)	Note 8	Note 8	Note 8	Note 8	Note 8	Note 8
18	ACD data (See item (2) in this section)		○		○		○

- ◎ : the software is installed to be linked with the standard service software using Telephony Server Maintenance Menu.
- : the node requires ACD data programming.

Note 2: When CM is used for another function, this setting may be changed.

Note 3: This data setting is required (i.e., assign 1) only when the AGENT ANYWHERE service is used in the Multiple ACDP Network configuration. In other words, this data setting takes effect only when SYS1, Index 864, Bit 3=1. Therefore, this data setting is not necessary (i.e., assign 0) when the AGENT ANYWHERE service in the Single ACDP Network configuration is used.



Note 4: All FCCS nodes in the network are used for “MULTIPLE ACDPs in an FCCS Network”, this data may be assigned using ASYDN.

Note 5: This data is required for UAP connection.

Note 6: Assign the number of ports for status Monitor Facility Notification (SMFN). The identical data value must be assigned at all nodes on FCCS Network. (When “Status Monitor Facility Request (SMFR), FN=126” is used, always assign 0 (2 ports).)

- ASYDL, SYS1, Index 864, Bit 4: 0/1
- 0=2 ports
- 1=8 ports (Normal Setting)

Note 7: Although this data is valid only when Index 864, Bit 4=1 (8 ports), this bit must be assigned as data “0” when Index 864, Bit 4=0 (2 ports). The identical data value must be assigned at all nodes on FCCS Network.

ASYDL, SYS1, Index 864, Bit 5: 0/1

0=Status Monitor Facility Notification (SMFN) is cleared when the FCCS Link is down.

(Normal Setting)

1=Status Monitor Facility Notification (SMFN) is not cleared when the FCCS Link is down.

Note 8: Assign the FPC no. of ACDP node using “AGENT ANYWHERE” when an FCCS Network provided MULTIPLE ACDPs is also provided “AGENT ANYWHERE”. While in the network not provided “AGENT ANYWHERE” (actually, the node may be changed into the node provided “ACD Trunk for FCCS”) assign the FPC no. of ACDP node using “ACD Trunk for FCCS” (In this example, FPC no. of Node D or Node F is applied with this condition).

- (2) The following is the basic conditions for ACD FCCS Network.
- a.) Telephone Number (two to six digits) is used for the station number type (both Non-ACD line and ACD line) to activate ACD system through FCCS Network.
 - b.) Logical Route (1-898: route numbers more than 898 are not available) is used for the route type to activate ACD system through FCCS Network. Tables below show which data programming is changed in accordance with these conditions in terms of data and command kinds.

Basic Office Data

Data Description	Notice
Monitor number	1. AMNON is used in place of AMNO 2. Telephone number for Monitor number (pilot number) is assigned in ALGNN command before the monitor number data assignment. 3. ACNON is used in place of ACNO
Announcement data	AADTN is used in place of AADT
Back up-UCD data	ASHUN is used in place of ASHU. See “Uniform Call Distribution (UCD) [U-1]” in Data Programming Manual - Business.
Other data	Logical route number (1-898) and telephone number (two to six digits) are used.

ACD Command Data

(See Chapter 6 “COMMANDS AND JOB SPECIFICATIONS” for details of each command.)

Data Description	Notice
ACDANA	Telephone number (monitor number = pilot number) should be set in AMNON before this command
ACDCCV	Telephone number is programmed when the transferred destination is a station (TRFDC)
ACDLOG	Telephone number is programmed in PARN, PERN
ACDPLT	Telephone number (monitor number = pilot number) should be set in AMNON before this command
ACDPSN	Telephone number is programmed in NACD and ACDL.
ACDSPL	Telephone number is programmed in ASIST, NIGHT, and EMGCY
ADCTG	Logical route (1-898) is programmed in ACDRT
ACDTN	Telephone number is programmed in IVRNO and OPENO.

- c.) The following operation codes (OP-CODE) are not available for OAI system when OAI and ACD system are used together in the same FCCS Network. See AOKC command in Chapter 6 for details.

MSF (F-KIND=1): OP-CODE=185~191

TMF (F-KIND=2): OP-CODE=248~255

- d.) Proper number of connection trunk must be prepared to prevent the traffic congestion. When all the connection trunks are busy, ACD incoming calls cannot be provided with the alternate route by AFRFL command. In case of such a situation, program the CCV step as shown below. Using this data setting, ACD calls distribution to transfer to another agent position is available using the alternate routing function.

Transfer (CCVACT=5) is assigned at CCV step 20.

The system is designed to select the alternating route assigned in step 20 automatically in case of the connection trunk all busy.

CCV for ACD Calls Transfer (in case of Traffic Congestion)

CCV step	CCVACT	Remarks
1	Queue Assign	
2	Pause	
3	Announcement	
4	End CCV	Be sure to assign "End CCV" by CCV Step 19 so that the call proceeded in right order is not processed with CCV step 20 "Transfer".
:		
:		
20	Transfer	Examples of alternating route (dialed number of the transfer destination) <ul style="list-style-type: none"> • ACD Pilot Number in the Self Node • Monitor Number in the remote node via outgoing trunk route

(3) Some notices for commands data programming are described below.

Type of Networks and Nodes Command Data	I	II	III		IV	
	Node A	Node B	Node C	Node D	Node E	Node F
AMNO(Monitor Number Data)		N/L		N		N
(Back-up UCD) Note 1		F		F		F
ACNO (Conversion Number Data)		N/L		N		N
AADT(Announcement/Dictation Data)		N		N		N
AOKC(OAI key code data)		○		○		○
AKYD (Key data for Desktop Terminal)		○		○		○
ASFC(Service Feature Restriction Class data)		○		○		○
ASHU (Station Hunting Group-UCD data)		F		F		F

○ : Assign data by the corresponding commands written in DM.

N : Assign data by the corresponding commands written in NDM.

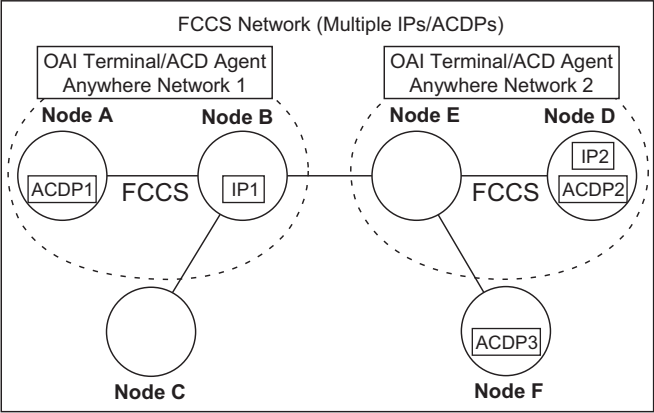
L : Assign data by the corresponding commands written in LDM when the call is not terminated from other nodes.

F : UCD for FCCS service must be used for the back-up UCD.

Note 1: When a COT card is used for back-up UCD, assign the UCD pilot number for the destination of RT and TK for COT card using ACSI command data.

(4) When OAI and ACD services are used at the same time in a extended FCCS network

Here are some notices for ASYDL, SYS1, Index 865 (FPC of the IP node) and Index 866 (FPC of the ACDP node) data programming when OAI and ACD services are used at the same time in a FCCS network.



- Node A: SYS1 Index 865=FPC of the Node B
- Node A: SYS1 Index 866=FPC of the Self Node
- Node B: SYS1 Index 865=FPC of the Self Node
- Node B: SYS1 Index 866=FPC of the Node A
- Node C: SYS1 Index 865=FPC of the Node B
- Node C: SYS1 Index 866=FPC of the Node A
- Node D: SYS1 Index 865=FPC of the Self Node
- Node D: SYS1 Index 866=FPC of the Self Node
- Node E: SYS1 Index 865=FPC of the Node D
- Node E: SYS1 Index 866=FPC of the Node D
- Node F: SYS1 Index 865=FPC of the Self Node
- Node F: SYS1 Index 866=FPC of the Self Node

2.18 ACDP Automatic Logoff

This feature allows terminals being logged on as ACD Agent Position to activate automatic logoff in case of failure caused by commercial power outage or accidentally unplugged LAN cable.

1. This feature is available with the following terminals.

- Softphone (Proprietary Protocol) **Note 1**
- Softphone (SIP) **Note 1, Note 2**
- IP Enabled Dterm
- DtermIP (Proprietary Protocol)
- DtermIP (SIP)
- DT700 Series (DT730/DT730G)

Note 1: When a Softphone as an agent position logs off from the ACD system due to a failure in the Softphone side and then it logs on again, the SPEAKER key may not light up even though the Softphone is in the AUTOMATIC ANSWER mode.

If the AUTO/MAN key lights up, even if the SPEAKER key does not light, the Softphone automatically answers an ACD incoming call. After answering the call, the SPEAKER key lights up.

Note 2: When DtermSP30 (VPCC mode) is used as a thin-client terminal for agent position, DtermSP30 acts in the following way.

Location where failures occur	Action
In a VPCC Virtual server	All of the thin-client terminals log off.
In a thin-client terminal	The thin-client terminal in which the failure occurs logs off.

2. This feature starts up after the following conditions.

- A terminal establishes a registration with Login Mode/MAC Authentication Mode
- After a terminal's registration with Login Mode/MAC Authentication Mode, the other terminal performs the registration using the override function.
- A Health Check error occurs (when a system message 33-S is issued). **Note 3**
- Terminal reset is executed by changing the AKYD/ADKS command data.
- A destination agent position for an ACD call distribution does not establish a registration when the Telephony Server checks its registration state.
- Terminal reset is executed by the operation of LOGOUT key assigned by AKYD, FKY=142. PH Control Data Clear and Soft Reset is executed by DISD command.

Note 3: This Health Check error will occur due to failures on terminals and personal computers (commercial power outage and accidentally unplugged LAN cable) or network failures between the Telephony Server and terminals. A time length until the Health Check error occurs depends on terminal types.

3. When an agent position logs off by this feature, a collaboration application can recognize the change in state of the agent position according to Infolink messages.

4. When a failure notification is not sent due to a network failure or congestion between a node accommodating ACDP and the other node accommodating terminals, or a failure in the node accommodating terminals, a failed agent position does not shift to Logoff.
After an ACD call is distributed to the failed agent position or the failed agent position executes re-registration, the agent position shifts to Logoff and the ACD call is distributed to another agent position.

5. The relationship between ACDP Automatic Logoff and terminal state during a terminal failure is as follows.

State of Agent Position During a Failure		Influence of Failure on Agent Position	When Agent Position is in Logon State	
			This Feature is In Service	This Feature is Out of Service
Idle		No influence		
ACD Line	Ringling	The incoming call is not released. The calling party hears the RBT until the calling party releases the call. Note 4		
	Talking	The call in progress is released by SMF (Status Monitor Facility). Note 7		
	On hold	The held call is not released. Note 5, Note 7		
Non-ACD Line	Ringling	The incoming call is not released. The calling party hears the RBT until the calling party releases the call.		
	Talking	The call in progress is released by SMF (Status Monitor Facility).		
	On hold	The held call is released by SMF (Status Monitor Facility).		
ACD/Non-ACD Line	Forwarding a held call (Ringling the forwarding destination party)	The incoming call or the held call to be forwarded to the destination is released by SMF (Status Monitor Facility). Note 6, Note 8		
	Forwarding a held call (Talking with the forwarding destination party)	The call in progress with the forwarding destination or the held call is released by SMF (Status Monitor Facility). Note 7		

State of Agent Position During a Failure		Influence of Failure on Agent Position	When Agent Position is in Logon State	
			This Feature is In Service	This Feature is Out of Service
Ready to monitor		No influence	The state of failed supervisory position shifts to Logoff. Monitoring is canceled.	The state of failed supervisory position stays Logon. Monitoring is not canceled.
While Supervisory Position is Monitoring	Ringing	There is no influence on the call being monitored. The failed supervisory position is released from monitoring.		The state of failed supervisory position stays Logon. Monitoring is canceled.
	Talking	The ongoing call being monitored is released by SMF (Status Monitor Facility). The failed supervisory position is released from monitoring.		
	Hearing a hold tone of ongoing call (a call being monitored is placed on hold)	The held call (or forwarded call if the call is forwarded) and the agent position being monitored are released by SMF (Status Monitor Facility). The failed supervisory position while hearing a hold tone is also released from monitoring.		

- Note 4:** The calling party hears the RBT until the calling party is released from the call. By using CALL RECOVER - ACD [C-191A], an incoming call to the failed agent position can be forwarded to another agent position. If there are no idle agent positions or CALL RECOVER - ACD [C-191A] is not used, the calling party keeps ringing the failed agent position. The failed agent position displays “CALL RECOVERED” on its LCD when it performs re-registration after recovering from an error. “CALL RECOVERED” disappears after the agent position performs the logon operation.
- Note 5:** A held party hears a hold tone until the held party is released from the call or the failed agent position answers the held call after the agent position is released. If the failed agent position performs re-registration, release the terminal immediately after answering the held call. Do not perform the logon operation until a sequence of operations is completed. (A held call which is answered by the agent position in logoff state due to this feature is not treated as an ACD call. Subsequently, ACD features do not apply to this call.)
- Note 6:** The called party cannot communicate with the forwarding destination party, so the party may hear the RTP warning tone or no tone, or the call may be disconnected.
- Note 7:** A supervisory position in monitoring state is not released and continues to hear the RTP warning tone or no tone. If the supervisory position hears a hold tone, it continues to hear the hold tone. In those cases, monitoring state needs to be canceled from the supervisory position.

Note 8: A supervisory position hearing a hold tone is released. In this case, the monitoring state is canceled.

6. This feature is invalid on an analog agent position and a Hot position.
7. This feature is invalid when an agent position user performs the terminal reset (**Note 9**) by key operations.

Note 9: “Terminal reset” are the following states.

- Terminal with a standard key layout:
press HOLD + TRANSFER + “*” + “#” to display a Login ID entry screen
- ACD terminal with a Key Pad:
press RELEASE + HOLD + “*” + “#” to display a Login ID entry screen

Programming

STEP 1: ASYDL, ASYDN - Assign the following system data for using ACDP Automatic Logoff:
SYS1, Index 874, Bit 3=1 (In service).

Note: The identical data value must be assigned at all nodes on FCCS Network.

2.19 ACDP Quick Initialization

This feature provides a quick initialization of ACD system on a redundant SV9500 system with ACD (hereinafter “ACDP Node”) or the SV9500 system without ACD (hereinafter “Local Node”) by copying the memory concerning ACD from ACD side to STBY side periodically via LAN. Due to this memory synchronization, a reestablishment of a memory becomes nonessential which enables the ACD system to initialize more rapidly.

Note: This feature is not available in North America.

Note: Refer to the Programming section for information on data assignment required for this feature.

The following become available when a system has double CPU configuration.

- ACDP restart time is shortened when a forceful changeover is caused by a CPU failure at a node where ACDP is mounted (hereinafter referred to as the ACDP node).
- An application restart becomes unnecessary when a forceful changeover is caused by a CPU failure at a node where ACDP is not mounted (hereinafter referred to as the Local Node).

The following is available regardless of whether a system has double CPU configuration or not.

- Application restart time is shortened.

[Behavior when a forceful changeover is caused by a CPU failure]

When a failure happened on an operating CPU at the ACDP node and a standby CPU restarted, ACDP restart time is shortened and the system immediately starts operating.

When a failure happened on an operating CPU at the Local Node and a standby CPU restarted, an application restart is not required because information of terminal monitoring setting, etc. is copied. If you do not use this function, monitoring information is not copied and an application restart is required.

[Behavior when an application restarts] **Note 1**

When CPU restarts due to a failure at the ACDP node while an application is connected to an ACD system to run various features, an application needs to restart because the connection with the ACDP node is disconnected.

Because an application can specify a logical port and set up Association in advance by using this function, some of the procedures for a restart can be skipped and thereby the restart time is shortened.

This function is also effective for an application restart when a failure happened not on the ACDP node but on a network or an application.

Note 1: For more details of this function, refer to “Upper Application Restart Time Reduction (logical port assignment functionality)” in Data Programming Manual - ACD.

Service Conditions

<General Conditions>

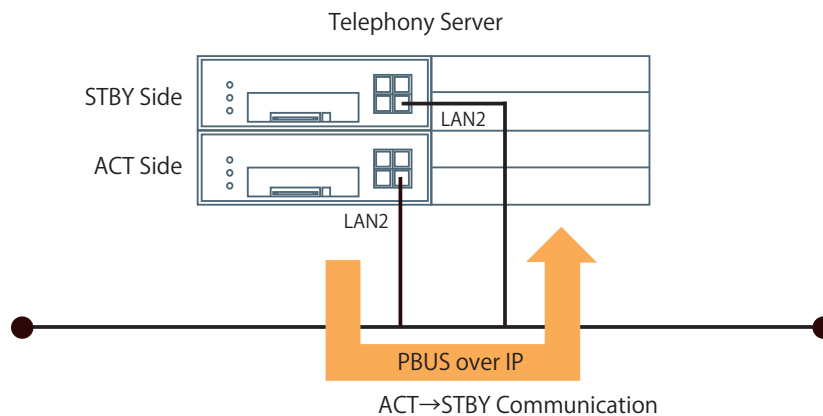
1. ACDP Quick Initialization is available only when the following failures with a reset occur in ACT side.
 - CPU power failure

- Reset caused by WDT overflow **Note 2**
- Reset caused by IAT overflow **Note 2**
- Program & Office Data Load & System Initialize due to C-Level Infinite Loop

Note: This feature is not available if a forceful changeover is caused by CPU power failure due to a system shutdown with a manual operation.

Note 2: WDT and IAT are timers which monitor the status of the program execution.

2. Execute Periodical Backup to backup the data of services in use.
3. Basic specifications concerning the Memory Copy are as follows.



Note: PBUS over IP is an interface used to packetize the transmitted/received data between ACT side and STBY side into IP packets and to perform a Memory Copy.

- (a) Memories to copy from ACT side to STBY side are as follows.
 - Information concerning ACD
 - VNDM (Variable Network Data Memory)
 - Call Forwarding Data (Call Forwarding - All Calls/Call Forwarding - Busy Line/Call Forwarding - Don't Answer)
 - Do Not Disturb Data (Do Not Disturb/Do Not Disturb-D-CCIS)
- (b) LAN2 is used as a LAN interface. Select “Fixed 100Mbps” or “Auto Negotiation (1Gbps Only)” for Speed and “Full Duplex” for Duplex Mode in the NIC Tab of the ADTM command. Moreover, verify that the port setting of the connecting switching HUB is configured with 100Mbps or 1Gbps for data speed and Full Duplex for Duplex Mode as well **Note 3**.

Note 3: According to the type of a switching HUB, Half Duplex mode may be set for the Duplex mode unless Auto Negotiation is set for Data Speed to both of the Telephony side and the Switching HUB side. In such cases, set Auto Negotiation to the Telephony side.

-
- (c) Set the same network address for IP address of ACT side to the IP address of STBY side.
 - (d) “60220” and “60240” are used for application port of PBUS over IP. Application port may not be modified.
 - (e) Service Type Setting, Module Initialize, Module Reset, and Module stop can be assigned for PBUS over IP with the ADPM command.
 - (f) To stop the Memory Copy, assign SYS1, Index 1347, Bit 1=0 (Stop Memory Copy from ACT to STBY) in the ASYDL command.
4. Memory Copy ends in failure when a link disconnection of LAN2, System Initialization, or a changeover of CPU occurs. Memory Copy restarts after the system recovers.
 5. Save the Office Data with the MEM_HDD command whenever the Office Data is modified.

Note: The Office Data will not be copied from ACT side to STBY side unless you save the data with the MEM_HDD command. The system will operate with the old Office Data that were valid before the modification if a forceful changeover is executed without saving the data.

6. ACDP Quick Initialization is not available for the following cases.
 - (a) If a forceful changeover takes place while Memory Copy cannot be executed (such as when a network failure occurs) for more than 3 to 10 seconds **Note 4** from the point when the memory was copied last from ACT side to STBY side.
-> ACDP Node or Local Node will initialize after “Office Data Load & System Initialize” is performed **Note 5**
 - (b) If a forceful changeover occurs while processing the initial setting in STBY side.
-> ACDP Node or Local Node will initialize when the initial setting process starts again **Note 6**
 - (c) If a forceful changeover occurs when CPU changeover is executed manually (such as with the CMOD command)
-> ACDP Node or Local Node will initialize after “Office Data Load & System Initialize” is performed
 - (d) If a forceful changeover occurs while manipulating the files (such as data backup) in STBY side
-> ACDP Node or Local Node will initialize after “Office Data Load & System Initialize” is performed

Note 4: Time required to retain the memory and to initialize ACDP system differs depending on the type of memory since the copying cycles of the memory (updating interval) vary by memory types. The time indicated in this service condition does not include the time for system shutdown which is from when a failure with a reset occurs until a forceful changeover takes place.

Note 5: When a system is restarted with Office Data Load & System initialize due to a memory copy failure on a forceful changeover, Standard VNDM is reestablished only with the information of VNDM Center Node. If the VNDM Center Node restarts within a short time (in about 10 minutes), all ACD services will stop temporarily. This is because the Standard VNDM reestablished by the VNDM Center Node is broadcasted to each node and clears the VNDM of the nodes in operation since VNDM Local Node does not switch to a Standalone mode when VNDM Center Node restarts within a short time.

Therefore, assign the following system data to switch the VNDM Local Node to a Standalone mode by delaying the restart time of VNDM Center Node when restarting the system with Office Data Load & System Initialize due to a memory copy failure on a forceful changeover

ASYDL, SYS1, Index 1234

System Reset Delay Timer for Office Data Load & System Initialize (due to a memory retained reset failure)

00 (Hex) = Disabled

01 to FF (Hex) = 1 to 255 seconds

Consider the following when assigning the system data below:

- Assign this data only to a node which a standard VNDM is accommodated to.
- Save the Office Data with the MEM_HDD command after assigning this data. When using a CPU dual configuration system, you must save the Office Data with the MEM_HDD command to backup the system data of ACT side to STBY side.
- When this data is assigned, time required for the system to initialize will extend by the time period assigned in this data, regardless of how an initialization is performed (even for an initialization with the SINZ command).

Note 6: An initialization may be applied according to the progress status of the initial settings.

7. System Message "0-C" is issued when the system is initialized with ACDP Quick Initialization. This message will be issued in the node where the initialization is performed regardless of whether the node is ACDP Node or Local Node.

Refer to "Chapter 3 System Messages"- "0-C" in the Operation and Maintenance Manual for detailed information on this system message.

8. Memory Copy of Call Forwarding Data and Do Not Disturb Data is not available for the following cases.
 - When saving/loading/referring the Office Data with the MEM_HDD command or the MEM_HDD_N command.
 - When performing a periodic backup by the Routine Diagnosis.
9. This feature is capable of retaining Do Not Disturb Data for the following services.
 - DO NOT DISTURB - D [D-11D]
 - DO NOT DISTURB - D - CCIS [D-76D]

10. When the terminal re-registers while DO NOT DISTURB is set, the associated LED of DND key will light and the Soft key will flash. However, this is only available for IP terminals and SIP Multiple Line terminals and will not be available for Digital terminals.
11. Do Not Disturb Data will not be retained when a system switches with a forceful changeover if this feature is not in service.
12. Conditions on an occurrence of a forceful changeover are as follows:
 - When CPU power failure occurs in ACT side, a forceful changeover will be executed immediately.
 - When WDT overflow occurs in ACT side, a forceful changeover will be executed after 1 minute has elapsed since the failure occurred.
 - When IAT overflow occurs in ACT side, a forceful changeover will be executed after 10 minutes has elapsed since the failure occurred.
 - When C Level Infinite Loop occurs in ACT side, a forceful changeover will be executed if C Level Infinite Loop continues for more than 8 seconds.

<ACDP Conditions>

1. To enable ACDP Quick Initialization, the number of SMF Monitoring ports must be set to eight.
2. When ACDP is initialized with ACDP Quick Initialization feature, the following messages will not be issued as ACD Trouble Kinds in the system message (6-H).
 - ACDP Reset Started
 - ACDP Reset Completed
 - ACD Agent Position Ready for Use

Instead of the messages above, the following messages will be issued.

- ACDP Quick Initialization Started
- ACDP Quick Initialization Completed

Refer to “3.2.3 Message Detail Data of System Message “6-H” in Chapter 8 System Messages” for details on this system message.

3. As initialization on a standalone basis (ACIDZ) does not support ACDP Quick Initialization, it takes the same time to perform ACDP initialization as it takes for standard initialization (SINZ).
4. If forceful changeover due to ACT system failure occurs while memory synchronization between ACT and STBY systems is stopped owing to the events such as network failure, it initializes normally. Thus, the ACDP service features are stopped for the same period of time it takes for standard initialization.
5. ACDP Quick Initialization disconnects TCP/IP connection with upper applications. Reconnection from upper application is required. If applications cannot detect disconnection, services interacting with applications stop until applications are reconnected.

6. When initialized with ACDP Quick Initialization feature, agent positions can log on to the system after the system message is issued, however LED/LCD of agent positions will not be initialized (LED/LCD display will work properly after the agent positions log on to the system). Other status are as follows:
 - (a) All keys but LOG ON/OFF key (and TALLY COUNT key) are disabled.
 - (b) Agent positions will be logged off at the end of the initial display processing (LCD will display "VACANT" and all LED indication will be cleared).
 - (c) It takes 15 minutes from the notification of the system message: ACD Quick Initialization Completed to complete the initial display processing of all agent positions. **Note 1**
 - (d) When you log on to the agent position with a logon operation where initial display processing has not been given yet, you can start the reception service.
 - (e) If you log on to the agent position where initial display processing has not been given yet, the initial display process will not be applied to that agent position and will remain in logon status without initial display. If the agent position is logged off later on, an initial display processing will be performed and the agent position will indicate an initial display.
 - (f) For Network ACDP configuration (Agent Anywhere/Multiple Agent Anywhere), agent position status depends on the node where the agent position is registered. **Note 2**

Note 1: In this context, all agent positions means the maximum number of positions, 15000.

Note 2: Agent position status when ACDP Quick Initialization per network configuration is performed are as follows.

- Agent Positions Registered at ACDP Node (for ACDP Node forceful changeover)

Agent positions must be re-registered. The following table shows the capability of agent positions after re-registration. You can log on to the agent position and start operation after re-registration even if the initial display of LED/LCD of agent positions has not been restarted.

After Quick Initialization Completed *After the system message (6H: 41 - ACDP Quick Initialization Completed) is issued	LOG ON	Available	
	ACD Key Operation	Before LOG ON	Not Available
		After LOG ON	Available
	LED/LCD	Before LOG ON	ON/ No Indication
After LOG ON		Normal (Not for LED/LCD initialization processing)	
LED/LCD on Agent Position *After Initialization is completed	LOG ON	Available	
	ACD Key Operation	Before LOG ON	Not Available
		After LOG ON	Available
	LED/LCD	Before LOG ON	Initial status (VACANT)
After LOG ON		Normal	

- Agent Positions Registered at Local Node (for ACDP Node forceful changeover)

It is not necessary for agent positions to be re-registered. Pre-initialized status may remain until initialization processing of agent positions is completed. You can log on to the agent position and start operation after re-registration even if the initial display of LED/LCD of agent positions has not been restarted.

After Quick Initialization Completed *After the system message (6H: 41 - ACDP Quick Initialization Completed) is issued	LOG ON	Available	
	ACD Key Operation	Before LOG ON	Not Available
		After LOG ON	Available
	LED/LCD	Before LOG ON	Status before initialization
After LOG ON		Normal (Not for LED/LCD initialization processing)	
LED/LCD on Agent Position *After Initialization is completed	LOG ON	Available	
	ACD Key Operation	Before LOG ON	Not Available
		After LOG ON	Available
	LED/LCD	Before LOG ON	Initial status (VACANT)
After LOG ON		Normal	

- Agent Positions Registered at Local Node (for Local Node forceful changeover)

Re-registration of agent positions is required. Agent positions are automatically logged out at re-registration. When re-registration is completed, the LCD of the agent position displays “VACANT”, and you can log on to the system and start operating right away.

Before LOG ON	ACD Key Operation	Not Available
	LED/LCD	Initial status (VACANT)
After LOG ON	ACD Key Operation	Available
	LED/LCD	Normal

Note: Automatic Logoff is a feature to force an agent position (IP Terminal/SIP Multiple Line Terminal/Softphone) to log off regardless of its status, and activated when the logged on agent position is disconnected. You can continue the operation with agent positions that do not automatically logged off such as analog agent positions or IVR.

7. ACDP initialization after forceful changeover due to ACT system failure is to be completed within three minutes (**Note 3**). If it takes more than three minutes to initialize ACDP, Subscribe information of ACDP may not be synchronized (**Note 4**).

Note 3: You can check if ACDP Initialization after forceful changeover has completed or not with the following system message.

- 6-H: Trouble Kind =41 “ACDP Quick Initialization Completed”

Note 4: For ACDP Quick Initialization, ACDP Subscribe must be generated, and the memory has been synchronized with STBY system. If Subscribe has not been generated at ACDP Quick Initialization after forceful changeover, the following operations are to be

seen:

You can check if Subscribe has been regenerated or not with the system message (6-H).

Stand-alone	Subscribe is regenerated at ACDP Initialization. Setting Status Monitoring for a terminal is skipped.
VNDM Center Node	
VNDM Local Node	When Subscribe is generated, it is set to VNDM Center node. Thus, there can be up to 10 minutes of waiting time until FCCS link is established. After the waiting time is over, the rest of the operations are same with those for VNDM Center Node.

8. Influences when a system initialization processing with ACDP Quick Initialization feature is performed within each node are as follows.

<When ACDP initialization takes place in ACDP node >

Note: For upper application, if ACDP Node is initialized, Line information must be initialized with the initialization process for agent positions after reconnection to the upper application is performed. Initialization for Line information is not required for CTI Cooperation system.

- (a) Calls in a queue will receive a RBT until the originator recovers since the queuing is discarded. The call progress for the calls in a queue cannot be carried on since the ACD Control Memory is initialized due to ACDP Initialization.
- (b) All agent positions will be logged off since all the status will be initialized. Logoff notification will not be sent to the upper application until ACDP initialization processing is performed.
- (c) All operations will be disabled until the initialization is completed (takes about 2 minutes). LCD/LED display of agent positions will not change either (up to 15 minutes in maximum). After the initialization is completed, you can start the reception service by performing a logon operation again.
- (d) If a call is originated to an ACD Pilot Number before the initialization is completed (about 2 minutes), the originator will hear a BT since the incoming call message will not be notified to the office. This is only when ASYD, SYS1, Index 47, Bit 4=1 (tone control by SCF (FM=127)) is assigned.
- (e) Services other than ACD features (such as call forwarding) are available for call in progress.
- (f) The communication between the upper application will suspended. Reconnect to the upper application to recover the connection. The event which occurred in a period from the start of processing until the reconnection of communication with the upper application will not be announced to the upper application. In this case, the event concerning OAI which occurred after the application is reconnected will be announced to the upper application if the communication with the upper application is reconnected.

- (g) Calls handled by the Infolink will not be carried on since the ACD Control Memory is initialized due to ACDP Initialization.

<When ACDP initialization takes place in Local Node (Node where agent positions are accommodated)>

- (a) When the initialization process takes place in the node where MG(PRI)/MG(BRI) is accommodated, the ACD incoming calls in a queue will remain in queuing status and will receive a RBT until the originator recovers.
 - (b) All operations with agent positions will be disabled until the initialization is completed (takes about 2 minutes). All agent positions other than the one in a call conversation will be re-registered and will be logged off automatically. After the initialization is completed, you can start the reception service by performing a logon operation again.
 - (c) The status of the call in a conversation will be retained, however the terminal will be re-registered at the point where the call recovers and will be logged off automatically. After the initialization is completed, you can start the reception service by performing a logon operation again.
 - (d) If the Local Node is initialized, logoff notification will be sent to the upper application since the terminals (agent positions) connected to the Local Node will log off automatically. The upper application must initialize the Line information with the initialization process (log off status) for the relevant agent positions.
 - (e) Initialization for Line information is not required for CTI Cooperation system.
 - (f) Terminals will not be logged off automatically if they are initialized (re-registered) before the FCCS link is established. In this case, LCD/LED display of the terminals will initialize but remains in logon status (calls will be distributed if any calls are terminated to these terminals). When considering the CTI Integration, the status between upper application and ACDP does not require any matching since the status of the upper application and ACDP side does not have any difference (only the terminal display (LCD/LED) has the difference).
9. For ACDP Quick Initialization, the following memories must be synchronized with STBY system. Otherwise (at memory rollback), ACDP service features may be affected. When ACDP service features are affected, recover them in the following ways:

<Memory to synchronize (Cycle: 5 min. (Default))>

- Facility establishing state (Subscribe information)
- Status Monitoring setting information (ACD Pilot Number)

Influences by uncompleted synchronization (at ACDP Node)

Influences by uncompleted synchronization (At memory rollback)	Recovery Method	
	ACDP	Application
After system changeover, facilities are not available until Subscribe is performed. Example: Key operations such as Logon become invoked. (Negative tone)	Recovers automatically at initialization.	Application restart is required.
Unable to place a call to ACD Pilot Number *If a call is placed to an ACD Pilot Number, the caller hears ROT.	Recovers by re-registering the relevant ACD Pilot Number with the ACDPLT command.	Recovers by re-assigning the Status Monitor settings of the relevant ACD Pilot Number with the ACDPLT command.

Influences by uncompleted synchronization (at Local Node)

Influences by uncompleted synchronization (At memory rollback)	Recovery Method	
	ACDP	Application
After system changeover, facilities are not available until Subscribe is performed. Example: Key operations such as Logon become invoked. (Negative tone)	Recovers by VNDM data en block broadcasting (CBCV command)	
Unable to place a call to ACD Pilot Number *If a call is placed to an ACD Pilot Number, the caller hears ROT.	Recovers by VNDM data en block broadcasting (CBCV command)	

Upper Application Restart Time Reduction (logical port assignment functionality)

1. When Application Association Request is sent with a port designation from the upper application, Application Association Response (AARE) to return to upper applications are as follows:

(a) When there is no facility setup from upper applications:

- First connection of the application
- Reconnection after application opens associations (RLRQ)
- Reconnection after application abort (ABRT)

"Memory not retained (Result=0)" is returned as the association setup result. Normal application restart processing is required.

(b) When there is facility setup from upper applications:

- Reconnection after system initialization (forceful changeover, ACDP initialization, standard initialization (non-load/loading LM))
- Reconnection after application is disconnected due to LAN failures

"Memory retained (Result=10, Result=11)" is returned as the association setup result. (**Note 3**) Logical port number assigned with Application Association Request (AARQ) is returned as well. All that application side has to do is to set up facilities (Subscribe). Setting Status Monitoring for terminals is not required.

When logical port designation functionality is enabled, Application Association Response (AARE) to return to upper applications are as follows:

Cause of APL Disconnection	Result of Reconnection	
	With Port Designation	Without Port Designation
First connection	0	0
Reconnection after normal disconnection (RLRQ) / abort (ABRT) of application	0	0
Disconnection due to the Health Check timeout from Telephony Server	11	0
Reconnection after application is disconnected due to LAN failure	11	0
Reconnection after forceful changeover due to ACT system failure	10	0
TCP initialization (the ADTM command)	11	0
PH2.0 initialization (Non-load)	11	0
PH2.5 initialization (DM load)	0 (Note 4)	0
PH2.5 initialization (LM and DM load)	0 (Note 4)	0
PH3.0 (Power On initialization)	0 (Note 4)	0

<Upper Application Setup Result>

0: No upper application retained

Facility setup (Subscribe) and Status Monitor setting for terminals are required

10: Upper application retained

Returns a result when disconnected by a forceful changeover due to an equipment fault in ACT side. Only facility setup (Subscribe) is required

11: Upper application retained

Returns a result when disconnected by a forceful changeover due to an equipment fault in ACT side. Only facility setup (Subscribe) is required

Note 3: Whether application reconnection has succeeded or not is determined upon the existence of the facility opening (Subscribe). If even one Subscribe has been performed, Result=10 or Result=11 is returned. When logical port designation functionality is enabled, Application Association Response (AARE) to return to upper applications are as listed above.

Note 4: At the load-initialization of the system (DM Load/ LM and DM Load/ Power On initialization), standard initialization processing is required because Subscribe information/Status Monitor Facility information of the application are deleted.

2. Even if Result=10 or Result=11 is returned as Application Association Response (AARE), Subscribe processing and Infolink message subscription (IL) is required. **Note 5**
If Subscribe is not executed, the following Infolink facilities become unavailable.

- AMF (APL message transmission)
- PMF (PBX message transmission)

Note 5: If you change the facility version of SMFN at the time of re-connection, the modified facility version becomes valid.

3. When logical port designation functionality is disabled, if connection is attempted with designating a logical port with Application Association Request (AARQ), Application Association Response (AARE) returns an error (Result=1 (Service disabled)).

4. When logical port designation functionality is enabled, if connection is attempted without designating a logical port with Application Association Request (AARQ), the application information is not retained. Thus, Application Association Response (AARE) at the application reconnection, Result=0 is always returned. Standard initialization processing (facility setup and Status Monitor settings for terminals) is required for applications.

5. Logical port numbers that can be designated with Application Association Request (AARQ) from the upper applications are 1 to 16. If a port number that is out of the range is designated, Application Association Response (AARE) returns an error (Result=5 (Service Not Permitted)).

6. Designate different logical port number to each application. Although it is possible to connect from a different application that has the same IP and the same port number as the application that was disconnected, it does not operate normally.
7. If Application Association Request (AARQ) is attempted with designating the logical port that is being used by other application, an error (Result=7 (Logical Port is Being Used)) is returned.
8. When upper applications use multiple monitor designation for Status Monitor Facility Request (SMFR), the following conditions must be met:
 - The valid Request Kinds are: MR ID=0 (Monitor Request) and MR ID=1 (Monitor Cancel) only. MR ID=2 to 6 (Line Status Inquiry) are exempted.
 - FN=12H (18) To terminate, answer, hold, release, or monitor a call with sticky keys (without tones) and FN=7EH (126) To terminate, answer, hold, release, or monitor a call with sticky keys (with tones) are exempted.

Programming

Follow the procedures below for data assignment required for ACDP Quick Initialization.

[To Set]

STEP 1: ASYDL - Assignment of System Data for LDM

SYS1
 Index 1191
 Bit 1=1 (Logical Port Assignment Enabled)

Note: This data assignment is only required for systems with CTI Cooperation. You need not assign this data if using the system for ACD only.

Index 1193
 Bit 0=1 (ACDP Quick Initialization Enabled)
 Bit 1 to Bit 3 (Copying Cycle of VNDM to STBY side)

Data			Timer Value
Bit 3	Bit 2	Bit 1	
0	0	0	5 minutes (default)
0	0	1	30 seconds
0	1	0	1 minute
0	1	1	3 minutes
1	0	0	5 minutes
1	0	1	10 minutes
1	1	0	30 minutes
1	1	1	60 minutes

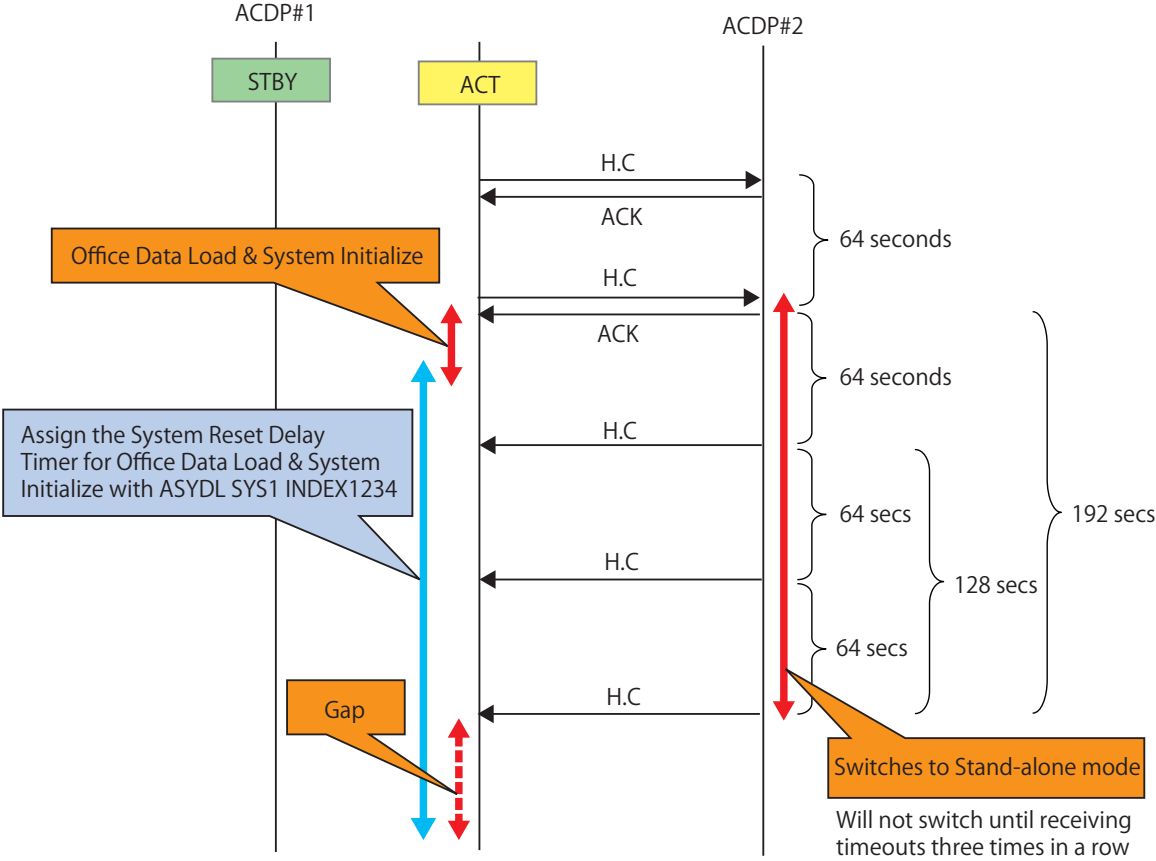
Note: If VNDM synchronization is not completed (memory rollback) at forceful changeover, the added ACD Pilot Numbers or Personal Pilot Numbers may not be operational. In this case, reassignment of data (ACDP) and resetting of Status Monitoring for terminals (application) are required.

Note: When ACD Pilot Numbers or Personal Pilot Numbers are frequently added/modified, if you shorten the VNDM transfer cycle, the number of unavailable numbers at forceful changeover can be decreased, but the communication load is increased.

Index 1234
 System Reset Delay Timer for Office Data Load & System Initialize
 (due to a memory retained reset failure)
 00 (Hex) = Disabled
 01 to FF (Hex) = 1 to 255 seconds

- Note:** Assign this data to a node which a standard VNDM is accommodated to (indicated as ACDP#1 node in the later example).
- Note:** Save the Office data with the MEM_HDD command after assigning this data. When using a CPU dual configuration system, you must save the Office data with the MEM_HDD command to backup the system data of ACT side to STBY side.
- Note:** When this data is assigned, time required for the system to reset will extend by the time period assigned in this data, regardless of how an initialization is performed (even for an initialization with the SINZ command).
- Note:** Before assigning this data, you must measure the duration shown in the diagram below for the node to which a standard VNDM is accommodated. Refer to the example shown below for information on recommended time value.

Duration to startup a system when Office Data Load & System Initialize is executed in ACDP#1



<Example on Recommended Timer Value Assignment>

192 seconds (time required to switch to Stand-alone mode) + 20 seconds (gap)
 - duration required for Office Data Load & System Initialize on ACDP#1 (XX seconds)

Example:

192 seconds (time required to switch to Stand-alone mode) + 20 seconds (gap)
 - duration required for Office Data Load & System Initialize on ACDP#1 (5 seconds)

192+20-5 = 207 seconds (=CF (Hex)) -> Assign "CF" in Index 1234

Index 1347

Bit 0=1 (PBUS over IP Module Enabled)

Note: When modifying this data from disabled to enabled, you must execute "Module Initialize" for PBUS over IP Module with the ADPM command.

Note: PBUS over IP is an interface used to packetize the transmitted/received data between ACT side and STBY side into IP packets and to perform a Memory Copy.

Bit 1=1 (Start Memory Copy from ACT to STBY)

Index 1348

Bit 0 to Bit 3 (Cycle of Executing a Health Check between ACT side and STBY side)

Data				Timer Value
Bit 3	Bit 2	Bit 1	Bit 0	
0	0	0	0	2 seconds (default)
0	0	0	1	2 seconds
0	0	1	0	4 seconds
0	0	1	1	6 seconds
0	1	0	0	8 seconds
0	1	0	1	10 seconds
0	1	1	0	12 seconds
0	1	1	1	14 seconds
1	0	0	0	16 seconds
1	0	0	1	18 seconds
1	0	1	0	20 seconds
1	0	1	1	22 seconds
1	1	0	0	24 seconds
1	1	0	1	26 seconds
1	1	1	0	28 seconds
1	1	1	1	30 seconds

Bit 4 to 7 (Cycle of Abnormal Detection for Health Check between ACT side and STBY side)

Data				Timer Value
Bit 7	Bit 6	Bit 5	Bit 4	
0	0	0	0	30 seconds (default)
0	0	0	1	30 seconds
0	0	1	0	60 seconds
0	0	1	1	90 seconds
0	1	0	0	120 seconds
0	1	0	1	150 seconds
0	1	1	0	180 seconds
0	1	1	1	210 seconds
1	0	0	0	240 seconds
1	0	0	1	270 seconds
1	0	1	0	300 seconds
1	0	1	1	330 seconds
1	1	0	0	360 seconds
1	1	0	1	390 seconds
1	1	1	0	420 seconds
1	1	1	1	450 seconds

STEP 2: ADTM - Assignment of Data for TCP/IP Module

Assign this data to set the LAN2 of the Telephony Server.

Select LAN Interface: LAN2

[IP Address] tab

IP Address (ACT): IP address of active side Telephony Server

IP Address (System-0): IP address of System-0 side Telephony Server **Note 6, Note 7**

IP Address (System-1): IP address of System-1 side Telephony Server **Note 6, Note 7**

Subnet Mask: Subnet Mask

Note: The same IP address as LAN1 cannot be assigned.

Note 6: Only when Dual System is used, IP Address (System-0) and IP Address (System-1) are required to be assigned.

Note 7: Assign the same Network Address as that of the IP Address (ACT).

[NIC] tab

Speed: Fixed 100Mbps/Auto Negotiation (1Gbps Only)/Auto Negotiation (10Mbps-1Gbps)

Duplex Mode: Full Duplex

ARP Broadcasting Period: Not Send/30 sec/60 sec/120 sec

Note: Set Speed and Duplex Mode using one of the combination settings listed below. Combination other than below is not permitted

Speed	Duplex Mode	Note
Fixed 100Mbps	Full Duplex	
Auto Negotiation (1Gbps Only)	Full Duplex	Note 8
Auto Negotiation (10Mbps-1Gbps)	-	Note 9

Configure the setting of a switching Hub to conform to the setting of the Telephony Server. Check whether the actual transmission speed is in 100Mbps or 1Gbps and the duplex mode is in Full Duplex mode after the settings are complete.

Note 8: When “Auto Negotiation (1Gbps Only)” is assigned for Speed, you may only assign “Full Duplex” for Duplex Mode. (“Half Duplex” is unavailable.)

Note 9: When “Auto Negotiation (10Mbps-1Gbps)” is assigned for Speed, Duplex Mode selection will be unavailable.

Note: For the dual system configuration, it is recommended to enable the periodic transmission of G-ARP on both LAN1 and LAN2 with the ADTM command. The parameter of ARP Broadcasting Period should be preferably selected as “60 sec”. As for the offices that frequently execute the CPU system changeover, select “30 sec” for the parameter of ARP Broadcasting Period.

STEP 3: MEM_HDD - Data Control Between Memory and HDD

Assign this data to back up the Data Memory.

Direction Select: Memory to Hard Disk

Data Type Select: Data Memory

STEP 4: ADPM - Assignment of Data for PH Module

Assign this data to initialize PBUS over IP.

MODULE TYPE: PBUS over IP

Menu: Module Initialize

[To Cancel]

STEP 1: ASYDL - Assignment of System Data for LDM

SYS1

Index 1191

Bit 1=0 (Logical Port Assignment Disabled)

Index 1193

Bit 0=0 (ACDP Quick Initialization Disabled)

Index 1347

Bit 0=0 (PBUS over IP Module Disabled)

Bit 1=0 (Stop Memory Copy from ACT to STBY)

2.20 Program Upgrade with ACDP Quick Initialization

ACDP Quick Initialization can be used when upgrading the program version.

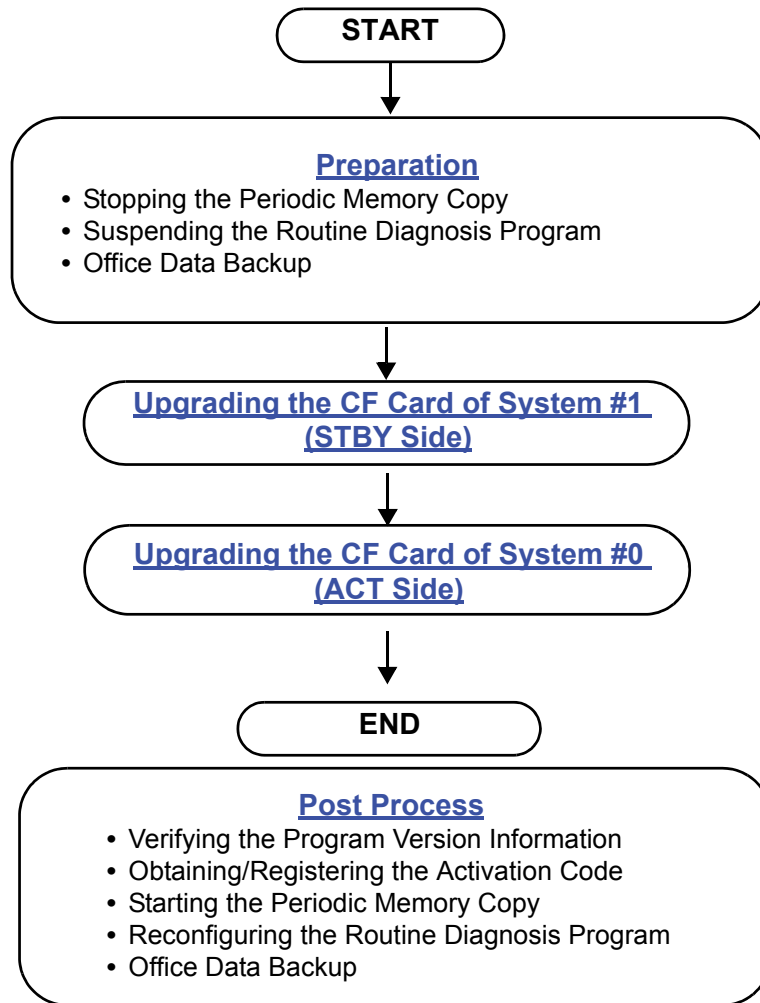
If ACDP Quick Initialization is disabled in your system, you can enable this feature after program upgrade by assigning the data for ACDP Quick Initialization after upgrading the program version with a conventional procedure.

Follow the flow chart below to upgrade the program version (hereinafter, ACT side will be indicated as System #0 and STBY side as System #1).

Note: Take notice that the system will stop while upgrading the program version.

- Upgrading from a System with ACDP Quick Initialization Enabled (Before Upgrade [Enabled] → After Upgrade [Enabled])
- Upgrading from a System with ACDP Quick Initialization Disabled (Before Upgrade [Disabled] → After Upgrade [Enabled])

Upgrading from a System with ACDP Quick Initialization Enabled
(Before Upgrade [Enabled] → After Upgrade [Enabled])



1. Preparation

STEP 1: Stopping the Periodic Memory Copy

Assign the system data (ASYDL, SYS1, Index 1347, Bit 1=0) to stop the Periodic Memory Copy.

STEP 2: Suspending the Routine Diagnosis Program

Note: Write down the values for these system data before modifying the data to the values below. These data will be used when reconfiguring the Routine Diagnosis Program.

Assign the system data (ASYD, SYS1, Index 87=FF (Hex), Index 88=FF (Hex)) to suspend the execution of Routine Diagnosis Program temporarily.

STEP 3: Office Data Backup

Use the MEM_HDD command to save the Office Data to the CF Card.

2. Upgrading the CF Card of System #1 (STBY Side)

Upgrade the program version of System #1 (STBY side).

Refer to “Chapter 6 SYSTEM STARTUP” in Appliance Model Installation Manual for details.

3. Upgrading the CF Card of System #0 (ACT Side)

Upgrade the program version of System #0 (ACT side).

Refer to “Chapter 6 SYSTEM STARTUP” in Appliance Model Installation Manual for details.

4. Post Process

STEP 1: Verifying the Program Version Information

Use the DISS command to verify the program version information after program upgrade.

STEP 2: Obtaining/Registering the Activation Code

Register the Activation Code to the upgraded program.

Refer to “Chapter 6 SYSTEM STARTUP” in Appliance Model Installation Manual for details.

STEP 3: Starting the Periodic Memory Copy

Assign the system data (ASYDL, SYS1, Index 1347, Bit 1=1) to start the Periodic Memory Copy.

STEP 4: Reconfiguring the Routine Diagnosis Program

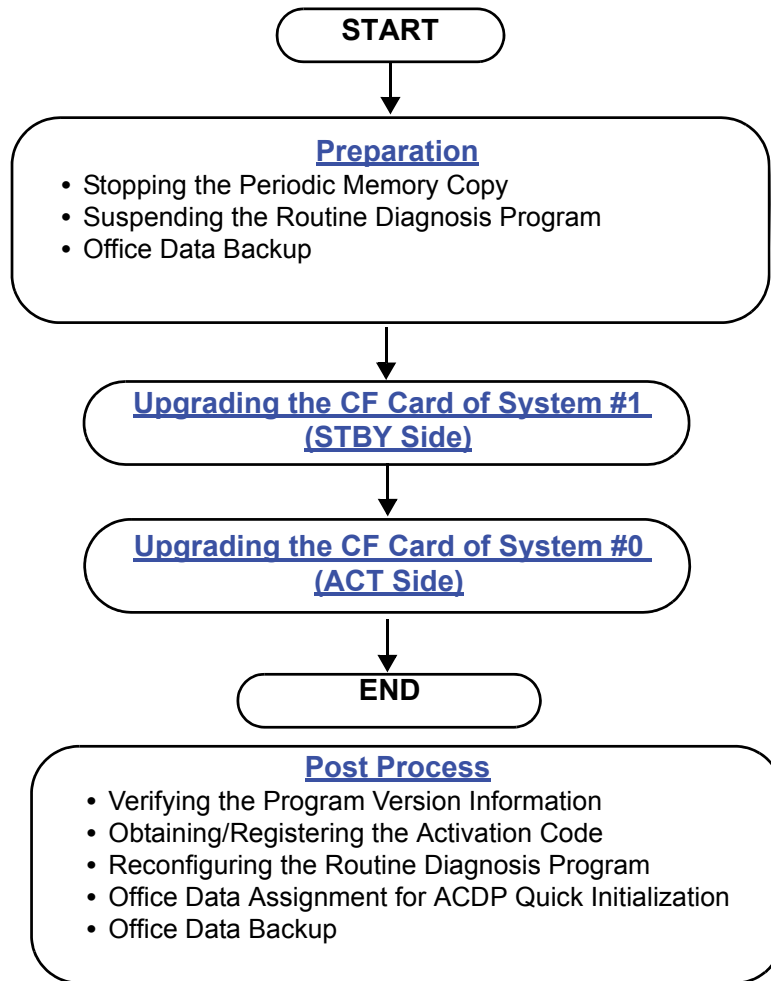
Restore the system data (ASYD, SYS1, Index 87 and Index 88) to the former values defined before suspending the Routine Diagnosis Program.

STEP 5: Office Data Backup

Use the MEM_HDD command to save the Office Data to the CF Card.

Procedure for upgrading from a system with ACDP Quick Initialization enabled is completed.

**Upgrading from a System with ACDP Quick Initialization Disabled
(Before Upgrade [Disabled] → After Upgrade [Enabled])**



1. Preparation

STEP 1: Suspending the Routine Diagnosis Program

Note: Write down the values for these system data before modifying the data to the values below. These data will be used when reconfiguring the Routine Diagnosis Program.

Assign the system data (ASYD, SYS1, Index 87=FF (Hex), Index 88=FF (Hex)) to suspend the execution of Routine Diagnosis Program temporarily.

STEP 2: Office Data Backup

Use the MEM_HDD command to save the Office Data to the CF Card.

2. Upgrading the CF Card of System #1 (STBY Side)

Upgrade the program version of System #1 (STBY side).

Refer to “Chapter 6 SYSTEM STARTUP” in Appliance Model Installation Manual for details.

3. Upgrading the CF Card of System #0 (ACT Side)

Upgrade the program version of System #0 (ACT side).

Refer to “Chapter 6 SYSTEM STARTUP” in Appliance Model Installation Manual for details.

4. Post Process

STEP 1: Verifying the Program Version Information

Use the DISS command to verify the program version information after program upgrade.

STEP 2: Obtaining/Registering the Activation Code

Register the Activation Code to the upgraded program.

Refer to “Chapter 6 SYSTEM STARTUP” in Appliance Model Installation Manual for details.

STEP 3: Reconfiguring the Routine Diagnosis Program

Restore the system data (ASYD, SYS1, Index 87 and Index 88) to the former values defined before suspending the Routine Diagnosis Program.

STEP 4: Office Data Assignment for ACDP Quick Initialization

Assign the Office Data to enable ACDP Quick Initialization.

Refer to “Chapter 4 Office Data Design” - “2. Basic Office Data Assignment” - “2.19 ACDP Quick Initialization” - “[Programming](#)” for details.

STEP 5: Office Data Backup

Use the MEM_HDD command to save the Office Data to the CF Card.

Procedure for upgrading from a system with ACDP Quick Initialization disabled is completed.

2.21 Geographic Redundancy - ACD (Stand Alone System)

General Description

This feature provides automatic recovery of ACD service in case of a failure in a node where Geographic Redundancy is in use. When a failure is detected, it performs an automatic ACDP reset (**Note 1**) and maintains the information accuracy, eliminating the need for a maintenance person to manually restore the data.

Note: Please note the following:

- This feature is available in countries other than North America.
- This feature is supported from FP95-113 V3.
- For a detailed explanation of the terms related to Geographic Redundancy see the Geographic Redundancy Configuration Manual.

Note 1: Please note the following:

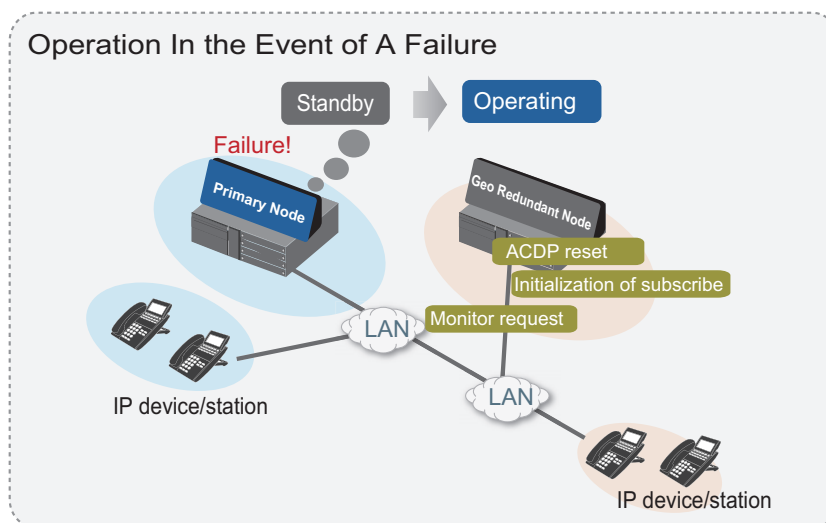
- In an ACDP reset, the ACD Agent Position is logged off and ACDP, the ACD working memory, subscribe and monitoring information are initialized.
- ACDP reset is done only in Primary Node or Geo Redundant Node (It does not happen in a Survivable Remote Node and SR-MGC.)
- When the Survivable Remote Node is in operating mode, ACD can still be used in the system (same as SR-MGC).

Operating Procedure

The ACDP reset is related to the Geographic Redundancy process and aims to automatically restore the ACD data. When a Geo Redundant Node changes to operating mode due to a failure in the Primary Mode, an ACDP reset is performed in the Geo Redundant Node and restore the ACD data. The ACDP reset procedure follows the steps below.

<When ACDP failure occurs>

When a failure occurs in the Primary Node, Geo Redundant Node transits to operating. As a result, an ACDP reset is triggered and the ACD data is restored by the steps from STEP 1 to STEP 3.



STEP 1: ACDP reset is performed in the Geo Redundant Node.

STEP 2: Subscribe information is initialized.

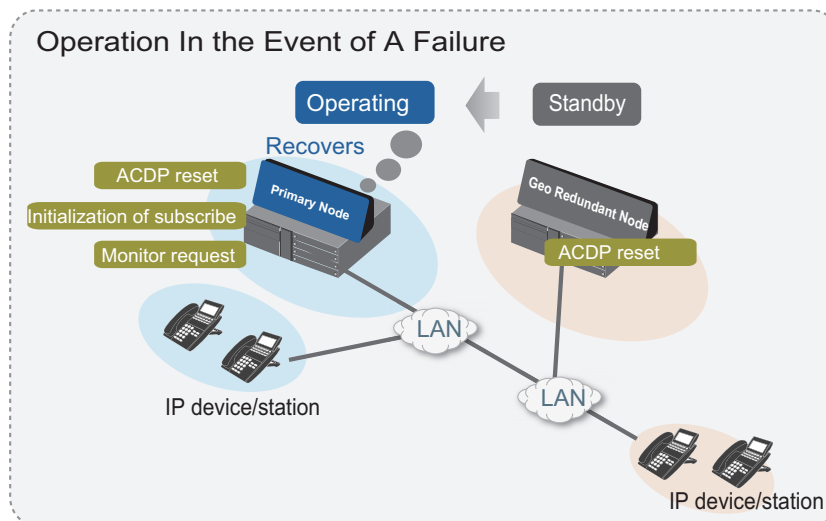
STEP 3: Monitoring information of IP devices/stations under the Geo Redundant Node is initialized.

After the steps from STEP 1 to STEP 3 are completed, ACD service becomes available in the Geo Redundant Node.

Note: Steps from STEP 1 to STEP 3 are performed automatically in the system side.

<When ACDP recovers from a failure>

By transition to standby, an ACDP reset is triggered in the Geo Redundant Node. According to STEP 1, ACD data which the node owns is initialized. Then an ACDP reset is triggered in the Primary Node by transition to operating and ACD data is restored by the steps from STEP 2 to STEP 4.



STEP 1: ACDP reset is performed in the Geo Redundant Node.

STEP 2: ACDP reset is performed in the Primary Node.

STEP 3: Subscribe information is initialized.

STEP 4: Monitoring information of IP devices/stations under the Primary Node is initialized.

After the steps from STEP 2 to STEP 4 are completed, ACD service becomes available in the Primary Node.

Note: Steps from STEP 2 to STEP 4 are performed automatically in the system side.

Service Conditions

<General Conditions>

1. The following data assignment must be performed:
 - ASYDL, SYS1, Index 1193, Bit 7=0 (ACDP Retrofit is out of service (up to 15000 Agents))
2. Only stand alone system supports this feature (FCCS Networking via IP does not support it.)
3. ACD calls are not available during the time period between the moment when a failure occurs and the moment when the Redundant System starts operating. To solve this problem, set up UCD backup for the ACD pilot number.
4. The service conditions regarding the type of system are as follows:

Supported : X, Non Supported : N
Supported with Conditions: C, Non Related: -

Type of System	Primary Node		Geo Redundant Node		Survivable Remote Node		SR-MGC	
	Operating	Standby	Operating	Standby	Operating	Standby	Operating	Standby
ACD Note 1								
Stand Alone	X	N Note 2	X	N Note 2	C Note 4	C Note 3 Note 4	C Note 4	C Note 3 Note 4
ACDP RESET								
Change to operating	X Note 5		X Note 5		-		-	
Change to standby	X Note 5		X Note 5		-		-	

- Note 1:** See [Interactions to other features](#) for a detailed explanation.
- Note 2:** An ACDP reset is performed in a Primary Node or Geo Redundant Node when it changes to standby mode because of a recovery. In this case, the ACD feature cannot be guaranteed for the IP devices/stations registered to the Primary Node or Geo Redundant Node in standby mode.
- Note 3:** An ACDP reset is not performed in an SR-MGC or Survivable Remote Node when it changes to standby mode because of a recovery. In this case, the ACD feature can be continued for the IP devices/stations registered to the SR-MGC or Survivable Remote Node.
- Note 4:** When the Primary Node is an ACDP node, ACD features are available. The Primary Node requires the system data assignment for ASYDL, SYS1, Index 1193, Bit 4=0 (SR-MGC Saving Method: ACD).
- Note 5:** An ACDP reset is performed when there is a change in the mode of a system. It may not correspond to the restart timing of IP devices/stations accommodated in the system.

<Conditions for ACDP Reset>

1. The following conditions must be fulfilled:
 - ASYDL, SYS1, Index 1354, Bit 0=1 (Geographic Redundancy Enabled).
 - The system must be Primary Node or Geo Redundant Node.
2. ACDP reset is not accompanied by the disconnection of calls. A mismatch in the real state of the stations and the state registered in the ACDP data may happen. In that case, the mismatch can be eliminated with a log off/log on operation of the ACD position.
3. After an ACDP reset, during the ACDP restarting an office data load is not performed. If an ACDP office data loading is necessary, use a maintenance operation (data copy using the CMNT command) or a system restarting based in a periodical sending (automatic copy of data performed after a periodical diagnosis).
4. When the ACDP is initialized by ACDP reset, system message 6-H is generated.
5. ACDP reset is performed when a node transited to operating.
6. During the initial startup and periodical maintenance procedures of a system, an ACDP reset is triggered. It is triggered depending on the status (operating mode or standby mode) of each node when an initial restart is executed.
When an initial restart is executed, if the node where the ACDP reset is triggered is in operating mode, it causes the node itself to have an ACDP reset.

<Interactions to other features>

1. The following table shows ACD feature which has specific conditions for nodes in the Geographic Redundancy system. ACD feature which is not in this table is available without any conditions.

Supported: X (Note 1), Non Supported: N, Non Related: -

FEATURE	System Conditions (Geographic Redundancy)			
	Primary Node	Geo Redundant Node	Survivable Remote Node	SR-MGC
ACDP Quick Initialization	X Note 2	N	X	-
ACD Trunk for FCCS	-	-	-	-
Agent Anywhere - ACD [A-133A]	-	-	-	-
Multiple ACDP	-	-	-	-
Multiple Agent Anywhere	-	-	-	-
SR-MGC with ACD [S-164]	-	-	X	X
Hot Split - ACD [H-31A] (Hot position with Standard SIP-IVR)	X	X Note 3	X Note 3	-
ACDP Program Online Update	X	X	X	-

Note 1: See also service conditions in each feature mentioned in chapter 5 of this manual.

Note 2: ACDP Quick Initialization is performed only when ASYDL, SYS1, Index 1354, Bit 2=0 (Priority of Automatic Transition to Standby: Giving operation priority to the Primary Node) is set.

Note 3: When a SIP station is incapable of selecting multiple destinations, the terminal should be accommodated in a node (Geo Redundant Node or Survivable Remote Node) that is capable of providing ACD feature independently.

Programming

<Assignment>

For Primary Node:

STEP 1:

ASYDL, SYS1,

Index 1193, Bit 4: 0/1 (SR-MGC Saving Method: ACD/UCD)

Bit 7: 0 (ACDP Retrofit: Out of service (Up to 15000 Agents))

Index 1194, Bit 2: 0/1 (SR-MGC for OAI: Out of service/In service)

Index 1199, Bit 7: 0/1 (UAP/MIS connection for system in standby mode: Not restricted/ Restricted)

STEP 2: AMNO/AMNOL

Place a check mark in the check box to follow the UCD when monitor status is not requested from AP.

Note: There are not specific data settings for Geo Redundant Node, Survivable Remote Node and SR-MGC.

2.22 Geographic Redundancy - ACD (FCCS Networking via IP)

General Description

This feature provides automatic recovery of ACD service in case of a failure in a node of an FCCS over IP network where Geographic Redundancy is in use. When a failure is detected, it performs an automatic ACDP reset (**Note 1**) in all the ACDP nodes (nodes that provide ACD function) of the network and maintains the information accuracy, eliminating the need for a maintenance person to manually restore the data.

Note: Please note the following:

- This feature is available only in North America.
- This feature is supported from FP95-112 V2.
- For a detailed explanation of the terms related to Geographic Redundancy, see the Geographic Redundancy Configuration Manual.

Note 1: Please note the following:

- In an ACDP reset, the ACD Agent Position is logged off and ACDP, the ACD working memory, subscribe and monitoring information are initialized.
- ACDP reset is done only in Primary Node or Geo Redundant Node. (It does not happen in a Survivable Remote Node and SR-MGC.)
- When the Survivable Remote Node is in operating mode, ACD can still be used in the system (same as SR-MGC).
- ACDP reset mode can be assigned with the following system data:
ASYDL, SYS1, Index 1203, Bit 0=0/1 (IP/ACDP reset mode in Geographic Redundancy setting = Automatic/Manual).

Operating Procedure

The ACDP reset is related to the Geographic Redundancy process and aims to automatically restore the ACD data in an FCCS over IP network. When a system changes to operating mode, it sends an ACDP reset instruction to all the nodes. On the other hand, when a system changes to standby mode, the ACDP reset is performed only in the system. The ACDP reset procedure follows the steps below.

1. ACD Agent Position is logged off.
2. The IP terminals registration is changed.
3. ACD Agent Position is logged on.

Service Conditions

<General Conditions>

1. Only FCCS over IP supports this feature. (DTI - FCCS does not support it.)
2. ACD calls are not available during the time period between the moment when a failure occurs and the moment when the Redundant System starts operating. To solve this problem, set up UCD backup for the ACD pilot number.
3. When multiple ACD nodes are configured in an FCCS network, the ACD nodes may enter in stand alone mode after a failure. To prevent them from taking actions, assign the following data so that the stand alone mode is automatically disabled after the connection is restored:
 - ASYDL/ASYDN, SYS1, Index 1186, Bit 6=0 (Automatic VNDM Reestablishment is enabled).
4. The service conditions regarding the type of system are as follows:

Supported: X, Non Supported: N
Supported with Conditions: C, Non Related: -

Type of System	Primary Node		Geo Redundant Node		Survivable Remote Node		SR-MGC	
	Operating	Standby	Operating	Standby	Operating	Standby	Operating	Standby
ACD								
FCCS Connected	X	N	X Note 1	N	N	N	N	N
Stand Alone	X	N Note 2	X	N Note 2	C Note 4	C Note 3 Note 4	C Note 4	C Note 3 Note 4
ACDP RESET								
Change to operating	X Note 5		X Note 5		-		-	
Change to standby	X Note 5		X Note 5		-		-	

Note 1: If the Primary Node does not provide ACD function (Local node), all the Geo Redundant Nodes also operate as Local nodes.

Note 2: An ACDP reset is performed in a Primary Node or Geo Redundant Node when it changes to standby mode because a recovery of other system. In this case, a correct function of the ACD feature cannot be guaranteed for the IP stations registered to the Primary Node or Geo Redundant Node.

Note 3: An ACDP reset is not performed in an SR-MGC or Survivable Remote Node when it changes to standby mode because of a recovery of other system. In this case, the ACD feature can be continued for the IP stations registered to the SR-MGC or Survivable Remote Node.

Note 4: Primary Node only supports ACD if it provides ACD function (ACDP node). Assign ASYDL, SYS1, Index1193, Bit 4=0 (SR-MGC Saving Method: ACD). If Primary Node does not provide ACD function (Local node), ACD is not available because office data is not copied to the Survivable Remote Node or SR-MGC.

- ASYDL/ASYDN, SYS1, Index 1194, Bit 2= 1 (SR-MGC for OAI: In service).

In this case the UAP connection will be done with the LAN1 port for the SR-MGC and the LAN2 port for the Survivable Remote Node.

Note 5: An ACDP reset is performed when there is a change in the mode of a system.

5. In UMGi system, ACD feature is available after the following operation is performed:

- Conditions for ACD feature under Primary Node (CCN)/Geo Redundant Node (CCN)

When CCN has changed state to normal mode, ACDP reset is automatically performed in three minutes as default setting (**Note 6**). If UMGi system is in FCCS, ACDP reset is performed against the overall network.

Note 6: The setting of ACDP reset timer depends on the system configuration (such as the number of nodes) how long it takes for all the RNs to complete switchback to normal mode after CCN has changed state to normal mode. Therefore, specify a value in ASYDL, SYS1, Index 1201, Bit 0 to Bit 3, which is suitable for your system.

Maintenance personnel have to execute ACDP reset when system message “10-M: Remote Node State Notification” is output after “6-H: Bad Call Notification (ACD)”.

Maintenance personnel do not need to execute ACDP reset when system message “6-H: Bad Call Notification (ACD)” is output after “10-M: Remote Node State Notification”.

- Conditions for ACD feature under Primary Node (RN)/Geo Redundant Node (RN)

After RN has changed state to normal mode, maintenance personnel need to execute ACDP reset. If UMGi system is in FCCS, ACDP reset should be performed against the overall network.

<Conditions for ACDP Reset>

1. ACDP reset is only available in an FCCS configuration. The following conditions must be fulfilled:

- ASYDL, SYS1, Index 1354, Bit 0=1 (Geographic Redundancy Enabled).
- The system must be Primary Node or Geo Redundant Node.

2. ACDP reset does not follow the disconnection of calls. A mismatch in the real state of the stations and the state registered in the ACDP data may happen. In that case, the mismatch can be eliminated with a log off/ log on operation.
3. After an ACDP reset, during the ACDP restarting an office data load is not performed. If an ACDP office data loading is necessary, use a maintenance operation (data copy using the CMNT command) or a system restarting based in a periodical sending (automatic copy of data performed after a periodical diagnosis).
4. During an ACDP reset, when the ACDP is initialized, system message 6-H is generated.
5. When a system changes to operating mode, it waits for the FCCS link to be reestablished to perform an ACDP reset. If 2400 seconds(40 minutes) pass and the link is not reestablished, the ACDP reset is not performed.

Note: If the system is a Network Control Node, the link is re-established with the designed node. If it is a Local Node, the link is re-established with the Network Control Node.

6. During the initial startup and periodical maintenance procedures of a system, an ACDP reset is triggered. If the system where the ACDP reset is triggered is in operating mode, it causes all the ACDP nodes to have an ACDP reset.

<Conditions specific to UMGi system>

1. When CCN cannot connect to other RNs due to a network failure, ACD feature is available in the CCN, while it is unavailable for ACD system accommodated in the RNs.
2. When an RN is in survival mode, ACD feature is not available for terminals accommodated in the RN.
3. ACD feature is available for Survivable Remote Node/SR-MGC belonging to RN/CCN. However, it cannot work with ACD agent positions belonging to other RNs.
4. When an RN has changed back to normal mode from survival mode without Geographic Redundancy switching, ACD Agent Positions accommodated in the RN are automatically logged off. However, this function is not performed when Geographic Redundancy is switched, for example, Primary Node (RN) is manually switched to Geo Redundant Node (RN). In this case, after the Geo Redundant Node (RN) has changed state to normal mode from survival mode, maintenance personnel need to force the ACD Agent Positions to be in log-off state by executing ACDP reset.

Programming**<Assignment>****For Primary Node:**

STEP 1:

(a) ASYDL

SYS1, Index 1193, Bit 4: 0/1 (SR-MGC Saving Method: ACD/UCD)

SYS1, Index 1193, Bit 7=0 (ACDP Retrofit: Out of service (Up to 15000 Agents)) (Not available in North America)

(b) ASYDL/ASYDN

SYS1, Index 1186, Bit 6: 0/1 (Automatic VNDM Reestablishment: In service/Out of service)

SYS1, Index 1199, Bit 7: 0/1 (UAP/MIS connection for system in standby mode: Not restricted/ Restricted)

STEP 2: AMNO/AMNOL/AMNON

Place a check mark in the check box to follow the UCD when monitor status is not requested from AP.

Note: There are not specific data settings for Geo Redundant Node, Survivable Remote Node and SR-MGC.

For Primary Node in UMGi system:

STEP 1:

(a) ASYDL

SYS1, Index 852, Bit 5=0 (IP Station Registration Manual Changeover)

SYS1, Index 1193, Bit 4: 0/1 (SR-MGC Saving Method: ACD/UCD)

SYS1, Index 1193, Bit 7=0 (ACDP Retrofit: Out of service (Up to 15000 Agents)) (Not available in North America)

SYS1, Index 1201, Bit 0 to Bit 3 (ACDP reset timer for UMGi system)

SYS1, Index 1354, Bit 2=1(MGC substitution order for Priority of Automatic Transition to Standby)

(b) ASYDL/ASYDN

SYS1, Index 874, Bit 3=0 (ACDP Automatic Logoff is disabled)

SYS1, Index 1186, Bit 6=0 (Automatic VNDM Reestablishment is enabled)

SYS1, Index 1193, Bit 0=0 (ACDP Quick Initialization is disabled.) (Not available in North America)

SYS1, Index 1199, Bit 7: 0/1 (UAP/MIS connection for system in standby mode: Not restricted/ Restricted)

SYS1, Index 1347, Bit 1=0 (Memory Copy from ACT to STBY is stopped)

STEP 2: AMNO/AMNOL/AMNON

Place a check mark in the check box to follow the UCD when monitor status is not requested from AP.

STEP 3: ARPM

Select Automatic in Changeover Mode.

Note: There are not specific data settings for Geo Redundant Node, Survivable Remote Node and SR-MGC.

<Deletion>

Perform the opposite procedure of the Assignment procedure.

3. ACD SERVICE FEATURE

This section explains general description, operating procedure, service condition, and programming procedure for the ACD service features.

A-31A ABANDONED CALL SEARCH - ACD

GENERAL DESCRIPTION

This feature prohibits abandoned incoming calls from being connected to Agent/Supervisory positions. Any trunk call disconnected during Ringback Tone is considered an abandoned call and is automatically removed from all queues. Trunk calls disconnecting after the first announcement must provide disconnect supervision to be classified as an abandoned call and to be removed from all queues. Once the ACD has answered a call, some central offices are unable to inform the ACD when a trunk is no longer in use. In these cases, the ACD is unable to recognize that the trunk has been abandoned and will connect the idle trunk to an Agent/Supervisory position.

OPERATING PROCEDURE

1. A caller has dialed into the ACD and is waiting in queue since no Agents were available. While waiting the calling party hears either Ringback Tone, a message, or music on hold.
2. The caller disconnects prior to being connected to an Agent position. This could be either while hearing an announcement, listening to music on hold, or even while the Agent's phone is ringing. At this time the abandoned call is detected and the caller will be removed from all queues he was waiting in.
3. If the abandon occurred while ringing at an Agent position, the Agent position will be assigned a new call from queue if there are additional callers waiting.

SERVICE CONDITIONS

1. An ACD call is registered as an abandoned call under the following conditions:
 - a. The ACD incoming call is placed in queue and disconnects after hearing Ringback Tone.
 - b. The ACD incoming call disconnects while it is in queue at both the overflow source and the overflow destination.
 - c. The ACD incoming call disconnects during the first delay announcement.
 - d. The ACD incoming call disconnects while hearing music or silence between the first and second announcements.
 - e. The ACD incoming call disconnects during the second delay announcement.
 - f. The ACD incoming call disconnects after the second delay announcement and before connection to an Agent position.
 - g. The caller disconnects while the ACD call is being terminated to the ACD Agent position and Ringback Tone is being provided.
2. If the C.O. trunk is a loop start trunk (loop start trunks are unsupervised), the ACD cannot detect the release of a call by the C.O. after the trunk has terminated or is connected to the first delay announcement. Thus, the ACD cannot detect an abandoned call.
3. To activate this feature properly, the following conditions are required:
 - a. The C.O. line has the answer/release signal.
 - b. The C.O. trunk can detect the release signal from the C.O. line (Release signal detection function must be valid by the switch setting).
 - c. Assign the following state translation data by ASTD command: STM = 1, STS = 0, ST = 1 (Release the trunk after detection of the release signal)

PROGRAMMING

None

A-34A ASSISTANCE - ACD AGENT - ACD

GENERAL DESCRIPTION

This feature allows an agent to call a supervisor for assistance. Activation of this feature, by the **ASSIST** key during an ACD call, automatically places the active call on hold and places an assistance call to a pre-programmed number. This number can be a Non-ACD line of the supervisor. If the target extension of the assistance request has display capabilities, then display information identifying the call as a call for assistance will accompany the call.

OPERATING PROCEDURE

To place an assistance request:

1. While on an ACD call, the agent whose extension is 4302, presses the **ASSIST** key. The **ASSIST** lamp lights and ASSIST is displayed at the agent position.
2. The ACD call is placed on hold and an automatic transfer to the designated supervisor is initiated.
3. The agent hears Ringback Tone and the supervisor is rung. The supervisor is connected to the agent. (If supervisor is not available to take the call, the call waiting indication is provided to the supervisory position and “BUSY” is displayed at the agent position.)
4. The assistance call will connect on the supervisor’s Non-ACD line and will display either ASSIST NAME or ASSIST 4302, depending on whether the agent’s name is programmed with their logon ID. Refer to “FLEXIBLE ID CODES - ACD [F-25A]” for more information.
5. After consulting with the supervisor, one of three things may happen:
 - a. The agent may release from the call, thereby completing the transfer of the ACD call to the supervisor.
 - b. The supervisor may release from the call. This will reconnect the agent and the ACD call.
 - c. The agent may press the **CONF** key and invoke a three-way conference between the supervisor, the agent and the ACD calling party.
6. When either the agent or the supervisor disconnects from the assistance call, the **ASSIST** lamp is extinguished and the displays return to their original status.

To cancel an assistance request:

7. After initiating an assistance request and before being answered by a supervisor, the agent may cancel the request by pressing the **TRANSFER** key or perform the switch hook flash. At that time, the agent reconnects with the ACD call.
8. The lamp associated with **ASSIST** key will be extinguished, the agent will be reconnected with the ACD calling party, and the display will return to the original display.

Queuing of Assistance Requests: See “MULTIPLE SUPERVISORS - ACD [M-79A]” for details.

1. Assistance requests may be routed to a split of supervisors or an individual supervisor. In the case of a split of supervisors, multiple assistance requests can be queued. All the features which apply to CALL TRANSFER TO SPLIT QUEUE-ACD [C-67A] also apply to assistance requests to a split of supervisors.

2. If assistance requests are being routed to a split of supervisors, they will also appear on the supervisor's ACD line. If the calls are routed directly to an individual supervisor, they will appear on the pre-programmed line (e.g., the supervisor's non-ACD line).

SERVICE CONDITIONS

1. During an assist call, either the agent or the supervisor can display the source of the original ACD call and the queue depth by pressing the **LOGON** key. Refer to "CALLING PARTY IDENTIFICATION - ACD [C-70A]" for additional information.
2. The directory number used for assistance requests may not contain a "*" or a "#".
3. Assist requests will be ignored while talking on a non-ACD line or during an emergency call.
4. The **ASSIST** key can be dedicated to the ASSISTANCE - ACD AGENT feature or the MONITOR ME feature. The choice is made on a split-wide basis.
5. When an Assistance request is routed to an individual supervisor, the call is distributed to the supervisor in Work Mode or Break Mode. While, Assistance call to a split of supervisors is not distributed to the supervisors in those modes.
6. For Assistance split queuing, to ensure the fastest processing, the only CCV steps that will be executed are Queue to Split, Conditional Queue to Split, and Pause, End CCV and the request will be queued at the highest priority.
7. When an agent in need of assistance is handling calls from multiple splits (multi-split mode), the first entry of the agent's ACD Split data list (Split number 1, configured with the ACDLOG command) is used in this feature.

PROGRAMMING

This data is set to the agent position.

STEP 1: AOKC - Define the meaning of OAI key codes (AKYD. FKY 34 through 47).

KEY-CODE=8 (FKY 41 in AKYD)

F-KIND=2 (Terminal Multi Information Transfer Facility: TMF)

OP-CODE=254 (Assistance)

STEP 2: ACDSPL - Assign the Non-ACD line's number of the supervisory position as the assistance call's destination.

ASIST: Non-ACD line (My line) of a supervisory position/Pilot number of a split of supervisors (two to six digits) **Note 1**

Note 1: Only numeric values can be used. An asterisk (*) or pound (#) is not allowed. One-digit dial number may not be assigned.

STEP 3: AKYD - Apply "ASSIST" key to the Line/Feature Key.

KYN=7 (as an example)

KYI=1

FKY=41 (ASSIST)

A-35A AUTOMATIC ANSWER - ACD

GENERAL DESCRIPTION

This feature gives an agent the ability to determine whether calls should be automatically connected to the headset or handset, or manually answered after ringing. When in Automatic Answer mode, calls are announced using a special tone signal called Zip Tone. All normal calls are preceded by a single burst of tone. Calls which may require special handling (forwarded or overflow calls) are preceded by two bursts of tone.

OPERATING PROCEDURE

To set AUTOMATIC ANSWER from the Manual Answer mode:

1. The agent or supervisor presses the **AUTO/MAN** key.
2. The Desktop terminal display shows AUTO ANSWER. The **AUTO/MAN** lamp lights steadily.
3. All subsequent calls are introduced by a Zip Tone at the agent's or supervisor's headset, and then the caller is automatically on-line.

To set Manual Answer from the AUTOMATIC ANSWER mode:

1. The agent or supervisor presses the **AUTO/MAN** key.
2. The Desktop terminal display shows MANUAL ANSWER, and the **AUTO/MAN** lamp is extinguished.
3. All subsequent calls are introduced by the normal ringing of the Desktop terminal set.

SERVICE CONDITIONS

1. The **AUTO/MAN** key can be pressed at any time as long as the agent or supervisor is logged on to the ACD system.
2. If the supervisor or agent is engaged in a call when the **AUTO/MAN** key is pressed, the answering mode change will take effect upon the completion of the call in progress.
3. If the agent or supervisor is in the Auto mode and hears Zip Tone (introducing the next call), and presses the **AUTO/MAN** key at that moment, the next call will not be answered until after the current call is completed. Refer to "ZIP TONE - ACD [Z-1A]" for related information.
4. When the agent console is set for AUTOMATIC ANSWER, normal ACD calls are introduced by one burst of tone (i.e., Zip Tone). Overflowed calls and calls which arrive at the agent position as a result of forwarding from another split are announced by two bursts of tone.
5. AUTOMATIC ANSWER applies only to ACD calls. It does not apply to calls which terminate to an agent's or supervisor's LINE key.
6. AUTOMATIC ANSWER applies only while the agent terminal;
 - is idle (on-hook).
 - has a non-ACD call on hold.
 - is being called (non-ACD line is ringing).

7. The answer mode change can be operated at any time a position is occupied. ANMD parameter in ACDSPL determines the default setting for this feature for a particular position each time an agent or supervisor logs in.
8. Agents can be restricted from changing their answer mode by not assigning an **AUTO/MAN** key to the agent position. In that case, the split default will remain in effect.
9. If a Desktop terminal is left on-hook (the handset is resting in the cradle) and AUTOMATIC ANSWER is set, each call assigned to the terminal will ring once and be immediately disconnected. Therefore, when your Desktop terminal is in the AUTOMATIC ANSWER mode, do not leave it on-hook.
10. When a Desktop terminal is left on hook in the auto answer mode, the ACD line will ring as if it were set to the manual answer mode.

PROGRAMMING

STEP 1: ACDSPL - Assign whether the default ANSWER mode is automatic or manual after logging on.
ANMD (logon answer mode) = 0 (Auto)

STEP 2: Assign “AUTO/MAN” key to change the answer mode referring to “Section 2.4 ACD Agent/Supervisory Position Data Assignment”.

A-37A AVAILABILITY - ACD POSITION - ACD

GENERAL DESCRIPTION

After-Call Availability allows a split to be assigned to either Automatic-Available mode or Automatic-Work mode. This is referred to as the after-call work mode.

In Automatic-Available mode, a position becomes available to receive new ACD calls immediately upon disconnecting from the previous call. In Automatic-Work mode, a position is unavailable to receive ACD calls after disconnecting from the previous call. Automatic-Work mode allows the agent time to perform miscellaneous activities that may be associated with the ACD call.

After-call work mode may have a time limit which will automatically force the position to Available mode upon expiration.

The after-call mode and optional Work Timeout are set on a per-split basis through the ACD PCPro or a MIS terminal. Agents may change their after-call mode during an ACD call.

OPERATING PROCEDURE

Automatic-Available Mode set for split:

1. An agent is engaged in an ACD call. The **WORK** lamp is not lit and the lamp associated with the ACD CALL key is lit.
2. If the ACD call is disconnected, the lamp associated with the ACD CALL key is turned off, the position becomes available, and **READY** is displayed.
3. If the agent presses the **WORK** key before the ACD call is disconnected, the **WORK** lamp is lit, **WORK PENDING** is displayed, and the Automatic-Work mode is selected for this call only.

Automatic-Work Mode set for split:

1. An agent is engaged in an ACD call. The **WORK** lamp is lit and the lamp associated with the ACD CALL key is lit.
2. If the ACD call is disconnected, the lamp associated with the ACD CALL key is extinguished, the position becomes unavailable, and **WORK MODE** is displayed for a short time.
3. If the agent presses the **WORK** key before the ACD call is disconnected, the **WORK** lamp is extinguished and the Automatic-Available mode is selected for this call only.
4. After releasing the call and entering the Automatic-Work mode, the agent must press the **WORK** key to leave the Automatic-Work mode and become available to receive new ACD calls.

SERVICE CONDITIONS

1. The after-call mode can be operated whenever a position is occupied.

2. When a position is forced into the Automatic-Work mode immediately after an agent or supervisor logs on, the **WORK** key must be pressed to begin receiving ACD calls. When the first and all subsequent ACD calls are received, a split parameter will automatically set the appropriate after-call mode for the position.
3. The conditions for Automatic-Available/Automatic-Work mode can be set on a per-split basis. The operating mode can be changed either from the ACD PCPro or from a MIS terminal.
4. During after-call Automatic-Work mode, non-ACD incoming calls are allowed to terminate to the ACD position. However, non-ACD incoming calls are terminated or originated from the ACD position's LINE key.

PROGRAMMING

Assign "WORK" key to the agent position referring to Section 2.4 in Chapter 4 "Agent/Supervisory Position Data Assignment".

ACDSPL-

AFTER: After-call answer mode.

0/1=Work Mode /Available mode

Note: Work mode maybe canceled and reset by the manual operation even if AFTER = 0 is programmed in ACDSPL.

A-80A ANNOUNCEMENTS - ACD

GENERAL DESCRIPTION

Variable length announcements (2-120 seconds) are provided for ACD callers by customer-provided announcement hardware using digital announcement trunk circuits or certain analog trunk circuits. Announcements are designed to be heard for one complete cycle from the beginning of the message. Since multiple connections to each announcement channel are possible, an appropriate delay may be inserted to wait for the beginning of the spoken announcement, if necessary. VS32 can also be used for this feature.

OPERATING PROCEDURE

1. The ACD system recognizes the termination of an ACD incoming call.
2. The ACD calling party hears Ringback Tone (RBT) or music (MSC).
3. Announcement connections are made by properly programming a Call Control Vector (CCV). Refer to “CALL CONTROL VECTOR - ACD [C-108A]” for additional information.
4. When the predetermined ring delay timing parameter set before the delay announcement has passed, the system sends answer supervision to the central office and connects the caller to the announcement. During this process, the ACD call retains its queue position if a “10 (queue to)” step has been specified at the CCV.
5. At any point after a “10 (queue to)” step (including during the delay announcements), if an agent becomes available, the ACD call is immediately connected to the agent.

SERVICE CONDITIONS

1. VS32 can also be used instead of the Digital Announcement Trunk. Hardware types of VS32 supported in this feature are listed below:

VS32 Conference Server Hardware Type	Firmware Version
VS32 BOX [MG-VS32VA]/ VS32 Card [SCA-VS32VA]	SP-3891 CA-VS32 PROG-A Issue 3A or later <i>(*Proprietary Protocol mode or SIP mode can be selected)</i>
	SP-3891 CA-VS32 PROG-A Issue 2A or earlier <i>(*operating in Proprietary Protocol mode only)</i>

2. When the system is DTI-FCCS, this feature cannot be used with the following equipment:
 - MG(BRI) Card [SCA-2BRIA]/MG(BRI) Box [MG-2BRIA]
3. Announcements are connected only when the transfer is completed.
4. The announcement source connection method can be a multiple connection or a single connection with start point seek, depending on System Data.
5. In the case of a multiple connection, all new calls that are detected within a period of time preassigned by System Data (2~30 sec.) will receive the message simultaneously.

6. This feature is applicable to ACD incoming calls from a C.O., transferred from an attendant, agent or Non-ACD station.
7. The announcement length timer is programmed in the System data on a per-announcement basis.
8. The Cook Electric Model 213400 or the Interalia 6 Channel Announcer are specified for the provision of delay announcements for the ACD system. They can provide four to six separate channels of digital announcements which can be assigned as required. Each digital announcement channel is connected to the Non-ACD using a 2/4-wire Tie Line circuit (one port of a TLT circuit pack), or circuits 0 and 1 of an COT card (which is programmed to operate in the Page mode) or a 4 DAT-A card.
9. It is possible to set up multiple channels of the same announcement in a hunt arrangement to accommodate large volumes of simultaneously queuing calls.
10. By the system data programming, at any point during the announcement when all the ACD callers connected to the announcement are disconnected or distributed to another station/trunk, the Digital Announcement Trunk (DAT) is released and the next announcement is sent immediately.
11. In the case of a multiple connection, maximum 10 ACD incoming calls can be connected to one channel of Digital Announcement Trunks depending on the system data.
12. In the case of a single connection, one ACD incoming call is connected to one channel of Digital Announcement Trunks.
13. You cannot use the announcement trunk route for DELAY ANNOUNCEMENT -UCD [D-31] as the route for ANNOUNCEMENTS - ACD [A-80A].
14. Traffic Measurement does not work for this feature.

PROGRAMMING

Refer to “2.11 Announcement (Delay/Night/Holiday) Data Assignment” in Chapter 4.

A-85A AGENT PERSONAL QUEUE - ACD

GENERAL DESCRIPTION

Incoming ACD calls wait in queues until an agent is available to take the call. There are two types of queue for waiting callers, Split Queues and Agent Personal Queues. When a call is waiting in a split queue, the next agent who becomes available in the entire split will be assigned to the longest waiting call. When a call is waiting in an Agent Personal Queue, it can only be assigned to a single agent. A variety of overflow timeout, unavailability, and full queue parameters can be programmed for each agent personal queue to provide for alternate call handling when the designated agent does not get to the call in time or is unavailable.

A call is directed to a normal split queue by way of the dialed Pilot Number. A call is directed to an agent's personal queue by way of a Personal Pilot Number. The personal pilot number is associated with the agent's logon ID and is valid whenever and wherever the agent is logged on to the ACD system.

Calls (internal, external, ACD agent transfers, CCV transfers, emergency, assist, etc.) to the agent's ACD line are made by calling the personal pilot number. If and only if the agent is on an ACD call or is in Work mode, the call will be queued to the agent's personal queue. The **LOGON** lamp functions as the call waiting indicator for the personal queue. Calls in the agent's personal queue have priority over calls in any split queue.

Six pieces of data may be programmed independently for each agent's personal queue.

The Personal Pilot Number: this is the number dialed in order to call to the personal queue.

Call Waiting Chime: alerts the agent when calls arrive in queue, may be off, on first, on always.

Maximum Queue Depth: how many calls may be waiting in the agent's personal queue.

Forward / Full CCV: how to handle calls when the queue is full or when the agent is not available. Not available includes the two states of a) not logged in to the ACD and b) on Break.

Personal Queue Timeout: how long a call may wait in queue before overflowing.

Overflow CCV: how to handle calls which overflow in timeout.

Each call that is added to the personal queue, abandons the personal queue, or overflows from the queue invokes a display on the agent's console. The display indicates the current depth of the personal queue; for example, **PERS. QUEUE: 4**.

A call in a personal queue does not have an associated priority. A call in a split queue does have an associated priority because the handling of a call in a split queue is based on the call's priority and elapsed time in the queue. When a call overflows from a personal queue or is forwarded from a personal queue, and the call is then queued to a split, the call must have a priority assigned to it. Calls that overflow/forward from a personal queue are placed in one of two categories for the purpose of assigning a priority.

1. Calls that were received on an ACD trunk are given the priority of the trunk.
2. Calls that were not received on an ACD trunk are given a priority that is programmed in the ACD database. The single priority is set on a tenant-wide basis.

OPERATING PROCEDURE

The agent is handling an ACD call or is in Work mode, when a non-emergency/non-assist call to the agent's personal pilot number is received:

1. The call is queued to the agent's personal queue.
2. The agent's display shows **PERS. QUEUE: 1**, which indicates that a single call (in this example) is in the agent's personal queue.
3. The **LOGON** lamp, functioning as the call waiting lamp for the personal queue, begins flashing. The lamp flashes when the queue depth is one (1) or two (2); it winks when the queue depth is three (3) or greater. The flash and wink thresholds are fixed in the System software.
4. If programmed to do so, a chime (personal queue chime) will sound as an audio alert to the agent. The chime can be programmed to sound for only the first call queued, for each call queued, or not to sound.
5. The calling party is immediately connected to an announcement (personal queue announcement). This announcement, which is specifically for agent personal calls, is programmed on a tenant-wide basis. All calls to any personal queue will hear the exact same announcement.
6. The call to the agent's personal pilot number will have a higher priority than any non-emergency/non-assist call queued to a split. When the agent becomes Ready the personal queue call will connect to the agent.
7. When the call is ringing and when the agent answers the call, the display shows **PRS ORDERS**, for four (4) seconds, followed by **TIME IN Q: 0:28** (for example). The consecutive displays indicate that the call is from the personal queue, identify the source of the call (trunk/party, etc.), and provide the amount of time the call spent in the queue.
8. If the timer expires, the call will be handled by the Forward/Full CCV step indicated in the ACD database. If another ACD agent subsequently receives the overflowed call, that agent's display will indicate that the call overflowed from a specific personal queue; for example **PRS OVF SAM**.
9. If the agent logs off or enters Break mode, the call will be handled by the Forward/Full CCV step indicated in the ACD database.

SERVICE CONDITIONS

1. This feature can be set for each ACD agent ID code.
2. The following conditions need to be satisfied for an incoming call to queue and be distributed to the agent in this service.
 - An agent is logged on to an agent position with ACD agent ID code that is associated with Personal Pilot Number, and an agent position is ready to receive a call, on an ACD call or in Work Mode.
 - The number of calls waiting in a personal queue is not more than Maximum Queue Depth of the Personal Pilot Number when a call is arrived. **Note 1**

Note 1: When this condition is not satisfied, a call arrived to a Personal Pilot Number is forwarded to the forwarding destination CCV for an Agent Personal Queue.

3. When there are queued calls in both a personal queue and a split queue, the calls in a personal queue are distributed first regardless of the queue priority setting.
4. When using Agent Personal Queue, set the personal queue time-out to at least 20 seconds.
5. The personal queue announcement is connected to each call as soon as the call is queued. The announcement is only played once. Therefore, it is suggested that the announcement informs the caller that additional announcements will not be forthcoming and that the call will be handled elsewhere (if the called agent does not answer, and the personal queue time-out is used and expires). If the personal queue time-out is not used, the call will remain in the personal queue until it is either handled by the agent, or the agent logs off or goes into Break mode. In the latter case, the call will go to the personal queue forward step.
6. When you use the personal queue announcement, set the identical value for Overflow Timeout as that for Message Timer set by the AADT command.

Note: When the time of Overflow Timeout is set shorter than that of Message Timer of the AADT command, a call may not be connected to the announcement set for the overflow destination CCV.

7. A personal queue overflow step and a personal queue forward step both point to a step (instruction) in a particular Call Control Vector. The indicated steps can be any CCV instruction.
8. When a call waits longer than the time set for Overflow Timeout, the call is forwarded to an overflow destination CCV.
9. The overflow feature for Agent Personal Queue becomes out of service when Overflow Timeout is set to “0”. In this case, a call stays in a personal queue.
10. The priority of calls that are forwarded to the overflow/forwarding destination CCV for Agent Personal Queue follows the priority setting below.
 - For a call forwarded from a station
The priority set by the ACDTN command (ACD tenant data) for Agent Personal Queue
 - For a call forwarded from a trunk
The priority set by the ACDTG command (ACD trunk group data) for ACD trunk incoming calls
11. When a call cannot be connected to an agent (e.g. the Break Mode is set or an agent is logged off) while a call is terminated to an agent position, the call is forwarded to the forwarding destination CCV.

Note: When an IP terminal is used as an agent position, if a call terminates to the agent position while the terminal is still unregistered, the call is forwarded to the forwarding destination CCV.

12. The flash and wink thresholds for the **LOGON** lamp are fixed in the system; they are not programmable. The **LOGON** lamp will flash when the queue depth is one or two calls; it will wink when the queue depth is three or more calls.
13. The Stranded Call Routing feature is available for Agent Personal Queue. The behavior of the stranded call routing feature follows the setting of the forwarding destination CCV for ACD agent ID code.

14. The Call Recover feature is also available for Agent Personal Queue. The conditions are as follows.

- The setting of whether the Call Recover is in service or not depends on the setting of the Call Recover time of the split that is assigned as an attribute split in the ACD agent ID code data.
- The time until the Call Recover is executed also depends on the setting of the Call Recover time of the split that is assigned as an attribute split in the ACD agent ID code data.
- If a split of an agent position is not set in the ACD agent ID code data, the setting of the Call Recover follows the setting of a split assigned by the ACDPSN command.
- When single logon is selected for a split membership, the setting of the Call Recover follows the split where an agent is logged on.
- When multiple logon is selected for a split membership, the setting of the Call Recover follows the attribute split.
- The behavior of the Call Recover for Agent Personal Queue depends on the setting of the forwarding destination CCV of ACD agent ID code.

PROGRAMMING

STEP 1: AMNO/AMNOL/AMNON - Assign the pilot number (monitor number) for an individual call.

MNO: Pilot Number (2 to 6 digits) **Note 2**
Numbers 0 to 9 may be used. **Note 3**
* or # may not be used. 1st DC= "0" may not be used either.

Note 2: The number of digits for each Pilot Number must be the same.

Note 3: ACD System does not function when a one-digit number is assigned.

STEP 2: ACDTN - Assign the announcement number per tenant

ANTNO: Personal Announcement Number (0-200) **Note 4, Note 5**
* To disable Personal Announcement, set this parameter to 0, or leave it blank.

Note 4: This enhancement is not available in North America.

Note 5: Specify an announcement number in the range of 0 to 58 when:

- Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0)

PRI: Priority order of queue for an individual call (1-250)

STEP 3: ACDLOG -

SPLIT: Split number (1-900)

PRIO: Priority for handling ACD calls in multiple splits/the agent's preference level (1 ~ 99)

PPN: Pilot number for an individual call (max. 6 digits)

MXQD: Maximum Queue Depth for an incoming call routed to the agent (0-999)

GOCF NO: Forwarding destination CCV No. to be routed when the individual call encounters busy status (1-2000)

GOCF STP: Forwarding destination CCV step number to be forwarded when the individual call encounters busy status (1-20)

OVFT: Overflow Timeout (0-9999 sec.) **Note 6**
* "0" means overflow service is out of service for an individual call

Note 6: This value cannot be bigger than the message timer value of AADT/AADTL/AADTN.

GOCO NO: Overflow destination CCV number to be routed when the time limit (OVFT) is over (1-2000)

GOCO STP: Overflow destination CCV step number to be routed when the time limit (OVFT) is over (1-20)

PCWCM: 0=Call waiting chime is not available
1=Call waiting chime is rung only once (at the first time)
2=Call waiting chime is rung every time

STEP 4: ACDSPL - Assign the Call Recover Time (CRT)

CRT: Call Recover time (1-255, 0 is invalid)

A-86A AUTO WORK MODE FOR PBX CALLS - ACD

GENERAL DESCRIPTION

All the agents, within a split, can automatically be placed in Work mode when handling a call on a Non-ACD line. Incoming and outgoing non-ACD calls are treated separately.

When this feature is applied to incoming non-ACD calls, an agent will be automatically placed in Work mode upon receiving an incoming non-ACD call.

When this feature is applied to outgoing non-ACD calls, an agent will be automatically placed in Work mode upon receiving Dial Tone on their Non-ACD line.

If Work mode is restricted, Break mode is used instead.

OPERATING PROCEDURE

None

SERVICE CONDITIONS

This feature is implemented through the ACDSPL PCPro command. The command data is on a split-wide basis.

PROGRAMMING

ACDSPL

- AWPI: Auto work mode for the ACD call when handling an incoming non-ACD call
 0 = Not available
 1 = Available when the non-ACD call is terminated
 2 = Available when the non-ACD call is answered
 3 = Available when the non-ACD call is terminated/answered
- AWPO: Auto work mode for the ACD call when originating a non-ACD call
 0 = Not available
 1 = Available
- ARPR: Work mode is canceled automatically when the non-ACD call is complete
 0/1 = Not available/Available
- AWPRST: Auto Work Timeout Restriction
 0/1 = Allowed/Restricted

Note: When setting Auto Work Mode (AWPI = 1-3, AWPO = 1), assign "1" to the AWPRST parameter.

The table below illustrates an example of the data setting in combination of AWPI/AWPO/ARPR.

Method for Work Mode for Node Calls Set/Cancel	AWPI	AWPO	ARPR
Automatic operation for Set/Cancel	2 or 3	1	1
Automatic operation for setting Manual operation for cancel	1	1	0

A-91A ANALOG ACD POSITION - ACD

GENERAL DESCRIPTION

This feature extends the functionality of ACD features to users operating analog station equipment. By dialing access codes from a single-line (POTS) station, an agent may invoke several features including:

- Logon with ID
- Logon without ID
- Logoff
- Switch between the modes of Work, Ready, and Break (up to 9 types of Break)
- Enter Tally codes
- Register Trunk Trouble
- Place the split into Day and Night modes

Using OPX (off-premise extension) technology an agent can now be situated at a remote location and still process ACD calls with many of the features available to the local agents using digital telephone sets. With additional hardware, a remote agent can dial into the ACD and remain continuously connected while calls are connected to the agent one after another. The same hardware can also be programmed to call the agent back at their home telephone number effectively reversing any long distance charges which might apply.

OPERATING PROCEDURE

A typical shift at an analog position might be as follows:

- The agent dials the access code 4300 to log on to a split using the ID code 100. ID 100 is not currently in use by another agent, and is programmed for split 1 which requires an ID code. The agent is logged on to split 1 and hears the success announcement or the service set tone programmed for access code 4300. The agent enters Work mode automatically upon logon.
- After the Work Timeout expires (3 seconds, for example), the agent automatically enters Ready mode. If ACD calls are waiting in queue one will be immediately assigned to this position.
- At the conclusion of each call, the position is placed in Work mode for 3 seconds, and then returned to Ready mode. (assuming the after call work timeout is programmed for 3 seconds)
- At the end of the shift, the agent calls the access code to log off and is connected to the success announcement or the service set tone.

When to register trunk troubles:

- The agent performs switch hook flash during an ongoing call, and dial the access code for registering trunk trouble. Then, the agent goes back to the suspended call by performing switch hook flash once more.

SERVICE CONDITIONS

1. When setting access codes for features such as Logon with ID, Break Mode Type, and Tally Code, program for each different parameter.
2. In order for an agent to perform Logoff, it is desirable that the status of an agent position after the position answered an ACD call is set to "Work Mode" by ACDSPL command.
3. If the destination party for Blind Transfer of ACD call does not answer, "RECALL" does not occur when a pre-determined No Answer timer expires.
4. Once in Permanent Work Mode an agent will be required to press the Work Key in order to receive the next incoming call and, of course, this will only be effective after the required Tally Code has been entered.
5. When using this feature, assign an independent agent group only configured by analog stations. This agent group should not be mixed with Digital terminals, IP terminals or Softphones.
6. The access codes dialed by agents from analog positions may be from 2 to 5 digits in length and may not contain any "*" or "#" digits even though these digits are commonly available on the station equipment typically used.
7. Success and failure announcements are not connected to agents performing a transfer to the access code. Only agents without a held party hear announcements.
8. The Telephony Server without announcement trunk can send the tone, (service set tone for success and reorder tone for failure) to the agent.
9. When using this feature, be sure to assign SFI 95 = 1 (Direct Incoming Call Restriction) to Analog Agent positions.
10. The current status time counter for Analog Agent Position on Real Time window of the Server MIS is reset to zero each time the user goes off-hook or on-hook.
11. Day/Night mode changeover of ACD Analog Split must be performed from the MIS terminal.
12. Tally Code information for Analog Agent that is displayed on the Historical Report of the Client/Server MIS supports only the information about the number of Tally key presses.
13. Following terminals can also be used as Analog Agent Position:
 - MC&MG-COT
 - Analog MC

PROGRAMMING

STEP 1: AMNO/AMNOL/AMNON - Assign the pilot number used for ACC in ACDANA

M_NO: Pilot number (Monitor Number) (2 to 6 digits) **Note 1, Note 3**
Numbers 0 to 9 may be used. **Note 2**
* or # may not be used. 1st DC= "0" may not be used either.

Note 1: The monitor number is the same as the pilot number assigned in ACDPLT and must match the numbering plan of the System. When ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), set the monitor number to "5 digits at most" by making not valid the 16-digit OAI Station Number Information in Terminal Identifier (ASYDL, SYS1, Index 867, Bit 7=0).

Note 2: ACD System does not function when a one-digit number is assigned.

Note 3: The number of digits for each Pilot Number must be the same.

STEP 2: ACDANA

ACC: Access code (Max. 5 digits) assigned in AMNO, M_NO.

FKIND: Feature (1-13)

- 1 = Logon with ID code
- 2 = Logon without ID code
- 3 = Logoff
- 4 = Ready Mode
- 5 = Work Mode
- 6 = Break Mode
- 7 = Tally Code
- 8 = Trunk Trouble
- 9 = Day Mode Single
- 10 = Day Mode All
- 11 = Night Mode Single
- 12 = Night Mode All
- 13 = Permanent Work

ID: Logon ID Valid for FKIND = 1

CODE: Tally code Valid for FKIND = 7

TYPE: Break type Valid for FKIND = 6

S-ANT: Success Announcement or Tone

0 = Service Set Tone

1-200 = Message No. programmed in AADT. Analog ACD position will be connected to the announcement upon successful operation. **Note 4, Note 5**

F-ANT: Failure Announcement or Tone

0 = Reorder Tone

1-200 = Message No. programmed in AADT. Analog ACD position will be connected to the announcement upon failed operation. **Note 4, Note 5**

Note 4: Specify an announcement number in the range of 1 to 58 when:

- Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0)

Note 5: For North America, specify an announcement number in the range of 1 to 58.

STEP 3: ACDSPL - Assign the split data.

WKRST: Work Mode Restrict

0 = Allowed

AWPI: Auto work mode for the ACD call when connecting with a non-ACD call

0 = Work Mode is not available

AWPO: Auto work mode for the ACD call when originating a non-ACD call

0 = Not available

ARPR: Auto work mode after a non-ACD call is released

0 = Not available

A-WMT: Analog Work Mode Timeout (0-9999 sec.) **Note 6**

0 = work mode is out of service for an analog agent

Note 6: When dialing operation, such as entering the Tally Code, is performed during the After Work Mode time, set the A-WMT in consideration of dial operation time.

STEP 4: ACDPSN

NACD: My line number for the analog agent (two to six digits)

ACDL: My line number for the analog agent (automatically set with the number assigned for NACD)

PTYPE: 2 (Analog agent position) or 3 (Analog supervisory position)

A-93A ALTERNATE NIGHT CCV - ACD

GENERAL DESCRIPTION

Alternate Night CCV provides custom routing on a per Pilot Number basis for incoming ACD calls which encounter splits in the night mode. This feature is activated only when a split is in night mode. Consequently, if a split is in Call Forward mode the Alternate Night CCV assigned to the Pilot Number will not be checked.

Several incoming Pilot Numbers can be directed to a common split for answering of calls during the daytime. When the split is placed in Night Mode a new Night CCV is specified to handle the calls. Calls to Pilot Numbers which do not specify an Alternate Night CCV will be routed to the split's Night CCV.

OPERATING PROCEDURE

1. An ACD position puts the split into night mode via the **NIGHT** key.
2. New calls arriving at this time will route to the Alternate Night CCV specified for the Pilot Number dialed.
3. If the Pilot Number dialed does not have an Alternate Night CCV then the split's night destination is used as a default.

SERVICE CONDITIONS

1. Alternate Night CCV will be used if and only if the call is not yet queued to any split and the current split being checked is in the Night Mode.
2. Alternate Night CCV cannot be CCV index #1, CCV step#1; only CCV index #2 through CCV index #900 and CCV step#2 through 20 are allowed.
3. When N-CCVNO of the ACDPLT command is not specified, ACD incoming calls are forwarded to a night pilot number specified in NIGHT of ACDSPL command.
4. If any step for conditional queue (CCVACT=8) and queue (CCVACT=10) is not assigned by ACDCCV command, Night of ACDSPL command becomes invalid. At this time, CCV is performed with CCVNO of ACD-PLT command.
5. When NIGHT SERVICE - ACD [N-12A] and this feature both are assigned, this feature is performed because it has higher priority than NIGHT SERVICE - ACD [N-12A].
6. Note the following when a station is specified as a call-forwarding destination in night mode by using ACDC-CV command.
 - Do not set features such as CALL FORWARDING - BUSY LINE [C-2], CALL FORWARDING - ALL CALLS [C-5], and Station Hunting to the destination (station).
 - PS cannot be specified as a destination in the night mode.

PROGRAMMING

STEP 1: ACDPLT

N-CCVNO: CCV index number to be routed in the night mode (2-2000)

N-CCVSTP: CCV step number to be routed in the night mode (2-20)

STEP 2: ACDSPL

NIGHT: Destination pilot number in the night mode (2 - 6 digits)

Note: When night destination is not programmed for the split, enter the pilot number assigned in ACDPLT.

A-133A AGENT ANYWHERE - ACD

GENERAL DESCRIPTION

This feature is used in the FCCS network. This feature allows the ACD Agent Position to be installed in any FCCS node irrespective of the node which has the ACDP or not (Those ACD Agent Positions in multiple nodes are controlled by one ACDP). By using this feature, ACD calls terminated at the trunk in the Self Node can be handled by ACD Agent Positions in the Self Node. A split can consist of ACD positions belonging to multiple nodes.

OPERATING PROCEDURE

None

SERVICE CONDITIONS

1. Refer to the condition described in “2.17 ACD FCCS Data Assignment” of this chapter.
2. The node providing the ACDP is one node only in an FCCS Network.
3. The node that has the most ACD Agent Positions must be specified for the node providing ACDP.
4. After the system initialization is complete (when the system message 6-H “Bad Call Notification”, print code 2033 is output) in the node providing the ACDP, it will take around 5 minutes until the ACD service becomes effective in the all nodes. (It depends on the quantity of the ACD data. The shortest time is 30 sec.)
The reason for taking this much time: It is because of the time to complete transferring the ACD data written in the Variable Network Data Memory (VNDM) to all nodes.
5. The pilot number (including the personal monitor number and the dialed number for ANALOG ACD POSITION-ACD [A-91A]) has to be registered in the Network Data Memory (programmed in AMNON).
6. After the ACD pilot number is registered or deleted, it takes around 5 minutes until the new pilot number becomes effective in all nodes. (It depends on the quantity of the ACD data. The shortest time is 30 sec.) When registering or deleting ACD pilot number, the VNDM data is automatically transferred to all nodes. Thus, the registration or deletion of the pilot number has to be done in low traffic.
7. The node providing the ACDP must be initialized when all the other nodes are in on-line mode.
8. When you initialize the node that does not accommodate the ACDP, you must also initialize the node providing the ACDP.
9. When you add a node/nodes to the network, you have to initialize the node that accommodates the ACDP. Until you complete the initialization of the node providing the ACDP, you can not use the ACD Agent Position or the ACD trunk in the additional node.
10. The MIS must be installed in the node providing the ACDP.
11. When the system performs the system changeover, the LED on an ACD Agent Position may not light correctly.

Note: If the state of the LCD seems not to operate correctly, the agent position needs to log on again. For example, DND key does not light even if an agent position answers an ACD call.

12. In case this feature is used in DTI-FCCS configuration, the following condition is applied.

- If a calling party is released at the same time as an agent position receives an ACD incoming call and answers it, the agent position is not released automatically, and the agent position hears ROT. In this case, the agent position should be released manually.

PROGRAMMING

Assign the basic data for ACD for FCCS system referring to “2.17 ACD FCCS Data Assignment” in this chapter.

ASYDL/ASYDN

SYS1, Index 533: FPC number of the node that has the C-VNDM (1-253)
(assign the FPC number of the node providing ACDP)

A-140A ACD-ACCESS - ACD

GENERAL DESCRIPTION

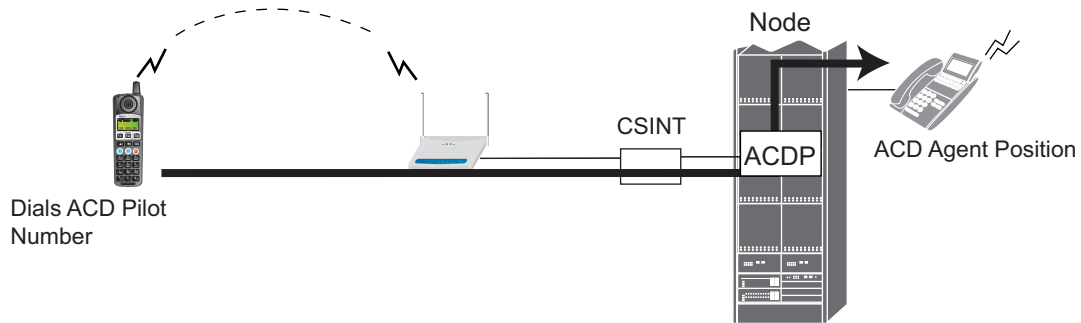
This feature allows the user to use the ACD function which can be activated in collaboration with PS. ACD Pilot Number can be dialed from a PS and the PS call is distributed to a particular ACD Agent Position specified by the ACD System. Also, ACD Agent Position can transfer an ACD Incoming call to a PS. For this function, no particular data programming is required.

Note: This feature is not available in North America.

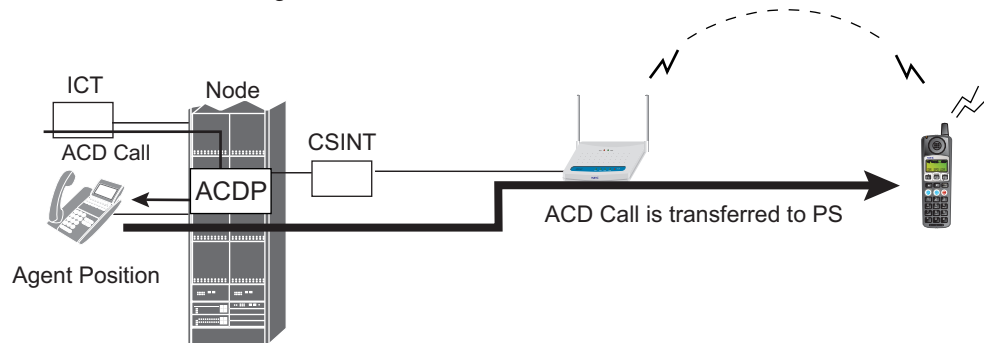
OPERATING PROCEDURE

- This figure shows the call originated from the PS can be terminated to an ACD Agent Position (via ACD Pilot Number) by dialing the ACD Pilot Number.

1. A PS user dials the ACD Pilot Number.
2. The call originated from the PS terminates to the dialed ACD Pilot Number, as an ACD Incoming call.
3. The PS call is distributed to a particular ACD Agent Position specified by the ACD System.
4. The designated ACD Agent Position is rung.

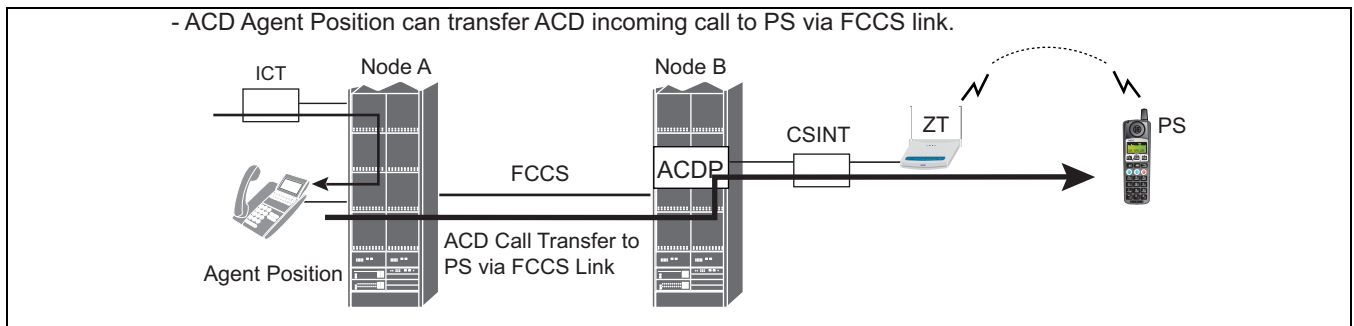
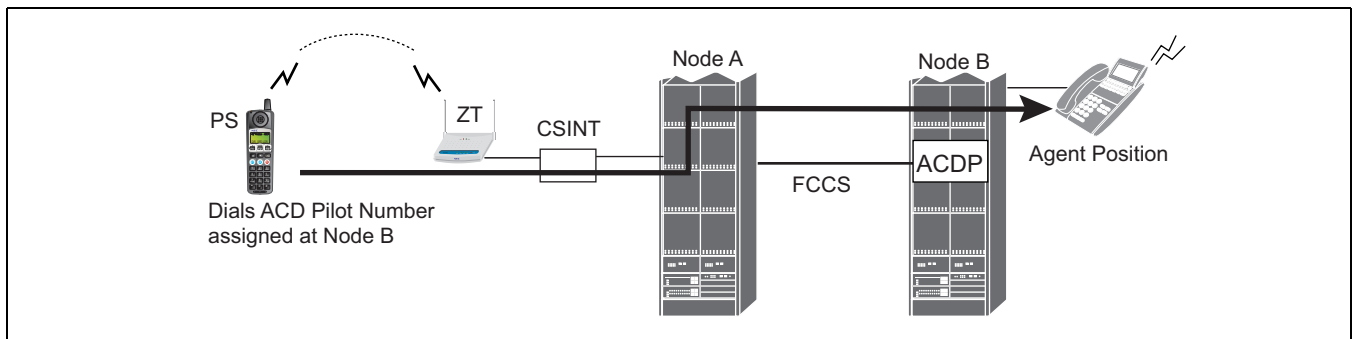


1. ACD Agent Position is connected to an ACD Incoming call.
2. Agent transfer the ACD Incoming call to PS.
3. Transfer destination PS is rung.



SERVICE CONDITIONS

1. PS cannot be assigned as an ACD Agent Position.
2. PS cannot be specified as an Overflow and a Night destination.
3. When a PS user attempts to hand over while the PS is ringing the ACD Pilot Number or the particular ACD Agent Position, the call is released.
4. When the PS in roaming status dials the ACD Pilot Number, the PS user hears ROT. Also, when an ACD call is transferred to the PS in roaming status, ACD Agent Position hears ROT after receiving no tone for a few minutes.
5. This function is available via FCCS link.



6. This function is also available for Analog Agent Positions and Hot Agent Positions.
7. This function does not support Callpath Service Architecture (a trademark of International Business Machines, Inc.)

Note: These messages are sent to the Host for the ACD system from ACDP to control the currently connected call. For details on the Infolink Messages, refer to "INFOLINK DATA MESSAGES - ACD [I-99A]" in ACD System Manual.

8. ACD service of PS only supports services mentioned in this manual.
9. Transferring ACD incoming call to PS will not be available if the PS is accommodated in Multi-Line of the Desktop terminal.

PROGRAMMING

No manual operation is required.

A-145A ACD INCOMING PILOT NUMBER RESTRICTION - ACD

GENERAL DESCRIPTION

This feature counts the number of calls that an ACD pilot number has accepted (**Note 1**), and when the number equals or exceeds an incoming call limit number (**Note 2**) previously set, any new call to the pilot number will hear a Busy Tone (BT). Also, when the release of accepted calls makes decrease the number of accepted calls below the incoming call limit number, any new call will be accepted until the incoming call limit number is reached again.

Note 1: The feature counts as accepted calls all the trunk calls (calls waiting in queue, calls being distributed to Agent Position and calls already distributed) to the ACD pilot number.

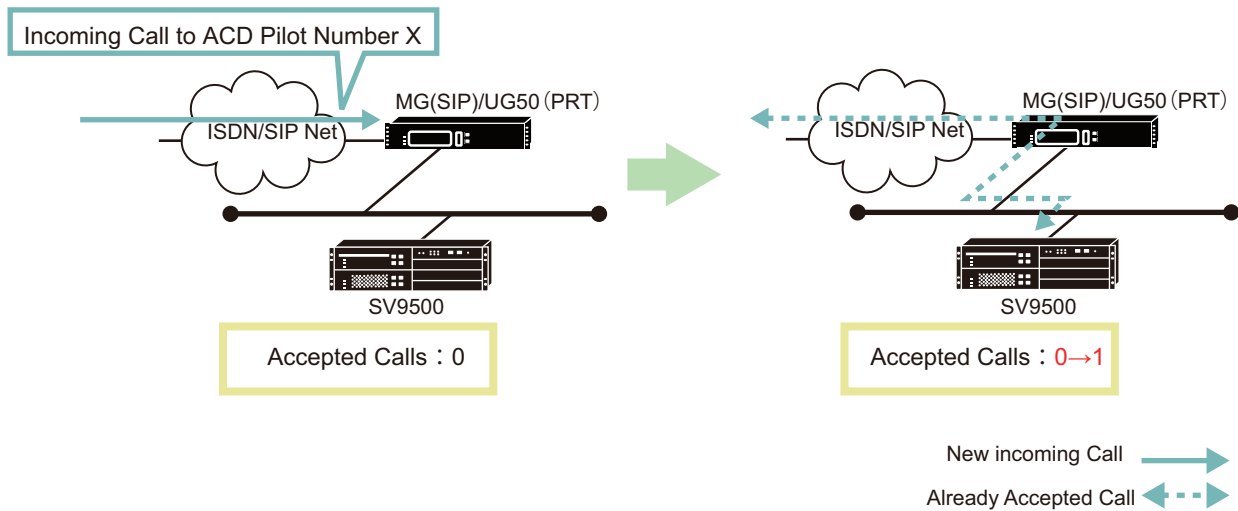
Note 2: A different incoming call limit number can be set per pilot number.

Note: This feature is available since FP95-112 V2.

Note: This feature is not available in North America.

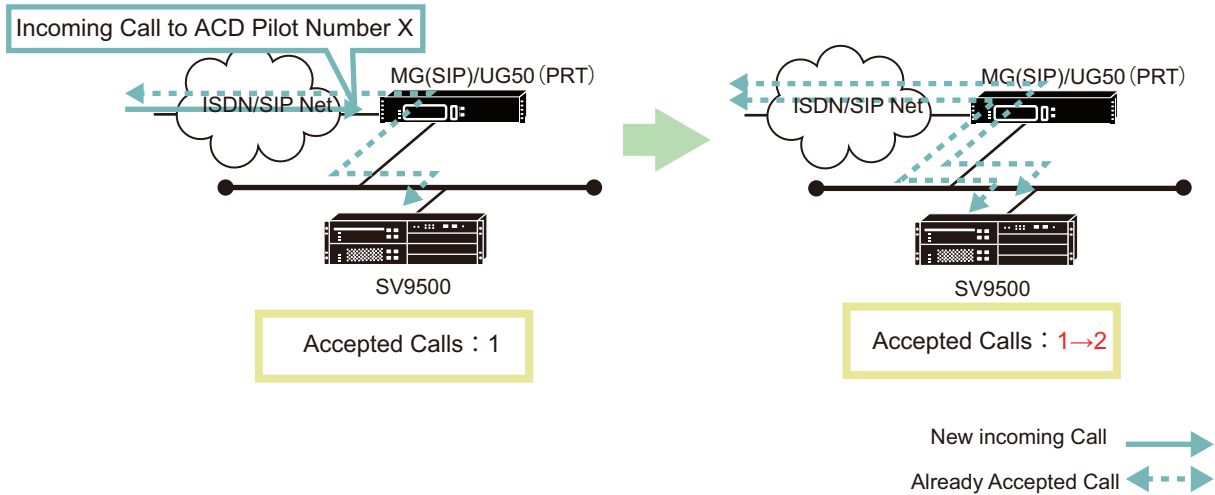
Example: The incoming call limit number is set to 2.

- A new call arrives when the number of accepted calls is 0. Since the number of accepted calls is still smaller than the incoming call limit number, the call is accepted:

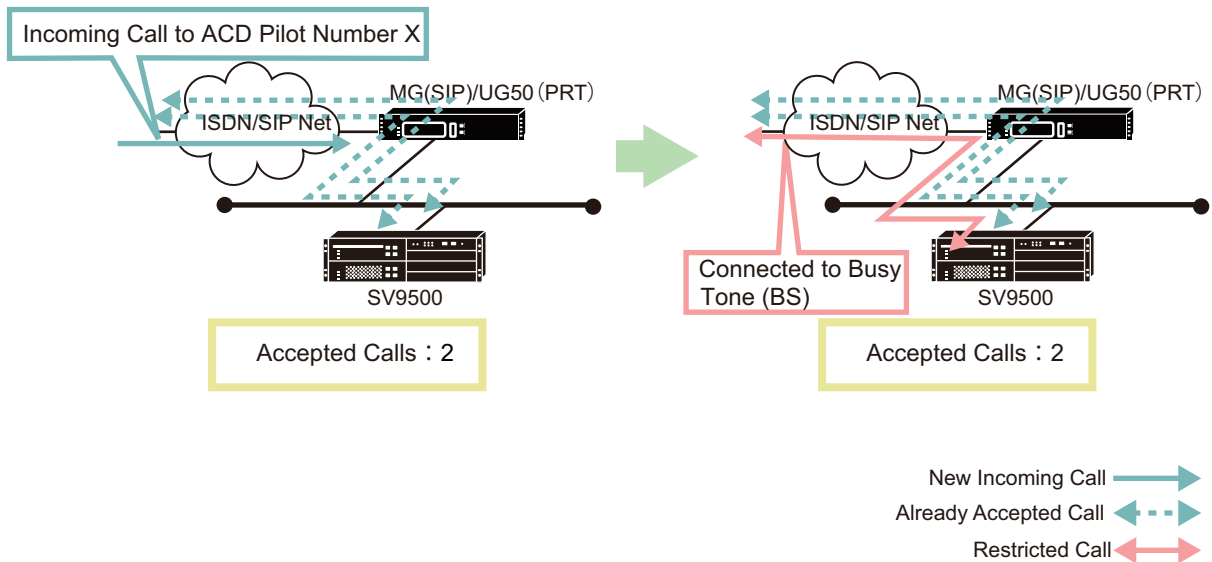


A-145A ACD INCOMING PILOT NUMBER RESTRICTION - ACD

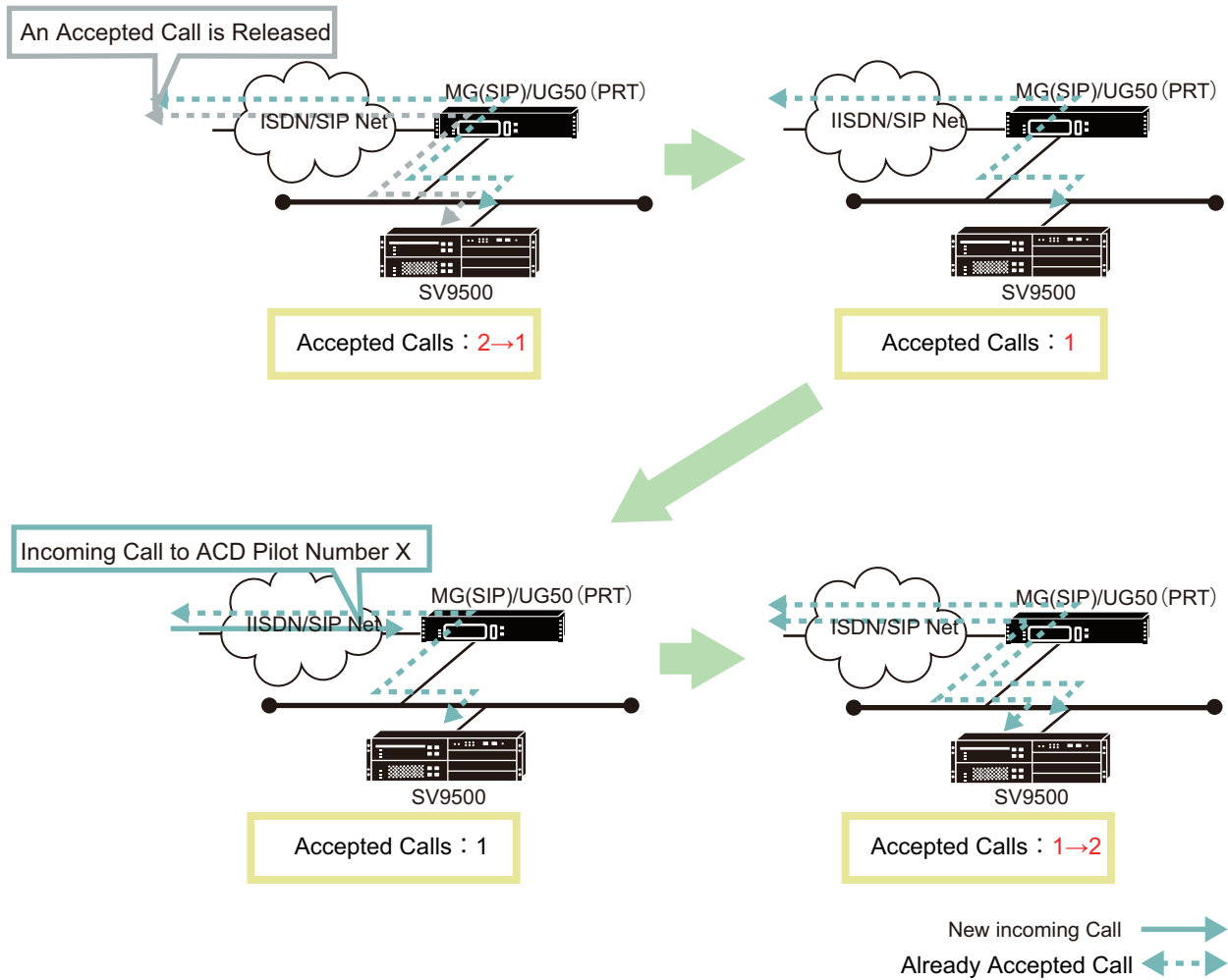
- A new call arrives when the number of accepted calls is 1. Since the number of accepted calls is still smaller than the incoming call limit number, the call is accepted:



- A new call arrives when the number of accepted calls is 2. Since the number of accepted has reached the incoming call limit number, the call is connected to Busy Tone (BT):



- An accepted call is released when the number of accepted calls is 2. Since the number of accepted calls becomes 1, a new call is accepted:



OPERATING PROCEDURE

None

SERVICE CONDITIONS

<Important Notices>

- To enable this feature, assign the following system data: ASYDL, SYS1, Index 1199, Bit 4=1.
- This feature is available when ACDP Retrofit is out of service (ASYDL, SYS1, Index 1193, Bit 7=0).
- This feature is only for calls from trunks to ACD pilot numbers. The feature is not applicable to the following types of call (they are not counted as accepted calls and not restricted based on the incoming call limit number):
 - Calls from a trunk to a pilot number for an individual call (PPN).
 - Non-ACD calls from a trunk

- Calls from stations to an ACD pilot number
- Transferred calls to an ACD pilot number
- A transferred call based on CCVACT=5(TRANSFER) of the ACDCCV command to an ACD pilot number
- A routing to an ACD pilot number based on the Infolink message IF (Route Call Request) **Note 3**

Note 3: For Infolink messages see “INFOLINK DATA MESSAGES - ACD [I-99A]”

4. Anytime the value for the incoming call limit number is changed, also the ACD data memory must be saved using the MEM_HDD command. If the data is not saved with MEM_HDD, the system performs an ACDP initialization (restart with office data load) and in that case the incoming call limit number goes back to the initial value before the change.

<Interactions with Other Features>

1. Do not set a incoming call limit number for ACD pilot numbers used with PREDICTIVE DIALING - ACD [P-86A]. If it is set, when the incoming call limit number is reached, a terminal that answers a call sent with predictive dialing will hear Busy Tone (BT).
2. Incoming call limit number is not available for PATTERN SWITCHING FOR PILOT NUMBER GROUP - ACD [P-88A]. A different incoming call limit number cannot be set to pattern A and pattern B.

<Hardware/Software>

SR-MGC operates with the last ACD data memory that was sent. If the incoming call limit number value is changed on the Telephony Server, save the ACD data memory with the MEM_HDD command and sent the data to SR-MGC with the CMNT command.

<Interactions with Networks>

1. In case of using the service on FCCS, it can be used only with FCCS NETWORKING VIA IP [F-36]. Use on DTI-FCCS is not supported.
2. This service can be only used with trunks connected to ISDN or SIP networks (**Note 4**). If the feature is used in a system that uses different types of trunks, (such as ISDN trunks (PRI/BRI) and Analog COTs), please note the following:
 - Do not set the same ACD pilot number for incoming calls from different types of trunks.
 - Do not set an incoming call limit number for ACD pilot numbers in trunks connected to other than ISDN or SIP networks.

Note 4: For details, see [Equipment/Terminals Accommodating in ACD/OAI System in Chapter 2](#).

<Conditions Specific to This Feature>

1. The incoming call limit number can be set using PCPro or UAP (User Application Processor).
 - a.) For the setting with PCPro, see [PROGRAMMING](#).
 - b.) For the setting with UAP, see the point 15 in this section.

2. The number of calls accepted by an ACD pilot number is counted according to the following:

[Conditions to add one to the current count of accepted calls]

- A call from a trunk to an ACD pilot number. **Note 5**

Note 5: Restricted calls are not counted as accepted calls.

[Conditions to subtract one from the current count of accepted calls]

- The release of a trunk upon disconnect of a call routed through the trunk to an ACD pilot number.
- The release of an Agent Position after transferring an ACD call to a station (including to the non-ACD call line of another Agent Position). **Note 6**
- The release of an Agent Position after transferring an ACD call to a trunk (such as tie line etc). **Note 6**
- The transfer to a station (including the non-ACD call of another Agent Position) based on CALL CONTROL VECTOR - ACD [C-108A].
- The transfer to a trunk (such as tie line etc) based on CALL CONTROL VECTOR - ACD [C-108A].
- The transfer to a station (including to the non-ACD call line of Agent Position) based on the Infolink message IF (Route Call Request). **Note 7**
- The transfer to a trunk (a tie line, etc) based on Infolink message IF (Route Call Request). **Note 7**

Note 6: When an ACD call is put on hold for transfer to another Agent Position, if the caller hangs up or is disconnected while the Agent Position who answered the call is on a call with the destination Agent Position, the decrease in the number of accepted calls is not recognized immediately; the reduction is reflected only after either of the Agent Positions is disconnected.

Note 7: For Infolink messages see “INFOLINK DATA MESSAGES - ACD [I-99A]”.

3. The feature will not restrict new calls if [Use the Incoming Call Limitation Service] check box in the ACDPLT command is not selected. Also, if it is not selected, the incoming call limit number value will not be displayed when the command is executed.
4. Even if the [Use the Incoming Call Limitation Service] check box in the ACDPLT command is not selected, new accepted calls will be counted for the incoming call limit number value. When the incoming call limit number value is set with the ACDPLT command, new calls will be restricted based on the amount of accepted calls at the moment of the setting.
5. In the case when multiple DID numbers are assigned to one route number, the incoming call limit number and the number of accepted calls are managed based on each ACD pilot number to which DID numbers are assigned. If you need to control these parameters on a DID basis, assign one DID number for each ACD pilot number.

6. In the case when the multiple DID numbers (same route/different routes) are assigned to the same ACD pilot number, the incoming call limit number and the number of accepted calls are collectively managed by the ACD pilot number. If you need to restrict multiple DID numbers at the same time, assign the same ACD pilot number to each DID number.
7. Restrictions cannot be applied on a route number basis.
8. After the incoming call limit number is changed using PCPro or UAP, if the number of accepted calls equals or exceeds the new incoming call limit number value, new incoming calls will be restricted until the number of accepted calls goes below the restriction level.

Example: When the number of accepted calls is 10, the incoming call limit number value is changed from 11 to 5:

- Before the change:
New incoming calls are not restricted (the number of accepted calls (10) is smaller than the incoming call limit number value (11))
- After the change:
New incoming calls are restricted (the number of accepted calls (10) is larger than the incoming call limit number value (5))

In this case new calls will be restricted until the number of accepted calls drops below 5, but the already accepted calls will not be restricted.

9. When an ACDP initialization is performed with the ACDIZ command, the SINZ command, or by powering OFF/ON the Telephony Server, the number of accepted calls is reset to 0.
10. The type of Busy Tone (BT) that is heard on a restricted call depends on the network specifications.
11. Calls restricted by this feature cannot be controlled with CALL CONTROL VECTOR - ACD [C-108A].
12. When an incoming call from a trunk or a call with the conversation established are sent to a ACD pilot number using SCF (FN=10) from UAP, the call is counted for the incoming call limit number value.

Examples:

- A call counted as an accepted call for the ACD pilot number X is transfer to the ACD pilot number Y using SCF (FN=10) from UAP:
The number of accepted calls for the ACD pilot number X decreases 1 unit and increases 1 unit for the ACD pilot number Y.
- A call from a station or a call with the conversation established (both are calls to which this feature is not applicable) is transfer to the ACD pilot number Z using SCF (FN=10) from UAP:
The number of accepted calls for the ACD pilot number Z increases 1 unit.

13. When existing office data is used, the incoming call limit number value of the registered ACD pilot number becomes its default value (the value when [Use the Incoming Call Limitation Service] check box is not selected).
14. When the feature is enabled (ASYDL, SYS1, Index 1199, Bit 4=1), if at least one accepted call is counted (call waiting in a queue, call being distributed to Agent Position or call already distributed), the data of the ACD pilot number cannot be deleted using the ACDPLT command.
15. In systems where Infolink message is used, the following applies:

Note: For Infolink messages see **INFOLINK DATA MESSAGES - ACD [I-99A]**.

- a.) Specify “PA” for type of data when the incoming call limit number value is changed with the Infolink message IJ (Data Change Request).
- b.) Incoming call limit number value is changed with the Infolink message IJ (Data Change Request) as follows:
 - Incoming Call Limit Number = 0 (new calls are not restricted).
 - Incoming Call Limit Number = 1-20000 (new calls are restricted according the set value).
- c.) When ACD pilot number data is loaded by the ACDPLT command, it is not possible to change the incoming call limit number by using the Infolink message IJ (Data Change Request) until 90 seconds have passed.
- d.) It is not possible to change the incoming call limit number by the Infolink message IJ (Data Change Request) while office data backup is being performed.
- e.) When the incoming call limit number is changed using the Infolink message IJ (Data Change Request) or the ACDPLT command, the Infolink message KC (Data Change Notification) provides the new value. Even if the same value as the last incoming call limit number is specified, it will be treated as a change in the value.

Examples of notifications are as follows:

- When the incoming call limit number is changed from 15 to 20, incoming call limit number = 20 is provided.
- When an incoming call limit number of 15 is overwritten from 15, incoming call limit number = 15 is provided.
- When data is written without [Use the Incoming Call Limitation Service] check box being selected, incoming call limit number = 0 is provided.
- When ACD pilot number data is deleted with the ACDPLT command, incoming call limit number = 0 is provided.

Note: When you access to UAP for the first time, the Infolink message KC (Data Change Notification) is disabled. Enable the Infolink message Ik (Individual Service Message Subscription).

- f.) When a new incoming call is restricted, restriction information (trunk, ACD pilot number) is provided by the Infolink message KD (Pilot Number Calls Limitation)

Note: When you access to UAP for the first time, the Infolink message KD (Pilot Number Calls Limitation) is disabled. Enable the Infolink message KD by using the Infolink message Ik (Individual Service Message Subscription).

<Other Conditions>

None

PROGRAMMING

To enable the feature.

STEP 1: ASYDL - Disable ACDP Retrofit (SYS1, Index 1193, Bit 7=0).

ASYDL - Enable incoming calls limit number (SYS1, Index 1199, Bit 4=1).

Note: The following conditions apply:

- The system data is set to the node accommodating ACDP that uses the feature.
- When this system data is changed, it is not necessary an ACDP initialization.

STEP 2: ACDPLT - Select [Use the Incoming Call Limitation Service].

INCLMT - Enter the incoming call limit number (1-20000). **Note 8**

Note 8: The entered value will be used only if [Use the Incoming Call Limitation Service] is selected. If not, the feature will be set to the value 0 (new calls are not restricted).

To disable the feature

STEP 3: ACDPLT - Leave [Use the Incoming Call Limitation Service] clear.

STEP 4: ASYDL - Disable incoming calls limit number (SYS1, Index 1199, Bit 4=0).

B-20A BREAK MODE - ACD

GENERAL DESCRIPTION

This feature allows an agent to take their position out of the queue without logging off or entering Automatic-Work mode. This feature is useful if the agent will be away from the position for a short time, such as for lunch, a coffee break, etc. Since the agent does not log off when using BREAK MODE, no other agent may log on to this position.

The user can select, for each split, a single break type or 99 break types (**Note 1**). If 99 break types are selected for a split, then whenever an agent in the split requests a break, the agent is prompted for the break type. The Navigator Management Information System (MIS) allows each break type to be defined with a six-character string, such as “coffee” or “lunch”. This string will be used for MIS reporting purposes.

Note 1: This feature is enabled when the system data (ASYDL/ASYDN, SYS1, Index 1194, Bit 1=1) is assigned. For North America, only 9 break types are available.

OPERATING PROCEDURE

1. Operation on a terminal

a. To activate BREAK MODE (single break type):

STEP 1: The agent presses the **BREAK** key and the associated lamp is lit.

STEP 2: If the agent is not on a call, the display will show **ON BREAK**. If the agent is on a call, the display will show **BREAK PENDING**. At the end of the call, the display changes to **ON BREAK**.

b. To activate BREAK MODE (multiple break types):

STEP 1: The agent presses the **BREAK** key and the associated lamp is lit.

STEP 2: The display shows **BREAK TYPE?**

STEP 3: The agent enters a digit from “1” to “99”, to indicate the break type, and then enters “#” to complete the input.

Note: The display shows **BREAK TYPE = N**, where N is the number the agent entered in the previous step. This display will be shown for four seconds. Following this display, if the agent is not on a call, the display will show **ON BREAK**. If the agent is on a call, the display will show **BREAK PENDING**. At the end of the call, the display will change to **ON BREAK**.

Note: If the agent does not indicate a break type (“1” to “99”), within thirty seconds of pressing the **BREAK** key, the system will default to break type 1, and **BREAK TYPE = 1** will be displayed for four seconds. Following this display, if the agent is not on a call, the display will show **ON BREAK**. If the agent is on a call, the display will show **BREAK PENDING**. At the end of the call, the display will change to **ON BREAK**.

- c. To cancel BREAK MODE:

STEP 1: The agent presses the BREAK key.

STEP 2: The display shows the time spent on break in minutes and seconds. For example, BREAK OVER 35:20.

STEP 3: The BREAK lamp is extinguished.

STEP 4: The WORK lamp indicates whether the agent will be placed in the Work Mode or Ready Mode when the Break Mode is concluded. By operating the WORK key prior to exiting Break Mode the agent may specify what their next mode will be.

2. Operation for when INFOLINK DATA MESSAGES - ACD [I-99A] is in service

- a. To activate BREAK MODE:

Use the Infolink message “b: Break Mode” of “IH: State Change Request”.

- b. To cancel BREAK MODE:

Use the Infolink message “r: Ready” and “w: Work Mode” of “IH: State Change Request”

SERVICE CONDITIONS

<Important Notices>

None.

<Interactions with Other Features>

If an Agent Position or a Supervisory Position belongs to multiple splits (MULTI-SPLIT AGENT - ACD [M-90A] is in service), the break type setting (single or multiple) follows an attribute split (the split where the AC-DLOG command, SPLIT=1 is assigned).

<Hardware/Software>

1. The break type setting is only available for ACD Agent Positions or Supervisory Positions. This service is not available for Analog Agent Positions and Hot Positions (IVR).
2. If Break Mode is set while ACD Agent Positions or Supervisory Positions are on an ACD call, Break Mode is activated after the ACD call is finished.

<Conditions Specific to This Feature>

1. This feature can be programmed on per-split basis.
2. When the single break type (ACDSPL, BRKTP=0) is assigned, the break type is always single regardless of the setting of the system data (ASYDL/ASYDN, SYS1, Index 1194, Bit 1).
3. Only 9 break types are available when Break Mode is set by using Analog Split Access Code by the ACDANA command.

4. Only 9 break types are available when ACDP Retrofit is enabled.
5. When Break Mode is set at a position, incoming ACD calls are not allowed to terminate to the position.
6. Non-ACD calls can be originated from or terminated to a position, while the position is in Break Mode.
7. Conditions for terminal operation
 - a. If the agent does not indicate a break type (“1” to “99”), within thirty seconds after pressing the **BREAK** key, the system will default to break type 1.
 - b. In order to cancel this feature just after the **BREAK** key is pressed for the purpose of entering BREAK MODE, press the **BREAK** key again, enter the digit indicating the break type, then finally press “#”, within 30 seconds after the key is pressed for entering BREAK MODE.
 - c. If “0 + #” is entered, the type of break mode can not be distinguished. The break type can be selected again.
 - d. If “*” that does not belong to the break type (Number 1 to 99) is entered, the break type needs be selected again.
 - e. If an operator enters a break type in 3 digits or more;
 - the LCD displays BREAK TYPE? again when the system data (ASYDL/ASYDN, SYS1, Index 1194, Bit 1=1) is assigned, or
 - only the first digit is valid when the system data (ASYDL/ASYDN, SYS1, Index 1194, Bit 1=0) is assigned.
(e.g. If an operator entered “1” + “4” + “7” + “#”, it is recognized as “1” + “#”)
 - f. For SR-MGC (E), 99 break types are available only through terminal operations.
 - g. Logging off is permitted while in Break Mode, by pressing the **LOGON** key. The after-call mode may be toggled while on break and set to either Automatic-Work or Automatic-Available.
 - h. Every agent position and supervisor position may have a **BREAK** key.
 - i. The operation of the **BREAK** key allows the MIS to track work time and non-work time.
8. Conditions for the system where INFOLINK DATA MESSAGES - ACD [I-99A] is in service

Note: For details about Infolink messages, refer to [INFOLINK DATA MESSAGES - ACD \[I-99A\]](#) in this manual.

- a. To set Break Mode for an agent position through the application, use the Infolink message “b: Break Mode” of “IH: State Change Request”.
 - b. To cancel Break Mode for an agent position through the application, use the Infolink message “r: Ready” and “w: Work Mode” of “IH: State Change Request”
 - If an agent position is on Work Mode when Break Mode is canceled by using IH_r, the Work Mode is canceled as well (the agent position becomes ready).
 - If an agent position is ready to answer an incoming call when Break Mode is canceled by using IH_w, the Work Mode is activated on the agent position.
 - c. If the break type is not specified, it is set to “1”.
 - d. When the following break type is specified, NAK (Negative Acknowledgments) of “TY: Sequence Acknowledgment” is replied to the application. In this case, the detailed code for NAK is “05: Invalid Field Data”
 - The character other than the number from 0 to 9 (such as *and #).
-

- The number “0” or the number starts with “0” (e.g. 03)
 - The number in 3 digits or more (100 or more).
- e. 99 break types are available only when the facility version of Subscribe is 2 or later.
- f. All the versions of the facility (AMFR/AMFN and PMFR/PMFN) need to be the same for Subscribe.
- g. For facility version 1 or earlier (including not being set), if an operator enters a break type in 2 digits or more, only the first digit is valid.
- h. If an operator enters a break type in 2 digits or more on the system where facility version 1 and 2 of Subscribe coexist, the both applications process only the first digit entered.

PROGRAMMING

STEP 1: **ASYDL/ASYDN** - System Data (LDM/NDM)

Index 1194, Bit 1: Break Type Expansion

0=9 break types (default)

1=99 break types

Note: System initialization is not required when you change this data.

Note: This enhancement is not available in North America

STEP 2: **ACDSPL** - ACD Split Data

Enable Break Type feature by setting BRKTP=1 for each split.

BRKTP: Break Type

0=Not used (single break type)

1=Used (multiple break types)

Assign “Break” key referring to “2.4 ACD Agent/Supervisory Position Data Assignment” in Chapter 4.

B-21A BAD CALL NOTIFICATIONS - ACD

GENERAL DESCRIPTION

Bad Call Notifications are printed on the PCPro printer when they occur. Even though the name indicates that some serious error has occurred there are several “Bad Call Notifications” which are for informational purposes only and do not really indicate an error situation. The term “Bad Call Notification” cannot be changed but ACD users should consider the 6-H reports as “ACD Information Report” regardless of what the header information says. For details of system message “6-H”, see 3.2.3 Message Detail Data of System Message “6-H” in Chapter 8.

OPERATING PROCEDURE

1. The noise or an error occurs in the communication or the agent wants to see the information of the connection in progress.
2. The agent presses the **TRKTRBL** key during handling the call.
3. The **ACD** information report is printed on the **PCPro** printer.

PROGRAMMING

Assign “TRKTRBL (Trunk Trouble Report)” key referring to “2.4 ACD Agent/Supervisory Position Data Assignment” in Chapter 4.

C-35A CALL DISTRIBUTION TO AGENTS - ACD

GENERAL DESCRIPTION

ACD calls are automatically distributed among the agents in a split such that when an agent becomes available the longest waiting call with the highest priority in the queue is assigned to that agent. Refer to “PRIORITY QUEUING - ACD [P-21A]” and “QUEUING - ACD [Q-1A]” for additional information.

During periods when more than one agent is available and there are no calls in the queue, the first incoming ACD call is assigned, based on a two-level algorithm, to an agent.

The first level of the algorithm seeks the agent who has the highest preference level specified for the split. An agent who is servicing a single split is considered to have the highest possible preference level (“1”) specified for the split. An agent who is servicing multiple splits can have a preference level ranging from “1” (highest) to “250” (lowest) specified for the split (Since an agent is allowed to handle calls terminated at a maximum of four split, only four privilege order is applied to each split). The preference levels for an agent who is servicing multiple splits are set in the ACD database. Refer to the description of the “MULTI-SPLIT AGENT-ACD [M-90A]” for more details.

The second level of the algorithm seeks the agent who has been waiting to service an incoming ACD call (in Ready mode) for the longest period of time.

The following example illustrates the operation of the two-level algorithm.

Agent Preference Example

Agent Name	Preference Level	Waiting Time
Allan	3	55 seconds
Barbara	1	30 seconds
Charles	1	25 seconds
Denise	2	40 seconds

The first incoming ACD call will be sent to Barbara. The first level of the algorithm removes Allan and Denise from consideration since their respective preference levels are lower than the preference level that Barbara and Charles have in common. The second level of the algorithm removes Charles from consideration since Charles has been waiting to service an incoming ACD call (in Ready mode) for a shorter period of time than Barbara.

Only incoming ACD calls directed to pilot numbers or personal pilot numbers, and other calls generated within the ACD processor (such as Assist and Emergency calls) may be connected to agents’ ACD lines. For proper operation of the ACD, direct calls to an agent’s ACD line from stations, DIDs, Tie trunks, CCIS trunks, attendants or any other method (such as call forwarding to agents’ ACD lines) are not permitted and must be restricted by the proper programming of the Telephony Server database.

OPERATING PROCEDURE

No agents available:

1. An incoming ACD call is queued.
2. An agent becomes available.
3. The longest waiting ACD call in the queue with the highest priority is assigned to that agent.

Agents available:

1. There are no incoming ACD calls.
2. Agents are queued as they become available.
3. An incoming ACD call arrives.
4. The ACD call is assigned to the agent who has the highest preference level, and who, among those agents with the same preference level, has been waiting to service an incoming ACD call (in Ready mode) for the longest period of time.

SERVICE CONDITIONS

1. When calls are waiting in queue, all calls of a higher priority will be answered (in their order of arrival) before calls of a lower priority, regardless of how long a lower-priority call has been waiting.
2. Upon receiving a call, an agent may transfer the call to any destination allowed under normal transfer conditions. When transferring to a CALL PARK-ACD [C-29A] location, the agent will hear only a short burst of Service Set Tone.
3. Do Not Disturb (DND) Key
The DND Key may have undesirable side effects if utilized at an agent's ACD position. For example: an agent position left in Ready mode but with the DND feature set for the position's Non-ACD line (my line) will still receive an ACD call (as a result of the Ready mode) but the position will not ring (as a result of the DND feature being set). It is up to the ACD user to understand and accept all potential side effects of using the DND key at an ACD position.

PROGRAMMING

None

C-67A CALL TRANSFER TO SPLIT QUEUE - ACD

GENERAL DESCRIPTION

This feature allows calls to be transferred by Agents or Supervisors, Non-ACD station users, or attendants to splits in the ACD system. The transferred call will be connected to an available Agent position or the call will be queued, if Agent positions are not available. The transferring party is allowed to remain on the line until the Agent position answers (screened transfer) or may complete the transfer while still in queue or while ringing the Agent position (blind transfer).

OPERATING PROCEDURE

From a Non-ACD station:

1. The Non-ACD station user transfers the calling party to the ACD by dialing a pilot number.
2. A Call Control Vector (CCV) associated with the pilot number is processed and the transferred call may be queued to a split.
3. The System transferring station processes the CCV until an Agent position answers, the Non-ACD station finishes the transfer, or the party being transferred disconnects. All announcement connections indicated in the CCV are skipped over in the case of a transferred call. The System transferring party hears only ringback, while transferring, until an Agent position answers.
4. The transferring station user may either disconnect, completing the transfer, or may press the **TRANSFER** key again, aborting the transfer. Attempts to conference at this point will be ignored.
5. If the transferring station disconnects and completes the transfer, the calling party will then begin processing the remainder of the CCV, including announcements.

From an ACD Agent position or Supervisory position:

1. The Agent position or Supervisory position presses their **TRANSFER** key while on a non-ACD call and transfers the call to a split queue by dialing an ACD pilot number.
2. A CCV associated with the pilot number is processed and the transferred call may be queued to a split.
3. The Agent position processes the CCV until another Agent position answers, the Agent position finishes the transfer, or the transferred party disconnects. All announcement connection instructions in the CCV are skipped over. Ringback Tone (RBT) is provided to the transferring Agent position until another Agent position answers.
4. The transferring Agent position may either disconnect (completing the transfer), or may press the **TRANSFER** key again, aborting the transfer. Attempts to conference at this point will be ignored.
5. If the transferring Agent position disconnects and completes the transfer, the calling party will begin processing the remainder of the CCV, including announcements.

From an Attendant Console:

1. The attendant transfers the calling party to the ACD by dialing a pilot number.
2. RBT is provided to the attendant. At this point the attendant may either complete or cancel the transfer. If the attendant completes the transfer, the transferred party will begin processing the CCV, including all announcements. Note that except for transfers across CCIS, no CCV processing is done while the attendant listens to RBT. The attendant must complete the transfer before CCV processing takes effect. For attendant transfers across CCIS, CCV processing will begin when the attendant first receives RBT.

SERVICE CONDITIONS

1. Any caller from a non-ACD line, except attendants, can be transferred to an ACD pilot number if he/she is placed on hold before transfer.

Note: In a call between ACD lines, an attempt to transfer the call to an ACD pilot number will be blocked. Placing a call from an ACD line is not allowed, except for making a consultation call to an ACD pilot number during a non-ACD call.

2. For attendant transfers to a split queue across CCIS, CCV processing will begin when the attendant first receives RBT. However, for non-CCIS attendant transfers to a split queue, CCV processing will begin only after the attendant completes the transfer.
3. Except for calls across CCIS, attendants are only allowed to transfer calls to pilot numbers. They may not call pilot numbers directly. If an attendant dials pilot number directly, the call is ignored and the attendant will hear RBT indefinitely.
4. If an attendant dials a pilot number directly across CCIS, the call will be treated as a normal trunk call.
5. If an Agent or non-ACD station user transfers a call to a split queue and hangs up before the Agent at the destination answers, an audible alert (Recall) is not sent when the don't answer timer expires.
6. When an Agent position makes another call while placing the original ACD call on hold, if he/she drops or disconnects the new call in such a way as described below, an audible alert (Recall) is sent:
 - After placing the original call on hold by switch hook flash, the Agent position cancels the new call in the middle of dialing.
 - After placing the original call on hold by switch hook flash, the Agent position drops the new call to an analog trunk while RBT is being played.
 - After placing the original call on hold by switch hook flash, the Agent position drops the new call while Reorder Tone (ROT) or Busy Tone (BT) is being played.
 - When trunk tandem connection is established with the ARRC command, the Agent position makes a new trunk call while placing the original trunk call on hold, and the trunk call is disconnected in the middle of the conversation.
7. In a call transfer to a split queue, overflow service is provided to calls placed in queue.

PROGRAMMING

Assign “TRANSFER” key referring to “2.4 ACD Agent/Supervisory Position Data Assignment” in Chapter 4.

C-68A CALL WAITING INDICATION - LCD DISPLAY/CW LAMP - ACD

GENERAL DESCRIPTION

This feature provides visual indication of a split's current queue depth by the use of the **CW** lamp (Call Waiting) and the position's display. The **CW** lamp is always operative but can only provide an approximate indication of the queue depth. The position's display can show the current queue depth precisely but the display is provided periodically as the agent processes calls. An optional Call Waiting Key may be programmed and will generate a display of the current queue depth when pressed.

OPERATING PROCEDURE

1. When the number of ACD calls in a split's queue is greater than or equal to the call-waiting-on threshold, the **CW** lamp is turned on.
2. When the number of ACD calls in the split's queue is greater than or equal to the call-waiting-flash threshold, the **CW** lamp flashes. A database setting can enable a chime to sound at positions in the WORK mode when the lamp comes on or begins flashing. For more detailed information, refer to "CALL WAITING LAMP WITH CHIME - ACD [C-110A]".
3. Each time an ACD agent or supervisor is assigned a new call or each time they go into Work mode, the number of calls waiting in the split's queue is displayed on their position.
4. When an agent or supervisor presses the **LOGON** key while engaged in a call, the calling party identification of the original incoming ACD call (trunk calls only) is displayed for that position followed by the number of calls waiting in the split queue.
5. For an on-demand display of the current queue depth and longest waiting caller the agent may press the Call Waiting Key while in any mode.

SERVICE CONDITIONS

1. The lighting of the **CW** lamp may be somewhat delayed and is not intended to depict instantaneous queue status.
2. Queue depth is only displayed on an agent's position when there are calls waiting in the split queue.
3. Split data must be set for the desired threshold of calls in queue required to make the **CW** lamp illuminate or flash to indicate call thresholds have been exceeded.
4. The call waiting indication can be provided on the Desktop terminal agent or supervisor console in any unused programmable line appearance.
5. The DLC and ELC line cards must be of the proper version to provide "call waiting indication".

PROGRAMMING

STEP 1: AKYD - Assign the CW lamp to the agent/supervisory position

KYN: Key Number

KYI = 1 (Function key)

FKY = 47 (CW lamp)

STEP 2: ACDSPL - Designate the threshold value for changing the lamp status

CWON: Threshold value for CW lamp ON (0-700) **Note 1, Note 2**

When the number of calls is equal to or exceeds the value, CW lamp lights

CWFL: Threshold value for CW lamp flashing (0-700) **Note 1, Note 2**

When the number of calls is equal to or exceed the value, CW lamp starts to flash

Note 1: "0" means the lamp does not light nor flashes.

Note 2: CWON < CWFL < maximum number of queuing calls

C-70A CALLING PARTY IDENTIFICATION - ACD

GENERAL DESCRIPTION

This feature allows calling party information to be displayed on the LCD of the Desktop terminal when an incoming call is assigned to an ACD agent. The format of the calling party information follows:

1. Incoming Trunk and Circuit Information:

A unique twenty-character name for an incoming trunk group along with the trunk circuit number within the group can be displayed. This display is commonly used for ringdown trunks. For example, **NATIONAL 7**.

2. Called Number Identification: LDN

When an incoming trunk calls a particular pilot number, an ID associated with the pilot number can be displayed instead of the twenty-character name of the incoming trunk group and the trunk circuit number. This display is commonly used for DID trunks. For example, **SALES DEPT**.

3. Internal Directory Number:

The internal directory number (up to five digits) assigned to the circuit can be displayed. This display is used for Non-ACD stations calling into the ACD. For example, 70626.

4. Overflow Connections:

When a non-transferred call is assigned to an agent in a secondary split, an overflow message is displayed before the calling party identification indicating that this call is not being assigned to an agent in the split for which it was first queued. For example, **OVF SHIPPING**. If the call has overflowed from an agent's personal queue, the display will identify the call as such and will show the name of the called agent; for example, **PRS OVF FRED**. Refer to "AGENT PERSONAL QUEUE - ACD [A-85A]" for related information.

5. Transfer Connections:

When a call being transferred by one agent is answered by another agent, an indication of who is transferring the call is displayed. For example, **XFR JONATHAN**.

6. Talking notification:

While an agent is engaged in a call, the Calling Party Identification of the original incoming ACD call, along with the number of calls waiting in the split queue, can be displayed by pressing the **LOGON** key. For example, **NATIONAL 17** is displayed prior to **SHIPPING: 5**. A display showing the amount of time in queue is provided to the agent position when a call is assigned (ringing) and again when the call is answered. For example, **TIME IN Q: 9:17**. The time shown is computed as the elapsed time since the caller entered the ACD system and when it is answered (or started ringing).

7. If an incoming ACD call enters the system through a pilot number and the receiving agent uses a pilot number to transfer the call to an agent in another split, the transferred call will be identified by the ID associated with the latter pilot number. If an ID is not associated with the latter pilot number, the call will be identified by the ID associated with the original pilot number. For example, an agent in Split A receives a call via a pilot number with an associated ID of “SERVICE”, resulting in SERVICE being displayed at the agent’s position. The agent uses a pilot number to transfer the call to Split B. Split B has an associated ID of “PARTS”. The agent who receives the transferred call in Split B will have PARTS displayed at their position. If an ID was not associated with the pilot number applied in the transfer, the agent in Split B will have SERVICE displayed at their position. Refer to “PILOT NUMBERS - ACD [P-40A]” for related information.

OPERATING PROCEDURE

This feature is assigned through ACDPLT and ACDTG PCPro commands.

SERVICE CONDITIONS

1. Pilot number ID takes precedence over incoming trunk gate and circuit ID when both are programmed.
2. If no special Calling Party Identification is chosen for a particular trunk, the System defaults is displayed.
3. Names with a maximum length of 20 alphanumeric characters can be displayed on the LCD.
4. The character display data for C.O. line/Tie Line calls can be assigned on the basis of each trunk route.
5. The character display data for this service is assigned from the ACD PCPro.
6. The Calling Party Identification is displayed for only four seconds; then, the default System display is shown.
7. Call type and circuit number of the incoming call may be displayed before Calling Party Identification information.
8. The sequence and timing of calling party information display can be customized based on ACD agent ID code. For details, see “CONNECTION DISPLAYS - ACD [C-199A]”.
9. Calling Party Identification containing a number sign (#) or asterisk (*) will not be displayed correctly.

PROGRAMMING

Assign the name for incoming call identification by following commands.

Note: Since NAME programmed in ACDPLT and in ACDTG may be duplicated to display the trunk incoming call, assign NAME in one of those two commands, and skip NAME parameter in the other command.

Note: When MIS is used, name corresponding to the pilot number and name corresponding to the split are programmed from MIS terminal.

STEP 1: ACDPLT - Assign name corresponding to the ACD pilot number.
NAME: up to 20 characters

C-70A CALLING PARTY IDENTIFICATION - ACD

- STEP 2: ACDTG - Assign name corresponding to the route number.
NAME: up to 20 characters
- STEP 3: ACDSPL - Assign the name corresponding to the split.
NAME: up to 20 characters

C-108A CALL CONTROL VECTOR - ACD

GENERAL DESCRIPTION

A Call Control Vector (CCV) is a series of steps that describe how an incoming ACD call is to be handled. A CCV can consist of a maximum of twenty steps. Each step of a CCV is an instruction for handling the call at a specific time. The steps may be programmed in any sequence (see Service Condition #1) and will be processed in order until an agent answers the call.

When an incoming call is presented to the ACD system, it is processed according to the CCV specified for the dialed pilot number (refer to “PILOT NUMBERS - ACD [P-40A]”). Thus, specifying different CCVs for different pilot numbers can produce a variety of call handling patterns. Countless combinations of CCV steps are possible and have been put together in very creative ways to solve complex call handling requirements.

A CCV is a timed sequence of events which control incoming ACD calls prior to their connection to an agent. It is important to understand the timing of CCV instructions in order to construct CCVs which process calls at the proper tempo. The following table shows how much time is used for each CCV instruction. Only after that amount of time has passed, a caller will proceed to the next step in the CCV.

Call Control Vector Timing

CCV Step Action (Alphabetical order)	Takes This Much Time
Announcement	wait until beginning of announcement or 30 seconds whichever comes first, then proceed to next instruction
Blank	0 seconds, next instruction processed immediately
Conditional Queue to Split	0 seconds, next instruction processed immediately
Dequeue from Split	0 seconds, next instruction processed immediately
Goto CCV X:Y	wait 0.5 second, then proceed with CCV #X step #Y.
Hang Up	0 seconds, next instruction processed immediately
If Estimated Time to Answer/Estimated Waiting Time to Answer	0 seconds, process first or second instruction immediately based on testing ETA/EWTA
If Estimated Time to Answer/Estimated Waiting Time to Answer in the specified split	0 seconds, process first or second instruction immediately based on testing ETA/EWTA
If Not Queued then Busy	0 seconds, Busy Tone provided immediately
If Not Queued then Goto X:Y	wait 0.5 second, then proceed with CCV #X step #Y.
IVR Announcement	wait 2 seconds, then proceed with IVR announcement
IVRDN	0 seconds, next instruction processed immediately
New Priority	0 seconds, next instruction processed immediately
Pause X	wait X seconds (1 to 999) then proceed with next instruction
Queue to Split	0 seconds, next instruction processed immediately
Ring Delay	Wait 2 seconds, then proceed with Ring Delay
Skip Percent	0 seconds, first or second instruction processed immediately based on percentage
Transfer To	wait 0.5 second if: <ul style="list-style-type: none"> • an incoming call is transferred to an ACD Pilot number, or • an incoming call is redirected according to GOCFNO and GOCFSTP settings of the ACDLOG command after a failed transfer attempt due to a busy PPN (Personal Pilot Number).
Up Priority	0 seconds, next instruction processed immediately
QUEUE greater	0 seconds, next instruction processed immediately

Call Control Vector Timing

CCV Step Action (Alphabetical order)	Takes This Much Time
LOGON less	0 seconds, next instruction processed immediately
READY less	0 seconds, next instruction processed immediately
WORKING-AGENTS greater	0 seconds, next instruction processed immediately

A list of the available CCV instructions, and their associated variables, follows.

■ QUEUE TO SPLIT #n (CCVACT=10)

This instruction directs a call to the specified split. The calling party will be connected to an agent within the split, if an agent is available. If an agent is not available to accept the call, the call will be placed in a queue of calls waiting to be serviced by an agent at a priority level determined by the Pilot Number dialed. If the target split's queue is full, the call will be handled by the next step in the CCV. The next step could provide alternate routing.

A call can only be queued to four splits, simultaneously. If a call encounters a Queue to Split instruction and the call is already successfully queued to four splits, the call will be connected to an agent in the target split, if an agent is available. If an agent is not available, the call will not be placed in the queue for that split. The call will be handled by the next step in the CCV.

When a Queue to Split instruction points to a split that is in Night Mode or is forwarded, the call will follow the target split's night routing of forward routing only if the call is not already in a queue. If the call is already in a queue (or queues), the Queue to Split instruction will be ignored. The call will be handled by the next step in the CCV.

■ CONDITIONAL QUEUE TO SPLIT #n (CCVACT=8)

This instruction directs a call to the specified split. The split will not accept the call unless a predefined condition (to be explained) is satisfied. If the condition is satisfied, the calling party will be connected to an agent within the split, if an agent is available. If an agent is not available to accept the call, the call will be placed in a queue of calls waiting to be serviced by an agent. If the condition is not satisfied, the call will be handled by the next step in the CCV. The next step could provide alternate routing.

The condition serves to control the traffic that the split will accept. The condition is a property of the split, and is defined in the ACD database. There are three options for imposing a condition. The conditions are mutually exclusive; therefore, only one of the following three conditions can be selected.

a. Agents Available [minimum]

The ACD system will ascertain the number of available agents in the split at the time the call is presented. If the number of available agents is greater than or equal to the minimum specified, the call is accepted and connected to the longest-waiting available agent. For example, if the minimum agent threshold is set at "3", then calls are connected if there are three or more available agents. If there are two or fewer available agents, the call will be handled by the next step in the CCV.

b. Calls in Queue [maximum]

The ACD system will ascertain the number of calls in the split's queue at the time the call is presented. If the queue depth is less than the maximum specified, the call may be queued, or connected if agents are available. For example, if the maximum queue depth is set at "3", and there are fewer than three calls in queue, calls will be queued, or connected to an available agent. If there are three or more calls in queue, the call will be handled by the next step in the CCV.

c. No Calls Accepted

The split will not accept any call that is directed to the split by a Conditional Queue to Split instruction. The split will only accept calls that are presented through a Queue to Split instruction.

A call can only be queued to four splits, simultaneously. If a call encounters a Conditional Queue to Split instruction and the call is already successfully queued to four splits, the call will be connected to an agent in the target split, if an agent is available. If an agent is not available, the call will not be placed in the queue for that split. The call will be handled by the next step in the CCV.

When a Conditional Queue to Split instruction points to a split that is either in Night Mode or forwarded, the call will be handled by the next step in the CCV.

■ DEQUEUE #n (CCVACT=9)

This instruction removes a call from a specified queue or from all the queues in which the call currently resides.

■ IF NOT QUEUED GOTO CCV #x STEP #y or BUSY (CCVACT=12)

This instruction provides an alternate routing option if a call cannot be queued for one of the following reasons.

- a. The target split of a Queue to Split instruction has a full queue.
- b. The target split of a Conditional Queue to Split instruction does not satisfy the preimposed condition.
- c. The call is already successfully queued to four splits.
- d. The target split of a Queue to Split instruction is in Night Mode or forwarded, and the call is already queued to other split(s).
- e. The target split of a Conditional Queue to Split instruction is in Night Mode or forwarded.

If none of the above reasons exists, then alternate routing is not implemented and the call will be handled by the next step in the CCV.

If one of the above reasons exists, then alternate routing is implemented in one of the following manners.

- f. If a CCV number and a step number are included in the If not Queued instruction, then processing will continue at the specified CCV number and step number.
- g. If a CCV number and a step number are not included in the If not Queued instruction, and the call is not queued to other split(s), then Busy Tone will be returned to the calling party. The CCV processing will be halted, and the calling party must hang up.
- h. If a CCV number and a step number are not included in the If not Queued instruction, and the call is queued to other split(s), then the call will be handled by the next step in the CCV.

The If not Queued, Goto or Busy instruction will be performed only if it follows a Queue to Split or a Conditional Queue to Split instruction. If it does not follow one of the queuing instructions, the If not Queued, Goto or Busy instruction will be ignored and the call will be handled by the next step in the CCV.

■ PAUSE #n (CCVACT=1)

This instruction delays the processing of the CCV for the specified period of time. During that period of time, the call will remain in the same state it was in when the Pause step was encountered. After the specified period of time has elapsed, the processing of the CCV will resume at the step which follows the Pause step.

■ ANNOUNCEMENT #n (CCVACT=2)

This instruction connects the caller to the beginning of the specified announcement.

Incoming callers with held parties cannot be connected to an announcement, although this will not affect their CCV processing.

An announcement may be used in any CCV and announcements can be shared among splits. Announcements can be used in any order and can be repeated as often as desired, although each should be followed by a pause step with a pause time at least as long as the announcement.

■ GOTO CCV #x STEP #y (CCVACT=3)

This instruction invokes a pause of 0.5 second before the processing of the CCV continues at the specified step, in the specified CCV. The specified CCV can be the CCV that is currently handling the call, or it can be a different CCV in the same tenant.

■ SKIP % (CCVACT=13)

This instruction causes the next CCV step to be bypassed by a percentage of the calls that reach this step. The indicated percentage of calls will skip the next step and continue immediately with the CCV step that is two steps after the SKIP instruction. The remaining calls will not honor the SKIP instruction and will process the next CCV step. Thus, the SKIP instruction acts as a filter to distribute calls, on a percentage basis, between two consecutive steps in the CCV.

Note: This instruction step can be used up to 128 times across all of the Call Control Vectors.

■ HANG UP (CCVACT=4)

This instruction disconnects the call by breaking the station or trunk connection. CCV processing is terminated after this instruction. The Hang Up step is designed to provide positive forward disconnect on a supervised trunk circuit particularly after having heard an announcement. Station users who encounter a Hang Up step while calling into an ACD pilot number may receive mixed results based on their exact call scenario at the time as well as the System software level in use. The possible results include Busy Tone, reorder tone or the inadvertent completion of a transfer. Because of these variations for station users the feature is best described as “unpredictable” for stations and should be avoided if possible.

■ TRANSFER TO NODE #n (CCVACT=5)

This instruction transfers the call to the specified Transfer Index Number (1-10). A Transfer Index Number is associated with a telephone number; the telephone number can have a maximum of twenty-two digits. The telephone number can be associated with an internal extension, an operator, a UCD group, voice mail, an outside number via Least Cost Routing (LCR). This instruction removes the call from every queue in which it currently resides.

With the exception of transfers across CCIS, if the specified telephone number is not busy, this instruction will complete the CCV call processing. If the specified telephone number is busy, CCV processing will resume at the next step following a five-second delay. If the transfer is across CCIS, this instruction will complete the CCV processing whether the specified telephone number is busy or not.

If the transfer is to a local UCD group with all members busy UCD queuing will not take place even if the feature is enabled. The call will continue processing the CCV in the case of an all-busy UCD group.

■ NEW PRIORITY #n (CCVACT=6)

This instruction is used to change the current priority associated with a call to a different priority in all the splits to which the call is currently queued. The priority that is specified in the instruction can be either higher or lower than the present priority.

The variable associated with the instruction is a priority. If a call with a priority of “8” encounters the instruction “New Priority 15”, the call’s priority will change to “15” in all splits it is currently queued to.

■ UP PRIORITY #n (CCVACT=7)

This instruction is used to change the current priority associated with a call to a higher priority in all the splits where the call is currently queued.

The variable associated with the instruction is the amount by which to increment the priority. If a call with priority of “14” encounters the instruction “Up Priority 4”, the call’s priority will change to “10”. A priority of “10” is four levels higher than a priority of “14”.

■ BLANK (CCVACT=0)

This instruction does not invoke any call processing action. The call will immediately process the next step with no delay.

The Blank instruction is used to simplify future modifications to a CCV. If a CCV is constructed without Blank instructions, and new instructions are added to the CCV at a later time, then the changes could force a major restructuring of the CCV. If a CCV is constructed with Blank instructions, and new instructions are added to the CCV at a later time, then the new instructions can take the place of Blank instructions.

■ IVR DN #n (CCVACT=20)

A Node directory number that enables the ACD to access a port on an Interactive Voice Response Unit (IVR). Each IVR port should have a corresponding IVR directory number. All such numbers should be set up on the Node as members of a UCD group and can be accessed via the UCD pilot number. This UCD pilot number should be input as the IVR pilot number using the ACDTN command.

■ ETA Less Than (CCVACT=15)/ETA Greater Than (CCVACT=16)

This instruction checks all queues a caller is waiting in and determines the best estimated time to answer (ETA). Using this ETA in a comparison with the parameter to the ETA < or ETA > instruction determines whether the next CCV instruction should be skipped.

If result of ETA comparison is TRUE, next instruction is PROCESSED.

If result of ETA comparison is FALSE, next instruction is SKIPPED.

Imagine this small CCV example:

- | | | | |
|----|---------------|-----|---|
| 3. | Queue to | 1. | this is the regular split queue |
| 4. | ETA Greater | 120 | |
| 5. | Goto CCV step | 8. | |
| 6. | Queue to | 3. | this could be the standard overflow split |

- 7. === End ===
- 8. Queue to 4. this could be the message center split
- 9. === End ===

If a caller is queued to split 1 and finds that his ETA for that split is greater than 120 seconds (2 minutes) then the call will go to step 8 and will queue to split 4, the message center. If the current ETA is less than or equal to 120 seconds (ETA tests FALSE) then step 5 will be skipped and the call will continue with step 6 and queue to the standard overflow split.

** ETA less than 11 seconds will be considered as 0 second.*

ETA steps should be used with some amount of leeway since they can only be approximations of an estimated time to answer. Many events could occur to cause the ETA estimate to be incorrect by a considerable amount of time.

QUEUE TO SPLIT #n or CONDITIONAL QUEUE TO SPLIT #n step must be assigned before ETA greater/less step. When queuing to more than one split, ETA in the originally queued split is compared with the threshold value of ETA greater/less step.

■ Split < ETA less (CCVACT=21)/Split >= ETA greater (CCVACT=22)

This instruction allows CCV processing to be decided based on the Estimated Time to Answer (ETA) for a specified split, as opposed to being based on the ETA of a call in queue. It then compares that calculated Split ETA with a specified number of seconds. If the “less than (<)” or “greater than or equal to (>=)” comparison is met, the next CCV step is processed. The next step is skipped if the comparisons are not met. This allows the CCV to determine the ETA of a split before queuing a call to the split, thus allowing the decision of whether or not to queue a call, for example, to be determined by the current split traffic level.

** ETA less than 11 seconds will be considered as 0 second.*

■ Ring Delay #n (CCVACT=17)

This instruction must appear prior to any Queue to Split steps in the CCV in order for it to have the desired effect. The Ring Delay feature is intended to slow down the connection of incoming calls to agents and give a window of opportunity for a host computer to paint an appropriate screen of information for the agent which may aid in proper answering of the call.

Ring Delay specifies a number of seconds to wait after selecting which agent should receive the next call in queue. The actual ringing of the agent’s phone will be intentionally delayed by ‘n’ seconds. An Infolink application can send a command to the ACD to terminate the artificial delay before time expires if it has determined that it is OK to ring the agent’s phone. See “RING DELAY - ACD [R-145A]” for more details.

■ Short Stroke Count (CCVACT=18)/Long Stroke Count (CCVACT=19)

This instruction is used to set a Stroke Count number to notify the application of CCV route.

In the case of Long Stroke Count, set a Blank instruction in the next step since two lines are required for CCVSTP.

■ END (CCVACT=11)

This instruction terminates the processing of the CCV. The call remains in any queue or queues in which it currently resides, and the caller will be connected to an agent when one is available.

The call processing in a CCV will terminate, without an End instruction, when the entire twenty steps of the CCV have been executed. If the CCV has fewer than twenty instructions, the steps without instructions are treated as Blank instructions.

■ QUEUE greater (CCVACT=23)

This instruction determines whether the next CCV step is executed or skipped by comparing the number of the calls that are presently waiting in queue for a specified split and the preassigned threshold value. If result of the comparison is True (the number of the calls in queue is greater than the preassigned threshold), the next CCV step is executed. The next CCV step is skipped if the comparison is False (the number of the calls in queue is less than the preassigned threshold).

■ LOGON less (CCVACT=24)

This instruction determines whether the next CCV step is executed or skipped by comparing the number of the agents who are presently logging on to a specified split and the preassigned threshold value. If result of the comparison is True (the number of the logged-in agents is less than the preassigned threshold), the next CCV step is executed. The next CCV step is skipped if result of the comparison is False (the logged-in agents is greater than the preassigned threshold).

■ READY less (CCVACT=25)

This instruction determines whether the next CCV step is executed or skipped by comparing the number of the agents who are presently in Ready mode for a specified split and the preassigned threshold value. If result of comparison is True (the number of the agents in Ready mode is less than the preassigned threshold value), the next CCV step is executed. The next CCV step is skipped if result of the comparison is False (the number of the agents in Ready mode is greater than preassigned threshold).

■ WORKING-AGENTS greater (CCVACT=26)

This instruction determines whether the next CCV step is executed or skipped by comparing the number of the calls that are presently waiting in queue for a specified split and the Variable Queue Depth calculated from the preassigned threshold value (%). If result of the comparison is True (the number of the calls in queue is greater than the Variable Queue Depth), the next CCV step is executed. The next CCV step is skipped if result of the comparison is False (the number of the calls in queue is less than the Variable Queue Depth).

* Working-agents are agents who are logging on to a specified split except the agents in Break mode.

* Variable Queue Depth = Working-agents × Threshold Value (%)

■ EWTA less (CCVACT=27)/EWTA greater (CCVACT=28)

This instruction controls whether the next CCV step is skipped or not by comparing Estimated Waiting Time to Answer (EWTA) to a threshold (the number of seconds). When using EWTA less/EWTA greater, EWTA of a split where an ACD incoming call is queuing, and a threshold are compared.

Example of CCV Steps

CCV Step	CCV Step Control Information (ACDACT)	CCV Step Data (CCVACTDATA)
Step 1	10: QUEUE TO SPLIT	1
Step 2	28: EWTA greater	30
Step 3	10: QUEUE TO SPLIT	5
Step 4	11: End	-

If ACD incoming call is assigned to the split 1 to queue and Estimated Waiting Time to Answer (EWTA) is more than or equal to 30 seconds (a threshold), Step 3 is executed and the ACD incoming call is assigned to the split 5 to queue as well. If the EWTA is less than 30 seconds, Step 3 will be skipped and Step 4 is executed (CCV steps end).

EWTA less	<p>When Estimated Waiting Time to Answer (EWTA) of a split where an incoming call is queuing is less than a threshold, the next step will be executed. If not, the next step will be skipped.</p> <p>Note: The shortest Estimated Waiting Time to Answer (EWTA) among splits where an incoming call is queuing is used for the comparison. "QUEUE TO SPLIT" or "CONDITIONAL QUEUE TO SPLIT" step must be assigned before the EWTA greater/less step.</p>
EWTA greater	<p>When Estimated Waiting Time to Answer (EWTA) of a split where an incoming call is queuing is greater than or equal to a threshold, the next step will be executed. If not, the next step will be skipped.</p> <p>Note: The shortest Estimated Waiting Time to Answer (EWTA) among splits where an incoming call is queuing is used for the comparison. "QUEUE TO SPLIT" or "CONDITIONAL QUEUE TO SPLIT" must be assigned before the EWTA greater/less step.</p>

1. This feature can be set for each CCV number by ACDCCV command.
2. A step of "QUEUE TO SPLIT" or "CONDITIONAL QUEUE TO SPLIT" must be assigned before the EWTA greater/less step. If not, the next step is skipped regardless of the result of EWTA comparison.
3. The available value to be set for EWTA greater/less is 1 to 9999 seconds.
4. When queuing to more than one split, the threshold value of EWTA greater/less step is compared with the shortest EWTA.
5. Handling CCV steps by EWTA comparison is available even if ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1).

6. EWTA less and EWTA greater cannot be placed on CCV step 19 and 20. These must be placed on a CCV step from 1 to 18.

■ **Split < EWTA less (CCVACT=29)/Split >= EWTA greater (CCVACT=30)**

This instruction controls whether the next CCV step is skipped or not by comparing Estimated Waiting Time to Answer (EWTA) to a threshold (the number of seconds). When using Split < EWTA less/Split >= EWTA greater, a split can be specified in advance, so this feature can be used even though a “QUEUE TO SPLIT” step is not assigned before the Split < EWTA less/Split >= EWTA greater step. This gives flexibility to control queues of ACD incoming calls in various situations.

Example of CCV Steps

CCV Step	CCV Step Control Information (ACDACT)	CCV Step Data (CCVACTDATA)
Step 1	10: QUEUE TO SPLIT	1
Step 2	29: Split < EWTA less	2/30
Step 3	10: QUEUE TO SPLIT	2
Step 4	11: End	-

If ACD incoming call is assigned to the split 1 to queue and Estimated Waiting Time to Answer (EWTA) of the split 2 is more than or equal to 30 seconds (a threshold), Step 3 will be skipped and Step 4 is executed (CCV steps end). If Estimated Waiting Time to Answer (EWTA) of the split 2 is less than 30 seconds, Step 3 is executed and the ACD incoming call is assigned to the split 2 to queue as well. (This means it is possible to control whether the incoming call queues to the split 2 in Step 3 or not by adjusting EWTA for the split 2 in Step 2.)

Split < EWTA less	When Estimated Waiting Time to Answer (EWTA) of a specified split is less than a threshold that is set for Split < EWTA less, the next step will be executed. If not, the next step will be skipped.
Split >= EWTA greater	When Estimated Waiting Time to Answer (EWTA) of a specified split is greater than or equal to a threshold that is set for Split >= EWTA greater, the next step will be executed. If not, the next step will be skipped.

1. This feature can be set for each CCV number by ACDCCV command.
2. This feature can be used without setting the “QUEUE TO SPLIT” step before the Split < EWTA less/Split >= EWTA greater step because a split can be specified.
3. A split number available for Split < EWTA less/Split >= EWTA greater is 1 to 900.
4. The available value to be set for EWTA greater/less is 1 to 9999 seconds.
5. The following restrictions are applied for Split < EWTA less/Split >= EWTA greater settings if ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1):
 - Split < EWTA less/Split >= EWTA greater cannot be set for the split number 128 or larger.
 - A value of EWTA that can be set by Split < EWTA less/Split >= EWTA greater is from 1 to 511 seconds.

6. Split < EWTA less and Split >= EWTA greater cannot be placed on CCV step 19 and 20. These must be placed on a CCV step from 1 to 18.

OPERATING PROCEDURE

The desired Call Control Vectors are created through ACD PCPro assignments.

SERVICE CONDITIONS

1. The programming of CCVs is not examined by the ACD system. It is the responsibility of the user to provide a logical sequence of instructions, which produce the desired call handling, in every CCV.
2. An announcement is not guaranteed to be available from its beginning, when an Announcement instruction is encountered. An additional Pause instruction may need to be programmed in order to provide proper sequencing through the CCV. Refer to “ANNOUNCEMENTS - ACD [A-80A]” for additional information.
3. The If not Queued Goto or Busy instruction is applicable to DID & Tie type trunks. In the case of ringdown trunks, Ringback Tone is controlled by the C.O.; therefore, Busy Tone cannot be given to the caller.
4. A “Transfer To” step in the CCV may send a caller off to any number within the number plan established for the System. It is not feasible to describe the exact operation of such a transfer to all possible numbers under all possible conditions. Many of the cases are described below.
 - a. When the target is a UCD pilot number in the System: If a member of the UCD is available, the call will be transferred. If there are no members available in the UCD, the call remains in the ACD side and continues the CCV with the step following the “Transfer To”. The call *will not queue* to the UCD group even if queuing in the UCD is enabled.
 - b. If the overflow destination is an ordinary station: If the station at the overflow destination is a member station of a station hunting group:
 - c. If transfer service is set for the station at the overflow destination:
 - d. When the station at the target is busy, the Transfer-To instruction may be retried with a Goto instruction.
 - e. When the station at the target is in make-busy state or lockout state, no transfer takes place.
 - f. If the overflow destination is an Attendant Console: Transfer is executed only when the Attendant Console group is in Day mode, or when a Night Attendant Console is provided and is in service during Night mode.
 - g. No transfer will take place when the Attendant Console group is in Night mode and no Night Attendant Console is provided.
 - h. If the transfer target is an external line:
 - i. To designate the external line number for the overflow destination, an abbreviated code for SPEED CALLING - SYSTEM-ACD [S-3A] is used.
 - j. A maximum of 1000 abbreviated codes can be assigned for the ACD.
 - k. For selecting external routes, LCR can be used.
 - l. When an overflow has encountered all external trunks busy, it may be retried with a Goto instruction.
 - m. When an overflow has encountered all senders busy, it may be retried with a Goto instruction.
 - n. Once an ACD call has been connected to an external trunk, it may not be distributed to agent positions at the overflow origination side even if the destination distant office happens to be busy.
 - o. Tandem connections which release on both the incoming route and the outgoing route cannot be supervised and should be restricted by means of System Data programming.

5. For QUEUE less, LOGON less, READY less and WORKING-AGENTS greater instructions:
- More than one QUEUE greater/LOGON less/READY less/WORKING-AGENTS greater instruction (Maximum 18 instructions) can be assigned in a CCV. When these instructions are assigned to the consecutive steps, the conditions of each assigned instructions can be combined. At this time, "AND" (logical product) or "OR" (logical sum) may be assigned to the second and further steps to specify the conditions for the combination with the previous step. Refer to the figure below.

[Example 1]

After checking the number of the Split 1, 2, 3 and 4 agents who are presently in Ready mode, the system makes a decision on whether the incoming calls should be routed to BT connection or to a particular split (for this example: Split 3 (Hot Split)). This allows the system to control the incoming calls before the split queuing, according to the current split traffic level.

In this example, assuming that:

- The number of the agents in Ready mode in Split 1: 0
- The number of the agents in Ready mode in Split 2: 0
- The number of the agents in Ready mode in Split 3: 0
- The number of the agents in Ready mode in Split 4: 0

CCV STEP	CCVACT	Parameters	Explanations
1	READY less	Split: 1 COMP:1 COND: -Note 1	<p>The diagram illustrates the execution of a CCV with AND conditions. At the top, a legend shows four boxes: '1 > 0' (assigned at Step 1), 'AND 1 > 0' (assigned at Step 2), 'AND 1 > 0' (assigned at Step 3), and 'AND 1 > 0' (assigned at Step 4). Below this, a flowchart shows the execution path. Step 1 is TRUE (1), Step 2 is TRUE (2), Step 3 is TRUE (4), and Step 4 is TRUE (6). AND operations are performed between Step 1 and 2 (resulting in TRUE 3), Step 2 and 3 (resulting in TRUE 5), and Step 3 and 4 (resulting in TRUE 7). An arrow points to Step 5, indicating the next CCV step is executed.</p> <ol style="list-style-type: none"> Result of the comparison at Step 1 is "TRUE" because the number of agents in Ready mode is less than preassigned threshold value. Result of the comparison at Step 2 is "TRUE" because the number of agents in Ready mode is less than preassigned threshold value. At this point, result of the comparison is "TRUE" because the condition for the combination of Step 1 and 2 is "AND". Result of the comparison at Step 3 is "TRUE" because the number of agents in Ready mode is less than preassigned threshold value. At this point, result of the comparison is "TRUE" because the condition for the combination of Step 2 and 3 is "AND". Result of the comparison at Step 4 is "TRUE" because the number of agents in Ready mode is less than preassigned threshold value. At this point, result of the comparison is "TRUE" because the condition for the combination of Step 3 and 4 is "AND".
2	READY less	Split: 2 COMP:1 COND: AND	
3	READY less	Split: 3 COMP:1 COND: AND	
4	READY less	Split: 4 COMP:1 COND: AND	
5	If Not Queued Goto CCV #x Step #y or Busy	GOCCV: 0 GOSTP: 0	
6	Queue to Split	3 (Hot Split)	

Note 1: Even if AND/OR condition is assigned to the COND parameter of the first step, AND/OR condition is ignored because the comparable previous instruction does not exist.

- b. Queue greater/LOGON less/READY less/WORKING-AGENTS greater instructions assigned to the consecutive steps can be enclosed in brackets by assigning “1” to the BRAC parameters for the first steps and the last steps. For example, when assigning the data “1” to the BRAC parameters for Step 1 and Step 3, Step 1 through 3 are enclosed in brackets (The first assigned BRAC (assigned for Step 1) is automatically recognized as the opening bracket/the next assigned BRAC (assigned for Step 3) is automatically recognized as the closing bracket). The steps enclosed in brackets take priority over the steps not enclosed in brackets. Refer to the figure below.

[Example 2]

After checking the number of the Split 1 and Split 2 agents who are presently logging on to and the calls that are presently waiting in each queues for Split 1 and 2, the system makes a decision on whether the incoming calls should be routed to the announcement connection or to a particular split.

In this example, assuming that:

- The number of the calls in queue for Split 1: 18
- The number of the agents logging on to Split 1: 9
- The number of the calls in queue for Split 2: 10
- The number of the agents logging on to Split 2: 20

CCV No.5

CCV STEP	CCVACT	Parameters	Explanations
1	QUEUE greater	Split: 1 COMP:10 COND: - Note 2 BRAC: 0	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> $10 < 18$ OR $15 > 9$ AND ($8 > 10$ OR $12 > 20$) assigned at Step 1 assigned at Step 2 assigned at Step 3 assigned at Step 4 </div> <p>The next CCV step (Step 5) is executed.</p> <p>① Result of the comparison at Step 1 is "TRUE" because the number of calls in queue for Split 1 is greater than preassigned threshold value.</p> <p>② Result of the comparison at Step 2 is "TRUE" because the number of the agents logging on to Split 2 is less than preassigned threshold value.</p> <p>③ At this point, result of the comparison is "TRUE" because the condition for the combination of the Step 1 and 2 is "OR".</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> At this time, the comparisons at Step 3 and 4 are performed in advance because Step 3 and Step 4 are enclosed in brackets. </div> <p>④ Result of the comparison at Step 3 is "TRUE" because the number of calls in queue for Split 2 is greater than preassigned threshold value.</p> <p>⑤ Result of the comparison at Step 4 is "FALSE" because the number of agents logging on to Split 2 is greater than preassigned threshold value.</p> <p>⑥ At this point, result of the comparison is "TRUE" because the condition for the combination of the Step 3 and 4 is "OR".</p> <p>⑦ At this point, result of the comparison is "TRUE" because the condition for the combination of the results at ③ and ⑥ is "AND".</p>
2	LOGON less	Split: 2 COMP:15 COND: OR BRAC: 0	
3	QUEUE greater	Split: 2 COMP:8 COND: AND BRAC: 1	
4	LOGON less	Split: 2 COMP:12 COND: OR BRAC: 1	
5	Jump CCV	GOCCV: 5 GOSTP: 9	
6	Queue to Split	1	
7	Queue to Split	2	
8	End		
9	Announcement	3	
10	Pause	10	
11	Hang up		
12	End		

Note 2: Even if AND/OR condition is assigned to the COND parameter of the first step, AND/OR condition is ignored because the comparable previous instruction does not exist.

- c. When two or more brackets () are assigned in a CCV, each brackets () must be appended. When more than three steps are enclosed in brackets (), these steps are proceeded in normal order.
- d. QUEUE greater/LOGON less/Ready less/WORKING-AGENTS greater instructions cannot be assigned to Step 19 and 20.

- e. To route a call to BT (Busy Tone) connection by the result of QUEUE greater/LOGON less/Ready less/WORKING-AGENTS greater instructions, assign the If NOT QUEUE instruction without a CCV number and a step number to the next step of these instructions.
 - f. When the unregistered split number is assigned to the "Split" parameter for QUEUE less/LOGON less/READY less/WORKING-AGENTS greater instructions, the result of each instruction is forced to be as follows:
 - QUEUE greater → False
 - LOGON less → True
 - READY less → True
 - WORKING-AGENTS greater → False
6. If an ACD Incoming call is distributed to an ACD position (Legacy Desktop terminal) while all IPPADs are in busy state, the Calling Party will continue to hear Ringback Tone (RBT). To work around this problem, the data setting of CALL RECOVER - ACD [C-191A] is required.
7. When deleting CCV data that includes a transfer destination number (TRFDC), consider the following conditions.
- When changing existing CCV data that includes a transfer destination number and such transfer destination number is also assigned to other CCV data, overwrite the existing CCV data with the new one.
 - Before deleting existing CCV data and entering new one or overwriting the existing data, if such existing CCV data includes a transfer destination number that is not assigned to any other CCV data, assign the number to the final CCVNO as dummy data. Only after the dummy data assignment has been performed, proceed to delete or overwrite the existing data.

(Example)

When deleting TRFDC=3000 from CCVNO 1 and assigning TRFDC=3000 to CCVNO 2 (do not forget to assign TRFDC=3000 to the final CCVNO (900) as dummy data of the destination number that is going to be deleted):

- 1) Assign TRFDC=3000 as dummy data to the final vacant CCVNO (900).
- 2) Assign TRFDC=3000 into CCVNO 2.
- 3) Delete TRFDC=3000 from CCVNO 1.

The CCVNO used for dummy assignment (in the example above 900) can also be used for dummy assignment of other transfer destination numbers.

(Example of dummy assignment)

(CCVNO 900)
CCVSTP 1: Transfer (3000)
CCVSTP 2: Transfer (3001)
CCVSTP 3: Transfer (3500)
CCVSTP 4: Transfer (047182xxxx)

If all the twenty Steps of the Dummy CCVNO (900) are used, use other CCVNOs (899, 898...) for the dummy data.

For deleting a transfer destination number that is not necessary anymore, overwrite the existing data with new data or assign Blank.

8. Refer to the following precautions for Guaranteed ACD Tone Connection.
 - a. The ASYD command (SYS1, Index 47, Bit 4=1) needs to be assigned.
 - b. When SCF (FN=127) results in Return Error, SCF is sent twice to retry (total 3 times of execution), and if the execution is still unsuccessful, no tone is provided.
(0.5 seconds of waiting time is taken from reception of Return Error to SCF retry)
 - c. When reply of SCF (FN=127) does not arrive in time (waiting timer for reply is set to 5 seconds), SCF (FN=127) is set once to retry (total 2 times of execution), and if the execution is still unsuccessful, no tone is provided.
 - d. Guaranteed ACD Tone Connection is executed regardless of the setting of ACDP retrofit.
 - e. When SCF (FN=127) is not executed or while a reply of SCF (FN=127) is being waited, Route Call Request (IF), which is the Infolink message, is restricted.
If an application does not have a retry function of Route Call Request (IF), assign the ASYDL/ASTDN command (SYS1, Index 193, Bit 6=1 (no restriction)) to eliminate the Route Call Request (IF) restriction for when SCF (FN=127) is not executed. However, when SCF (FN=127) fails, routing becomes ACK and the connection is disconnected from a network.
9. When a Hot position (Analog IVR / Standard SIP-IVR) transfers a call to an ACD pilot number and then releases the call, if the release coincides with the destination phone ringing (**Note 3**), the called agents may not be able to answer the call. To avoid this, use the ACDCCV command and insert a brief pause (CCVACT = 1) before the Queue Assign step (CCVACT = 10) so that the queue assignment is delayed until after the Hot position releases the call.

Note 3: Ringer is activated after the Queue Assign step is completed. A series of CCV steps are defined with the ACDCCV command.
10. When you use the ACDCCV command to create a CCV with multiple steps in which the caller is connected to VS32, make sure that trunks of Multiple connection and trunks of Single connection (**Note 4**) are not mixed in the announcement trunks used for the CCV.

Note 4: For details, see the Connection Pattern parameter of the AADT/AADTL/AADTN command.
11. The SKIP % instruction step can be used up to 128 times across all of the Call Control Vectors.

PROGRAMMING

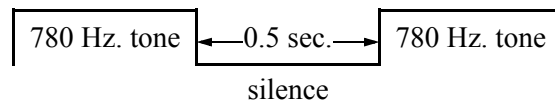
Refer to “2.7 Call Control Vectors (CCV) Assignment” in Chapter 4.

C-110A CALL WAITING LAMP WITH CHIME - ACD

GENERAL DESCRIPTION

An optional chime is available, on a split-wide basis, as a companion audio signal to the visual signals offered by the **CW** lamp (Call Waiting). The **CW** lamp can be programmed to light or flash when a given quantity of calls reside in a split queue. There are separate thresholds for lighting the lamp and for flashing the lamp. Refer to “CALL WAITING INDICATION - LCD DISPLAY/CW LAMP - ACD [C-68A]” for related information. If the chime is selected, the chime will sound at each agent position which is in the Work mode at the time the **CW** lamp is lit, and at the time the **CW** lamp begins to flash.

The chime is composed of two half-second beeps, which are separated by a half-second of silence.



OPERATING PROCEDURE

None

SERVICE CONDITIONS

1. The chime will sound only at a position where the agent is in Work mode.
2. The volume of the chime is controlled by the ringer volume switch on the Desktop terminal.
3. The use of the chime is indicated through an ACD PCPro command. The command data is on a split-wide basis.

PROGRAMMING

ACDSPL - Make the CW lamp with chime service available for each split
CWCHM: 1 (Available)

C-127A CALL FORWARDING - SPLIT - ACD

GENERAL DESCRIPTION

This feature provides alternate routing for calls destined for a particular split. When split call forwarding is in effect and a call attempts to queue for that split, the call is routed to a pilot number instead of being queued. At this point, the call is handled by the Call Control Vector (CCV) associated with the new pilot number.

OPERATING PROCEDURE

1. The supervisor presses the **NIGHT** key while logged on to the ACD.
2. *ENTER NIGHT/FWD?* is displayed at the position. The individual enters the digit 0, a pilot number, and #.
3. At this point, the split goes into call forwarding, incoming calls are routed to the call forwarding number entered, and the **NIGHT** lamp flashes at all the positions in the split.
4. Split call forwarding may be canceled by pressing the **NIGHT** key again. *EXIT FWD?* is displayed at the position and the supervisor enters 1# to confirm.
5. At this point the split exits split call forwarding and the **NIGHT** lamp is extinguished at all the positions in the split.

SERVICE CONDITIONS

1. Only pilot numbers may be used as the split call forwarding destination.
2. The pilot number used for split call forwarding may not contain a “*” or a “#”.
3. The pilot number for split call forwarding may invoke either a Week Schedule or a CCV.
4. The MIS is not informed when split call forwarding is activated.
5. When a split enters Night mode automatically using the MIS, split call forwarding is canceled.
6. When a call attempts to queue to a split using a Queue to Split instruction in a CCV and the split has call forwarding activated, the new pilot number routing for the split is only followed if the split is the primary split for the call. If the split is a secondary split, the Queue to Split instruction is ignored. A primary split is the split specified in the first queuing instruction in a CCV. Splits specified in subsequent queuing instructions in the CCV are referred to as secondary splits.
7. When a call attempts to queue to a split using the Conditional Queue to Split instruction in a CCV and the split has call forwarding activated, the Conditional Queue to Split instruction is ignored.
8. When alternate routing is required by a split, night service may be used to provide a more static choice of pilot numbers used for the new routing (see “NIGHT SERVICE - ACD [N-12A]” for additional information).

PROGRAMMING

- STEP 1: ACDCCV - Assign the pilot number of Night destination to the CCV
CCVACT: 5 (Transfer)
- STEP 2: ACDPLT - Designated the CCV for alternate route
CCV/W = 0 (Call Control Vectors)
- STEP 3: ARRC - Release the route restriction between the ACD line and the tie line.

C-191A CALL RECOVER - ACD

GENERAL DESCRIPTION

The call recover feature allows an ACD call to ring at an ACD position for a predetermined length of time and if unanswered the call will be directed to another available agent or replaced in all of the queues it was originally in at the highest possible priority. If the call is requeued it will be the highest possible priority and will be answered by the next available agent.

OPERATING PROCEDURE

1. An incoming ACD call rings at an agent's position. The agent is either unavailable to answer the call or chooses to not answer the call.
2. When the "Call Recover" timer expires the call is removed from the agent's position. The agent's position is placed in a "Penalty Work" mode and the display will show **CALL RECOVERED** until a key is pressed.
3. The caller will be immediately directed to another available agent if one exists.
4. If there are no available agents the call will be replaced in all of the queues it was originally queued to at the highest possible priority. The call will also continue to process the CCV beginning with the step where it left off.
5. The call will be assigned to the next available agent.

SERVICE CONDITIONS

1. This feature can be programmed on a per-split basis.
2. Work Mode activated by this feature is not available when programming to restrict the Work Mode (ACDSPL, WKRST=1). To prevent this, assign the time for Call Recover activating by ACDSPL command.
3. The time used for the Time In Queue display when the call is assigned for the second time will be the cumulative time starting when the call first arrived at the ACD.
4. For the incoming call to the agent's personal queue, this feature is activated according to Call Recover timer of the agent's split. At this time, the call will be redirected according to the Forward / Full CCV programmed for the agent's logon ID.
5. For the agent position that is restricted to be placed in work mode:
Although the agent position is not to be placed in work mode, the call can be directed to another available agent.
6. When an agent position receives an incoming call from an outside line/a trunk, the calling party continues to hear the Ringback Tone (RBT) even after "Call Recover" is activated. When an agent position receives a station call, the tone which the calling party hears differs depending on the setting of ASYD, SYS1, Index 47, Bit 4. However, always assign "1" for this system data in ACD system.

When ASYD, SYS1, Index 47

Bit 4=1, the Ringback Tone (RBT) continues even after "Call Recover" is activated. **Note 1**

Bit 4=0, the Ringback Tone (RBT) changes to Music On Hold (MOH) after "Call Recover" is activated.

Note 1: If the calling party is a digital terminal, it may hear Music On Hold (MOH) for a moment which interrupts the Ringback Tone (RBT) being provided.

7. An original agent position which receives an incoming call displays “CALL RECOVERED” on its LCD after the call is forwarded to another agent position. This “CALL RECOVERED” is displayed again even after the agent position performs registration due to a failure. It disappears after the agent performs the login operation.
8. When the system is DTI-FCCS, this feature cannot be used with the following equipment:
 - MG(BRI) Card [SCA-2BRIA]/MG(BRI) Box [MG-2BRIA]
9. When the “Call Recover” function is effective, if MC-MG which accommodates IVR is a non-registration state and a call is distributed to an applicable IVR line, the “Call Recover” works.

PROGRAMMING

ACDSPL - Assign the time for Call Recover activating.
CRT: Call Recover time (1-255)

C-199A CONNECTION DISPLAYS - ACD

GENERAL DESCRIPTION

This feature allows each agent to specify the exact sequence of displays to be delivered to the LCD display at the time of an incoming ACD call connection. There are several displays available providing a variety of information pertaining to the call being connected. Different styles of operation give rise to different needs regarding what information is presented first. Now each agent can specify how much information they want and in what order.

The settings of this feature can be viewed and edited on a Logon ID basis with the PCPro commands (**Note 1**). Control of custom connection displays is also available through the use of a special Tally-Oh code designed for this purpose.

Note 1: Available since FP95-112 V2.

OPERATING PROCEDURE

Connection displays can be customized in the following two ways:

1. Use of Tally-Oh Code on ACD Agent Position

By entering the proper codes and durations each ACD agent can customize the sequence and timing of the displays they will receive when an incoming ACD call commences ringing at the Agent Position and when the agent answers the call. Only one sequence is specified and the same set of displays will be generated at time of ringing and answer.

The following table indicates which displays can be selected and the Display ID Code for each:

Connection Display Codes

Display ID Code	Display Description
3	Time in queue (merged display)
4	Time in queue (stand-alone display)
5	Pilot number text (gate ID)
6	ANI digits received
7	Unused
8	Answering split name
9	Current queue depth and longest call time
10 thru 29	Reserved

A maximum of 5 displays may be selected. A duration from 3 to 9 seconds is assigned to each display and is specified using the setup Tally-Oh code. As an option, the final display can be set to display for the remainder of the ACD call by entering a time of 0 seconds (hereinafter called the “permanent display”). A Tally-Oh code exists which can reset the permanent display and allow the standard conversation timer to display.

Three Tally-Oh codes have been added to support the Connection Displays feature. These codes are available to all ACD Agent Positions and cannot be restricted. The connection display sequence and timing is stored per agent-log-on ID basis and will be retained from one logon session to the next.

Connection Display Tally-Oh Codes

Code	Format	Description
021	021DS# -or- 021DDS#	Setup the display sequence and timing for the current agent. D = single-digit display code (3 thru 9) DD = double-digit display code (10 thru 29) S = number of seconds to display (3 thru 9 seconds, or 0 for permanent display) The DS or DDS pairs may be repeated up to 5 times (Note 2), the '#' digit must follow the final entry. A very long entry might look like: Tally+021-44-54-64-74-84# (pluses and minuses are not actually entered, they are shown here for visual separation only)
022	022#	On-line help to show a series of 4-second displays describing the available displays codes.
023	023DS# -or- 023DDS#	Demand display of the specified code. D = single-digit display code (3 thru 9) DD = double-digit display code (10 thru 29) S = optional number of seconds to display (3 thru 9 seconds, default = 4)

Note 2: If you repeat more than 5 times, the 6th and subsequent pairs will be ignored.

Time in Queue Merged Display

When using display code 3, time in queue merged display, the actual time in queue will be merged with the previous display if possible. The previous display must be 11 characters or shorter for the merge to be allowed (10 or shorter if the time in queue was over 10 minutes). For example, if the agent entered Tally "021-58-38#" the request is to display the Pilot number text for 8 seconds and merge the time in queue on the end of the display. If the Pilot number text was "SALES" then the display would show "**SALES 0:48**" for 8 seconds. On the other hand, if the Pilot number text was "APPLICATIONS" (12 characters) then the first display would be "**APPLICATIONS**" for 8 seconds followed by "**TIME IN Q 0:48**" for 8 seconds.

Time in Queue Stand-alone Display

Use display code 4 to force the time in queue display to always be displayed alone, that is, not merged with the previous display even when space permits.

Permanent Display

Use a time code of 0 seconds to indicate that the final display should remain on the display for the duration of the ACD call. Tally-Oh code 021# can be entered at any time to reset the display to the default information. For example, if the agent entered Tally "021-42-60#" the time in queue will be displayed (alone) for 2 seconds (code 42) followed by the ANI digits being displayed for the remainder of the ACD call (code 60). All digits beyond the permanent display will be ignored.

- Note:** The permanent display option does not work for the time in queue merged display (code 3).
For example, consider the following cases:
- Case where Tally “021-69-30#” is entered
Only the ANI digits will be displayed for 9 seconds. The time in queue will not be merged or displayed.
 - Case where Tally “021-69-40#” is entered
The ANI digits will be displayed for 9 seconds followed by the time in queue for the remainder of the ACD call.

2. Use of PCPro Commands

With this method, the connection display setting can be viewed and customized on a Logon ID basis.

For the procedure, see <Programming for Connection Display Control from PCPro> in the Programming section.

SERVICE CONDITIONS

<Common Conditions>

1. A maximum of 5 displays may be set up with each display being from 3 to 9 seconds.
2. A permanent display (time code of 0 seconds) must be the last display in the setup string. Any subsequent codes entered will be ignored.
3. When more than 5 displays are coded only the first 5 will be displayed, the remaining entries will be ignored.
4. The same display sequence and display timing are provided both when the Agent Position begins ringing with an incoming ACD call and when the agent answers the incoming ACD call. The permanent display is only supported after the agent answers the phone and will be provided as a 9-second display when displayed during the ringing phase. This is a security feature so that potentially private numbers are not left on display at an unoccupied position.
5. Even a permanent display will be automatically reset at the conclusion of the ACD call.
6. You can reset the custom connection display setting to the factory defaults by:
 - Entering Tally-Oh code 021#, or
 - Choosing “Set Initial Value” for the Connection Displays Setting parameter (**Note 3**) of the ACDLOG command. The initial values displaying is 4 seconds for the following:
 - Pilot number text (gate ID)
 - Answering split name
 - Time in queue (stand-alone display)
 - ANI digits received:

Note 3: Available since FP95-112 V2.

7. This feature is available to all agents via Tally-Oh codes. The feature itself cannot be restricted.
8. Display timing accuracy is limited to ± 2 seconds from the time indicated for each display.

<Conditions Specific to Connection Display Control from PCPro>

Note: The following conditions are applicable since FP95-112 V2.

Note: The Connection Display Control from PCPro feature is not available in North America.

1. To enable connection display control from PCPro, you need to make the following setting for the ACDP node:
ASYDL, SYS1, Index 1199, Bit 2=1
2. When ACDP Retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), this feature is not available.
3. The interaction of this feature with FLEXIBLE SPLIT MEMBERSHIP - ACD [F-40A] is as follows:
 - When FLEXIBLE SPLIT MEMBERSHIP - ACD [F-40A] is enabled:
If you attempt to change the currently logged-on agent's connection display setting with the ACDLOG command, you will fail. The process is terminated in error.
 - When FLEXIBLE SPLIT MEMBERSHIP - ACD [F-40A] is disabled:
You can change currently logged-on agent's connection display setting with the ACDLOG command. The change will be effective on the next logon.
4. Priority is equal between the configuration with Tally-Oh codes and the configuration with PCPro; existing data is overwritten with new data, regardless of the method used.

PROGRAMMING

<Common Programming>

The following steps are required for both control methods - control by entering Tally-Oh code on an Agent Position and control by using PCPro commands from a maintenance PC.

STEP 1: ACDPLT - Assign name corresponding to the pilot number.
NAME: (Up to 20 characters)

STEP 2: ACDTG - Assign name corresponding to the route number.
NAME: (Up to 20 characters)

STEP 3: ACDSPL - Assign the name corresponding to the split.
NAME: (Up to 20 characters)

Note: Since NAME programmed in ACDPLT and in ACDTG may be duplicated to display the trunk incoming call, assign NAME in one of those two commands, and skip NAME parameter in the other command.

Note: When MIS is used, name corresponding to the pilot number and name corresponding to the split are programmed from MIS terminal.

<Programming for Connection Display Control from PCPro>

The following steps are required only for connection display control from PCPro:

STEP 1: ASYDL - Assign the following system data to enable this feature.
SYS1
Index 1199
Bit 2=1 (Connection Display Control from PCPro: Enabled) **Note 4, Note 5, Note 6**

Note 4: Available since FP95-112 V2.

Note 5: This system data is not available in North America.

Note 6: This setting is required for ACDP node.

STEP 2: ACDLOG - Configure the following connection display-related parameters for each Logon ID code.
Connection Displays Setting: Change Configuration **Note 7, Note 8**

Note 7: Available since FP95-112 V2.

Note 8: Note the following points for this parameter:

- You can reset the settings to the factory defaults by choosing "Set Initial Value."
- When you add a new Logon ID code, the following default connection display setting is automatically configured for the ID code:

Number (Order of Display Items)	Code (Display Item)	Time (Display Duration)
1	5: Pilot number text (gateID)	4 sec
2	8: Answering split name	4 sec
3	4: Time in queue (stand-alone display)	4 sec
4	6: ANI digits received	4 sec

Sequence of Display Processing: (A maximum of 5 display items can be specified in the list.)

Code: Display ID code **Note 9**

- 3: Time in queue (merged display)
- 4: Time in queue (stand-alone display)
- 5: Pilot number text (gateID)
- 6: ANI digits received
- 8: Answering split name
- 9: Current queue depth and longest call time

Time: Display duration in seconds **Note 10**

- 0: Permanent Display
- 3: 3 sec
- 4: 4 sec
- 5: 5 sec
- 6: 6 sec
- 7: 7 sec
- 8: 8 sec
- 9: 9 sec

Note 9: “Time in queue (merged display)” cannot be defined as the first element of the connection display sequence.

Note 10: No display items can be added after the item that is set to be displayed permanently (Time=0).

C-205A CONSULTATION HOLD RELEASE - ACD

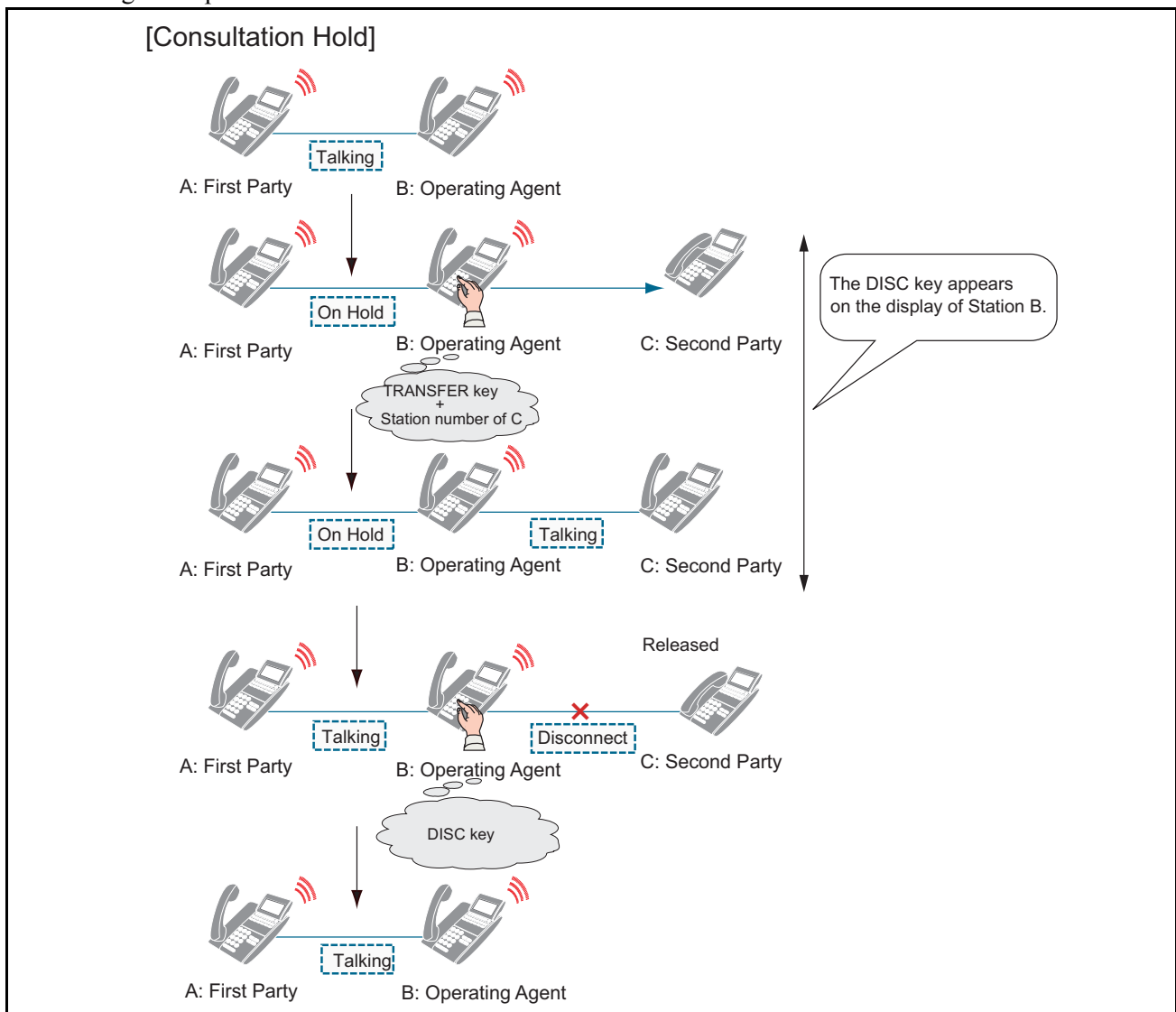
GENERAL DESCRIPTION

The Consultation Hold Release - ACD feature allows an ACD agent, talking with the second party while placing the first party on Consultation Hold [C-17], to disconnect the current call and return to the original call without waiting for the consulted party to hang up.

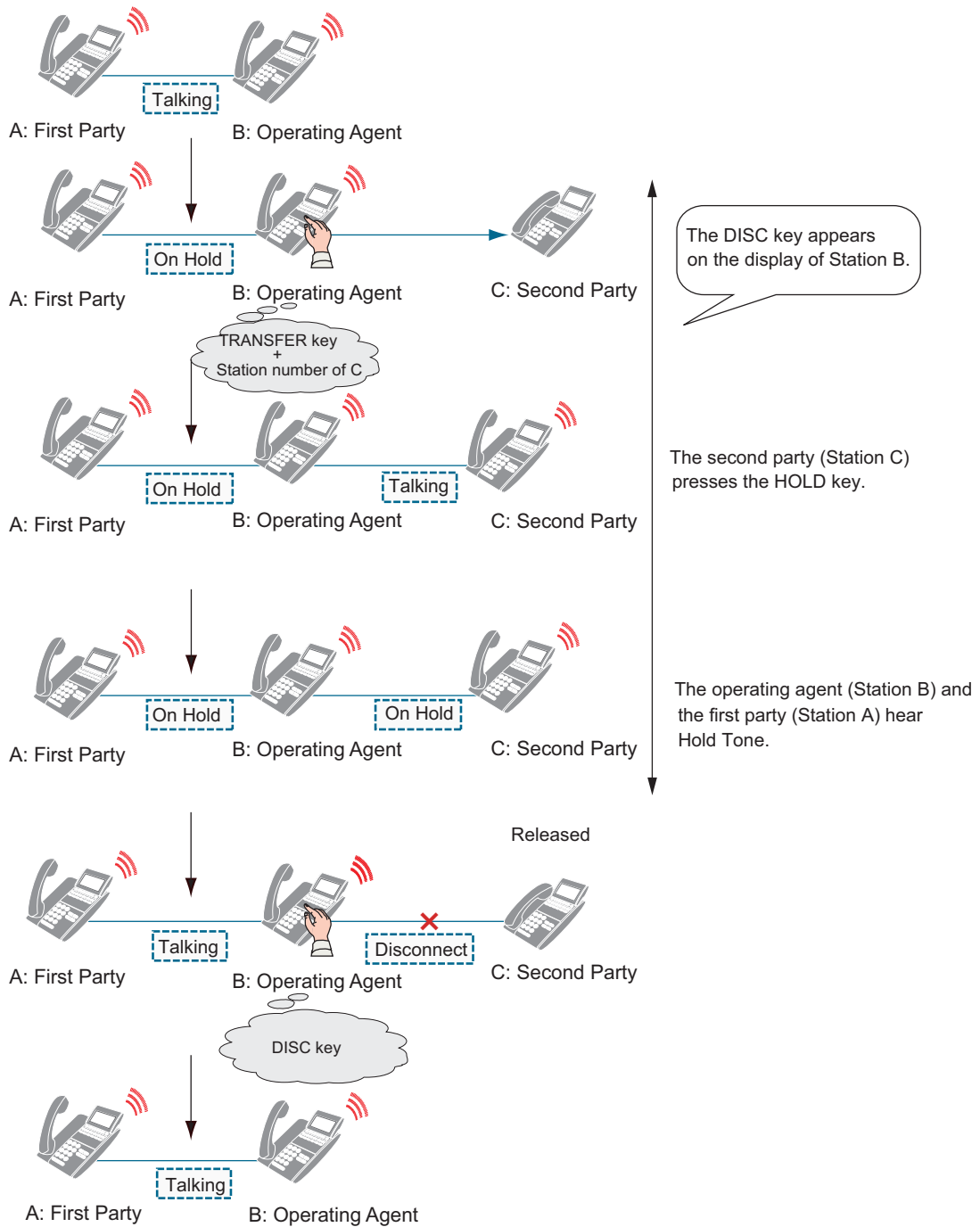
Consultation Hold means to place a call (first call) on hold using switch hook flash to make a consultation call (second call) to another party before Call Transfer [C-11] (with the **TRANSFER** key.)

- In a state of Consultation Hold: Original caller placed on hold
- Making Call Transfer: Agent transferring the call

The following is the procedure for this service:



[Consultation Hold - Case where Operating Agent is placed on hold]



OPERATING PROCEDURE

1. The operating agent for this feature presses the **DISC** key.
2. The connection with the second party is ended, and the operating agent starts talking with the first party.

Note 1, Note 2

Note: [Term Definition]
Operating agent (for this feature):

An agent who places the current call on hold to make a consultation call to another party. Referred to as Station B in the illustrations above.

First party:

A party, who talks with the Operating agent first and is put on hold during a consultation. Referred to as Station A in the illustrations.

Second party:

A party to whom the operating agent makes a consultation call by using the **TRANSFER** key + his/her station number. Referred to as Station C in the illustrations.

Note 1: When a consultation call is made via a station line, the ending of the connection depends on the Telephone Equipment Class (TEC) of the second party. If either TEC 12 (Desktop terminal) or TEC 18 (Software (Virtual) Line (for configuring Multiple Lines)), the second party's phone will be disconnected; otherwise, it will give Reorder Tone (ROT).

Note 2: When a consultation call is made via a trunk line, the second party's phone will be disconnected.

SERVICE CONDITIONS

<Important Notices>

1. For assignment of the related function to a Soft Key of a Desktop terminal, only SN = 5 (Consultation Hold) can be specified for the ADSL command (Desktop terminal LCD Soft Key data).
2. This feature is available for both ACD and non-ACD calls.

<Interactions with Other Features>

1. When a consultation call is ended with the **DISC** key, the supervisor position resumes monitoring of the original two-party call.

The following are examples of monitoring procedures:

[Conditions]

- An operating agent is currently monitored by a supervisor position.
- The supervisor position is monitoring a consultation call between the operating agent and the second (consulted) party.

- a. When the operating agent disconnects the second party with the **DISC** key to return to the original call, the supervisor position can monitor the call between the operating agent and the first party.
- b. If the operating agent interchanges the first and second parties with the **TRANSFER** key, the supervisor position hears a hold tone. After that, when the operating agent disconnects the call in progress with the **DISC** key and returns to the call on hold, the supervisor position can resume monitoring the call between them.
- c. When the second party places the current call on hold by manual operation, the supervisor position hears a hold tone. (The call transfer destination cannot be placed on hold via OAI (SCF 12.)) After that, when the operating agent disconnects the second party with the **DISC** key and returns to the call on hold, the supervisor position can resume monitoring the call between them. **Note 3**

Note 3: When both the original and consultation calls are placed on hold, the operating agent cannot interchange them with the **TRANSFER** key.

<Hardware/Software>

1. After disconnected by an operating agent, a station allowed to make a call using Prime Line (AKYD/AKYD_T, S = 0: Off-hook suppression is disabled) will become in a state ready to make a call (giving Dial Tone), while agent/supervisory positions and Softphones will not.
2. This feature can be used on agent and supervisor positions.
3. This feature is not available for Softphones since they are not supported for Soft keys.

<Interactions with Networks>

None

<Conditions Specific to This Feature>

1. When an operating agent presses the **DISC** key on an active call, the current talking party will be disconnected (see the illustration of [Consultation Hold].) If an operating agent presses the key on a held call, the last party the agent talked with will be disconnected (see the illustration of [Consultation Hold - Case where Operating Agent is placed on hold].)

Note: If you interchange the active call and the held call by using the **TRANSFER** key, the call to be disconnected by the **DISC** key will also be changed. (The **DISC** key does not always disconnect the first party.)

<Other Conditions>

None

PROGRAMMING

STEP 1: ASYDL/ASYDN - Assignment of System Data for LDM/for NDM

SYS1

Index 803

Bit 1=1 (Consultation Hold Release: Enabled) **Note 4**

Note 4: This system data can also be specified for an FCCS Network with ASYDN command.

Index 1240

Bit 1=1 (Consultation Hold Release - ACD: Enabled)

STEP 2: ADSL/ADSLN - Assignment of Dterm Soft Key on LCD/LCD for NDM

SKP=0 (Soft key pattern shared in a system) **Note 5**

SN=5 (Consultation Hold)

SKN: Soft key number [0-15] **Note 6**

FKY=131 (Disconnect)

Assign the Consultation Hold Release feature to a Soft Key (Line/Feature Key) on a Desktop terminal.

Note 5: If you specify a number other than "0" for SKP (soft key pattern), you need to change the SKP of the applicable Desktop terminal by using the ADKS command, which causes the terminal to restart.

Note 6: Assign "0" to unused SKN.

STEP 3: AFDD/AFDDN - Assignment of Function Display Data/Function Display Data for NDM

FKY=131 (Disconnect)

DISP: Display Message on LCD [Maximum six digits]

Assign soft key indication for this feature displayed on the LCD of a Desktop terminal. If this setting is omitted, the default feature name is shown (Default Display of FKY=131: DISC)

D-133A DO NOT DISTURB - SPLIT - ACD

GENERAL DESCRIPTION

The Do Not Disturb feature disables queuing when there are no agents logged on to the split. When the last agent logs off the split will be automatically placed in the Do Not Disturb mode. Although similar to Night Mode in some respects this feature does not activate the **NIGHT** lamp. Incoming calls cannot queue to this split as long as it is in the Do Not Disturb mode. As soon as an agent logs in the Do Not Disturb mode is canceled and queuing is enabled. See also “STRANDED CALL ROUTING - ACD [S-108A]” for how to process calls which were left behind in queue when the last agent logs off.

If the Do Not Disturb mode is active any Call Control Vector (CCV) step that would cause a call to be queued to the split is ignored. The CCV processing will continue until a queuing or transfer step is reached. Any Pause and Announcement steps that are encountered, between the ignored queuing step and the subsequent queuing/transfer step, are also ignored.

After the call is queued to another split or transferred to a Non-ACD number, the CCV processing will continue in a normal fashion, with every Pause and Announcement step processed normally.

OPERATING PROCEDURE

The DO NOT DISTURB option is implemented through the ACDSPL PCPro command. The command data is on a split-wide basis.

The following example illustrates how the feature functions.

Do Not Disturb CCV Example

Step	CCV INSTRUCTION (CCVACT)	DETAIL DATA (CCVACT DATA)
1.	10 (QUEUE TO SPLIT)	5
2.	1 (PAUSE)	15
3.	2 (ANNOUNCEMENT)	3
4.	1 (PAUSE)	22
5.	8 (CONDITIONAL QUEUE TO SPLIT)	12
6.	2 (ANNOUNCEMENT)	4

1. Split #5 has been programmed to be placed in DO NOT DISTURB mode when agents are not logged on to the split. There are no agents logged on to Split #5.
2. A call to an ACD pilot number processes the CCV shown above.
3. The Queue to Split #5 in step #1 is ignored, because Split #5 is in DO NOT DISTURB mode.
4. The Pause in step #2 is ignored because the call was not queued during step #1.
5. Also the Announcement in step #3 and the Pause in step #4 will be ignored since the call was not queued.

6. The conditional Queue to Split #12 is processed. The conditions for queuing are satisfied, and the call is queued to Split #12.
7. The processing of this CCV will continue from step #6 in a normal fashion, with all Pause and Announcement steps processed.
8. The first agent logs on to Split #5 and is in Work mode. A call to an ACD pilot number now enters the same CCV. The call will queue to split 5 even though the agent is not yet available. The caller will also perform the pause from step #2 and hear announcement #3 assuming the agent is not available.

SERVICE CONDITIONS

Both a Queue to Split and a Conditional Queue to Split instruction will be ignored if the target split is in DO NOT DISTURB mode.

PROGRAMMING

ACDSPL - Make Do Not Disturb - Split service available for each split
DNDS: 0/1 = Not in service/In service.

D-171A DTMF SENDING DURING MONITORED STATUS - ACD

GENERAL DESCRIPTION

This feature enables Agent Positions to send DTMF tones with SCF (FN=20) while they are on the phone with the following parties, even though their calls are monitored, barged by a Supervisory Position, or connected in a three-way. **Note 1**

- a station
- a trunk
- a forwarding destination station during the station call being on hold
- a forwarding destination trunk during the station call being on hold
- a forwarding destination station during the trunk call being on hold
- a forwarding destination trunk during the trunk call being on hold

Note: This feature is not available in North America.

Note: When the forwarding destination is on hold, the forwarding station and forwarding destination station can send DTMF tone. DTMF tone cannot be sent from a station on hold, a trunk on hold, or a forwarding destination trunk.

Note 1: Conference calls (8/16/32 parties) are not supported.

OPERATING PROCEDURE

None

SERVICE CONDITIONS

<Important Notices>

1. The following phones can be specified as SCF (FN = 20) 1st Party (DTMF sending terminal):

- Digital terminal
- IP terminal
- Softphone
- SIP multiple line terminal
- PS

Note: Only My Line can be specified as SCF (FN = 20) 1st Party. Specify My Line as SCF (FN = 20) 1st Party even though on-going call uses a Sub Line. If an unsupported terminal such as SIP station, Analog MG and Trunk, or a Sub Line is specified as SCF (FN = 20) 1st Party, the return value is as below.

Error type	Error description
10H	0212H (1st Party terminal type error)

2. DTMF receiving terminals (including a Supervisory Position in monitoring status) are as follows.

[Station]

- Digital terminal
- IP terminal
- Softphone
- SIP multiple line terminal
- PS
- Analog MC
- Hot Split (Analog IVR)
- SIP station

[Trunk]

- MG(BRI) [Propriety Protocol/SIP]
- MG(PRI) [Propriety Protocol/SIP]
- MG(SIP)
- MG-COT
- MC&MG-COT
- CCIS over IP (Peer-to-Peer) **Note 2**

Note 2: In case of CCIS over IP (Peer-to-Peer), the following conditions are applied:

- the usable station terminals and trunks for the opposite party in counter office are the same as the listed above
- This feature is available under connecting conditions other than monitoring because CCIS over IP (Peer-to-Peer) does not support the monitoring feature.

3. FCCS network supports only Peer-to-Peer connection.

4. If a Supervisory Position in monitoring status is specified as SCF ($FN = 20$) 1st Party, Telephony Server sends Return Error (the value described below) to UAP.

Error type	Error description
10H	0310H (1st Party status error)

5. DTMF is sent to all opposite parties (including a Supervisory Position in monitoring status) in the same manner as manual operation.

<Interactions with Other Features>

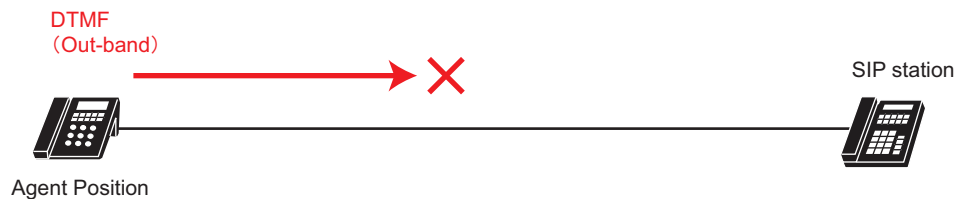
1. This feature is available under Single-path monitor and Silent (Multi-path) monitor connections.

Note: Starting/ending of single-path monitoring in the middle of sending DTMF causes audio breakup.

2. This feature is not available for the Hotel Service.

<Hardware/Software>

1. SIP stations are possible to play only In-band DTMF (Voice data). Therefore, use In-band DTMF signaling for a SIP telephony network. Agent Positions cannot send DTMF tones to a SIP station without the mediation of Media Gateways when on the phone with it.

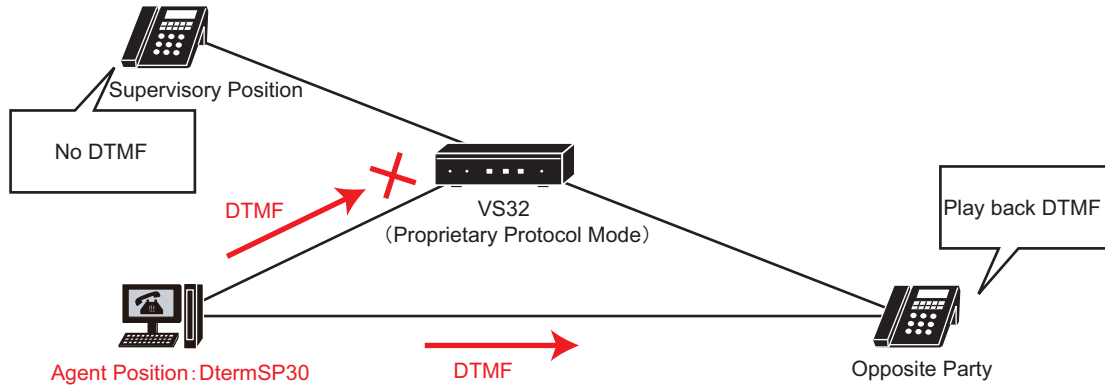


Agent Positions can send DTMF tones to a SIP station via Media Gateways which are set to In-band.

2. Use Soft Client SP350 when using Softphone. Using DtermSP30 causes the phenomena described below in sending/playing DTMF tones when the Agent Position is monitored or barged by the Supervisory Position.

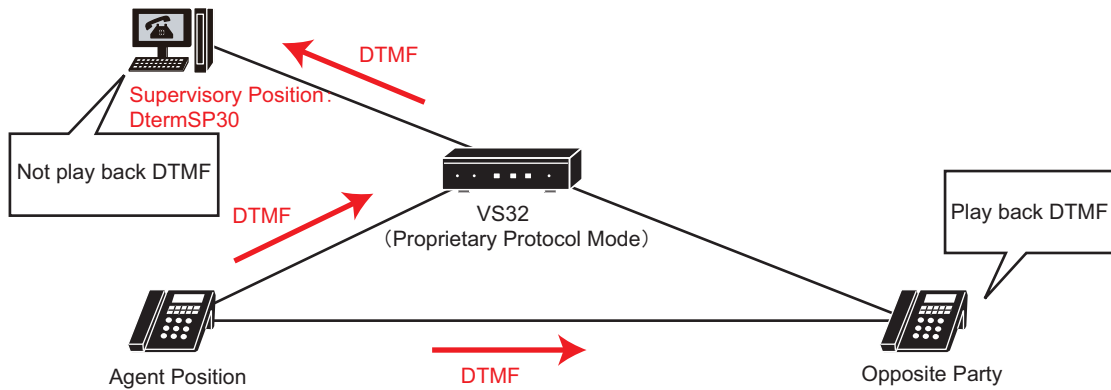
a. Silent monitor (Multi-path)

If DtermSP30 is used for an Agent Position, it does not send DTMF tones to VS32. Therefore, the Supervisory Position does not receive DTMF tones.



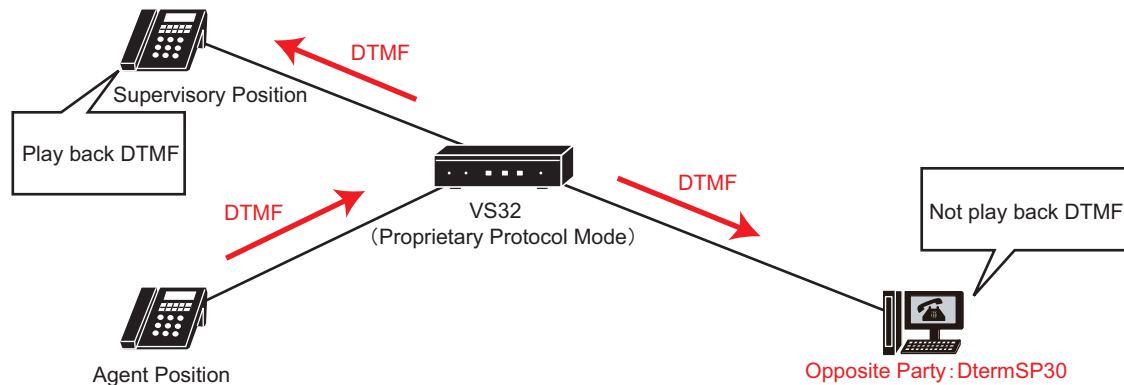
b. Single-path/Silent monitor (Multi-path)

If DtermSP30 is used for a Supervisory Position, it does not play back DTMF tones received from VS32.



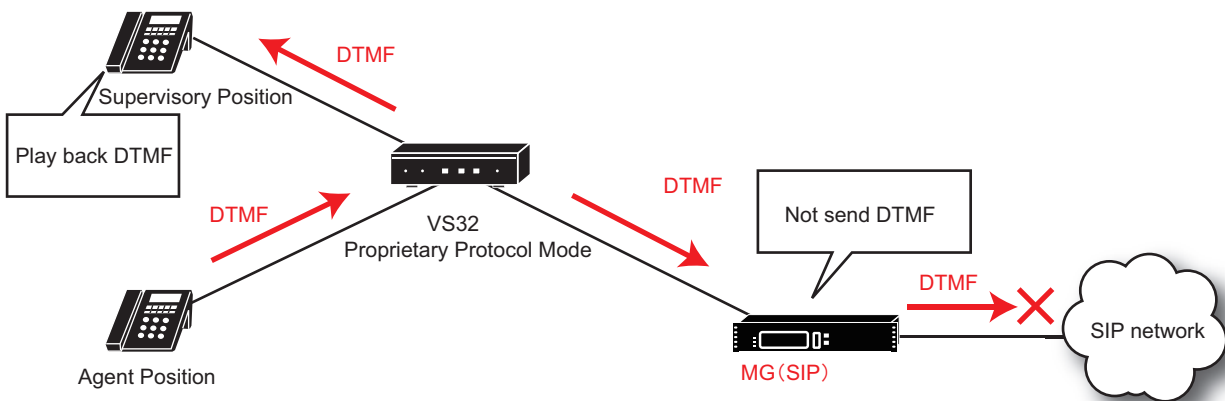
c. Barging after Silent monitor (Multi-path)

If DtermSP30 is used for an opposite party, it does not play back DTMF tones received from VS32.



3. Use the firmware listed below for MG (SIP).
 If versions other than those listed below are used, the MG(SIP) will not send DTMF tones to SIP network when a Supervisory Position barges into a call after Silent monitor (Multi-path monitor).

Equipment		Supported firmware version
MG (SIP)	Software-based MG-SIP	SP-4085 MGSIPVM PROG-E issue 1 or later
		SP-4080 MGSIPVM PROG-D issue 1 or later
		SP-4078 MGSIPVM PROG-B issue 1 or later
	MG-SIP128 [MG-128SIPMGL-A]	SP-4089 MGSIP(MM) PROG-A issue 1 or later
	MG-SIP128 [MG-128SIPMGJ-B/MG-128SIPMGJ]	SP-4032 MGSIP PROG-E issue 1 or later
	MG-SIP128 [MG-128SIPMGG-B/MG-128SIPMGG]	SP-4058 MGSIP PROG-J issue 1 or later
		SP-4051 MGSIP PROG-G issue 1 or later
	MG-SIP96	SP-3987 MGSIP PROG-B issue 3 or later
	MG (SIP) 16 [MG-16SIPMGA]	SP-3905 MG SIP(16) PROG-A issue 5 or later
MG (SIP) 16 [SCA-16SIPMGA]	SP-3905 MG SIP(16) PROG-A issue 5 or later	
SCA-16SIPMG (US)	SP-3988 MG SIP(16) PROG-G issue 3 or later	



4. Only VS32 (Proprietary Protocol Mode) is available as a Conference Trunk.
 5. When a terminal sends DTMF, its LCD displays digits of sent DTMF.

Note: In case of PS, its LCD does not display digits of sent DTMF.

PROGRAMMING

* DTMF Play Mode is assumed to be set in the following descriptions. For more detail about DTMF playback, refer to Chapter 3 BUSINESS FEATURES - RTP Information Output [R-58] - DTMF control.

[Registration]

[1] ASYDL/N (System data)

SYS1

Index 1187

Bit 7=0 (SCF ($FN = 20$) monitor support is enabled)

Note: There is no need for initialization and reconnection of Application after Office Data setting.

E-6A EMERGENCY/RECORDER - ACD

GENERAL DESCRIPTION

In an emergency, this feature allows a conversation between an Agent and an incoming ACD caller to be recorded, using a customer-provided recording device, and simultaneously permits a monitor connection between the ACD call and a supervisor by pressing **EMER** key. Activation of this feature, while on an ACD call, automatically places a call to a pre-programmed number. This number can be any station in the System, an individual supervisor, or a pilot number for a split of supervisors. If the target extension of the emergency request has display capabilities, then display information will accompany the call, identifying it as an emergency call. This feature is not available when a supervisory position is logged off, away from the desk or talking on an ACD call.

OPERATING PROCEDURE

To place an emergency request:

The following example assumes that an emergency request is sent to the pilot number of a split of supervisors.

Note: The destination, the pilot number of a split of supervisors, is allowed. For details, see **MULTIPLE SUPERVISORS - ACD [M-79A]**.

1. While engaged in an ACD call, the Agent presses the **EMER** key, the Agent position's display shows ***EMERG [SUPV PILOT#]***, and the associated lamp is lit. "SUPV A" is the name associated with the split of supervisors.
2. If no supervisor is available to take the call, a call waiting indication is provided to each supervisor position. The first supervisor to respond will silently monitor the Agent and the calling party.
3. Upon the assignment of the call, the supervisor's display shows ***AGENT [EXT#]***, or if Agent names are used, ***EMERG [NAME]***.
4. When a supervisor answers, the Agent position's display will show ***EMERG ANSWERED*** and the associated lamp will wink. When the Agent releases from the call, or the supervisor releases from the monitor, the Agent position's lamp will go off.
5. The Agent and the calling party are never disconnected while the supervisor's position is ringing.
6. An emergency recorder is connected as soon as the supervisor starts ringing and is disconnected if the supervisor joins the call in a three-way conference by pressing the **MON** key. The recorder is also disconnected if the supervisor releases from the monitor using the **RELEASE** key. **Note 1**
7. If the Agent releases from the call while the call is being recorded, Reorder Tone is sent out to the ACD trunk.

Queuing of emergency requests:

1. Emergency requests may be routed to a split of supervisors or an individual supervisor. In the case of a split of supervisors, multiple emergency requests can be queued. Recording starts from the moment the ACD call terminates to the supervisory position (not recorded while the call is in queue).
2. For emergency split queuing, to ensure the fastest processing, the only CCV steps that will be executed are Queue to Split, Conditional Queue to Split, Pause, End CCV, and the request will be queued at the highest priority.

Note 1: If the supervisor performs one of the following operations before three-way conference (when "BARGE?" is displayed), the monitor is abandoned.

- Dial “1” + “#” or “1” + “n” ... “n” + “#”
- Press MON key again
- No operation for 30 seconds

SERVICE CONDITIONS

1. Emergency requests can be issued only to an ACD line of a target station such a Supervisory position.
2. Emergency requests are only allowed while talking on an ACD line. Requests while on a non-ACD line will be ignored.
3. Recording equipment can only be used in a stand-alone system where no IP devices is used.
4. This service requires the three-conference trunk. When you record conversations, VS32 cannot be used.
5. Three-way conference trunk in the node accommodating Agent positions is used. When the three-way conference trunk has no idle port, ***EMERG BUSY*** appears on the LCD of the Agent position and the monitoring is not performed.
6. During an emergency, either the Agent position or the Supervisory position can display the identification of the original ACD call and the queue depth by pressing the **LOGON** key. Refer to “CALLING PARTY IDENTIFICATION-ACD [C-70A]” for additional information.
7. The directory number used for emergency requests may not contain a “*” or a “#”.
8. Supervisory positions are always rung in Manual Answer for the EMERGENCY/RECORDER feature, regardless of their answer mode. This is to guard against unattended Supervisory positions being left in Ready mode.
9. Supervisory positions may be members of a split when it is necessary for them to handle regular split calls. In this case, emergency requests should be routed to one Supervisory position’s non-ACD line. However, the Supervisory position will not be able to barge. Barge attempts are only allowed from the ACD line.
10. Emergency requests are not allowed during an assist call.
11. If the emergency request is sent to an individual line and that line is busy, the Agent position’s display will show ***EMERG BUSY*** and the emergency lamp will be turned off. The Agent position may try to send the emergency request as many times as necessary during the call.
12. The Supervisory position’s monitor will not be updated for transfers or subsequent calls as in the MONITORING - ACD SUPERVISOR-ACD [M-28A] feature. At the completion of the emergency call, the Supervisory position will be released.
13. If an Agent position presses the **EMER** key, while already being monitored by a Supervisory position for a non-emergency situation, the Supervisory position will be released from the monitor and the emergency will continue as usual. Emergency requests are not allowed during a Supervisory position’s three-way barge or any other three-way connection in progress at the Agent position.
14. If an Agent position presses the **EMER** key after answering an audible alert (Recall) that indicates unsuccessful call transfer (**Note 2**), the emergency request is not sent.

Note 2: For details, see “SERVICE CONDITIONS” of “CALL TRANSFER TO SPLIT QUEUE - ACD [C-67A]”.

15. Emergency requests cannot be routed to operators, or destinations over CCIS. Pilot numbers for group hunts is available as the destination of Emergency requests call, but the request call is not hunted to the other members.
16. The emergency recorder is customer-provided equipment. Typically, it is a dictation machine with remote playback capabilities. This equipment is optional and all other feature operations work even if a recorder is not provided.
17. Due to the emergency nature of the call, audible beeps are not provided to the parties even though the call is being recorded.
18. The emergency call is still routed to the supervisor even if the recording equipment is not available. The recording equipment must be idle at the beginning of the emergency call.
The recording equipment will not be connected in the middle of the emergency call if the equipment was busy at the beginning of the emergency call and then subsequently became idle. One circuit is required as an interface between the emergency recorder and the System; this circuit can be port 0 or port 1 of an 8 COTBF or 16 COTBD circuit card or one circuit of a TLT circuit card.
19. When an ACD Agent Position is talking while a Supervisory position is monitoring the Agent position and a Hot position with Standard SIP-IVR is in a call hold state, the Supervisory position is not in the monitoring state but is set ready to start monitoring (The MON/BARGE lamp lights). When the held call on a Hot position with Standard SIP-IVR is released, the Supervisor position starts monitoring the Agent position.
20. When the trunks connecting the recording equipment are all busy, the trunk is not seized, but the emergency call is still routed to the supervisor.
21. The playback controls of the recorder normally require DTMF signals.
22. Any trunk-side connectable recording device may be provided, but a device which has playback controls is strongly recommended.
23. Most recording devices impose some mechanical delay before recording begins.
24. Even when the recording equipment is not available, reorder tone is sent out to the ACD trunk when the agent is released.
25. The recording equipment can be shared among agent position splits, but it is recommended to prepare several pieces of equipment per system.
26. For the agent position where MONITORING - ACD SUPERVISOR-ACD [M-28A] is available, the directory number used for emergency request can be programmed individually on each agent position.
27. Recording type number is assigned on an agent position split basis.
28. When Emergency requests is routed to an individual supervisor, the call is distributed to the supervisor in Work Mode or Break Mode. While, Emergency call to a split of supervisors is not distributed to the supervisors in those modes.
29. When emergency request call is routed to a specified Split of Supervisors, the emergency request call cannot be canceled by pressing the EMER key. Release operation of the appropriate Supervisor or the monitored Agent can cancel the emergency request call.

SERVICE CONDITIONS (When Using IP Devices/In ACD-FCCS Configuration)

1. Recording equipment cannot be used.
2. VS32 is required for this feature. For the firmware version available for this feature, see [Equipment/Terminals Accommodating in ACD/OAI System](#) in Chapter 2.
3. VS32 in the node accommodating Agent positions is used. When the VS32 has no idle port, “HELP BUSY” appears on the LCD of the Agent position and the monitoring is not performed.
4. When this feature is used in an environment where IP devices are used or in an ACD-FCCS configuration, some system data settings are required. Also, in an environment where IP devices are used or in an ACD-FCCS configuration, an audio breakup occurs at the start/end of the monitoring. To prevent this problem, enable Silent Monitor (Multi-path Monitor). For details, see the Programming section.

Note: For connections including terminals/equipment does not support Silent Monitor (Multi-path Monitor), Single-path Monitor is provided.

Note: In an ACD FCCS network containing DTI-FCCS, monitoring functions cannot work properly when Silent Monitor (Multi-path Monitor) connection is enabled. In that case, set “0” for ASYDN, SYS1, Index 874, Bit 0 to disable Multi-path Monitor connection.

Note: When using Silent Monitor (Multi-path Monitor) connection, voice is transmitted from both the terminal and the trunk. Therefore, when collecting a call log by IP logger, it may not be collected normally while monitoring. In this case, this function must be disabled when using an IP logger that does not support this function.

5. Monitoring is available for an Agent position in a two-way conversation. When an Agent position is in the following state, monitoring are not available and “HELP BUSY” appears on the LCD of the Agent position.
 - Agent position is placing a call on hold
 - Agent position is in three-party conference
 - Agent position is transferring a call
 - Agent position is being monitored
6. When an Agent position being monitored by a Supervisory position places the monitored call on hold or goes switch hook flash, the Supervisory position hears MOH. In this case, the Supervisory position needs to release the call once to start the monitoring again.
7. When an FCCS link block/IPPAD link block occurs at the start of a monitoring, “HELP BUSY” appears on the LCD of the Agent position.
8. When a Supervisory position which is monitoring an Agent position is an IP terminal:
When IPPAD link block occurs while a Supervisory position is being called by a reserved Agent position, the Supervisory position cannot answer the monitor call and the ringing continues. In this case, the Supervisory position needs to repeat the answering operation until any idle IPPAD is found.

Note: The ringing continues until the Agent position presses the **EMER** key.

9. In the case of Single-path Monitor connection, when starting or stopping a monitoring, silence occurs for a moment because the speech path is reestablished.

10. When either of the monitored Agent position or the calling party is an IP terminal, loudness level according to IPPAD data may change on the ACD call monitored by Supervisory position (because the voice path is reestablished). Adjust the loudness level of IPPAD data appropriately. Refer to the Data Programming Manual - Business Chapter2 ASSIGNMENT OF BASIC OFFICE DATA “18. PAD/EC Control IP/PHC Support”.
11. When this feature is used in an IP network, an identical voice compression format needs to be used in the network.
12. When an Agent position being monitored cannot activate Automatic Idle Return [A-69] (because the opposite party is an analog trunk) or is talking with its Non-ACD line:
If the opposite party (calling party) releases the call during a monitoring, the Supervisory position continues hearing MOH until the Agent position releases the call.
Even when an Agent position can activate Automatic Idle Return [A-69], the Supervisory position may hear MOH if the opposite party (calling party) releases the call during a monitoring.
13. When a communication failure, including equipment failure, occurs in ACDP node during a monitoring:
Even when the monitored Agent position or the opposite party (calling party) releases the call, the Supervisory position is not released but hears Music-On Hold. Supervisory position can be released by going off-hook but MON lamp still remains flashing. **MON/BARGE** lamp goes out by pressing **MON/BARGE** key twice after recovering from a communication failure.
When ACD system recovers from a communication failure, the **MON/BARGE** lamp goes out automatically.
14. When a communication failure, including equipment failure, between a calling party side node and an Agent position side node in an FCCS network occurs during a monitoring:
Even when the monitored Agent position/calling party releases the connection, the **MON/BARGE** lamp still remains flashing on Supervisory position. In this case, the **MON/BARGE** lamp goes out by pressing the **MON/BARGE** key twice.
15. When a failure occurs in an Agent position being monitored by a Supervisory position or the opposite party, the Supervisory position continues monitoring and hears RTP warning tone (Supervisory position continues hearing MOH when the Supervisory position was hearing MOH before the occurrence of the failure) or no tone. In that case, Supervisory position can exit the monitoring by releasing the connection.
16. While an Agent position being monitored by a Supervisory position is in a connection with a destination party or calling party through a Consultation Hold:
When either of the two parties hearing Music On Hold (MOH) releases the connection, the monitoring is canceled.
17. When an agent position being monitored presses ASSIST key, the monitoring is canceled and the agent position places an assistance call to a supervisory position predesignated as an assistance call destination. However, the agent occasionally fails to place an assistance call and “MONITOR BUSY” is displayed on the LCD. In that case, press ASSIST key again.

CAUTION: The use of a monitoring, recording or listening devices to eavesdrop, monitor or record telephone conversations or other sound activities, whether or not contemporaneous with its transmission, may be illegal under certain circumstances and laws. Legal advice should be sought before implementing any practice that monitors or records any telephone conversation. Some federal and state laws require the monitoring party to use beep tones, to notify all parties to the telephone conversation, or to obtain the consent of all parties to the telephone conversation. Some of these laws incorporate strict penalties.

PROGRAMMING

Note: Before you set the following data, make sure that any monitoring function is not being used. If you change the setting of the data while a monitoring function is being used, the voice path is not re-established properly, an error, such as no tone or warning tone, may occur.

Assign the **EMER** key to the ACD Agent Position referring to “2.4 ACD Agent/Supervisory Position Data Assignment” in Chapter 4.

STEP 1: AOKC - Assign OP-CODE to KEY-CODE.
KEY-CODE: 9
F-KIND: 2
OPE-CODE: 255 (Emergency Recorder)

STEP 2: ACDSPL - Assign the destination of Emergency request call.
EMGCY: the ACD line of a supervisory position/the pilot number of a split of supervisors (two to six digits) **Note 3**

Note 3: Only numeric values can be used. An asterisk (*) or pound (#) is not allowed. One-digit dial number may not be assigned. When ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), the value is set to “5 digits at most”.

RECD: Recorder No. 1-5 (When RECD=0, Emergency/Recorder-ACD cannot be used.) **Note 4**

Note 4: Use the message number that is specified by AADT (TYPE=2: Dictation Trunk: DCT)

STEP 3: AKYD - Assign EMER key to a Line/Feature Key on agent positions.
KYN: 7
KYI: 1
FKY = 42 (Emergency Key)

After STEP 4 is the required setting for when there is a recording device.

STEP 4: ARTD - Assign the route class data for Emergency/Recording trunk.
CDN2: ONSG = 2 (PB), 60 msec. interval
CDN6: TCL = 4 (Tie Line/Announcement Trunk)

Note: To change the data for existing route (RT), initialize the circuit card.

STEP 5: ATRK - Assign the trunk data of COT used for interface with the recording machine.

When Paging Trunk is available, two circuits (#0, #1) are required for connecting paging equipment.

STEP 6: AADT - Assign the related data of recording machine.
TYPE: 2 (Recording Trunk)
NO.: 1~5
RT: Route number for recording machine
TK: Trunk number for recording machine

STEP 7: MBTK - Make the interface trunk (COT) idle.

STEP 8: ARRC - Release the route restriction between the ACD route and the route for the recording machine.

Note: When the destination of Emergency request call that is programmed in ACDSPL is busy, the request call is not connected. In another word, this service is available for one agent only per split when the destination is only one. For preventing the above-mentioned case, the destination of Personal Emergency Request call (both the ACD line of a supervisory position and the pilot number of a split of supervisors are allowed) can be programmed for each ID code in ACDLOG.

- **In environment where IP devices are used or in ACD-FCCS configuration:**

STEP 1: ASYDL/ASYDN

Note: When this feature is used in an ACD-FCCS configuration, set the following data with ASYDN.

System Data 1

Index 867

Bit 3=1 (Improvement for SCF6 request for Monitor Connection is enabled)

Index 869

Bit 6=1 (Monitor Function for IP terminals is enabled)

Bit 7=1 (Monitor Function for IP terminals-LAN is enabled)

- **When Silent Monitor (Multi-path Monitor) is used:**

Note: In an ACD FCCS network containing DTI-FCCS, monitoring functions cannot work properly when Silent Monitor (Multi-path Monitor) connection is enabled. In that case, set "0" for ASYDN, SYS1, Index 874, Bit 0 to disable Multi-path Monitor connection.

STEP 1: ASYDL/ASYDN

Note: When this feature is used in an ACD-FCCS configuration, set the following data with ASYDN.

System Data 1

Index 679

Bit 1=1 (Multiple Session for SIP Multiple Line Terminals is enabled)

Note: When you change the setting of this System Data, you must reregister the terminal to reflect the change.

Index 874

Bit 0=1 (Multi-path Monitor connection is enabled)

STEP 2: ARTI/ARTIN

Note: When this feature is used in an ACD-FCCS configuration, set the following data with ARTIN.

CDN 95 (MONITOR) = 1 (ACD monitor link connection = Multi-connection)

Note: To change the data for existing route (RT), initialize or reboot the trunk device such as circuit card, MG, or VS32.

F-10A FUNCTION GROUPS (SPLITS) - ACD

GENERAL DESCRIPTION

Please refer to “SPLITS - ACD [S-91A]” for a full description of how splits are used with this product.

F-25A FLEXIBLE ID CODES - ACD

GENERAL DESCRIPTION

ID codes are used by agents and supervisors to access the ACD system. A considerable amount of information is programmed for each agent's ID code and this information is used by the ACD system to determine which calls the agent will be handling after logging in and which features the agent will have access to.

Some of the parameters programmed in ACDLOG for each logon ID are described in the table below. For more details, see ACDLOG in Chapter 6.

Logon ID Characteristics

LID (The Logon ID itself):	From 2 digits to 9 digits
LANG (Default Language):	0 = English 1 = Japanese 2 = Spanish 3 = Italian 4 = French 5 = German
NAME (Agent Name):	Specify a name for use in displays
SPLIT (Available Split or Splits to log on):	Specify a maximum of 4 split Nos. (1-900)
PRIO:	Priority for the split assigned in SPLIT or Agent's preference level (1-99)
MULTS (Multi-split Allowed):	Allow or Restrict multiple simultaneous splits
PPN (Personal Pilot Number):	Specify a directory number for Personal Queue
MXQD (Personal Queue Depth):	from 0 to 999 calls may be in queue
GOFC (Personal Queue Forward CCV):	Specify a CCV for alternate handling
OVFT (Personal Queue Timeout):	from 0 to 9999 seconds
GOCO (Personal Queue Timeout CCV):	Specify a CCV for alternate handling
PCWCM (Personal Queue Chime):	Call Waiting in queue chime On or Off
PARN (Personal Assist):	Specify destination for Assist
PERN (Personal Emergency):	Specify destination for Emergency

Refer to "MULTI-SPLIT AGENT - ACD [M-90A]" and "SPLIT SELECTION - ACD [S-98A]" for information on how an ID code determines the split.

OPERATING PROCEDURE

None

SERVICE CONDITIONS

1. The maximum length for an ID code is nine digits, and only the digits “0” through “9” are allowed.
2. Leading zeros are permitted, but are not meaningful, in logon ID codes. For example, “0017” is acceptable; however, this code is identical to the code “17”.
3. Each split determines whether ID codes are required for access to the ACD system.
4. An ID code can only be assigned once in the ACD system regardless of which tenant the ID code is used for.
5. An ID code can only be used in the tenant in which it is assigned.
6. An ID code can only be used at one position at any given time. Multiple logons with the same ID code are not permitted.

PROGRAMMING

Refer to “2.5 ACD Agent ID Code Assignment” in Chapter 4.

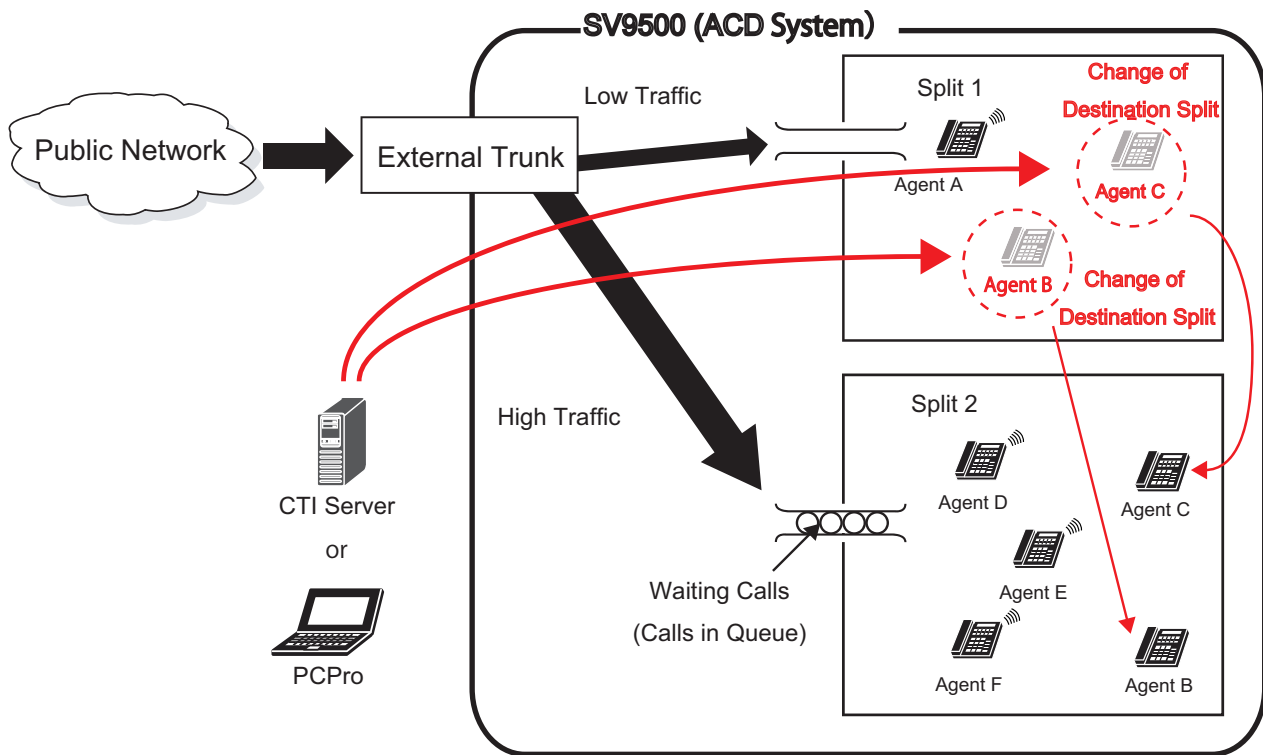
F-40A FLEXIBLE SPLIT MEMBERSHIP - ACD

GENERAL DESCRIPTION

This feature is to change the splits where agents belongs (**Note 1**) while the agents are logging on, and adjust the number of agents in each split on a timely basis according to the volume of incoming call traffic. This change can be made through a maintenance console as well as a CIT server.

Note 1: The splits where agents are currently belonging are referred to as “destination splits” in this feature description

Note: This feature is not available in North America.



OPERATING PROCEDURE

None.

SERVICE CONDITIONS

<Important Notices>

1. To enable this feature, assign the system data (ASYDL, SYS1, Index 1192, Bit 6=1).
2. When the system data (ASYDL, SYS1, Index 1192, Bit 6) is changed, the change is applied from next ACD-LOG change. System Initialization is not required.

Note: When ID code is changed while this feature is disabled, the ID code needs to be logged on again after the system data is enabled.

3. This feature is not available when ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1).
4. By assigning the system data (ASYDL, SYS1, Index 1192, Bit 7=1), Work Mode can be set for an agent position, when the destination split of the agent position is changed during an ACD call.

Note: This setting prevents the agent from receiving an incoming call immediately after the agent is assigned to new split.

5. The service conditions for the usage of the ACDLOG command are as follows.
 - a. The following table shows whether each parameter of ACDLOG can be changed or not when this feature is enabled/disabled.

I: Agent position is logged off (MAT interface)

II: Agent position is logged on and this feature is disabled (MAT interface)

III: Agent position is logged on and this feature is enabled (MAT interface)

X: Possible, N: Impossible

ACDLOG Parameter		Settings for Agent Position and Feature		
		I	II	III
ACDP	ACDP number	N (Key Field)		
TN	Tenant number			
LID	Logon ID code			
NAME	Logon ID name	X	X	N
LANG	Default language	X	X Note 1	N
SPLIT 1	Split number (attribute)	X	X Note 1	N
SPLIT 2-16	Split number	X	X Note 1	X
PRIO 1	Priority for handling ACD calls	X	X Note 1	X
PRIO 2-16		X	X Note 1	X
MULTS	Choice of single split or multiple splits	X	X Note 1	N
PARN	Dial number of individual Assistance call	X	X	N
PERN	Dial number of individual Emergency call	X	X	N
PPN	Pilot number for an individual call	X	X	N
MXQD	Maximum Queue Depth for an incoming call routed to the agent	X	X	N
GOCFNO	CCV No. to be routed when the individual call encounters busy status	X	X	N

ACDLOG Parameter		Settings for Agent Position and Feature		
		I	II	III
GOCFSTP	CCV step number to be forwarded when the individual call encounters busy status	X	X	N
OVFT	Overflow Timeout	X	X	N
GOCONO	CCV number to be routed when time limit (OVFT) is over	X	X	N
GOCOSTP	CCV step number to be routed when time limit (OVFT) is over	X	X	N
PCWCM	Individual call waiting chime control	X	X	N
NAMES	Abbreviation of Logon ID Name	X	X	N

Note 1: The changes made to the settings are applied from next logon.

- b. ID code cannot be deleted in the conditions of II or III.
- c. When you change the parameters with “N: Impossible” in the condition III, the agent position that is using an ID code needs to be logged off.
- d. For the ID code assigned as a single logon (ACDLOG, MULTS=0), its destination split cannot be changed in the condition III. To change the destination, the ID code needs to be assigned as a multiple logon (ACDLOG MULTS = 1) in advance.
- e. The following splits cannot be specified to SPLIT 2 to 16 in the condition III.
 - Split that does not exist (no office data is set)
 - Hot Split
- f. Immediately after a destination split of an ID code is changed, its second or more changes for the same ID code may be regulated in the condition III. In this case, attempt to change them again.
- g. To use this feature, set the data to an agent position to belong to any split (ACDPSN, SPLC=0). If the data is set for an agent position to belong to a specified split (ACDPSN, SPLC=1) in the condition III, a destination split cannot be changed unless Split Group Number (ACDPSN, SPL1) is included in any of SPLIT 1 to 16 of ACDLOG.

Example) If Split Group Number (ACDPSN, SPL1) is set to “250” and an agent position (71000) uses "100000000" as its ID code, the agent position needs to belong to the split “250”.

- h. For Hot Positions that do not require the setting of the ACDLOG command or agent positions that do not need ID code, their destination split cannot be changed.
 - i. A destination split cannot be changed if the condition of LOGOFF WARNING - ACD [L-92A] is applied to an agent position. Refer to “LOGOFF WARNING - ACD [L-92A]” in this manual for more details.
6. Conditions when WORK MODE - ACD [W-5A] is in service are as follows.
- a. WORK MODE - ACD [W-5A] can be set only when an agent position is on ACD call. This setting can be canceled during the ACD call.

Note: The status of ASSISTANCE - ACD AGENT - ACD [A-34A] and MONITORING - ACD SUPERVISOR. ACD [M-28A] are treated as “in a call”. The status of MONITOR, MONITOR ME - ACD [M-89A] and EMERGENCY/RECORDER - ACD [E-6A] are not treated as “in a call”.

- b. WORK MODE - ACD [W-5A] can be set when BREAK MODE - ACD [B-20A] is set for an agent position. In this case, the agent position is placed into Break mode after an ACD call is finished.
- c. If Work Mode Restriction (ACDSPL, WKRST=1) is set for an attribute split, WORK MODE - ACD [W-5A] cannot be set.

<Interactions with Other Features>

1. When a destination split is changed during RING DELAY - ACD [R-145A], a call terminated to the previous split (the split where the agent belonged before the change is made) is distributed to the agent. The timer value of CALL RECOVER - ACD [C-191A] at the previous split is also applied.
 2. When a destination split is changed while ETA/EWTA Greater or ETA/EWTA Less is in service, ETA (Estimated Time to Answer)/EWTA (Estimated Waiting Time to Answer) is affected.
 3. When a destination split is changed while you are using CCV (Call Control Vector) instructions, the number of agent positions logging on to each split is affected.
 4. A destination split cannot be changed to a split in a different tenant.
 5. Conditions when SPLIT CONNECTION RESTRICTION - ACD [S-153] is in service are as follows.
 - a. When a destination split is changed while SPLIT CONNECTION RESTRICTION - ACD [S-153] is in service, the new destination split is applied to an agent position from next logon.
 - b. When a destination split is changed while monitoring feature is restricted, the new destination split is applied to an agent position from next logon. Serial Monitoring is not restricted.
 6. When a destination split is changed while Variable Queue Depth with WORKING-AGENTS greater is in service, the number of working-agent is affected.
 7. When a destination split is changed, Call Waiting Lamp is updated to the setting of the new destination split.
 8. When a destination split is changed while CALL WAITING LAMP WITH CHIME - ACD [C-110A] is in service, the setting of chime control is applied from the next termination of an incoming call if the new destination split has the setting of it.
 9. When a destination split is changed while an agent position is on an ACD call, the following features remain in the same settings of the split that received the call.
 - CALLING PARTY IDENTIFICATION - ACD [C-70A]
Information of the split that received a call is shown in LCD when the call is received and answered.
 - ASSISTANCE - ACD AGENT - ACD [A-34A]
When an agent position pressed the ASSIST key, the assistance call destination is determined by the setting of the split that received the call. However, changeover of Assist/Monitor requirement follows the setting of an attribute agent position.
 - EMERGENCY/RECORDER - ACD [E-6A]
If an agent position pressed the EMERGENCY key, the destination of Emergency request call is determined by the setting of the split that received the call.
 - CALL RECOVER - ACD [C-191A]
The setting of the split that received a call is applied
-

10. STRANDED CALL ROOTING - ACD [S-108A] starts up when none of agent positions belongs to the split that has queuing calls due to a change of destination splits. It is recommended to set STRANDED CALL ROOTING - ACD [S-108A] to prevent an incoming call stays in the queue of the split that has no agent positions.

Note: If STRANDED CALL ROOTING - ACD [S-108A] is not set, waiting calls remain in the queue of the same split that has no agent positions, and treated by the CCV set in the split.

<Hardware/Software>

None.

<Interaction with networks>

None.

<Conditions Specific to This Feature>

1. Distribution order is shown below for when newly assigned split has waiting calls from multiple splits.
 - A Call at the split that has a higher priority of the ACDLOG command is distributed first
 - If waiting calls have the same priority, the call waiting for the longest time is distributed first.

In the case shown below, the distribution order is 1, 3, 2, and 4.

Split Number	PRIO	Waiting Time
Split 1	1	10 seconds
Split 2	2	15 seconds
Split 3	2	20 seconds
Split 4	3	30 seconds

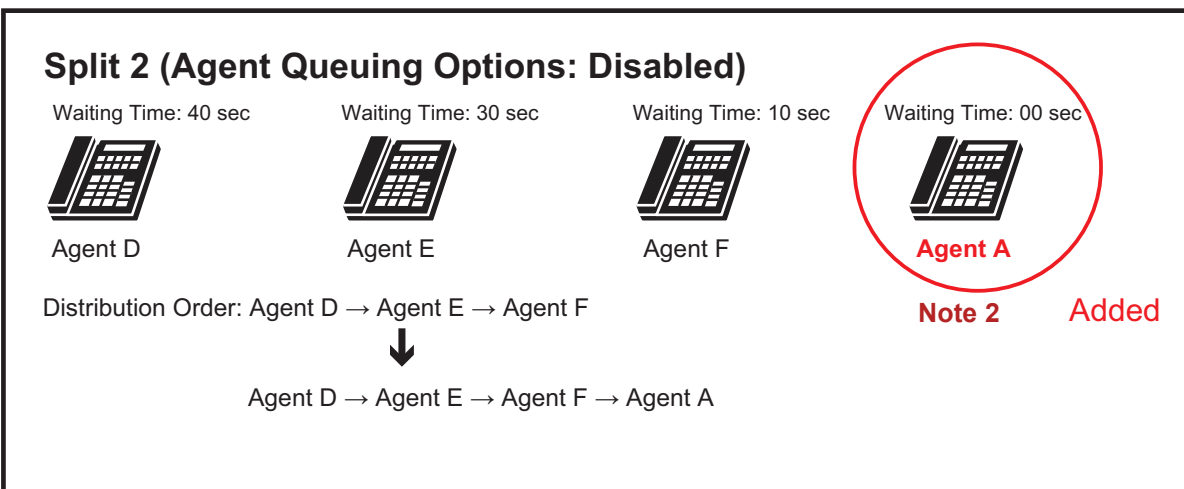
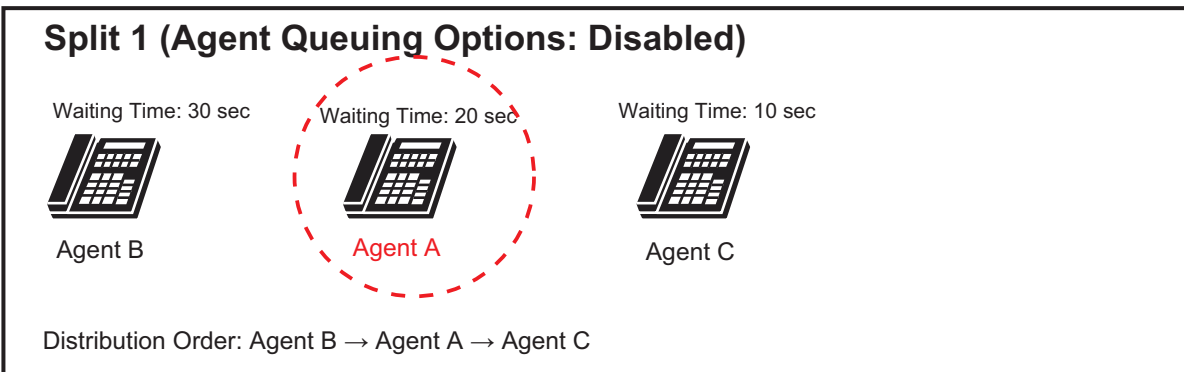
2. If a new destination split has an available agent position, the distribution order for the agent position just joined to the split comes to the last within the split. For example, if Agent A moves to Split 2 from Split 1, the time Agent A has waited for within the new destination split is 0 seconds, so Agent A has the lowest priority in Split 2.

Example 1) Destination Split of Agent A is changed from Split1 to Split 2

Split	PRIO
Split 1	10
—	—

⇒

Split	PRIO
Split 1	10
Split 2	10



Note 2: Waiting time of Agent A is 0 second, so Agent A's priority becomes the lowest.

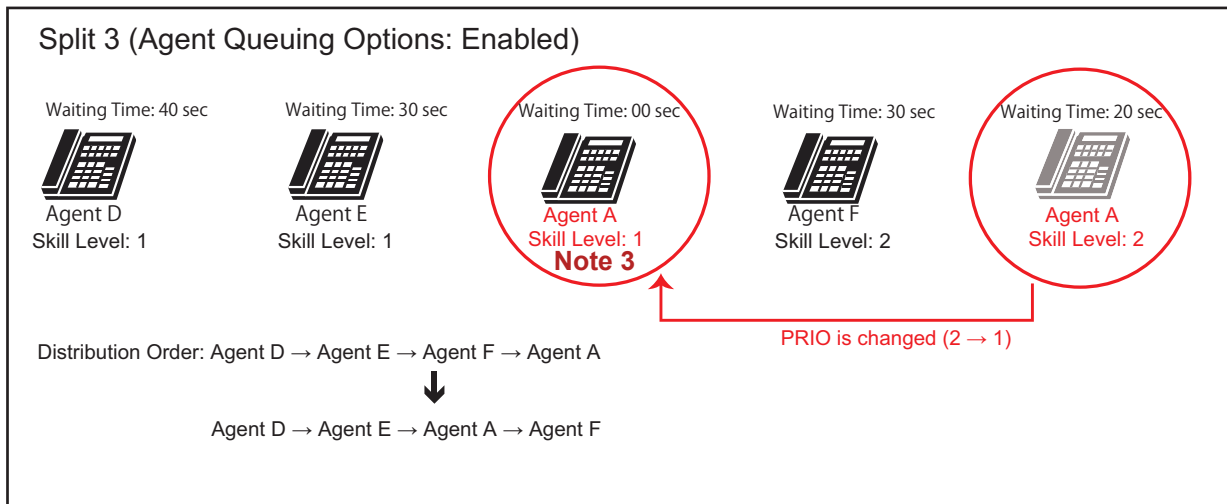
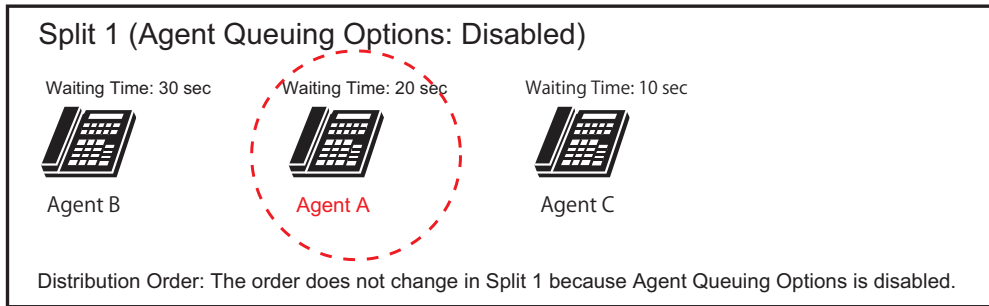
If only PRIO is changed, the distribution order does not change. However, if AGT_Q = 1 of the ACDSPL command is enabled and PRIO (skill level) is changed in the split, the distribution order of the call comes to the last of the order of new PRIO setting.

Example 2) Priority of Agent A when PRIO in Split 1 and Split 3 is changed

Split	PRIO
Split 1	2
Split 3	2

⇒

Split	PRIO
Split 1	1
Split 3	1



Note 3: Agent A comes to the last in the order of Skill Level 1 because Agent A's priority is the lowest of Skill Level 1 in Split 3.

3. The following information shown in LCD is not reset when an agent position logs off. These are statistics of each ID code that are counted from logon to logoff.
 - Logon time
 - Count of calls handled
 - Average talk time
 - Total work time
 - Total break time

PROGRAMMING

<Office Data Programming>

ASYDL - System Data (LDM)

SYS1, Index 1192

Bit 6=1 (Flexible Split Membership is enabled)

Bit 7=0/1 (Work Mode Setting with Flexible Split Membership is disabled/enabled) **Note 4**

Note 4: If a destination split of an agent position is changed while the agent position is on an ACD call, the change made to this setting is applied after the ACD call is finished.

<ID Code Registration>

To use the Flexible Split Membership feature, the following settings are required.

STEP 1: **ACDLOG** - ACD Agent ID Code Data

SPLIT: Split Number (1-900)

PRIO: Priority Setting (1-99)

MULTS: Single or Multiple Split Membership (0/1: Single/Multiple) *Fixed to 1

STEP 2: **ACDPSN** - ACD Position Data/Supervisory Position Data

SPLC: Split Assignment (0/1: Any Split/Specified Split) *0 is recommended to be set

<Destination Split Change>

ACDLOG - ACD Agent ID Code Data **Note 5**

SPLIT: Split Number (1-900) **Note 6**

PRIO: Priority Setting (1-99)

Note 5: This setting cannot be deleted while an ID code is in use.

Note 6: SPLIT1 cannot be changed.

H-20A HOLIDAYS SCHEDULING - ACD

GENERAL DESCRIPTION

Holidays may be programmed up to 365 days in advance. On a holiday, special call routing is in effect for up to eight time-of-day changes. Three different holiday schedules, one of which is used on any particular holiday, may be programmed for each tenant basis or pilot number basis. Holiday Scheduling on a pilot number basis is available.

OPERATING PROCEDURE

See “TIME OF DAY/WEEK ROUTING - ACD [T-50A].”

SERVICE CONDITIONS

1. Holiday schedule routing takes place only for those pilot numbers which route to week routing. If a pilot number routes directly to a Call Control Vector (CCV), its routing is not affected on a holiday even if holiday routing has been programmed.
2. All incoming ACD traffic must follow the same routing (CCV handling) on a holiday.

PROGRAMMING

Refer to “2.8 ACD Schedule Data Assignment” in Chapter 4.

H-31A HOT SPLIT - ACD

GENERAL DESCRIPTION

This feature was designed to accommodate “Automatic” agents of “Hot” agents. That is to say, agents who never log on, never log off and never take breaks. As soon as the ACD is on line, these “agents” are automatically logged on to the ACD and placed in the Ready Mode to take incoming calls. Actually, these agents are more accurately described as “machines” because the feature was intended for use with answering machines, dictation machines, voice mail machines, etc.

The feature is named “Hot Split” because all members of the split must be automatic agents. There cannot be a mixture of standard agent positions and hot agent positions in the same split.

Due to the nature of the equipment expected to be used for this feature, it was designed to accommodate only SIP Handler Controlled SIP terminal, analog station equipment, or Telephone Equipment Class (TEC) = 3 (DP/PB) for those familiar with System database assignments in the ACD system. Dterm stations in particular cannot be used for members of a Hot Split. A member of a Hot Split is called a Hot Position.

1. A Hot Position is idle and, therefore, in the Ready Mode. This station is the only assigned member of a particular Hot Split. Let’s say it is an answering machine.
2. A call arrives to the Pilot Number for this Hot Split and immediately rings the Ready “agent”.
3. The “agent” (answering machine) automatically answers and does what answering machines do. Meanwhile, another call arrives for the Hot Split and is placed in queue.
4. The Hot Split is programmed for 15 seconds of After Call Work Mode Timeout. This allows the answering machine sufficient time to rewind or reset before the next call rings through.
5. The first caller hangs up. The “agent” enters After Call Work Mode for 15 seconds.
6. After 15 seconds the Hot Position is automatically placed in the Ready Mode and since a caller is waiting in queue it immediately rings the position.
7. The Hot Position (answering machine) answers the next call.

SERVICE CONDITIONS

<Conditions For Hot position with Analog IVR>

1. A Hot Position is allowed to go off-hook and originate outgoing calls. It will be placed in a Break Mode for incoming ACD calls until it goes onhook.
2. Hot Positions are assumed to be in the Ready Mode upon ACD startup. If, in fact, the position is offhook and busy the ACD will make only one attempt to connect a call and then, upon noticing its busy status, will correctly mark the position as Unavailable and wait for its onhook.
3. Only ACD incoming calls which are distributed through the ACD Pilot Number arrive at Hot positions.
 - ASFC, SFI: 95 (Direct IC Call Restriction) needs to be set as RES = 1 (Allowed) to the station used for an Agent Position.

- By allowing Direct IC Call Restriction, Blind Transfer of ACD incoming calls becomes available, and then the transferring Station is not recalled even if the call is not answered.
4. When the type of DTMF signal between Hot Positions and Peripheral equipment/station which is connected with Hot Positions is different, DTMF signal might not be recognized. In that case, the type of DTMF signal in Peripheral equipment/station must be equal to Hot Positions.
 5. When the Work Mode is set to the agent position by CALL RECOVER - ACD [C-191A], you can make the agent position ready to receive a call again with following procedures.
 - For the system with INFOLINK DATA MESSAGES - ACD [I-99A]
Use the Infolink message “r: Ready” of Infolink message “IH: State Change Request”.
 - For the system without INFOLINK DATA MESSAGES - ACD [I-99A]
Re-register the data of the Hot Split, which the Work Mode is set for, by the ACDPSN command.
 6. If status discrepancy (such as a call cannot be distributed to a Hot Split) happens, the discrepancy is fixed with re-registering the data of the Hot Split, which the discrepancy is happened on, by the ACDPSN command.
 7. Analog IVR and Standard SIP-IVR can be mixed in a Hot Split.
 8. When a Hot position (Analog IVR) transfers a call to an ACD pilot number and then releases the call, if the release coincides with the destination phone ringing (**Note 1**), the called agents may not be able to answer the call. To avoid this, use the ACDCCV command and insert a brief pause (CCVACT = 1) before the Queue Assign step (CCVACT = 10) so that the queue assignment is delayed until after the Hot position releases the call.

Note 1: Ringer is activated after the Queue Assign step is completed. A series of CCV steps are defined with the ACDCCV command. For details, see “CALL CONTROL VECTOR - ACD [C-108A]”.

<Conditions For Hot position with Standard SIP-IVR>

1. Service conditions of Standard SIP-IVR is based on the service conditions of SIP Handler Controlled SIP terminals. See SIP HANDLER - STANDARD SIP TERMINAL [S-167] in Data Programming Manual - Business in addition to this manual.
2. This service is unavailable when ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1).
3. A Hot Position is allowed to go off-hook and originate outgoing calls. It will be placed in a Break Mode for incoming ACD calls until it goes onhook.
4. Only ACD incoming calls which are distributed through the ACD Pilot Number arrive at Hot positions. ASFC, SFI: 95 (Direct IC Call Restriction) needs to be set as RES = 1 (Allowed) to the station used for an Agent Position.
 - By allowing Direct IC Call Restriction, Blind Transfer of ACD incoming calls becomes available, and then the transferring Station is not recalled even if the call is not answered.
5. Analog IVR and Standard SIP-IVR can be mixed in a Hot Split.

6. SR-MGC cannot rescue Standard SIP-IVRs.
7. DTMF signal cannot be used between Supervisory positions/Agent positions and Hot positions.
8. To use DTMF signals between Standard SIP-IVR and MG(PRI) or MG(SIP), enable the In-band DTMF signal through the configuration command of MG(PRI) or MG(SIP).
9. When the type of DTMF signal between Standard SIP-IVR Hot Positions and Peripheral equipment/station which is connected with Hot Positions is different, DTMF signal might not be recognized. In that case, the type of DTMF signal in Peripheral equipment/station must be equal to Standard SIP-IVR Hot Positions.
10. When the Work Mode is set to the agent position by CALL RECOVER - ACD [C-191A], you can make the agent position ready to receive a call again with following procedures.
 - For the system with INFOLINK DATA MESSAGES - ACD [I-99A]
Use the Infolink message “r: Ready” of Infolink message “IH: State Change Request”.
 - For the system without INFOLINK DATA MESSAGES - ACD [I-99A]
Re-register the data of the Hot Split, which the Work Mode is set for, by the ACDPSN command.
11. If status discrepancy (such as a call cannot be distributed to a Hot Split) happens, the discrepancy is fixed with re-registering the data of the Hot Split, which the discrepancy is happened on, by the ACDPSN command.
12. When a Hot position which is disconnected from the Telephony Server receives a call, a calling party hears a Ringback Tone (RBT) and keeps calling. To avoid this situation, enable CALL RECOVER - ACD [C-191A].
13. Standard SIP-IVR does not support ACDP Automatic Logoff.
14. Standard SIP-IVR cannot be monitored by other positions.
15. Standard SIP-IVR cannot monitor other positions.
16. When an ACD Agent Position and a Hot position with Standard SIP-IVR are talking or the call between them is placed on hold while a Supervisory position is monitoring the Agent position, the Supervisory position is not in the monitoring state but is set ready to start monitoring (The **MON/BARGE** lamp lights).
When the Agent position has another call which is on hold and then the Agent position returns to the call, the Supervisor position starts monitoring the Agent position again.
17. When an ACD Agent Position is talking while a Supervisory position is monitoring the Agent position and a call on a Hot position with Standard SIP-IVR is on hold, the Supervisory position is not in the monitoring state but is set ready to start monitoring (The **MON/BARGE** lamp lights). When the held call on a Hot position with Standard SIP-IVR is released, the Supervisor position starts monitoring the Agent position.
18. Emergency calls and assist/monitor requests are processed as shown below.
 - a.) When an Agent position is engaged in a call with a Standard SIP-IVR, emergency calls from the Agent position are restricted.
 - b.) When an Agent position is engaged in a call with a Standard SIP-IVR, assist/monitor requests from the Agent position are restricted.

c.) Emergency calls and assist/monitor requests from a Standard SIP-IVR are restricted.

19. Standard SIP-IVR is supported for DNIS WITHOUT CTI SERVER [D-173] (**Note 2**). For details, see Data Programming Manual - Business.

Note 2: Available since FP95-112 V2.

20. When a Hot position (Standard SIP-IVR) transfers a call to an ACD pilot number and then releases the call, if the release coincides with the destination phone ringing (**Note 3**), the called agents may not be able to answer the call. To avoid this, use the ACDCCV command and insert a brief pause (CCVACT = 1) before the Queue Assign step (CCVACT = 10) so that the queue assignment is delayed until after the Hot position releases the call.

Note 3: Ringer is activated after the Queue Assign step is completed. A series of CCV steps are defined with the ACDCCV command. For details, see CALL CONTROL VECTOR - ACD [C-108A].

21. Auto Break of Hot position with Standard SIP-IVR is available since FP95-113 V3. This function enables a Hot position with Standard SIP-IVR to be placed in Break Mode automatically when a failure occurs in the Hot position (REGISTER expires) or when the Hot position is not in a registration state. This function works in the following conditions.

- A failure occurs in a Hot position receiving a call

When a failure occurs in a Hot position receiving a call and REGISTER expires (**Note 4**), a call already having been distributed is queued. Then the Hot position is placed in Break Mode.

- A failure occurs in a Hot position in any state except for receiving a call

When a failure occurs in a Hot position in any state except for receiving a call and REGISTER expires (**Note 4**), the Hot position is placed in Break Mode.

- A call-distributed Hot position is not in a registration state

When a call-distributed Hot position is not in a registration state, the Hot position is placed in Break Mode. Then the call is distributed to another Hot position which is idle.

- Telephony Server has received UnREGISTER (REGISTER “Expires=0”) from a Hot position

When Telephony Server has received UnREGISTER (REGISTER “Expires=0”) from a Hot position, the Hot position is placed in Break Mode.

Note 4: See <To enable Auto Break of Hot position with Standard SIP-IVR> in PROGRAMMING for the data assignment of Register Expires Timer.

The following shows conditions for Auto Break of Hot position with Standard SIP-IVR.

- a. This function is not supported in North America.
- b. When this function is enabled (ASYDL/ASYDN SYS1, Index 1200, Bit 1=1), if a failure occurs in a Hot position receiving a call and REGISTER expires, a call having been distributed is queued. If the Infolink facility version is “2” or later, the ACDP sends a notification of queuing (Iq) to the application side.
- c. This function supports only FCCS networking via IP (Peer-to-Peer) for FCCS systems.

- d. SIP Handler Controlled SIP terminal failure is detected in the following occasions:
 - Telephony Server does not receive any REGISTER requests for updating the Register Expires Timer within the timeout period from a SIP Handler Controlled SIP terminal
 - Telephony Server receives an UnREGISTER (REGISTER “Expires=0”) from a SIP Handler Controlled SIP terminal.
 - Terminal Reset is executed with the DISD command.
- e. Register Expires Timer can be assigned with the Register Expires parameter in the AUACL/AUACN command.
- f. When a Hot position is placed in Break Mode by this function, the ACDP sends a notification of Break Mode (IW b1) to the application side. If the Hot position has already been in Break Mode, the ACDP does not send the notification (IW b1).
- g. To change a Hot position which is once in Break Mode by this function to Work Mode, send a notification (IH r) from the application side.
- h. When this function is enabled (ASYDL/ASYDN, SYS1, Index 1200, Bit 1=1), if an SCF (FN=4, notify ID=05H) is received from a non-ACDP application, Return Error 1-2 (specifying an unsupported element value) is sent back.
- i. When a failure occurs in a Hot position in any state except for idle and receiving a call, the Hot position may be released and be in idle state by session management (such as UPDATE/OPTIONS requests) with a terminal.

PROGRAMMING

<To use Hot position with Analog IVR>

STEP 1: ACDPSN

NACD: dialed number of Hot agent (2 to 6 digits) **Note 5**

ACDL: dialed number of Hot agent (2 to 6 digits)

PTYPE: 4 (Hot agent)

Note 5: Use numbers 0-9. * and # may not be used. 1stDC=“0” may not be used.

STEP 2: ACDSPL

AFTER: 0 (Work mode)

WMT: Work Mode Timer time out (0-9999 sec.)

AWPI: Auto work mode for the ACD call when connecting with a non-ACD call
0 = Not available

AWPO: Auto work mode for the ACD call when originating a non-ACD call
0 = Not available

ARPR: Auto work mode after a non-ACD call is released
0 = Not available

HSPL: 1 = Hot Split is in service

<To use Hot position with Standard SIP-IVR>

STEP 1: ACDPSN

NACD: dialed number of Hot agent (2 to 6 digits) **Note 6**
ACDL: dialed number of Hot agent (2 to 6 digits)

Note 6: Use numbers 0-9. * and # may not be used. 1stDC="0" may not be used.

PTYPE: 6 (Standard SIP-IVR)
SPLC: 1 (Specified specific split)
SPL1: Split Number (1 - 900)

STEP 2: ACDSPL

AFTER: 0 (Work mode)
WMT: Work Mode Timer time out (0-9999 sec.)
AWPI: Auto work mode for the ACD call when connecting with a non-ACD call
0 = Not available
AWPO: Auto work mode for the ACD call when originating a non-ACD call
0 = Not available
ARPR: Auto work mode after a non-ACD call is released
0 = Not available
HSPL: 1 = Hot Split is in service

STEP 3: ASFC

SFI: 95 (Direct IC Call Restriction)
RES: 1 (Allowed)

Note: By allowing Direct IC Call Restriction, Blind Transfer of ACD incoming calls becomes available, and then the transferring Station is not recalled even if the call is not answered.

<To enable Auto Break of Hot position with Standard SIP-IVR>

Assign the following data in addition to <To use Hot position with Standard SIP-IVR>. (Available since FP95-113 V3)

STEP 1: ASYDL/ASYDN

SYS1
Index 874, Bit 3 = 1 (ACDP Automatic Logoff is in service)
Index 1200, Bit 1 = 1 (Auto Break of Hot position with Standard SIP-IVR is enabled)

Note: Note the following points for this parameter:

- These system data do not need system initialization operations.
- Use the ASYDN command for FCCS system.

STEP 2: AUACL/AUACN

Register Expires: Register Expires Timer [0, 300-4294967295 seconds (default value: 0)]

Note: Note the following points for this parameter:

- When the default value "0" is set, the timer will be 3600 seconds.
- Use the AUACN command for FCCS system.

I-99A INFOLINK DATA MESSAGES - ACD

GENERAL DESCRIPTION

Infolink Data Messages provide a two-way communications link between the ACD and external computer equipment. Typical examples of external computer equipment include but are not limited to:

- Mini and Mainframe Host Computers (IBM, DEC, Honeywell, Borroughs, Hewlett Packard)
- Desktop Workstations (Sun, IBM, Hewlett Packard, DEC)
- Personal Computers (IBM, Compaq, Dell, Gateway, AST, *et.al.*)

The Infolink message set was designed to support features which are performed by several obvious applications which can be done from a host computer.

Three message sets have been designed for Infolink. External computers may use as little or as much of the data from any of the three sets as needed in order to implement their application. Unnecessary messages may be turned off to reduce transmission bandwidth. Just as there are many words which can be derived using the 26 letters of the alphabet there are also many applications which can be invented using the messages available in the Infolink message sets. We can guess what some of the obvious applications might be but there is no way to predict how far developers can go given the information available from Infolink.

Some of the possible applications which Infolink clients could perform include:

- Agent Screen Pop-Up
- Agent Screen Correlation and Screen Transfer
- Outbound Calling Campaigns
- Electronic Call Transfer
- Customized Announcements
- Host Directed Routing - Host Directed Priority Changes
- Customer Callback
- Predictive Dialing Enhancements
- Phone-In-A-Drawer
- Position In Queue Announcements
- Estimated Time To Answer Announcements
- Leave A Message vs. Stay In Queue Options

The following tables lay out the names of the messages currently available:

Inbound Messages from Infolink Client to ACD

Tag	Message Description
IC	Split Status Request
Ic	Agent Status/Caller Status Request
IF	Route Call Request
IG	Call Manipulation Request
IH	State Change Request
IL	Message Subscription
IJ	Data Change Request Note 1
Ik	Individual Service Message Subscription
II	Message Subscription with Reply Notification
JL	ACD Receiver ID Code Readout Request

Outbound Messages from ACD to Infolink Client

Tag	Message Description
IP	Split Status Notification
Ip	Agent Status/Caller Status Notification
IQ	Incoming Call Notification
Iq	Incoming Call Notification with Queuing Information
IS	Agent Ringing
IT	Agent Answer
IU	Call Disconnect
IV	Call Transfer
IW	Agent State Change
IY	Sequence Acknowledgment
JR	JL Message Reply Notification
KA	Membership Change Notification
KB	Announcement Trunk Status Notification
KC	Data Change Notification Note 1
KD	Pilot Number Calls Limitation Note 1
KE	Monitor Status Notification Note 2, Note 3

Note 1: Available since FP95-112 V2.

Note 2: Available since FP95-113 V3.

Note 3: Not supported in North America.

OPERATING PROCEDURE

Operating procedures vary depending on the usage of each application.

Note: If you perform the following actions by using OAI facility (SCF) from an application other than ACDP, you cannot use ACD features:

- Routing an ACD incoming call in queue (SCF FN=4)
- Announcement connection (SCF FN=5)
- Monitoring (SCF FN=6)
- Connecting a line to an ACD Pilot Number (SCF FN=10)

SERVICE CONDITIONS

1. Detailed functional specification is determined by the application.
2. Lower layer protocol of Infolink supports TCP/IP + DIX Ethernet Ver. 2.
3. Infolink Data Messages are provided to the ACD tenant programmed in ACDTN.
4. To use this feature, a Pilot Name and ACD Pilot Number is required to be assigned in ACDPLT.
5. Two-way communications link is provided simultaneously.
6. One link can control multiple ACD tenants (up to 9 tenants). Multiple links (up to 8 links) of Infolink can control one ACD tenant.
7. OAI transmission is also provided via the same link.
8. An external computer equipment communicating with ACD system such as host needs to be connected to the node providing ACDP.
9. For FP95-113 V3 or later, the monitor management (the setting of notification, request, and release of the monitor information) is available. The monitor management is not supported in North America.

PROGRAMMING

None

L-19A LOGON/LOGOFF - ACD

GENERAL DESCRIPTION

Access to the ACD system is controlled either with or without logon ID codes. A logon ID code is used to identify individual agents or supervisors, to the ACD, for statistics gathering purposes. An agent is only permitted to be logged on to the system at one position at a time. Flexible ID Codes can be employed to log on to the ACD system. Refer to “FLEXIBLE ID CODES - ACD [F-25A]” for related information.

OPERATING PROCEDURE

Logon Procedure:

This procedure varies depending on whether or not logon ID codes are used. The cases are described separately.

1. When logon ID codes are used:
 - a. The display shows VACANT.
 - b. The agent presses the **LOGON** key. The display shows LOGON ID?.
 - c. The agent enters a logon ID code, using the DTMF keypad, and presses the “#” key after the logon ID code is entered. **Note 1**
 - d. If an invalid logon ID code is entered, the display returns to LOGON ID? and the agent must enter a correct logon ID.
 - e. If the entered logon ID code is currently in use, the display briefly shows ID IN USE and then returns to LOGON ID?.
 - f. If a valid logon ID code is entered, the **LOGON** lamp is lit, a greeting is provided, and the split the user logged on to is displayed.
 - g. The console is placed in the Work mode with the Manual/Auto answer mode set to the split’s default.
 - h. The **WORK** key must be pressed before the agent can begin taking calls.

Note 1: For selective logon, press “#” until the name of the corresponding split is displayed and then press “1+#”.

2. When logon ID codes are not used:
 - a. The display shows VACANT.
 - b. The agent presses the **LOGON** key; the **LOGON** lamp is turned on, a greeting is provided, and the split the user logged on to is displayed.
 - c. The console is placed in the Work mode with the Manual/Auto answer mode set to the split’s default.
 - d. The **WORK** key must be pressed before the agent can begin taking calls.

Logoff Procedure (with or without ID codes):

1. The agent or supervisor may log off the system while in Break mode, Work mode, or while ready to take calls.
2. The agent presses the **LOGON** key at this time. Several displays will cycle on the display for four seconds each:
 - a. A farewell greeting; for example, GOODBYE RENEE.
 - b. The time since logon in hours, minutes, and seconds; for example, SHIFT 6:38:08.
 - c. The number of incoming calls handled; for example, ACD CALLS 138.

- d. If any calls were handled, the average time spent with each call in minutes and seconds; for example, AVG TALK 1:30.
- e. The cumulative amount of time spent in Work mode during the shift in hours, minutes, and seconds; for example, WORK 2:07:25.
- f. The cumulative amount of time spent in Break mode during the shift in hours, minutes, and seconds; for example, BREAK 1:02:41.
- g. Finally, the display shows VACANT.

SERVICE CONDITIONS

- 1. Whether an logon ID code is used or not can be configured on a per-split basis.
- 2. When a vacant position displays R.I.P. (Reset In Progress), it indicates that the system is unable to communicate with the telephone instrument. If the **LOGON** key is pressed and the connection is established, the display will show VACANT within five seconds. If the connection cannot be established, R.I.P. will continue to be displayed.
- 3. ID code can be entered up to 9 digits.
- 4. Numeric numbers (0-9) is available for ID code. “*” or “#” cannot be used. “0” cannot be entered for the first digit.

Note: If you enter “0”, ID code is processed without “0”.

- 5. Maximum ID code you can register is up to 40000.

Note: If ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), you can register up to 10000.

PROGRAMMING

- 1. When ID code is used

[Single logon]

STEP 1: ACDSPL - Set the ID code is required to log on for each split.
LOGID=1 (0/1: ID code is not required/ID code is required)

STEP 2: ACDSPN - Assign whether you specify the split or not.
SPLC: Split Assignment
0 = Any Split
1 = Specified Split

STEP 3: ACDLOG - Assign the ID code to log on
LID: (9 digits at the maximum)

Note: “0” is not recognized at the first digit.

NAME: Logon ID name (14 characters at the maximum)
NAMES: Abbreviated ID code name (5 digits at the maximum)
SPLIT: Available Split number
MULTS=0 (0/1: Single split/Multi split)

[Multiple logon/Selective logon]

STEP 1: ACDSPL - Set the ID code is required to log on for each split.
LOGID=1 (ID code is required)

STEP 2: ACDSPN - Assign whether you specify the split or not.
SPLC=0: Split Assignment (0/1: Any Split/Specified Split)

STEP 3: ACDLOG - Assign the ID code to log on
LID: (9 digits at the maximum)

Note: "0" is not recognized at the first digit.

NAME: Logon ID name (14 characters at the maximum)
NAMES: Abbreviated ID code name (5 digits at the maximum)
SPLIT: Available Split number
MULTS: 0/1=Single split/Multi split **Note 2**

Note 2: Assign "0" for selective logon or "1" for multiple logon.

2. When ID code is not used

STEP 1: ACDSPL - Set the ID code is not necessary to log on for each split.
LOGID = 0 (ID code is not required)

STEP 2: ACDSPN - Assign SPLC=1 (Specified Split) and specify the Split Number with SPL1.
SPLC:1 = Specified Split
SPL1: Split Number

L-48A LANGUAGE DEFAULT - ACD

GENERAL DESCRIPTION

This feature allows the selection of a language, applicable to an entire tenant, for use in messages displayed at positions where an agent is not logged on to the ACD system. The following are examples of messages that will appear in the selected language:

1. The ***VACANT*** message, displayed when an agent is not logged on at the position;
2. The messages used during the logon procedure, such as ***LOGON ID?***, (if logon ID codes are used);
3. The messages giving split information (name, queue depth, time of longest waiting call) that are displayed at a vacant position when the agent presses the **AUTO/MAN** key.

OPERATING PROCEDURE

None

SERVICE CONDITIONS

1. This feature is implemented through an ACD PCPro command (ACDTN). The command data is on a tenant-wide basis.

PROGRAMMING

ACDTN - LANG: 0 = English
 1 = Japanese
 2 = Spanish
 3 = Italian
 4 = French
 5 = German

L-92A LOGOFF WARNING - ACD

GENERAL DESCRIPTION

This feature is programmed on a per-split basis via the ACDSPL PCPro command. When a split is marked for Logoff Warning agents will receive the display “LOGOFF WARNING” for a few seconds if they try to log off while there are still calls in queue. In order to actually logoff the agent must press the Logoff Key a second time after having received the warning message. In other words, the warning message is intended to encourage the agent to continue taking phone calls and, in fact, the agent remains logged on if the key is pressed only one time.

A value is set for the Logoff Warning feature from 1 to 9 or ALL. The value 1~9 describes the maximum number of agents still logged on to the split when the warning is given. If the setting is at 5 then only the last 5 agents to logoff from the split will be given the warning message.

The “LOGOFF WARNING” display is shown only when the number of callers waiting in queue for the agent’s split is greater than or equal to the number of agents still logged on in addition to the value set for Logoff Warning. That is, if the setting is at 5 and there are 5 agents logged on but only 3 calls are in queue then an agent will be allowed to logoff and will not receive the warning message. In fact, 2 agents may logoff and neither will receive the message. However, when there are only 3 agents remaining and 3 calls in queue, if one of those agents attempts to log off the warning will be provided.

SERVICE CONDITIONS

1. For multi-split agents the logoff warning is calculated for each split that the agent is a member of. If any split falls into the logoff with warning threshold then the warning will be provided and the agent’s logoff will be restricted. No indication is given as to which split or splits has remaining calls to be answered.
2. When an agent wishes to log off when Logoff Warning is enabled it will be required that the agent press the LOGON/LOGOFF KEY two times in succession (no intervening keypresses) and that there must be at least a 2 second pause between the two keypresses.
This should ensure that the agent was given an opportunity to see the “LOGOFF WARNING” display and has chosen to ignore it and logoff anyway.
3. When an agent attempts to log off by the operation of the MIS client, the logoff operation is not rejected even if it meets LOGOFF WARNING conditions.

PROGRAMMING

ACDSPL -

LOFFW: Assign the threshold value (necessary number of agents logged on to the split) for LOGOFF WARNING.

0 = LOGOFF WARNING is out of service

1-9 = Maximum number of agents to be logged on

ALL = Number of agents equal to or less than the number of calls in queue

Example: When setting LOFFW = 3, the result is as follows.

L-92A LOGOFF WARNING - ACD

Number of Agents currently Login	Number of Waiting Calls			
	1 call	2 calls	3 calls	4 or more calls
1	Warning	Warning	Warning	Warning
2	Logoff	Warning	Warning	Warning
3	Logoff	Logoff	Warning	Warning
4 or more	Logoff	Logoff	Logoff	Logoff

Warning: Warning is displayed.

Logoff: Logoff is available. (No warning message is displayed.)

M-28A MONITORING - ACD SUPERVISOR - ACD

GENERAL DESCRIPTION

This feature allows the Supervisory position to select an Agent position and to monitor the calls on both the ACD line and the non-ACD line at that position. The Agent position and calling party are not aware that their call is being monitored. As the Agent position concludes one call and begins another, switches from one line to another, or transfers, the Supervisory position's monitor is applied to the current call. If both lines are idle when the monitoring is established, the Supervisory position will hear quiet tone until the Agent position either answers a call on one of the lines or places a call from the non-ACD line. At that time, the Supervisory position will be able to hear both parties. When this feature is set for Agent position/Supervisory position, the setting is maintained until the setting is canceled. This feature has been available for network that is configured by Peer-to-Peer FCCS. VS32 can also be used for this feature.

OPERATING PROCEDURE

- While an Agent position is busy.

STEP 1: Lift the handset.

STEP 2: Press the **MON/BARGE** key.

STEP 3: Dial "Station ID code + #" or "0 + Station number for a call of Agent Position + #".

STEP 4: Supervisory Position starts monitoring the call between the Agent Position and the ACD call.

STEP 5: Press the **RELEASE** key.

- While an Agent position is in a state other than busy.

STEP 1: Lift the handset.

STEP 2: Press the **MON/BARGE** key.

STEP 3: Dial "Station ID code + #" or "0 + Station number for a call of Agent Position + #".

STEP 4: The Agent Position is set to be monitored.

STEP 5: Replace the handset.

STEP 6: The Supervisory Position is called when the Agent Position start talking.

STEP 7: Lift the handset.

STEP 8: The Supervisory Position starts monitoring the call between the Agent Position and the ACD call.

STEP 9: Press the **RELEASE** key.

Note: The **MON/BARGE** lamp will flash while monitoring, and light while being set ready to start monitoring. Also, the lamp will flash while the Supervisory Position is hearing the hold tone provided when the monitored call is held or transferred.

SERVICE CONDITIONS

1. The following shows the service conditions for **MONITORING** function:
 - a.) The ones who can perform the monitoring are Supervisory positions and Agent positions, and the one who can be monitored are Supervisory positions and Agent positions.

Note: To allow Agent positions to monitor calls, assign Monitor/Barge function to a Line/Feature Key of Desktop terminals for ACD Agent Position. For details, see [ACD Agent/Supervisory Position Data Assignment](#) in this chapter.
 - b.) Supervisory positions and Agent positions (if applicable) can monitor both ACD lines and non-ACD lines. In this case, the currently monitored line type (ACD or non-ACD) is displayed on the LCD.
 - c.) Three-way conference trunk or VS32 is required for the Monitoring function. For the firmware version available for this feature, see [Equipment/Terminals Accommodating in ACD/OAI System](#) in Chapter 2. Three-way conference trunk can be used in a stand-alone system in which all related devices of the monitoring are composed of non-IP devices. In other configurations, VS32 can be used.
 - d.) Three-way conference trunk/VS32 in the node accommodating Agent positions is used. When the three-way conference trunk/VS32 has no idle port, the Supervisory position cannot start monitoring, and stays ready for monitoring until any of the three-way conference trunks become idle.
 - e.) Supervisory positions must make sure this feature is completed before logoff. While the **MON/BARGE** key lamp is lit or flashing, the Supervisory positions cannot log off.
 - f.) While a Supervisory position sets (reserves) monitoring (the **MON/BARGE** key lamp is lit), any ACD incoming calls are not distributed to the Supervisory position.
 - g.) A monitor call can be routed to a Supervisory position even when the Supervisory position is in Work mode or Break mode.
 - h.) Supervisory position cannot reserve monitoring an Agent position which is being monitored or is set to be monitored by another Supervisory position.
 - i.) When Supervisory position itself is set to be monitored by another Supervisory position, the Supervisory Position cannot set monitoring.
 - j.) When an Agent position being monitored by a Supervisory position transfers an ACD call, the Supervisory position can proceed to monitor the conversation between the Agent position and the transfer destination. Also, when the destination party releases the ACD call and the ACD call returns to the Agent Position, the Supervisory position can monitor the conversation between the ACD call and the Agent position. However, when the Agent position goes back to the conversation with the ACD call through the switch hook flash, the monitoring will be released.
 - k.) When an Agent position being monitored releases the call, the Supervisory position automatically sets reservation to monitor the Agent position and hears silence.
 - l.) While a Supervisory position is monitoring an Agent position's ACD line, the Supervisory can display

the identification of the original ACD call and the queue depth by pressing the **LOGON** key. Please see “CALLING PARTY IDENTIFICATION - ACD [C-70A]” for more details.

- m.) Serial Monitoring is not available through a monitor request (MONITOR ME – ACD [M-89A]) from an Agent position. When the conversation ends, the monitoring is automatically released. When the Agent position being monitored places the monitored call on hold or goes switch hook flash, the Supervisory position hears MOH. In that case, to start the monitoring again, the Supervisory position needs to release the connection once and then set the monitoring.
- n.) When an Agent position places a call on hold and attempts to transfer it to the next destination, if a Supervisory position sets up immediate or preset monitoring of the Agent position before the second call is connected, it may take four to six seconds for the Supervisory position to receive the ringing notice of readiness for monitoring.
- o.) In the case that an Agent position receives an audible alert (Recall) indicating unsuccessful call transfer (**Note 1**), the procedure for call monitoring differs depending on whether the Supervisory position starts monitoring of the Agent position before or after the Recall:

Note 1: For details, see “SERVICE CONDITIONS” of CALL TRANSFER TO SPLIT QUEUE - ACD [C-67A].

- **Case where monitoring is started before Recall**

If the monitoring of the Agent position has already started when the call transfer fails, the monitoring will be interrupted by the disconnect. The Supervisory position is automatically placed in a state waiting for the Agent position to start talking on the phone, but the monitoring does not automatically resume when the Agent position answers the Recall. To restart the monitoring, the Supervisory position needs to release the current monitoring setting and then set it up again.

- **Case where monitoring is started after Recall**

If the monitoring of the Agent position is set up after the Agent position answers the Recall, the Supervisory position can monitor continuously until the end of the call (**Note 2**), when the Supervisory position hears MOH instead of being disconnected. The Supervisory position needs to release the connection manually (**Note 3**).

Note 2: The monitored Agent position is not automatically disconnected. Manual disconnection is only possible.

Note 3: Releasing the connection manually releases the current monitoring setting.

2. The following shows the service conditions for **BARGING** function:

- a.) A Supervisory position can barge into an ACD call by pressing the **MON/BARGE** key while monitoring the ACD call.

Note: While monitoring an Agent position's Non-ACD line, the Supervisory position cannot barge into the conversation even by pressing the **MON/BARGE** key again. Barges can only be done while monitoring ACD lines. If the **MON/BARGE** key is pressed while monitoring an Agent's Non-ACD line, the key that is flashing will go off. When changing the state so that it will flash, press it once more.

- b.) Three-way conference trunk or VS32 is required for the Barging function. For the firmware version available for this feature, see [Equipment/Terminals Accommodating in ACD/OAI System](#) in Chapter 2.
- c.) Three-way conference trunk/VS32 in the node accommodating Agent positions is used.
- d.) When Supervisory position barges into a call, short beeps are heard.

Note: When Supervisory position barges into a call via MG(SIP), the beeps are not heard.

- e.) When a Supervisory position releases the connection while barging into an ACD call, the Supervisory position returns to the monitoring mode. When an Agent position being barged by a Supervisory position releases the connection, the Supervisory position sets the monitoring for the Agent position.
- f.) If a Supervisory position barges into an ACD call after the Agent position answers an audible alert (Recall) indicating unsuccessful call transfer (**Note 4**), the Supervisory position cannot use the **MON/BARGE** key to release the current monitoring when it is no longer necessary.

Note 4: For details, see "SERVICE CONDITIONS" of CALL TRANSFER TO SPLIT QUEUE - ACD [C-67A].

When the Supervisory position disconnects the barge call or the monitored Agent position has completed the call (**Note 5**), the **MON/BARGE** lamp on the Supervisory position will flash red. The lamp goes off when the **MON/BARGE** key is pressed, but the monitoring setting still remains without being released. In this state, the Supervisory position cannot create a new monitoring configuration.

To get out of the lockup, the Supervisory position needs to log off from the ACD system and log on again.

Note 5: The monitored Agent position is not automatically disconnected. Manual disconnection is only possible.

SERVICE CONDITIONS (When Using IP Devices/In ACD-FCCS Configuration)

1. The following shows the service conditions for **MONITORING** function:

- a.) When this feature is used in an environment where IP devices are used or in an ACD-FCCS configuration, some system data settings are required. Also, in an environment where IP devices are used or in an ACD-FCCS configuration, an audio breakup occurs at the start/end of the monitoring. To prevent this problem, enable Silent Monitor (Multi-path Monitor). For details, see the Programming section.

Note: For connections including terminals/equipment does not support Silent Monitor (Multi-path Monitor), Single-path Monitor is provided.

Note: In an ACD-FCCS network containing DTI-FCCS, monitoring functions cannot work properly when Silent Monitor (Multi-path Monitor) connection is enabled. In that case, set "0" for ASYDN, SYS 1, Index 874, Bit 0 to disable Multi-path Monitor connection.

Note: When using Silent Monitor (Multi-path Monitor) connection, voice is transmitted from both the terminal and the trunk. Therefore, when collecting a call log by IP logger, it may not be collected normally while monitoring. In this case, this function must be disabled when using an IP logger that does not support this function.

b.) Supervisory position can start monitoring immediately when the target Agent position is in a two-way call. In the following cases, the Supervisory position reserves monitoring on the Agent position (the **MON/BARGE** key lamp is lit).

- Agent position is placing a call on hold
- Agent position is in a three-party conference
- Agent position is transferring a call

c.) While Agent position A being monitored by Supervisory position A is talking with Agent position B, another Supervisory position (Supervisory position B) can set a monitoring for Agent position B but it cannot start the monitoring (the **MON/BARGE** lamp turned on). Supervisory position B automatically starts the monitoring after Supervisory position A releases the monitoring.

When Agent position A being monitored by Supervisory position A transfers the monitored call to Agent Position B being set to be monitored by Supervisory position B, either of the Supervisory positions starts the monitoring and the other reserves the monitoring. Likewise, when Agent position A being monitored by Supervisory position A makes a call to Agent position B being monitored by Supervisory position B and the conversation between Agent A and Agent B is established, either of the Supervisory positions starts the monitoring and the other reserves the monitoring.

d.) Executive Right-of Way is not available for an Agent position which is being monitored. The LCD of the terminal which tries to be bridged into the connection displays "RST".

e.) When an Agent position being monitored by a Supervisory position places the monitored call on hold or goes switch hook flash, the supervisory position hears MOH. Subsequent state transition is as follows:

- When the Agent position retrieves the held call, the transfer destination party answers the transferred call, or the calling party abandons the call: the Supervisory position releases the monitoring and then automatically starts the monitoring again (Supervisory position rings).
- When the Agent position starts a three-party conference after transferring the call, the Supervisory position automatically releases the monitoring.
- When Agent position (Agent A) goes switch hook flash after talking with the transferring destination (Agent B), the Supervisory position releases the monitoring. In this case, the Supervisory position hears MOH (monitoring is not started automatically). To start monitoring the call between the calling party and the Agent position (Agent A) again, the Supervisory position needs to release the call once and then set the monitoring for Agent A.

f.) While a Supervisory position is being called by a reserved Agent position (the Supervisory position is ringing):

When the Agent position places the call before the Supervisory position answers the monitor call, the Supervisory position hears MOH after answering the monitor call. Subsequent state transition is as follows:

- When the Agent position retrieves the held call, the Supervisory position starts the monitoring.
 - When the Supervisory position releases the call, the monitoring is canceled. Subsequently, the Supervisory position can set monitoring again. In this case, the Supervisory position can start the monitoring when the Agent position retrieves the held call.
 - When the Agent position retrieves the held call before the Supervisory position answers the monitor call, the monitoring will be started.
- g.) When an FCCS link block/IPPAD link block occurs at the start of a monitoring, the Supervisory position automatically sets reservation to monitor the Agent position. Monitoring will be retried in ACDP. When any idle connection trunk/IPPPAD is found, the monitoring is restarted.
- h.) When a Supervisory position which is monitoring an Agent position is an IP terminal:
When IPPAD link block occurs while a Supervisory position is being called by a reserved Agent position, the Supervisory position cannot answer the monitor call and the ringing continues. In this case, the Supervisory position needs to repeat the answering operation until any idle IPPAD is found.
- Note:** The Supervisory position can cancel the monitoring by pressing the **MON/BARGE** key twice.
- i.) In the case of Single-path Monitor connection, when starting or stopping a monitoring, silence occurs for a moment because the speech path is reestablished.
- j.) When either of the monitored Agent position or the calling party is an IP terminal, loudness level according to IPPAD data may change on the ACD call monitored by supervisor (because the voice path is reestablished). Adjust the loudness level of IPPAD data appropriately. Refer to the Data Programming Manual - Business Chapter2 ASSIGNMENT OF BASIC OFFICE DATA "18. PAD/EC Control IP/PHC Support".
- k.) When this feature is used in an IP network, an identical voice compression format needs to be used in the network.
- l.) If an opposite party connected to an Agent position under monitoring hangs up, the Supervisory position may hear Music-On Hold (MOH) in the following cases:

<When monitored Agent position is on ACD call >

- When Automatic Idle Return [A-69] is available for the monitored Agent position, if the opposite party (calling party) hangs up during the monitoring, the Agent position returns to idle status without user intervention, and the Supervisory position is automatically switched to a status waiting for the next monitoring event. In this case, the Supervisory position may hear MOH until entering the waiting state.

- When Automatic Idle Return is not available for the monitored Agent position (because the opposite party is an analog trunk), if the opposite party (calling party) hangs up during the monitoring, the Supervisory position will not be switched to a status waiting for the next monitoring event until the Agent position releases the call. In this case, the Supervisory position hears MOH until entering the waiting state.

<When monitored Agent position is on Non-ACD call >

- When the monitored Agent position answers a Non-ACD call, if the opposite party (calling party) hangs up during the monitoring, the Supervisory position is switched to a status waiting for the next monitoring event. In this case, the Supervisory position may hear MOH until entering the waiting state.
- When the monitored Agent position places a Non-ACD call to another Agent position or a trunk configured with the ACDTG command, if the opposite party (called party) hangs up during the monitoring, the Supervisory position is switched to a status waiting for the next monitoring event. In this case, the Supervisory position may hear MOH until entering the waiting state.
- When the monitored Agent position places a Non-ACD call to a station or a trunk without the ACDTG command configuration, if the opposite party (called party) hangs up during the monitoring, the Supervisory position will not be switched to a status waiting for the next monitoring event until the Agent position releases the call. In this case, the Supervisory position hears MOH until entering the waiting state.

m.) When a communication failure, including equipment failure, occurs in ACDP node during a monitoring: Even when the monitored Agent position or the opposite party (calling party) releases the call, the Supervisory position is not released but hears Music-On Hold. Supervisory position can be released by going off-hook but MON lamp still remains flashing. **MON/BARGE** lamp goes out by pressing **MON/BARGE** key twice after recovering from a communication failure. When ACD system recovers from a communication failure, the **MON/BARGE** lamp goes out automatically.

n.) When a communication failure, including equipment failure, between a calling party side node and an Agent position side node in an FCCS network occurs during a monitoring: Even when the monitored Agent position/calling party releases the connection, the **MON/BARGE** lamp still remains flashing on Supervisory position. In this case, the **MON/BARGE** lamp goes out by pressing the **MON/BARGE** key twice.

o.) When a failure occurs in an Agent position being monitored by a Supervisory position or the opposite party, the Supervisory position continues monitoring and hears RTP warning tone (Supervisory position continues hearing MOH when the Supervisory position was hearing MOH before the occurrence of the failure) or no tone. In that case, Supervisory position can exit the monitoring by releasing the connection.

p.) When the Agent position's operation for the ongoing call overlaps the Supervisory position's monitoring or cancel monitoring operation, either of operations may be failed. In that case, try the failed operation again.

Example:

When the Supervisory position is monitoring the Agent position's ongoing call and both of the Supervisory and Agent positions disconnects at the same time, the Agent position may fail to disconnect the call. In that case, the Agent position needs to try the operation again.

q.) The following explains three cases of the Supervisory position operations when an Agent position to be monitored by the Supervisory position places/answers a consultation call while the original call is put on hold. The operation of the Supervisory position differs depending on when monitoring is set and the type of the line (ACD line or Non-ACD line) to be used.

- When Calling Party Releases the Call (While Being Placed On Hold):
- When Calling Party Releases the Call (While Transfer Destination Party is Placed On Hold):
- When Transfer Destination Party Releases the Call (While Being Placed On Hold):

When Calling Party Releases the Call (While Being Placed On Hold):

Case 1: An Agent position to be monitored by a Supervisory position makes a consultation call to the transfer destination party while placing the first call on hold. The Supervisory position sets monitoring **BEFORE** the destination answers the consultation call, then the calling party (who is hearing MOH) releases the call.

[Example]

- (1) Agent A puts the calling party on hold and places a consultation call to Agent B/trunk (transfer destination).
The calling party (trunk/station) hears MOH.
- (2) Supervisor sets monitoring for Agent A (intermediate party) or Agent B/trunk (transfer destination).
- (3) Agent B/trunk (transfer destination) answers the consultation call.
The calling party (trunk/station) is hearing MOH.
The supervisor is monitoring Agent A (intermediate party) or Agent B (transfer destination).
- (4) The calling party (trunk/station) goes on-hook.

Line to be Used		When Supervisor Sets Monitoring <u>Before</u> Transfer Destination Answers	
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A	Sets Monitoring for Agent B
ACD line	ACD line	Restarts Monitoring	Restarts Monitoring
ACD line	Non-ACD line	Restarts Monitoring	Restarts Monitoring
Non-ACD line	ACD line	Restarts Monitoring	Restarts Monitoring
Non-ACD line	Non-ACD line	Hears MOH	Hears MOH

Line to be Used		When Supervisor Sets Monitoring <u>Before</u> Transfer Destination Answers
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A
ACD line	Trunk	Restarts Monitoring
Non-ACD line	Trunk	Hears MOH

Case 2: An Agent position to be monitored by a Supervisory position places a consultation call to the transfer destination party while placing the first call on hold. The Supervisory position sets (starts) monitoring **AFTER** the destination answers the consultation call, then the calling party (who is hearing MOH) releases the call.

[Example]

- (1) Agent A puts the calling party on hold and places a consultation call to Agent B/trunk (transfer destination).
The calling party (trunk/station) hears MOH.
- (2) Agent B/trunk (transfer destination) answers the consultation call.
The calling party (trunk/station) is hearing MOH.
- (3) Supervisor sets (starts) monitoring for Agent A (intermediate party) or Agent B/trunk (transfer destination).

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The calling party (trunk/station) is hearing MOH.

The supervisor is monitoring Agent A (intermediate party) or Agent B (transfer destination).

(4) The calling party (trunk/station) goes on-hook.

Line to be Used		When Supervisor Sets Monitoring After Transfer Destination Answers	
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A	Sets Monitoring for Agent B
ACD line	ACD line	Restarts Monitoring	Restarts Monitoring
ACD line	Non-ACD line	Restarts Monitoring	Hears MOH
Non-ACD line	ACD line	Hears MOH	Restarts Monitoring
Non-ACD line	Non-ACD line	Hears MOH	Hears MOH

Line to be Used		When Supervisor Sets Monitoring After Transfer Destination Answers
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A
ACD line	Trunk	Restarts Monitoring
Non-ACD line	Trunk	Hears MOH

Note: When the Supervisory position hears MOH after the calling party releases a call, the following operations are required to restart monitoring.

- Agent position retrieves a call on hold or cancels a call transfer.
- Supervisory position releases a call and then restarts monitoring.

When Calling Party Releases the Call (While Transfer Destination Party is Placed On Hold):

Case 1: An Agent position to be monitored by a Supervisory position places a consultation call to the transfer destination party while placing the first call on hold. The Supervisory position sets (starts) monitoring **BEFORE** the Agent position (intermediate party) goes switch hook flash, then the calling party (who is in an active call with the intermediate party) releases the call.

[Example]

- (1) Agent A puts the calling party on hold and places a consultation call to Agent B/trunk (transfer destination).
The calling party (trunk/station) hears MOH.
- (2) Agent B/trunk (transfer destination) answers the consultation call.
The calling party (trunk/station) is hearing MOH.
- (3) Supervisor sets (starts) monitoring for Agent A (intermediate party) or Agent B/trunk (transfer destination).
The calling party (trunk/station) is hearing MOH.
The supervisor is monitoring Agent A (intermediate party) or Agent B/trunk (transfer destination).
- (4) Agent A goes switch hook flash.
- (5) A connection between Agent A (intermediate party) and the calling party (trunk/station) is reestablished.
Agent B/trunk (transfer destination) hears MOH.
- (6) The calling party (who is in an active call) releases the call.

Line to be Used		When Supervisor Sets Monitoring <u>Before</u> Agent A Goes Switch Hook Flash	
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A	Sets Monitoring for Agent B
ACD line	ACD line	Restarts Monitoring	Restarts Monitoring
ACD line	Non-ACD line	Restarts Monitoring	Restarts Monitoring
Non-ACD line	ACD line	Restarts Monitoring	Restarts Monitoring
Non-ACD line	Non-ACD line	Restarts Monitoring	Restarts Monitoring

Line to be Used		When Supervisor Sets Monitoring <u>Before</u> Agent A Goes Switch Hook Flash
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A
ACD line	Trunk	Restarts Monitoring
Non-ACD line	Trunk	Restarts Monitoring

Case 2: An Agent position to be monitored by a Supervisory position places a consultation call to the transfer destination party while placing the first call on hold. The Supervisory position sets (starts) monitoring **AFTER** the Agent position (intermediate party) goes switch hook flash, then the calling party (who is in an active call with the intermediate party) releases the call.

[Example]

- (1) Agent A puts the calling party on hold and places a consultation call to Agent B/trunk (transfer destination).
The calling party (trunk/station) hears MOH.
- (2) Agent B/trunk (transfer destination) answers the consultation call.
The calling party (trunk/station) is hearing MOH.
- (3) Agent A goes switch hook flash.
- (4) A connection between Agent A (intermediate party) and the calling party (trunk/station) is re-established.
Agent B/trunk (transfer destination) hears MOH.
- (5) Supervisor sets (starts) monitoring for Agent A (intermediate party) or Agent B/trunk (transfer destination).
Agent B/trunk (transfer destination) is hearing MOH.
The supervisor is monitoring Agent A (intermediate party) or has set monitoring for Agent B/trunk (transfer destination).
- (6) The calling party (who is in an active call) releases the call.

Line to be Used		When Supervisor Sets Monitoring <u>After</u> Agent A Goes Switch Hook Flash	
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A	Sets Monitoring for Agent B
ACD line	ACD line	Restarts Monitoring	Restarts Monitoring
ACD line	Non-ACD line	Restarts Monitoring	Restarts Monitoring
Non-ACD line	ACD line	Restarts Monitoring	Restarts Monitoring
Non-ACD line	Non-ACD line	Restarts Monitoring	Restarts Monitoring

Line to be Used		When Supervisor Sets Monitoring <u>After</u> Agent A Goes Switch Hook Flash
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A
ACD line	Trunk	Restarts Monitoring
Non-ACD line	Trunk	Restarts Monitoring

When Transfer Destination Party Releases the Call (While Being Placed On Hold):

Case 1: An Agent position to be monitored by a Supervisory position places a consultation call to the transfer destination party while placing the first call on hold. The Supervisory position sets (starts) monitoring **BEFORE** the Agent position (intermediate party) goes switch hook flash, then the destination party (who is hearing MOH) releases the call.

[Example]

- (1) Agent A puts the calling party on hold and places a consultation call to Agent B/trunk (transfer destination).
The calling party (trunk/station) hears MOH.
- (2) Agent B/trunk (transfer destination) answers the consultation call.
The calling party (trunk/station) is hearing MOH.
- (3) Supervisor sets (starts) monitoring for Agent A (intermediate party).
- (4) Agent A goes switch hook flash.
- (5) A connection between Agent A (intermediate party) and the calling party (trunk/station) is re-established.
Agent B/trunk (transfer destination) hears MOH.
- (6) Agent B/trunk (transfer destination) releases the call.

Line to be Used		When Supervisor Sets Monitoring <u>Before</u> Agent A Goes Switch Hook Flash
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A
ACD line	ACD line	Restarts Monitoring
ACD line	Non-ACD line	Restarts Monitoring
Non-ACD line	ACD line	Restarts Monitoring
Non-ACD line	Non-ACD line	Hears MOH

Line to be Used		When Supervisor Sets Monitoring <u>Before</u> Agent A Goes Switch Hook Flash
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A
ACD line	Trunk	Restarts Monitoring
Non-ACD line	Trunk	Hears MOH

Case 2: An Agent position to be monitored by a Supervisory position places a consultation call to the transfer destination party while placing the first call on hold. The Supervisory position sets (starts) monitoring **AFTER** the Agent position (intermediate party) goes switch hook flash, then the destination party (who is hearing MOH) releases the call.

[Example]

- (1) Agent A puts the calling party on hold and places a consultation call to Agent B/trunk (transfer destination).
The calling party (trunk/station) hears MOH.
- (2) Agent B/trunk (transfer destination) answers the consultation call.
The calling party (trunk/station) is hearing MOH.
- (3) Agent A goes switch hook flash.
- (4) A connection between Agent A (intermediate party) and the calling party (trunk/station) is reestablished.
Agent B/trunk (transfer destination) hears MOH.
- (5) Supervisor sets (starts) monitoring for Agent A (intermediate party).
- (6) Agent B/trunk (transfer destination) releases the call.

Line to be Used		When Supervisor Sets Monitoring <u>After</u> Agent A Goes Switch Hook Flash
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A
ACD line	ACD line	Restarts Monitoring
ACD line	Non-ACD line	Restarts Monitoring
Non-ACD line	ACD line	Restarts Monitoring
Non-ACD line	Non-ACD line	Hears MOH

Line to be Used		When Supervisor Sets Monitoring <u>After</u> Agent A Goes Switch Hook Flash
Agent A (Intermediate Party)	Agent B (Transfer Destination)	Sets Monitoring for Agent A
ACD line	Trunk	Restarts Monitoring
Non-ACD line	Trunk	Hears MOH

- Note:** When the supervisory position hears MOH after the transfer destination releases a call, the following operations are required to restart monitoring.
- Agent position retrieves a call on hold or cancels a call transfer.
 - Supervisory position releases a call and then restarts monitoring.

r.) When a failure such as a terminal fault occurs in Supervisory position or Agent position while a monitoring is set, the monitoring is canceled by ACDP Automatic Logoff function. When a failure occurs while a call is being monitored, the call is released by a failure handling.

2. The following shows the service conditions for **BARGING** function:
- a.) Executive Right-of Way is not available for an Agent position which is being monitored. The LCD of the terminal which tries to bridge into the connection displays "RST".
 - b.) When an IPPAD link block occurs at the start of a barging, the barging will be retried in ACDP. When any idle port of IPPAD is found, the barging will be executed.
 - c.) When either of the monitored Agent position or the calling party is an IP terminal, loudness level according to IPPAD data may change on the ACD call monitored by supervisor (because the voice path is reestablished). Adjust the loudness level of IPPAD data appropriately. Refer to the Data Programming Manual - Business Chapter 2 ASSIGNMENT OF BASIC OFFICE DATA "18. PAD/EC Control IP/PHC Support".
 - d.) When this feature is used in an IP network, an identical voice compression format needs to be used in the network.
 - e.) When a communication failure, including equipment failure, between a calling party side node and an Agent position side node in an FCCS network occurs while a Supervisory position barges into the ACD call:
Even when the barged Agent position/calling party releases the connection, the **MON/BARGE** lamp still remains flashing on Supervisory position. In this case, the **MON/BARGE** lamp goes out by pressing the **MON/BARGE** key twice.
 - f.) When an Agent position being monitored by a Supervisory position places the monitored call on hold or transfers the call, the Supervisory position hears MOH. When the Agent position cancels the call hold or the call transfer while the Supervisory position tries to barge into the Agent position's ACD line ("BARGE?" is displayed on the Supervisory position), a three-party call is established after the completion of the barging. However, in that case, the Supervisory position continues to hear MOH until the Agent position cancels the call hold or the call transfer. Also, if the Supervisory position cancels the barging before the completion of the barging, the monitoring will also be canceled.

CAUTION: The use of a monitoring device to eavesdrop, whether or not contemporaneous with its transmission, may be illegal under certain circumstances and laws. Legal advice should be sought before implementing any practice that monitors a telephone conversation. Some federal and state laws require the monitoring party to use beep tones, to notify all parties to the telephone conversation, or to obtain the consent of all parties to the telephone conversation. Some of these laws incorporate strict penalties.

PROGRAMMING

Assign the **MON/BARGE** key referring to “2.4 ACD Agent/Supervisory Position Data Assignment” in Chapter 4. When Monitor Function for IP devices is used, assign the following data.

Note: Before you set the following data, make sure that any monitoring function is not being used. If you change the setting of the data while a monitoring function is being used, the voice path is not re-established properly, an error, such as no tone or warning tone, may occur.

- **In environment where IP devices are used or in ACD-FCCS configuration:**

STEP 1: ASYDL/ASYDN

Note: When this feature is used in an ACD-FCCS configuration, set the following data with ASYDN.

SYS1

Index 867

Bit 3=1 (Improvement for SCF6 request for Monitor Connection is enabled)

Index 869

Bit 6=1 (Monitor Function for IP terminals is enabled)

Bit 7=1 (Monitor Function for IP terminals-LAN is enabled)

- **When Silent Monitor (Multi-path Monitor) is used:**

Note: In an ACD FCCS network containing DTI-FCCS, monitoring functions cannot work properly when Silent Monitor (Multi-path Monitor) connection is enabled. In that case, set “0” for ASYDN, SYS1, Index 874, Bit 0 to disable Multi-path Monitor connection.

STEP 1: ASYDL/ASYDN

Note: When this feature is used in an ACD-FCCS configuration, set the following data with ASYDN.

System Data 1

Index 679

Bit 1=1 (Multiple Session for SIP Multiple Line Terminals is enabled)

Note: When you change the setting of this System Data, you must reregister the terminal to reflect the change.

Index 874

Bit 0=1 (Multi-path Monitor connection is enabled)

STEP 2: ARTI/ARTIN

Note: When this feature is used in an ACD-FCCS configuration, set the following data with ARTIN.

CDN 95 (MONITOR) = 1 (ACD monitor link connection = Multi-connection)

Note: To change the data for existing route (RT), initialize or reboot the trunk device such as circuit card, MG, or VS32.

M-29A MULTIPLE CUSTOMER GROUPS - ACD

GENERAL DESCRIPTION

The system can be arranged to independently service more than one ACD customer (tenant). Ideally all components of the ACD system should be duplicated for each tenant but in reality some components can be shared.

Utilizing multiple tenants in an attempt to circumvent limitations imposed at a per-tenant level does not work since too many components end up being shared. Tenant limitation exist for a reason often related to software design considerations. Assigning a second tenant to take advantage of a tenant parameter may appear to work at first but blending all the other components of a multi-tenant ACD can present several difficulties.

OPERATING PROCEDURE

No manual operation is required.

SERVICE CONDITIONS

1. Multiple tenants were designed to serve separate groups within one ACD system. Each group should have separate telephone facilities, MIS systems and personnel.
2. Attempts to share resources will typically result in inaccurate statistics since calls which cross tenant boundaries can not be adequately tracked by either system.

PROGRAMMING

For the consideration of the ACD tenant, see “2.2 ACD Tenant Data Assignment” in Chapter 4.

STEP 1: ASYD-Assign the tenant development table data.
Separate or Common Tenant Data table development for the respective commands.
0/1=Separate/Common

Note: When data “1” is assigned, data must be assigned for Tenant 1 (TN=1) in the respective commands.

SYS1, Index 92,

Bit 0: System Data-2 (“ASYD” command)

Bit 1: Special Access Code Data (“ASP”, “AASP”, “AGSP” commands)

Bit 2: Numbering Plan Data (“ANPD”, “AANP”, “AGNP” commands)

Bit 3: Station Data (“ASDT”, “AAST”, “AGST”, “ALDN”, “ASAT” commands)

Bit 4: Route Restriction Class Data (“ARSC” command)

Bit 5: Call Forwarding Restriction Data (“ACFR” command)

SYS1, Index 93,

Bit 0: Service Feature Restriction class Data (“ASFC” command)

Bit 1: Call Forwarding Data (“ACFO” command)

Bit 2: TAS Data (“ATAS” command)

Bit 3: Speed Calling Data (“ASPD” command)

Bit 4: Route and Selection Translation Data (OG, Tandem) (“ASTP”, “AFRS” commands)

Bit 5:Route and Selection Translation Data (IC) (“ASTP”, “AFRS” commands)
Bit 6:Maximum Necessary Digit Data (“AMND” command)
Bit 7:Announcement Equipment Data (“AAED” command)
SYS1, Index 94,
Bit 0:Tenant Restriction Class Data (“ATNR” command)
Bit 1:EPN Facility Restriction Data (“AEFR” command)
Bit 2:Primary Call Restriction Data (“APCR” command)
Bit 3:Authorization Code Data (“AATC” command)

STEP 2: ACDTN-Assign the ACD tenant data.

TN: ACD tenant (1-9)
NAME: Name corresponding to the ACD tenant data (max. 20 digits)
NSPL: Maximum Split for Tenant (1-900)
LANG: Default Language
0=English
1=Japanese
2=Spanish
3=Italian
4=French
5=German
OPENO: Enter the agent access code programmed in the ASPA or ASPAN (up to six digits)
IVRNO: Not used.
ANSTM: Time (in seconds) after which an outbound call is assumed to have been answered.
ANTNO: Personal Announcement Number (0-200) **Note 1, Note 2**
* To disable Personal Announcement, set this parameter to 0, or leave it blank.

Note 1: Specify an announcement number in the range of 1 to 58 when:
• Extension of Programmable Announcement Messages is disabled. (ASYDL/
ASYDN, SYS1, Index 1194, Bit 0=0)

PRI: Priority to use for split queuing after overflow or call forwarding (1-250)
* To disable split queuing after overflow or call forwarding, leave this parameter blank.

Note 2: For North America, specify an announcement number in the range of 1 to 58.

STEP 3: The following are the commands necessary to assign the ACD tenant.

ASDT, ACDPSN, ACDLOG, ACDSPL, ACDTG, ARTD, ATRK, AMNO, ACDHC, ACDHS,
ACDWS, ACDTN, AKYD, ARSC, ASFC, ATNR, ACDCCV.

M-79A MULTIPLE SUPERVISORS - ACD

GENERAL DESCRIPTION

Multiple supervisors can be grouped together to form a split when it is necessary for more than one supervisor to serve a split of agents. Assistance and emergency requests can be routed to a split of supervisors, but a split of supervisors does not normally receive incoming call traffic unless it has been programmed as a secondary split to be queued to in a Call Control Vector (CCV). Refer to “CALL CONTROL VECTOR - ACD [C-108A]” for more detailed information. All aspects of an agent split, such as call waiting indication and queuing, also apply to a split of supervisors.

OPERATING PROCEDURE

For additional reading please see the note for “The Supervisor Concept” in “SPLITS - ACD [S-91A]”.

SERVICE CONDITIONS

1. Data modification can be made from PCPro. Any modification from MIS cannot be made.
2. When any data for this feature is not set, the designated supervisory position at each split is called.
3. This feature is available only to positions in which agents logged with login IDs.
4. The same type of EMERGENCY/RECORDER used in each split group must be used for a split of supervisors.
5. Assign NIGHT key (AKYD, FKY 38) only to the primary supervisory position.
6. Assistance and emergency calls with this feature can not be taken by the supervisor in Work Mode or Ready Mode (Assistance and emergency call to a individual supervisor can be taken by supervisors in those modes).
7. The followings are differences between assistance/emergency requests to an individual supervisor and those to a split of supervisors. See “ASSISTANCE - ACD AGENT - ACD [A-34A]” and “EMERGENCY/RECORDER - ACD [E-6A]” for more details.

Service \ Destination	Individual Supervisor	Split of Supervisor
Assistance-ACD Agent	Assistance call terminates to Non-ACD line to the supervisor	Assistance call terminates to the ACD pilot number of the split
Emergency/Recorder	Emergency call can be distributed to the supervisor in Work Mode/Ready Mode.	Emergency call can not be distributed to the supervisor in Work Mode/Ready Mode.

8. CCV data programmed for an ACD pilot number of a split of supervisors as the destination of Assistance call or Emergency call is as follows. See “2.7 Call Control Vectors (CCV) Assignment” in Chapter 4.
 - Queue Assign, Conditional Queue Assign
 - Pause (Valid for CCV data for Assistance only)
 - End CCV
9. Since DAY/NIGHT CLASS OF SERVICE [D-15] can not be used for the split of supervisors, do not set the data that ACD call excluding Assistance and Emergency calls terminated to the split directly.
10. When using dictation trunk for EMERGENCY/RECORDER, recording starts from the moment the call terminates to the supervisory position (It is not recorded while the call is in queue).

11. When emergency request call is routed to a specified Split of Supervisors, the emergency request call cannot be canceled by pressing the EMER key. Release operation of the appropriate Supervisor or the monitored Agent can cancel the emergency request call.

PROGRAMMING

STEP 1: ACDSPL -Assign assistance and emergency request destinations per split.

ASIST - pilot number of a split of supervisors

EMGCY - pilot number of a split of supervisors

STEP 2: ACDLOG -Assign assistance and emergency request destinations per ID code.

PARN - pilot number of a split of supervisors

PERN - pilot number of a split of supervisors

M-88A MIS OPERATOR SELECTION - ACD

GENERAL DESCRIPTION

This feature permits the selection of an access code for an operator, for an entire tenant. Certain MIS change commands permit the operator to be selected as the destination when routing ACD calls.

In the extreme case where the ACD traffic has exhausted all available call records (too many simultaneous ACD calls either connected or in queue) all new incoming ACD traffic will be diverted to the code specified for the MIS Operator Selection. Once diverted the caller should be encouraged to call back at a later time when the ACD system is not so congested.

Note: This feature is available in North America only.

OPERATING PROCEDURE

This feature is implemented through an ACD PCPro command. The command data is on a tenant-wide basis.

PROGRAMMING

ACDTN - OPE NO: Operator access code (Max. 6 digits)

M-89A MONITOR ME - ACD

GENERAL DESCRIPTION

An Agent position, during an ACD call, can request to be monitored by a specific Supervisory position. When the Agent position presses the **ASSIST** key or presses the **TALLY** key and dials 006#, a monitor request is sent to the designated Supervisory position. Upon answering, the Supervisory position is in a Silent Monitor (Multi-path Monitor) connection listening to the Agent position and the calling party.

The number (personal assist request number) associated with the Supervisory position is programmable for each Agent position.

The **ASSIST** key and the personal assist request number can be used for either the MONITOR ME feature or the ASSISTANCE - ACD AGENT feature. The choice is made for each split. Regardless of which feature the key and number are dedicated to, if an Agent personal assist number and a split assist request number are both defined, the personal assist request number will always be used. If an Agent position is in multi-split mode and a personal assist request number is defined, the quantity of splits which have an assist request number defined is meaningless; the personal assist request number will be applied. Please refer to “MULTI-SPLIT AGENT - ACD [M-90A]” for more information. This feature is available for network that is configured by Peer-to-Peer FCCS.

OPERATING PROCEDURE

The following example illustrates how the feature functions.

1. An Agent is logged on to a position; the extension is 4281.
2. The Agent requests to be monitored by pressing the **ASSIST** key.
3. While the Supervisory position is being rung, the Agent and the calling party remain connected and can continue to converse.
4. The **ASSIST** lamp at the Agent position is lit, and the display shows the individual Supervisor’s name. An example of the display is MONITOR JAMES.
5. When the destination Supervisory position is idle, the **MON/BARGE** lamp at the destination Supervisory position is lit and the display provides the extension of the Agent who is requesting the monitor activity and the trunk type and number to which the Agent is connected. The display appears when the monitor request is ringing and when it is answered.
6. The Supervisory position answers the request and begins monitoring the Agent and the calling party.
7. The **ASSIST** lamp at the Agent position starts to flash and the display changes to MONITOR ANSWERED.
8. At this point, the Supervisory position is able to release the call or to barge. The latter option results in a three-way call involving the Supervisory position, the Agent position, and the calling party. To initiate the barge, the Supervisory position presses the **MON/BARGE** key; the ACD system responds with a BARGE? prompt. The Supervisory position can enter 1# to affirm the barge, at which point the Agent and calling party are sent an intrusion tone. The Supervisory position can cancel the monitor activity by either pressing the **MON/BARGE** key or by entering #.

SERVICE CONDITIONS

1. Monitoring requests can be issued only to an ACD line of a target station such a Supervisory position.
2. Monitoring requests are only allowed while talking on an ACD line. Requests while on a non-ACD line will be ignored.
3. Three-way conference trunk or VS32 is required for this feature. For the firmware version available for this feature, see [Equipment/Terminals Accommodating in ACD/OAI System](#) in Chapter 2.
Three-way conference trunk can be used in a stand-alone system in which all related devices of the monitoring are composed of non-IP devices. In other configurations, VS32 can be used.
4. Three-way conference trunk/VS32 in the node accommodating Agent positions is used. When the three-way conference trunk/VS32 has no idle port, “MONITOR BUSY” appears on the LCD of the Agent position and the monitor request does not appear on the Supervisory position.
5. During the barge (three-way conversation), any of the three parties may release themselves from the call; the other two parties remain connected.
6. The monitor activity, which is silent, is automatically canceled if the Agent position transfers to another party.
7. If the connection between the calling party and the Agent position is terminated prior to the Supervisory position’s response to the monitor request, the request is automatically canceled.
8. While the Supervisory position handles the ACD call, the LCD display for the service indication for “MONITOR ME” (see OPERATING PROCEDURE for details of indication) and the chime informs the Supervisory position with the request. On the LCD of Agent position, “MONITOR BUSY” is displayed.
9. When the Supervisory position is logged off or in BREAK mode, the service indication of “MONITOR VACANT” or “MONITOR BREAK” is displayed on the Agent position’s LCD at each time. However, the Supervisory position cannot find the service request via its LCD display.
10. Softphone can be used as Agent position and a Supervisory position. The following Softphones are available.
 - DtermSP30
 - Soft Client SP350 (R4 or later)
11. When an Agent position being monitored presses the ASSIST key, the monitoring is canceled and the Agent position places an assistance call to a Supervisory position predesignated as an assistance call destination. However, the Agent position occasionally fails to place an assistance call and “MONITOR BUSY” is displayed on the LCD. In that case, press ASSIST key again.
12. When an Agent position presses the ASSIST key after answering an audible alert (Recall) that indicates unsuccessful call transfer (**Note 1**), the monitor request is not sent.

Note 1: For details, see “SERVICE CONDITIONS” of CALL TRANSFER TO SPLIT QUEUE - ACD [C-67A].

SERVICE CONDITIONS (When Using IP Devices/In ACD-FCCS Configuration)

1. When this feature is used in an environment where IP devices are used or in an ACD-FCCS configuration, some system data settings are required. Also, in an environment where IP devices are used or in an ACD-FCCS configuration, an audio breakup occurs at the start/end of the monitoring. To prevent this problem, enable Silent Monitor (Multi-path Monitor). For details, see the Programming section.

Note: For connections including terminals/equipment does not support Silent Monitor (Multi-path Monitor), Single-path Monitor is provided.

Note: In an ACD FCCS network containing DTI-FCCS, monitoring functions cannot work properly when Silent Monitor (Multi-path Monitor) connection is enabled. In that case, set "0" for ASYDN, SYS1, Index 874, Bit 0 to disable Multi-path Monitor connection.

Note: When using Silent Monitor (Multi-path Monitor) connection, voice is transmitted from both the terminal and the trunk. Therefore, when collecting a call log by IP logger, it may not be collected normally while monitoring. In this case, this function must be disabled when using an IP logger that does not support this function.

2. Monitoring is available for an Agent position in a two-way conversation. When an Agent position is in the following state, monitoring are not available and "MONITOR BUSY" appears on the LCD of the Agent position.
 - Agent position is placing a call on hold
 - Agent position is in three-party conference
 - Agent position is transferring a call
 - Agent position is being monitored
3. When an Agent position being monitored by a Supervisory position places the monitored call on hold or goes switch hook flash, the Supervisory position hears MOH. In this case, the Supervisory position needs to release the call once to start the monitoring again.
4. When an FCCS link block/IPPAD link block occurs at the start of a monitoring, "MONITOR BUSY" appears on the LCD of the Agent position.
5. When a Supervisory position which is monitoring an Agent position is an IP terminal:
When IPPAD link block occurs while a Supervisory position is being called by a reserved Agent position, the Supervisory position cannot answer the monitor call and the ringing continues. In this case, the Supervisory position needs to repeat the answering operation until any idle IPPAD is found.

Note: The ringing continues until the Agent position presses the **ASSIST** key.

6. In the case of Single-path Monitor connection, when starting or stopping a monitoring, silence occurs for a moment because the speech path is reestablished.
7. When either of the monitored Agent position or the calling party is an IP terminal, loudness level according to IPPAD data may change on the ACD call monitored by supervisor (because the voice path is reestablished). Adjust the loudness level of IPPAD data appropriately. Refer to the Data Programming Manual - Business Chapter2 ASSIGNMENT OF BASIC OFFICE DATA "18. PAD/EC Control IP/PHC Support".

8. When this feature is used in an IP network, an identical voice compression format needs to be used in the network.
9. When an Agent position being monitored cannot activate Automatic Idle Return [A-69] (because the opposite party is an analog trunk) or is talking with its Non-ACD line:
If the opposite party (calling party) releases the call during a monitoring, the Supervisory position continues hearing MOH until the Agent position releases the call.
Even when an Agent position can activate Automatic Idle Return [A-69], the Supervisory position may hear MOH if the opposite party (calling party) releases the call during a monitoring.
10. When a communication failure, including equipment failure, occurs in ACDP node during a monitoring:
Even when the monitored Agent position or the opposite party (calling party) releases the call, the Supervisory position is not released but hears Music-On Hold. Supervisory position can be released by going off-hook but MON lamp still remains flashing. **MON/BARGE** lamp goes out by pressing **MON/BARGE** key twice after recovering from a communication failure.
When ACD system recovers from a communication failure, the **MON/BARGE** lamp goes out automatically.
11. When a communication failure, including equipment failure, between a calling party side node and an Agent position side node in an FCCS network occurs during a monitoring:
Even when the monitored Agent position/calling party releases the connection, the **MON/BARGE** lamp still remains flashing on Supervisory position. In this case, the **MON/BARGE** lamp goes out by pressing the **MON/BARGE** key twice.
12. When a failure occurs in an Agent position being monitored by a Supervisory position or the opposite party, the Supervisory position continues monitoring and hears RTP warning tone (Supervisory position continues hearing MOH when the Supervisory position was hearing MOH before the occurrence of the failure) or no tone. In that case, Supervisory position can exit the monitoring by releasing the connection.
13. While an Agent position being monitored by a Supervisory position is in a connection with a destination party or calling party through a Consultation Hold:
When either of the two parties hearing Music On Hold (MOH) releases the connection, the monitoring is canceled.
14. When a Supervisory position assigned to monitor or an Agent position assigned to be monitored has a failure such as its terminal is broken, the monitoring setting is canceled by ACDP Automatic Logoff.
If a failure happens while a call is being monitored, the call is recovered by Related Call Release of fault recovery.

CAUTION: The use of a monitoring device to eavesdrop, whether or not contemporaneous with its transmission, may be illegal under certain circumstances and laws. Legal advice should be sought before implementing any practice that monitors a telephone conversation. Some federal and state laws require the monitoring party to use beep tones, to notify all parties to the telephone conversation, or to obtain the consent of all parties to the telephone conversation. Some of these laws incorporate strict penalties.

PROGRAMMING

Note: Before you set the following data, make sure that any monitoring function is not being used. If you change the setting of the data while a monitoring function is being used, the voice path is not re-established properly, an error, such as no tone or warning tone, may occur.

STEP 1: AOKC - Define the meaning of OAI key codes (AKYD, FKY 34 through 47).
KEY -CODE = 8 (FKY 41 in AKYD)
F -KIND = 2 (Terminal Multi Information Transfer Facility: TMF)
OP -CODE = 254 (Assistance)

STEP 2: ACDSPL - Assign the ACD line's number of the Supervisory position as the assistance call's destination and the service activated with ASSIST key.
RMON: 1 (Monitor Me)
ASIST:ACD line of the Supervisory position (two to six digits) **Note 2**

Note 2: Only numeric values can be used. An asterisk (*) or pound (#) is not allowed. One-digit dial number may not be assigned. When ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), the value is set to "5 digits at most".

STEP 3: AKYD - Apply "ASSIST" key to the Line/Feature Key.
KYN =7 (as an example)
KYI =1
FKY =41 (ASSIST)

- **In environment where IP devices are used or in ACD-FCCS configuration:**

STEP 1: ASYDL/ASYDN

Note: When this feature is used in an ACD-FCCS configuration, set the following data with ASYDN.

SYS1

Index 867

Bit 3=1 (Improvement for SCF6 request for Monitor Connection is enabled)

Index 869

Bit 6=1 (Monitor Function for IP terminals is enabled)

Bit 7=1 (Monitor Function for IP terminals-LAN is enabled)

- **When Silent Monitor (Multi-path Monitor) is used:**

Note: In an ACD FCCS network containing DTI-FCCS, monitoring functions cannot work properly when Silent Monitor (Multi-path Monitor) connection is enabled. In that case, set "0" for ASYDN, SYS1, Index 874, Bit 0 to disable Multi-Path Monitor connection.

STEP 1: ASYDL/ASYDN

Note: When this feature is used in an ACD-FCCS configuration, set the following data with ASYDN.

SYS1

Index 679

Bit 1=1 (Multiple Session for SIP Multiple Line Terminals is enabled)

Note: When you change the setting of this System Data, you must reregister the terminal to reflect the change.

Index 874

Bit 0=1 (Multi-path Monitor connection is enabled)

STEP 2: ARTI/ARTIN

Note: When this feature is used in an ACD-FCCS configuration, set the following data with ARTIN.

CDN 95 (MONITOR) = 1 (ACD monitor link connection = Multi-connection)

Note: To change the data for existing route (RT), initialize or reboot the trunk device such as circuit card, MG, or VS32.

M-90A MULTI-SPLIT AGENT - ACD

GENERAL DESCRIPTION

This feature allows an individual agent to handle calls from a maximum of sixteen splits. The agent's logon ID is programmed to specify whether the agent is permitted to handle calls from a single split (single-split mode) or from multiple splits (multi-split mode).

The agent's logon ID is programmed to specify which splits the agent can service. The logon ID permits one to sixteen specific splits to be listed, or access to any split to be indicated. If specific splits are listed, then a priority (or preference level) is assigned to each split. There are 99 priority levels (1>99); splits can be assigned the same level.

An agent who is servicing multiple splits will have calls assigned based on a two-level algorithm. The first level of assignment is based on the priorities of the splits. Calls from the split with the highest priority will always be connected before calls from splits with lower priorities. The second level of assignment is the amount of time that the longest waiting call has been in queue. This level is only used if two or more splits have the same priority. If splits have the same priority, then the call with the longest time in queue will always be connected before calls that have spent less time in queue. The following examples, where an agent is servicing four queues, illustrate the two-level algorithm.

Call Distribution Algorithm - I

SPLIT NUMBER	PRIORITY LEVEL	CALLS IN QUEUE	LONGEST WAITING CALL
1	1	1	15 seconds
2	2	4	45 seconds
3	2	7	20 seconds
4	3	3	50 seconds

In this case, the call in Split #1 will be connected to the agent. Split #1 has the highest priority of the splits that the agent is serving. Thus, the fact that Split #1 has the fewest calls and the call with the shortest time in queue is not a consideration.

Call Distribution Algorithm - II

SPLIT NUMBER	PRIORITY LEVEL	CALLS IN QUEUE	LONGEST WAITING CALL
1	1	0	
2	2	4	60 seconds
3	2	7	35 seconds
4	3	3	65 seconds

In this example, the next call that is connected to the agent will be the longest waiting call from Split #2. The split with the highest priority, Split #1, does not have any calls in queue. Split #2 and Split #3 have the same (and next highest) priority. Thus, the longest waiting call will be selected, and that call resides in Split #2 (60 seconds as opposed to 35 seconds).

The splits that an agent can handle are not based solely on the agent's logon ID. A combination of three factors determines which splits a specific agent, at a specific position, can handle. The three factors and their associated variables follow.

1. The splits allowed by the agent's logon ID, which can be a list of one to sixteen specific splits, or any split.
2. The splits allowed by the position, which can be one specific split or any split.
3. The split mode allowed by the agent's logon ID, which can be single-split or multi-split.

The ensuing paragraphs describe the scenarios associated with each possible combination of the three factors. While examining these scenarios, it would be beneficial to reference the table "Valid Logon ID/Position Combinations". The table's horizontal axis describes the agent's logon ID (split mode and allowed splits) and the vertical axis describes the position's allowed splits. The intersection presents the split mode in which the agent will operate and the split or splits the agent will service (indicated with lower-case letters in parentheses).

The single-split mode scenarios will be examined first.

An agent, in single-split mode, whose logon ID lists one to sixteen allowable splits can log on to a position with a single specified split (which matches one of the agent's logon ID splits) or a position with any split allowed. As an example, an agent's logon ID specifies the splits 2,5,8 and 12. The agent can log on at a position that specifies one of those splits (2, 5, 8 or 12). Alternatively, the agent can log on to a position that allows any split. During the logon procedure, the splits in the logon ID list are displayed sequentially. The agent indicates the single split of choice by entering 1#; entering # indicates that this is not the split of choice. The agent's split defaults, such as the after-call mode and the answer mode, will be the defaults associated with the single split that is chosen.

An agent, in single-split mode, whose logon ID permits any split can only log on at a position that permits a single specified split. The agent will take calls from the single split and the agent's split defaults will be the defaults associated with that split.

An agent, in single-split mode, whose logon ID allows any split is not permitted to log on at a position that allows any split. This combination would force the ACD system to begin to sequentially prompt the agent with the name of every split in the system, until the agent selected the single split in which they wish to work. This is not an effective use of agents' time.

The multi-split mode scenarios will now be examined.

An agent, in multi-split mode, is not permitted to have a logon ID which allows any split. This combination would force the ACD system to begin to sequentially prompt the agent with the name of every split in the system, until the agent selected the splits in which they wish to work. As in the previous case, this is not an effective use of agents' time.

If taken together, the last scenario of the single-split mode (an agent's logon ID allows any split, the agent is not permitted to log on at a position which allows any split), and the first scenario of the multi-split mode (an agent's logon ID which allows any split is not permitted), the following ACD condition is the result. If an agent's logon ID allows any split, then the agent will automatically be put into single-split mode and will not be allowed to log on at a position which allows any split.

An agent, in multi-split mode, whose logon ID allows a list of specific splits can log on at a position that allows a single specified split (where the split matches one of the allowed splits in the agent's logon ID list) or at a position that allows any split. In both cases, the agent will automatically be allowed to handle calls from every split in the agent's logon ID list. As an example, the agent's logon ID list allows splits 2, 5 and 8. The agent logs on at a position

that allows Split #5. The agent will be allowed to handle calls from splits 2, 5 and 8. The same agent logs on at a position that allows any split. The agent will be allowed to handle calls from splits 2, 5 and 8. The agent’s split defaults, such as the after-call mode and the answer mode, will be the defaults associated with the agent’s logon ID attribute split. The attribute split is the first split in the list of allowable splits.

The **CW** lamp (Call Waiting), for an agent in multi-split mode, reflects the status of every split that the agent is servicing. The **CW** lamp serves as a visual indication for changes in the depth of each split queue. Thresholds for each split queue, based on the quantity of calls in the split queue, are programmed to force the **CW** lamp to light or flash. There are two separate thresholds. Please refer to “CALL WAITING INDICATION - LCD DISPLAY/CW LAMP - ACD [C-68A]” for related information. Since the **CW** lamp is related to multiple splits, the lamp is used to indicate the most “severe” case at any given time. For example, the **CW** lamp reflects the status of the first split that has either reached a threshold, the first to reach a higher threshold (flashing), or the status of the split which has exceeded a threshold by the greatest amount of calls.

The **NIGHT** lamp, for an agent in multi-split mode, reflects the night mode of the attribute split. The agent is allowed to put the attribute split into Night mode, or remove the attribute split from Night mode.

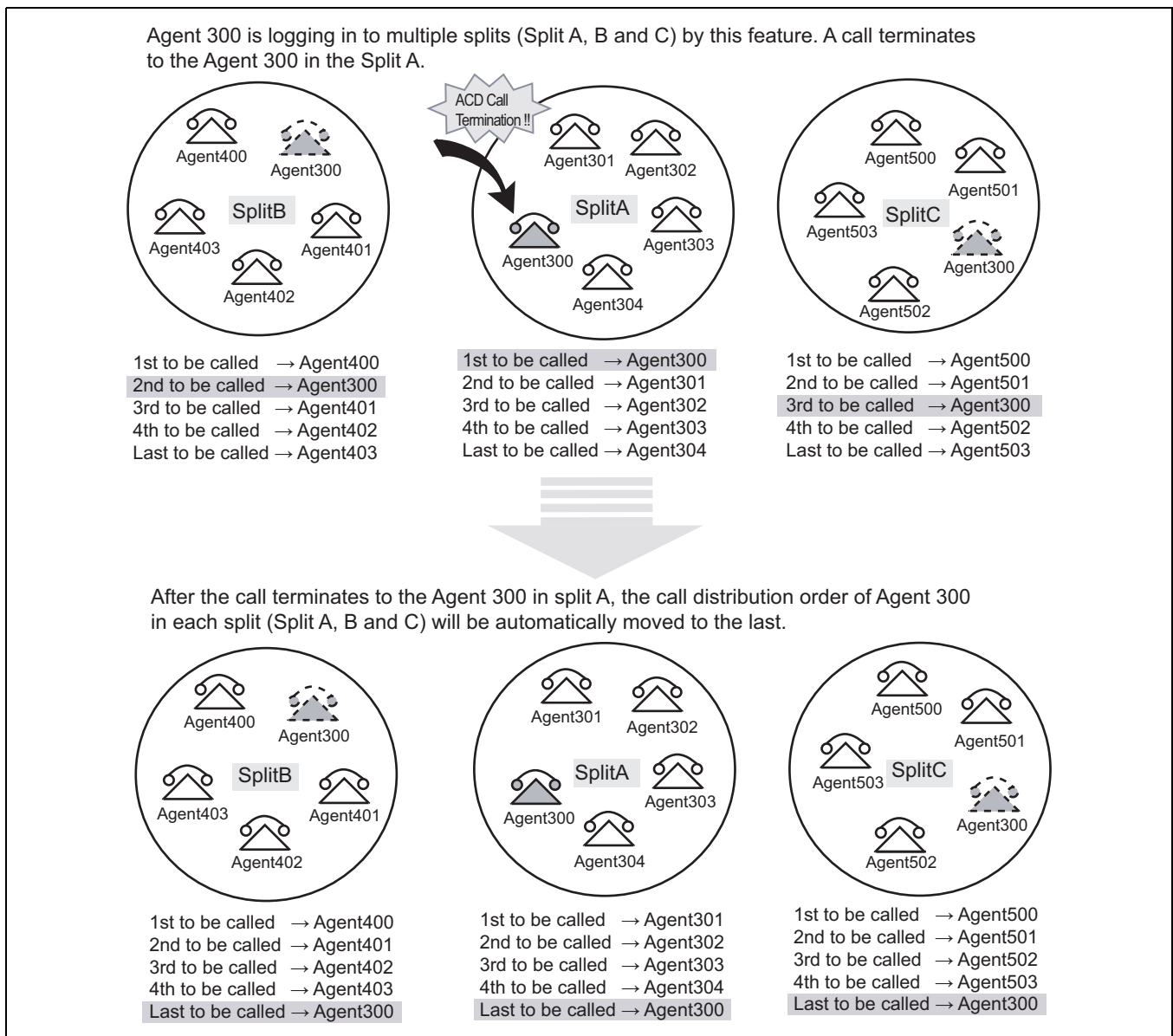
Table below summarizes the valid combinations of an agent’s split mode, the splits allowed to the agent, and the splits allowed to the position. Recall that a logon ID which allows the agent to operate in multi-split mode and service any split is not permitted. The intersection of the rows and columns presents the split mode in which the agent will operate and the split or splits the agent will service (indicated with lower-case letters in parentheses; (a), (b), (c), (d)).

Valid Logon ID/Position Combinations

	Agent’s Logon ID-ACDLOG Split Mode - single split or multi split:MULTS=0/1 Allowed Splits - List (a, b, c, d) or Any Split:SPLIT		
Position’s Allowed Splits-ACDPSN	Single-Split List (a, b, c, d)	Single-Split Any Split	Multi Split List (a, b, c, d)
Single (a):SPLC=1	Single (a)	Single (a)	Multi (a, b, c, d)
Any:SPLC=0	Single (a, b, c, d)	Not Allowed	Multi (a, b, c, d)

The splits allowed to a position or an agent can be changed by using the ACD PCPro command, the MIS, or a Supervisor Tally-Oh Code. These changes can be implemented while agents are logged on at positions. The impact on the agent's call handling and the agent's ability to log on at the same position in the future are described by the two general statements which follow.

1. If the changes to the splits allowed the position and/or the splits allowed the agent produce a situation which is not a valid combination, the agent will be allowed to continue handling calls as before, until the agent logs off.
2. If the changes to the splits allowed the position and/or the splits allowed the agent produce a situation which is not a valid combination, the agent will not be allowed to log on at the same position, after the agent logs off.
3. When an agent belongs to multiple splits by this feature and a call terminates to that agent, the call distribution order changes at all the splits: That agent is now positioned at the last in the whole split's call distribution order tables and the call distribution order of the agents which follow is advanced by one position in each split. Refer to the figure below:



4. For Overflow conditions when using this feature, refer to “2.9 Multiple Queueing” in this chapter.

OPERATING PROCEDURE

This feature is implemented through ACD PCPro assignments. The three critical areas which underpin the feature are:

1. The split mode of the agent, which is part of the agent logon ID, is programmed on an agent basis.
2. The splits that an agent can service, which is part of the agent logon ID, is programmed on an agent basis.
3. The splits allowed at a position, which are programmed on a position basis.

PROGRAMMING

ACDLOG -

- SPLIT: Split no. which an agent belongs to (1-900)
Maximum number of split to be assigned here is sixteen splits.
- PRIO: Priority order to handle ACD calls terminated to each split (1-99)
When the priority is not taken, assign all “1” here.
- MULTS: Multi Split or Single Split
0/1 = Single Split/Multi Split

M-110A MULTI-LINE SUPPORT - ACD TERMINAL - ACD

GENERAL DESCRIPTION

This feature allows a Supervisory/an Agent Position to accommodate the so-called Multi-Line, other Desktop terminal's My Line and Software Line, on the programmable Line/Feature Keys of the Desktop terminal. Multi-Line performs the business operations.

Note: ACD Line and Non-ACD Line cannot be accommodated to Multi Line.

By using Multi Line (other than ACD Line and Non-ACD Line) accommodated on the Line/Feature Keys of Agent/Supervisory Position, the following Business features can be activated.

- Call Pickup
- Station Hunting (except Station Hunting-Priority/Priority with Switchback)

The following Business features can be set to Multi Line and Non-ACD Line Keys of Agent/Supervisory Position.

- Call Forwarding - All Calls
- Call Forwarding - Busy Line
- Call Forwarding - Don't Answer

OPERATING PROCEDURE

For each Business features, refer to Data Programming Manual - Business.

SERVICE CONDITIONS

1. This feature is available since ACDP Release 3.
2. By this feature, Other Desktop terminal's My Line and Software Line can be accommodated on the Line/Feature Keys of Agent/Supervisory Position. Be sure to assign the Service Feature Restriction Class (SFC) separately to Multi-Line and ACD/Non-ACD Lines accommodated on the Agent/Supervisory Position.
3. Even if Agent/Supervisor is in conversation using Multi Line, ACD Incoming Call can be distributed to the ACD Line. To prevent this, Agent /Supervisory position can be placed in Break or Work Mode while in Multi Line conversation.
4. A Multi Line accommodated on the Line/Feature Key of Agent/Supervisory Position can be formed a Station Hunting Group with other Multi Lines, Desktop terminal's My Line and station number of Single Line Telephone.
5. When including the * (asterisk) or # (pound) among station number accommodated to Multi Line:
When a conversation is between Non-ACD Line and that station number of Multi Line, "*" , "#" and the latter numbers are not displayed on MIS Real Time Screen.
6. My Line and Software Line accommodated in different IMGs cannot be assigned as Agent/Supervisory Position's Multi Line. Expanded Multiple Line Operation -D feature is not supported. Only My Line and Software Line in the same IMG can be accommodated to Multi Line of Agent/Supervisory Position.

7. My Line and Software Line of a Desktop terminal in the other nodes belonging to the FCCS Network cannot be accommodated to Multi Line of Agent/Supervisory Position.
8. Agent/Supervisory Position can use Call Pickup feature only by its Multi Line. A call cannot be picked up from ACD/Non-ACD Line of Agent/Supervisory Position. Calls terminated to ACD/Non-ACD Line cannot be picked up from other ACD/Non-ACD Line, Multi Line or other Station's Line. Do not answer the call terminated to other lines by Non-ACD Line using Call Pickup feature.

Note: MIS data cannot be counted correctly if Non-ACD Line picks up the call terminated to other lines.

9. When a call from ISDN network is transferred to ACD Line/ Non-ACD Line/Multi Line of Agent/Supervisory Position, the following conditions must be considered.
 - When Station A transfers an ISDN call by Call Transfer-All Calls [C-11]:
Telephone Number of Calling Party is displayed on the LCD of the destination party when Station A releases the call.
 - When Station A transfers an ISDN call by Blind Transfer [B-18]:
Telephone Number of Calling Party is displayed on the LCD of the destination party when the destination party answers the transferred call.

Note: When an ISDN call is transferred to ACD Line, ACD Call Information (such as Split Number) is also displayed in addition to Telephone Number of Calling Party.

10. PS station number cannot be accommodated to Multi Line of Agent/Supervisory Position.
11. MIS cannot monitor and display the status (Call Origination, Call Termination, Call Answer, Call Transfer, Call Hold, Conference Release, etc.) of Multi Line accommodated on Line/Feature Keys of Agent/Supervisory Position. Also, MIS does not count the number of Incoming Calls and Answering Calls for the Multi Line. OAI Messages for the Multi Line sent from the Telephony Server are not recognized by ACDP and MIS Messages are not sent from MIS. Therefore, the status of the Multi Line does not affect MIS Real Time Screen and MIS Historical Report.

MIS Report and Real Time Screen for Connections between Multi Line, ACD Line and Non-ACD Line

		Called Party		
		Multi Line	Non-ACD Line	ACD Line
Calling Party	Multi Line	No Report	Report for Non-ACD Incoming Call	Report and Real Time Display for ACD Incoming Call
				Report and Real Time Display for Answering ACD Incoming Call

		Called Party		
		Multi Line	Non-ACD Line	ACD Line
Calling Party	Non-ACD Line	Report and Real Time Display for Call Origination from Non-ACD Line	Report and Real Time Display for Call Origination from Non-ACD Line	Report and Real Time Display for Call Origination from Non-ACD Line
			Report for Non-ACD Incoming Call	Report and Real Time Display for ACD Incoming Call
	ACD Line	-	-	Report and Real Time Display for Answering ACD Incoming Call
	Trunk	No Report	Report for Call Termination from Trunk to Non-ACD Line	Report and Real Time Display for Call Termination from Trunk to ACD Line Report and Real Time Display for Answering ACD Incoming Call

12. When Call Forwarding - All Calls/Busy Line/ Don't Answer features are set to Multi Line, the Desktop terminal's LCD does not display the message indicating that Call forwarding features have been set, and the appropriate LED does not light.
When Call Forwarding - All Calls/Busy line/ Don't Answer features are set to Non-ACD Line, the Desktop terminal's LCD displays the message, and the LED lights.
Call Forwarding - All Calls/Busy line/ Don't Answer features cannot be set to ACD Line.
13. Call Forwarding features can be set to Non-ACD Line. At this time, Pilot station number on Multi Lines can be assigned as the Call Forwarding destination. ACD Pilot Number cannot be the destination of Call Forwarding features.
14. Agent/Supervisory Position can answer a call from Multi Line key even while it is placed in Break Mode or Work Mode.
15. When assigning FKY = 28 [Answer (ANS)] to Line/Feature Keys on Agent/Supervisory Position's Desktop terminal, calls can be answered in the order of Line/Feature Key appearance.
16. This feature is available for DT700 Series, DtermIP, DT300 Series, Dterm Series *i*, and IP Enabled Dterm.
17. When the Agent/Supervisory Position activates this feature and Call Termination to Non-ACD Line Restriction feature at the same time, the following conditions must be considered.
 - When the Agent/Supervisory Position using Headset answers a call held on its another Multi Line after holding a call on a Multi Line, turn the Headset Key to OFF and ON again to allow the call termination to Non-ACD Line. Call termination to Non-ACD Line is rejected until the Headset Key OFF → ON operation is performed.

Note: If the held call on Multi Line is released before the Agent/Supervisory Position answers the call, this Headset Key OFF → ON operation is not necessary.

- When the Agent/Supervisory Position holds a call on its Multi Line during a conversation by the speaker operation, and answers that held call, turn the SPEAKER Key to OFF to allow the call termination to Non-ACD Line.

Note: If the held call on Multi Line is released before the Agent/Supervisory Position answers the call, this SPEAKER Key OFF operation is not necessary.

18. FKY = 27 [Originate (ORG)] can be assigned to Line/Feature Keys on Agent/Supervisory Position's Desktop terminal under the following conditions.
When assigning LN PRE = 0 (Prime Line Pickup) on AKYD:
Call Origination from the Line/Feature Key whose Key Number is higher than ACD Line Key Number, is ineffective.
When assigning LN PRE = 1, ORG = 0 or 1 on AKYD:
Call Origination from the Line/Feature Key whose Key Number is higher than ACD Line Key Number, is ineffective.
When assigning LN PRE = 1, ORG = 2 on AKYD:
Call Origination from the Line/Feature Key is ineffective.
19. SFI = 132 (Call Termination to Non-ACD Line Restriction) cannot be assigned to Multi Line on Agent/Supervisory Position.
20. When assigning SFI = 132 to Non-ACD Line, Call Termination to the Non-ACD Line is restricted while in conversation by using ACD Line or Multi Line. Thus, if Non-ACD Line is assigned as destination of ASSISTANCE - ACD AGENT - ACD [A-32A], Assistance Call is restricted while the destination party is engaged in a conversation by using Multi Line.
21. Multi Lines can be assigned as destination of ASSISTANCE - ACD AGENT - ACD [A-32A].
22. This feature does not support Host Interlock (Infolink). For example, ACD terminal Multi-Line cannot arrive at specified numbers via Infolink message IF.
23. When an ACD call answered with a handset is placed on hold, call termination to Non-ACD Line will be restricted. When a station goes on-hook after an ACD call is placed on hold, call termination to Non-ACD Line will not be restricted.
24. When an ongoing call on Non-ACD Line is released while placing an ACD call on hold, call termination to Non-ACD Line will not be restricted.

PROGRAMMING

- STEP 1: Assign Station data by ASDT (for Digital terminals)/AISTL (for an IP terminal/a SIP Multiple Line terminal, a Softphone).
- STEP 2: AKYD - Assign Multi Line to each Line/Feature Key of Agent/Supervisory Position.
KYN: Key Number (1-40)
KYI: Assign "2 (Multi Line)."
TN: Tenant Number of Multi Line
STN: Station Number of Multi Line
KD: Kind of Line (0-2)

STEP 3: ASFC - When Call Termination to Non-ACD Line is restricted while in conversation by using ACD Line or Multi Line, assign the following data.

SFC: Service Feature Restriction Class (1-15)

SFI: 132 (Call Termination to Non-ACD Line is restricted while in conversation by using ACD Line or Multi Line.)

RES: Assign "1".

When using Business features such as Call Pickup, Station Hunting and Call Forwarding, assign the necessary data by referring to Data Programming Manual.

Assign the Selectable Station Call Pickup to use call pickup feature. Lift the restriction of Selectable Station Call Pickup (SFI 183) for ACD/Non-ACD Line.

Note: Only the Multi Line of Agent/Supervisory Position can be programmed to Call Pickup-Group. ACD/No-ACD Lines are not supported.

List of IC Call Features for Multi-Line Support - ACD Terminal

X: Available N: Not Available C: Conditionally available -: Not Applicable

SERVICE FEATURES	
Attendant Console	N
Direct-In Termination (DID)	X
Direct Inward Dialing	X
Remote Access To System	N
Master Console	N
Power Failure Transfer	N
Internal Music On Hold	X
External Music On Hold	N
Multiple Music On Hold	N
Distinctive Ringing	X
Tenant Service	X
Slumber Time-Do Not Disturb	N

List of OG Call Features for Multi-Line Support - ACD Terminal

X: Available N: Not Available C: Conditionally available -: Not Applicable

SERVICE FEATURES	
Direct Outward Dialing (DOD)	N
Miscellaneous Trunk Restriction	X
Toll Denial/Toll Diversion	X
Toll Restriction-3/6-Digit	X
Speed Calling-Station/Group	N
Speed Calling-System	N
Outgoing Trunk Queuing	N
Off-Hook Queuing	N
Alternate Routing	N
Pushbutton-To-Rotary Conversion	N

List of Station Features for Multi-Line Support - ACD Terminal (1/2)

X: Available N: Not Available C: Conditionally available -: Not Applicable

SERVICE FEATURES	
Station Hunting	C
Call Pickup	X
Call Pickup-Group	N
Call Pickup-Direct	N
Step Call	N
Call Back	N
Automatic Call Back Cancel	N
Call Waiting	N
Executive Right-of Way	N
Privacy-D	N
Call Forwarding-All Calls	X
Call Forwarding-Busy Line	X
Call Forwarding-Don't Answer	X
Call Forwarding-All Calls-Outside	N
Call Forwarding-Busy Line-Outside	N
Call Forwarding-Don't Answer-Outside	N
Split Call Forwarding	N
Tone to be sent out when Handset is Off-Hook at the station on which Call Forwarding - All Calls service is set.	N
Service Selection for a Busy Station with Call Forwarding - Busy Line	N
Call Forwarding-I'm Here	N
Remote Call Forwarding Control	N
Call Transfer-All Calls	X
Blind Transfer	X
Camp-On Busy	N
Boss Secretary	N
Three-Way Calling	X
Station-Controlled Conference	N

List of Station Features for Multi-Line Support - ACD Terminal (2/2)

X: Available N: Not Available C: Conditionally available -: Not Applicable

SERVICE FEATURES	
Call Hold	N
Automatic Recall	N
Exclusive Hold	X
Hot Line	N
Priority Call	N
Station-To-Station Calling	X
Class Of Service-Individual	X
Day/Night Class Of Service	N
Timed Reminder	N
Call Forwarding-Intercept/Announcement	N
Call Forwarding-All Calls-Announcement	N
Howler Tone Sending	N
Line Lockout	N
Off-Hook Alarm	N
Periodic Time Indication Tone	N
Immediate Ringing	X
Pushbutton Calling	N
Telephone Number on FCCS Network	X
Flexible Numbering of Station	X
Line Circuit Reverse Relay Control	N
Emergency Call	N
Station 5DB Pad	N
Number Sharing	N
Dual Station Call	N
Last Number Call	N

List of Features for Multi-Line Support-ACD Terminal Available in Multiple Line Operation

X: Available N: Not Available

SERVICE FEATURES	
Station/Trunk Call	X
Non-Exclusive Hold	X
Exclusive Hold	X
Call Forwarding-All Calls	X
Call Forwarding-Busy Line	X
Call Forwarding-Don't Answer	X
Voice Call	N
Internal Zone Paging	N
Selectable Station Call Pickup	X
Boss-Secretary Transfer	N
Station Hunting	X
Call Hold	X
Three-way Calling	X
Call Transfer-All Calls	X
Blind Transfer	X
Serial Call-D	N
Executive Right-of Way	N
Call Back	N
Message Reminder	N
Outgoing Trunk Queuing	N
Name Display-System	N
Tone Block	N

N-12A NIGHT SERVICE - ACD

GENERAL DESCRIPTION

This feature provides alternate routing for calls destined for a particular split. When Night mode is in effect for a split and a call attempts to queue to that split, the call is routed to a programmed pilot number (night pilot number), used by the split, instead of being queued. At this point, the call is handled by the Call Control Vector (CCV) of the new pilot number. Refer to “CALL CONTROL VECTOR - ACD [C-108A]” for related information. Night mode is invoked manually by pressing the **NIGHT** key, or automatically by the MIS.

OPERATING PROCEDURE

[Manual Change-over]

Night Mode Engage:

1. The supervisor presses the **NIGHT** key while logged on to the ACD system.
2. **ENTER NIGHT/FWD?** is shown on the display and the agent presses 1# to confirm entering Night mode.
3. At this point, the split goes into Night mode, the **NIGHT** lamp is lit at all the positions in the split, and incoming calls are routed to the night pilot number programmed from the ACD PCPro.

Night Mode Cancel:

1. Night mode may be canceled by pressing the **NIGHT** key again. **EXIT NIGHT?** is shown on the display and the agent presses 1# to confirm entering Day mode.
2. At this point, the split exits night service and the **NIGHT** lamp is extinguished at all the positions in the split.

[Automatic Change-over]

Automatic change-over from Day mode to Night mode and vice versa is accomplished from the MIS system. See the manual described on the MIS functions.

Note: Program that whether Manual or Automatic operation is performed per system (Manual and Automatic operations can not operated together in a system).

SERVICE CONDITIONS

1. For more information on assigning Night Key of ACD supervisory position, see “2.4 ACD Agent/Supervisory Position Data Assignment” in Chapter 4.
2. Night Pilot Number in NIGHT of the ACDSPL command is required when you use the following:
 - Using Night Key on supervisory position
 - Switching Day/Night Mode by MIS.
3. When CCV is selected (CCV/W=0 in the ACDPLT command) for a Night Pilot Number specified in the ACD-SPL command, CCV is performed in this feature.
At this time, CCV is performed not with Night CCV Index (specified in N_CCENO of the ACDPLT command) but with CCV index number (specified in CCVNO of the ACDPLT command).
4. Note the following when a station is specified as a call-forwarding destination in night mode by using ACDC-CV command.
 - Do not set features such as CALL FORWARDING - BUSY LINE [C-2], CALL FORWARDING - ALL CALLS [C-5], and Station Hunting to the destination (station).
 - PS cannot be specified as a destination in the night mode.
5. For conditions on supervisors with Night Key belonging to multiple splits, refer to “MULTI-SPLIT AGENT - ACD [M-90A]”.
6. Night key is available after logon is successfully completed.
7. When this feature is configured by both ACDSPL and ACDPLT commands, the latter takes precedence.
8. The pilot number used for Night mode cannot contain a “*” or a “#.”
9. The pilot number for Night mode may invoke either a Week Schedule or a CCV.
10. The **NIGHT** lamp shows the current night status regardless of whether the night status was changed automatically or manually.
11. When a call attempts to queue to a split using a Queue to Split instruction in a CCV and the split is in Night mode, the Night mode routing for the split is only followed if the split is the primary split for the call. If the split is a secondary split, the Queue to Split instruction is skipped. A primary split is the split specified in the first queuing instruction in a CCV. Splits specified in subsequent queuing instructions in the CCV are referred to as secondary splits.
12. When a call attempts to queue to a split using the Conditional Queue to Split instruction in a CCV and the split is in Night mode, the Conditional Queue to Split instruction is skipped.
13. When alternate routing is required by a split, CALL FORWARDING - SPLIT-ACD [C-127A] may be used to provide a more dynamic choice of the pilot number used for the new routing.
14. When a split enters Night mode automatically, using the MIS, CALL FORWARDING - SPLIT-ACD [C-127A] is canceled.

15. Do not set call forwarding features such as Call Forwarding-All Calls/Busy and Station Hunting at the transfer destination station.
16. PS cannot be assigned as the transfer destination.

PROGRAMMING

STEP 1: ACDPLT - CCW/W = 0 (CCV)

N_CCVNO: CCV index number to be routed in the night mode (0 ~ 2000)

N_CCVSTP: CCV step number to be routed in the night mode

STEP 2: ACDSPL - Assign the ACD pilot number of the Night mode destination.

NIGHT: Pilot number of the Night mode destination (two to six digits) **Note 1**

Note 1: Only numeric values can be used. An asterisk (*) or pound (#) is not allowed. One-digit dial number may not be assigned.

STEP 3: AKYD - Assign "Night" key to a supervisory position when DAY/NIGHT mode is changed over by the supervisory position.

N-14A NON-ACD CALL - ACD

GENERAL DESCRIPTION

This feature allows ACD agents and supervisors to receive calls from and place calls to other ports in the system (e.g., Non-ACD stations, attendants, trunks). When ACD agent or supervisor position is called using their Node directory number, the call appears on the Non-ACD line provided for that purpose. The same Non-ACD line also permits ACD agents and supervisors to place outgoing calls.

OPERATING PROCEDURE

The operation to place and receive calls on the Non-ACD line is like any other Non-ACD line with all the associated privileges and restrictions.

SERVICE CONDITIONS

1. The Non-ACD line is not essential to ACD operation. Both agents and supervisors can operate without a Non-ACD line. ACD agents and supervisors would only lose the ability to place non-ACD calls.
2. Direct incoming calls to Non-ACD lines are permitted. When a call is received, or placed, on a Non-ACD line, it is tagged as a non-ACD call by the MIS.
3. When there is an incoming Non-ACD call during talking on an ACD call or vice versa, respond to the incoming call after releasing the current call or placing it on hold. Also, the use of “WORK MODE-ACD [W-5A]” and “AUTO WORK MODE FOR PBX CALLS-ACD [A-86A]” are recommended.

PROGRAMMING

Refer to “2.4 ACD Agent/Supervisory Position Data Assignment” in Chapter 4.

O-19A OVERFLOW OUTSIDE - ACD

GENERAL DESCRIPTION

This feature is provided by proper programming of Call Control Vectors, specifically using the “Transfer To” instruction. See “CALL CONTROL VECTOR - ACD [C-108A]” for additional information.

Note: Do not set call forwarding features such as Call Forwarding-All Calls/Busy and Station Hunting at the overflow destination station.

Note: PS cannot be assigned as the overflow destination.

P-21A PRIORITY QUEUING - ACD

GENERAL DESCRIPTION

The ACD system supports 250 different queue priorities for every split. Priorities in a split queue are assigned such that priority “1” calls have the highest priority and priority “250” calls have the lowest priority. Calls with a higher priority will be serviced, in the order in which they were queued regardless of the waiting time of the calls with a lower priority.

A particular call’s priority is determined by the following factors:

1. Call origination (incoming trunk or internal station).
2. Call transfer (by attendant or station).
3. Pilot number dialed.
4. CCV priority change steps.

OPERATING PROCEDURE

When implementing a system which will use multiple priorities for incoming callers there are several important concepts to keep in mind:

[HIGHEST PRIORITY CALLERS ALWAYS GO FIRST]

Callers with a higher priority are always serviced before those with lower priorities. As a result of this a low priority call could remain in queue forever or at least as long as higher priority calls continue to arrive. This situation can be rectified by proper CCV programming. After a low priority call has been in queue for some amount of time a “New Priority” step in the CCV can change a call’s priority. It should be changed to something at least as high as, if not higher than, the highest priority in use for other calls.

In this way a low priority caller is only penalized (kept at a low priority) for a certain amount of time after which it will be treated similarly to the higher priority calls coming in.

[DETERMINING TRUNK CALLER PRIORITY]

The priority of an incoming trunk call is determined by checking two places.

- A priority assigned to the trunk group (route)
- A priority assigned to the pilot number dialed

The higher of these two priorities will be used for the call.

SERVICE CONDITIONS

Calls transferred into the ACD by Node stations and calls transferred by attendants have the same priority.

PROGRAMMING

STEP 1: ACDTG - Assign the priority order to each ACD route.

QPRTY: Queue priority of ACD route (1-250) (1>250)

STEP 2: ACDPLT -Assign the priority order for ACD calls terminated to each ACD Pilot Number

TRKPRI: Priority order of ACD calls from a trunk (1~250)

INPRI: Priority order of ACD calls from a station (1~250)

TRPRI: Priority order of ACD calls to be transferred (1~250)

P-40A PILOT NUMBERS - ACD

GENERAL DESCRIPTION

Pilot numbers are the access codes to ACD functions. They are programmed into the Node-side database according to the numbering plan in effect for the system. Pilot numbers do not correspond to any line appearances, either physical or virtual, in the system. No physical equipment is required to assign a pilot number.

Although pilot numbers are often thought of as ringing into a particular split, pilot numbers are associated with a Call Control Vector (refer to “CALL CONTROL VECTOR - ACD [C-108A]”) which in turn controls the handling of the ACD call. Since most Call Control Vectors will present a call to a split as one of their first functions, the pilot numbers appear as if they are connecting the ACD call to a split.

An ID can be associated with a pilot number. This ID will be displayed at an agent’s position when the agent accepts a call that entered the system via that pilot number. An example of this display is **TECH SUPPORT**. Refer to “CALLING PARTY IDENTIFICATION - ACD [C-70A]” for related information.

If an incoming ACD call enters the system through a pilot number and the receiving agent uses a pilot number to transfer the call to an agent in another split, the transferred call will be identified by the ID associated with the former pilot number. If an ID is not associated with the former pilot number, the call will be identified by the ID associated with the latter pilot number. For example, an agent in Split A receives a call via a pilot number with an associated ID of “SERVICE”, resulting in **SERVICE** being displayed at the agent’s position. The agent uses a pilot number to transfer the call to Split B. Split B has an associated ID of “PARTS”. The agent who receives the transferred call in Split B will have **PARTS** displayed at his position. If an ID was not associated with the original pilot number, the agent in Split B will have PARTS displayed at his position.

SERVICE CONDITIONS

Only the digits “0” to “9” may be used (“*” and “#” are not allowed) with a minimum of 2 digits and a maximum of 5 digits in each Pilot Number.

PROGRAMMING

Refer to [VS32 Announcement Multiple Connection](#) in Chapter 4.

P-45A PERSONAL EMERGENCY AND ASSIST - ACD

GENERAL DESCRIPTION

This feature allows an agent to have a designated individual supervisor's number as the destination for an assist request (personal assist request number) and a designated individual supervisor's number as the destination for an emergency request (personal emergency request number). If these personal numbers are defined for an agent, then these numbers will be used instead of the emergency and assist numbers that are defined for a split. If these personal numbers are not defined, then the request (emergency/assist) will be directed to the supervisor who was designated for the split. In the latter case, the split is the split in which the agent received the call. This is true for an agent working in single-split or multi-split mode. Please refer to "MULTI-SPLIT AGENT - ACD [M-90A]" for related information.

OPERATING PROCEDURE

For these examples, the agent's name will be Molly and the supervisor's name will be Kathey.

To place a personal assistance request:

1. While on an ACD call, Molly at extension is 4302 presses the **ASSIST** key. The **ASSIST** lamp turns on and **ASSIST KATHEY** is displayed on the agent's position indicating whose supervisor position is receiving the call.
2. The ACD call is placed on hold and an automatic transfer to the designated supervisor is initiated.
3. The agent hears Ringback Tone and the supervisor's position is rung.
4. The assistance call will connect on the supervisor's ACD line and the supervisor's position will display either **ASSIST MOLLY** or **ASSIST 4302**, depending on whether the agent's name is programmed with his or her logon ID. Please refer to "FLEXIBLE ID CODES - ACD [F-25A]" for more information.
5. After consulting with the supervisor, one of three things may happen:
 - a. The agent may release from the call thereby completing the transfer of the ACD call to the supervisor.
 - b. The supervisor may release from the call. This will reconnect the agent and the ACD call.
 - c. The agent may press the **CONF** key and invoke a three-way conference between the supervisor, the agent and the ACD calling party.
6. When either the agent or the supervisor disconnects from the assistance call, the **ASSIST** lamps are extinguished and the displays return to their original status.

To cancel a personal assistance request:

1. After initiating an assistance request and before being answered by the supervisor, the agent may cancel the request by pressing the **TRANSFER** key.
2. The **ASSIST** lamp will be extinguished, the agent will be reconnected with the ACD call, and the display will return to its original status.

To place a personal emergency request:

1. While engaged in an ACD call, the agent presses the **EMERGENCY** key, the agent's display shows EMR KATHEY, and the associated lamp is lit.
2. The supervisor's phone rings with the emergency displays shown below.
3. The supervisor will silently monitor the agent and the calling party.
4. The supervisor's display shows EMR 4302 DDD 28, where 4302 is the Agent position's extension and DDD 28 is the trunk type and trunk circuit number to which the agent is connected.
5. When the supervisor answers, the agent's display will show EMERG ANSWERED and the **EMERGENCY** lamp will wink. When the agent releases from the call, or the supervisor releases from the monitor, the agent's lamp will be extinguished.
6. The agent and the calling party are never disconnected while the supervisor's position is ringing.
7. An emergency recorder is connected as soon as the supervisor's position answers and is disconnected if the supervisor joins the call in a three-way conference by pressing the **MON/BARGE** key. The recorder is also disconnected if the supervisor releases from the monitor using the **RELEASE** key.

To cancel a personal emergency request:

1. If the request is routed to an individual supervisor's ACD/Non-ACD line, the request can be canceled by pressing the **EMERGENCY** key.

SERVICE CONDITIONS

1. The **ASSIST** key and the personal assist request number are dedicated to one of two features; either the key and the number are used for the ASSIST feature or they are used for the MONITOR ME-ACD [M-89A] feature. The choice is indicated through an ACD PCPro command on a split-wide basis.
2. When a Personal Emergency or Personal Assist call destination is a station which has Call Forward All, Busy or Don't Answer set the call will not be forwarded.

PROGRAMMING

STEP 1: ACDLOG - PARN: Personal Assist Request number
 PERN: Personal Emergency Request number

STEP 2: ACDSPL - RMON=0 (Assist)

P-86A PREDICTIVE DIALING - ACD

GENERAL DESCRIPTION

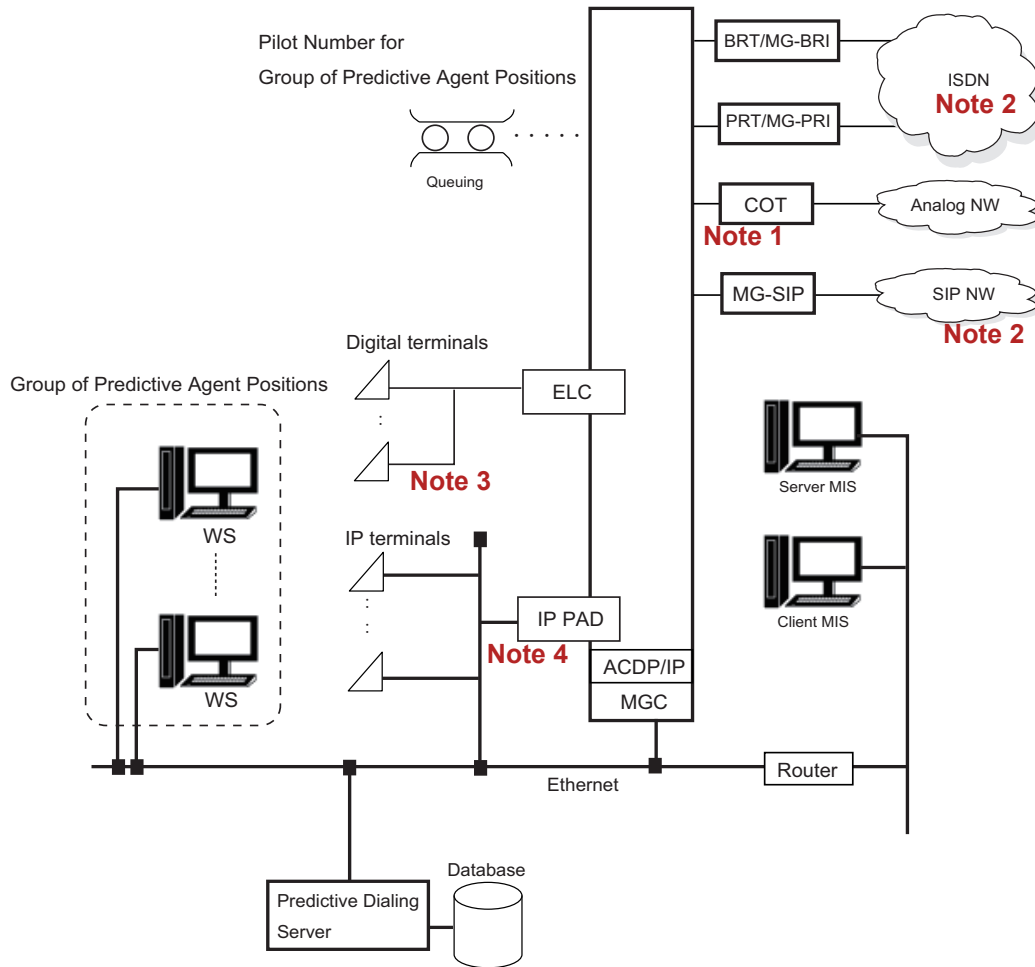
Predictive dialing makes database-driven automatic internal calls or external calls via the outgoing trunk, and transfers the call to next available operator terminal (predictive agent position) only when a live person has answered.

When the call is not answered due to reason such as busy, not answered, dialed by a wrong number, and relocation of the telephone, the confirming function for calling parties' status discards an originating call and updates database.

When the call is answered manually, operating in conjunction with a database, the system collects statistical data such as agent busy rate, unsuccessful call rate, successful call rate (hit rate) and average length of call, which are used to calculate agent availability and determine the number and timing of call attempts, realizing the prediction of the optimum staffing.

This feature operates under the circumstances that the number of operator terminals is smaller than that of lines.

The predictive dialing system consists of ACD and OAI systems. Ethernet interface is used between the Telephony Server and hosts, the Telephony Server and Workstations.



- Note 1:** COT circuit card dedicated for detecting busy status is required. For more information on the COT circuit card, refer to Circuit Card Description.
- Note 2:** You can use SCF Calling Party Number Selection to notify calling party number to ISDN and SIP networks. For more information on SCF Calling Party Number Selection, refer to the Data Programming Manual - OAI.
- Note 3:** For more information on the terminals available in this feature, refer to “Section 2.3, System Configuration”.
- Note 4:** Though the number of IPPAD channels depends on system traffic, you need to prepare enough channels in order to avoid being busy. If the number of channels is not enough, the IP terminal might not answer the terminating call.

OPERATING PROCEDURE

1. A call is originated by SCF(FN=128).
When the called party answered it, the call tries to connect to the agent.
2. The agent answers the call.
A connection is established.

SERVICE CONDITIONS

<Confirming Function for Calling Party Status>

The service conditions for confirming function for calling party status are as follows:

1. This function can be used only when a call is originated to ISDN/SIP network.
2. No connection to operators is made by the confirming function for calling party status alone. Use the ACDCCV command to determine a connection to the operator.
3. Messages related to the confirming function for calling party status are as follows:

SMFN (FN=128, STS=193)	Called party does not answer (this message is output when the called party does not answer a call in a specified time of period [Note 5] after it is originated. Make sure that its number is available.)
SMFN (FN=128, STS=195)	Available to call the called party
SMFN (FN=128, STS=196)	Status of called party is unknown. (Status of called party is unknown due to the analog-type telephony server. Connect as an operator and find the cause.)

Note: SMFN(FN=128) is output only when predictive dialing to outside lines is executed.

Note 5: Use NotifyID to determine no answer timer when a call is originated by SCF(FN=128).

NotifyID=01: 8 seconds
 NotifyID=02: 16 seconds
 NotifyID=03: 24 seconds
 NotifyID=04: 32 seconds
 NotifyID=05: 40 seconds
 NotifyID=06: 48 seconds
 NotifyID=07: 56 seconds

If you omit or specify other values than ones described in the above, 24 seconds is automatically set as no answer timer.

<Originating Calls from Trunk>

The service conditions for originating trunks are as follows. For more information on SCF/SMFN, refer to [OAI Facilities Used in Predictive Agent Positions](#).

1. COT circuit card dedicated for detecting busy state is required.
2. After a call is originated from an analog trunk, SMFN (FN=128, STS=194) is not output to UAP. However, SMFN (FN=128, STS=192) is output to UAP only when the called party is busy.
3. For the number of concurrent connections of Predictive Dialing and call kind values, see Data Programming Manual - OAI - Chapter 5 Office Data Design - Predictive Dialing.
4. LCR/LCRS is available when a call is originated by SCF (FN=128).

5. Analog predictive dialing cannot perform the following, while digital predictive dialing can perform them:
 - When called party is busy, diagnosis information and reason as indicated in additional information of SMFN (FN=128, STS=192) is not notified to UAP.
 - Calls with sub address cannot be originated.
6. The detailed information when Return Error is returned due to data assignment of detour routes.
 - When all of the trunks in a detour taken are busy, no trunk is available, or only CCIS trunks are available in a detour taken:

Error type: Error =10H, Error Detail=00H
SCF Error details: Error=10H, Error Detail=0515H (Outgoing TRK Busy)
 - When CCIS trunks alone exist in a detour taken:

Error type: Error =10H, Error Detail=00H
SCF Error details: Error=10H, Error Detail=0225H (Originating not supported)
7. When the called party is accommodated in the analog-type telephony server or the originating trunk is an analog-type trunk, you cannot check the called party number by using NotifyID=17 of SCF(FN=128).
8. MA-ID=0000 (default setting) is used for an outgoing call with Predictive Dialing.
9. A Monitor Number specified by SCF (FN=128) may be sent as a originating station number on billing information for a call via Predictive Dialing (SCF (FN=128)). The billing information for the Monitor Number cannot be arranged by the office data setting.

<Predictive Dialing to Stations>

Service conditions for predictive dialing to stations is described in Service Conditions - Predictive Dialing to Station of Predictive Dialing in Data Programming Manual - OAI.

<Others>

1. The following can be performed in Predictive Dialing system:

The following is available in Predictive Agent Positions

- NON ACD CALL - ACD[N-14A]
- DO NOT DISTURB - SPLIT - ACD[D-133A]
- ABANDONED CALL SEARCH - ACD[A-31A]
- VOLUME CONTROL (ACD HEADSET) - ACD[V-5A]
- BAD CALL NOTIFICATION - ACD[B-21A]
- RELEASE - ACD POSITION - ACD[R-19A]
- CALLING PARTY IDENTIFICATION - ACD[C-70A]

- AUTOMATIC ANSWER - ACD[A-35A]
- ZIP TONE - ACD[Z-1A]
- Automatic Call Distribution (ACD)
- TALLY COUNT - ACD[T-49A]
- CALL DISTRIBUTION TO AGENTS - ACD[C-35A]
- LOG-ON/LOG-OFF POSITION - ACD[L-19A]
- JACK STATUS RECOGNITION - ACD[J-1A]
- MIS

2. The following shows OAI facilities frequently used in Predictive Agent Positions:

OAI Facilities Used in Predictive Agent Positions

OAI FACILITIES	EXPLANATION
SCF(FN=2) Predictive Dialing Server →Telephony Server	This is Release Call facility which releases connections (such as in connected/dialing state) into an idle state.
SCF(FN=7) Predictive Dialing Server →Telephony Server	This is Transfer Call facility which holds the call in progress then transfer it to another station and trunk.
SCF(FN=11) Predictive Dialing Server →Telephony Server	This is Answer Call facility which responds to terminating-state calls.
SCF(FN=12) Predictive Dialing Server →Telephony Server	This is Hold Call facility which puts calls in progress into a holding state.
SCF(FN=13) Predictive Dialing Server →Telephony Server	This is Retrieve Call facility, which responds to calls on hold.
SCF(FN=14) Predictive Dialing Server →Telephony Server	This is Hooking facility, which returns calls being transferred/operated for transferring (including connected with Special Dial Tone, in a busy/restricted state) into a normal state (speak-ready state).
SCF(FN=128) Predictive Dialing Server → Telephony Server	This is TRK Make Call facility. Trunk originates a call and then puts a call into the queue for the pilot number for a group of predictive agent positions if the called party answers the call.
SCF(FN=129) Predictive Dialing Server →Telephony Server	This is Abandon Call facility for call originated by SCF(FN=128), which returns originating trunks into an unused state. This facility is available only for originating trunk that called parties do not answer the call yet.
SMFN(FN=128) Predictive Dialing Server ←Telephony Server	This is Status Monitor facility notification, which notifies the connection state change to server until a trunk originated by SCF (FN=128) is released.

PROGRAMMING

STEP 1: ASYDL, Index 1188, Bit 0=1, Bit 1=1: Enables calling party number selection function with SCF and extended function of SCF (FN=128)

Note: If 0 (disable) is specified in either Bit 0 or Bit 1, this feature doesn't work. If you want to enable this feature, set 1 (enable) to Bit 0 and Bit 1 both.

P-88A PATTERN SWITCHING FOR PILOT NUMBER GROUP - ACD

GENERAL DESCRIPTION

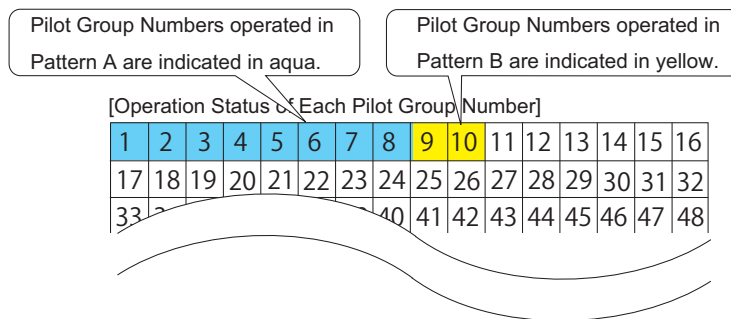
This feature allows switching the operation patterns by enabling two types of CCV/W (Week Schedule) parameter (Pattern A/B) in the ACD pilot number data.

Switching of operation patterns is performed on a Pilot Group Number basis. The operation pattern of ACD Pilot Numbers that are assigned the same Pilot Group Number can be switched over all at once.

Note: This feature is not available in North America.

OPERATING PROCEDURE

1. Start up the ACDPG command. The current status of each Pilot Group Number will be displayed.



2. Choose the Range of write from the drop-down list and then select the desired operation pattern.

Note: When “Individual” is chosen for Range of write, assign PLTG before selecting an operation pattern.

3. Click the “Set” button and confirm the operation pattern is switched.

SERVICE CONDITIONS

1. This feature is not available when ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1).
2. The operation pattern setting of the ACDPG command can be saved by the following procedures:
 - For the MEM_HDD/MEM_HDD_N command, select “ACD Data Memory” for the “Data Type Select”.
 - For routine backup by Routine Diagnosis Program, enable ACD Data Memory Saving (ASYD, SYS1, Index 306, Bit 1=1).
3. For the data setting by the ACDPLT command, note the following conditions:
 - a.) When “Use the Switching Function of Operation Pattern” is checked, the status of the Pilot Group Number that is used for the first time is changed from “Not Used” to “Pattern A” on the ACDPG command screen. Also, when the assigned data is deleted by the ACDPLT command or the check of the “Use the Switching Function of Operation Pattern” is taken off, the status of the Pilot

Group Number that is stopped to be used is changed to “Not Used” on the ACDPG command screen.

- b.) When the check of “Use the Switching Function of Operation Pattern” is taken off, the operation pattern of that Pilot Numbers become Pattern A.

Note: When the check of “Use the Switching Function of Operation Pattern” is taken off while the operation pattern B is selected, the operation pattern of the corresponding Pilot Number becomes Pattern A.

- c.) All parameters other than ACDP, TN and M_NO can be changed during the operation. (For example, the setting of Pattern B can be changed even if Pattern B is currently selected.)
d.) Once the operation pattern is switched, the incoming call to ACD Pilot Number is subject to the newly switched operation pattern.

Note: The followings are also considered as the incoming call to the ACD Pilot Number.

- Call Transfer
- Connection to ACD Pilot Number by SCF = 10
- Routing (Infolink message IF) via Infolink
- Call Transfer by CCVACT = 5

- e.) The operation patterns (Pattern A/B) can be applied to the following features:

- Holiday Schedule (on Tenant basis)
- ACD Scheduling for the type of reception services
- Multiple Supervisors - ACD **Note 1**
- Split Connection Restriction - ACD **Note 2**
- Call Transfer To Split Queue - ACD **Note 3**
- Alternate Night CCV - ACD **Note 4**

Note 1: For making an emergency call, the operation pattern of the ACD Pilot Number that is assigned to the EMGCY parameter of the ACDSPL command is used. For making an Assist/Monitor Me request, the operation pattern of the ACD Pilot Number that is assigned to the ASIST parameter of the ACDSPL command is used.

Note 2: Whether the Split Connection Restriction is in service or out of service depends on the operation pattern of the Pilot Number that makes a call.

Note 3: When CALL TRANSFER TO SPLIT QUEUE - ACD [C-67A] is executed, the operation pattern of the ACD Pilot Number that is the Call Transfer destination is used.

Note 4: When the split is in Night mode, Night CCV is subject to the operation pattern assigned to the ACD Pilot number of the split to which an incoming call is queued. If Night CCV is not specified, the operation pattern of the ACD Pilot Number that is assigned for the “Night” parameter of the ACDSPL command is used.

f.) CALL RECOVER - ACD [C-191A] is subject to the operation pattern of the ACD Pilot Number that receives a call.

Note: If an operation pattern is switched before the Call Recover is performed, the Call Recover is not subject to the newly switched operation pattern.

g.) SR-MGC is operated by the final transferred ACD Data memory. When the operation pattern is switched by Telephony Server side through the ACDPG command, save the ACD data memory by the MEM_HDD/MEM_HDD_N command and transfer it to SR-MGC by the CMNT command.

PROGRAMMING

STEP 1: ACDPLT -Assignment of ACD Pilot Number Data

Set the data of Pattern A/B and assign it to ACD Pilot Number data.

Then check the box of “Use the Switching Function of Operation Pattern”.

The following parameters can be set when this check box is on.

PLTG - Pilot Group Number (1 - 250)

Assign the same Pilot Group Numbers to the ACD Pilot Numbers of which operation pattern is intended to be switched at the same time.

<Pattern A>

CCV/W: 0/1 = CCV/Week Schedule

CCVNO: CCV index number (1-2000), valid for CCV/W = 0

CCVSTP: CCV step number (1-20), valid for CCV/W = 0

WEEKNO: Week Schedule number (1-900), valid for CCV/W = 1

N_CCVNO: Night CCV index number (1-2000) **Note 5**

N_CCVSTP: Night CCV step number (1-20)

Note 5: If Night CCV is not used, assign N_CCVNO = 0 (default setting).

<Pattern B>

CCV/W_B: 0/1 = CCV/Week Schedule for Pattern B

CCVNO_B: CCV index number (1-2000) for Pattern B, valid for CCV/W_B = 0

CCVSTP_B:CCV step number (1-20) for Pattern B, valid for CCV/W_B = 0

WEEKNO_B: Week Schedule number (1-900) for Pattern B, valid for CCV/W_B = 1

N_CCVNO_B: Night CCV index number (1-2000) for Pattern B **Note 6**

N_CCVSTP_B:Night CCV step number (1-20) for Pattern B

Note 6: If Night CCV is not used, assign N_CCVNO_B = 0 (default setting).

STEP 2: MEM_HDD -Data Control Between Memory and HDD

Assign this data to back up the Data Memory.

Direction Select: Memory to Hard Disk

Data Type Select: ACD Data Memory

Q-1A QUEUING - ACD

GENERAL DESCRIPTION

There are two queues for every split. One queue contains a prioritized list of callers waiting to be connected to agents and the other queue contains a list of agents waiting to be connected to callers starting with the agent who has been ready the longest. A queue will be empty when there are no waiting callers or no waiting agents.

If agents are available to handle a call, the agent queue contains a list of the agents, starting with the highest priority (preference level) agent who has been waiting the longest period of time for a call, and ending with the lowest priority agent who has been waiting the shortest period of time for a call. Refer to “CALL DISTRIBUTION TO AGENTS - ACD [C-35A]” and “MULTI-SPLIT AGENT - ACD [M-90A]” for related information.

If callers are waiting to be connected to agents, the call queue contains a list of the calls, starting with the highest priority calls which have been waiting the longest period of time to be connected to an agent, and ending with the lowest priority calls which have been waiting the shortest period of time to be connected to an agent.

Callers may be suspended in queue while conducting certain voice transactions with IVR equipment. At this time it is possible to have a (suspended) caller in the call queue while at the same time have available agents in the agent queue.

There are two distinct ways to present a call to a split. Each way provides a different algorithm for connecting the call to an agent or placing the call in queue.

1. Standard queuing:

Standard queuing always connects a call with an available agent or queues the call when an agent is not available. Calls are queued according to their priority. The only limit to standard queuing is the split’s maximum depth. Upon finding the queue full, alternate routing may be invoked, if alternate routing has been programmed. Please refer to the If not Queued, Goto or Busy instruction, under “CALL CONTROL VECTOR-ACD [C-108A]”, for additional information.

A split’s maximum queue depth may be specified in one of two ways:

- As an absolute number. This count defines the maximum number of callers who may wait in queue for the split.
- As a percentage of the number of working agents. This percentage is specified in 5% increments from 5% to 1000%. Working agents are those agents in the Work Mode or on an ACD call. When the queue depth is specified as a percentage of working agents the depth will change up and down as agents logon, take breaks and logoff. There may be occasions when there are more calls in queue than the queue depth might appear to permit. No new calls may queue until the current depth is reduced below the current maximum allowed.

If the percentage is set to 150% and there are 18 agents working then the queue depth for that moment will be set at 27.

2. Conditional queuing:

One of the two following conditions (programmed on a split-wide basis) will be checked before a call is either connected to an agent or queued.

a. Minimum Agent Availability

The system will check for a minimum number of available agents before connecting the call. If the number of available agents is greater than or equal to the minimum specified, the call is accepted and connected to the longest-waiting available agent. For example, if the minimum agent threshold is set at “3”, then calls are connected if there are three or more available agents. If there are two or fewer available agents the call will be processed by the next step in the Call Control Vector (refer to “CALL CONTROL VECTOR - ACD [C-108A]”).

b. Maximum Queue Depth

The system will check for a maximum number of calls in the split’s queue, at the time the call is presented. If the queue depth is less than the maximum specified, the call may be queued or connected if agents are available. For example, if the maximum queue depth is set at “3”, then calls are connected if there are fewer than three calls in queue. If there are three or more calls in queue the call will be processed by the next step in the Call Control Vector (refer to “CALL CONTROL VECTOR - ACD [C-108A]”).

A Call Control Vector (CCV), which is assigned to a Pilot Number, allows certain calls to queue to a split, and specifies standard or conditional queuing. When conditional queuing is used, the type (condition) and threshold must be selected for the split. A split may receive standard queuing calls from one CCV while receiving conditional queuing calls from another CCV. Refer to “CALL CONTROL VECTOR - ACD [C-108A]” for related information.

The following types of calls are permitted to queue to an ACD split when agents in the split are not available to handle calls:

1. Calls to the C.O. trunk assigned to the ACD split.
2. A DID or Tie trunk call that dialed the Pilot Number associated with the split.
3. Automatic Ringdown Tie trunk terminations.
4. Calls transferred by the attendant.
5. Calls overflowed from other splits.
6. Calls forwarded by the split supervisor of another split.
7. Calls transferred by Node stations or ACD agents.
8. Calls transferred by Night mode.
9. Direct station calls.

OPERATING PROCEDURE

This feature is implemented through the programming of CCVs.

SERVICE CONDITIONS

1. Queuing Limitations:

- a. An incoming ACD call can follow a set of instructions in the CCV, associated with the pilot number, and encounter many different splits. If all the splits are busy, the call is allowed to queue to the first four splits it encounters. Additional splits may be programmed in the CCV, but no queuing is permitted if the splits are busy. A Dequeue instruction removes the call from one or all of the queues it currently occupies. After dequeuing, additional splits may be programmed and queuing will take place.
- b. There are a limited number of queue sports available in the ACD system. If a call is queued to four different splits, it has absorbed four queue spots. In the unlikely event that all the queue spots in the ACD system are in use, the split queue will not accept additional calls even though its queue depth limit has not been reached.

2. Queue Size Restrictions:

- a. Queues are basically unlimited in size; however, a maximum queue depth may be specified when designing the database. For example, a small split having only six agents should not allow 220 queued calls. This would result in numerous abandoned calls. A maximum queue size of 15 would be more appropriate for this particular split. Once full, additional calls would get Busy Tone or endless ringing, depending on CCV programming. Each split's queue is programmed with a maximum size which may be an absolute number (1 to 700) or may be stated as a percentage of logged on agents (5% to 1000%).
- b. The total number of all calls waiting in all queues combined with the total number of all calls currently connected to agents is limited to the maximum number of Call Records. Refer to the ACD Job Specification for the quantity of Call Records allocated for each ACD system.

3. Queue Timing Restrictions:

- a. There is no limit on how long a call may remain in queue. There are ways of removing calls from queues including the caller disconnecting, a successful transfer to a Node number, a Dequeue instruction in the CCV, or the call being answered by an agent from another queue. Encountering an END instruction in a CCV does not remove the call from the queue.

PROGRAMMING

ACDSPL - Assign the maximum number of queued calls

QUEUE FLAG: Unit of Queue flag

0 = Decimal

1 = Percent

QUEUE: Maximum value of queued calls

For QUEUE FLAG = 0 1-700 calls

For QUEUE FLAG = 1 5-1000% (every 5 increments)

R-19A RELEASE - ACD POSITION - ACD

GENERAL DESCRIPTION

This feature allows an agent who is using a headset to release from a call by pressing the **RELEASE** key, rather than for the other party to disconnect.

OPERATING PROCEDURE

1. While engaged in a call, the agent or supervisor presses the **RELEASE** key.
2. The calling party is immediately disconnected and the agent or supervisor becomes idle with after-call availability set accordingly. Refer to “AVAILABILITY - ACD POSITION-ACD [A-37A]” for related information.

PROGRAMMING

Assign “RELEASE” key referring to “2.4 ACD Agent/Supervisory Position Data Assignment” in Chapter 4.

R-145A RING DELAY - ACD

GENERAL DESCRIPTION

This feature is programmed in a Call Control Vector (ACDCCV) using the Ring Delay step followed by a parameter of from 1 to 15 seconds. Once a call has traversed a Ring Delay step then the ring delay feature will be applied to that call when it ultimately connects to an agent.

The effect of the Ring Delay feature on a call is that once an agent has been selected to receive this call there will be a delay in connection of up to 15 seconds. This delay is intentionally inserted to provide a window during which a host computer could paint information on the agent's screen which is pertinent to the call. The Host Computer is allowed to shorten the Ring Delay cycle by sending an appropriate Infolink command to the ACD. This message (IHx) will cause the call to immediately ring through to the agent's position.

SERVICE CONDITIONS

1. The accuracy of the timing on the Ring Delay feature is +/- 2 seconds.
2. For a Ring Delay step in a CCV to be effective it must appear before the Queue To (Queue Assign or Conditional Queue Assign) step, otherwise the Ring Delay step may not be reached if calls ring in and go directly to a waiting agent.
3. When the agent position is turned into the Work Mode or Break Mode while on Ring Delay step, the position goes in Work Mode or Break Mode after the communication ends as in the manner that the position presses the WORK/BREAK key while handling the ACD call (The ACD call is terminated to the position after Ring Delay step as normal processing).
4. When the call is distributed to execute more than one Ring Delay step, Ring Delay step which is programmed the longest time will be executed.
5. While RING DELAY is executed, the MIS displays "READY". The call abandoned during Ring Delay step is counted as "Abandoned Call before Announcement", "Abandoned Call after the First Announcement", or "Abandoned Call after the Second Announcement" in the static report.

PROGRAMMING

ACDCCV -
CCVACT = 17 (Ring Delay)
CCVACT DATA: 1-15 (sec.)

S-91A SPLITS - ACD

GENERAL DESCRIPTION

A Split is a basic building block of a call center and is generally thought to consist of a group of agents performing a similar task, a prioritized queue for incoming callers and possibly a supervisor position to oversee the caller and agent activity within the split. The supervisor may have a sophisticated statistics program available to monitor the caller and agent activity which will provide both real-time as well as historical information.

Many features are provided on a per-split basis and applied equally to all agents in the split or all callers in the split's queue. Here is a brief summary of the features available for a split. Most of these are discussed in detail on their respective pages and are included here for summary information only.

After ACD Call Mode

At the conclusion of each call an agent can be automatically either available or in wrap up mode depending on this setting. Straightforward key presses at the agent instrument allows individual agents to override this feature on a call-by-call basis.

Agent Queuing Options

An option exists where the agent's preference levels can be checked in order to decide which agent should receive the next incoming call. When preference levels are not being checked then the call will go to the longest waiting agent. If preference levels are being checked then the agent with the highest preference level is located and if there are more than one with the same preference level then the longest waiting one will be assigned the call.

The Agent preference level data for this feature is also used to decide the preference level of incoming ACD call when using MULTI-SPLIT AGENT-ACD [M-90A] (Preference levels 1 through 99 (1>99) can be programmed using "PRIO" in ACDLOG command). Therefore, when MULTI-SPLIT AGENT [M-90] is used together with this feature, there are the following conditions.

- a. if there are no ACD calls waiting in the queue:
 - Agent Queuing Options is available for the ACD call to be routed to the split where
 - Agent Queuing Options is effective (when multiple splits are allowed for Agent Queuing Options, the agent may have different preference level for each split).
- b. if there are ACD calls waiting to be queued in multiple splits:
 - the agent handles the ACD call followed by MULTI-SPLIT AGENT function.

Analog Work Timeout

Analog positions within a split may utilize a different after-call-work timeout than digital station users.

Answer Mode

By default, agent phones may be setup for auto answer which provides zip tone and an automatic connection or manual answer in which case the agent's position will ring and the incoming call should be answered in the normal fashion. Straightforward key presses at the agent instrument allows individual agents to override this feature on a call-by-call basis.

Assist Destination

A destination to receive calls when an agent presses the Assist Key can be specified for each split.

Auto Ready after PBX Call

A feature may be setup such that an agent's position will be automatically replaced in the Ready Mode at the conclusion of a call on their Non-ACD line.

Auto Work with PBX Answer

ACD positions may be automatically placed in the Work Mode when an agent answers an incoming call on their Non-ACD line.

Auto Work with PBX Ringing

ACD positions may be automatically placed in the Work Mode when an incoming call begins to ring on their Non-ACD line.

Auto Work with PBX Dialing

ACD positions may be automatically placed in the Work Mode when an agent receives Dial Tone in order to place an outgoing call on their Non-ACD line.

Break Types

By simply pressing a digit '1' through '99' ('9' for North America) when entering the Break Mode, the MIS systems can track more closely how an agent's time is being spent.

Call Recover Timer

After a call has been assigned to an agent's position it is expected to be answered within a certain short period of time. If the call is not answered it can be programmed to be recovered and placed back in queue. At this time it will be connected immediately to another agent if one is available or will wait as the highest priority call to be connected as soon as one is available.

Call Waiting Chime On

The Call Waiting feature includes an optional chime which sounds only at ACD positions which are in the Work Mode at the moment the CW light turns on or begins flashing.

Call Waiting Threshold

The Call Waiting LED can be programmed to light when 'X' calls are in queue and begin flashing when there are 'Y' calls in queue. The thresholds are programmed independently for each split.

Conditional Threshold

Certain splits may be programmed to only accept overflow calls from other splits only if certain thresholds have not been exceeded. Either too many calls in queue or not enough available agents can prevent conditionally queued incoming calls from reaching this split.

Do Not Disturb Mode

When a split is unstaffed it operates in a Do Not Disturb Mode. Calls may be either allowed or restricted from queuing during this mode.

Emergency Destination

A destination to receive calls when an agent presses the Emergency Key can be specified for each split.

Emergency Recorder

A recording device can be specified to record calls in the event of an emergency. The agent must operate the Emergency Key before a call can be recorded.

Headset Jack Out Mode

When an agent's headset jack is removed from the telephone this can either automatically log the agent out or place the agent in break mode. Additionally the agent will have keys available to effect either of these conditions as well.

Hot Split

When a split is specified as a Hot Split then all ACD positions which are programmed for that split are automatically logged on when the ACD is initialized. This is most useful for ports which are typically staffed with machines like dictation equipment, answering machines, voice mail, etc.

Logoff Warning

When logoff warning feature is enabled agents will receive a visual display and their logoff key will be ignored (one key press only is ignored) if an agent attempts to log off while there are still calls in queue.

Logon ID

Agents are expected to use a logon ID to gain access to an ACD position. It is via this ID that the ACD becomes aware of what kind of calls should be assigned to this position.

Queue depth

The number of calls waiting to be answered in a split's queue can be limited as an absolute value or as a percentage based on the number of agents logged in and working. Of course the limits can be set to such a level as to be virtually unlimited.

Monitor Me Destination

A destination to receive calls when an agent dials the Monitor Me code can be specified for each split. A supervisor is alerted to the agent's request for monitoring and should commence a Silent Monitor (Multi-path Monitor) to that station.

Night Destination

A destination pilot number can be specified to receive incoming ACD calls when a split goes to Night Mode.

Stranded Calls CCV

If there are calls remaining in queue even after the last agent has logged off they will be forwarded automatically to the Stranded Calls CCV if it has been specified.

Tally Code Required

When per-call tally is enabled an agent is required to enter a tally code for each ACD call received before a new call will be assigned. The tally code may be entered either during the call or during the wrap up mode.

Work Mode Restriction

The ability for agents to selectively enter the work mode can be restricted. In such an environment agents will normally be forced to take one incoming call after another or enter the break mode.

Work Mode Timeout

The amount of time allocated for after call work mode wrap up can be set for each split. At the conclusion of that time period the agent will be automatically placed in the ready mode in order to receive a new incoming ACD call.

By properly assigning these features each split can customize the method of operation to suit the needs of the agents and clients. Additionally, it may be advantageous for an agent to be a member of multiple splits at one time. Please refer to “MULTI-SPLIT AGENT-ACD [M-90A]” for additional information.

The Supervisor Concept

The concept of a supervisor or a supervisor position has no formal definition within this ACD. Some of the traditional ideas of a supervisor are described below and in all cases these features or attributes may be applied to any agent or agent position.

Can utilize the Performance Appraisal/Silent Monitor (Multi-path Monitor) feature.

This feature is activated through the use of the **MON/BARGE** key and is available to any agent position equipped with such a key. It is not hard to imagine an environment where a senior agent may be responsible for doing some of the performance appraisals but not be considered the “Supervisor”. Every position may be equipped with a **MON/BARGE** key.

Has access to the Real-time and Historical Report MIS Information.

This capability is provided by external computer (PC) equipment. It is a management decision that determines who will be provided with such computer equipment. We would expect most “Supervisors” to have access but certainly other individuals may have a need for such information as well.

SERVICE CONDITIONS

Every position in the ACD may be a member of the same split.

PROGRAMMING

Refer to “2.3 Split Data Assignment” in Chapter 4.

S-97A SPLIT DISPLAY - ACD POSITION - ACD

GENERAL DESCRIPTION

The name of the split that a position belongs to can be displayed while the position is in Vacant mode. This maintenance feature helps the user determine which positions belong to which splits.

OPERATING PROCEDURE

1. While the position is Vacant, press the **AUTO/MAN** key or the **WORK** key.
2. Two four-second displays will follow each other providing some brief statistics pertaining to the split this position belong to.
 - the current queue depth and wait time of the longest caller is displayed first:
Q = 1 WAIT = 4:38
 - the name of the split and an estimated time to answer (ETA) for a call just arriving is shown second:
SALES: 5:45
3. The display returns to VACANT.

SERVICE CONDITIONS

1. This feature is only available when the position is unoccupied.
2. The agent's display will show **SPLIT: ANY** if the position is programmed as an any split position and an attempt is made to use this feature.

PROGRAMMING

None

S-98A SPLIT SELECTION - ACD

GENERAL DESCRIPTION

Split selection is determined by the position in use and the logon ID in use. A logon ID indicates whether the agent can service a single split (single-split mode) or a maximum of sixteen splits concurrently (multi-split mode). A logon ID can access a maximum of sixteen specified splits or any split. A position can access a single specified split or any split.

When an agent logs on, a validation procedure compares the split assignment of the position with the split assignment and the split mode of the logon ID. The three factors (position split assignment, logon ID split assignment, logon ID split mode) determine the split(s) that the agent works in and that are displayed during the logon process. Please refer to “MULTI-SPLIT AGENT-ACD [M-90A]” for additional information.

OPERATING PROCEDURE

1. Split selections are performed automatically by the ACD system when an agent logs on.

SERVICE CONDITIONS

1. One combination of a position's split assignment and a logon ID is not allowed. One combination of a split mode and a split assignment, within the same logon ID, is not allowed. Both combinations are denied because the determination of the appropriate split(s) would be an ineffective use of ACD system resources and agent's time. The two combinations which are not permitted are:
 - a. A logon ID which allows any split, in combination with a position which allows any split;
 - b. A logon ID which indicates multi-split mode and allows any split.
2. Changes to the position's split assignment and/or the logon ID, entered at the ACD PCPro or the ACD MIS terminal, will take effect immediately when the agent logs on.
3. Split assignments for positions and logon IDs are accomplished through ACD PCPro assignments.

PROGRAMMING

None

S-108A STRANDED CALL ROUTING - ACD

GENERAL DESCRIPTION

A stranded call is defined as a call left unanswered in queue at the time when the last agent in the split logs off the ACD system. If this call is not queued to any other split which still has agents logged on then it becomes “stranded” at the moment the last agent logs off and is a candidate for Stranded Call Routing.

Some call centers operate by placing a split into Night Mode some number of minutes prior to their actual closing time or more precisely prior to the time when the last agent will log off. This will stop new incoming calls from being queued while the remaining agents handle the calls which are still in queue. The Stranded Call Routing feature is not affected by Night Mode and will still be invoked to reroute any calls remaining in queue when the last agent logs off.

When Stranded Call Routing is invoked each caller remaining in queue will be directed to a new Call Control Vector and step and continue their ACD processing from that new point. Any CCV sequence may be specified at this time.

OPERATING PROCEDURE

1. A caller remains in queue for the Customer Service split.
2. One agent is still working, handling another call and all other agents have logged off and gone home.
3. The last agent finishes the call and enters After Call Work Mode.
4. After some time, and without answering the last call in queue, this agent logs off the system.
5. Since the caller in queue is only in the Customer Service queue and there are no agents remaining in this split the caller will be immediately rerouted to the Stranded Call CCV destination specified for this split.

SERVICE CONDITIONS

Assist and Emergency calls will not be rerouted by the Stranded Call Routing feature.

PROGRAMMING

ACDSPL

STCCV NO: CCV index number for Stranded Call Routing (1-2000)

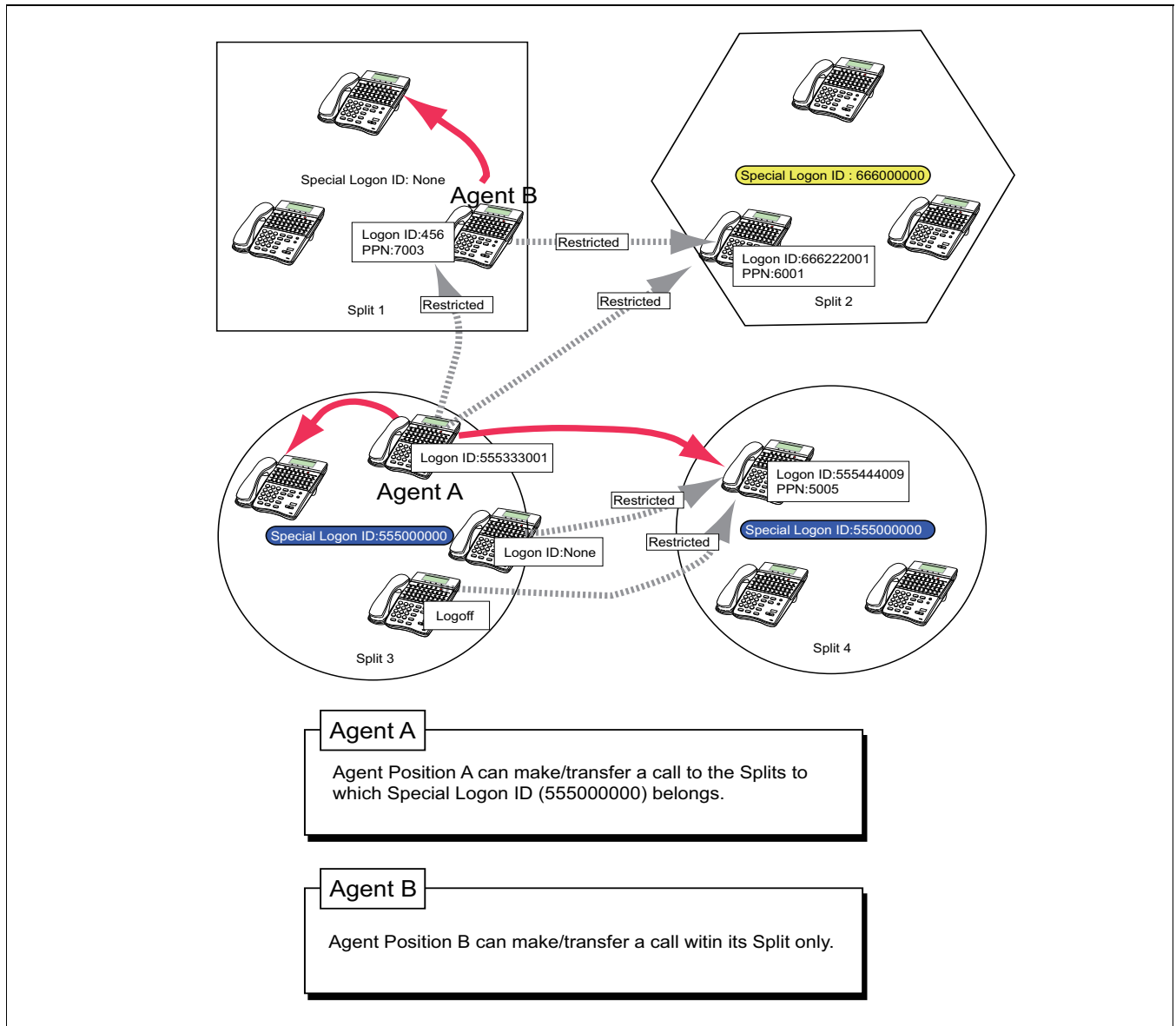
STCCV STP: CCV step number for Stranded Call Routing (1-20)

S-153 SPLIT CONNECTION RESTRICTION - ACD

GENERAL DESCRIPTION

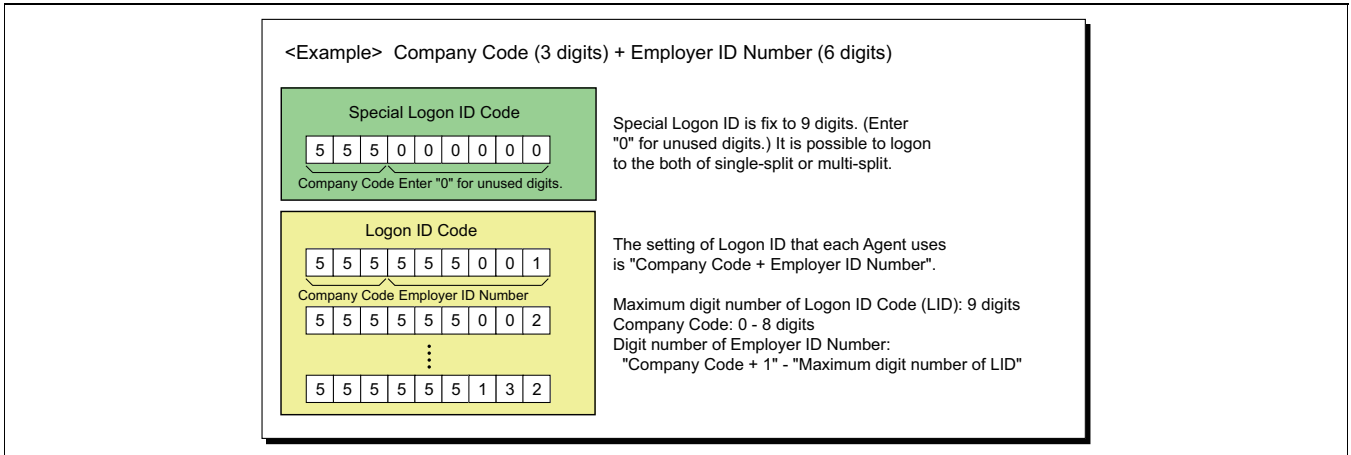
This feature allows the system to prevent Agent/Supervisory Positions from accessing (call origination, call transfer and Monitor/Barge) to PPN (Personal Pilot Number) or ACD Pilot Number of other Splits.

Note: This feature is not available in North America.



S-153 SPLIT CONNECTION RESTRICTION - ACD

Special Logon ID determines whether a Calling Party can access to a Split. If no Special Logon ID is assigned, the Calling Party can access only to Split to which the Calling Party belongs. The following show the relationship between Special Logon ID and normal Logon ID for Agent.



The following table shows the status of Calling Party (Agent) and actions of this feature when making/transferring a call to PPN or ACD Pilot Number.

Status of Calling Party		Call to PPN	Transfer to PPN	Call to ACD Pilot Number	Transfer to ACD Pilot Number
Logon (Using Logon ID)	With Special Logon ID	Only Splits having Special Logon ID Note 1	Only Split having Special Logon ID - Call Transfer - All Calls - Blind Transfer - Call Forwarding - Busy Line - Call Forwarding - Don't Answer - Call Forwarding - All Calls - Call Transfer by CCV	Only when Split having Special Logon ID = Split assigned as a call/transfer destination in CCV	Only when Split having Special Logon ID = Split assigned as a call/transfer destination in CCV
	Without Special Logon ID	Only Split to which Calling Party belongs Note 2	Only Split to which Calling Party belongs. - Call Transfer - All Calls - Blind Transfer - Call Forwarding - Busy Line - Call Forwarding - Don't Answer - Call Forwarding - All Calls - Call Transfer by CCV	Only when Split to which Calling Party = Split assigned as a call/transfer destination in CCV	Only when Split to which Calling Party = Split assigned as a call/transfer destination in CCV
Logon (Not using Logon ID)/Log off		Restricted	Restricted	Restricted	Restricted

Note 1: If Special Logon ID logs in to multiple Splits, all the applicable Splits are available.

Note 2: If Calling party logs in to multiple Splits, all the applicable Splits are available.

S-153 SPLIT CONNECTION RESTRICTION - ACD

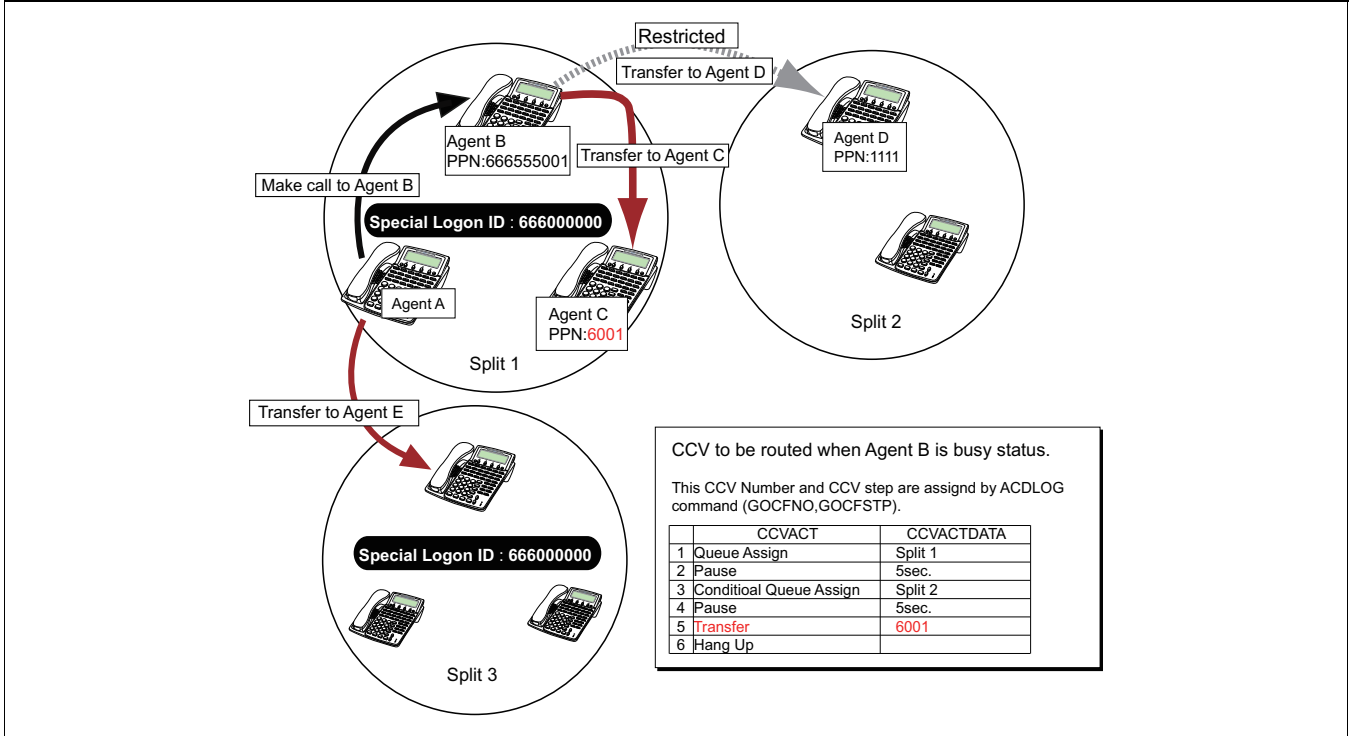
The following table shows the status of Agent/Supervisor and actions of Monitor function.

Status of Agent	Status of Supervisor	Transfer to PPN	Monitor Function
Logon (Using Logon ID)	Logon (Using/not using Logon ID)	Logon ID is specified	Monitor/Barge function is available only for Split to which Supervisor belongs. Note 3, Note 4
		Station number is specified	Monitor/Barge function is available only for Split to which Supervisor belongs. Note 3
	Log off	Logon ID is specified	Restricted
		Station number is specified	
Logon (Not using Logon ID)	Logon (Using/not using Logon ID)	Logon ID is specified	Monitor/Barge function is available only for Split to which Supervisor belongs. Note 3
		Station number is specified	-
Log off	Logon (Using/not using Logon ID)	Logon ID is specified	-
		Station number is specified	Restricted

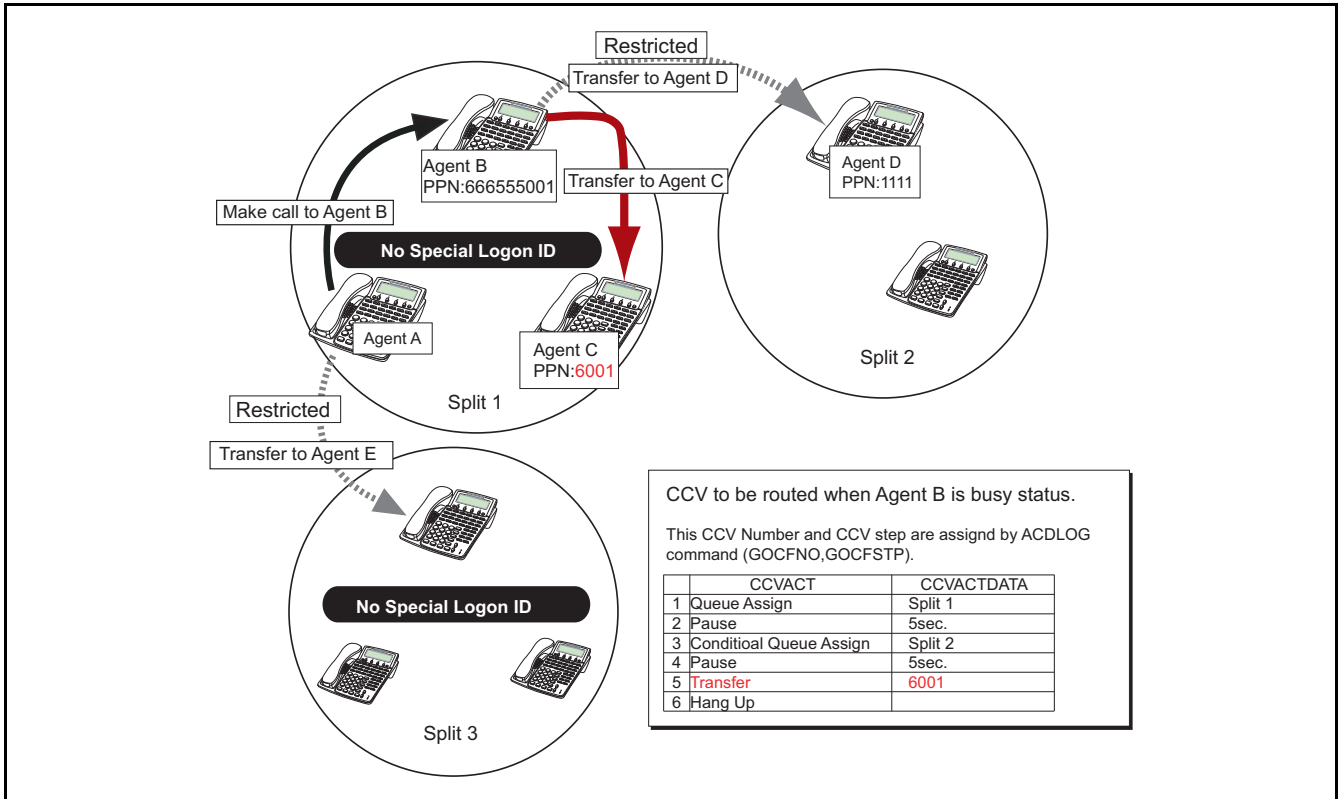
Note 3: If Supervisor logs in to multiple Splits, all the applicable Splits are available.

Note 4: Barge function is available only for ACD calls.

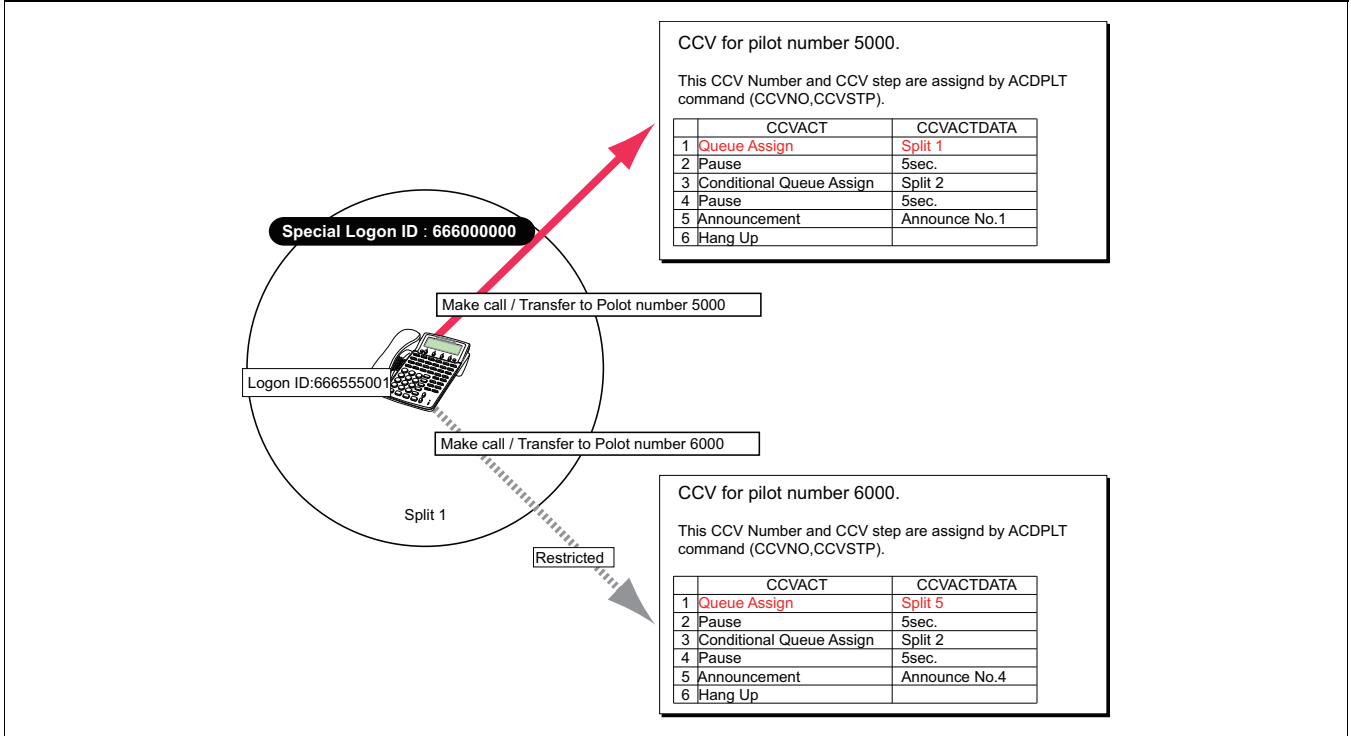
Transfer to PPN (With Special Logon ID)



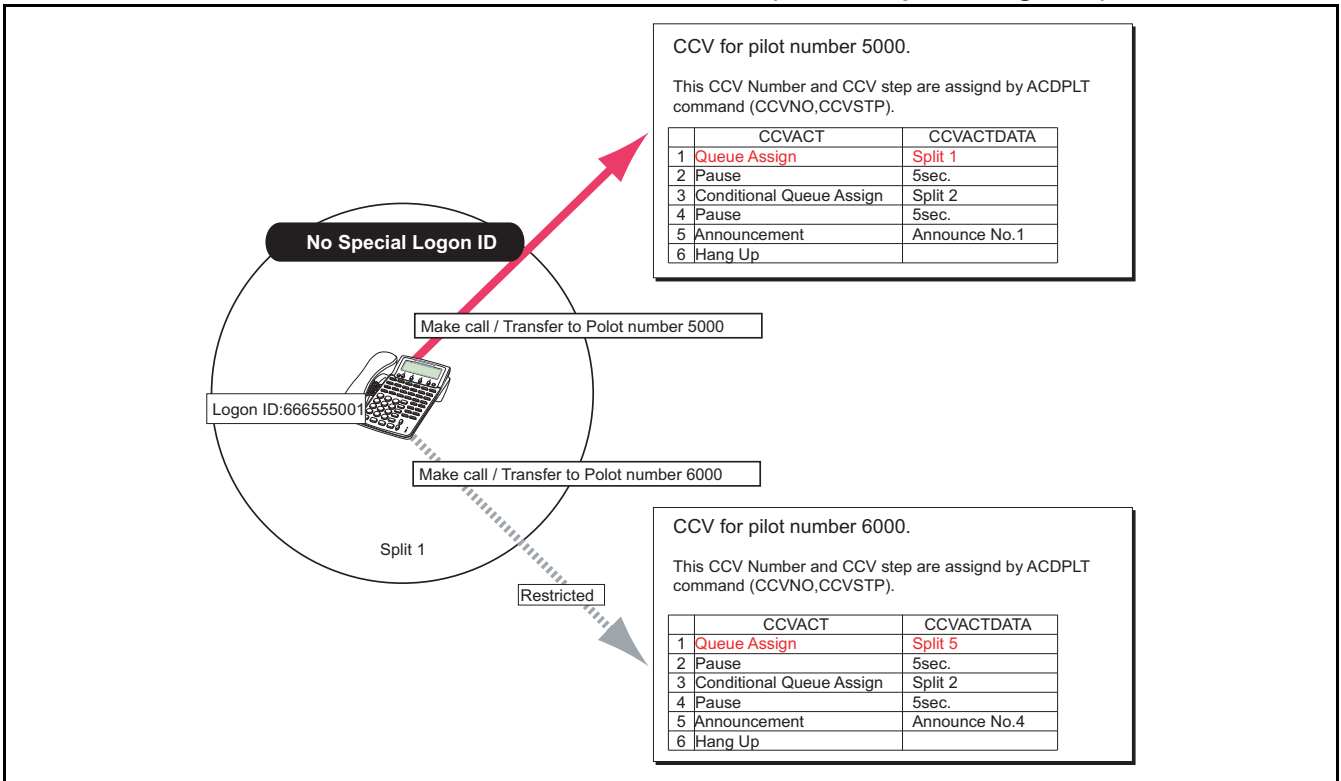
Transfer to PPN (Without Special Logon ID)



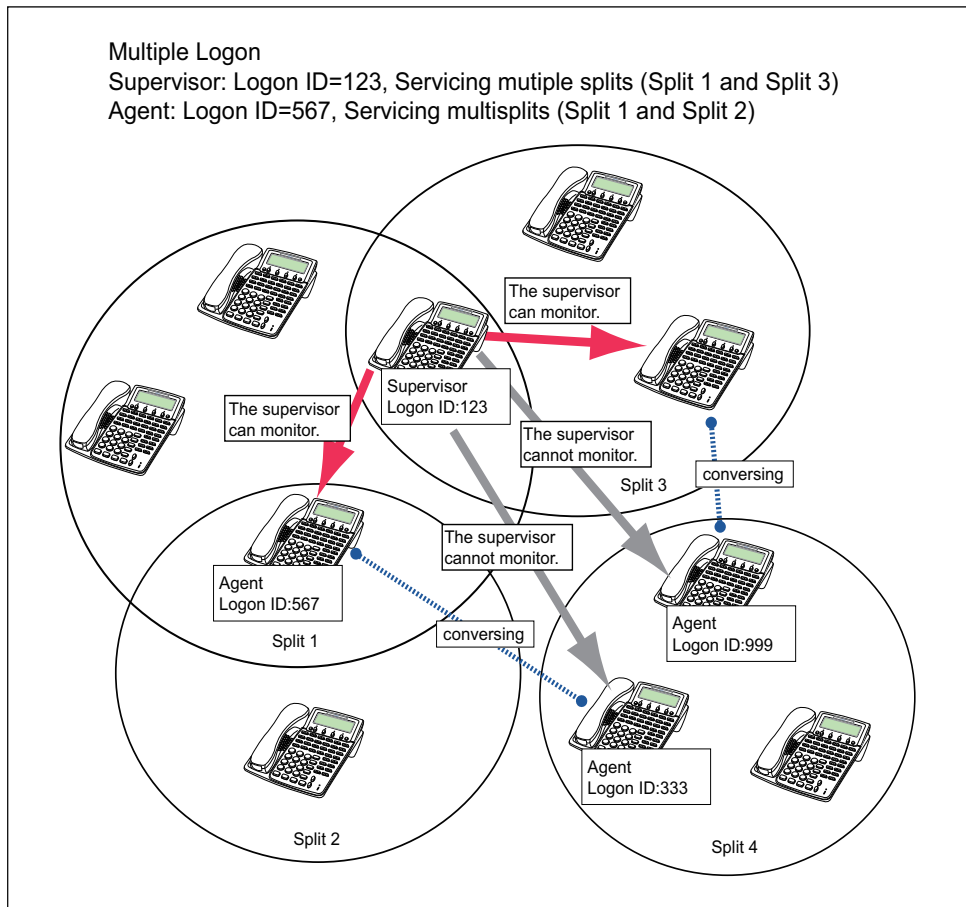
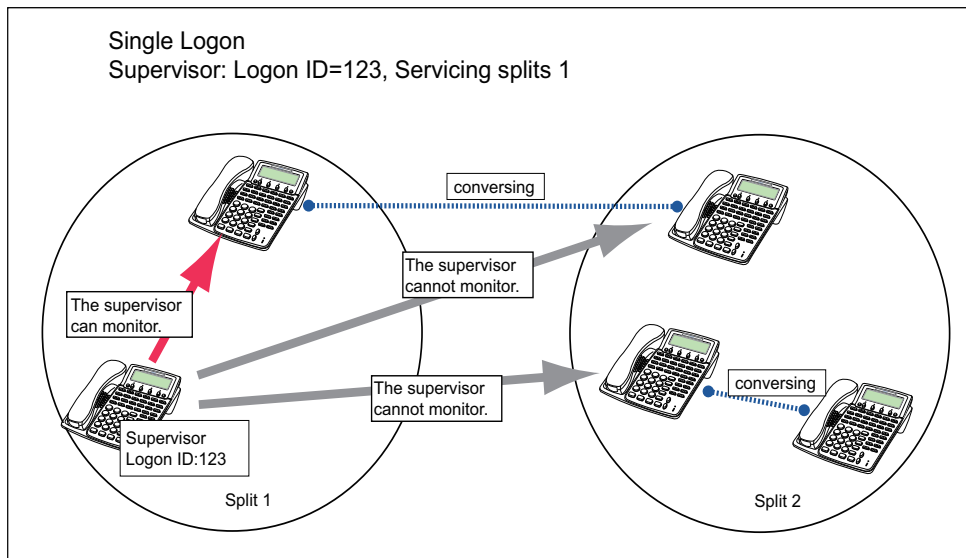
Make a Call/Transfer to ACD Pilot Number (With Special Logon ID)



Make a Call/Transfer to ACD Pilot Number (Without Special Logon ID)

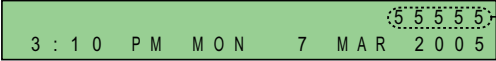
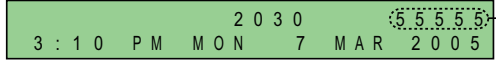
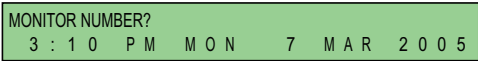
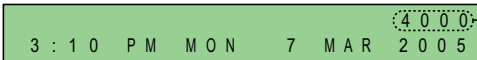


Monitor



S-153 SPLIT CONNECTION RESTRICTION - ACD

The following table is behavior of Agent (calling party) and MIS when call is restricted.

	AGENT (CALLING PARTY)		MIS Real Time Screen
	Display of LCD	Kind of Tone	
When Agent is restricted from making call to PPN.	Blink the PPN 	ROT (BT)	Not queuing.
When Agent is restricted from transferring.	Blink the PPN 	ROT (BT)	Not queuing.
When Agent is restricted from monitoring.	“MONITOR NUMBER?” is displayed 	None	Not monitoring. (No display)
When Agent is restricted from connecting to the ACD Pilot number.	Blink the ACD Pilot number 	ROT (BT)	Not queuing.

OPERATING PROCEDURE

None

SERVICE CONDITIONS

- The relation between Special Logon ID and Logon ID Code (LID) assigned by ACDLOG is as follows.
 <Example> Company Code (3 digits) + Employer ID Number (6 digits)
 - Maximum digit number of LID: 9 digits
 - Company Code: 0 - 8 digits **Note 1**
 - Digit number of Employer ID Number: Company Code+1 to Maximum digit number of LID

Note 1: The number of digits can be changed by entering Tally code from Supervisory Position.

- The Special Logon ID is fixed to 9 digits. Digits other than Company code (0-8 digits which is used from MSB) are filled by 0 when combine Company code and Employer ID Number.
- When Special Logon ID is not assigned, connection restriction is not executed.
- Restriction control is executed based on the Restriction data (SFC) set to Line that calling party (Agent or Supervisor) uses. However, when SFC cannot be readout, the call will not be restriction checked.
- An assist numbers are not restricted.
- For the monitoring, connection restriction is executed in case of both the dialing the ID code and the dialing the non-ACD-call station number of the agent.

7. When Supervisor has no Logon ID, only the Split assigned by ACDPSN can be monitored.
8. Barge function is available only when Supervisor is in Monitoring status.
9. When connecting to PPN, the restriction check is performed based on information of the following Splits:
 - Call/transfer destination Split
 - Split to which Calling/transferring Party belongs

Note: If Special Logon ID data is assigned, the restriction check is performed based on information of the Split having Special Logon ID.

10. When connecting to ACD Pilot Number, the restriction check is performed based on information of the following Splits:
 - Split to which Calling/transferring party belongs
 - Split whose ACD Pilot Number is assigned as destination in a CCV table

Note: If Special Logon ID data is assigned, the restriction check is performed based on information of the Split having Special Logon ID.

11. When PPN or ACD Pilot number is assigned to “Transfer To” (CCVACT=5) step of a CCV table, the restriction check is performed for the transferred call.
12. This feature is available only for CCV Number or CCS Step assigned on ACDPLT. The other CCVs assigned on “Jump CCV” or “Jump CCV step when the queue is busy” step in a CCV table are not supported.
13. Call forwarding of this feature is available among a maximum of 16 Splits.
14. When an intermediate party is released after Call Transfer-All Calls is restricted, the Calling Party is also disconnected.
15. When using QUEUE greater, LOGON less, READY less and WORKING-AGENTS greater of CCV instructions together with this feature, the result of logical operations (“AND”/”OR”) by using these CCV instructions is always “TRUE”.
16. Do not set, change and delete the Special Logon ID from MIS client.

PROGRAMMING

STEP 1: ASYDL, Index 873, Bit 0=1: Restriction on the connection of PPN/Pilot number. **Note 2**

STEP 2: ASYDL, Index 873, Bit 1=1: Restriction on the connection of Monitor. **Note 2**

STEP 3: ASFC, SFI 227, RES=1: Restriction on the connection of PPN/ACD Pilot number. **Note 3**

STEP 4: ASFC, SFI 228, RES=1: Restriction on the connection of Monitor. **Note 3**

STEP 5: ACDLOG - Assign the ID code to logon **Note 4**

LID: (9 digits at the maximum)

Note 2: In an FCCS network (ACD Trunk for FCCS, Agent Anywhere, Multiple ACDPs, Multiple Agent Anywhere), assign the same data to all the nodes.

Note 3: Specifying RES=1 enables this service to activate.

Note 4: The Special Logon ID is fixed to 9 digits.
<Example > If Company Code = "555", enter "0" for unused 6 digits. Thus the Special Logon ID ="555000000".

S-164 SR-MGC with ACD

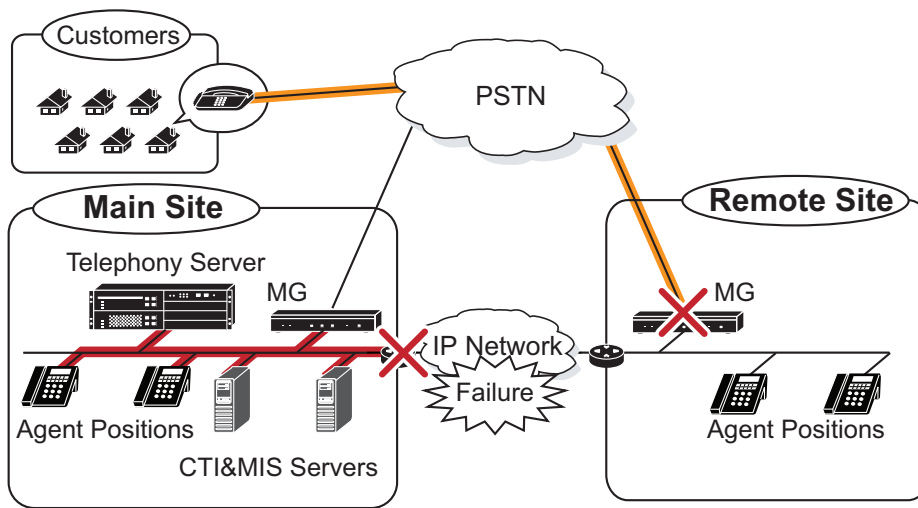
* Here SR-MGC represents SR-MGC(E) if not otherwise specified.

GENERAL DESCRIPTION

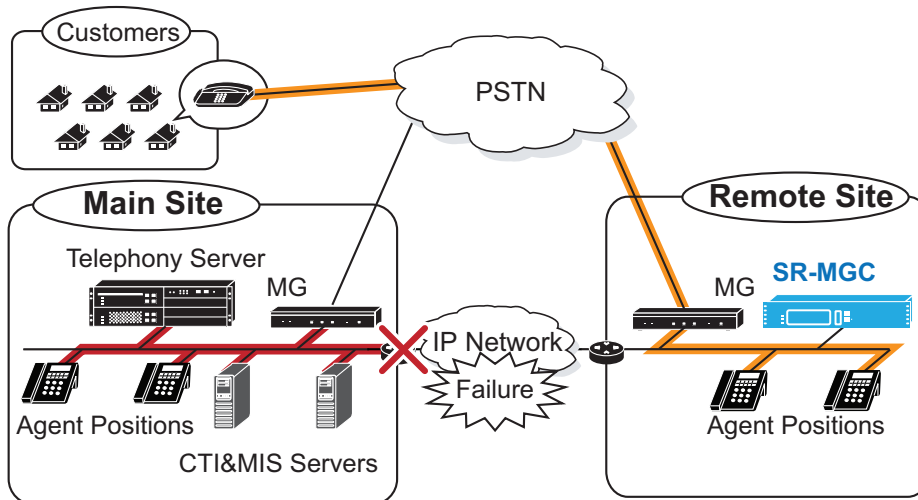
An SR-MGC, which is installed onto your ACD system, can protect customers' calls from being dropped in case of failure on the Telephony Server or a network between your sites.

Note: This section explains only relevant matters between ACD and SR-MGC; for other general information and conditions on SR-MGC including terminal kinds rescued by an SR-MGC, timing when an SR-MGC switches terminals back to the Telephony Server, refer to Data Programming Manual - Business.

[Incoming calls to devices uncontrollable by a Telephony Server have been lost]



[SR-MGC can rescue the devices to handle the calls as normal]



OPERATING PROCEDURE

None.

SERVICE CONDITIONS

- * A site where the Telephony Server is located is referred to as a main site; a site where an SR-MGC is located is referred to as a remote site.

<Important Notices>

1. An SR-MGC is available only for a standalone system. One Telephony Server can accommodate up to 256 SR-MGCs.

Note: If an SR-MGC has less capacity to rescue IP equipment than Telephony Server, the SR-MGC cannot rescue all of the IP equipment. Keep it in mind when configuring your network.

2. You can choose the SR-MGC saving method from “ACD” or “UCD”.
 - a. When "UCD" is chosen, consider the following conditions.
 - ACD function does not work. Incoming calls are distributed by UCD.
 - Be sure to assign the UCD backup data to Monitor Numbers used for ACDPLT command or Personal Pilot Number (PPN).
 - Up to 63 UCD groups are available. Each UCD group can have up to 100 stations.
 - b. When “ACD” is chosen but ACD system does not work, incoming calls are distributed by UCD.
3. An SR-MGC (E) can accommodate up to 4000 agent positions.

Note: The increase does not apply to North America.

4. If you change office data of the ACD system, be sure to perform the following to copy both of ACD system office data and office data simultaneously. If a copy, which may be done by the CMNT command or automatically after routine diagnosis, is successfully finished, the SR-MGC is initialized.

STEP 1: Perform the MEM_HDD command to backup the office data of the ACD system.

STEP 2: Perform the CMNT command to copy the office data to an SR-MGC.

Note:

- If an SR-MGC starts to operate without backup after changing office data on the Telephony Server, the SR-MGC does not have up-to-date ACD system office data: The SR-MGC operates with ACD system office data before changed.
- After switching back terminals, be sure to perform the ACDIZ command to initialize ACDP in an SR-MGC. If not, and the SR-MGC starts to operate again, there may be agent positions in the logon status following the last SR-MGC operation; in that case, each of the agent positions requires you to log back on by pressing its LOG ON/OFF key.
- For the countries except North America, office data copy (including backup for

ACD system office data) to SR-MGC can be performed with routine diagnosis.

- For the countries except North America, when Automatic ACD office data copy is enabled, the office data copy is performed after routine diagnosis. ACD office data backed up at the time of routine diagnosis is automatically copied to SR-MGC, and the new data is reflected after the SR-MGC initialization. Automatic office data copy after routine diagnosis is performed regardless of the result of routine diagnosis.

5. To switch back terminals after recovery from failure, perform the CMNT command for manual switching.

Note: Do not set automatic switching because it causes lamps on agent positions discrepancy in states.

<Interactions with Other Features>

1. SR-MGC operation limits a MIS server and a CTI server:

* We assume that a MIS server and a CTI server are located in a main site, but not in a remote site.

- During failure on the Telephony Server, all the devices cannot provide statistical data with a MIS server and CTI cooperation.
- During failure on a network, devices registering to an SR-MGC in a remote site cannot provide statistical data with a MIS server and CTI cooperation. A MIS server and a CTI server in a main site recognize the devices as discrepancy in their states.

2. An SR-MGC cannot connect with a MIS server and a CTI server: It means that devices registering to an SR-MGC in a remote site cannot provide statistical data with a MIS server and CTI cooperation.

3. An agent position in proprietary protocol mode, to which you are supposed to have ACDP automatic logoff enabled, is automatically logged off when a network goes down. If the agent position executes call recover during the failure, its LCD keeps displaying “CALL RECOVERED” until it logs back on.

4. When SR-MGC takes over the control of IP terminals from the Telephony Server, the ACD system starts up in Night mode.

Since a MIS server cannot change Day/Night mode when SR-MGC is in operation, be sure to add NIGHT key to supervisory position telephones on which Day/Night modes of ACD split are switched. At least one supervisory position must be installed in a remote site in advance for this purpose.

Note: After logging back on, make sure that a NIGHT lamp works properly in synchronization with the time. A NIGHT lamp represents Day mode when unlit, Night mode when lit.

5. When SR-MGC takes over the control of IP terminals from the Telephony Server, the ACD system starts up in Night mode.

Since a MIS server cannot change Day/Night mode when SR-MGC is in operation, be sure to set up an access code on analog supervisory positions to switch between Day and Night modes. At least one analog supervisory position must be installed in a remote site in advance for this purpose.

6. With supervisory position’s monitor in service, if a device relevant to a monitoring registers to an SR-MGC, the monitoring will be discarded.

7. SR-MGC does not accept FCCS Cluster in Location Diversity [L-55].

8. The table below shows which ACD-features are available in the system while an SR-MGC operates:

Which ACD-Features does SR-MGC Support?

Feature		Availability
X: Available, N/A: Not available		
[A-31A]	ABANDONED CALL SEARCH - ACD	X
[A-34A]	ASSISTANCE - ACD AGENT - ACD	X
[A-35A]	AUTOMATIC ANSWER - ACD	X
[A-37A]	AVAILABILITY - ACD POSITION - ACD	X
[A-80A]	ANNOUNCEMENTS - ACD	X
[A-85A]	AGENT PERSONAL QUEUE - ACD	X
[A-86A]	AUTO WORK MODE FOR PBX CALLS - ACD	X
[A-91A]	ANALOG ACD POSITION - ACD	X
[A-93A]	ALTERNATE NIGHT CCV - ACD	X
[A-133A]	AGENT ANYWHERE - ACD	N/A
[A-140A]	ACD Access - ACD	X
[B-20A]	BREAK MODE - ACD	X
[B-21A]	BAD CALL NOTIFICATIONS - ACD	X
[C-35A]	CALL DISTRIBUTION TO AGENTS - ACD	X
[C-67A]	CALL TRANSFER TO SPLIT QUEUE - ACD	X
[C-68A]	CALL WAITING INDICATION - LCD DISPLAY/CW LAMP - ACD	X
[C-70A]	CALLING PARTY IDENTIFICATION - ACD	X
[C-108A]	CALL CONTROL VECTOR - ACD	X
[C-110A]	CALL WAITING LAMP WITH CHIME - ACD	X
[C-127A]	CALL FORWARDING - SPLIT - ACD	N/A
[C-191A]	CALL RECOVER - ACD	X
[C-199A]	CONNECTION DISPLAYS - ACD	N/A
[D-133A]	DO NOT DISTURB - SPLIT - ACD	X
[E-6A]	EMERGENCY/RECORDER - ACD	X
[F-10A]	FUNCTION GROUPS (SPLITS) - ACD	X
[F-25A]	FLEXIBLE ID CODES - ACD	X
[H-20A]	HOLIDAYS SCHEDULING - ACD	X
[H-31A]	HOT SPLIT - ACD	X
[I-99A]	INFOLINK DATA MESSAGES - ACD	N/A
[L-19A]	LOGON/LOGOFF - ACD	X
[L-48A]	LANGUAGE DEFAULT - ACD	X
[L-92A]	LOGOFF WARNING - ACD	X
[M-28A]	MONITORING - ACD SUPERVISOR - ACD	X

Which ACD-Features does SR-MGC Support?

Feature		Availability
X: Available, N/A: Not available		
[M-29A]	MULTIPLE CUSTOMER GROUPS - ACD	X
[M-79A]	MULTIPLE SUPERVISORS - ACD	X
[M-88A]	MIS OPERATOR SELECTION - ACD	N/A
[M-89A]	MONITOR ME - ACD	X
[M-90A]	MULTI-SPLIT AGENT - ACD	X
[M-110A]	Multi-Line Support - ACD Terminal - ACD	X
[N-12A]	NIGHT SERVICE - ACD	X
[N-14A]	NON-ACD CALL - ACD	X
[O-19A]	OVERFLOW OUTSIDE - ACD	X
[P-21A]	PRIORITY QUEUING - ACD	X
[P-40A]	PILOT NUMBERS - ACD	X
[P-45A]	PERSONAL EMERGENCY AND ASSIST - ACD	X
[Q-1A]	QUEUING - ACD	X
[R-19A]	RELEASE - ACD POSITION - ACD	X
[R-145A]	RING DELAY - ACD	X
[S-91A]	SPLITS - ACD	X
[S-97A]	SPLIT DISPLAY - ACD POSITION - ACD	X
[S-98A]	SPLIT SELECTION - ACD	X
[S-108A]	STRANDED CALL ROUTING - ACD	X
[S-153]	SPLIT CONNECTION RESTRICTION - ACD	X
[T-24A]	TRUNK TROUBLE REPORT - MIS - ACD	X
[T-49A]	TALLY COUNT - ACD	X
[T-50A]	TIME OF DAY/WEEK ROUTING - ACD	X
[T-51A]	Tally-Oh Codes - ACD	N/A
[T-85A]	TALLY REQUIRED - ACD	X
[W-5A]	WORK MODE - ACD	X
[W-6A]	WORK MODE TIME LIMIT - ACD	X
[Z-1A]	ZIP TONE - ACD	X

<Hardware/Software>

1. As for terminals with logon operation, you need to perform another logon operation after failure occurrence as well as after its recovery.
2. If an agent position in SIP mode loses a connection and gets it back, lamps showing logon and work mode remain off even if the agent position is logged-on. Press a LOG ON/OFF key to log back on and the lamps will work properly.

<Conditions Specific to This Feature>

1. If network failure occurs in a configuration where an incoming trunk (MG) and an agent position are located in different sites, the agent position cannot receive an incoming call from the trunk. But you can rescue the call by overflowing to another agent position located in the same site with the trunk. It is necessary for the rescue enabling Call Recover - ACD [C-191A] which is part of split data.
2. After recovering from network failure, there may be discrepancy in states between terminals switched back from a remote site and a MIS server or a CTI server; therefore, you need to follow the procedure described in <Link> to switch back terminals.
3. Failure causes an agent position to initialize itself and display the current time on its LCD. An unlit Visitor lamp represents that the agent position registers to the Telephony Server and a lit Visitor lamp represents registering to an SR-MGC. Press a LOG ON/OFF key to log back on.

Note: An agent position operating in SIP mode may display “Logoff” on its LCD when you press its LOG ON/OFF key. In this case, press the LOG ON/OFF key again to log back on.

PROGRAMMING

The following describes office data assignment specific to SR-MGC use in the ACD system. As for SR-MGC's basic data, refer to the Peripheral Equipment Description (IP Devices).

[To set]

1. Data Assignment on the Telephony Server

STEP 1: ASYD - Assignment of System Data.

SYS1
Index 306
Bit 1=1 (ACD Data Memory Saving is Enabled)

Note: Available in the countries except North America.

Note: Assign the necessary data for Routine Backup in advance. See ROUTINE DIAGNOSIS in chapter 2 of Operations and Maintenance Manual.

STEP 2: ASYDL - Assignment of System Data for LDM

SYS1
Index 847
Bit 6=0 (selects high-speed method if it is available; if not, selects regular method)

SYS1
Index 874
Bit 3=1 (ACDP Automatic Logoff: Enabled)

SYS1
Index 1193, Bit 4 (SR-MGC Saving Method)
0/1: ACD/UCD

STEP 3: AKYD - Assignment of Key Data for Dterm

FKY=38 (Night)
Assigns a NIGHT key to supervisory positions.

STEP 4: ACDANA - Assignment of ACD Analog Split Access Code

FKIND=9 (Day Mode Single)
FKIND=11 (Night Mode Single)

STEP 5: ACDSPL (Assignment of ACD Split Data)

CRT (1-255)
Assign Call Recover Time.

STEP 6: ACDCCV - Assignment of ACD CCV Data

CCVACT=10 (Queue Assign)

STEP 7: AMNO/AMNOL/AMNON - Assignment of ACD CCV Data

Follow the UCD when Monitor Status is not requested from AP:
Check=ON (Follow)

STN/TELN: UCD Pilot Station Number (up to 5 digits)/UCD Pilot Telephone Number (up to 16 digits)

2. Data Assignment on an SR-MGC

STEP 1: ASYDL - Assignment of System Data for LDM

SYS1

Index 846

Bit 4=1 (Terminals registered in SR-MGC are able to perform terminal reset by using the Visitor key:
Disabled)

Index 852

Bit 5=0 (IP terminal registration changeover from SR-MGC to MGC: Manual)

Note: Set to manual for switching back (changeover) from an SR-MGC, which means that you need to perform the CMNT command to switch back terminals. Automatic changeover causes discrepancy in states between an LCD and lamps on an agent position, as well as between an agent position and a MIS server or a CTI server. Also, changeover with a Visitor key should be disabled.

STEP 2: AKYD - Assignment of Key Data for Dterm

FKY=156 (Visitor Key)

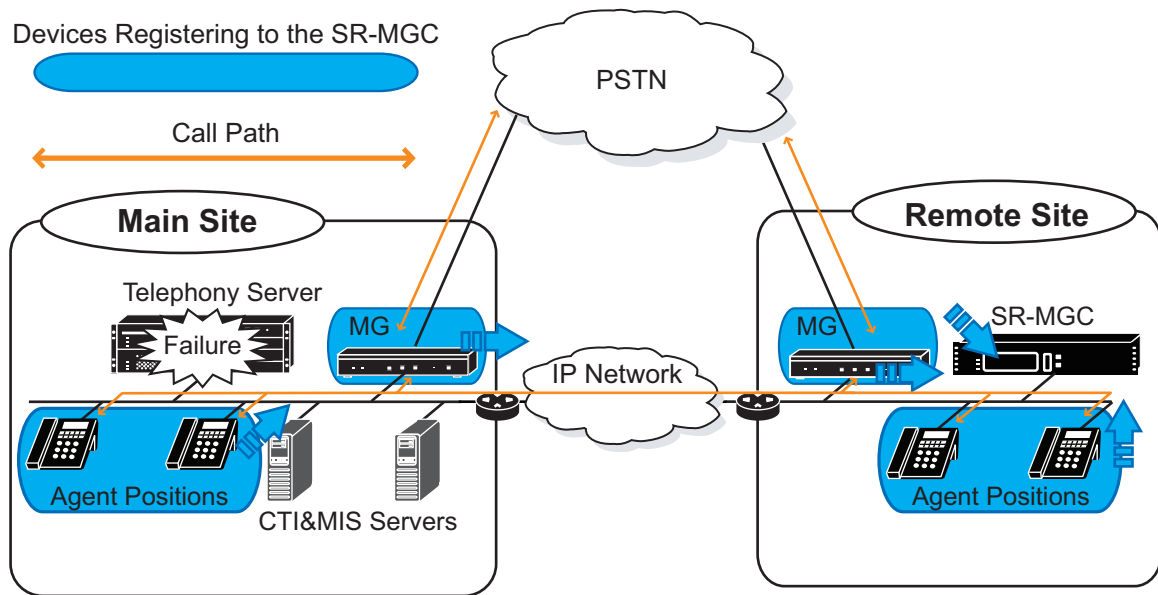
[To delete]

Take the opposite procedure of the procedure to set for deletion.

OPERATION ON FAILURE OCCURRENCE

This section describes devices' operations when an SR-MGC rescues them, depending on the type of failure.

1. In case of failure on the Telephony Server



If failure occurs on the Telephony Server, devices in both a main site and a remote site begin to register to an SR-MGC. After their registrations, the SR-MGC handles calls.

If there is an incoming, outgoing, or ongoing call at the moment of failure occurrence, the following conditions will apply.

What does Failure Cause a Call?

Channel State \ Device	MG	AP
Queuing	D to S	-
Incoming	D to S	D to S
Ongoing	H Note 1	H Note 1
Outgoing	D to S	D to S Note 2
Idle	S	S

AP: Agent Position.

D: Disconnected. S: Switched to an SR-MGC. H: Holds a call. -: Not applicable.

Note 1: An MG (and an agent position) holds a call only when MG Based Call Retention is enabled; the MG's operation varies depending on conditions as below:

- If your MG is an MG(PRI) with MG Based Call Retention and Call Protected Re-Registration [C-203] both enabled, its channels having ongoing calls hold the calls while other channels in the idle state register to an SR-MGC to get ready for new incoming/outgoing calls. The agent position will register to the SR-MGC when you go on-hook after finishing the conversation.
- If your MG is an MG(PRI) with MG Based Call Retention enabled but Call Protected Re-Registration [C-203] disabled, the MG holds ongoing calls; but all of its channels will not register to an SR-MGC until all the ongoing calls are released: You cannot have another incoming/outgoing call through the MG. The agent position will register to the SR-MGC when you go on-hook after finishing the conversation.
- If your MG is not an MG(PRI) and MG Based Call Retention is enabled, the MG holds ongoing calls; but all of its channels will not register to an SR-MGC until all the ongoing calls are released: You cannot have another incoming/outgoing call through the MG. The agent position will register to the SR-MGC when you go on-hook after finishing the conversation.
- If MG Based Call Retention is disabled, your MG releases any ongoing calls to register to an SR-MGC. The agent position will register to the SR-MGC when you go on-hook.

Note 2: A disconnected device will register to an SR-MGC when you go on-hook.

If you are monitoring an agent position with a supervisory position when the failure occurs, the following conditions will apply.

What does Failure Cause a Monitoring Supervisory Position and a Monitored Agent Position?

Monitor Stage \ Device	SP	AP
Reserved	S	H Note 5
Monitoring	D to S Note 4	H Note 6
Displaying “BARGE?” Note 3	D to S Note 4	H Note 6
Barging	D to S Note 4	D to S Note 4

SP: Supervisory Position. AP: Agent Position.
D: Disconnected. S: Switched to an SR-MGC. H: Holds a call.

Note 3: This stage refers to the condition when you press a MON/BARGE key on a supervisory position monitoring an agent position, which makes an LCD on the supervisory position display “BARGE?”

Note 4: A disconnected device will register to an SR-MGC when you go on-hook.

Note 5: You need to have MG Based Call Retention enabled for holding a call; if not, the call is released. The agent position will register to an SR-MGC when you go on-hook.

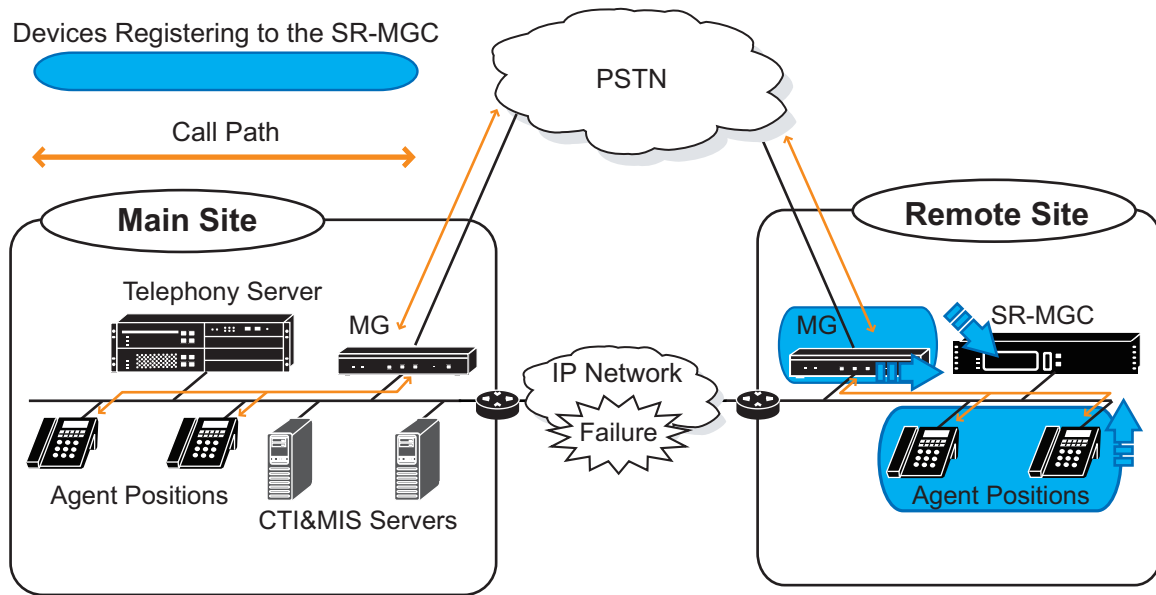
Note 6: You need to have Multi-path connection and MG Based Call Retention enabled for holding a call; if not, that is, the monitor uses Single-path connection or/and MG Based Call Retention is disabled, the call is released. The agent position will register to an SR-MGC when you go on-hook.

After an SR-MGC starts its operation, each agent position can have an incoming/outgoing call through MGs both in its same and other sites.

A MIS server and a CTI server cannot work properly while an SR-MGC operates. But the SR-MGC can handle calls to distribute to agent positions as the Telephony Server does.

2. In case of failure on a network

Suppose there is an incoming, outgoing, or ongoing call between an MG and an agent position in the same site with each other when failure occurs.



The failure causes devices in a remote site to register to an SR-MGC; but it has no influence on devices in a main site.

If there is an incoming, outgoing, or ongoing call at the moment of failure occurrence, the following conditions will apply.

What does Failure Cause a Call?

Call Path \ Device	MG in MS through AP in MS		MG in RS through AP in RS	
	MG	AP	MG	AP
Queuing	U	-	D to S	-
Incoming	U	U	D to S	D to S
Ongoing	U	U	H Note 7	H Note 7
Outgoing	U	U	D to S	D to S Note 8
Idle	-	U	S	S

AP: Agent Position. MS: Main Site. RS: Remote Site.

D: Disconnected. S: Switched to an SR-MGC. H: Holds a call. U: Unaffected. -: Not applicable.

Note 7: An MG (and an agent position) holds a call only when MG Based Call Retention is enabled; the MG's operation varies depending on conditions as below:

- If your MG is an MG(PRI) with MG Based Call Retention and Call Protected Re-Registration [C-203] both enabled, its channels having ongoing calls hold the calls while other channels in the idle state register to an SR-MGC to get ready for new incoming/outgoing calls. The agent position will register to the SR-MGC when you go on-hook after finishing the conversation.
- If your MG is an MG(PRI) with MG Based Call Retention enabled but Call Protected Re-Registration [C-203] disabled, the MG holds ongoing calls; but all of its channels will not register to an SR-MGC until all the ongoing calls are released: You cannot have another incoming/outgoing call through the MG. The agent position will register to the SR-MGC when you go on-hook after finishing the conversation.
- If your MG is not an MG(PRI) and MG Based Call Retention is enabled, the MG holds ongoing calls; but all of its channels will not register to an SR-MGC until all the ongoing calls are released: You cannot have another incoming/outgoing call through the MG. The agent position will register to the SR-MGC when you go on-hook after finishing the conversation.
- If MG Based Call Retention is disabled, your MG releases any ongoing calls to register to an SR-MGC. The agent position will register to the SR-MGC when you go on-hook.

Note 8: A disconnected device will register to an SR-MGC when you go on-hook.

If you are monitoring an agent position with a supervisory position when the failure occurs, the following conditions will apply.

What does Failure Cause a Monitoring Supervisory Position and a Monitored Agent Position?

SP Position	Monitored by SP in MS				Monitored by SP in RS			
AP Position	Monitor AP in MS		Monitor AP in RS		Monitor AP in MS		Monitor AP in RS	
MG Position	MS		RS		MS		RS	
Device Monitor Stage	SP	AP	SP	AP	SP	AP	SP	AP
Reserved	U	U	I Note 10	H Note 11	S	U	S	H Note 11
Monitoring	U	U	I Note 10	H Note 12	D to S Note 13	D	D to S Note 13	H Note 12
Displaying "BARGE?" Note 9	U	U	I	H Note 12	D to S Note 13	H Note 11	D to S Note 13	H Note 12
Barging	U	U	I Note 10	D to S Note 13	D to S Note 13	D	D to S Note 13	D to S Note 13

SP: Supervisory Position. AP: Agent Position. MS: Main Site. RS: Remote Site
 D: Disconnected. S: Switched to an SR-MGC. H: Holds a call. I: Idle. U: Unaffected.

Note 9: This stage refers to the condition when you press a MON/BARGE key on a supervisory position monitoring an agent position, which makes an LCD on the supervisory position display “BARGE?”

Note 10: It applies when ACDP automatic logoff is enabled on agent positions; if disabled, the supervisory position displays monitor-reserving state even though it cannot monitor an agent position any more because the agent position has registered to an SR-MGC. In that case, press a MON/BARGE key on the supervisory position to release the reservation.

Note 11: You need to have MG Based Call Retention enabled for holding a call; if not, the call is released. The agent position will register to an SR-MGC when you go on-hook.

Note 12: You need to have Multi-path connection and MG Based Call Retention enabled for holding a call; if not, that is, the monitor uses Single-path connection or/and MG Based Call Retention is disabled, the call is released. The agent position will register to an SR-MGC when you go on-hook.

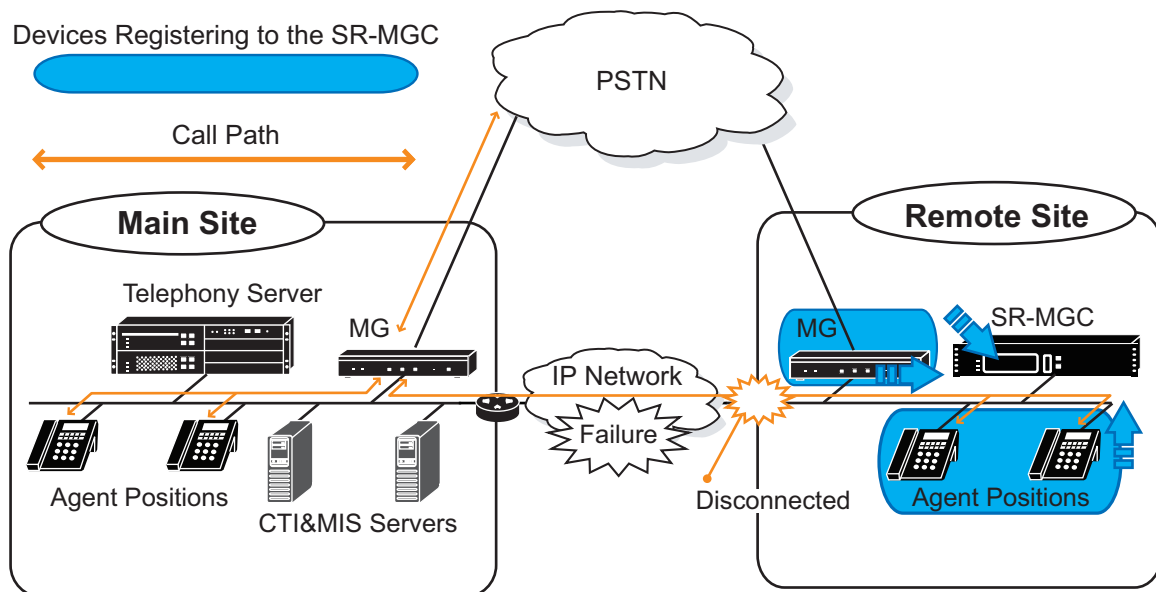
Note 13: A disconnected device will register to an SR-MGC when you go on-hook.

After an SR-MGC starts its operation, each agent position can have an incoming/outgoing call through MGs in its same site.

A MIS server and a CTI server cannot work properly while an SR-MGC operates. But the Telephony Server can handle calls arriving at an MG in a main site to distribute to agent positions in the main site; the SR-MGC can handle calls arriving at an MG in a remote site to distribute to agent positions in the remote site.

Suppose there is an incoming, outgoing, or ongoing call between an MG and an agent position in different sites from each other when failure occurs.

- About a call between an MG in a main site and each device



The failure causes devices in a remote site to register to an SR-MGC; but it has no influence on devices in a main site. Calls traversing sites are released.

If there is an incoming, outgoing, or ongoing call at the moment of failure occurrence, the following conditions will apply.

What does Failure Cause a Call?

Call Path Device	MG in MS through AP in MS		MG in MS through AP in RS	
	MG	AP	MG	AP
Queuing	U	-	R Note 14	-
Incoming	U	U	R Note 14	S
Ongoing	U	U	D to I Note 16	D to S Note 15
Outgoing	U	U	D to I	D to S Note 15
Idle	-	U	-	S

AP: Agent Position. MS: Main Site. RS: Remote Site
D: Disconnected. S: Switched to an SR-MGC. I: Idle. R: Rescued. U: Unaffected. -: Not applicable.

Note 14: The combination of call recovery and overflow can distribute incoming calls to agent positions in a main site: Incoming calls can be rescued even during network failure.

Note 15: A disconnected device will register to an SR-MGC when you go on-hook.

Note 16: It has no influence on calls in this case whether enabling or disabling MG Based Call Retention and Call Protected Re-Registration [C-203].

If you are monitoring an agent position with a supervisory position when the failure occurs, the following conditions will apply.

What does Failure Cause a Monitoring Supervisory Position and a Monitored Agent Position?

SP Position	Monitored by SP in MS				Monitored by SP in RS			
AP Position	Monitor AP in MS		Monitor AP in RS		Monitor AP in MS		Monitor AP in RS	
MG Position	MS							
Device Monitor Stage	SP	AP	SP	AP	SP	AP	SP	AP
Reserved	U	U	I Note 18	D to S Note 19	S	U	S	D to S Note 19
Monitoring	U	U	I Note 18	D to S Note 19	D to S Note 19	D	D to S Note 19	D to S Note 19
Displaying “BARGE?” Note 17	U	U	I	D to S Note 19	D to S Note 19	H Note 20	D to S Note 19	D to S Note 19
Barging	U	U	I Note 18	D to S Note 19	D to S Note 19	D	D to S Note 19	D to S Note 19

SP: Supervisory Position. AP: Agent Position. MS: Main Site. RS: Remote Site
 D: Disconnected. S: Switched to an SR-MGC. H: Holds a call. I: Idle. U: Unaffected.

Note 17: This stage refers to the condition when you press a MON/BARGE key on a supervisory position monitoring an agent position, which makes an LCD on the supervisory position display “BARGE?”.

Note 18: It applies when ACDP automatic logoff is enabled on agent positions; if disabled, the supervisory position displays monitor-reserving state even though it cannot monitor an agent position any more because the agent position has registered to an SR-MGC. In that case, press a MON/BARGE key on the supervisory position to release the reservation.

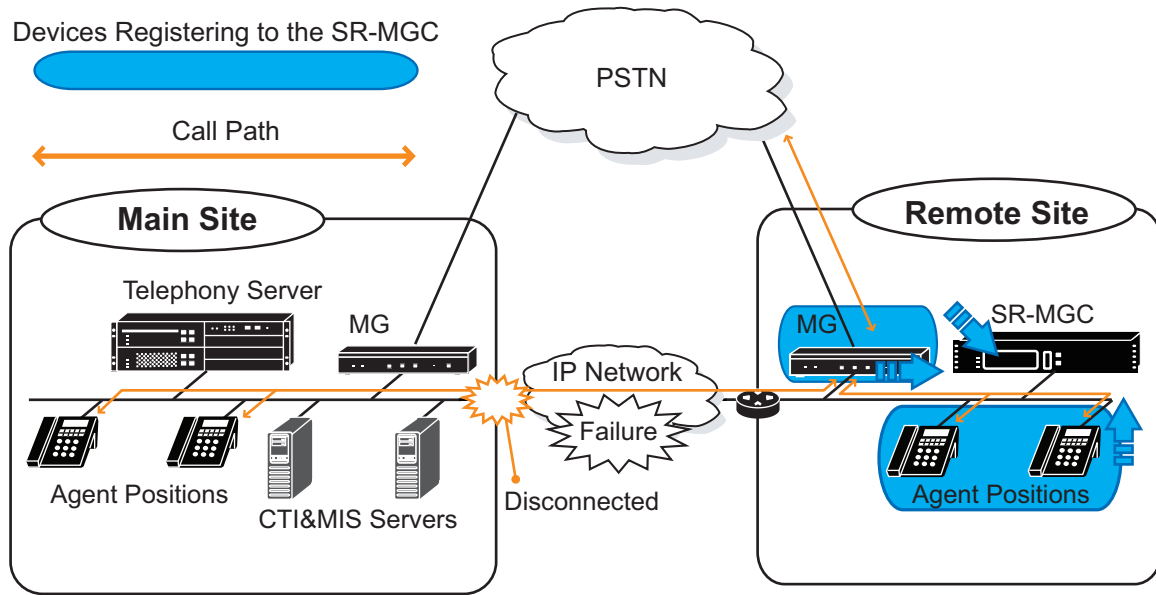
Note 19: A disconnected device will register to an SR-MGC when you go on-hook.

Note 20: You need to have MG Based Call Retention enabled for holding a call; if not, the call is released. The agent position will register to an SR-MGC when you go on-hook.

After an SR-MGC starts its operation, each agent position can have an incoming/outgoing call through MGs in its same site.

While an SR-MGC operates, the Telephony Server can handle calls arriving at an MG in a main site to distribute to agent positions in the main site according to the settings of call recovery and overflow; but the calls cannot be distributed from the main site to agent positions in a remote site.

- About a call between an MG in a remote site and each device



The failure causes devices in a remote site to register to an SR-MGC; but it has no influence on devices in a main site. Calls traversing sites are released.

If there is an incoming, outgoing, or ongoing call at the moment of failure occurrence, the following conditions will apply.

What does Failure Cause a Call?

Call Path	Device	MG in RS through AP in MS		MG in RS through AP in RS	
		MG	AP	MG	AP
Queuing		D to S	-	D to S	-
Incoming		D to S	I Note 21	D to S	D to S Note 24
Ongoing		D to S	D Note 22	H Note 23	H Note 23
Outgoing		D to S	D Note 22	D to S	D to S Note 24
Idle		S	U	S	S

AP: Agent Position. MS: Main Site. RS: Remote Site
D: Disconnected. S: Switched to an SR-MGC. H: Holds a call. I: Idle. U: Unaffected. -: Not applicable.

Note 21: An agent position keeps ringing for a couple of minutes resulting in the idle state.

Note 22: A disconnected agent position will be in the idle state when you go on-hook.

Note 23: An MG (and an agent position) holds a call only when MG Based Call Retention is enabled; the MG's operation varies depending on conditions as below:

- If your MG is an MG(PRI) with MG Based Call Retention and Call Protected Re-Registration

[C-203] both enabled, its channels having ongoing calls hold the calls while other channels in the idle state register to an SR-MGC to get ready for new incoming/outgoing calls. The agent position will register to the SR-MGC when you go on-hook after finishing the conversation.

- If your MG is an MG(PRI) with MG Based Call Retention enabled but Call Protected Re-Registration [C-203] disabled, the MG holds ongoing calls; but all of its channels will not register to an SR-MGC until all the ongoing calls are released: You cannot have another incoming/outgoing call through the MG. The agent position will register to the SR-MGC when you go on-hook after finishing the conversation.
- If your MG is not an MG(PRI) and MG Based Call Retention is enabled, the MG holds ongoing calls; but all of its channels will not register to an SR-MGC until all the ongoing calls are released: You cannot have another incoming/outgoing call through the MG. The agent position will register to the SR-MGC when you go on-hook after finishing the conversation.
- If MG Based Call Retention is disabled, your MG releases any ongoing calls to register to an SR-MGC. The agent position will register to the SR-MGC when you go on-hook.

Note 24: A disconnected device will register to an SR-MGC when you go on-hook.

If you are monitoring an agent position with a supervisory position when the failure occurs, the following conditions will apply.

What does Failure Cause a Monitoring Supervisory Position and a Monitored Agent Position?

SP Position	Monitored by SP in MS				Monitored by SP in RS			
AP Position	Monitor AP in MS		Monitor AP in RS		Monitor AP in MS		Monitor AP in RS	
MG Position	RS							
Device	SP	AP	SP	AP	SP	AP	SP	AP
Monitor Stage	SP	AP	SP	AP	SP	AP	SP	AP
Reserved	M	D	I Note 26	H Note 27	S	D	S	H Note 27
Monitoring	M	D	I Note 26	H Note 28	D to S Note 29	D	D to S Note 29	H Note 28
Displaying “BARGE?” Note 25	I	D	I	H Note 28	D to S Note 29	D	D to S Note 29	H Note 28
Barging	M	D	I Note 26	D to S Note 29	D to S Note 29	D	D to S Note 29	D to S Note 29

SP: Supervisory Position. AP: Agent Position. MS: Main Site. RS: Remote Site
D: Disconnected. S: Switched to an SR-MGC. H: Holds a call. I: Idle. M: Monitor-reserved.

Note 25: This stage refers to the condition when you press a MON/BARGE key on a supervisory position monitoring an agent position, which makes an LCD on the supervisory position display “BARGE?”

Note 26: It applies when ACDP automatic logoff is enabled on agent positions; if disabled, the supervisory position displays monitor-reserving state even though it cannot monitor an agent position any more because the agent position has registered to an SR-MGC. In that case, press a MON/BARGE key on the supervisory position to release the reservation.

Note 27: You need to have MG Based Call Retention enabled for holding a call; if not, the call is released. The agent position will register to an SR-MGC when you go on-hook.

Note 28: You need to have Multi-path connection and MG Based Call Retention enabled for holding a call; if not, that is, the monitor uses Single-path connection or/and MG Based Call Retention is disabled, the call is released. The agent position will register to an SR-MGC when you go on-hook.

Note 29: A disconnected device will register to an SR-MGC when you go on-hook.

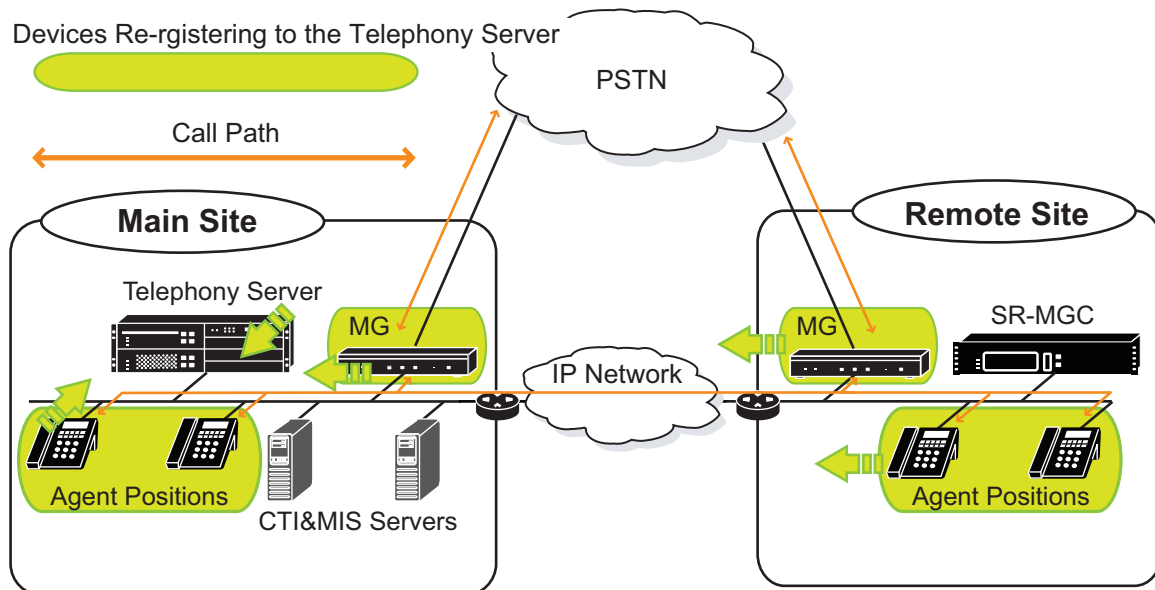
After an SR-MGC starts its operation, each agent position can have an incoming/outgoing call through MGs in its same site.

While an SR-MGC operates, the SR-MGC can handle calls arriving at an MG in a remote site to distribute to agent positions in the remote site according to the settings of call recovery and overflow; but the calls cannot be distributed from the remote site to agent positions in a main site.

OPERATION ON FAILURE RECOVERY

This section describes devices' operations when recovering from failure and switching terminals back from an SR-MGC, depending on the type of failure.

1. Switching back when recovering from failure on the Telephony Server



After recovering from failure on the Telephony Server, follow the following procedure to re-register (switch back) devices from an SR-MGC to the Telephony Server.

STEP 1: Login to the Telephony Server from PCPro, and perform the ACDIZ command to initialize ACDP (ACT).

* If you have initialized the Telephony Server after recovery, the preceding step is not necessary.

STEP 2: Restart a MIS server and a CTI server.

STEP 3: Login to the Telephony Server from PCPro, and perform the CMNT command to switch back devices from the SR-MGC to the Telephony Server.

STEP 4: Login to the SR-MGC from PCPro, and perform the ACDIZ command to initialize ACDP.

If there is a call at the moment of switching back, which may be incoming, outgoing, or ongoing, the call will come to what the following table shows.

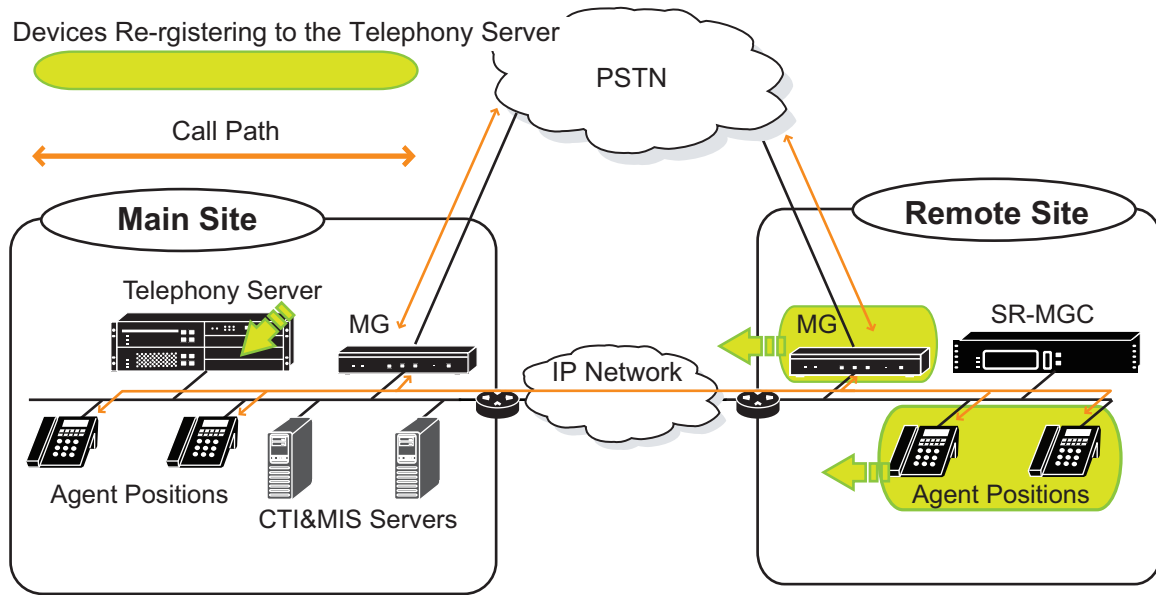
What does Switching Back Cause a Call?

Channel State \ Device	MG	AP
Queuing	D to S	-
Incoming	D to S	D to S
Ongoing	D to S Note 30	D to S
Outgoing	D to S	D to S
Idle	-	S

AP: Agent Position.
D: Disconnected. S: Switched back to Telephony Server. -: Not applicable.

Note 30: It has no influence on calls in this case whether enabling or disabling MG Based Call Retention and Call Protected Re-Registration [C-203].

2. Switching back when recovering from failure on a Network



After recovering from failure on a network, follow the following procedure to re-register (switch back) devices from an SR-MGC to the Telephony Server.

STEP 1: Login to the Telephony Server from PCPro, and perform the ACDIZ command to initialize ACDP (ACT).

* If you have initialized the Telephony Server after recovery, the preceding step is not necessary.

STEP 2: Restart a MIS server and a CTI server.

STEP 3: Login to the Telephony Server from PCPro, and perform the CMNT command to switch back devices from the SR-MGC to the Telephony Server.

STEP 4: Login to the SR-MGC from PCPro, and perform the ACDIZ command to initialize ACDP.

If there is a call at the moment of switching back, which may be incoming, outgoing, or ongoing, the call will come to what the following table shows.

What does Switching Back Cause a Call?

Call Path		MG in MS through AP in MS		MG in RS through AP in RS	
Channel State	Device	MG	AP	MG	AP
Queuing		U	-	D to S	-
Incoming		U	U	D to S	D to S
Ongoing		U	U	D to S Note 31	D to S
Outgoing		U	U	D to S	D to S
Idle		-	U	-	S

AP: Agent Position. MS: Main Site. RS: Remote Site
D: Disconnected. S: Switched back to Telephony Server. U: Unaffected. -: Not applicable.

Note 31: It has no influence on calls in this case whether enabling or disabling MG Based Call Retention and Call Protected Re-Registration [C-203].

T-24A TRUNK TROUBLE REPORT - MIS - ACD

GENERAL DESCRIPTION

This feature allows an agent to indicate a trouble condition affecting a trunk (e.g., poor transmission) which is encountered during a call. The system will log the agent's position number and the number of the connected trunk. This information is printed out on the ACD PCPro and provided to the MIS.

Although this feature is designed primarily to aid in the reporting of defective trunk circuits it does also report the connected party information even when the connected party is not a trunk such as in a station-to-station call.

Bad Call Notification

The trunk trouble report is logged to the PCPro printer under the 6-H heading, Bad Call Notification. A special code within the 6-H report indicates the occurrence of the trunk trouble report. Additional codes used within the 6-H report are described in detail under 3.2.3 Message Detail Data of System Message "6-H" in Chapter 8.

OPERATING PROCEDURE

1. The operations at the ACD Agent Position and the supervisory position are as follows:
 - a. The agent is engaged in an ACD call.
 - b. The **TRK TRBL** key is pressed on the ACD Agent Position.
 - c. ***TROUBLE REPORTED*** is displayed on the position for four seconds and the trouble is reported to both the ACD PCPro and the MIS terminal.

SERVICE CONDITIONS

1. There is no LED indication when the **TRK TRBL** key is pressed.
2. This feature is available only when connecting with an ACD call.

PROGRAMMING

Assign "TRK TRBL" key referring to "2.4 ACD Agent/Supervisory Position Data Assignment" in Chapter 4.

T-49A TALLY COUNT - ACD

GENERAL DESCRIPTION

This feature allows agents to register the occurrences of several specific events using the dial keypad, such as responses to various advertising method, sales campaigns, or calls from particular locations.

The MIS system is responsible for keeping a record of each event and may keep additional statistics for the various Tally Count events such as call duration. If a particular Tally Count pertains to a specific phone conversation that Tally Count will need to be entered either during the phone call itself or during the After Call Work time following that call and definitely prior to the beginning of the next ACD call. Once the next call has begun a Tally Count entry at that time would be associated with the new call. There is no way to associate a Tally Count with a previous call once a subsequent call has begun.

Multiple Tally Counts may be entered for a single phone call.

This feature is activated by the operation of the **TALLY** key on the agent position.

OPERATING PROCEDURE

1. The agent presses the **TALLY** key at any time. The displays shows TALLY NUMBER?.
2. The agent enters up to 22 digits from the telephone keypad and presses # when finished.
3. The displays shows TALLY ENTERED, for a short time, and then reverts to the previous display.
4. Pressing the **TALLY** key a second time before pressing the “#” key cancels the Tally Count feature.
5. All digits must be entered within a 30-second period or the Tally Count feature will timeout. After timeout, the feature is reset and all digits will have to be reentered.

SERVICE CONDITIONS

1. Tally numbers (e.g. Tally Count items' names) are configured by Server MIS. Also, the validity of the tally numbers entered are checked by Server MIS. Accordingly, invalid tally numbers are not displayed as errors on the agent positions. Instead, they are counted as such in a statistical report.
2. Tally Count items are entered by pressing one of the dial keypad digits, “0” through “9” (however, leading digit “0” is not allowed).
3. The length of tally numbers is variable, to a maximum of 22 digits.
4. The “*” key and the “#” key cannot be used as tally numbers since they are used to erase and enter input.
5. The keypad number “0” cannot be used as the leading digit of a Tally Count code.

PROGRAMMING

Program the data followed by the manual described MIS functions.

T-50A TIME OF DAY/WEEK ROUTING - ACD

GENERAL DESCRIPTION

The routing of incoming calls is controlled by the time of week. A week can be divided into 50 time segments, with different call handling performed during each segment. Segments must begin and end on whole minutes; no fractional minutes are allowed. Each segment will specify a Call Control Vector (CCV) number and step number where call handling will commence (refer to “CALL CONTROL VECTOR - ACD [C-108A]”). This routing specification is referred to as a Week Schedule.

Week routing can be interrupted during pre-programmed holidays, at which time a special 24-hour override table is available with up to eight time segments to provide routing on that day. The override table is referred to as a Holiday Schedule (refer to “HOLIDAYS SCHEDULING - ACD [H-20A]”). Holidays may be programmed up to 365 days in advance.

OPERATING PROCEDURE

Week Schedule routing is activated by programming a pilot number to invoke a Week Schedule instead of a CCV.

SERVICE CONDITIONS

1. This feature uses the Telephony Server system clock to determine the current time. It is the user’s responsibility to ensure that the clock is accurately set in order for week routing to make accurate transitions from one time segment to another.
2. In processing the CCV for a particular time of the week, a Queue to Split instruction in the CCV may find a split in Night mode or in split call forwarding. In this case, the Night mode or split call forwarding will take over the routing of the incoming call. See “NIGHT SERVICE - ACD [N-12A]” and “CALL FORWARDING - SPLIT - ACD [C-127A]” for more information.

PROGRAMMING

Refer to Section 2.7 in Chapter 4 “Call Control Vectors (CCV) Assignment”.

T-51A TALLY-OH CODES - ACD

GENERAL DESCRIPTION

Note: This feature is available only in North America.

Tally-Oh Codes are reserved for special use by agents or supervisors in the ACD system and are not reported to the MIS. These codes invoke various actions, such as statistical displays and mode changes. Tally-Oh Codes always begin with the digit zero, “0”. This trait of always using a leading digit of “0” differentiates the Tally-Oh Codes from the Tally Codes which are reported to the MIS system for statistical analysis.

The Tally-Oh Codes are divided into three categories which are suggestive of the types of users who are most likely to need those codes. Only the Supervisor Codes can be restricted on a per-position basis. All other codes may be used at any ACD position.

The following three tables illustrate the purpose and usage of the Tally-Oh Codes for Agents, Supervisors, and Technicians.

OPERATING PROCEDURE

1. The agent/supervisor presses the TALLY key at any time. The display shows TALLY NUMBER?.
2. The agent/supervisor enters the Tally-Oh Code from the telephone keypad and presses “#” when finished.
3. Press the TALLY key a second time before pressing the “#” key to cancel the Tally-Oh Code entry.
4. The Supervisor Tally-Oh Codes must be explicitly enabled on a per-position basis as specified in ACDPSN.

Agent Tally-Oh Codes

Code	Description
000#	<p>Reply agent’s statistics: shift time, number of ACD calls answered, average talk time, total time in work mode since logging on, and total time in break mode since logging on. Can be used from any mode. After logging off, statistics can be replayed as many times as necessary until an agent logs onto the position.</p> <p>All statistics are reset upon logon.</p> <p>Sample Displays: <i>SHIFT 3:12:48</i> (hours, minutes, seconds) <i>ACD CALLS 22</i> (one to three digits) <i>AVG TALK 3:11</i> (minutes and seconds) <i>T-WORK 0:55:19</i> (hours, minutes and seconds) <i>T-BREAK 1:04:31</i> (hours, minutes and seconds)</p>
001#	<p>Display queue depth for current split. If used from a vacant position, the position’s split is used. If used while logged on, the agent’s split is used. For agents working in Multi-Split mode, the queue depth of all of the agent’s splits are displayed, one at a time.</p> <p>Sample Displays: <i>ORDERS 10</i></p>

T-51A TALLY-OH CODES - ACD

Code	Description
002#	Displays time of longest waiting caller for current split. If used from a vacant position, the position's split is used. If used while logged on, the agent's split is used. For agents working in Multi-Split mode, the longest waiting callers of all of the agent's splits are displayed, one at a time. Sample Displays: <i>SERVICE 1:50</i> (minutes and seconds)
003#	Display number of working agents in split. A working agent is one that is logged on, and not in break mode (either on an ACD call, in work mode, or ready mode). If used from a vacant position, the position's split is used. If used while logged on, the agent's split is used. For agents working in Multi-Split mode, the number of working agents for all of the agent's splits are displayed, one at a time. Sample Displays: <i>DOMESTIC 151</i> (1 to 3 digits)
004#	Display number of agents on break in split. If used from a vacant position, the position's split is used. If used while logged on, the agent's split is used. For agents working in multi-split mode, the number of agents on break for all of the agent's splits are displayed, one at a time. Sample Displays: <i>INTERNAT'L 8</i> (1 to 3 digits)
005#	Display time passed since entering current mode. Valid for all modes: Vacant, Work, Break, Ready, or on an ACD call. Sample Displays: <i>BREAK 0:41:06</i> (hours, minutes and seconds)
006#	Monitor Me request. An agent asks a supervisor to monitor the conversation. Only valid while on an ACD call. Sample Displays: <i>MONITOR JAMES</i>
007#	Temporarily disable Work mode time limit. Valid only from Work mode, and disabled only until agent exits Work mode. Sample Displays: <i>TIMEOUT DISABLED</i>
008#	Display time and data for four seconds. Can be used from any mode, including modes such as Ready and Break where the display normally shows a constant display. Sample Displays: <i>4:58 PM NON 28</i>
009#	Clear permanent display such as "READY", "ON BREAK", or "VACANT".
021	Setup Connection Displays, see "CONNECTION DISPLAYS - ACD [C-199A]".
022#	Online Help, see CONNECTION DISPLAYS - ACD [C-199A].
023#	Show Connection Displays, see "CONNECTION DISPLAYS - ACD [C-199A]".
028#	Unlock an agent's own position (emergency use only).
029#	Force an agent's own position to log off (emergency use only).

T-51A TALLY-OH CODES - ACD

Code	Description
030	<p>Display statistics for a given agent: shift time, number of ACD calls answered, average talk time, total time in Work mode since logging on, and total time in Break mode since logging on. Press: 030aaaaa# (aaaaa = agent's ACD or Telephony Server station) Sample Displays: <i>SHIFT 3:12:48</i> (hours, minutes, seconds) <i>ACD CALLS 122</i> (one to three digits) <i>AVG TALK 3:11</i> (minutes and seconds) <i>T-WORK 0:55:19</i> (hours, minutes and seconds) <i>T-BREAK 1:04:31</i> (hours, minutes and seconds)</p>
031	<p>Display a given agent's current mode and the time passed since entering that mode. Valid for all modes: Vacant, Work, Break, Ready, or an ACD call. Press: 031aaaaa# (aaaaa = agent's ACD or Telephony Server station) Sample Displays: <i>BREAK 0:41:06</i> (hours, minutes and seconds)</p>
032	<p>Force a given agent to Break mode (from Work or Ready modes). Press: 032aaaaa# (aaaaa = agent's ACD or Telephony Server station)</p>
033	<p>Force a given agent to Ready mode (from Break or Work modes). Press: 033aaaaa# (aaaaa = agent's ACD or Telephony Server station)</p>
034	<p>Force a given agent to Work mode (from Break or Ready modes). Press: 034aaaaa# (aaaaa = agent's ACD or Telephony Server station)</p>
035	<p>Change a given agent's split or Multi-Split mode. Prompts are displayed to prompt for split number and approval. Press: 035aaaaa# (aaaaa = agent's ACD or Telephony Server station)</p>
036	<p>Display queue depth for a given split. Press: 036ss# (ss = one or two digit split number) Sample Displays: <i>DOMESTIC 36</i></p>
037	<p>Display time of longest waiting caller for a given split. Press: 037ss# (ss = one or two digit split number) Sample Displays: <i>INTERNAT'L 4:06</i> (minutes and seconds)</p>
038	<p>Display number of working agents (on an ACD call, in Work or Ready modes) for a given split. Press: 038ss# (ss = one or two digit split number) Sample Displays: <i>CRUISES 9</i></p>
039	<p>Display number of agents on break for a given split. Press: 039ss# (ss = one or two digit split number) Sample Displays: <i>SKY-DIVERS 2</i></p>

T-51A TALLY-OH CODES - ACD

Code	Description
040	<p>Change Night mode of a given split. Press: 040ss# (ss = one or two digit split number) The prompt <i>NIGHT MODE?</i> will be displayed to ask for approval to put the specified split into Night mode. To approve, press “1#” and the display <i>split name = NIGHT</i> will be shown. To disapprove and put the split into day mode, press “#” and the display <i>split name = DAY</i> will be shown. Sample Displays: <i>AWARDS = NIGHT</i> <i>AWARDS = DAY</i></p>
068	<p>Unlock a given agent’s position (emergency use only). Press: 068aaaaa# (aaaaa = agent’s ACD or Telephony Server station)</p>
069	<p>Force a given agent’s position to log off (emergency use only). Press: 069aaaaa# (aaaaa=agent’s ACD or Telephony Server station)</p>
075	<p>Turn Bad Call Notification PCPro print-outs on or off Press: 075rrs# (rr = Reference number. s = state: 0 (off) or 1 (on)) To turn all print-outs on or off use the reference number “00”. Example: 075000# (all of) or 075001# (all on). See “BAD CALL NOTIFICATIONS - ACD [B-21A]” for additional details.</p>
076	<p>Display error counts. Press: 076n# (n = error count number 0-99)</p>
077	<p>Reset all error counts. Press: 0770#</p>
080	<p>Display ACD version number and release date. Press: 080#</p>
081	<p>Unlock given logon id. Press: 081n# (n = logon id number)</p>
082	<p>Display current location of buffer trace pointer. Press 082#</p>
084	<p>Display (clear) debugging call counters. To display, press: 084# To clear counters, press: 0840#</p>
085	<p>Turn st_driver() debugging on or off. Usually used with call processing trace. Press: 085s# (s = state: on = 1, off = 0)</p>

SERVICE CONDITIONS

1. Tally-Oh Codes are enabled by pressing one of the dial keypad digits, “0” through “9”.
2. The “*” key and the “#” key cannot be used as Tally-Oh Code numbers since they are used to erase and enter input.

T-85A TALLY REQUIRED - ACD

GENERAL DESCRIPTION

This feature is programmed on a per-split basis via the ACDSPL PCPro command. When a split is marked for Tally Required an agent will not be able to answer a new incoming ACD call until a Tally entry has been made for the previous call. If an agent attempts to enter the Ready Mode to receive a new call but has not yet entered a Tally Code from the previous call a message will display “TALLY NEEDED” for a few seconds.

The Per-Call Tally field on the ACDSPL PCPro command may be set independently for each split in the ACD. Even if an agent is using the multi-split agent feature the per-call tally feature will be checked as each call is assigned based on the split that call is coming from. The Tally Code may be entered while the call is in progress or during the after-call work mode. If the after-call work mode is timed and the timer expires before the Tally Code has been entered a Permanent Work Mode will result (The key lamp status is changed from flash to steady light). Once in Permanent Work Mode an agent will be required to press the Work Key in order to receive the next incoming call and, of course, this will only be effective after the required Tally Code has been entered.

SERVICE CONDITIONS

1. Agents who are determined to get around the requirement of entering a Tally Code after each and every call may find that they are not even allowed to log off the ACD system until they have entered a tally code for the most recently completed call. This is not a bug. The “TALLY NEEDED” display will serve as a strong reminder to the agent that they have not yet completed the requirements for the previous call.
2. An agent is not permitted to go to Break Mode until a required Tally Code has been entered for the previous call. The usual display will remind the agent that the tally code is still needed.
3. Tally-Oh codes to Force Logoff a position will work even though a final Tally Code has not been entered.
4. Even though Tally Codes are required it is still possible for counts of Tally Codes and calls handled to differ. There are a few reasons for this, not the least of which is that multiple Tally Codes for a single call are always permitted.
5. When the communication with the ACD call ends without Tally Code entry, the position forced into Work Mode. At that time, WORK/BREAK/LOGOFF key is ineffective and the LCD display shows “TALLY NEEDED”. Operation for the status change to Ready Mode, Break Mode, Logoff using IVR is also ineffective.
6. This feature is not available when the Work Mode is not available (ACDSPL, WKRST=1).
7. When the communication ends without Tally Code entry, the agent position goes into the Work Mode even if the after-call work mode is available (ACDSPL, AFTER=1, Ready Mode).

PROGRAMMING

ACDSPL -
PCS: 1 (TALLY REQUIRED is in service)

W-5A WORK MODE - ACD

GENERAL DESCRIPTION

This feature offers the choice of allowing the agents within a split to enter and exit Work Mode. Calls waiting in queue cannot be connected to agents in the Work Mode. Since the Work Mode inhibits agents from receiving calls it is sometimes beneficial to limit Work Mode use or restrict it altogether. Two features have been provided which limit the agent's ability to be in the Work Mode.

After Call Work Mode Timeout

This feature sets a timer which limits how much time an agent may remain in the Work Mode at the conclusion of each ACD call. This mode is sometimes called the Wrap-Up Mode as well. When the timer expires the agent is automatically placed in Ready Mode and a new ACD call will be connected immediately if there is one waiting in queue.

Work Mode Restriction

The Work Mode can be restricted altogether for a specified split. Any attempt to enter the Work Mode is overridden according to the following conditions:

- The agent presses the **WORK** key. The ACD system ignores the request.
- The agent logs on to the ACD system. The agent is automatically placed in Ready mode and will receive calls immediately if calls are queued.
- The agent concludes an ACD call. The after call work mode of the split is ignored by the ACD system and the agent is automatically placed in Ready mode. If the agent requested to enter Break mode, while on the ACD call, the request will be honored and the agent will not be placed in Ready mode at the conclusion of the ACD call.
- The agent is placed in Work mode automatically if an assigned ringing ACD call has not been answered and the Recover Call feature has been activated and removed that call from the agent's position. The **WORK** lamp flashes to visually inform the agent of the forced entry into Work mode. This prevents the agent from receiving another ACD call.
- If the split is also setup for Automatic Work Mode with Node Call and Work Mode Restriction is set then the position will be placed in the Break mode instead of the Work mode when Node calls are assigned.

If the agents within a split are allowed to enter Work mode, the mode can be entered given the following conditions.

- The agent from the Ready Mode presses the **WORK** key.
- The agent is placed in Work mode automatically upon logon. This prevents a call from being connected before the agent is prepared to handle the call.
- The agent is placed in Work mode automatically at the conclusion of an ACD call, if the after call mode of the split is set to "Work".
- The agent is placed in Work mode automatically if an assigned ringing ACD call has not been answered and the Recover Call feature has been activated and removed that call from the agent's position. The **WORK** lamp flashes to visually inform the agent of the forced entry into Work mode. This prevents the agent from receiving another ACD call.

OPERATING PROCEDURE

This feature is an inherent feature of the ACD programs. Agents use the **WORK** key on their ACD position to set the Work Mode appropriately. Work Mode restrictions and time-outs are programmed using the PCPro command ACDSPL for each split.

PROGRAMMING

ACDSPL - WKRST = 1

W-6A WORK MODE TIME LIMIT - ACD

GENERAL DESCRIPTION

This feature allows the specification of a maximum time limit for an agent to be in Work mode at the conclusion of an ACD call before being automatically placed in Ready mode. Once in Ready mode, the agent will be connected to a call if calls are queued. The time limit applies to all the agents within a split.

Note: This feature is available in North America only.

OPERATING PROCEDURE

The following example illustrates the operation of the feature.

- a. The Work mode time limit is set at 45 seconds for Split A.
- b. After-call Work mode is set for Split A.
- c. An agent in Split A completes an ACD call, and is automatically placed in Work mode.
- d. One of three different scenarios could follow:
 1. The agent does not press any keys in the next 45 seconds. The agent is automatically placed in Ready mode and is connected to a caller if there are calls in queue.
 2. The agent presses the **BREAK** key or **LOGON** key within the next 45 seconds. The agent is placed in the appropriate mode.
 3. The agent chooses to return to Ready mode in less than 45 seconds, and presses the **WORK** key. The agent is connected to a caller if there are calls in queue.

SERVICE CONDITIONS

1. This feature is implemented through an ACD PCPro command. The command data is on a split-wide basis.
2. When the agent position is placed in a “Penalty Work” mode by CALL RECOVER [C-191A], this feature cannot be activated.
3. An agent handling calls from multiple splits (multi-split mode) is treated as a member of the split listed as the first entry of the agent’s ACD Split data (Split number 1, configured with the ACDLOG command).

PROGRAMMING

ACDSPL

WMT: Work mode timer timeout (0-9999 sec.)

* “0” means Work Mode Time Limit is out of service

Z-1A ZIP TONE - ACD

GENERAL DESCRIPTION

When an agent is operating in AUTOMATIC ANSWER-ACD [A-35A] mode, the system will provide an audible burst of tone to the agent's receive audio path before connecting an incoming ACD call.

OPERATING PROCEDURE

The operation of this feature from the agent or supervisory position is as follows:

From Manual Answering status:


1. The **AUTO/MAN** key is pressed.
2. ***AUTO ANSWER*** is displayed.
3. The **AUTO/MAN** lamp lights steadily.
4. The agent hears Zip Tone when an ACD call is connected.

SERVICE CONDITIONS

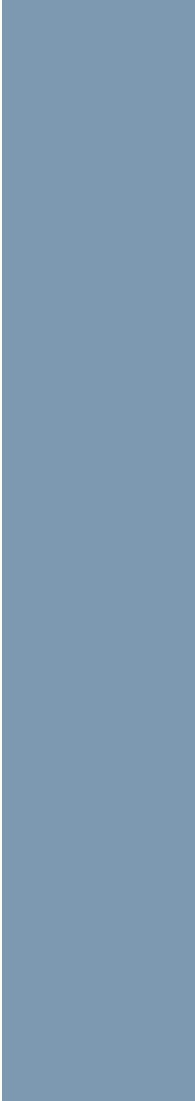
1. Tones:
 - a. Normal ACD calls are introduced by a single burst of tone.
 - b. Calls which may require special handling, calls which have overflowed from another split, calls which were call forwarded from another split by that split's supervisor, and calls transferred by agents or other business stations are introduced by two bursts of tone.

PROGRAMMING

None.

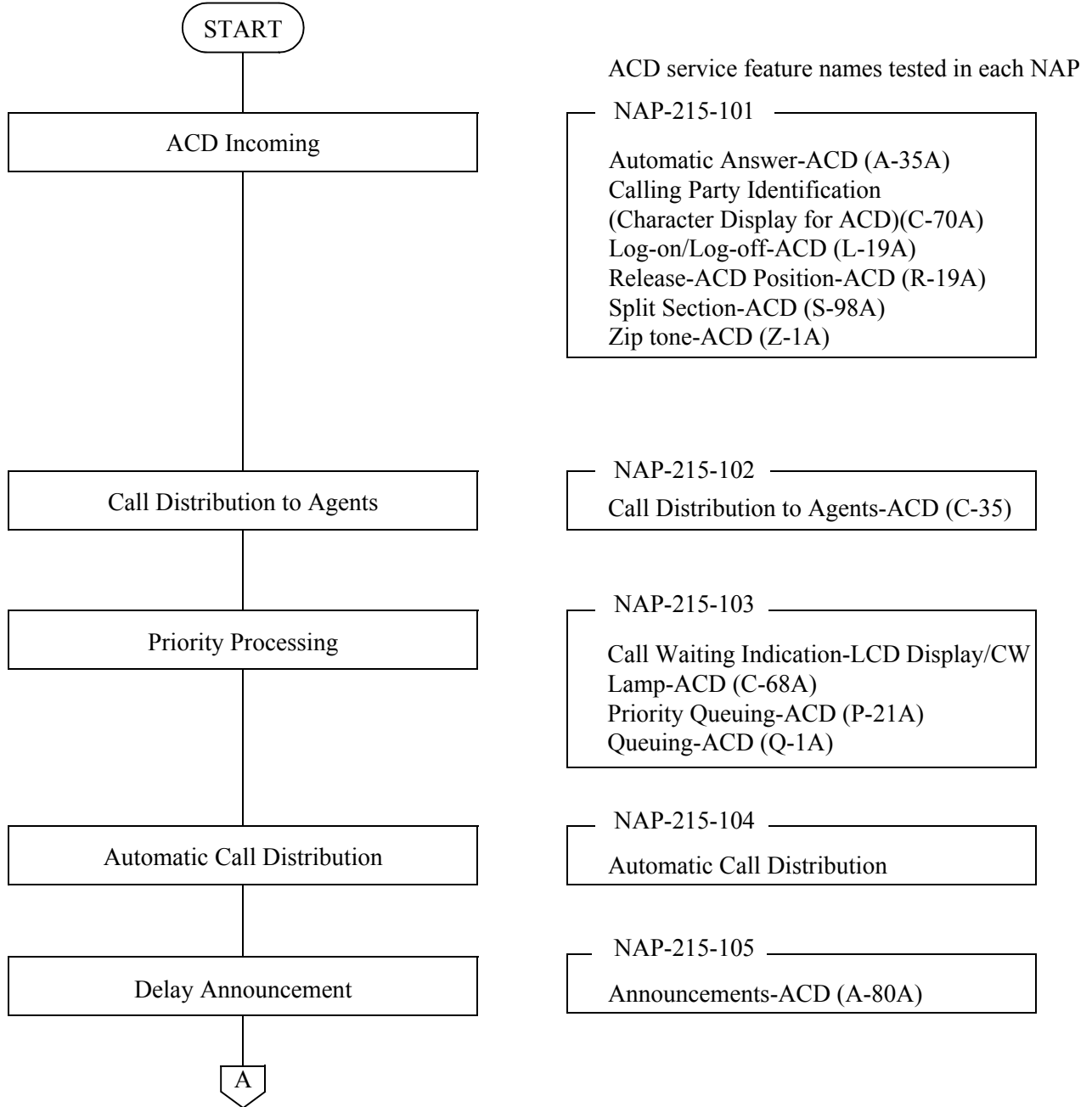


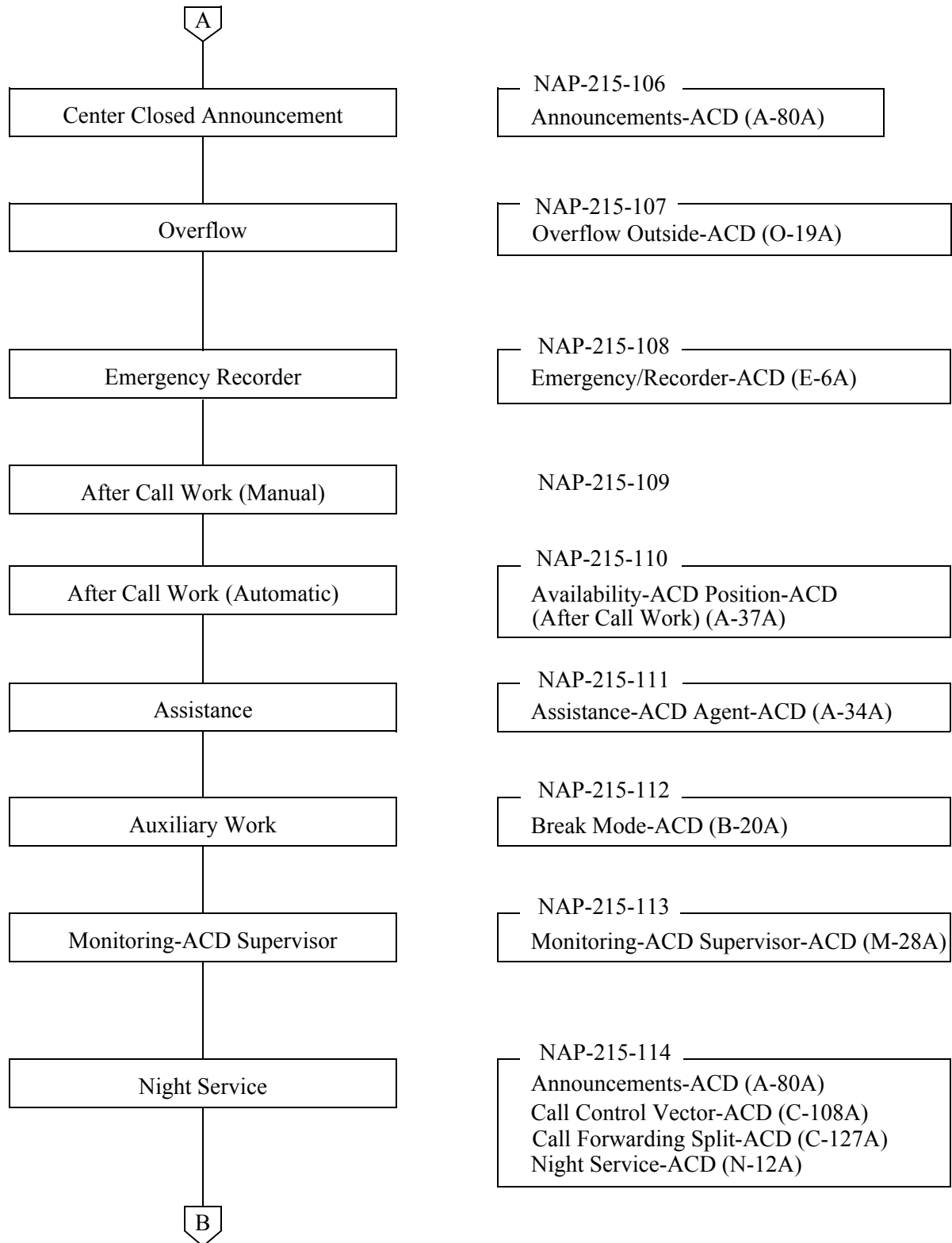
CHAPTER 5
ACD SERVICE
FEATURES FUNCTIONAL
TEST PROCEDURES

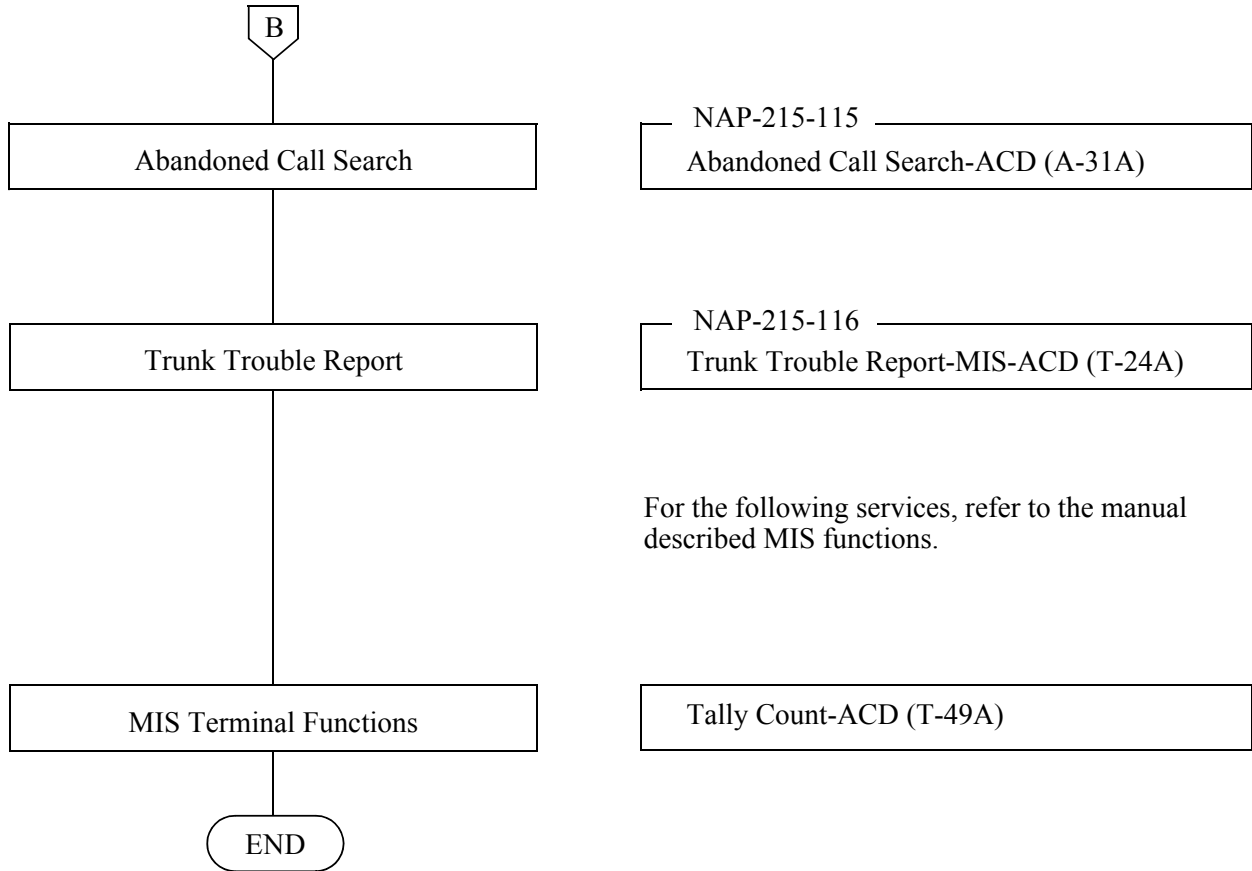


After the installation test following by the “Appliance Model Installation Manual”, test the ACD service features following the flowchart below. The names listed within of each NAP are the names of the ACD services. Also refer to the detailed description of the services in “3. ACD SERVICE FEATURE” in CHAPTER 4.

Note: When the System Initialization or ACDP Initialization is performed, the following test procedures should not be operated until the system message “6-H” is output and Login prompt appears on the LCD.

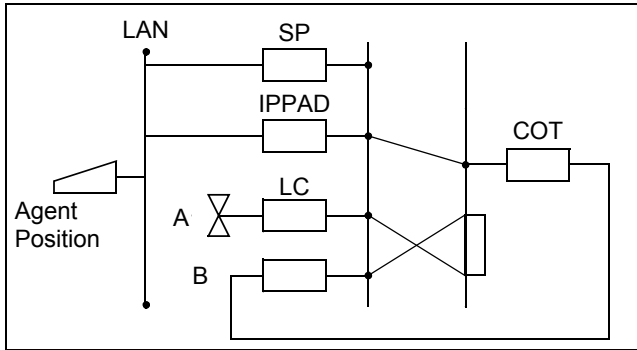




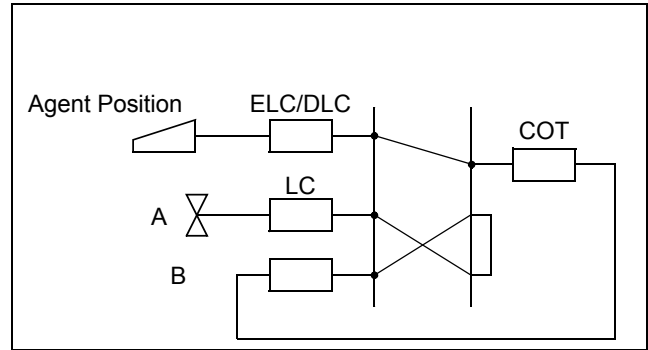


NAP-215-101
Sheet 1/2
ACD Incoming

For IP/SIP terminal



For Digital terminal



START

Set up a loop-back connection between COT for ACD trunk group to be tested and station line.

Log off agent positions and supervisory positions.

ACD Agent/Supervisory Position Incoming Test

- Test all agent positions and supervisory positions with following flow chart.

Log on the agent position or supervisory position to be tested, and release the After Call Work Mode.

- Use the AUTO/MAN key to set to the Automatic Answer mode. (If the answering mode at logon is the Automatic Answer mode, this operation is not necessary because the Automatic Answer mode has already been set.)

C.O. trunk call incoming.

- Place a C.O. trunk call from station A to line B.

Incoming at ACD Agent Position.

- Check that a Zip Tone is generated when the call is incoming.
- Check that the incoming route is displayed on the LCD of the ACD Agent Position.

Answering by ACD Agent Position.

Check that conversation can be started at the same time as the Zip Tone (without any operation).

Note: When ACD system is used in an FCCS Network, test that the incoming call terminated to C.O. trunk in other nodes can be picked up.



NAP-215-101
Sheet 2/2
ACD Incoming

A

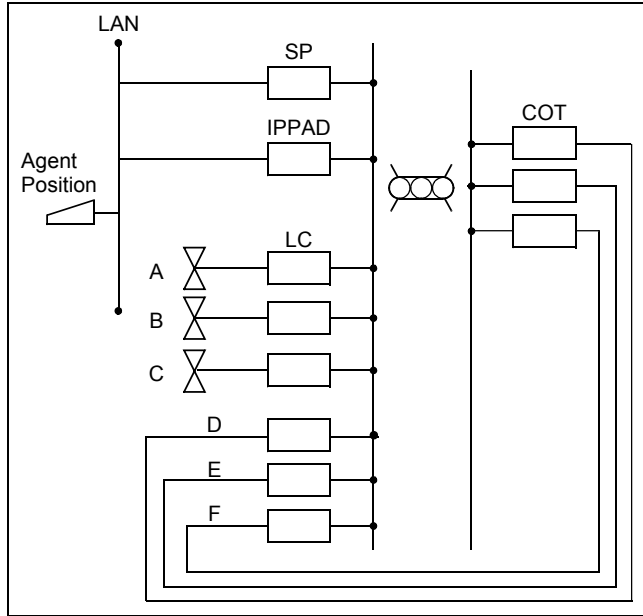
ACD Agent/Supervisory Position Trunk Incoming Call

- Test all ACD agent and supervisory position trunks with the following procedure.
- Log on to all agent and supervisory positions and release the After Call Work Mode.
- Use the AUTO/MAN key to set to the manual answer mode. (If the answering mode at logon is the Manual Answer mode, this operation is not necessary for the Manual Answer mode has already been set.)
- Set up a loop-back connection between COT to be tested and station line.
- C.O. trunk incoming test.
- Place a C.O. trunk call from station A to station B.
- Incoming at ACD Agent Position.
- Check that the call is incoming to the ACD split where the trunk tested is set.
- Answering by ACD Agent Position.
- Check that conversation can be held normally after answering.

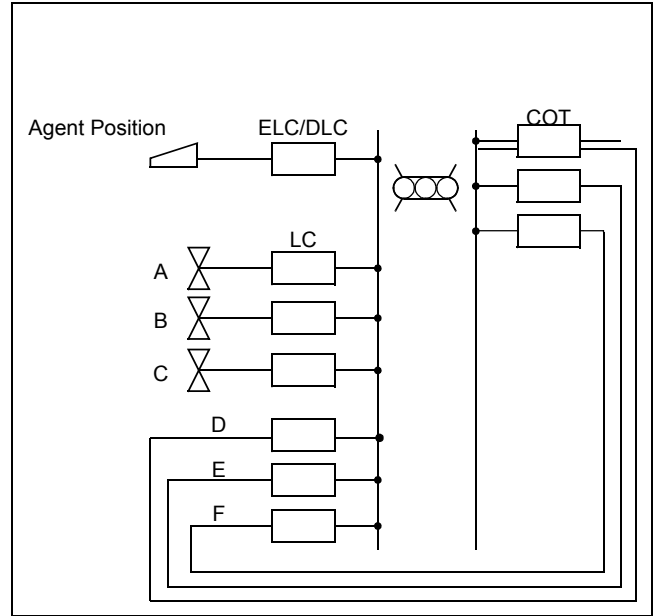
END

NAP-215-102
Sheet 1/2
Call Distribution to Agents

For IP/SIP terminal



For Digital terminal



START

Log off all ACD agent/supervisory positions.

C.O. trunk incoming.

- Place C.O. trunk calls from station A, B and C to stations D, E and F.

Log on at agent position.

- The incoming call trunk groups are distributed in the split.
- One of the agent positions in the split releases the after call work mode.

Incoming at ACD Agent Positions.



NAP-215-102
Sheet 2/2
Call Distribution to Agents

A

Answering by ACD Agent Positions.

- Check that conversation can be held normally after answering.

Release at ACD Agent Positions.

- The agent positions should not be in the Automatic After Call Work mode.

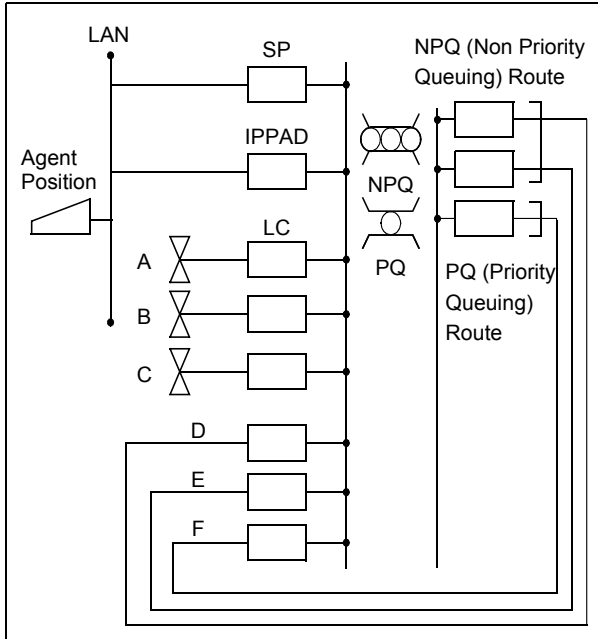
Check that the calls are distributed in the incoming order.

Apply the test procedure above to all splits.

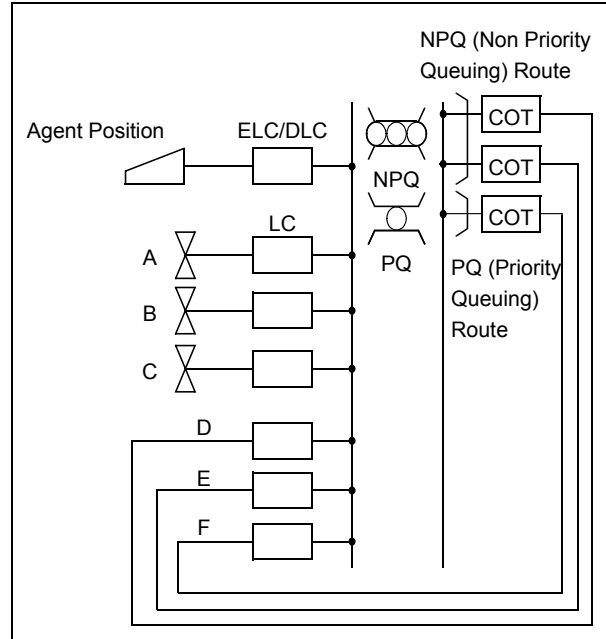
END

NAP-215-103
Sheet 1/2
Priority Processing

For IP/SIP terminal



For Digital terminal



START

Log off all ACD agent/supervisory positions.

C.O. trunk incoming to the non-priority queue.

- Place C.O. trunk calls from station A to station D and from station B to station E, and let them terminate in the routes for the non-priority queue.

C.O. trunk incoming to the priority queue.

- Place C.O. trunk call from station C to station F, and let it terminate in the route for the priority queue.

A

NAP-215-103
Sheet 2/2
Priority Processing

A

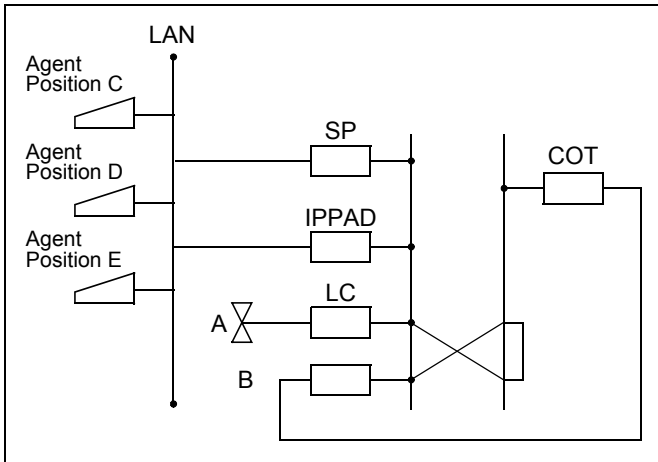
- Log on and After Call Work mode release at ACD Agent Position.
- Log on one of the agent positions in the split where calls queued in the non-priority queue and priority queue are terminated, and release the After Call Work mode.
- Incoming at ACD Agent Position.
- Answering by ACD Agent Position.
 - Check that the first communication can be held with the originator of the call in the priority queue (station C).
 - Check that the CW lamp on the ACD Agent Position illuminates during queuing.
 - Check that the number of waiting calls is indicated on the MIS terminal of the supervisory position during queuing.
- Release of ACD Agent Position.
 - After the above, confirm the originators of the calls in the non-priority queue (station A, then station B).
- Apply the test procedure above to all splits.

END

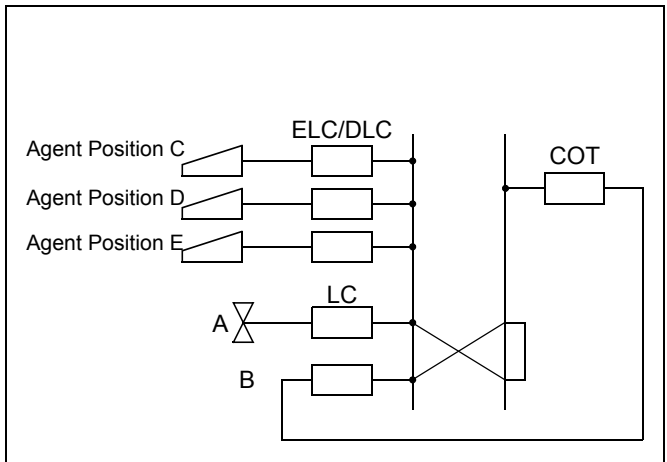
Note: The priority of C.O. trunk call incoming queue is determined depending on the queue priority set with the Assignment of Trunk Group data (ACDTG) command and Assignment of ACD Pilot Number Data.

NAP-215-104
Sheet 1/2
Automatic Call Distribution

For IP/SIP terminal



For Digital terminal



START

- Log off all agent and supervisory positions.
- Log on agent positions in sequence.
 - Log on agent positions in order of C→D→E.
- C.O. trunk incoming.
 - Place a C.O. trunk call from station A to line B.
- Incoming at ACD Agent Position.
 - Check that the call is terminated at agent position C.



NAP-215-104
Sheet 2/2
Automatic Call Distribution

A

- Answering and release by ACD Agent Position.
- C.O. trunk incoming.
 - Place a C.O. trunk call from station A to line B.
- Incoming at ACD Agent Position.
 - Check that the call is terminated at agent position D.
- Answering and release by ACD Agent Position.
- C.O. trunk incoming.
 - Place a C.O. trunk call from station A to line B.
- Incoming at ACD Agent Position.
 - Check that the call is terminated at agent position E.
- Answering and release by ACD Agent Position.
- Repeat the test procedure above for every agent position and supervisory position of each split.

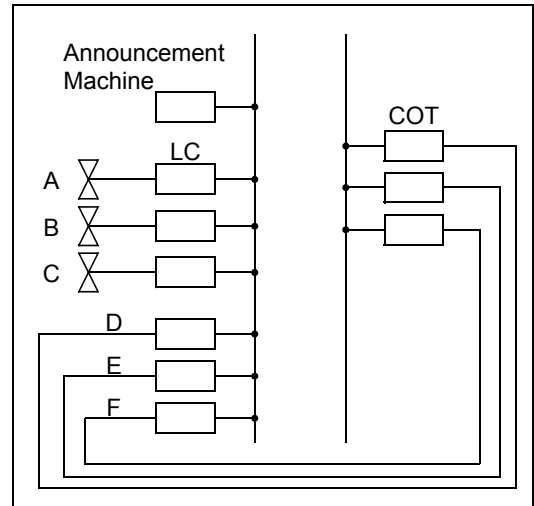
END

NAP-215-105
Sheet 1/1
Delay Announcement

START

- Log off all agent and supervisory positions.
- C.O. trunk incoming.
 - Place C.O. trunk calls sequentially from stations A, B and C to stations D, E and F respectively.
- First delay announcement.
 - Stations A, B and C shall hear the first delay announcement after the predetermined period of time.
- Music on hold.
 - Stations A, B and C shall hear the music on hold until the second delay announcement.
- Second delay announcement.
- Music on hold.
- Release.
 - Check that the incoming trunk is cleared automatically after the second delay announcement, then release stations A, B and C.
- Apply the test procedure above for each trunk group.

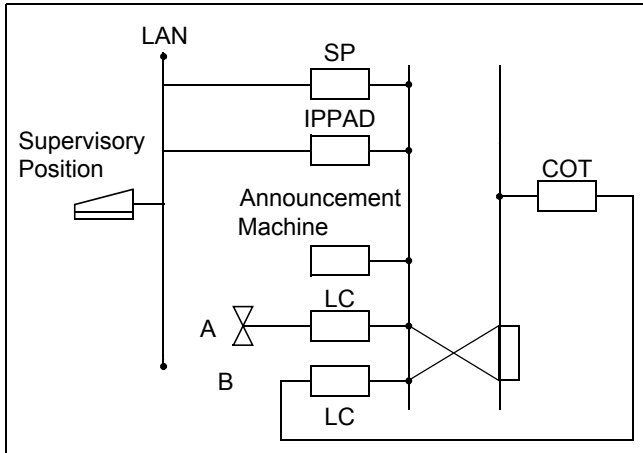
END



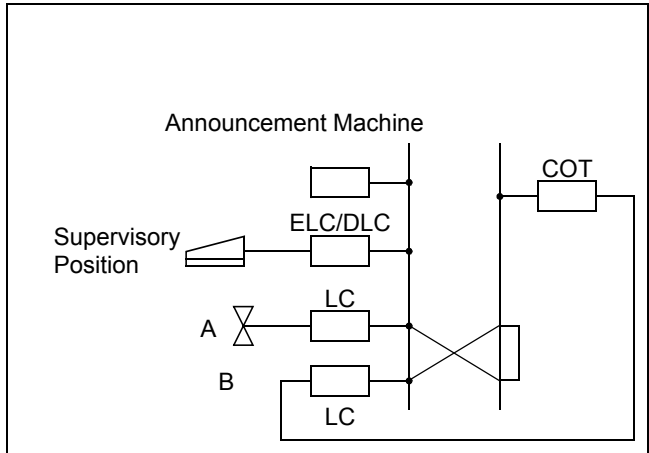
Note: This test does not use the Overflow service.
 Related commands: AADT, ACDCCV

NAP-215-106
Sheet 1/2
Center Closed Announcement

For IP/SIP terminal



For Digital terminal



(a) In case the weekly schedule No. is set as the incoming path:

START

— C.O. trunk call origination.

- Place a C.O. trunk call from station A to station B.

— Check that station A hears the center closed announcement.

END

NAP-215-106
Sheet 2/2
Center Closed Announcement

(b) In case the call control vector is set as the incoming path:

START

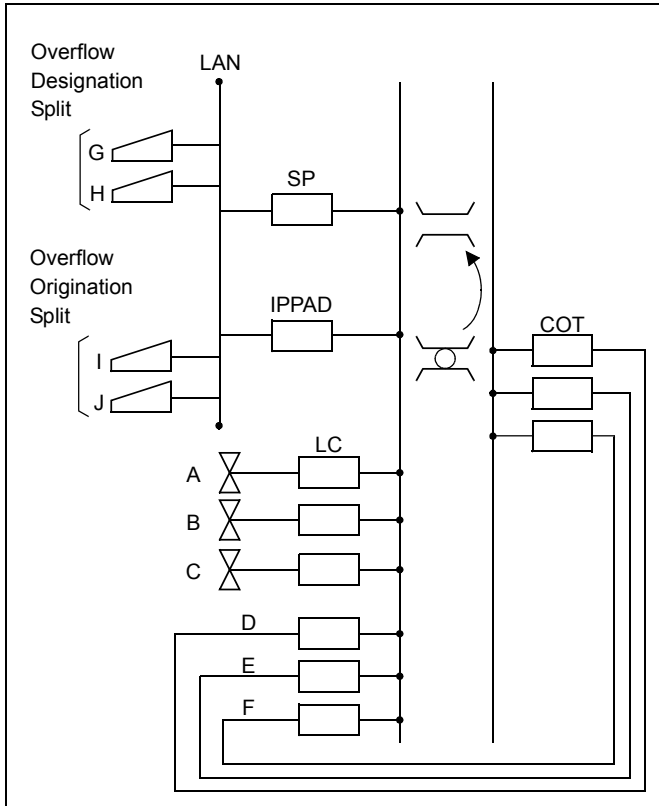


- Set the ACD system to the night mode by pressing the NIGHT key on the supervisory position or by operating from the MIS terminal.
- C.O. trunk call incoming.
 - Place a C.O. trunk call from station A to line B.
- Check that station A hears the center closed announcement.

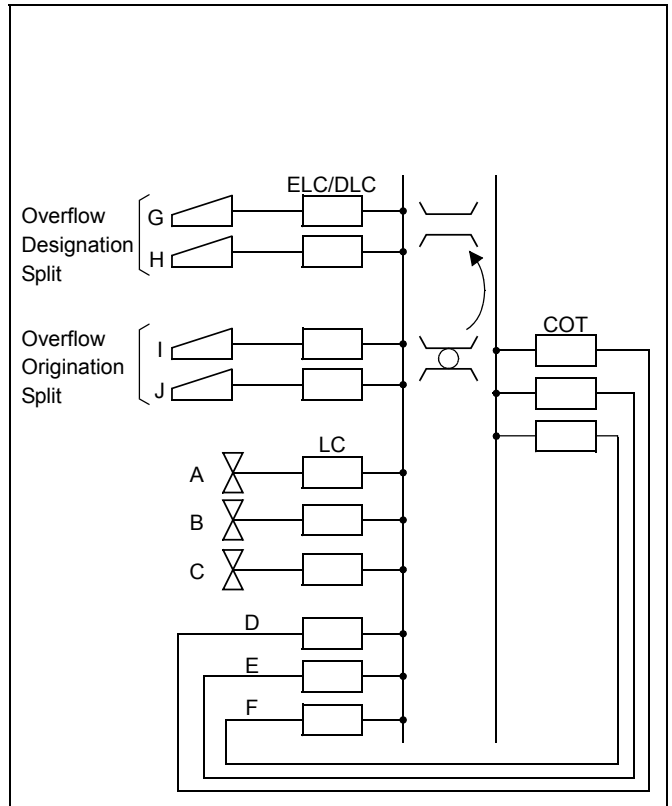
END

NAP-215-107
Sheet 1/2
Overflow

For IP/SIP terminal



For Digital terminal



START

- Log on the ACD agent and supervisory positions of the overflow origination split.
- Log on the ACD agent and supervisory positions of the overflow destination split.
- C.O. trunk incoming.
 - Place C.O. trunk calls sequentially from stations A, B and C to stations D, E and F respectively.



NAP-215-107
Sheet 2/2
Overflow

A

— (Overflow period elapsed).

— Call termination at overflow destination split.

— Answering by ACD Agent Position.

- At the moment an agent position answers, it hears the ACD call transfer identification tone, after which the communication can be started.

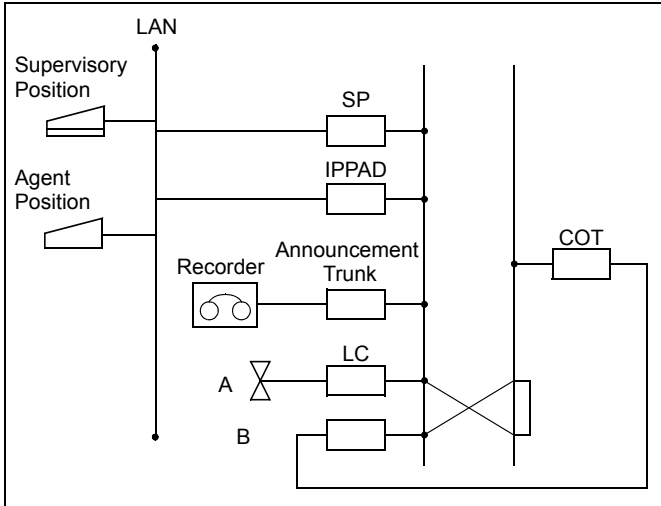
— Release of ACD Agent Position.

— Apply the test procedure above to each trunk group for which Overflow has been set.

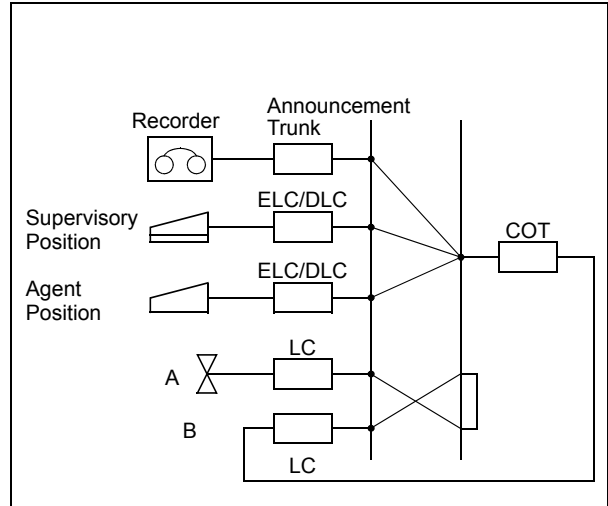
END

NAP-215-108
Sheet 1/2
Emergency Recorder

For IP/SIP terminal



For Digital terminal



START

- C.O. trunk call incoming.
 - Place a C.O. trunk call from station A to station B.
- Incoming at ACD Agent Position.
- Answering by ACD Agent Position.
- Emergency recording operation.
 - Press the EMER key on the ACD Agent Position.
- Incoming at supervisory position.
 - When the ACD call is terminated at the supervisory position, the LCD on the supervisory position indicates the emergency recording request and the MON lamp also illuminates.
 - At the same time, the recorder starts recording.
 - In the period above, the ACD Agent Position and C.O. trunk is in the communicating status.



NAP-215-108

Sheet 2/2

Emergency Recorder

A

Answering by supervisory position.

- The supervisory position answers the call as an ACD call and monitors it (three-party conference call does not occur).
- The ACD Agent Position can confirm the answering of the supervisory position by the change of the lamp indication on the agent position (flashing steady) as well as from the LCD display.

Confirmation of recording.

- Check that the call is recorded by the recorder.

The supervisory position presses the MON key to start three-party conference call. **Note 1**

Release by ACD Agent Position.

- When the agent position releases the incoming C.O. trunk call, it is transferred to the supervisory position.

Confirmation of communication.

- Check that the supervisory position is communicating with the C.O. trunk.

Release by supervisory position.

Apply the test procedure above to all splits.

END

Note 1: After MON key is pressed, "BARGE?" is displayed. At that time, monitoring is abandoned by one of the following operations.

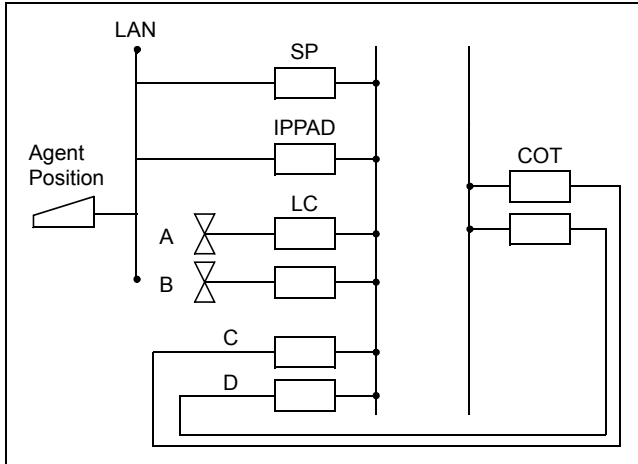
- Dial "1" + "#" or "1" + "n" ... "n" + "#"
- Press MON key again
- No operation for 30 seconds

NAP-215-109

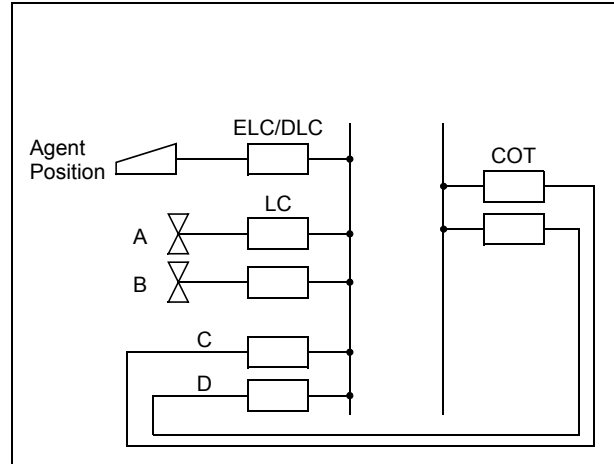
Sheet 1/2

After Call Work (Manual)

For IP/SIP terminal



For Digital terminal



START

- Log off all ACD agent and supervisory positions, then log on only one position.
- C.O. trunk incoming.
 - Place C.O. trunk call from station A to station C.
- Incoming at ACD Agent Position.
- Answering by ACD Agent Position.
- After Call Work activation.
 - Press the WORK key so that the WORK lamp illuminates.
- C.O. trunk incoming.
 - Place a C.O. trunk call from station B to station D.

A

NAP-215-109
Sheet 2/2
After Call Work (Manual)

A

Release by ACD Agent Position.

- The agent position can end communication with station A by pressing the RELEASE key.

Confirmation of After Call Work mode.

- Check that, when the agent position release, the next call is not terminated at it.

Release of After Call Work mode.

- Press the WORK key again so that the WORK lamp goes out.

Incoming at ACD Agent Position.

Answering by ACD Agent Position.

- The agent position starts communication with station B.

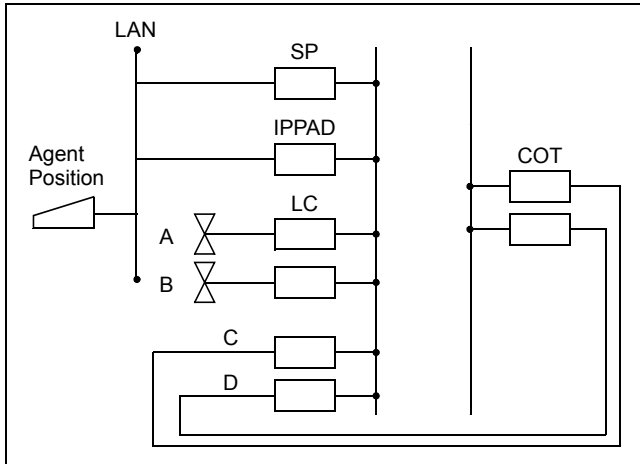
Release by ACD Agent Position.

Apply the test procedure above to all splits.

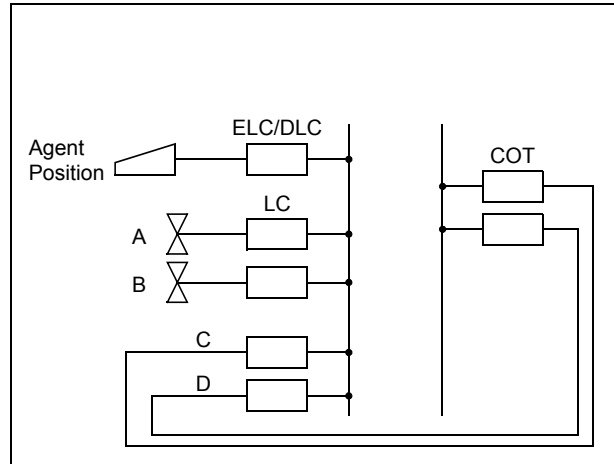
END

NAP-215-110
Sheet 1/2
After Call Work (Automatic)

For IP/SIP terminal



For Digital terminal



START

- Log off all ACD agent and supervisory positions, then log on only one position.
- Office data change.
 - Using the ACDSPL command, assign 0 (Automatic After Call Work mode setting) to parameter AFTER.
- C.O. trunk incoming.
 - Place a C.O. trunk call from station A to station C.
- Incoming at ACD Agent Position.
- Answering by ACD Agent Position.
- C.O. trunk incoming.
 - Place a C.O. trunk call from station B to station C.
- Release by ACD Agent Position, automatic setting of After Call Work mode.
 - Check that, when the agent position release, the After Call Work mode is set automatically.



NAP-215-110
Sheet 2/2
After Call Work (Automatic)

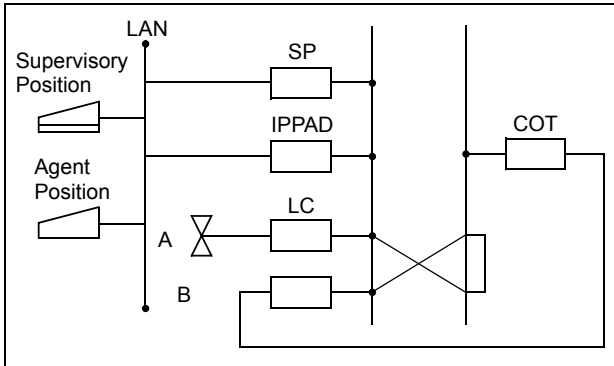
A

- Release of After Call Work mode.
 - Press the WORK key so that the WORK lamp goes out.
- Incoming at ACD Agent Position.
- Answering by ACD Agent Position.
 - The agent position starts communication with station B.
- Release by ACD Agent Position.
- Release of office data.
- Apply the test procedure above to all splits.

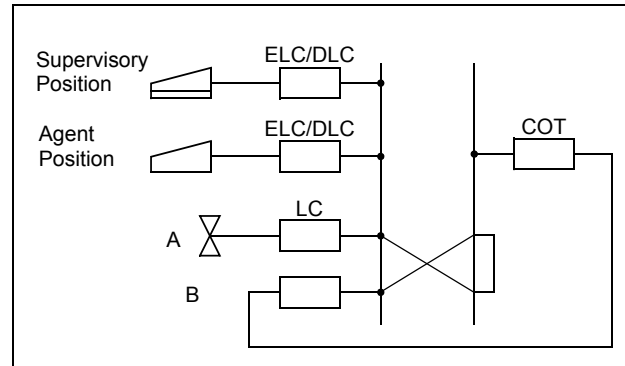
END

NAP-215-111
Sheet 1/1
Assistance

For IP/SIP terminal



For Digital terminal



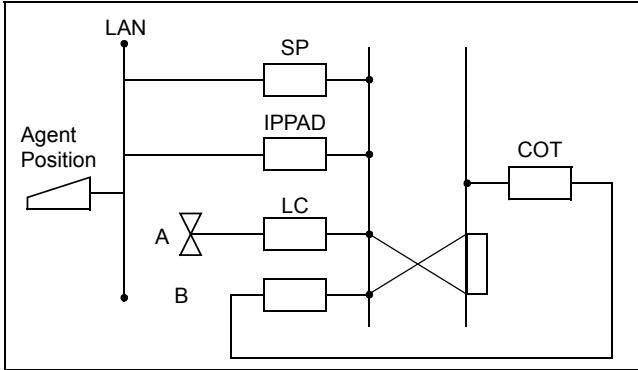
START

- C.O. trunk incoming.
 - Place a C.O. trunk call from station A to line B.
- Incoming at ACD Agent Position.
- Answering by ACD Agent Position.
- Assistance activation.
- Press the ASSIST key on the ACD Agent Position so that the ASSIST lamp illuminates.
- Incoming at supervisory position.
 - The call is terminated as non-ACD call to the supervisory position.
- Answering by supervisory position.
 - The communication between the ACD Agent Position and supervisory position starts, while the C.O. trunk call is held.
- Three-party conference call.
 - Press the CONF key on the ACD Agent Position to start three-party conversation.
- Release by ACD Agent Position.
 - The communication takes place between the C.O. trunk (station A) and supervisory position.
- Release.
- Apply the test procedure above to all splits.

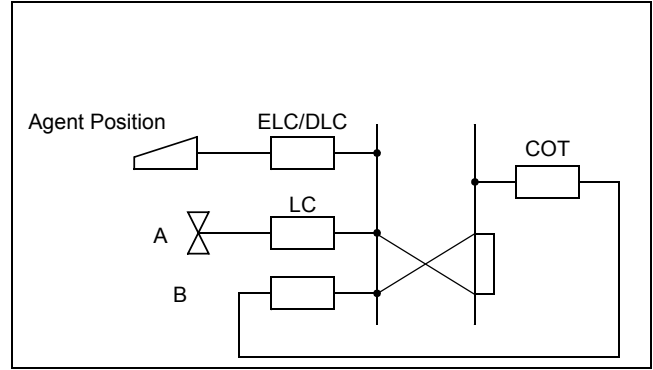
END

NAP-215-112
Sheet 1/1
Break Mode

For IP/SIP terminal



For Digital terminal



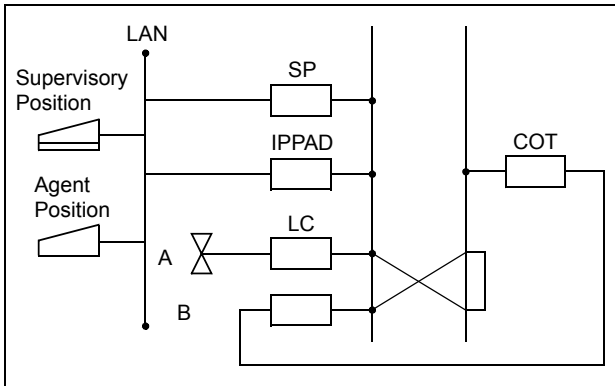
START

- Log off all ACD agent and supervisory positions.
- Set one of the ACD Agent Positions to the Break mode.
 - Press the BREAK key so that the lamp illuminates.
- C.O. trunk incoming.
 - Place a C.O. trunk call from station A to line B.
- Confirmation of Break mode.
 - Check that the incoming call is not distributed to the agent position.
- Release of Break mode.
 - Press the BREAK key again so that the lamp goes out.
- Incoming at ACD Agent Position.
- Answering by ACD Agent Position.
- Release by ACD Agent Position.
- Apply the test procedure above to all splits.

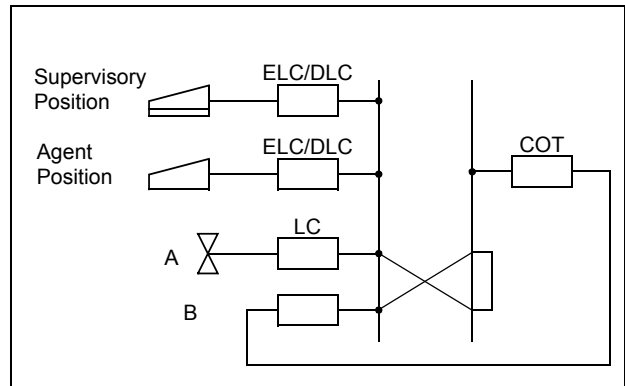
END

NAP-215-113
Sheet 1/2
Monitoring-ACD Supervisor

For IP/SIP terminal



For Digital terminal



START

C.O. trunk incoming.
 • Place a C.O. trunk call from station A to line B.

Incoming at ACD Agent Position.

Answering by ACD Agent Position.

Monitoring Activation from Supervisory Position

- (1) Press the MON/BARGE key on the supervisory position.
- (2) Dial Agent ID code+# or 0+ACD Agent Position station No. for non-ACD calls+#.

Monitoring.

- The supervisory position can monitor the conversation between station A and the ACD Agent Position.
- The supervisory position can monitor the call but cannot join the conversation.



NAP-215-113

Sheet 2/2

Monitoring-ACD Supervisor

A

Supervisory Override Operation

- Press the MON/BARGE key on the supervisory position again. “BARGE?” is displayed. **Note 2**
- The ACD Agent Position and the call originator (station A) hear the warning tone.

Release.

Apply the test procedure above to all splits.

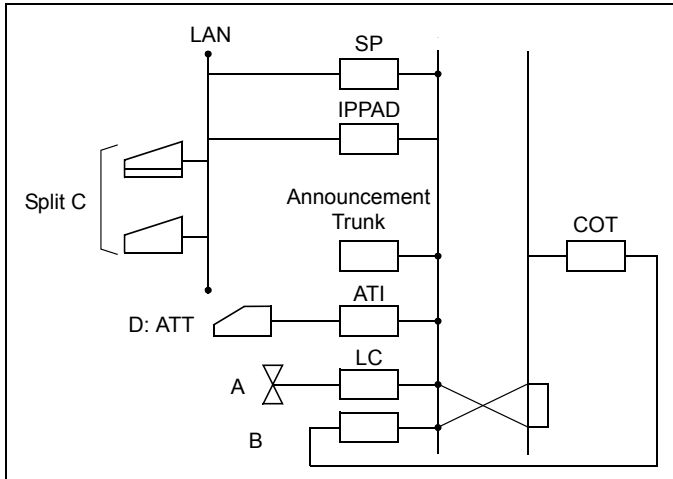
END

Note 2: If one of the following operations is performed at this time, monitoring is abandoned.

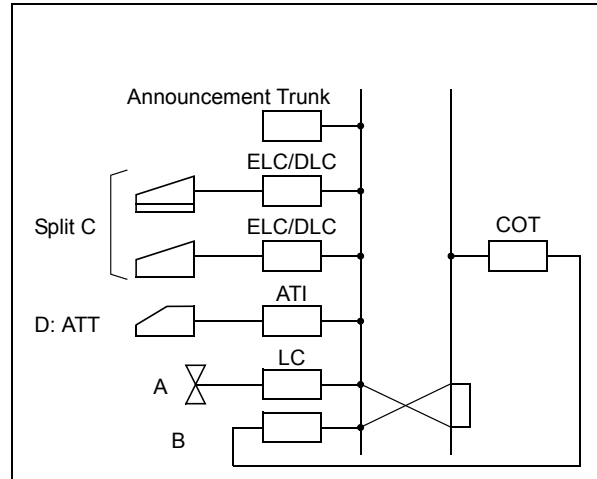
- Dial “1” + “#” or “1” + “n” ... “n” + “#”
- Press MON/BARGE key again
- No operation for 30 seconds

NAP-215-114
Sheet 1/2
Night Service

For IP/SIP terminal



For Digital terminal



START

- Use one of the following three methods to change into the night mode.
 - (1) Automatic changeover into the night mode based on the ACD call control vector (Night Announcement setting using ACD CCV command).
 - (2) Pressing the NIGHT key on the supervisory position of split C; as this display confirmation message Night Mode?, enter 1# to change over into the night mode.
 - (3) Changeover into the night mode by means of operation at the MIS terminal of the supervisory position.

Night Announcement

- Place a C.O. trunk call from station A to line B in the special night split.

Station A hears the night announcement.

Apply the test procedure above to all splits.

Using the ACD CCV command, change the night services of the split and test each of the following services repeatedly.



NAP-215-114

Sheet 2/2

Night Service

A

Night Service Change

Using the ACD CCV command, change the night services of the split and test each of the following services.

Night Transfer to Station

- Place a C.O. trunk call from station A to line B.

Call incoming at transfer destination station.

Answering by station.

Release by station.

Apply the test procedure above to all splits.

Night Transfer to Attendant

- Place a C.O. trunk call from station A to station B.

Call incoming at transfer destination Attendant Console.

Answering by ATTCON.

Release by ATTCON.

Apply the test procedure above to all splits.

Night Transfer to Outside

- Place a C.O. trunk call from station A to station B.

Call incoming at transfer destination C.O. trunk.

Answering by C.O. trunk.

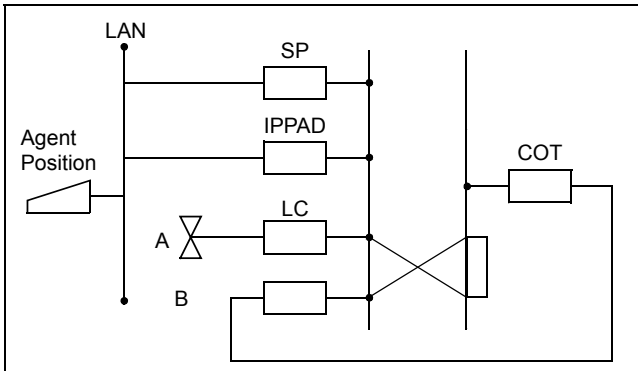
Release by C.O. trunk.

Apply the test procedure above to all splits.

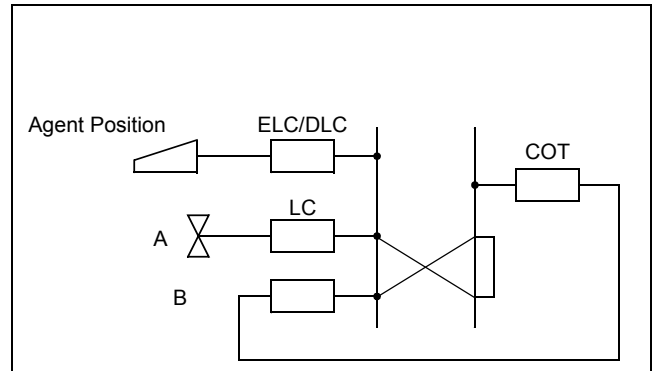
END

NAP-215-115
Sheet 1/1
Abandoned Call Search

For IP/SIP terminal



For Digital terminal



START

Abandoned Call Search

C.O. trunk call origination.

- Place a call from the station A to the line B. The call is connected to a Pilot number.
- At this time, agent positions shall be in Work mode.

After checking that the CW lamp on the agent position illuminates, station A releases the call.

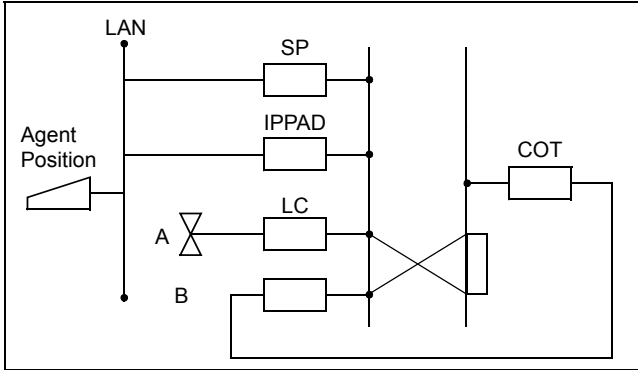
- Check that the CW lamp on the ACD Agent Position goes off.

END

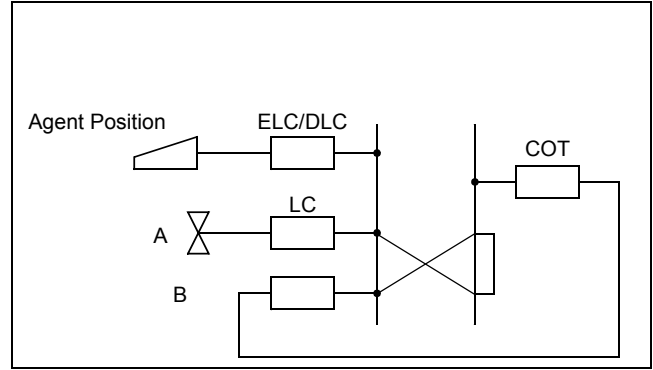
- Note:** To activate this feature properly, the following conditions are required:
- The C.O. line has the answer/release signal.
 - The C.O. trunk can detect the release signal from the C.O. line (Release signal detection function must be valid by the switch setting).
 - Assign the following state translation data by ASTD command: STM = 1, STS = 0, ST = 1 (Release the trunk after detection of the release signal)

NAP-215-116
Sheet 1/1
Trunk Trouble Report

For IP/SIP terminal



For Digital terminal



START

- C.O. trunk call incoming.
 - Place a C.O. trunk call from station A to line B and a C.O. trunk call is terminated to agent positions.
- The call is terminated to agent positions. An agent position answers the call.
- While the agent position is in the conversation, press the TRKTRBL key on line B.
- The connection information is output at the MIS terminal.
- A system message is output.
- Apply the test procedure above to all agent and supervisory positions of all splits.

END



CHAPTER 6

COMMANDS AND JOB SPECIFICATIONS

1. GENERAL

This chapter explains the ACD Commands which are used exclusively for the ACD system. For other related Telephony Server Command, refer to the Command Manual. When engaging in command operations concerning the ACD system, ensure to use both this manual and Command Manual.

Note: When assigning the command data related to the ACD system, execute Clear Initialization for ACDP Office Data with the ACDIZ command. Refer to Section 4 “SYSTEM START-UP PROCEDURE FOR ADDING ACD FEATURES” in Chapter 3 for detailed procedures.

2. ACD COMMANDS

ACD Command List

COMMAND NAME	DESCRIPTION
ACDTN	Assignment of ACD Tenant Data
ACDSPL	Assignment of ACD Split Data
ACDLOG	Assignment of ACD Receiver ID Code
ACDPSN	Assignment of ACD Position Data
ACDCCV	Assignment of ACD CCV Data
ACDPLT	Assignment of ACD Monitor Number
ACDPG	Assignment of ACD Trunk Group Data
ACDANA	Assignment of ACD Analog Split Access Code
ACDIVR	Assignment of ACD IVR Data
ACDHS	Assignment of ACD Holiday Schedule
ACDHSE	Assignment of ACD Holiday Calendar for type of reception services
ACDHC	Assignment of ACD Holiday Calendar
ACDHCE	Assignment of ACD Holiday Calendar for type of reception services
ACDWS	Assignment of ACD Week Schedule
ACDIZ	Internal ACDP Initialization
ACDUD1	Assignment of ACD User Data 1

2.1 Command Relationships

Each command consists of a name (four to six alphanumeric characters) which suggests its function and the parameters required for its execution. The table below describes the correspondence among the ACD and Node commands. Each ACD command may involve the assignment or execution of Node commands and/or other ACD commands.

Each command description includes a section entitled “Assignment and Deletion Procedure” which describes the correct sequence for applying related commands.

Related Commands

Command Name	Related Node (Non-FCCS) Commands	Related Node FCCS Commands	Related ACD Commands
ACDTN	ASYD, ANPD, ASPA, AADT	ASYD, ANPD, ASPAN, AADTN	ACDCOM, ACDSPL, ACDCCV
ACDSPL			ACDTN
ACDLOG			ACDTN, ACDSPL, ACDPSN
ACDPSN	AEFR, ASFC, ASDT/AISTL, AKY1, ARSC	AEFR, ASFC, ASDT/AISTL, AKY1, ARSCN	ACDSPL, ACDHS, ACDWS, ACDHC, ACDTN
ACDCCV	AADT, ASDT/AISTL	AADTN, ASDT/AISTL	ACDSPL, ACDHS, ACDWS, ADCHC, ACDTN
ACDPLT	AMNO, ACNO, ASAT	AMNON, ACNON, ASATN	ACDTN, ACDCCV, ACDWS
ACDTG			ACDTN
ACDANA	AMNO	AMNON	ACDPSN
ACDIVR	ASDT/AISTL, ASHU	ASDT/AISTL, ASHUN	ACDTN
ACDHS			ACDTN, ACDWS, ACDHC, ACDHCE, ACDCCV
ACDHSE			ACDTN, ACDWS, ACDHC, ACDHCE, ACDCCV
ADCHC			ACDTN, ACDHS
ACDHCE			ACDTN, ACDHS, ACDHSE
ACDWS			ACDTN, ACDCCV, ACDPLT
Total ACD System	ASYD (R), ASDT/AISTL (R), AOKC (R), ARSC (R), ASFC (R), AKY1 (R), AMNO (R), ACNO (O), AEFR (R), AADT (O), ASHU (O), SPDL (R), ASAT (R), ROAI (O)	ASYD (R), ASYDL (R), ASDT/AISTL (R), AOKC (R), ARSCN (R), ASFC (R), AKY1 (R), AMNON (R), ACNON (O), AEFR (R), AADTN (O), ASHUN (O), SPDL (R), ASATN (R), ROAI (O)	ACDTN (R), ACDSPL (R), ACDLOG (O), ACDPSN (R), ACDCCV (R), ACDPLT (R), ACDTG (R), ACDANA (O), ACDIVR (O), ACDHS (O), ACDHC (O), ACDWS (O)

(R) = Required, (O) = Optional

ACDTN: Assignment of ACD Tenant Data

1. Function

This command is used to assign, display, and print the following data for an ACD tenant:

- [1] Tenant Number
- [2] Tenant Name (optional)
- [3] The number (maximum) of splits (per tenant)
- [4] Default Language
- [5] Operator Access Code
- [6] IVR Pilot Number
- [7] Outbound Answer Timer
- [8] Agent Personal Queue Parameters:
Announcement Number and Overflow/Forward Priority.

Tenant data gives the user an identity within the ACD system. It also allows the tenant to determine the number of splits that will be needed for ACD operations.

2. Precaution

- (1) The ACDTN data is one of the most important data for ACD system configuration. Especially, the user must program so as not to change NSPL data in future. In case the NSPL data is changed, all data concerned with ACD function must be assigned again.
- (2) Be sure to set TN=1.
- (3) For the maximum number of splits per ACD, see “2.3.3 ACD System Capacity” in CHAPTER 2.
- (4) Remove menu selection is not applicable for this command.
- (5) Assign the number of tenants for whole system including Business/Hotel features (SYS1, Index 8).

3. Parameters

ACDP:	Fixed to 0 (Not used)
TN:	Tenant Number (1 to 9)
NAME:	Tenant Name (up to 20 characters)
NSPL:	Maximum Split for Tenant (1 - 900)
LANG:	0 = English 1 = Japanese 2 = Spanish 3 = Italian 4 = French 5 = German 6 = Japanese (Kanji)
OPE NO:	Enter the operator access code (up to six digits) programmed in the Node subsystem (ASPA or ASPAN).
IVR NO:	Number to access IVR directory numbers used by ACD (Two to six digits). Note 1 , Note 2

Note 1: Use numbers 0-9. *,# may not be used. One-digit IVR pilot number may not be assigned.

Note 2: Available in North America only.

ANSTM: Time (in seconds) after which an outbound call is assumed to have been answered.
 ANTNO: Personal Announcement Number (0 - 200) or blank for not used ones **Note 3, Note 4**

Note 3: Specify an announcement number in the range of 1 to 58 when:
 • Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0).

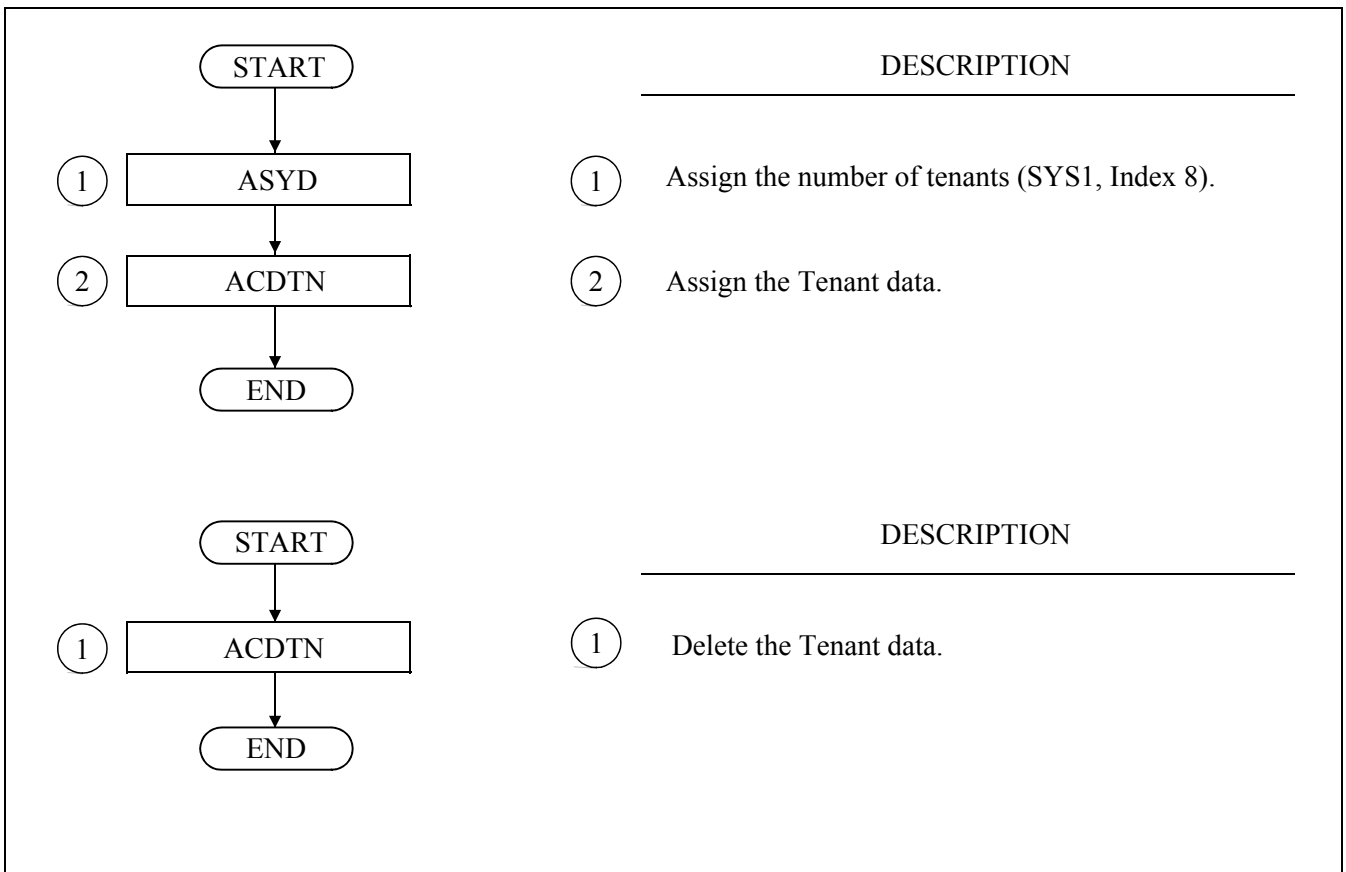
Note 4: For North America, specify an announcement number in the range of 1 to 58.

PRI: Priority to use for split queuing after overflow or call forwarding
 (1 to 250)

4. Assignment and Deletion Procedure

These flow diagrams show the procedure used to assign and change Tenant Data for the Integrated ACD.

Assigning and Removing Tenant Data Information



ACDSPL: Assignment of ACD Split Data

1. Function

This command is used to assign, display, print, and remove ACD split data. Each split is configured through this command for its answer mode, after call status, conditional thresholds, and operationally-related directory numbers and other split-related data.

2. Precautions

- (1) Directory number for assist, emergency, and night should be assigned before assigning split data.
- (2) When configuring ACD call processing procedures using this command, make sure not to create a CCV would cause an infinite loop.
- (3) The dictation trunk for emergency calls should be assigned before assigning split data.
- (4) The operation of Conditional Thresholds (COND) is shown in the table below.

COND (Conditional Thresholds)

METHODS	CONDITIONS	RESULTS
No Calls Accepted	No Call Accepted. Note 1	No conditional calls will be accepted by the split.
Agents Available Value: 1 to 250	Number of agents that must be available for conditional queue calls to be accepted. Note 2	Conditional calls will or will not be accepted.
Calls in Queue Value: 1 to 699	Will only accept conditional queue calls, depending on how many calls are already in queue to the split. Note 3	Conditional calls will or will not be accepted.

Note 1: If COND=0 (NO CALLS ACCEPTED) is selected, this split will not accept conditional Queue call.

Note 2: If COND=1 (AGENTS AVAILABLE) is selected, then this split will accept Conditional Queue calls, depending on the number of agents available in the split.
Example: If “2” is entered as the number of agents that must be available in COND DETAIL, then there will have to be at least 2 agents available in the split before it will accept any Conditional Queue calls.

Note 3: If COND=2 (CALLS IN QUEUE) is selected then the split will accept Conditional Queue calls depending on how many calls are already in queue in this split.
Example 1: If “3” is entered as the number of calls in queue in COND DETAIL and there are more than three calls in queue, this split will not accept Conditional Queue Calls.
Example 2: When "6" is entered as the number of calls in queue in COND DETAIL, and there are already six calls in queue, the 7th incoming call can be included in the Conditional Queue if its overflow period elapsed after one of the six calls in queue is terminated. If the overflow period has already elapsed before any of the calls in the queue is terminated, the incoming call cannot be transferred to the Conditional Queue, and has to be in the queue for its original split.

- (5) Handling of conditionally queued incoming ACD calls for a particular split. Refer to CCV steps (

- CALL CONTROL VECTOR - ACD) for programming conditional call handling.
- (6) Logon IDs can be set either required or not used in LOGID. If a logon ID is required, an agent must enter a logon ID before receiving access to the ACD system.
 - (7) When the split is in the Do Not Disturb mode (when no positions are logged on in the split), either the Queue or Do Not Queue option may be programmed.
 - (8) The Assist key can be programmed on a split-wide basis to function as an Assist key or a Monitor Me key in RMON.
 - (9) Work mode can be Allowed or Restricted on a split-wide basis.
 - (10) Call Waiting lamp can be programmed with two queue thresholds. It can light steadily when a specific number of calls are in queue, then to flash when the second threshold of number of calls are in queue.
 - (11) Never set the “CWON” and “CWFL” thresholds to the same value. Always set the “CWON” value to a lower value than the “CWFL” value.
 - (12) Work mode can be programmed to timeout after a position has been in Work mode for a predetermined time (on a split-wide basis).
 - (13) Each split can be programmed to have single break mode type or multiple break mode types in BRKTP.
 - (14) QUEUE:
The maximum number of calls that can be in queue at any given time. This field allows normal inputs (“150”) as well as “percentage” inputs (“150%”), used for Variable Depth Queuing. A Variable Queue Depth is one that changes based on the number of working agents (logged on and not in break mode). Therefore, with 4 working agents, a max depth of 150% would equate to $150\% \times 4 = 6$ calls in queue. The 7th call would then not be allowed to queue until more working agents were added to the split. Valid ranges for normal max. depths are 1 to 700. Valid ranges for variable max. depths are 5% to 1000%, in increments of 5%.
 - (15) Positions can be programmed to automatically go into Work mode if an outgoing call is made on the Non-ACD line, or if an incoming call is received on the Non-ACD line.
Press SPACE BAR to change selection (No/Yes)
 - (16) After-call work mode setting determines if an agent is available for the next call immediately, or if the agent is placed in an after-call work mode at the completion of the current ACD call.
 - (17) Answer mode setting determines if a call is automatically connected following a zip tone or if the agent must manually answer the incoming call by pressing the **ANSWER** key.
 - (18) A split can be set up so that agent priority queuing can be used if desired.
 - (19) This split can be set up as a Hot Split if desired.
 - (20) A CCV can be assigned for calls stranded in queue.
 - (21) The split can be programmed so that a call which rings at an agent’s phone for a long time can be recovered and requeued.
 - (22) When assigning AWPI=1~3, AWPO=1, set AWPRST=1 to restrict the Auto Work Mode cancel timer.
 - (23) When dialing operation, such as entering the Tally Code, is performed during the After Work Mode time, set the A-WMT in consideration of dial operation time.

3. Parameters

ACDP:	Fixed to 0 (Not used)
TN:	Tenant Number (1 to 9)
SPLIT:	Split Number (1 to 900)
NAME:	Split Name (Optional) - Up to 20 characters
LOGID:	Logon ID 0: Not Used 1: Required
AFTER:	After ACD Call (State of the agent position after ACD Call) 0: Work 1: Available
ANMD:	Answer Mode immediately after logging on 0: Automatic 1: Manual
QUEUE FLAG:	0: Number 1: Percent
QUEUE:	Maximum Queue Depth Only used if QUEUE FLAG=0 (1~700) Only used if QUEUE FLAG=1 (5~1000%)
CWCHM:	Call Waiting Chime Restrict 0: No 1: Yes
JACKM:	Jack Out Mode 0: Break 1: Vacant
WMT:	Work Mode Timeout 0~9999 seconds (0=indefinite)
RMON:	Assist Key (Type of Assistance) 0: Assist 1: Monitor Me
BRKTP:	Break Types 0: Not used (single break type) 1: Used (multiple break types)
NIGHT:	Night Pilot Number (SPACE: feature not used) (Two to six digits.) Note 4
ASIST:	Assistance Number (SPACE: feature not used) (Two to six digits.) Note 5
EMGCY:	Emergency Number (SPACE: feature not used) (Two to six digits.) Note 5

Note 4: If COND=2 (CALLS IN QUEUE) is selected then the split will accept Conditional Queue calls depending on how many calls are already in queue in this split.

Example 1: If "3" is entered as the number of calls in queue in COND DETAIL and there are more than three calls in queue, this split will not accept Conditional Queue Calls.

Example 2: When "6" is entered as the number of calls in queue in COND DETAIL, and there are already six calls in queue, the 7th incoming call can be included in the Conditional Queue if its overflow period elapsed after one of the six calls in queue is terminated. If the overflow period has already elapsed before any of the calls in the queue is terminated, the incoming call cannot be transferred to the Conditional Queue, and has to be in the queue for its original split.

Note 5: Use numbers 0-9. *,# may not be used. One-digit dial number may not be assigned. Also, 1stDC="0" may not be used.

RECD:	Recorder No. 1 - 5 or 0=feature not used
-------	--

ACDSPL : Assignment of ACD Split Data

DNDS: Do Not Disturb (DND restrict)
 0: Queue (valid)
 1: Do Not Queue (invalid)

WKRST: Work Mode restrict
 0: Allow
 1: Restricted

AWPI: Auto Work Mode upon Node Call (Ring In, Answer) **Note 6**
 0: No Auto Work
 1: Auto Work Mode (only when Ring in)
 2: Auto Work Mode (only when Answer)
 3: Auto Work Mode (when Ring In and Answer)

AWPO: Auto Work Mode upon Node Call (Dialed Out) **Note 6**
 0: No Auto Work
 1: Auto Work Mode

ARPR: Auto Work Mode upon Node Call (Release) **Note 6**
 0: No Auto Work
 1: Auto Work Mode

Note 6: The table below illustrates an example of the data setting in combination of AWPI/ AWPO/ARPR.

Method for Work Mode for Node Calls Set/ Cancel	AWPI	AWPO	ARPR
Automatic operation for Set/Cancel	2 or 3	1	1
Automatic operation for setting Manual operation for cancel	1	1	0

ACDSPL : Assignment of ACD Split Data

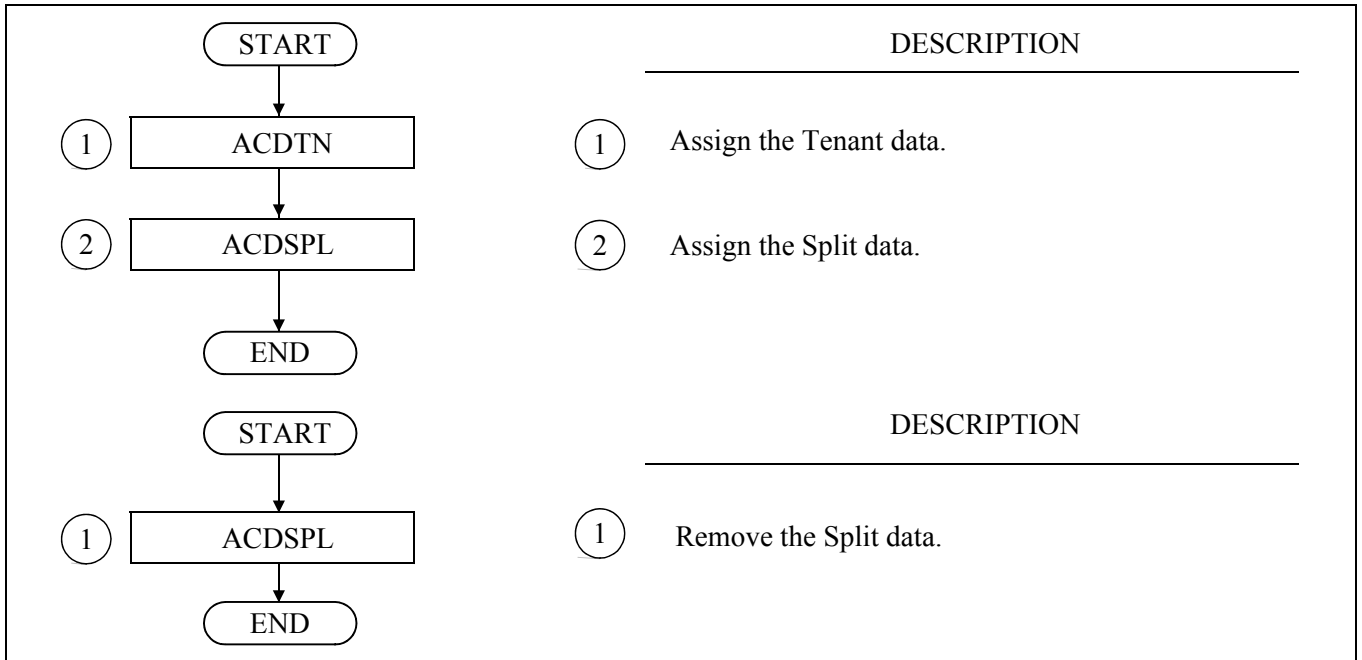
COND:	Conditional Threshold 0: Rejected 1: Agent Available 2: Calls in Queue
COND DETAIL:	Conditional Threshold Detail Only used if COND=0: - Only used if COND=1: 1~250 Only used if COND=2: 1~699
CWON:	Call Waiting Thresholds Light-number of queuing call (0~700)
CWFL:	Call Waiting Thresholds Flash-number of queuing call (0~700)
ST CCV NO:	Stranded Calls CCV Index number (1~2000)
ST CCV STP:	Stranded Calls CCV Step number (1~20)
CRT:	Call Recover Time (0~255 or 0=feature not used) Note 7
A_WMT:	Analog Work Mode Timeout (0 ~ 9999 seconds)
HSPL:	Hot Split 0/1 = No/Yes
AGT_Q:	Agent Queuing Options 0/1 = Out of Service/In Service
AWPRST:	Auto Work Timeout Restriction 0/1 = Allowed/Restricted
PCS:	Tally Required 0/1 = Not Required/Required
LOFFW:	Logoff Warning 0 = Not Available 1-9 = Maximum number of agents to be logged in a split ALL = Logoff Warning is executed when the number of log-in agents is less than that of queueing calls
CTKBY:	Fixed to 0 (Not used)
PILOT:	Fixed to Blank (Not used)

Note 7: Depending on the input value, a delay of up to 12 seconds occurs.

4. Assignment and Deletion Procedure

These flow diagrams show the procedure used to assign and delete ACD split data.

Assigning and Removing ACD Split Data



ACDSPL : Assignment of ACD Split Data

ACD Split Data Programming Sheet (1/2)

Tenant Number (TN)1~9					
Split Number (SPLIT) 1~900					
Split Name (NAME) up to 20 characters					
Logon ID (LOGID) Select one (✓)	Not Used (0)				
	Required (1)				
After ACD Call (AFTER) Select one (✓)	Work (0)				
	Available (1)				
Answer Mode (ANMD) Select one (✓)	Automatic (0)				
	Manual (1)				
Maximum Queue Depth (QUEUE) 1~700 or 5~1000%					
Call Waiting Chime (CWCHM) Select one (✓)	No (0)				
	Yes (1)				
Jack Out Mode (JACKM) Select one (✓)	Break (0)				
	Vacant (1)				
Work Mode Timeout (WMT) 0~9999 seconds					
Assist Key (RMON) Select one (✓)	Assist (0)				
	Monitor Me (1)				
Break Types (BRKTP)	Single Break Type (0)				
	Multiple Break Types (1)				
Night Pilot Number (NIGHT) Note 8					
Assistance Number (ASIST) Note 8					
Emergency DN (EMGCY) Note 8					
Recorder No. (RECD)					
Do Not Disturb (DNDS) Select one (✓)	Queue (0)				
	Do Not Queue (1)				

Note 8: Only digits 0~9 can be used (“*” and “#” are not available).

ACDSPL : Assignment of ACD Split Data

ACD Split Data Programming Sheet (2/2)

Work Mode (WKRST) Select one (✓)	Allow (0)				
	Restricted (1)				
Auto Work Node Call Ring In Answer (AWPI)	No Auto Work (0)				
	Ring In (1)				
	Answer (2)				
	Ring In Answer (3)				
Auto Work Node Call Dialed Out (AWPO)	No Auto Work (0)				
	Auto Work Mode (1)				
Auto Ready Node Call Release (ARPR)	No Auto Work (0)				
	Auto Work Mode (1)				
Conditional Threshold (COND) Select one (✓)	Rejected (0)				
	Agent Available 1~250				
	Calls in Threshold 1~699				
Call Waiting Thresholds - Light on (CWON) 0~700					
Call Waiting Thresholds - Light Flashes (CWFL) 0~700					
Stranded Calls CCV index (ST CCV NO) 1~2000					
Stranded Calls CCV Step (ST CCV STP) 1~20					
Call Recover Time (CRT) 0~255					
Analog Work Mode Timeout (A-WMT) 0~9999 seconds					
Hot Split (HSPL) Select one (✓)	Disabled (0)				
	Enabled (1)				
Agent Queuing Options (AGT_Q) Select one (✓)	No Priorities (0)				
	Priorities (1)				
Tally Required (PCS) Select one (✓)	Not Required (0)				
	Required (1)				
Auto Work Timeout (AWPRST) Select one (✓)	Allowed (0)				
	Restricted (1)				
Logoff Warning (LOFFW) Select one (✓)	Not Required (0)				
	Max. No. of agents (1~9)				
	No. of Calls in Queue (ALL)				

ACDLOG: Assignment of ACD Receiver ID Code

1. Function

This command is used to assign and remove the parameters of each ACD Logon ID.

2. Precautions

- (1) Each split determines whether ID codes are required for logging on. (See ACDSPL command.)
- (2) An ID code may be used at only one position at any given time. Multiple logs on from plural position with the same ID are not permitted.
- (3) Position data (defined with the ACDPSN command) and logon data (defined with the ACDLOG command) is used to specify the valid logon/position mode combinations. Valid modes are: SPLC = 0: any split/1: specific split(s); SPLIT: Available split to log on; MULTS: 0/1=Single/Multi. See the table “Programming Considerations” in ACDPSN command for detailed information.
- (4) If using Abacus MIS, the logon ID cannot exceed 4 digits.
- (5) When Agent Queuing Options (see SPLITS - ACD [S-91A] in CHAPTER 4) is available (AGT-Q=1 in ACDSPL), the valid entered in PRIO is used as the agent’s preference level. If not, the valid is used as the priority for taking calls terminated to multiple splits.
- (6) At the time of logon/logoff, the first 8 characters of a name registered by the “NAME” parameter are displayed on an agent position's LCD.
- (7) When a data is registered, modified, or deleted using the ACDLOG command while the LCDLOG command is executed, the result of the data exported with the list up command will not be guaranteed.

3. Parameters

ACDP:	Fixed to 0 (Not used)
TN:	Tenant Number (1 to 9)
LID:	Consists of one to nine digits (1 to 999,999,999) Note 1

Note 1: Use numbers 0-9. *, # may not be used. Leading zeros are not permitted in logon ID codes.

NAME:	(Optional) up to 14 characters
LANG:	0 = English 1 = Japanese 2 = Spanish 3 = Italian 4 = French 5 = German

SPLIT:	Available split to log on (1 - 900) Note 2
PRIO:	Priority for handling ACD calls in multiple splits/the agent’s preference level (1 ~ 99) Note 2

Note 2: Select the check box in order to assign SPLIT or PRIO. These parameters cannot be registered if this check box is not selected.

MULTS:	0/1=Single/Multi Note 3
--------	--------------------------------

Note 3: When more than one split number is defined and single logon is chosen (MULTS = 0), only one split must be specified for Agent logon.

ACDLOG : Assignment of ACD Receiver ID Code

PPN: Valid personal pilot number (SPACE: feature not used) (Two to six digits. Unify the number of digits.) **Note 4 Note 5**

Note 4: Use numbers 0-9. *, # may not be used. One-digit pilot number may not be assigned.

Note 5: When you assign the parameter of PPN, you can assign MXQD, GOCFNO, OVFT, and PCWCM.

MXQD: Queue depth for personal pilot number (0 ~ 999) **Note 6**

Note 6: Available for 0-9999 when additional method is used.

GOCFNO: CCV index (1 - 2000) **Note 7**

Note 7: When you assign the parameter of OVFT, you can assign GOCONO and GOCOSTP.

GOCFSTP: CCV step number (1 - 20)

OVFT: 0 ~ 9999 seconds; 0 = indefinite

GOCONO: CCV index (1 - 2000)

GOCFSTP: CCV step number (1 - 20)

PCWCM: 0=off/1=First/2=All time

PARN: Individual assistance number or SPACE (SPACE: Functional not used) (Two to six digits.) **Note 8**

PERN: Individual emergency number or SPACE (SPACE: Functional not used) (Two to six digits.) **Note 8**

Note 8: Use numbers 0-9. *,# may not be used. One-digit dial number may not be assigned.

NAMES: Abbreviated Name (Use all the initials of the user.)

Connection Displays Setting: Set Initial Value/Change Configuration **Note 9**

<Sequence of Display Processing>

When "Change Configuration" is specified for the Connection Displays Setting parameter, a maximum of 5 display items can be specified in the list.

Code:	Display ID code Note 10
	3: Time in queue (merged display)
	4: Time in queue (stand-alone display)
	5: Pilot number text (gateID)
	6: ANI digits received
	8: Answering split name
	9: Current queue depth and longest call time
Time:	Display duration in seconds Note 11
	0: Permanent Display
	3: 3 sec
	4: 4 sec
	5: 5 sec
	6: 6 sec
	7: 7 sec
	8: 8 sec
	9: 9 sec

Note 9: Available since FP95-112 V2.

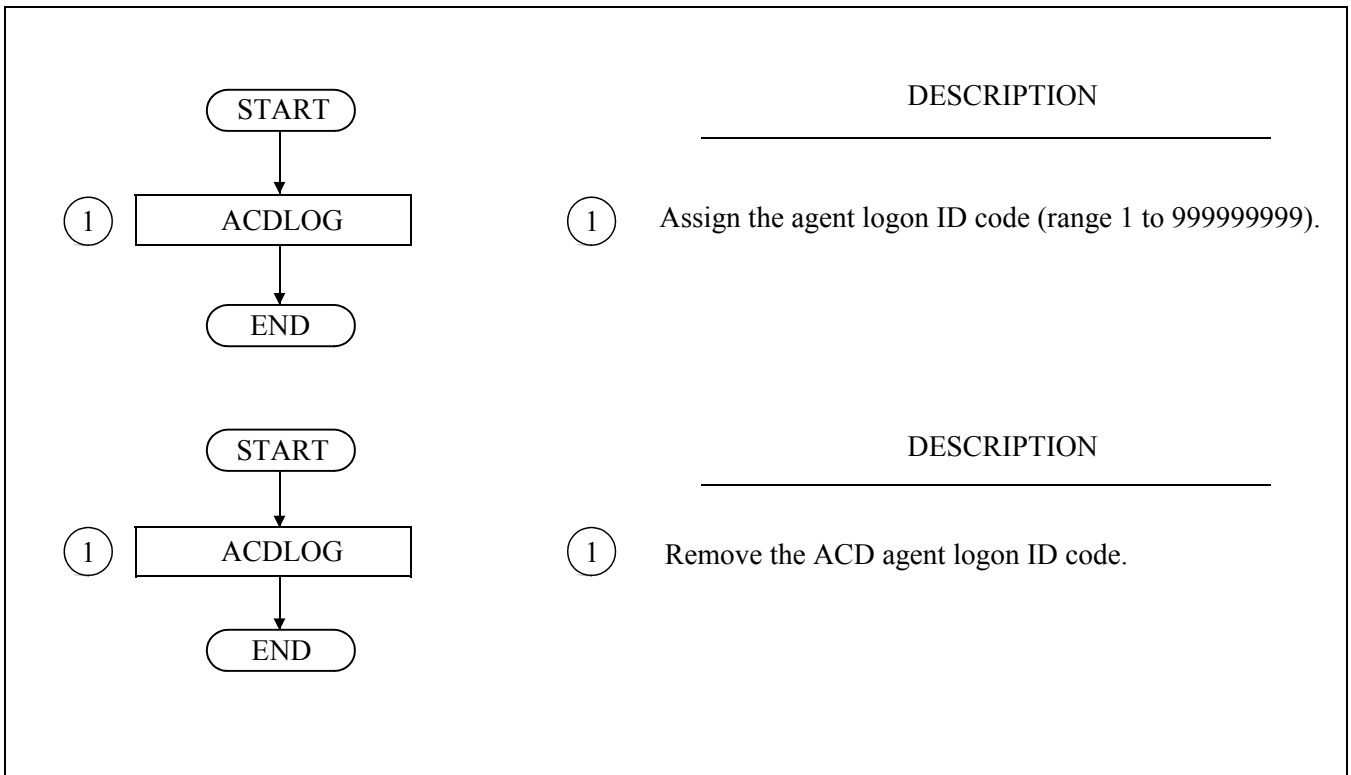
Note 10: "Time in queue (merged display)" cannot be defined as the first element of the Connection Display sequence.

Note 11: No display items can be added after the item that is set to be displayed permanently (Time=0).

4. Assignment and Deletion Procedure

These flow diagrams show the procedure used to assign and delete ACD Agent Logon Data.

Assigning and Removing ACD Agent Logon ID Code



ACDLOG : Assignment of ACD Receiver ID Code

ACD Logon Data Programming Sheet - 1

ACD Tenant (TN) 1 ~ 9					
Agent Logon ID (LID) Max. 9 digits					
Agent Logon ID Name (NAME) up to 20 characters					
Abbreviated Name (NAMES) up to 5 characters					
Language (LANG)	English (0)				
	Japanese (1)				
	Spanish (2)				
	Italian (3)				
	French (4)				
	German (5)				
Split Number (SPLIT) 1 ~ 900					
Priority (PRIO) 1 ~ 99					
Multi-Split (MULTS)	No (0)				
	Yes (1)				
Personal Assist Request No. (PARN) 2- 6 digits					
		Note 12			
Personal Emergency Request No. (PERN) 2- 6 digits					
		Note 12			
Personal Pilot Number (PPN) 2- 6 digits					
		Note 12			
Maximum Queue Depth (MXQD) 0 ~ 999					
CCV (For Word/Full)	CCV Index (GOCFNO) 1 ~2000				
	CCV Step (GOCFSTP) 1 ~ 20				
Overflow-Timeout (OVFT) 0 ~ 9999					
Goto CCV on Overflow	CCV Index (GOCONO) 1 ~2000				
	CCV Step (GOCOSTP) 1 ~ 20				
Call Waiting Chime (PCWCM)	Off (0)				
	First (1)				
	All (2)				
Connection Displays Setting	Set Initial Value				
	Change Configuration				

Note 12: Only digits 0-9 can be entered to these parameters (“*” and “#” are not available)

ACD Logon Data Programming Sheet - 2

Sequence of Display Processing	Number					
	Code					
	Time					

ACDPSN: Assignment of ACD Position Data

1. Function

This command is used to assign, display, print, and remove ACD position data. Each position is identified by the tenant it belongs to, the number of its ACD line and the Non-ACD line it may have, and what split(s) the position belongs to.

2. Precautions

- (1) The terms supervisor and agent are used as a convention but are not differentiated by the ACD system.
- (2) Any position may have a **NIGHT** key.
- (3) Removing positions removes them as ACD agents or supervisors. Positions still function as Non-ACD lines unless removed using ASDT/AISTL (see Command Manual).
- (4) If changing the Tenant Number, My Line number, or ACD line number with the ASDT/AISTL/ASTN commands (Node), the position must first be deleted using the ACDPSN command, before changes using the ASDT/AISTL/ASTN commands may be made. See the procedure below.
STEP 1: Delete the ACDPSN data of ACD agent/supervisory position to be changed the number.
STEP 2: Change the number using ASDT/AISTL or ALGSL/ALGSN.
STEP 3: Assign the changed number and other data in the ACDPSN data.
- (5) For maximum number of ACD positions per ACD system, see "2.3.3 ACD System Capacity" in CHAPTER 2.
- (6) If an invalid Node or ACD line number is programmed in ACDSPN, it may cause erroneous CW lamp problems.
- (7) There should only be two lines on an ACD position (the My line and the ACD line). If other lines are programmed on an ACD position, the MIS status may be incorrect.
- (8) Do not allow Call Pickup to ACD lines (may cause incorrect MIS status).
- (9) One of the following conditions must be agreed when using this command
 - ACD line number and Non-ACD line number is assigned using the ASDT/AISTL command
 - ACD line number and Non-ACD line number is assigned using the ALGSL command
 - ACD line number and Non-ACD line number is assigned using the ALGSN command
- (10) When assigning PTYPE is 2~4, data entry to ACDL is not necessary. The Non-ACD line number assigned in NACD is automatically entered in ACDL in this case.

(11) The relationship between ACDLOG and ACDPSN is shown in the table below.

Programming Considerations

		LOGON TO A SPECIFIC SPLIT		LOGON TO MULTIPLE SPLITS	
ACDPSN	ACLOG	MULTS=0 (Single logon) Max.4 split is programmed in SPLIT	MULTS=0 (Single logon) No split No. is programmed in SPLIT	MULTS=1 (Multi logon) Max.4 split is programmed in SPLIT	MULTS=1 (Multi logon) No split No. is programmed in SPLIT
		SPLC=1 (SPECIFIED)	If Logon ID list contains the Specified Split in ACDPSN, the Agent <u>will be ALLOWED</u> to Log on to the system.	The Specified Split in ACDPSN <u>will be ALLOWED</u> to Log on to the system.	If one of the splits on the list is allowed by ACDPSN, <u>ALL SPLITS ARE SERVICED.</u>
	SPLC=0 (ANY SPLITS)	System prompts for a Split, from ACDLOG. <u>Agent must select one Split from the list.</u>	Not valid, <u>WILL NOT ALLOW LOGON</u> to the system.	<u>Will Allow Logon to the Splits allowed in ACDLOG.</u>	Not valid, <u>WILL NOT ALLOW LOGON</u> to the system.

(12) After changing of the split number (SPL1 parameter) of the agent position logging on to the ACD system, log off the agent position and on again to allow the new split number to take effect, by pressing the **LOG ON/OFF** key.

In case of Hot position, delete the whole agent position data of the agent which you want to change its split number once and then assign new split number and other related data, by this command.

(13) A maximum of 1,524 supervisory and agent positions are allowed per LP in ACD system.

3. Parameters

- ACDP: Fixed to 0 (Not used)
- TN: Tenant Number (1 to 9 or 10)
- NACD: Number of Non-ACD line [My Line (two to six digits)] **Note 1**
- ACDL: Number of ACD Line [Virtual Line (two to six digits)] **Note 1**

Note 1: Use numbers 0-9. *,# may not be used. 1stDC="0" may not be used. One-digit station number may not be assigned.

- PTYPE: Type of ACD Position (0 ~ 6)
 - 0: Agent Position
 - 1: Supervisory Position
 - 2: Analog Agent Position
 - 3: Analog Supervisory Position
 - 4: Hot Split **Note 2**
 - 6: Standard SIP-IVR Extension **Note 2**

Note 2: When PTYPE: 4 (Hot Split) or PTYPE: 6 (Standard SIP-IVR Extension) is selected, assign HSPL=1 (Hot Split: Yes) with the ACDSPL command.

ACDPSN : Assignment of ACD Position Data

SPLC: Any or specified specific split
0: Any split
1: Specified

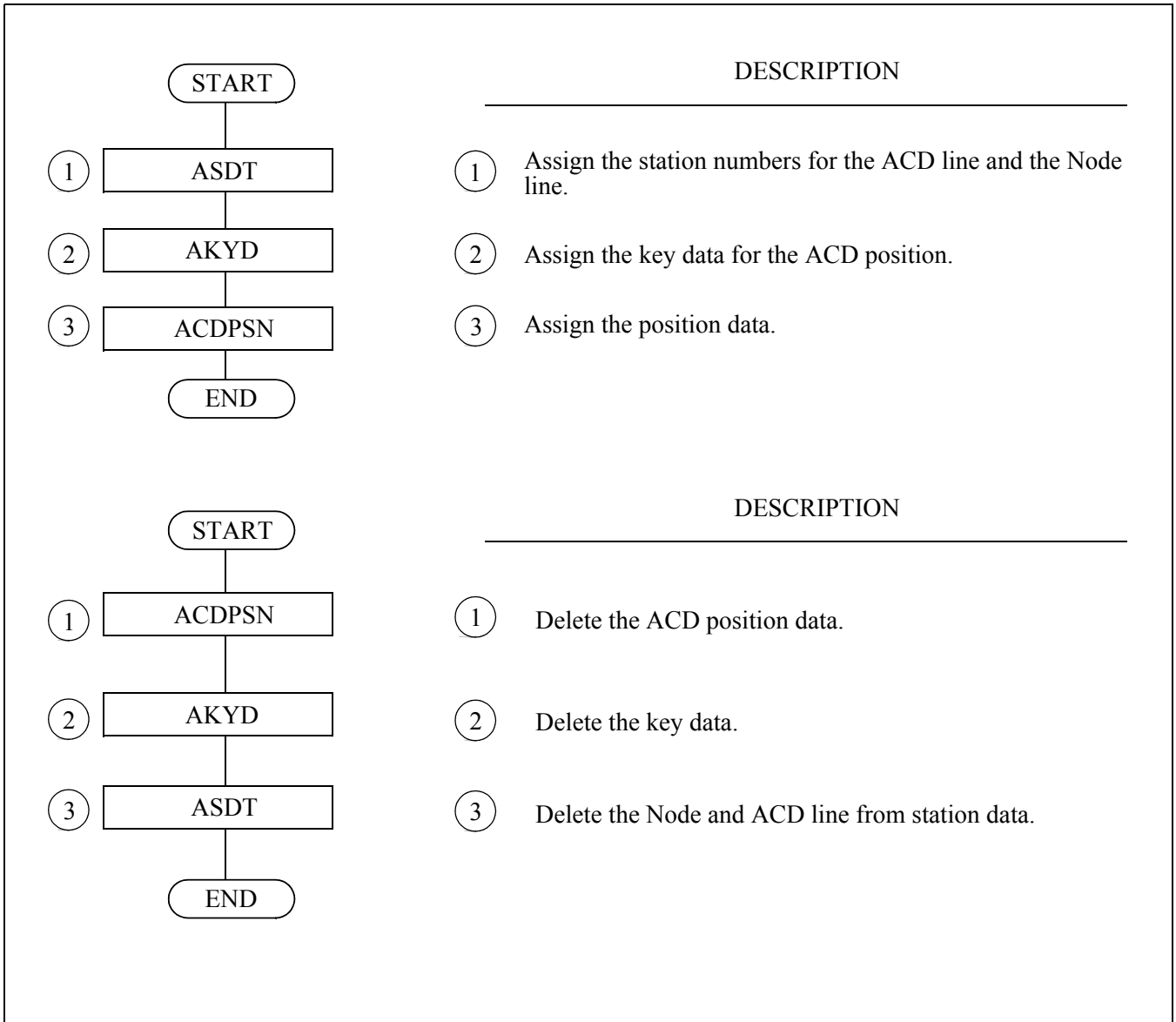
SPL1: Split Number (1 ~ 900)
(only used if SPLC=1)

The List up program will scan both My-Line and ACD line positions within the range designated in the List up command.

4. Assignment and Deletion Procedure

These flow diagrams show the procedure used to assign and delete ACD Agent Position data

Assigning and Removing ACD Position Data.



ACD Position Data Programming Sheet

ACD Tenant (TN) 1 ~ 9 or 10					
Line Numbers-Node (NACD) Note 3					
Line Numbers-ACD (ACDL) Note 3					
Type of Agent Position (PTYPE) 0 ~ 6	Agent Position (0)				
	Supervisory Position (1)				
	Analog Agent Position(2)				
	Analog Supervisory Position(3)				
	Hot Split(4)				
	Standard SIP-IVR Extension(6)				
Any or Specified Specific Split (SPLC)	Any Split(0)				
	Specified(1)				
Split Number (SPL1) 1 ~ 900					

Note 3: Only digits 0-9 can be entered to these parameters (“*” and “#” are not available).

ACDCCV: Assignment of ACD CCV Data

1. Function

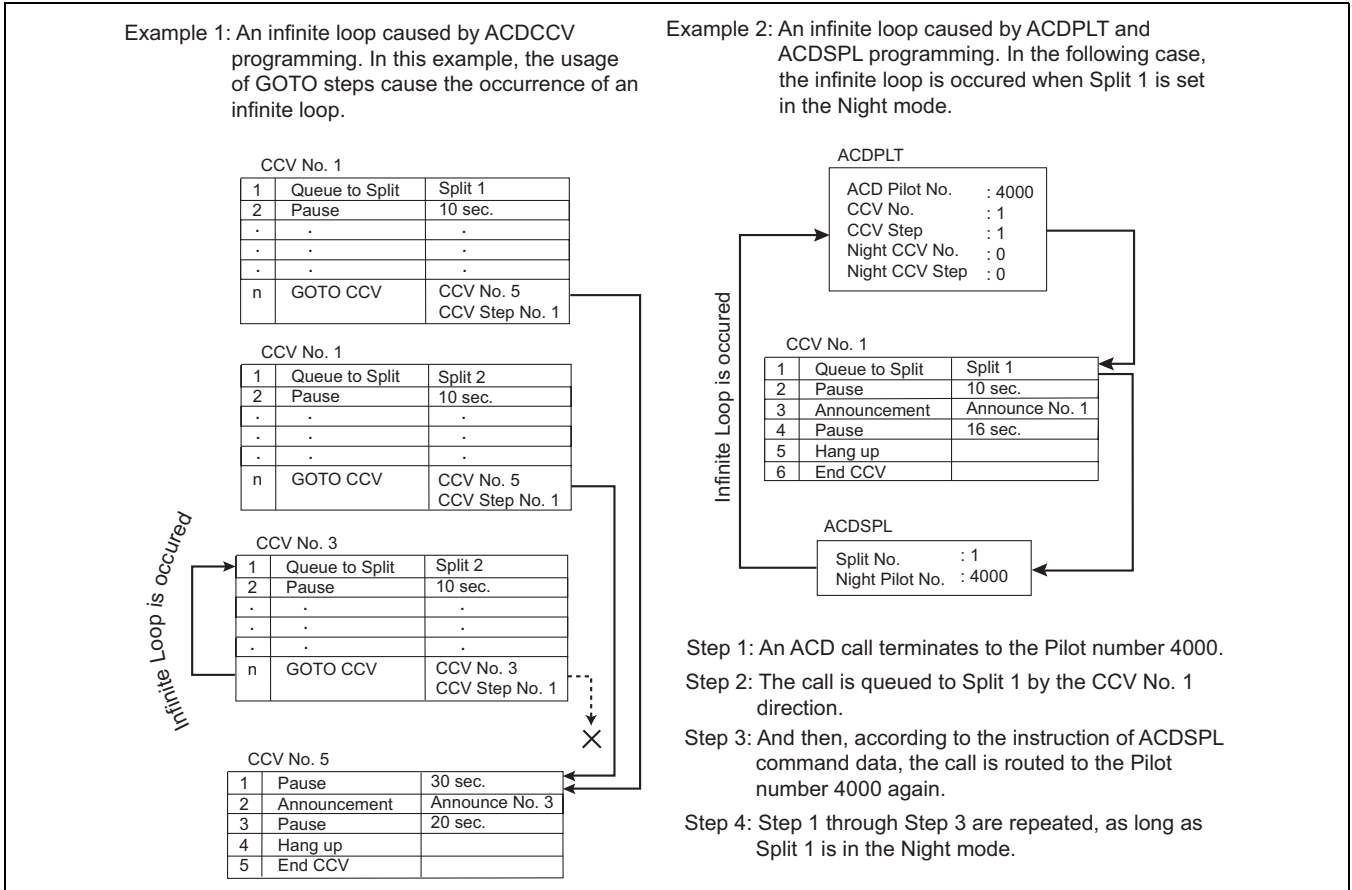
This command is used to assign, display, print, and remove Call Control Vectors. A Call Control Vector is a list of procedural instructions (or steps) for handling incoming ACD calls. The instructions defined by the Call Control Vector are sentence-based and can be combined to form many different sequences. Call Control Vectors provide the following functions for the ACD:

- Queue a call to a particular split.
- Pause for “n” seconds before continuing call processing.
- Announcement made during call processing (Node and IVR).
- Hang up during call processing.
- Transfer to a particular directory number.
- Set a new priority or increase or decrease a call’s priority (new priority).
- Conditionally queue an incoming call to a particular split.
- Remove a call from a split’s queue (dequeuing).
- Queue to another split if the queue depth is full.
- Go to another CCV index step.
- Change priority of call at given point in the CCV.
- Skip a percentage of the calls going to the next step in the CCV.
- Conditionally perform next CCV instruction based on Estimated Time to Answer (ETA) or Estimated Waiting Time to Answer (EWTA) of a call.
- Conditionally perform next CCV instruction based on ETA or EWTA of a call in another split.*
- Individual IVR port number.
- Delay the time for ringing start.

2. Precautions

- (1) When a call rings at an Agent’s position, the call will not continue through the CCV steps because the call is considered complete.
- (2) Maximum number of splits which an incoming ACD call can be queued to (accomplished by any combination of CCVACT=10 (**QUEUE TO**) and 8 (**COND. QUEUE**) steps) is 10.
- (3) A CCV can be used to define how an incoming call is handled at any time by programming the ACD Week Schedule (ACDWS) and/or the ACD Holiday Schedule (ACDHS) commands.
- (4) It is recommended that CCVACT=1 (**PAUSE**) step be programmed after CCVACT=2 (**ANNOUNCEMENT**) step, and that CCVACT=1 (**PAUSE**) be programmed at least as long as CCVACT=2 (**ANNOUNCEMENT**).
- (5) The same CCV number can not be assigned to multiple ACD tenant numbers.

- (6) The call is controlled by the CCV for a long time by programming multiple PAUSE steps (CCVACT=1). However, we do not recommend a configuration where the total time of plural PAUSE steps exceeds 999 seconds in a CCV.
- (7) When creating a flow of incoming ACD call processing, use extreme care that the ACDPLT and ACD-SPL commands do not cause an infinite loop in the flow.



- (8) My Line number of Analog ACD position cannot be assigned as a transfer destination for **TRANSFER** step (CCVACT=5).
- (9) The following instructions cannot be assigned to Step 19 and 20.
 - QUEUE greater (CCVACT=23)
 - LOGON less (CCVACT=24)
 - READY less (CCVACT=25)
 - WORKING-AGENTS greater (CCVACT=26)
 - EWTA less (CCVACT=27)
 - EWTA greater (CCVACT=28)
 - Split < EWTA less (CCVACT=29)
 - Split >= EWTA greater (CCVACT=30)

- (10) When the unregistered split number is assigned to the “Split” parameter for QUEUE less/LOGON less/READY less/WORKING-AGENTS greater instructions, the result of each instruction is forced to be a follows:
- QUEUE greater → False
 - LOGON less → True
 - READY less → True
 - WORKING-AGENTS greater → False
- (11) When two or more brackets () are assigned in a CCV, each brackets () must be appended. When more than three steps are enclosed in brackets (), these steps are proceeded in normal order.

CAUTION

Changing a CCV while calls are in progress creates unpredictable results. CCV changes should be made during low traffic periods. Alternatively, a new CCV can be created first and then the pilot number can be changed to route to the new CCV.

3. Parameters

ACDP:	Fixed to 0 (Not used)
TN:	1-9
CCVNO:	1-2000
CCVSTP:	1-20
CCVACT:	See “CCV Parameters”.
CCVACT DATA:	See “CCV Parameters”.
GOCCV:	CCV index number only used for CCVACT=3 (1-2000) only used for CCVACT=12 (0-2000)
GOSTP:	CCV step number only used for CCVACT=3 (1-20) only used for CCVACT=12 (0-20)
TRFDC:	Each represents a Node number with a maximum of 22 digits * used for CCVACT=5
IVRDN:	IVR Access number (max.6 digits) * used for CCVACT=20 Note 1
Split:	Split Number* used for CCVACT=21-26, 29, and 30 For CCVACT=21 and 22: 1-900 For CCVACT=23~26: 1-900 For CCVACT=29 and 30: 1-900 Note 2
ETA:	ETA threshold value in a specified split (1-9999)* used for CCVACT=21, 22
COMP:	Comparable Threshold Value for a specified split * used for CCVACT=23-26 For CCCVACT=23 (0-100) Note 3 For CCVACT=24 and 25 (1-100) Note 3 For CCVACT=26 (0-500%) (at intervals of 10%)
COND:	Condition for the Combination with the previous step (0/1=AND/OR) * used for CCVACT=23-26
BRAC:	Bracket (0/1=Not used/Used) * used for CCVACT=23-26
EWTA:	EWTA threshold value in a specified split (1 ~ 9999) used for CCVACT=29 or 30 Note 4

Note 1: Available in North America only.

Note 2: If ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), assign Split in the range of 1 to 127.

Note 3: For the values 20 or smaller: Any number from 0/1 to 20 (0/1, 2 ... 20)
For the values 22 or larger: at intervals of 2 (22, 24 ... 100)

Note 4: If ACDP retrofit is enabled (ASYDL, SYS1, Index 1193, Bit 7=1), assign EWTA in the range of 1 to 511.

CCV Parameters (1/3)

CCVACT		CCVACT DATA	Remarks
0	Blank	–	Vacant for the future use
1	Pause	1-999 sec.	Waiting time before the next step
2	Announcement	Announce No. (1-200) Note 10	Delay Announcement/Announcement service in Night mode/Announcement service on holidays, etc.

ACDCCV : Assignment of ACD CCV Data

CCVACT		CCVACT DATA	Remarks
3	Jump CCV	(See “GOCCV” and “GOSTP”)	For repeated use
4	Hang up	–	Forced to release
5	Transfer	(See “TRFDC”)	Ex. Dialed number of destination station in the night mode. Note 5
6	Priority order change	Queue number (1-250)	
7	Priority order up	Queue level to make priority order high (1-250)	
8	Conditional Queue Assign	Split number (1-900)	Split number of destination Note 6
9	Queue Delete	Split number (0-900)	The queue is deleted at the originally called split Note 7
10	Queue Assign	Split number (1-900)	
11	End CCV	–	CCV is finished
12	Jump CCV step when the queue is busy	(See “GOCCV” and “GOSTP”)	When all operators in the split are busy, jump to the designate CCV no. and/or CCV step no. Note 8
13	Skip CCV step Note 11	Percent of the skip (1-99)	The next CCV step is skipped for a specified percentage of queued calls.
14	Not used	-	
15	ETA less	ETA threshold value (1-9999)	When ETA value is less than the predetermined threshold value, shift to the next step
16	ETA greater	ETA threshold value (1-9999)	When ETA value is over the predetermined threshold value, shift to the next step
17	Ring Delay	Delayed time to ringing (1-15 sec.)	See “RING DELAY - ACD [R-145A]”.
18	Short Stroke Count	Stroke Count No. (1-9999)	Stroke Count number used for notifying the application of CCV route
19	Long Stroke Count	Stroke Count No. (10000-99999999)	Stroke Count number used for notifying the application of CCV route *Set a Blank instruction in the next step since two lines are required for CCVSTP.
20	IVRDN Note 9	(See “IVRDN”)	<i>*This step must be assigned before IVR announcement.</i>
21	Split < ETA less	(See “SPLIT” and “ETA” to be programmed Split < ETA less)	When ETA value is less than the predetermined threshold value and in the predetermined split, shift to the next step.

Note 5: The number can be assigned here is a telephone number of outside party (LCR method), station number, or Individual Attendant Identification Number. The calls can be transferred without the restriction of tandem connection limit.

Note 6: For details of each parameter's meaning, see "[C-108A] Call Control Vector-ACD" in Section 3, CHAPTER 4.

Note 7: Valid for Overflow service

Note 8: This step is available even for the split which restricts the queuing by "DO NOT DISTURB-SPLIT-ACD [D-133A]" feature.

Note 9: Available in North America only.

Note 10: Specify an announcement number in the range of 1 to 58 when:

- Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0).

Note 11: You can use this instruction step up to 128 times across all of the Call Control Vectors.

CCV Parameters (2/3)

CCVACT		CCVACT DATA	Remarks
22	Split >= ETA greater	(See "SPLIT" and "ETA" to be programmed Split >= ETA greater)	When ETA value is greater than the predetermined threshold value and in the predetermined split, shift to the next step.
23	QUEUE greater	Split: Split No. (1-900) COMP: Threshold Value (0-100) Note 12 COND: Condition for the Combination (0/1=AND/OR) BRAC: Bracket (0/1=Not used/Used)	This instruction determines whether the next CCV step is executed or skipped by comparing the number of the calls in queue for a specified split and the threshold value. If the number of the calls in queue is greater (less) than the threshold, the next CCV step is executed (skipped). For more details, see CALL CONTROL VECTOR - ACD [C-108A].
24	LOGON less	Split: Split No. (1-900) COMP: Threshold Value (1-100) Note 12 COND: Condition for the Combination (0/1=AND/OR) BRAC: Bracket (0/1=Not used/Used)	This instruction determines whether the next CCV step is executed or skipped by comparing the number of the log-on agents for a specified split and the threshold value. If the number of the log-on agents is less (greater) than the threshold, the next CCV step is executed (skipped). For more details, see CALL CONTROL VECTOR - ACD [C-108A].
25	READY less	Split: Split No. (1-900) COMP: Threshold Value (1-100) Note 12 COND: Condition for the Combination (0/1=AND/OR) BRAC: Bracket (0/1=Not used/Used)	This instruction determines whether the next CCV step is executed or skipped by comparing the number of the agents in Ready mode for a specified split and the threshold value. If the number of the agents in Ready mode is less (greater) than the threshold, the next CCV step is executed (skipped). For more details, see CALL CONTROL VECTOR - ACD [C-108A].

ACDCCV : Assignment of ACD CCV Data

CCVACT		CCVACT DATA	Remarks
26	WORKING-AGENTS greater	Split: Split No. (1-900) COMP: Threshold Value (0-500%) (at intervals of 10%) Note 13 COND: Condition for the Combination (0/1=AND/OR) BRAC: Bracket (0/1=Not used/Used)	This instruction determines whether the next CCV step is executed or skipped by comparing the number of the calls in queue for a specified split and the Variable Queue Depth calculated from the threshold value (%). If the number of the calls in queue is greater (less) than the Variable Queue Depth, the next CCV step is executed (skipped). For more details, see CALL CONTROL VECTOR - ACD [C-108A].

Note 12: For the values 20 or smaller: Any number from 0/1 to 20 (0/1, 2... 20)
For the values 22 or larger: at intervals of 2 (22, 24... 100)

Note 13: This value (%) must always be smaller than the value (%) assigned to the QUEUE parameter (maximum queue depth) of the ACDSPL command.

CCV Parameters (3/3)

CCVACT		CCVACT DATA	Remarks
27	EWTA less Note 14	EWTA threshold value (1-9999)	When Estimated Waiting Time to Answer (EWTA) of a split where an incoming call is queuing is less than a threshold, the next step is executed. If not, the next step is skipped. Note 15
28	EWTA greater Note 14	EWTA threshold value (1-9999)	When Estimated Waiting Time to Answer (EWTA) of a split where an incoming call is queuing is greater than or equal to a threshold, the next step is executed. If not, the next step is skipped. Note 15
29	Split < EWTA less Note 14	(See "SPLIT" and "EWTA" to program Split < EWTA less)	When Estimated Waiting Time to Answer (EWTA) of a specified split is less than a threshold that is set for Split < EWTA less, the next step is executed. If not, the next step is skipped. No need to assign "QUEUE TO SPLIT" or "CONDITIONAL QUEUE TO SPLIT" because a split can be specified.
30	Split >= EWTA greater Note 14	(See "SPLIT" and "EWTA" to program Split >= EWTA greater)	When Estimated Waiting Time to Answer (EWTA) of a specified split is greater than or equal to a threshold that is set for Split >= EWTA greater, the next step is executed. If not, the next step is skipped. No need to assign "QUEUE TO SPLIT" or "CONDITIONAL QUEUE TO SPLIT" because a split can be specified.

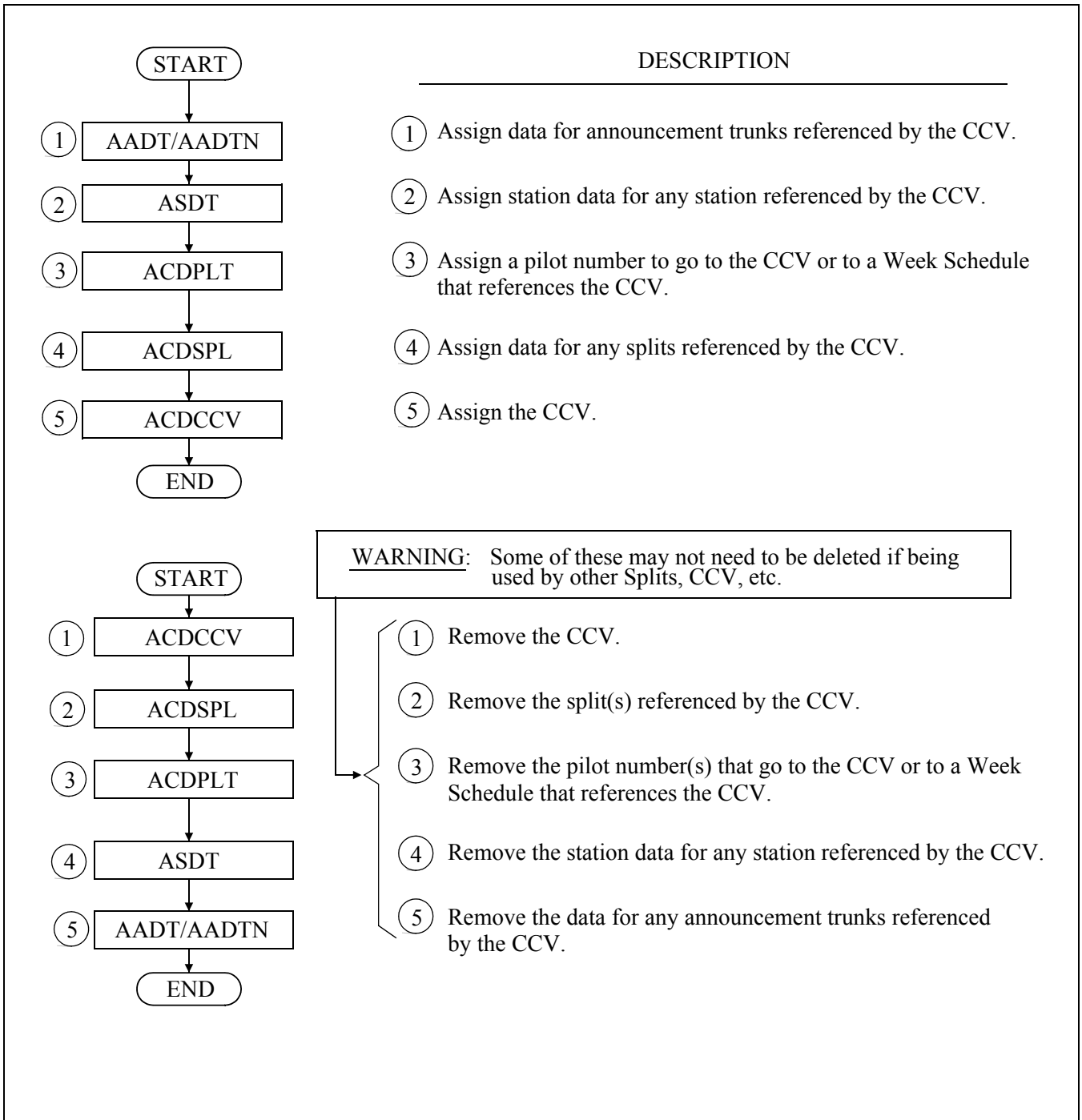
Note 14: EWTA less, EWTA greater, Split < EWTA less and Split >= EWTA greater cannot be placed on CCV step 19 and 20. These must be placed on a CCV step from 1 to 18.

Note 15: The shortest Estimated Waiting Time to Answer (EWTA) among splits where an incoming call is queuing is used for the comparison. "QUEUE TO SPLIT" or "CONDITIONAL QUEUE TO SPLIT" step must be assigned before the EWTA greater/less step.

4. Assignment and Deletion Procedure

These flow diagrams show the procedure used to assign and delete Call Control Vectors.

Assigning and Removing Call Control Vectors



ACDCCV : Assignment of ACD CCV Data

ACD Call Control Vectors Data Programming Sheet

ACD Tenant (TN) 1 ~ 9	CCV Index (CCVNO) 1 ~ 2000	Remarks

CCV Step (CCVSTP) 1 ~ 20	CCV Step Type (CCVACT) 0 ~ 30 Note 16	CCV Step Parameter (CCVACTDATA)	Jumped CCV	
			Index (GOCCV) Note 17	Step (GOSTP) Note 18
STEP 1				
STEP 2				
STEP 3				
STEP 4				
STEP 5				
STEP 6				
STEP 7				
STEP 8				
STEP 9				
STEP 10				
STEP 11				
STEP 12				
STEP 13				
STEP 14				
STEP 15				
STEP 16				
STEP 17				
STEP 18				
STEP 19				
STEP 20				

Note 16: CCVACT is from 0 to 30.

Note 17: For CCVACT=3, the data valid is 1~2000.
For CCVACT=12, the data valid is 0~2000.

Note 18: For CCVACT=3, the data valid is 1~20.
For CCVACT=12, the data valid is 0~20.

ACDPLT: Assignment of ACD Pilot Number Data

1. Function

This command is used to assign, display, print, and remove ACD pilot data. This consists of a pilot number that designates the pilot to which ACD calls are routed and the Call Control Vector call processing path to be taken. Internal and Transfer Priorities can be designated as well as an optional pilot name.

2. Precautions

Note: Pilot Number is the same number programmed in AMNO or AMNON.

Note: Personal Pilot Numbers are not programmed in ACDPLT.

- (1) A Call Control Vector is a list of instructions describing the procedure to be used in handling an individual call. Call processing steps are determined by the pilot number. Pilot numbers associate the call processing procedure with a Call Control Vector. Additional information about CCV programming can be found under ACDCCV.
- (2) Pilot numbers should be assigned as monitor numbers (see AMNO or AMNON in this chapter).
- (3) Different pilot numbers can route to the same CCV or Week Schedule and use different priorities.
- (4) If an invalid pilot number is assigned, it may cause the Call Recover feature not to work.
- (5) For a maximum number of pilots in a ACD system, see “2.3.3 ACD System Capacity” in CHAPTER 2.
- (6) One-digit ACD pilot number can not be assigned.
- (7) To enable the switching function of operation patterns, see PATTERN SWITCHING FOR PILOT NUMBER GROUP - ACD [P-88A].
- (8) ACD Pilot Numbers can be assigned up to 8000 (when ACDP Retrofit is enabled, up to 4000 can be assigned).
- (9) In case of using the incoming call limit number feature, see ACD INCOMING PILOT NUMBER RESTRICTION - ACD [A-145A]. **Note 1**

Note 1: This feature is available since FP95-112 V2.

3. Parameters

TN: Tenant Number (1 to 9)
M_NO: The number used for the pilot in ACD call routing (The number of digits for each pilot number must be the same.) (2 to 6 digits) **Note 1**

Note 1: Use numbers 0-9. *,# cannot be used. 1stDC="0" cannot be used.

ACDP: Fixed to 0 (Not used)
NAME: ACD Pilot Number Name, up to 20 characters. **Note 2**
TRKPRI: Priority at which ACD trunk calls are queued (1 to 250).
INPRI: Priority with which internal calls are queued (1 to 250).
TRPRI: Priority at which transferred calls are queued (1 to 250).

Note 2: This data setting is necessary to use Infolink Data Messages providing a two-way communications link between the ACD and external computer equipment.

Use the Switching Function of Operation Pattern **Note 3**

Check the box when PATTERN SWITCHING FOR PILOT NUMBER GROUP - ACD [P-88A] is intended to be activated.

Note 3: This parameter is displayed only when Pattern Switching for Pilot Number Group feature is valid. For more information on the conditions to enable Pattern Switching for Pilot Number Group feature, contact NEC maintenance personnel.

PLTG: Pilot Group Number (1-250) **Note 4**

Note 4: This parameter is displayed only when “Use the Switching Function of Operation Pattern” is checked.

<Pattern A>

The followings are the parameters for Pattern A when Pattern Switching for Pilot Number Group feature is enabled:

CCV/W **Note 5:** 0 = CCV
1 = Week Schedule

Note 5: When CCV/W = 0, CCVNO, CCVSTP, N_CCVNO, and N_CCVSTP can be assigned. Also, when CCV/W = 1, WEEKNO can be assigned.

CCVNO: CCV index number (1-2000)
CCVSTP: CCV step number (1-20)
N_CCVNO: Night CCV Index (1-2000) **Note 6**
0: feature not used
N_CCVSTP: Night CCV step number (1-20) **Note 6**

Note 6: Both N_CCVNO and N_CCVSTP cannot be assigned as “1” at the same time. If Night CCV is not used, assign N_CCVNO = 0 (default setting).

WEEKNO: Week Schedule number (1-900) **Note 7**

Note 7: The same Week Schedule number cannot be assigned to different ACD tenant numbers (TN). For example, WEEKNO = 9 cannot be assigned to the both ACD tenant numbers 1 and 2.

<Pattern B>

The followings are the parameters for Pattern B when Pattern Switching for Pilot Number Group feature is enabled. **Note 8**

Note 8: Pattern B can be selected only when “Use the Switching Function of Operation Pattern” is checked.

ACDPLT : Assignment of ACD Pilot Number Data

CCV/W_B **Note 9:** 0 = CCV for Pattern B
1 = Week Schedule for Pattern B

Note 9: When CCV/W_B = 0, CCVNO_B, CCVSTP_B, N_CCVNO_B, and N_CCVSTP_B can be assigned.

When CCV/W_B = 1, WEEKNO_B can be assigned.

CCVNO_B: CCV index number (1-2000) for Pattern B
CCVSTP_B: CCV step number (1-20) for Pattern B
N_CCVNO_B: Night CCV Index (1-2000) for Pattern B **Note 10**
0: feature not used
N_CCVSTP_B: Night CCV step number (1-20) for Pattern B **Note 10, Note 11**

Note 10: Both N_CCVNO_B and N_CCVSTP_B cannot be assigned as "1" at the same time. If Night CCV is not used, assign N_CCVNO_B = 0 (default setting).

Note 11: This parameter can be assigned when a value assigned to N_CCVNO_B is equal to or more than 1.

WEEKNO_B: Week Schedule number (1-900) for Pattern B **Note 12**

Note 12: The same Week Schedule number cannot be assigned to different ACD tenant numbers (TN). For example, WEEKNO_B =9 cannot be assigned to the both ACD tenant numbers 1 and 2.

Use the Incoming Call Limitation Service

Select the check box to use ACD INCOMING PILOT NUMBER RESTRICTION - ACD [A-145A].

Note 13

Note 13: The check box is only displayed when ACD INCOMING PILOT NUMBER RESTRICTION - ACD [A-145A] is enabled.

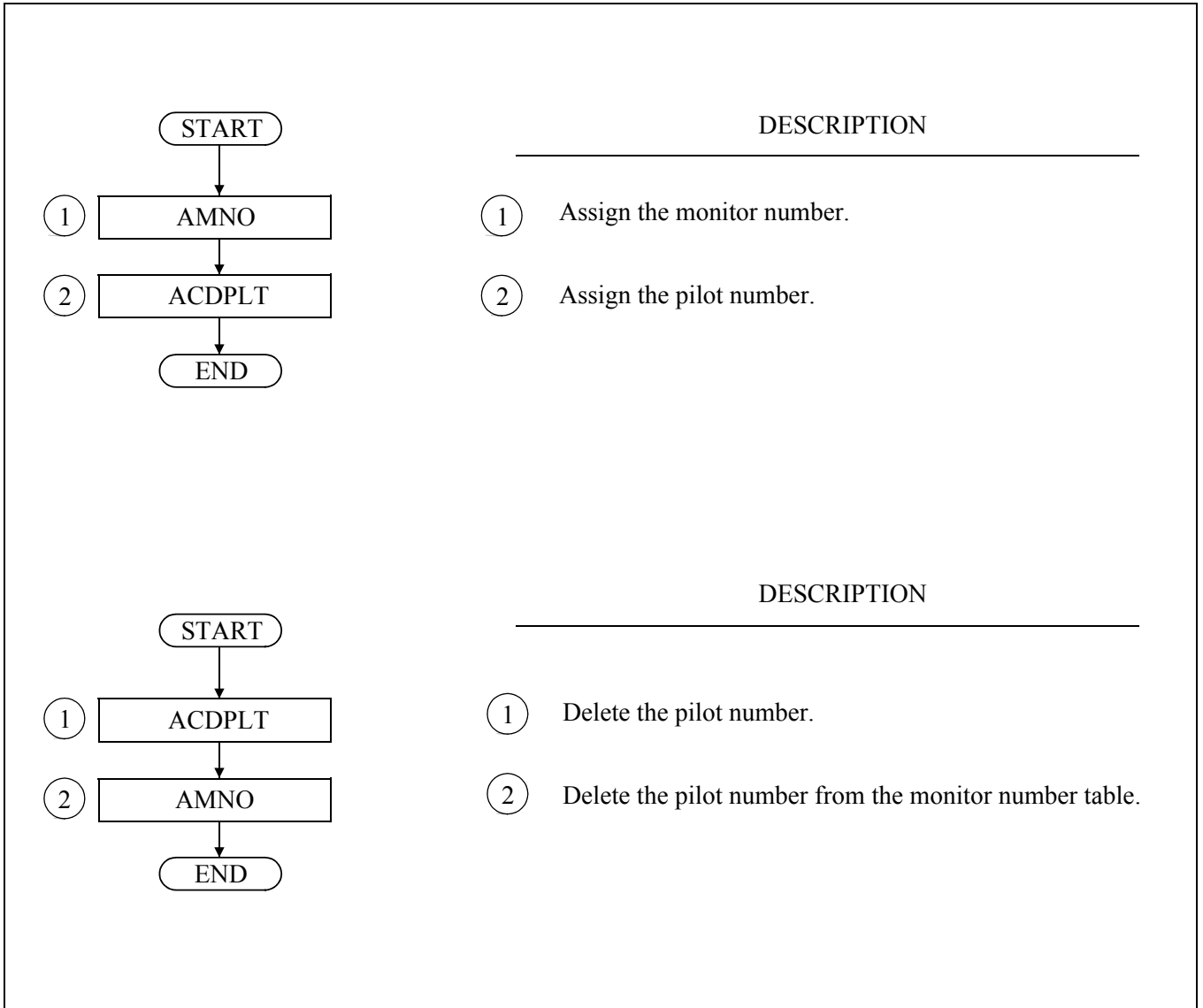
INCLMT: Incoming Call Limit Number (1-20000) **Note 14**

Note 14: The entered value will be used only if Use the Incoming Limitation Service is selected. If not, the feature will be set to the value 0 (new calls are not restricted).

4. Assignment and Deletion Procedure

These flow diagrams show the procedure used to assign and delete ACD pilot data.

Assigning and Removing ACD Pilot Data



ACD Pilot Data Programming Sheet

ACD Tenant (TN) 1 ~ 9				
Pilot No. (M_NO) Note 15				
Pilot Name (NAME)				
Trunk Priority (TRKPRI) 1 ~ 250				
Internal Priority (INPRI) 1 ~ 250				
Transfer Priority (TRPRI) 1 ~ 250				
Use the Switching Function of Operation Pattern		Check / Uncheck	Check / Uncheck	Check / Uncheck
Pilot Group Number (PLTG) 1 ~ 250				
Route to Method (CCV/W)	0: CCV			
	1: Week Schedule			
CCV Index (CCVNO) 1 ~ 2000				
CCV Step (CCVSTP) 1 ~ 20				
Alternate Night CCV	Night CCV Index (N_CCVNO) 0 ~ 2000			
	Night CCV Step (N_CCVSTP) 1 ~ 20			
Week Schedule number (WEEKNO) 1 ~ 900				
Route to Method for Pattern B (CCV/W_B)	0: CCV for Pattern B			
	1: Week Schedule for Pattern B			
CCV Index for Pattern B (CCVNO_B) 1 ~ 2000				
CCV Step for Pattern B (CCVSTP_B) 1 ~ 20				
Alternate Night CCV for Pattern B	Night CCV Index for Pattern B (N_C-CVNO_B) 0 ~ 2000			
	Night CCV Step for Pattern B (N_C-CVSTP_B) 1 ~ 20			
Week Schedule number for Pattern B (WEEKNO_B) 1 ~ 900				
Use the Incoming Call Limitation Service		Check / Uncheck	Check / Uncheck	Check / Uncheck

ACD Pilot Data Programming Sheet

Incoming Call Limit Number (INCLMT) 1 ~ 20000			
--	--	--	--

Note 15: Only digits 0-9 (“*” and “#” are not available). One-digit pilot number may not be assigned.

ACDPG: Assignment of ACD Pilot Group Number Operation Data

1. Function

This command is used to read or assign the operation mode of each ACD Pilot Group Number.

Note: This command is not available in North America.

2. Precautions

- (1) When this command is assigned, the operation patterns of each Pilot Group Number is read automatically.
- (2) To enable the switching function of operation patterns, see PATTERN SWITCHING FOR PILOT NUMBER GROUP - ACD [P-88A].
- (3) The operation pattern of the Pilot Number that is in the “Not Used” status cannot be switched.

3. Parameters

Operation Pattern of each Pilot Group Number

The operation mode of each Pilot Group Number is indicated by the following colors:

White:	Not Used
Aqua:	Pattern A
Yellow:	Pattern B

Range of write

Individual
All

PLTG: Pilot Group Number (1 - 250)

Note: This parameter is displayed when “Individual” is selected for Range of write.

Operation Pattern

Pattern A
Pattern B

ACDTG: Assignment of ACD Trunk Group Data

1. Function

This command is used to assign, display, print, and remove ACD trunk group data. This data includes queue priority, circuit quantity, and an optional trunk group name.

2. Precautions

- (1) If ACD circuits are not assigned they will not report to the MIS.
- (2) Queue Priority for ACD trunk are programmed in ACDTG.

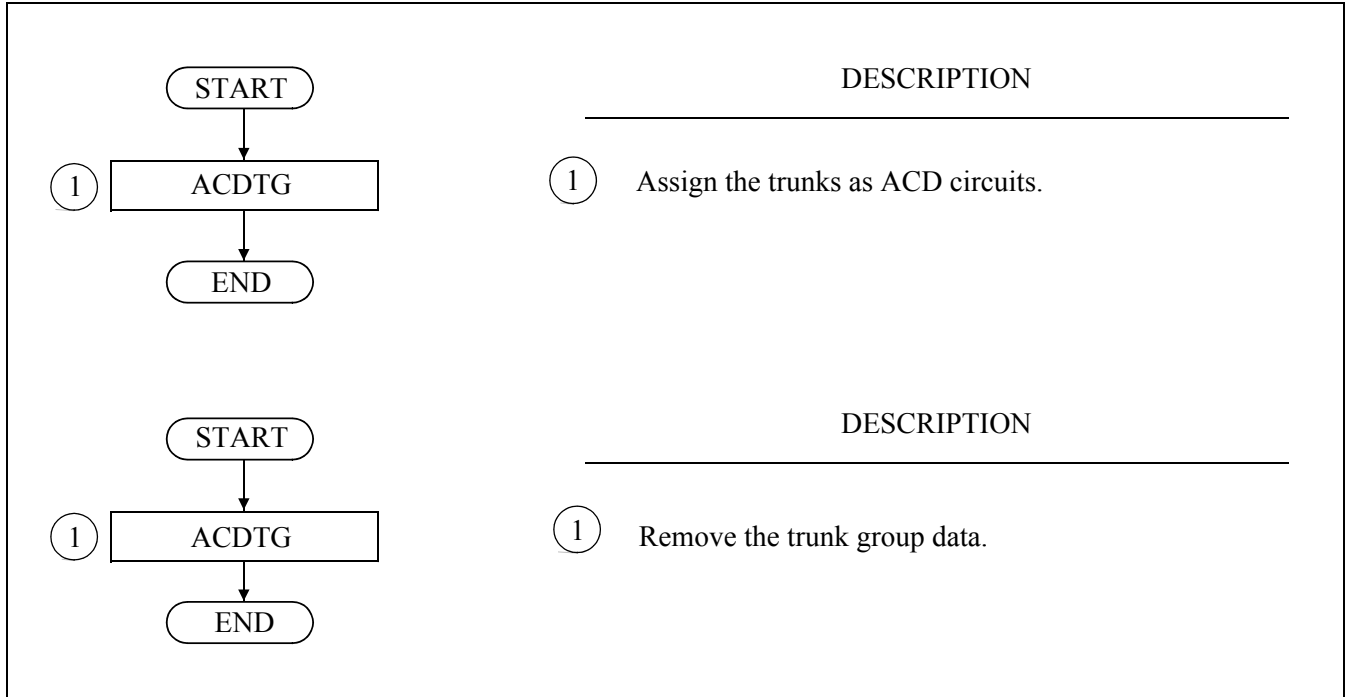
3. Parameters

ACDP: Fixed to 0 (Not used)
 TN: Tenant Number (1 ~ 9) 0: indicates all tenants
 ACDRT: Trunk Group Number (Rt. Number) (1 to 898)
 NAME: Trunk Group (Rt.) Name (optional, up to 20 characters).
 Only 12 will show on ACD position.
 QPRTY: Priority (1 to 250)
 TRK: Trunk Numbers (1 ~ 255)

4. Assignment and Deletion Procedure

These flow diagrams show the procedure used to assign and delete ACD trunk group data.

Assigning and Removing ACD Trunk Group Data



ACDANA: Assignment of ACD Analog Split Access Code

1. Function

This command is used to assign, display, print, and remove ACD Analog Agent access code data. These access codes enable agents using analog phones to perform many ACD features including logging on (with or without an ID), logging off, going into Ready, Work, and Break modes, entering tally codes, and reporting trunk troubles.

2. Precautions

- (1) Analog access codes must be set up on the Node as monitor numbers (see AMNO or AMNON in this manual).
- (2) Assign the message number specified as an announcement trunk with the AADT command to S-ANT and F-ANT.
- (3) One-digit access codes may not be assigned.

3. Parameters

ACDP:	Fixed to 0 (Not used)
ACC:	The dialed digit pattern used to invoke an ACD function. (Two to six digits. Unify the number of digits.)
FKIND:	The ACD feature which this access code will provide. (1-13) 1: Logon With ID 2: Logon Without ID 3: Logoff 4: Ready Mode 5: Work Mode 6: Break Mode 7: Tally Code 8: Trunk Trouble 9: Day Mode Single 10: Day Mode All 11: Night Mode Single 12: Night Mode All 13: Permanent Work
ID:	The logon ID associated with an analog access code Note 1 (only used for FKIND=1).
TYPE:	The break type associated with an analog access code (only used for FKIND=6).
CODE:	The tally code associated with an analog access code Note 1 (only used for FKIND=7).
S-ANT:	Success Announcement or Tone 0 = Service Set Tone 1-200 = Announcement No. programmed in AADT. An agent will be connected to the announcement upon successful operation. Note 2
F-ANT:	Failure Announcement or Tone 0 = Reorder Tone

ACDANA : Assignment of ACD Analog Split Access Code

1-200 = Announcement No. programmed in AADT. An agent will be connected to the announcement upon failed operation. **Note 2**

Note 1: Use numbers 0-9. Do not specify 0 to the first digit and do not use “#” and “*”.

Note 2: Specify an announcement number in the range of 1 to 58 for North America or when:

- Extension of Programmable Announcement Messages is disabled. (ASYDL/ASYDN, SYS1, Index 1194, Bit 0=0).

ACD Analog Agent Access Code Data Programming Sheet (1/3)

Access Code (ACC) Max. 6 digits Note 3	Agent Feature (FKIND)	Break Type (TYPE) 1 ~ 9	Success (S-ANT) 0 - 200	Failure (F-ANT) 0 - 200
_ _ _ _ _	Logon Without ID (2)	/	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Logoff (3)	/	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Ready Mode (4)	/	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Work Mode (5)	/	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Break Mode (6)	1	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Break Mode (6)	2	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Break Mode (6)	3	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Break Mode (6)	4	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Break Mode (6)	5	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Break Mode (6)	6	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Break Mode (6)	7	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Break Mode (6)	8	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Break Mode (6)	9	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Trunk Trouble (8)	/	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Day Mode Single (9)	/	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Day Mode All (10)	/	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Night Mode Single (11)	/	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Night Mode All (12)	/	_ _ _ _ _	_ _ _ _ _
_ _ _ _ _	Permanent Work (13)	/	_ _ _ _ _	_ _ _ _ _

ACDIVR: Assignment of ACD IVR Data

1. Function

This command is used to assign, display, print, and remove ACD Interactive Voice Response Unit (IVR) data. This command sets up IVR ports which will be used to play customized announcements or obtain dialed digit information from callers.

Note: This command is available in North America only.

2. Precautions

- (1) IVR should be set up on the Node as members of a UCD hunt group whose pilot number is the same as the IVR pilot number field of ACD tenant data (see ACDTN command).
One-digit IVR access pilot number may not be assigned.
- (2) IVR access pilot numbers and IVR port numbers must be set in a one-to-one association. That is to say, assigning the same IVR port number to multiple IVR access pilot numbers are not allowed.

3. Parameters

ACDP:	Fixed to 0 (Not used)
TN:	Tenant number (1 to 9)
IVR:	The Node directory number used to access an IVR port. (Two to five digits. Unify the number of digits.)
PORT:	The IVR port number associated with this directory number. (1-255)

ACDHS: Assignment of ACD Holiday Schedule

1. Function

This command is used to assign, display, print, and remove the CCVs for holiday schedules. Up to three different holiday schedules per tenant can be programmed for handling incoming calls. When a holiday is designated through the ACDHC command, calls are processed according to one of the three schedules for that day. This only applies to Pilot Numbers that use time-of-week scheduling.

2. Precautions

- (1) Holiday schedules are only valid for pilot numbers using week schedule route (CCV/W=1 in ACD-PLT).
- (2) One of the three Holiday schedules must be started from 00:00 (HOUR and MINUTE parameters are assigned as data "0").
- (3) CCV data is configured by ACDCCV command.

3. Parameters

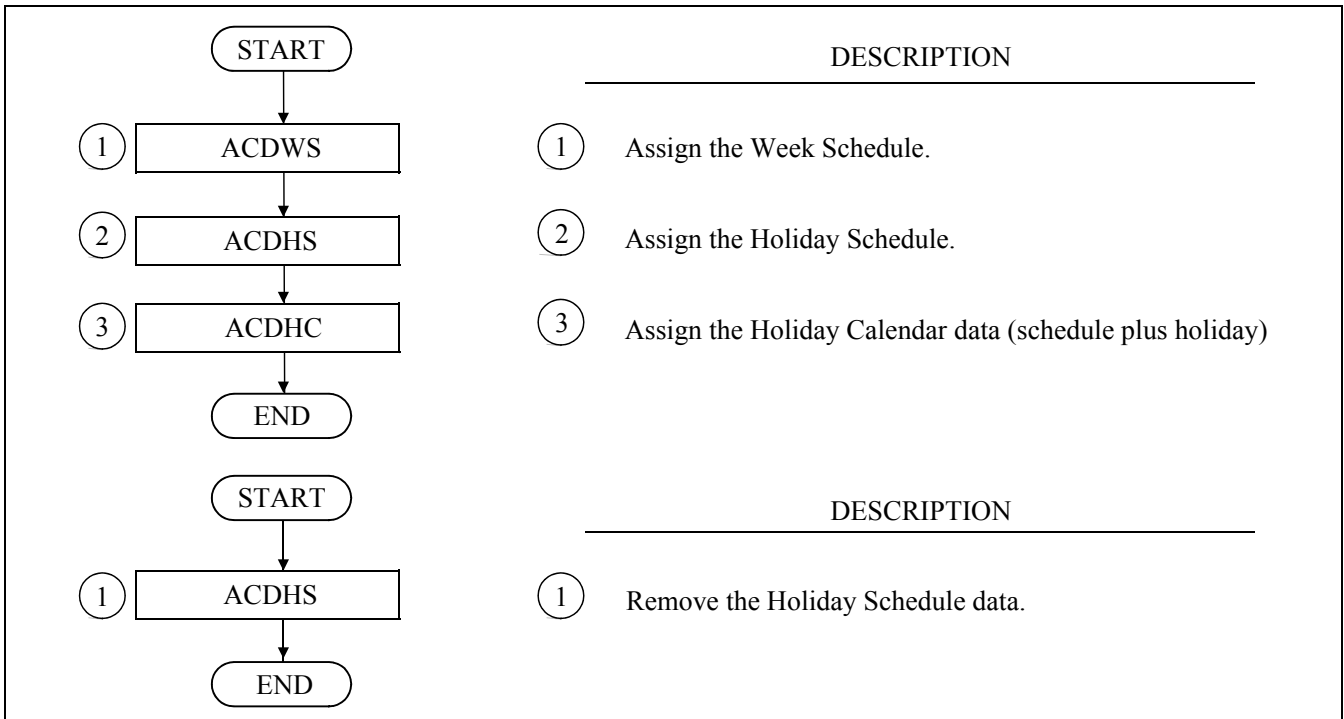
ACDP:	Fixed to 0 (Not used)
TN:	Tenant Number (1 to 9)
SCH:	Holiday Schedule Number (1 to 3)
	Note 1
SCH CN:	Schedule Number Count (1 to 8)
HOUR:	CCV start hour (0-23)
MINUTE:	CCV start minute (0-59)
CCVNO:	CCV index (1 to 2000)
CCVSTP:	CCV step (1 to 20)

Note 1: The value to be assigned to SCH (Holiday Schedule Number) corresponds to SCH (Schedule Pattern Number) assigned with the ACDHC/ACDHCE command.

4. Assignment and Deletion Procedure

These flow diagrams show the procedure used to assign and delete ACD Holiday Schedule data.

Assigning and Removing Holiday Schedule Information



ACD Holiday Schedule Data Programming Sheet

ACD Tenant (TN) 1 ~ 9				
Holiday Schedule Number (SCH) 1 ~ 3	CCV Start time		CCV Index (CCVNO) 1 ~ 2000	CCV Step (CCVSTP) 1 ~ 20
	(HOUR) 0 ~ 23	(MINUTE) 0 ~ 59		
1				

ACDHS : Assignment of ACD Holiday Schedule

ACD Holiday Schedule Data Programming Sheet

ACD Tenant (TN) 1 ~ 9				
Holiday Schedule Number (SCH) 1 ~ 3	CCV Start time		CCV Index (CCVNO) 1 ~ 2000	CCV Step (CCVSTP) 1 ~ 20
	(HOUR) 0 ~ 23	(MINUTE) 0 ~ 59		
<p align="center">2</p>			<p align="center"> </p>	<p align="center"> </p>
			<p align="center"> </p>	<p align="center"> </p>
			<p align="center"> </p>	<p align="center"> </p>
			<p align="center"> </p>	<p align="center"> </p>
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			<p align="center"> </p>	<p align="center"> </p>
			<p align="center"> </p>	<p align="center"> </p>
<p align="center">3</p>			<p align="center"> </p>	<p align="center"> </p>
			<p align="center"> </p>	<p align="center"> </p>
			<p align="center"> </p>	<p align="center"> </p>
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			<p align="center"> </p>	<p align="center"> </p>
			<p align="center"> </p>	<p align="center"> </p>
			<p align="center"> </p>	<p align="center"> </p>

ACDHSE: Assignment of ACD Holiday Schedule for type of reception services

1. Function

This command is used to assign, display, print, and remove the CCVs for holiday schedules for type of reception services. Up to 255 different holiday schedules can be programmed for handling incoming calls. When a holiday is designated through the ACDHCE command, calls are proceeded with one of the 255 schedules for that day. This only applies to Pilot Numbers that use time-of-week scheduling. If no data is assigned by this command, ACDHCE command uses the data assigned by the ACDHS command.

2. Precautions

- (1) CCV data is configured by ACDCCV command.
- (2) When holiday schedules are already assigned by ACDHCP or ACDHSP command (currently not supported), remove them by using ACDHCE or ACDHSE command.

Holiday schedule: Holiday Calendar information on a Pilot Number basis

Holiday schedules on a Pilot Number basis

- (3) Holiday schedules for the type of reception services are only valid for pilot numbers using week schedule route (CCV/W=1 in ACDPLT).
- (4) One of the 255 Holiday schedules must be started from 00:00 (HOUR and MINUTE parameters are assigned as data "0").

3. Parameters

ACDP:	Fixed to 0 (Not used)
SCH:	Holiday Schedule Number (1-255) Note 1
SCH CN:	Schedule Number Count (1 to 8)
HOUR:	CCV start hour (0-23)
MINUTE:	CCV start minute (0-59)
CCVNO:	CCV index (1-2000)
CCVSTP:	CCV step (1-20)

Note 1: The value to be assigned to SCH (Holiday Schedule Number) corresponds to SCH (Schedule Pattern Number) assigned with the ACDHC/ACDHCE command.

ACDHC: Assignment of ACD Holiday Calendar

1. Function

This command is used to assign, display, print, and remove Holiday Calendar information. The ACDHC command specifies days that calls are processed differently than on normal workdays (provided a Holiday Schedule is programmed). A Holiday Schedule only applies to pilot numbers that are using a Week Schedule (ACDPLT CCV/W=1). Holiday information includes a month and day entry and a number that refers to the Holiday Schedule to be used on that day. An unlimited number of days may be scheduled as holidays, and up to three different holiday schedules per tenant can be programmed. Holidays can be programmed up to one calendar year in advance.

2. Precautions

- (1) Holidays can be entered for any day of the year.
- (2) A separate Holiday Calendar is available for each tenant.

3. Parameters

ACDP:	Fixed to 0 (Not used)
TN:	Tenant Number (1-9)
MONTH:	Month (1-12)
DAY:	Day (1-31)
SCH:	Schedule Pattern Number (1-3) Note 1

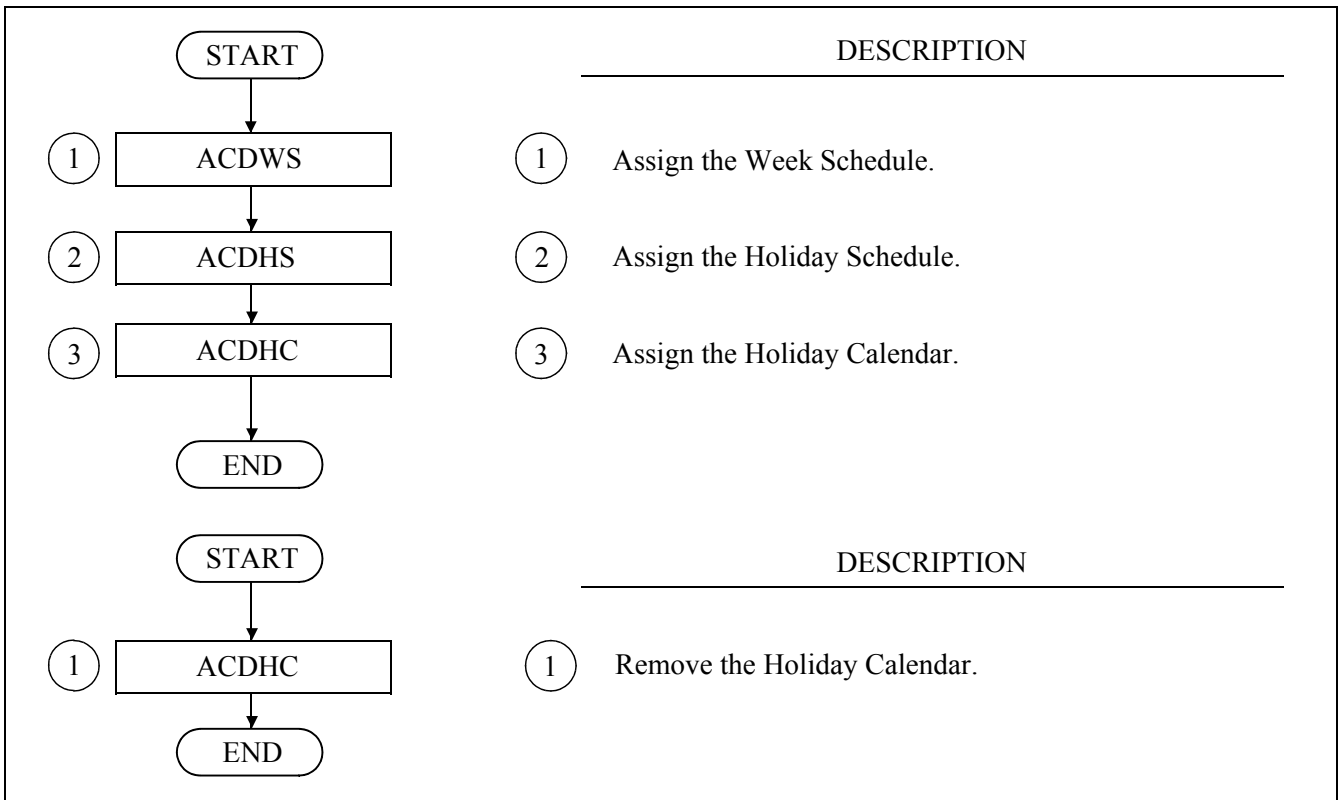
Note 1: Note the following point.

- The value to be assigned to SCH (Schedule Pattern Number) corresponds to SCH (Holiday Schedule Number) assigned with the ACDHS/ACDHSE command.
- When "0" is assigned to SCH (Schedule Pattern Number), Week Schedule will be enabled.

4. Assignment and Deletion Procedure

These flow diagrams show the procedure used to assign and delete ACD Holiday Calendar data.

Assigning and Removing Holiday Calendar Information



ACDHC : Assignment of ACD Holiday Calendar

ACD Holiday Calendar Data Programming Sheet

ACD Tenant (TN) 1 ~ 9	Month and Day		Schedule Pattern Number (SCH) 1 ~ 3
	(MONTH) 1 ~ 12	DAY	
		1	
		2	
		3	
		4	
		5	
		6	
		7	
		8	
		9	
		10	
		11	
		12	
		13	
		14	
		15	
		16	
		17	
		18	
		19	
		20	
		21	
		22	
		23	
		24	
		25	
		26	
		27	
		28	
		29	
		30	
		31	

ACDHCE: Assignment of ACD Holiday Calendar for type of reception services

1. Function

This command is used to assign, display, print, and remove Holiday Calendar information for the type of reception services. A Holiday Schedule only applies to pilot numbers that are using a Week Schedule (AC-DPLT CCV/W=1). Holiday information includes a month and day entries and numbers that refer to the Holiday Schedule to be used on that day. An unlimited number of days may be scheduled as holidays, and up to 255 different holiday schedules can be programmed. Holidays can be programmed up to one calendar year in advance.

2. Precautions

(1) When holiday schedules are already assigned, remove it by using ACDHCE or ACDHSE command.

Holiday schedule: Holiday Calendar information on a Pilot Number basis

Holiday schedules on a Pilot Number basis

(2) Holidays can be entered for any day of the year.

(3) A separate Holiday Calendar is available for each tenant.

3. Parameters

ACDP:	Fixed to 0 (Not used)
WEEKNO:	Week Schedule Number (1-400)
MONTH:	Month (1-12)
DAY:	Day (1-31)
SCH:	Schedule Pattern Number (0-255) Note 1

Note 1: Note the following point.

- The value to be assigned to SCH (Schedule Pattern Number) corresponds to SCH (Holiday Schedule Number) assigned with the ACDHS/ACDHSE command.
- When "0" is assigned to SCH (Schedule Pattern Number), Week Schedule will be enabled.

ACD Holiday Calendar Data Programming Sheet

Week Schedule Number (WEEKNO) 1 ~ 400		
Month and Day		Schedule Pattern Number (SCH) 0 ~ 255
(MONTH) 1 ~ 12	DAY	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	
	26	
	27	
	28	
	29	
	30	
	31	

ACDWS: Assignment of ACD Week Schedule

1. Function

This command is used to assign, display, print and remove week schedule data. The ACDWS command is used to program the CCV by which all incoming calls are handled on a 24-hour basis.

2. Precautions

- (1) The CCVs should be assigned using ACDCCV command prior to use in week schedules.
- (2) For allowed number of entry for Week Schedule, see “2.3.3 ACD System Capacity” in Chapter 2.
- (3) The same Schedule Number (SCH) cannot be assigned to multiple tenant numbers.
- (4) When assigning schedules, write the data after sorting.
- (5) The data specified for “MON 00:01” is displayed at the top of the list. This data cannot be edited.

3. Parameters

ACDP: Fixed to 0 (Not used)
TN: Tenant Number (1 to 9)
SCH: Schedule Number (1 - 900)
SCH CNT: Schedule Number Count (1 - 50) **Note 1**

Note 1: The values of “CCVNO” and “CCVSTP” for the last scheduled item (item at the bottom of the list) are automatically set for the “CCVNO” and “CCVSTP” parameters for the first item of the list (SCH CNT = 1, MON 00:01), respectively. Since the data specified for “MON 00:01” cannot be edited, users can assign SCH CNT in the range of 2 to 50.

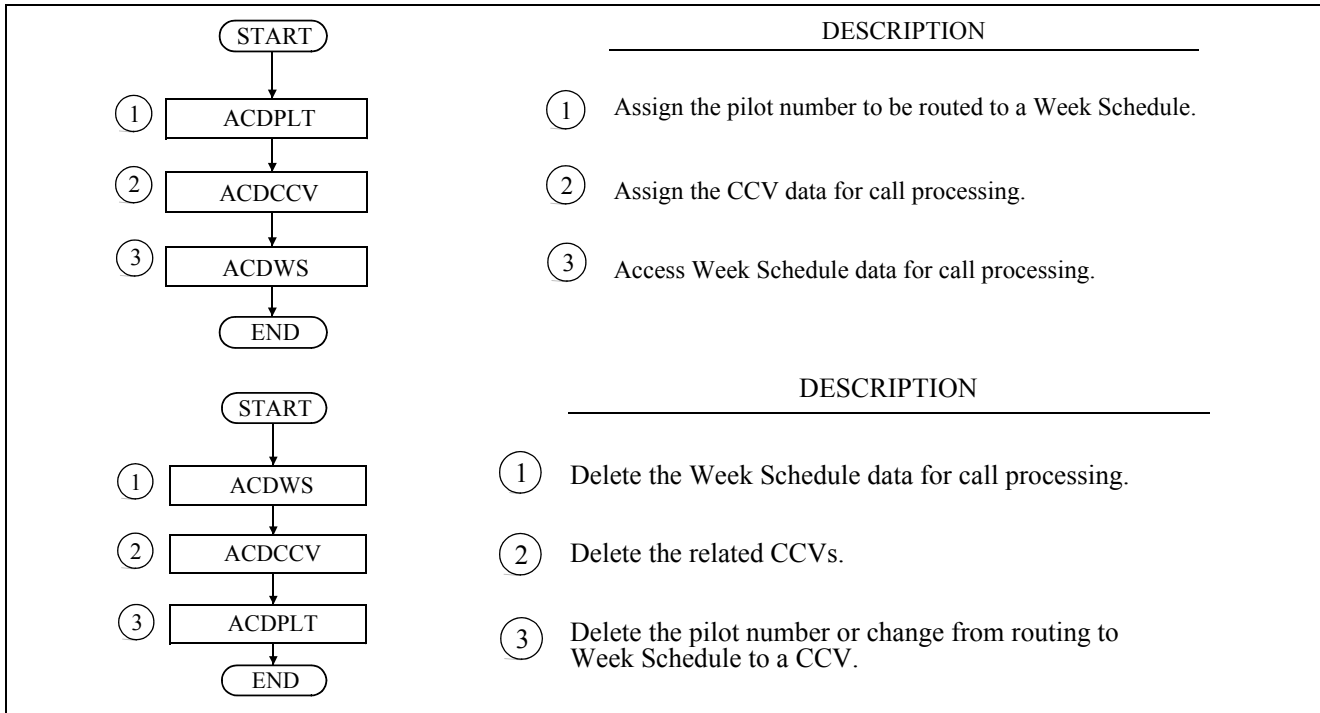
WEEK: Sun, Mon, Tue, Wed, Thu, Fri, Sat
HOUR: CCV start time: hour (0-23) **Note 2**
MINUTE: CCV start time: minute (0-59) **Note 2**
CCVNO: CCV index (1 to 2000)
CCVSTP: CCV step (1 to 20)

Note 2: Monday's table starts from “00:02”. Others start from “00:00”.

4. Assignment and Deletion Procedure

These flow diagrams show the procedure used to assign and delete Week Schedule data.

Assigning and Removing Week Schedule Information



ACD Week Schedule Data Programming Sheet

Tenant Number (TN) 1 ~ 9						
Schedule Number (SCH) 1 ~ 900						
Day of week (WEEK)	Monday (MON)					
	Tuesday (TUE)					
	Wednesday (WED)					
	Thursday (THU)					
	Friday (FRI)					
	Saturday (SAT)					
	Sunday (SUN)					
CCV start time (TIME)						
CCV index (CCVNO) 1 ~ 2000						
CCV step (CCVSTP) 1 ~ 20						

ACDIZ: Internal ACDP Initialization

1. Function

This command is used to initialize Internal ACDP on a standalone basis and write/delete the data of ACDP Program and ACDP office data. Use the command to execute office data clear initialization before assigning ACD office data.

Note: With this command, you can update ACDP Program online. For details, see “ACDP PROGRAM ONLINE UPDATE” in this manual.

2. Precautions

- (1) When the ACDP initialization (ACT) is executed, the agents currently logged on to the ACD system are forced into log-off state. To restart the agent operation, the agents must log on to the system again.
- (2) When the ACDP is restarted after this ACDP initialization (ACT), the system message “6-H” will be issued 3 times (14: ACDP initialization started, 33: ACDP initialization complete, 39: ACD Agent Position is available for use).
- (3) When you choose “STBY” for the “Target CPU” parameter, the setting of Office Data cannot be reflected.
- (4) If this ACDP initialization is performed while the ACDP accesses the MIS application, the status of the MIS application will not be displayed properly. In that case, restart the MIS system after the completion of the ACDP initialization.
- (5) To perform this initialization, the following data settings are required.
 ASYD, SYS1, Index 2, Bit 0 to Bit 3 = 01 Hex (ACDP is mounted)
 ASYD, SYS1, Index 207, Bit 0=1 (ACDP is mounted)
 ASYDL, SYS1, Index 864, Bit 0 = 1 (Built-in IP, ACDP is used)

3. Parameters

Target CPU: Choose a system to execute ACDP initialization on a standalone basis: ACT/STBY

Note: If the system configuration is not dual configuration, “STBY” cannot be chosen.

KIND: Select an option from the drop-down list: Initial/Apply the ACDP Program/Make Busy

Note: “Make Busy” is a parameter available only for technicians. “Make Busy” may not be selected when you choose “STBY” in the “Target CPU” parameter.

Program: This parameter is available when you select “Initial” for the “KIND” parameter. Choose either of the following from the drop-down list: Retain/Load **Note 1**
 Retain: The ACDP Program load is not performed.
 Load: The ACDP Program load is performed.

Office Data: This parameter is available when you select “Initial” for the “KIND” parameter. Select an option from the drop-down list: Retain/Clear/Load **Note 1**
 Retain: Internal ACDP is initialized without affecting the existing ACDP office data.
 Clear: Internal ACDP is initialized and the existing ACDP office data except the office data files in Flash Card Memory is all cleared. To clear the office data files in Flash Card Memory, write the cleared ACDP office data into Flash Card Memory by using MEM_HDD after the execution of this command.
 Load: Internal ACDP office data is loaded from Flash Card Memory, and then Internal ACDP is initialized.

Note: The “Office Data” parameter cannot be specified when you choose “STBY” in the “Target CPU” parameter.

Note 1: When performing Non-Load Initialization, choose “Retain” for both the “Program” and the “Office Data” parameters.

[Drive Select] (This field is available when you select “Load” for the “Office Data” parameter.)

<For the system using the Redundant Data Memory Backup function>

Specify the destination drive for the ACDP office data loading.

- Drive B (Default Setting)
- Drive C

<For the system not using the Redundant Data Memory Backup function>

Office data is loaded to Drive B.

[ACDP Program Issue Information]

(This field is available when you select “Apply the ACDP Program” for the “KIND” parameter.)

Issue in Operation: The version information about the ACDP Program currently in use. **Note 2**

Applying Target Issue: The version information about the update program. **Note 2**

[Current Information]

ACDP Program Issue: The version information about the ACDP Program currently in use. **Note 2**

ACDP Status: The current ACDP status.

Sequence Counter: The current value of the Sequence Counter.

Note 2: The version information about ACDP Program consists of three parts: Program Version number (Vxx), Issue number (xx.xx) and the date of issue (MM/DD/YYYY). For example, “V02 01.22 03/04/2015” means “Program Version 02, Issue 01.22, issued on March 4, 2015.”

[Execution Trace Information]

Displays the events generated by the command in chronological order. These events are recorded in log files.

ACDUD1: Assignment of ACD User Data 1

1. Function

This command is used to assign ACD user data. In general, this command is not used.

2. Precautions

- (1) This command is not displayed on the screen of the command tree of PCPro. When executing this command, write “ACDUD1” to the text box for writing command.
- (2) The parameters which are not supported cannot be changed from the default setting (see “Non-Variable Parameter”).

3. Parameters

<Variable Parameter>

Incoming Call Message: IQ/Iq

IQ: Set when using Infolink IQ message

Iq: Set when using Infolink Iq message (default)

CCV Tally DN: Station Number (maximum five digits)

Set ACD call station number of ACD Agent when using Short Stroke Count/Long Stroke Count (CCVACT=18/19)

Note: Set this parameter only when using Stroke Counts with the NAVIMIS.

Use Orig Detail Codes: NO/YES

NO: Set when using detail error code for Infolink IY Message (default)

YES: Set when using normal error code for Infolink IY Message

<Non-Variable Parameter>

User Large CP Trace Buffer: NO/YES (fixed to NO)

Send AO(MIS) Message: NO/YES (fixed to NO)

Trim CP Trace Space: NO/YES (fixed to NO)

Display “ANI MODE”: NO/YES (fixed to NO)

Always Queue High Priority: NO/YES (fixed to NO)

Display IVR Header: NO/YES (fixed to NO)

Outbound Call Disposition: IZ/Iz (fixed to IZ)

Dash Min LENS: 1 to 16 (fixed to 7)

Dash Index1: 0 to 11 (fixed to 0)

Dash Index2 Index1: 0 to 11 (fixed to 0)

Dash Index3 Index1: 0 to 11 (fixed to 0)

Dash Index4 Index1: 0 to 11 (fixed to 0)

Dash Index5 Index1: 0 to 11 (fixed to 0)

Reclaim IVR Call to: Music/Ringback (fixed to Music)

MIS Split Capacity: 4/16 (fixed to 16)

ETA: Excess Work Included/Excluded (fixed to Included)

Work Key Press: Disable/Ready Mode (fixed to Ready Mode)

Infolink With Call ID: NO/YES (fixed to NO)

Call Timeout Audit: Disable/Enable (fixed to Disable)



CHAPTER 7

SYSTEM OPERATIONS



1. GENERAL

This Chapter explains the operating methods of the ACD System in the following sections:

- Operation of Desktop terminal agent position/supervisory position
 - Log On/Log Off
 - Answer Mode
 - Work Mode
 - Break Mode
 - Tally Count
 - Trunk Trouble Report
 - Call Transfer
 - Night Service
 - Assistance
 - Emergency/Recorder
 - Monitoring/Supervisory Override
- ACD system restart processing — See Section 3
- ACDP library online update — See Section 4

For operation management, refer to the Operations and Maintenance Manual.

2. OPERATION OF DESKTOP TERMINAL AGENT POSITION/SUPERVISORY POSITION

2.1 Log On/Log Off

Use the following procedures to start or end work by logging on or off.

(a) When ID Code is Required

For Log on/Log off without ID Code, see the next page.

START

Log On (Start of work)

When VACANT is displayed, press the **LOG ON/OFF** key.
The lamp flashes and **LOG ON ID?** is displayed. **Note 1**

Dial the ID code of the agent and press the **#** key.
The dialed digits are displayed.

HELLO XXXX (Agent Name) is displayed.

The split name is displayed, then, **AUTO ANSWER** or **MAN ANSWER** is displayed according to the program mode of the split to which the agent belongs, and **WORK MODE** is displayed.

Press the **WORK** key.

READY is displayed.

Log Off (End of work)

Press the **LOG ON/OFF** key.

The lamp goes out, the previous display disappears, and the following messages are displayed.

(a) GOOD BYE XXXX (Agent Name: NAME in ACDLOG)

(b) SHIFT 08:02:37 (The time since Log on in hours, minutes and seconds)

(c) ACD CALLS 209 (The number of incoming calls handled)

(d) AVG TALK 01:42.6 (The average time spent with each call in minutes, seconds and tenths of a second)

(e) T-WORK 01:23:45 (The cumulative amount of time spent in Work Mode during the shift in hours, minutes and seconds)

(f) T-BREAK 01:02:03 (The cumulative amount of time spent in Break Mode during the shift in hours, minutes and seconds)

The display returns to VACANT.

END

Note 1: If an ID code starting with "0" is dialed, it is omitted by the system. For example when "00532#" is dialed, it is treated as "532#".

(b) When ID Code is not Required

START

Log On (Start of work)

When ***VACANT*** is displayed, press the **LOG ON/OFF** key.
The lamp illuminates and ***HELLO*** is displayed.
The split name is displayed, then, ***AUTO ANSWER*** or ***MAN ANSWER*** is displayed according to the program mode of the split to which the agent belongs, and ***WORK MODE*** is displayed.

Press the **WORK** key.
READY is displayed.

Log Off (End of work)

Press the **LOG ON/OFF** key.
The lamp goes out, the previous display disappears, and the following messages are displayed.

- (a) **GOOD BYE**
- (b) **SHIFT 08:02:37** (The time since Log on in hours, minutes and seconds)
- (c) **ACD CALLS 209** (The number of incoming calls handled)
- (d) **AVG TALK 01:42.6** (The average time spent with each call in minutes, seconds and tenths of a second)
- (e) **T-WORK 01:23:45** (The cumulative amount of time spent in Work Mode during the shift in hours, minutes and seconds)
- (f) **T-BREAK 01:02:03** (The cumulative amount of time spent in Break Mode during the shift in hours, minutes and seconds)

The display returns to ***VACANT***.

END

2.2 Answer Mode

The following procedures are used to set the ACD call answering mode of each agent position to automatic or manual.

(a) ACD Call Automatic Answer Mode

START

From the manual answer mode, press the **AUTO/MAN** key.
 The lamp lights and **AUTO ANSWER** is displayed.
 The agent enters the ACD call automatic answer mode.
 When an ACD call comes in, a zip tone is received.
 Monitor number name/Split name/Trunk group name, waiting time in the queue, and calling party's number, etc. is displayed and the time to be spent for the conversation is indicated.

When the call is over, press the **RELEASE** key.

END

(b) ACD Call Manual Answer Mode

START

From the automatic answer mode, press the **AUTO/MAN** key.
 The lamp goes out and **MANUAL ANSWER** is displayed.
 The agent enters the ACD call manual answer mode.

When an incoming ACD call is terminated, press the **ACD CALL** key to answer it.
 Monitor number name/Split name/Trunk Group name, waiting time in the queue, and calling party's number, etc. is displayed and the time to be spent for the conversation is displayed.

When the call is over, press the **RELEASE** key.

END

2.3 Work Mode

(a) Work mode manual setting

Use the following procedure to enter Work mode when the contents of the ACD call requires it.

START

Press the **WORK** key during communication with an ACD call.
The lamp lights up and ***WORK PENDING*** is displayed.

Press the **RELEASE** key.
WORK MODE is displayed, indicating the Work mode.

(End of work)

Press the **WORK** key.
The lamp goes off and ***READY*** is displayed.
Work mode ends, and the position becomes available for receiving the next ACD call.

END

(b) Work mode automatic setting

Use the following procedure if it is required to activate the Work mode automatically after every ACD call.

START

Press the **RELEASE** key during communication with an ACD call.
An incoming ACD call is completed.
WORK MODE is displayed, indicating the Work mode.

(End of work)

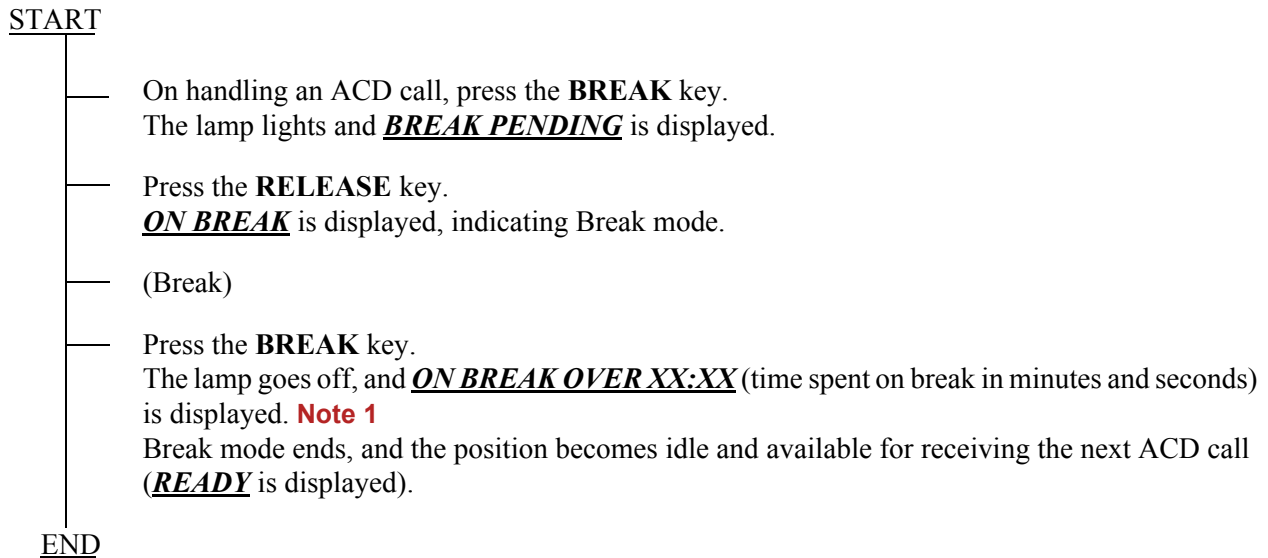
Press the **WORK** key.
The lamp goes off and ***READY*** is displayed.
Work mode ends, and the position becomes available for receiving the next ACD call.

END

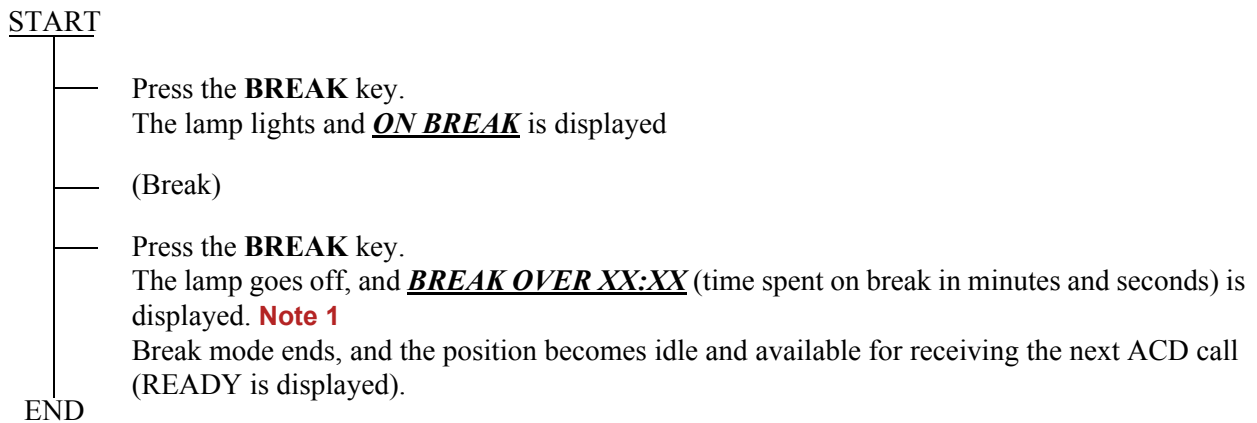
2.4 Break Mode

When it is required to leave the position unattended for a lunch or similar break, use the following procedure to activate the Break mode in which the ACD call handling services can be interrupted temporarily.

- (a) Set/reset during Communication with ACD Call



- (b) Set/Reset when idle



Note 1: The period of time in break mode is displayed for 99 minutes and 59 seconds. When 99 min. and 59 sec. passes, the part of indicating "Minute" is displayed as "***".

(c) Set/reset in Work Mode

START

Press the **BREAK** key.
The lamp lights and ***ON BREAK*** is displayed.

(Break)

Press the **BREAK** key.
The lamp goes off, and ***BREAK OVER XX:XX*** (time spent on break in minutes and second) is displayed. **Note 2**

Break mode ends, and the position returns to the Work mode
(***WORK MODE*** is displayed).

END

Note 2: The period of time in break mode is displayed for 99 minutes and 59 seconds. When 99 min. and 59 sec. passes, the part of indicating "Minute" is displayed as "***".

2.5 Tally Count

Use the following procedure to collect data on the communication contents according to the types.

START

Press the **TALLY** key.
The lamp flashes and ***TALLY NUMBER?*** is displayed.

Dial the code number (1 to 9) of the subject, and press the # key. **Note 1**
TALLY ENTERED is displayed.

The lamp goes off, and the data is stored in the MIS.

END

Note 1: A code number of the subject starting with "0" is invalid.

2.6 Trunk Trouble Report

Use the following procedure to report trunk troubles, such as noise or low level, in the Telephony Server.

START

During communication with an ACD call, press the **TRK TRBL** key.
TROUBLE REPORTED is displayed.
 The Trunk Trouble Report is automatically reported to the MIS and PCPro.

END

2.7 Call Transfer

Use the following procedure to transfer an ACD call to another split.

START

Press the **XFER** key.
 Special Dial Tone (SPDT) is heard.
XFR OPE is displayed.

Dial the ACD monitoring number of the transfer destination split.
 The call is immediately connected to one of the idle stations in the transfer destination split.
 If all stations in the transfer destination split are busy, the transfer originator hears the Ringback Tone (RBT) and should wait for an answering agent or release the call to complete the transfer.

END

Note: If the destination party for Blind Transfer of ACD call does not answer, "RECALL" does not occur when a predetermined No Answer timer expires.
 When Blind Transfer is used on an ACD line to a non-ACD line, ASFC SFI 104 = 0* (Transferred station continuously rings) must be assigned. The transferred station means a non-ACD line (My Line of the ACD Agent Position) or a business station.
 *the following system data setting is necessary. ASYD SYS1 Index 69 bit0=1 (according to the settings of ASFC SFI104)

2.8 Night Service

When the shift is over, the supervisory position can perform the following procedure to switch the entire split into the Night mode.

- (a) From Day mode to Night mode

START

The supervisor presses the **NIGHT** key.
The lamp blinks, and ***ENTER NIGHT/FWD?*** is displayed.

Dial 1 followed by the # key. **Note 1**
The lamp lights, and the split is switched to Night mode.
New incoming calls are no longer queued, and calls which have already been queuing are connected as soon as agent position becomes idle.

END

- (b) From Night mode to Day mode

START

The supervisor presses the **NIGHT** key.
The lamp blinks, and ***EXIT NIGHT?*** is displayed.

Dial 1 followed by the # key.
The lamp goes out, and the split is switched to Day mode.

END

Note 1: "1" is pressed to confirm, and "#" is pressed to complete the procedure. Even if any single digit number is input between "1" and "#", it is processed as the same as "1" + "#".

2.9 Assistance

The agent position can request assistance from a supervisor during an ACD call.

START

The agent position presses the **ASSIST** key. **Note 1**

ASSIST XXXX (Supervisory position name for the position with ID code or the ACD line number for the position without ID code) is displayed.

The supervisor answers the assistance call.

ASSIST XXXX (Agent position name for the position with ID code or the ACD line number for the position without ID code) is displayed.

The supervisor and agent can confer while the ACD call is held with Consultation Hold. **Note 2**

END

Note 1: If supervisor is not available to take the call, "EMERG BUSY" is displayed at the agent position.

Note 2: Consultation Hold is invoked by the agent performing switch hook flash, and the caller is provided with music (MSC) during the state.

2.10 Emergency/Recorder

The agent can notify the supervisory position of abnormal calls such as harassment, and request monitoring. If a recorder is provided, the conversation can also be recorded.

START

The agent presses the **EMER** key. **Note 1**

HELP XXXX (Supervisory name for the position with ID code or the ACD line number for the position without ID code) is displayed.

If a recorder is provided, recording of the call starts at the same time.

The ACD CALL lamp and the MONITOR lamp on the supervisory position blink. When ringing starts, the supervisory confirms the display of **HELP XXXX** (Agent name or ACD line number), Trunk kind, Trunk number, and presses the **LINE** key. **Note 2**

The monitoring can be terminated when the supervisor presses the **RELEASE** key.

The call between the ACD call and agent position continues.

The recording ends.

(When activating three-way conference, see "Monitoring/Supervisory Override.")

END

Note 1: If the supervisory position is not available, "EMERG BUSY" is displayed on the agent position.

Note 2: As the agent presses MON key while the agent is monitoring, "BARGE?" is displayed. At that time, monitoring is abandoned by the following operation.

- Dial "1" + "#" or "1" + "n" ... "n" + "#"
- Press MON key again
- No operation for 30 seconds

2.11 Monitoring/Supervisory Override

With the following procedure, the supervisory position can monitor a conversation between an agent position and ACD caller at any time, and can join the call by overriding if required.

START

Monitoring

Place Supervisor into the "Work" mode.

Supervisory presses the **MON/BARGE** key.
The lamp blinks.

MONITOR NUMBER? is displayed.

Dial the ID code of the agent to be monitored, or dial 0 followed by the non-ACD-call station number of the agent position, and #.

(Monitoring)

If it is required to monitoring here, press the **RELEASE** key. The "MON/BARGE" lamp goes off.

Supervisory Override

Press **MON/BARGE** key again.
BARGE? is displayed.

Dial 1 and #. ("1 + #"="1 + n + ... + n + #") **Note 1**
The "MON/BARGE" lamp flashes and the "CONF" lamp lights.

(Three-way conference call between the ACD call, agent position and supervisory position)

Press the **RELEASE** or **MON/BARGE** key to end overriding.
The "CONF" lamp goes off and Return to Monitoring.

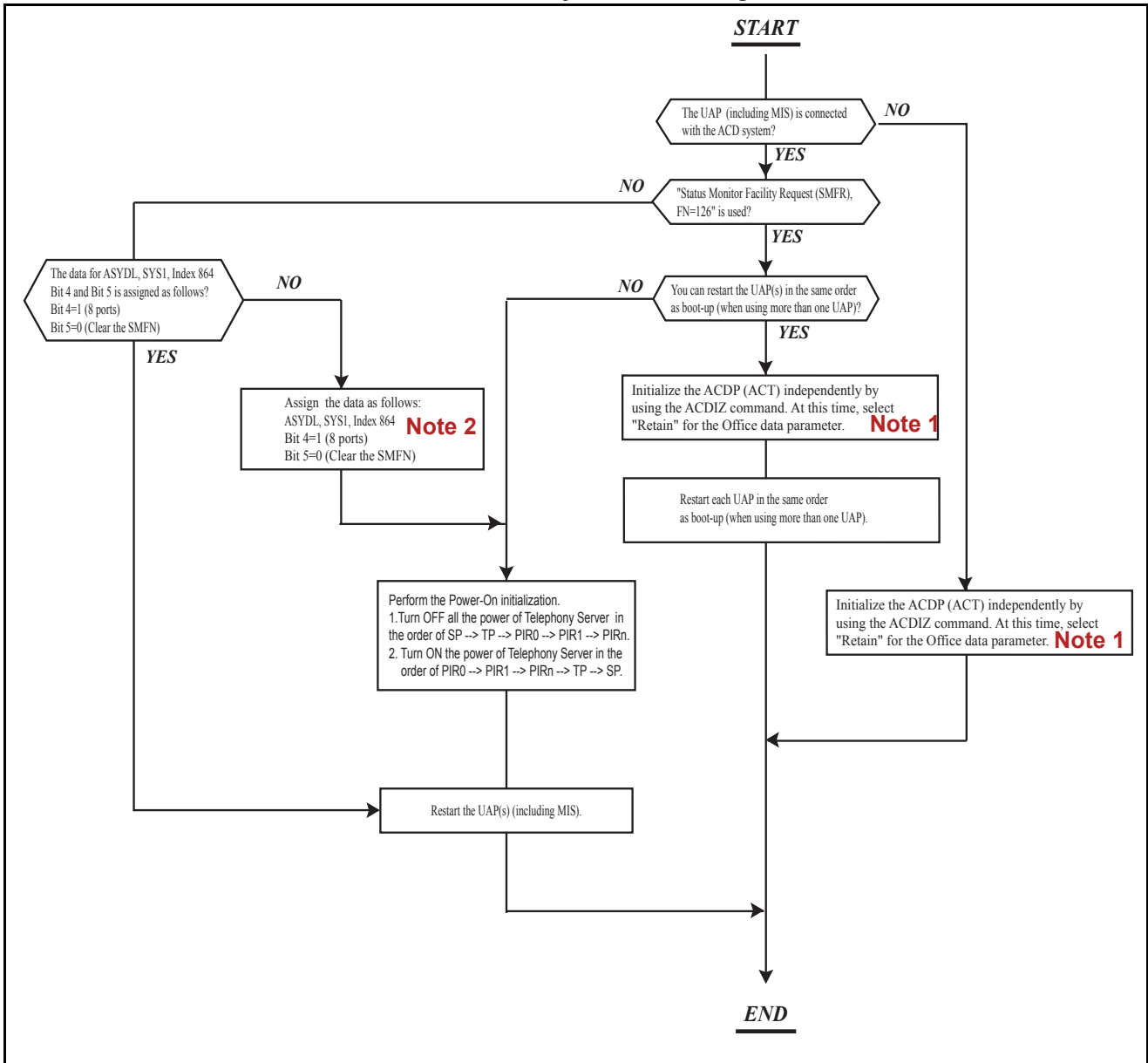
END

Note 1: "1" is pressed to confirm, and "#" is pressed to complete the procedure. The monitoring ends here by dialing numbers other than "1+#", no operation for more than 30 seconds or pressing MON/BARGE key.

3. ACD SYSTEM RESTART PROCESSING

When the data link between the Telephony Server and UAP (including MIS) is down in on-line mode, the UAP must be restarted according to the procedure shown below.

Flow of ACD System Restarting



Note 1: For the detailed information about this ACDP (ACT) initialization, refer to the “ACDIZ Command” in CHAPTER 6.

Note 2: This data setting causes the ACD system to temporarily stop its operating. Thus, this data setting must be performed deliberately. When using ACD FCCS service, this data setting must be performed at all nodes in the FCCS network.

Note: (When the “Status Monitor Facility Request (SMFR), FN=126” is used:) System initialization and Restarting of the UAP (including MIS) must be performed with the following caution. When two or more UAP(s) (including MIS) is used, restart each UAP in same order used in the start-up of the UAP(s) before the operating. If you are not sure of the order used in start-up of the UAP(s) before operating, perform the Power-On Initialization at first and then restart the UAP(s).

4. ACDP PROGRAM ONLINE UPDATE

This section describes how to update ACDP Program without stopping or initializing the ACDP.

4.1 Operating Procedure

1. Upload an update for ACDP Program to the Telephony Server by following the steps below:

STEP 1: Copy the obtained ACDP Program to a directory of your choice on the maintenance PC.

STEP 2: Start Internet Explorer.

STEP 3: Type “http://xxx.xxx.xxx.xxx:9801/” into the address bar to access Telephony Server Maintenance Menu.

Note: “xxx.xxx.xxx.xxx” represents the LAN1 IP address of the destination Telephony Server.

STEP 4: On the [Telephony Server Maintenance Menu Login] screen, enter your user name and password. Click [OK] to log in to Telephony Server Maintenance Menu.

STEP 5: On the [Telephony Server Maintenance Menu] screen, click the [Advanced Menu] button.

STEP 6: On the [Advanced Menu] screen, click the [ACDP Program Upload] button.

STEP 7: On the [ACDP Program Upload] screen, click the [Browse] button and specify the ACDP Program copied in STEP 1.

STEP 8: Click the [Upload] button.

STEP 9: When the upload is complete, the message “Operation successfully completed” appears. Click [OK].

2. Update the system with the newly uploaded ACDP Program by following the steps below:

STEP 1: Start the ACDIZ command.

STEP 2: For the [Target CPU] parameter, choose ACT or STBY to specify a system to update with the new ACDP Program.

STEP 3: For the [KIND] parameter, select [Apply the ACDP Program] and ensure that the Issue numbers of ACDP Program are correct.

Note: This option appears only when the system supports ACDP Program online update. When the online update is available, the current and latest Issue numbers of ACDP Program are displayed.

STEP 4: Click the [EXECUTE] button.

STEP 5: A confirmation message appears. Click [Yes] to start the update process.

STEP 6: When the update is complete, the message “Operation successfully completed” appears. Click [OK].

4.2 Conditions

1. This feature is not available on SR-MGC.
2. Reconnection of external application is not required after ACDP Program online update.
3. For CPU dual configuration system, be sure to also update the STBY side with the same latest file as the one used for the ACT side. Otherwise, after system changeover, the system will operate on ACDP Program without the latest updates.
4. When you select [Apply the ACDP Program] for the [KIND] parameter of the ACDIZ command, an error message, similar to the ones listed below, may be displayed. Follow the corrective action in the table for each error.

No.	Error Message	Suggested Action
1	ACDP Program doesn't exist.	Upload an update for ACDP Program to the Telephony Server.
2	ACDP Program can't be applied because Program status is busy.	Activate the ACDP Program.
3	ACDP Program can't be applied because ACDP Program is same.	Upload a new ACDP Program to the Telephony Server. Note 1
4	ACDP Program can't be applied because Program version is different.	Upload to the Telephony Server an ACDP Program of the same Program Version as the existing ACDP Program. Note 1

Note 1: When uploading an update for ACDP Program, ensure that the update program has the same Program Version number but a different Issue number.
For the version information about ACDP Program, see "ACDIZ" in this manual.

5. If ACDP Program online update fails, an error message, similar to the ones listed below, will be generated. Follow the corrective action in the table for each error.

No.	Error Message	Suggested Action
26	Applying ACDP Program failed because currently program status is abnormal.	<p>[ACT side] Follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. Perform Non-Load Initialization with the ACDIZ command. Note 2 ACDP restarts in the last Issue before the update. 2. Apply the update program as the steps in "2. Update the system with the newly uploaded ACDP Program by following the steps below" in 4.1. <p>[STBY side] This error message is not received on the STBY side.</p>

No.	Error Message	Suggested Action
27	Applying ACDP Program failed because currently program is not closed.	<p>[ACT side] Follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. Perform Program & Office Data Load & System Initialization with the SINZ command. ACDP restarts in the last Issue before the update. 2. Apply the update program as the steps in “2. Update the system with the newly uploaded ACDP Program by following the steps below” in 4.1. <p>[STBY side] Follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. By using the CTSP command, move all terminals registered with the STBY side to the ACT side. Note 3 2. Initialize the system by using Telephony Server Maintenance Menu. ACDP restarts in the last Issue before the update. Note 4 3. Apply the update program as the steps in “2. Update the system with the newly uploaded ACDP Program by following the steps below” in 4.1.
28	Applying ACDP Program failed because applying program can't be opened. Note 5	<p>[ACT side] ACDP restarts in the last Issue before the update. Go back to Section 4.1 and start over the update process again from uploading an update for ACDP Program via Telephony Server Maintenance Menu.</p> <p>[STBY side] Follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. Perform Non-Load Initialization with the ACDIZ command. Note 2 ACDP restarts in the last Issue before the update. 2. Go back to Section 4.1 and start over the update process again from uploading an update for ACDP Program via Telephony Server Maintenance Menu.

No.	Error Message	Suggested Action
29	Applying ACDP Program failed because read transaction of program is abnormal.	<p>[ACT side] Follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. Perform Program & Office Data Load & System Initialization with the SINZ command. ACDP restarts in the last Issue before the update. 2. Apply the update program as the steps in “2. Update the system with the newly uploaded ACDP Program by following the steps below” in 4.1. <p>[STBY side] Follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. By using the CTSP command, move all terminals registered with the STBY side to the ACT side. Note 3 2. Initialize the system by using Telephony Server Maintenance Menu. ACDP restarts in the last Issue before the update. Note 4 3. Apply the update program as the steps in “2. Update the system with the newly uploaded ACDP Program by following the steps below” in 4.1.
30	Applying ACDP Program failed because SR-MGC(E) is out of service.	SR-MGC(E) does not support ACDP Program on-line update. Do not use it for this purpose.
31	Applying ACDP Program failed because currently program is abnormal.	<p>[ACT and STBY sides] An inconsistency in the ACDP Program directory configuration was detected before or during the update. Check the current ACDP Program state.</p>

No.	Error Message	Suggested Action
32	Applying ACDP Program failed because program can't be changed.	<p>[ACT side] Follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. Perform Program & Office Data Load & System Initialization with the SINZ command. ACDP restarts in the last Issue before the update. 2. Apply the update program as the steps in “2. Update the system with the newly uploaded ACDP Program by following the steps below” in 4.1. <p>[STBY side] Follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. By using the CTSP command, move all terminals registered with the STBY side to the ACT side. Note 3 2. Initialize the system by using Telephony Server Maintenance Menu. ACDP restarts in the last Issue before the update. Note 4 3. Apply the update program as the steps in “2. Update the system with the newly uploaded ACDP Program by following the steps below” in 4.1.

No.	Error Message	Suggested Action
33	Applying ACDP Program failed because program link not changed.	<p>[ACT side] Follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. Perform Program & Office Data Load & System Initialization with the SINZ command. ACDP restarts in the last Issue before the update. 2. Apply the update program as the steps in “2. Update the system with the newly uploaded ACDP Program by following the steps below” in 4.1. <p>[STBY side] Follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. By using the CTSP command, move all terminals registered with the STBY side to the ACT side. Note 3 2. Initialize the system by using Telephony Server Maintenance Menu. ACDP restarts in the last Issue before the update. Note 4 3. Apply the update program as the steps in “2. Update the system with the newly uploaded ACDP Program by following the steps below” in 4.1.

No.	Error Message	Suggested Action
34	<p>Applying ACDP Program Version information change failed.</p> <p>Applying ACDP Program Version different from DISS command Version.</p>	<p>[ACT side]</p> <p>ACDP Program is successfully updated. The version information, however, has not been updated and the last Issue number before the update is displayed on the DISS command screen.</p> <p>To correct this, follow the outlined procedure below to update ACDP Program online again.</p> <ol style="list-style-type: none"> 1. Revert the ACDP Program to the previous Issue in the same manner as described in “2. Update the system with the newly uploaded ACDP Program by following the steps below” in 4.1. 2. Go back to Section 4.1 and start over the update process again from uploading an update for ACDP Program via Telephony Server Maintenance Menu. Note 7 <p>[STBY side]</p> <p>Follow the outlined procedure below to correct the ACDP Program version information.</p> <ol style="list-style-type: none"> 1. Perform Non-Load Initialization with the ACDIZ command. Note 2 <p>ACDP Program is successfully updated. The version information, however, has not been updated and the last Issue number before the update is displayed on the DISS command screen. Note 6</p> <ol style="list-style-type: none"> 2. Revert the ACDP Program to the previous Issue in the same manner as described in “2. Update the system with the newly uploaded ACDP Program by following the steps below” in 4.1. 3. Go back to Section 4.1 and start over the update process again from uploading an update for ACDP Program via Telephony Server Maintenance Menu. Note 8

Note 2: For details, see “ACDIZ” in this manual.

Note 3: For details, see “Control of Terminal Registration” in the chapter “Operations of Telephony Server” of Operations and Maintenance Manual.

Note 4: For details, see “Initialization by Telephony Server Maintenance Menu” in the chapter “Operations of Telephony Server” of Operations and Maintenance Manual.

Note 5: If this error repeatedly occurs, the update program may have a problem. Check it for validity and integrity.

Note 6: If the update of ACDP Program version information fails, the version file may have a problem. Check the ACDP library to be applied for validity and integrity.

Note 7: In the case that reverting the ACDP library to the previous Issue fails, perform Program & Office Data Load & System Initialization with the SINZ command.

Note 8: In the case that reverting the ACDP library to the previous Issue fails, move all terminals registered with the STBY side to the ACT side by using the CTSP command*. Then, Initialize the system via Telephony Server Maintenance Menu**.

* For details, see “Control of Terminal Registration” in the chapter “Operations of Telephony Server” of Operations and Maintenance Manual.

** For details, see “Initialization by Telephony Server Maintenance Menu” in the chapter “Operations of Telephony Server” of Operations and Maintenance Manual.

6. Do not perform the [ACDP Program Upload] option from Telephony Server Maintenance Menu while the ACDP Program update process is in progress.
7. If the following operation is performed while the ACDIZ command screen is open, current display of version information on the screen may not be updated automatically and will need to be updated by restarting the command:
 - Upload of an update for ACDP Program via Telephony Server Maintenance Menu
 - System changeover

4.3 Programming

None.



CHAPTER 8

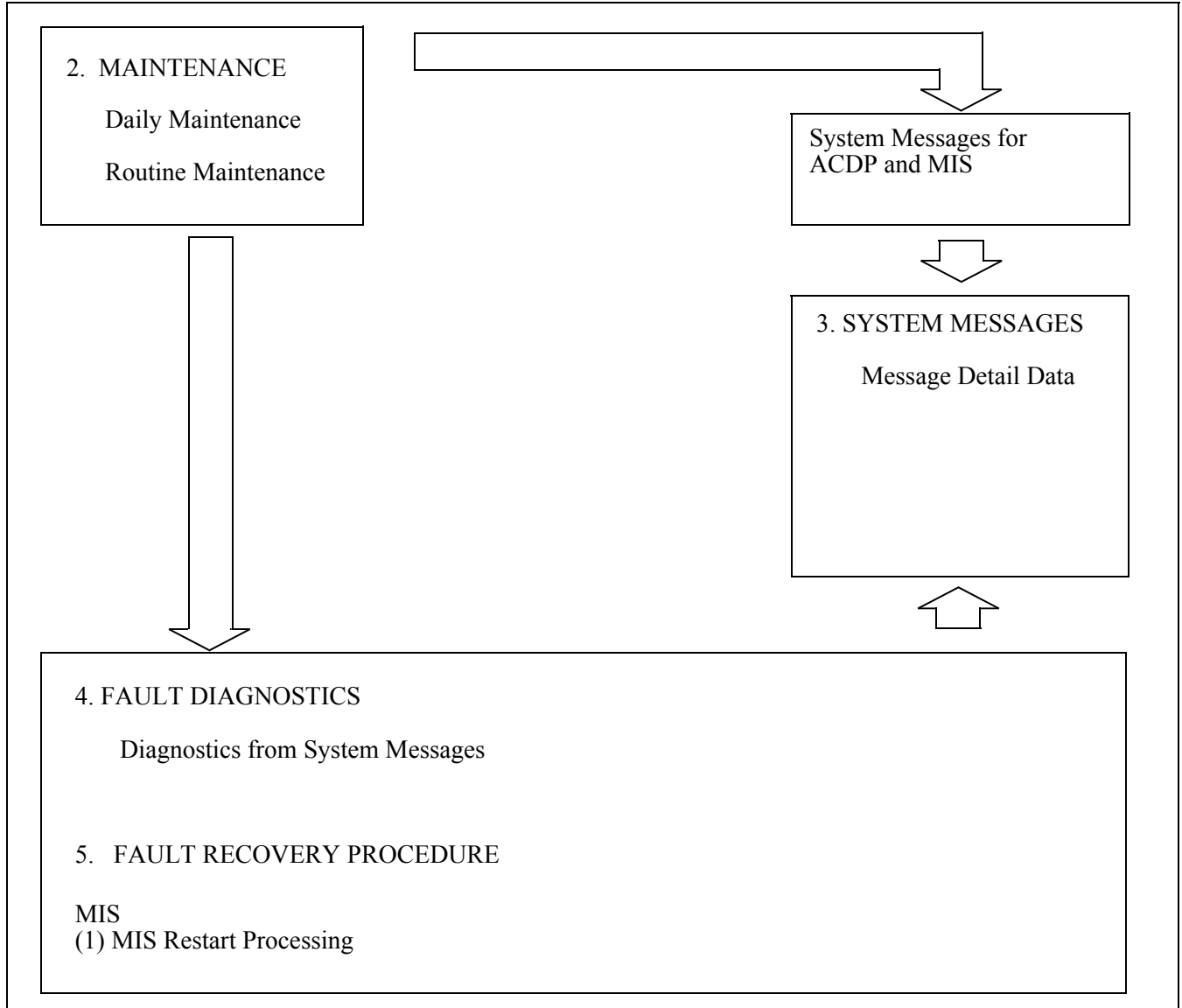
SYSTEM MAINTENANCE



1. GENERAL

This Chapter explains the maintenance, diagnostics from system messages and fault recovery procedure respectively of the ACD System. If any fault has been discovered in the course or as a result of maintenance operations, it should be diagnosed and repaired by referring to system messages concerned and the fault recovery procedure.

Flow of Maintenance Work



2. MAINTENANCE

2.1 Daily Maintenance

The daily maintenance of the ACD System consists of the following checking.

Checking if the following system messages related to ACD system is displayed.

4-R “TCP/IP Link Failure”

5-Q “ACD-MIS LOCK UP”

6-H “Bad Call Notification”

12-H “Connection Failure Between ACT and STBY (TEMPORARY)”

12-I “Connection Failure Between ACT and STBY (PERMANENT)”

12-J “Connection Recovery Between ACT and STBY”

26-V “LAN Interface Error Report”

26-Y “Standalone Mode Set Notification”

26-Z “Standalone Mode Release Notification”

2.1.1 The Relationship between System Messages and Lamp Indications

When the system has detected a fault, the corresponding system message is given out and, at the same time, the related lamp on the TOPU illuminates.

The table below shows the system messages and their default alarm/grade.

System Messages and their default Alarm/Grade

SYSTEM MESSAGE		DEFAULT ALARM	DEFAULT GRADE	REMARKS
NO.	NAME			
4-R	TCP/IP Link Failure	SUP	3	
5-Q	ACD-MIS LOCK UP	NON	0	
6-H	Bad Call Notification	SUP	2	
12-H	Connection Failure Between ACT and STBY (TEMPORARY)	SUP	1	
12-I	Connection Failure Between ACT and STBY (PERMANENT)	MN	2	
12-J	Connection Recovery Between ACT and STBY	-	1	

System Messages and their default Alarm/Grade

SYSTEM MESSAGE		DEFAULT ALARM	DEFAULT GRADE	REMARKS
NO.	NAME			
26-V	LAN Interface Error Report	SUP	3	
26-Y	Standalone Mode Set Notification	SUP	2	
26-Z	Standalone Mode Release Notification	NON	3	

3. SYSTEM MESSAGES

3.1 System Messages and Their Meanings

The system messages shown in System Messages for MIS are displayed when faults occur with the ACD system. These tables show the system messages in case faults and their meaning.

System Messages for MIS

SYSTEM MESSAGE	MEANING	FAULT CONTENTS	Page
4-R	TCP/IP Link Failure	A fault has occurred to the UAP or to the line connected with the external computer.	579
5-Q	ACD-MIS LOCK UP	Something abnormal happened, and the communication between ACDP and MIS has been locked up. (To be displayed when ASYD, SYS1, Index 42, Bit 2="1".)	580
6-H	Bad Call Notification	This message is issued to indicate the result of Bad Call Notification.	581
12-H	Connection Failure Between ACT and STBY (TEMPORARY)	This message is issued to indicate that a temporary connection failure between ACT side and STBY side has occurred.	591
12-I	Connection Failure Between ACT and STBY (PERMANENT)	This message is issued to indicate that a connection failure between ACT side and STBY side has occurred.	593
12-J	Connection Recovery Between ACT and STBY	This message is issued to indicate that a Health Check between ACT side and STBY side was ended successfully after a connection failure.	595
26-V	LAN Interface Error Report	A fault, related to the TCP/IP connection between the Node and MIS/HOST, occurred.	597

System Messages for MIS

SYSTEM MESSAGE	MEANING	FAULT CONTENTS	Page
26-Y	Standalone Mode Set Notification	This message is issued when the VNDM Local Node comes on-line as a Standalone mode.	598
26-Z	Standalone Mode Release Notification	This message is issued when the VNDM Local Node is released its standalone mode and FCCS link is re-established.	600

3.2.2 Message Detail Data of System Message “5-Q”

System Message 5-Q: ACD-MIS LOCK UP

(1) Print-out Format

SYSTEM MESSAGE 5 - Q	ACD-MIS LOCK UP
NEC - ESD	MAY 11 22:30
1: 00 00 00 00 00 00 00 00	2: 00 00 00 00 00 00 00 00

(2) Print-out information (typical)

Each data is always displayed as “0”.

3.2.3 Message Detail Data of System Message “6-H”

System Message 6-H: Bad Call Notification (ACD)

(1) Print-out Format **Note 1**

SYSTEM MESSAGE 6 - H				BAD CALL NOTIFICATION			
NEC - ESD				AUG 14 17:00			
1: XX XX	XX XX	XX XX	XX XX	2: XX XX	XX XX	XX XX	XX XX
□□ □□	□□ □□	□□ □□	□□ □□	□□ □□	□□ □□	□□ □□	□□ □□
[1] [2]	[3] [4]	[5] [6]	[7] [8]	[9] [10]	[11] [12]	[13] [14]	[15] [16]

Note 1: ASYD, SYS1, Index 86, Bit 7: System Message Contents.
 Above data is required to print out information report for [9]-[16].
 Set this bit as follows: Bit 7=1: Detailed (always assign "1").

(2) Print-out information (typical)

- [1] Bad Call Notification
 - 20=ACD trunk connection
- [2] ACD Trouble Kind
 - 01=ACD trunk trouble key
 - 14=ACD reset start
 - 15=Insufficient ACD memory
 - 16=Insufficient ACD call record
 - 17=Excessive business station on ACD calls
 - 18=Excessive calls queued
 - 21=Unknown Pilot No. called
 - 24=Illegal execution of ACD timeout procedure
 - 30=ACD pointer error detection and recovery
 - 33=ACDP reset completion
 - 34=Call recovery failure on unknown Pilot No.
 - 37=ACD Traffic (incoming) Capacity Over
 - 38=Call from unsupported terminal
 - 39=ACD Agent Position available
 - 40=ACDP Quick Initialization start
 - 41= Stop ACDP Quick Initialization completion
 - 42=ACD Client License capacity over
 - 44=Illegal ACD-DM
 - 46=Successful completion of ACDP Program update
 - 47=Failed ACDP Program update
 - 99=Illegal ACD processing - trace stored

[When [2] = 01 (Hex)]

[3]-[6]: Information on Agent Position
 [3]-[5]: My Line No.
 [6]: 00

[7], [8]: 00 00

[9]-[12]: Information on Calling Party
 – Station
 [9]-[11]: Station No.
 [12]: 00
 – Trunk
 [9], [10]: Route No.
 [11], [12]: Trunk No.

[13]-[16]: Information on Held Party or 3rd Station/Trunk in 3-party connection
 – Station
 [13]-[15]: Station No.
 [16]: 00
 – Trunk
 [13], [14]: Route No.
 [15], [16]: Trunk No.

[When [2] = 14 (Hex)]

[3]: Issue of ACDP (First digit of decimal place)
 [4]: Issue of ACDP (Second digit of decimal place)

[When [2] = 21 (Hex)]

[3]-[6]: Information on Calling Party
 – Station
 [3]-[5]: My Line No. (Station)
 [6]: 00
 – Trunk
 [3], [4]: Route No.
 [5], [6]: Trunk No.

[7], [8]: 00 00

[9]-[12]: Information on Unknown Pilot No.
 [9]-[11]: Unknown Pilot No. called
 [12]: 00

[When [2] = 24 or 99 (Hex)]

[3]-[6]: 00 00 00 00
 [7], [8]: Error Counter

[When [2] = 30 (Hex)]

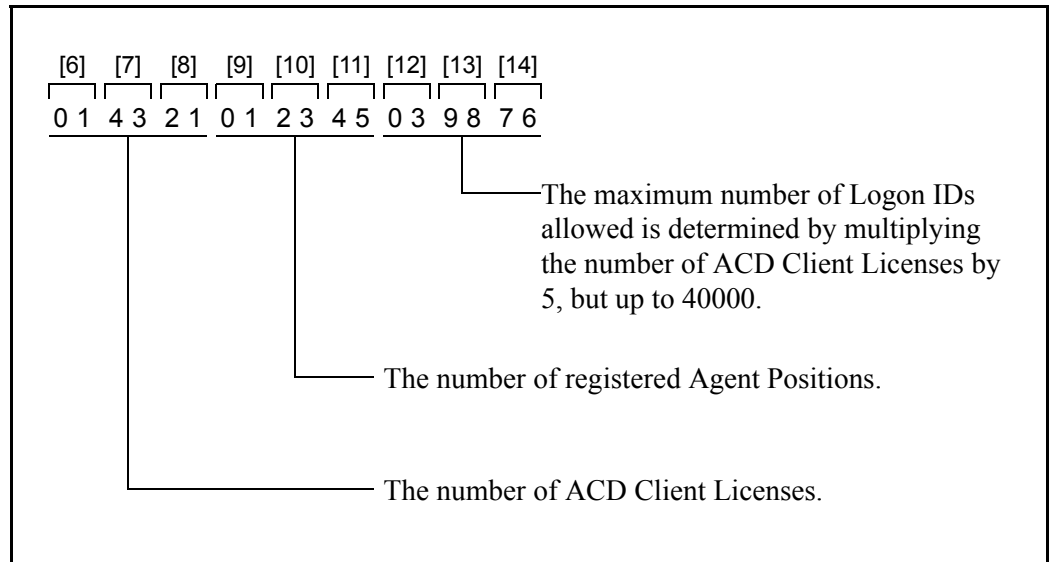
[3]-[6]: Pointer Address
 [7]: 00
 [8]: Error Kind

[When [2] = 33 (Hex)]

- [3]: ACDP Data Memory: 00=Used
01=Not used
- [4]: ACDP System Capacity: (The number of Agent Positions)
01=ACD Client License Method (Up to 2000 positions)
02=ACD Client License Method (Up to 15000 positions)

Note: In this method, the numbers of ACD Client License and registered Office Data are displayed between [6]-[14].

- [5]: 00
 - [6]-[8]: The number of ACD Client Licenses
 - [9]-[11]: The number of registered Agent Positions
 - [12]-[14]: The number of registered Logon IDs
- Example: When the numbers of ACD Client Licenses, registered Agent Positions, and registered Logon IDs are 14321, 12345, and 39876 respectively;



[When [2] = 34 (Hex)]

- [3]-[6]: Information on Unknown Pilot No.
- [3]-[5]: Unknown Pilot No. called
- [6]: 00

[When [2] = 38 (Hex)]

[3]-[6]: Information on Agent Position
 [3]-[5]: My Line No.
 [6]: 00
[7], [8]: 00 00
[9]-[12]: Information on Calling Party
 – Station
 [9]-[11]: Station No.
 [12]: 00
 – Trunk
 [3], [4]: Route No.
 [5], [6]: Trunk No.

[When [2] = 40 (Hex) or 41 (Hex)]

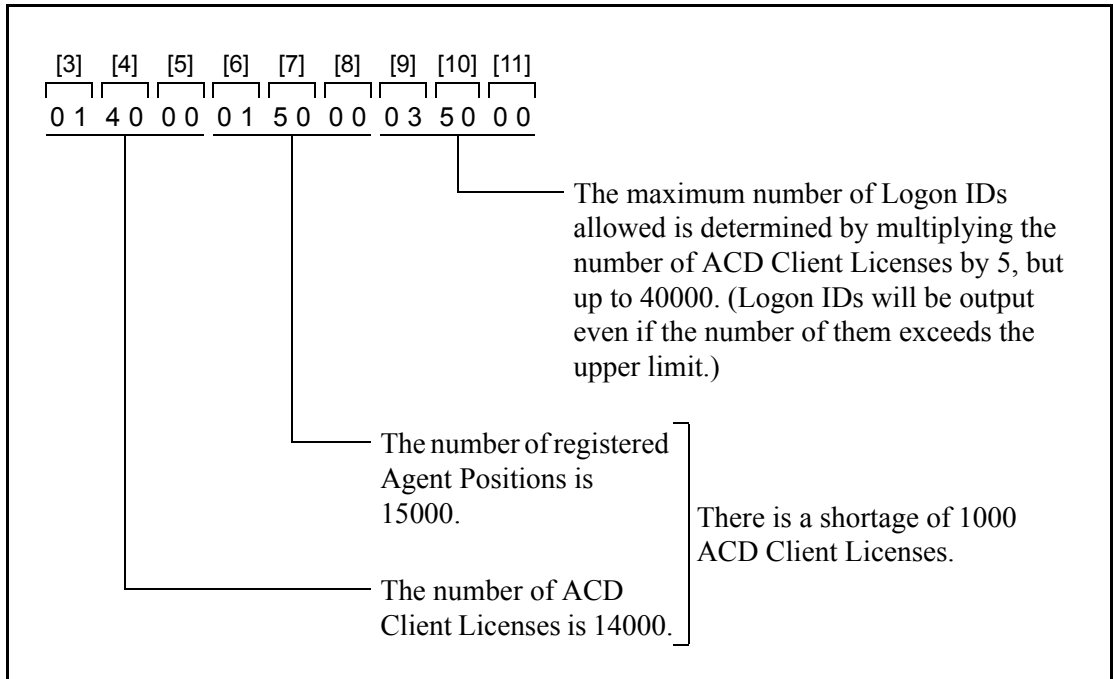
[3]: With/Without Subscribe
 00=With Subscribe
 01=Without Subscribe

Note: When a forced changeover due to an equipment failure ([2] ACD Trouble Kind=40) in the ACT side occurs, all agent positions will be logged off. After ACDP Quick Initialization Completion ([2] ACD Trouble Kind=41) is issued, all agent positions will become available again and you may log on to the agent position and start operation.

[When [2] = 42 (Hex)]

- [3]-[11]: The number of ACD Client Licenses and registered Office Data
- [3]-[5]: The number of ACD Client Licenses
- [6]-[8]: The number of registered Agent Positions
- [9]-[11]: The number of registered Logon IDs

Example: When the numbers of ACD Client Licenses, registered Agent Positions, and registered Logon IDs are 14000, 15000, and 35000 respectively;



[When [2] = 44 (Hex)]

- [3]: ACDP Retrofit: 00=Retrofit invalid
01=Retrofit valid
- [4]: ACD Data Memory 01=ACD Client License Method (Up to 2000 positions)
02=ACD Client License Method (Up to 15000 positions)
03=Others (Retrofit not available)

[When [2] = 46 (Hex)]

- [3]: Issue of ACDP (First digit of decimal place)
- [4]: Issue of ACDP (Second digit of decimal place)
- [5]: ACDP Program State 00=New program file open
01=Existing program file open

[When [2] = 47 (Hex)]

[3]: Error Type
01=Invalid memory configuration
02=Existing program file close error
03=Program file open error
04=Unsupported device
05=Current Working Directory read error
06=Abnormal state of Current Working Directory
07=Symbolic link update error
08=Version information update error

[4]: Error Description

- Error Type 01
 - 01=Memory backup failed
 - 02=Memory development failed
- Error Type 02
 - 01=Close of program file failed
- Error Type 03
 - 01=Open of new program file failed
 - 02=Open of existing/new program file failed
- Error Type 04
 - 01=SR-MGC(S) unsupported
- Error Type 05
 - 01=Current Working Directory read failed
- Error Type 06
 - 01=Current Working Directory abnormal state
- Error Type 07
 - 01=Symbolic link update failed
- Error Type 08
 - 01=Version information update failed (/usr)
 - 02=Version information update failed (/var)

(3) Bad Call Notification Codes.

Print code	Tally-Oh Ref. No.	Description
2001	Auto-print	Trunk Trouble key
2002		(Removed)
2003	03	Caller abandon during agent ringing
2004	04	Direct call to agent's ACD line
2005	05	Call connect failed, requeued
2006	06	Call connect failed, dropped after multiple attempts (Bad calling party)
2007	07	Call re-connect attempt
2008	08	Call connect error audit loop
2009	09	Agent force logoff (via Tally-Oh code)
2010	10	Supervisor forced agent to logoff (via Tally-Oh code)
2011	11	Supervisor forced agent to Break (via Tally-Oh code)
2012	12	Supervisor forced agent to Ready (via Tally-Oh code)
2013	13	Supervisor forced agent to Work mode (via Tally-Oh code)
2014	Auto-print	ACD initialization started
2015	Auto-print	Insufficient ACD memory
2016	Auto-print	Insufficient ACD call records
2017	Auto-print	Excessive business stations, agent Node lines, and Att's. on ACD calls
2018	Auto-print	Excessive calls queued
2019		(Reserved)
2020		(Reserved)
2021	Auto-print	Unknown pilot number called
2022	22	Count free call records (once per hour if enabled)
2023	23	Invalid tenant specified for agent
2024	Auto-print	Illegal execution of ACD time-out procedure
2025	25	Pilot number illegally removed (not by PCPro)
2026	26	Attendant called pilot without held party
2027	27	Position audit corrected locked agent (enabling turns on audit)
2028	28	Call record audit corrected locked call record (enabling turns on audit)
2029	29	Call recovered
2030	Auto-print	Pointer corruption detected and corrected
2031	31	Call abandoned while on hold
2032	32	Count total number of incoming messages (once per hour if enabled)
2033	Auto-print	ACD initialization complete
2034	Auto-print	Recover call failure due to bad pilot number
2099	Auto-print	Illegal ACD process, trace stored

(4) Auto-Print and Tally-Oh Codes

Some Bad Call Notifications are always printed on PCPro because of their importance. These codes are marked as Auto-print in the above table. All codes not marked Auto-print are turned off when ACD is initialized, but can be manually turned on using the Tally-Oh code 075. To use, press the TALLY key on any agent or supervisor phone and enter:

- 075;
- the two-digit reference number listed in the above table;
- either 0 (Off) or 1 (On);
- the # key.

For example, to turn on the Bad Call Notification print-out for “Call Recovered,” press TALLY 075291#.

To change all Bad Call Notifications, use the reference number 00. For example, pressing TALLY 075000 turns off all codes.

(5) Examples

- Agent 4031 reported trunk trouble while connected to route 134, trunk 10, with the held station 4302.
1: 20 01 4A 31 00 00 00 00 2: 01 34 00 1A 43 A2 00 00
- Route 5 trunk 14 abandoned after ringing 72 seconds at agent position 5432.
1: 20 03 54 32 00 00 00 72 2: 00 05 00 14 00 00 00 00
- Station 4003 has placed a direct call to the ACD line on station 5144.
1: 20 04 51 44 00 00 00 00 2: 4A A3 00 00 00 00 00 00
- An attempt to connect route 7 trunk 3 to agent 6640 has failed. Caller is being re-queued.
1: 20 05 66 4A 00 00 00 00 2: 00 07 00 03 00 00 00 00
- Successive attempts to connect route 3 trunk 15 have failed. Caller was dropped.
1: 20 06 00 00 00 00 00 00 2: 00 03 00 15 00 00 00 00
- A second attempt is being made to connect route 3 trunk 15 to agent 5677.
1: 20 07 56 77 00 00 00 00 2: 00 03 00 15 00 00 00 00
- A connection attempt to agent 2002 has failed. Checking agent for valid status.
1: 20 08 2A A2 00 00 00 00 2: 00 00 00 00 00 00 00 00
- Agent 78300 used Tally-Oh code to forcibly logoff.
1: 20 09 78 3A A0 00 00 00 2: 00 00 00 00 00 00 00 00
- Supervisor 3888 used Tally-Oh code to force logoff of agent 3005.
1: 20 10 3A A5 00 00 00 00 2: 38 88 00 00 00 00 00 00
- Supervisor 3888 used Tally-Oh code to force agent 3005 into break mode.
1: 20 11 3A A5 00 00 00 00 2: 38 88 00 00 00 00 00 00
- Supervisor 3888 used Tally-Oh code to force agent 3005 into ready mode.
1: 20 12 3A A5 00 00 00 00 2: 38 88 00 00 00 00 00 00

- Supervisor 3888 used Tally-Oh code to force agent 3005 into work mode.
1: 20 13 3A A5 00 00 00 00 2: 38 88 00 00 00 00 00 00
- The ACD has started the initialization process of release 2.12. Last initialization (prior to this one) was on September 25 at 7:15 pm. This msg will be followed by the number 33 ACD Initialization Complete msg.
1: 20 14 02 12 00 00 00 00 2: 00 00 00 00 00 00 00 00
- The ACD has exhausted available memory, new trunks will not be accepted.
1: 20 15 00 00 00 00 00 00 2: 00 00 00 00 00 00 00 00
- The ACD has exhausted available call records, new calls will receive Ringback Tone.
1: 20 16 00 00 00 00 00 00 2: 00 00 00 00 00 00 00 00
- The ACD has exhausted available station records, additional ACD calls from business stations, agent Node lines, or attendants will not be accepted.
1: 20 17 00 00 00 00 00 00 2: 00 00 00 00 00 00 00 00
- The ACD has exhausted available queue records, additional queueing of ACD calls will not be processed.
1: 20 18 00 00 00 00 00 00 2: 00 00 00 00 00 00 00 00
- Route 9 trunk 2 called the monitored number 4359, which is not listed as a pilot number in the ACD database.
1: 20 21 00 09 00 02 00 00 2: 43 59 00 00 00 00 00 00
- This is a count of available call records. The ACD could accept 293 more calls. Printed once per hour, on the hour.
1: 20 22 00 00 00 00 02 93 2: 00 00 00 00 00 00 00 00
- Invalid ACD tenant. Agent 3211 has a different tenant between ACD and Node.
1: 20 23 32 11 00 00 00 00 2: 00 00 00 00 00 00 00 00
- Internal ACD sequence error. This error has now been reported 7 times.
1: 20 24 00 00 00 00 00 07 2: 00 00 00 00 00 00 00 00
- The pilot number 4350 was illegally removed by the ACD. (Does not include removal from PCPro)
1: 20 25 43 5A 00 00 00 00 2: 00 00 00 00 00 00 00 00
- Attendant 2 called pilot number 4350 without a held party.
1: 20 26 20 00 00 00 00 00 2: 43 5A 00 00 00 00 00 00
- Position audit found agent 4301 in a bad state and corrected it. The position's state was #14 and it was pointing to a call record containing route 9 trunk 2, and 4302. The position audit is turned on by enabling this printout. The audit does not run otherwise.
1: 20 27 43 A1 00 00 00 14 2: 00 09 00 02 00 00 43 A2
- Call record audit found a call record in a bad state and corrected it. The three parties in the call record were 4301, 4350, and route 52 trunk 7. The call record audit is turned on by enabling this printout. The audit does not run otherwise.
1: 20 28 43 A1 00 00 00 00 2: 43 5A 00 00 00 52 00 07

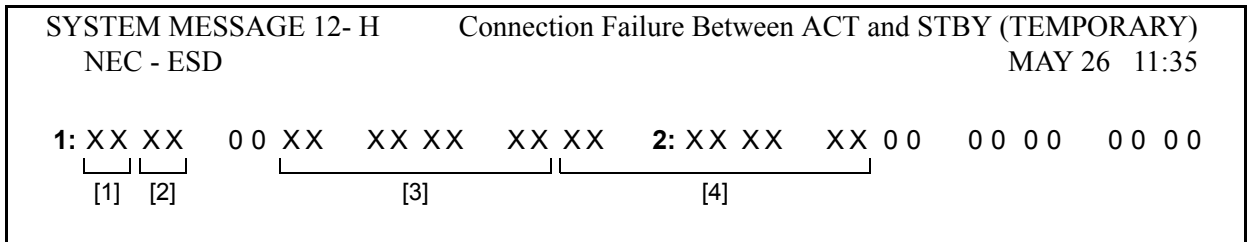
-
- Call was recovered after ringing too long at an agent's ACD line. The ringing time can be set with the ACDSPL PCPro command. The agent was 4301, the ringing time was 45 seconds, the split number was 2, the calling party was station 5800, and the held party was route 17 trunk 4.
1: 20 29 43 A1 00 00 45 02 2: 58 AA 00 00 00 17 00 04
 - The ACD detected corruption in the list of critical pointers. The pointer was 8000:1234 and the corruption type was #2. The corruption has been corrected and should not cause future problems.
1: 20 30 80 00 12 34 00 02 2: 00 00 00 00 00 00 00 00
 - An ACD call released from an agent while on hold. The agent was 4301, three minutes and 20 seconds have elapsed since the caller was put on hold, and the caller was route 15 trunk 7.
1: 20 31 43 A1 00 00 03 20 2: 00 15 00 07 00 00 00 00
 - Count of incoming messages from the Node to the ACD. This printout will be done once an hour, on the hour. There are 10 counters, each of which count messages for 6 minute blocks. In the first 6 minutes of the hour, there were (hex) 482B messages. There were (hex) A655 messages in the second 6 minutes, etc. This is used primarily for determining a relative traffic count.
1: 20 32 2B 48 55 A6 1C 56 2: 3F 62 98 B0 26 4D EF 78
 - ACD initialization completed. This message will follow the #14 ACD Initialization Started msg.
1: 20 33 00 00 00 00 00 00 2: 00 00 00 00 00 00 00 00
 - Recover Call failed due to a bad pilot number. When a call is recovered from an agent position after ringing the specified amount of time, the caller is reconnected to the first pilot number in the ACD database until another agent becomes available. If this pilot number is bad (doesn't exist in the Node database, etc.), the recover will fail and this msg will be printed. In this case, the pilot number 4350 is being reported. The pilot number should be removed or reprogrammed correctly.
1: 20 34 43 5A 00 00 00 00 2: 00 00 00 00 00 00 00 00
 - Internal ACD error. Trace snapshot saved in buffer. 27th occurrence of this error.
1: 20 99 00 00 00 00 00 27 2: 00 00 00 00 00 00 00 00
-

3.2.4 Message Detail Data of System Message “12-H”

System Message 12-H: Connection Failure Between ACT and STBY (TEMPORARY)

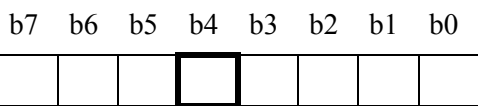
This message is issued when ACK packets of Health Check between ACT side and STBY side cannot be received from STBY side for more than 4 seconds (fixed). This message means that "Connection Failure (Temporary)" has occurred. When this message is issued, Memory Copy process between ACT and STBY will not be performed until the connection recovery message (12-J) is issued.

(1) Print-out Format



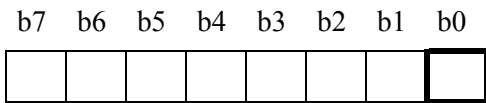
(2) Print-out information (typical)

[1] Health Check Type



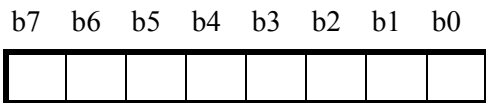
b4: 0/1= - /ACT→STBY

[2] ACT Information of CPU where a Failure Occurred

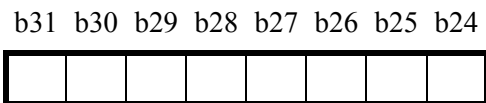
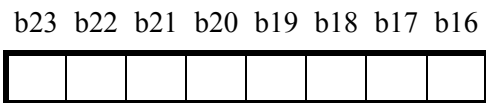
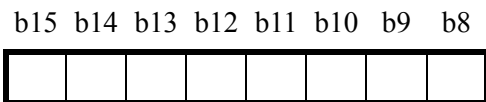


b0: 0/1= ACT / STBY

[3] IP Address of CPU in STBY side



b0-b31: IP Address of the LAN Port in STBY side which a connection failure was detected in



[4] IP Address of CPU in ACT side

b7 b6 b5 b4 b3 b2 b1 b0

--	--	--	--	--	--	--	--

b15 b14 b13 b12 b11 b10 b9 b8

--	--	--	--	--	--	--	--

b23 b22 b21 b20 b19 b18 b17 b16

--	--	--	--	--	--	--	--

b31 b30 b29 b28 b27 b26 b25 b24

--	--	--	--	--	--	--	--

b0-b31: IP Address of the LAN Port in ACT side

[4] IP Address of CPU in ACT side

b7 b6 b5 b4 b3 b2 b1 b0

--	--	--	--	--	--	--	--

b15 b14 b13 b12 b11 b10 b9 b8

--	--	--	--	--	--	--	--

b23 b22 b21 b20 b19 b18 b17 b16

--	--	--	--	--	--	--	--

b31 b30 b29 b28 b27 b26 b25 b24

--	--	--	--	--	--	--	--

b0-b31: IP Address of the LAN Port in ACT side

3.2.6 Message Detail Data of System Message "12-J"

System Message 12-J: Connection Recovery Between ACT and STBY

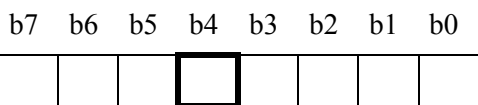
This message is issued when the Health Check between ACT side and STBY side ends successfully after "12-H Connection Failure Between ACD and STBY (TEMPORARY)" or "12-I Connection Failure Between ACD and STBY (PERMANENT)" is issued.

(1) Print-out Format

SYSTEM MESSAGE 12- J NEC - ESD	Connection Recovery Between ACT and STBY MAY 26 11:55
1: <u>XX XX</u> 00 00 <u>XX XX XX XX</u>	2: <u>XX XX XX XX</u> 00 00 00 00
[1] [2]	[3] [4]

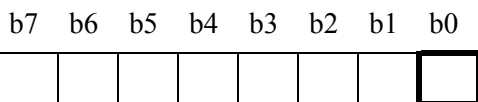
(2) Print-out information (typical)

[1] Health Check Type



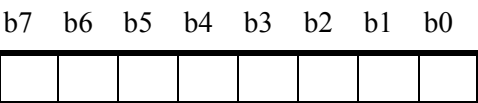
b4: 0/1= - /ACT→STBY

[2] Failure Type and ACT Information of CPU where a Failure Occurred

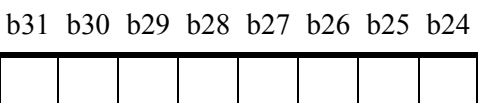
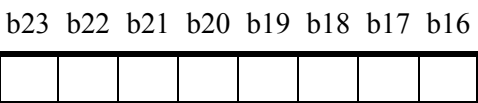
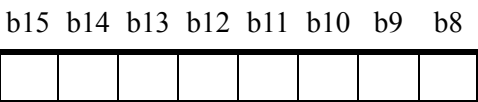


b0: 0/1= ACT / STBY

[3] IP Address of CPU in STBY side



b0-b31: IP Address of the LAN Port in STBY side which a connection failure was detected in



[4] IP Address of CPU in ACT side

b7 b6 b5 b4 b3 b2 b1 b0

--	--	--	--	--	--	--	--

b15 b14 b13 b12 b11 b10 b9 b8

--	--	--	--	--	--	--	--

b23 b22 b21 b20 b19 b18 b17 b16

--	--	--	--	--	--	--	--

b31 b30 b29 b28 b27 b26 b25 b24

--	--	--	--	--	--	--	--

b0-b31: IP Address of the LAN Port in ACT side

3.2.7 Message Detail Data of System Message “26-V”

System Message 26-V: LAN Interface Error Report (OAI/MIS)

This message is issued when the connection error related to external LAN Interface equipment occurs in the system.

(1) Print-out Format

SYSTEM MESSAGE 26 - V NEC - ESD	LAN INTERFACE ERROR REPORT JULY 25 19:30
TCP/IP Part	Application Part
1: XX XX XX XX XX XX XX XX [1] [2] [3] [4] [5] [6] [7] [8]	2: XX XX XX 00 00 00 00 00 [9] [10] [11]

(2) Print-out information (typical)

- TCP/IP Part -

- [1]-[4] IP address of the error-detected OAI/MIS terminal
- [5], [6] Port No.
- [7] Used socket No.
- [8] Error Code (TCP/IP part)

- Application Part -

- [9] Application Type
 05=OAI
 07=MIS
- [10] Faulty Logical Port No.
- [11] Error Kind (ERRK)
 01=SEND Execution Error
 02=RECEIVE Execution Error
 03=TCP/IP Connection Error
 04=Connection Error (B-level Infinite Loop, etc.)
 05=TCP/IP Port Capacity Over
 06=TCP/IP Connection Error (IP/ACDP service is invalid)

3.2.8 Message Detail Data of System Message "26-Y"

System Message 26-Y: Standalone Mode Set Notification

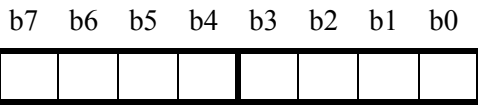
This message issued when the VNDM Local Node in FCCS network comes on-line as a Standalone mode.

(1) Print-out Format

SYSTEM MESSAGE 26 - Y				Standalone Mode Set Notification			
NEC - ESD				AUG 21 17:15			
1: XX XX	XX XX	XX XX	XX XX	2: XX 00	00 00	00 00	00 00
└─┘└─┘	└─┘└─┘	└─┘└─┘	└─┘└─┘	└─┘			
[1] [2]	[3] [4]	[5] [6]	[7] [8]	[9]			

(2) Print-out information (typical)

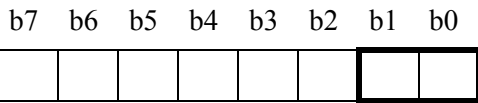
[1]



b0-b7: FACTOR (HEX)
 01: Center VNDM Writing NG
 02: Initialization Failure
 03: VNDM Data Reestablishment

<Center VNDM Writing NG>

[2]



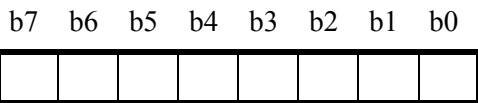
[When FACTOR=1]
 b0=WD=0/1=Writing/Reading
 b1=MS=0/1=Monitor Number/Subscribe Information

[3]-[9]

	(When MS=0) Monitor Number	(When MS=1) Subscribe Information								
[3]	NMI (HEX)	OPEC (HEX)								
[4]	NMI (HEX)	OPEC (HEX)								
[5]	MOKIND (HEX)	TN (HEX)								
[6]	PSAP (HEX)	TN (HEX)								
[7]	PSAP (HEX)	PSAP (HEX)								
[8]	<p>b7 b6 b5 b4 b3 b2 b1 b0</p> <table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table> <p>b0, b1=DL</p>									PSAP (HEX)
[9]	/	<p>b7 b6 b5 b4 b3 b2 b1 b0</p> <table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table> <p>b0, b1=DL</p>								

<VNDM Data Reestablishment>

[2]



[When FACTOR=3]
 b0-7: STS (HEX)
 01: Stand-alone mode due to VNDM Reestablishment (for Local Node only)
 02: VNDM Reestablishment Started (for Center Node only)
 03: VNDM Reestablishment Completed (for Center Node only)

3.2.9 Message Detail Data of System Message "26-Z"

System Message 26-Z: Standalone Mode Release Notification

This message is issued when the VNDM Local Node is released its standalone mode and FCCS link with VNDM Center Node is re-established.

(1) Print-out Format

SYSTEM MESSAGE 26 - Z	Standalone Mode Release Notification
NEC - ESD	AUG 21 17:15
1: 00 00 00 00 00 00 00 00	2: 00 00 00 00 00 00 00 00

(2) Print-out information (typical)

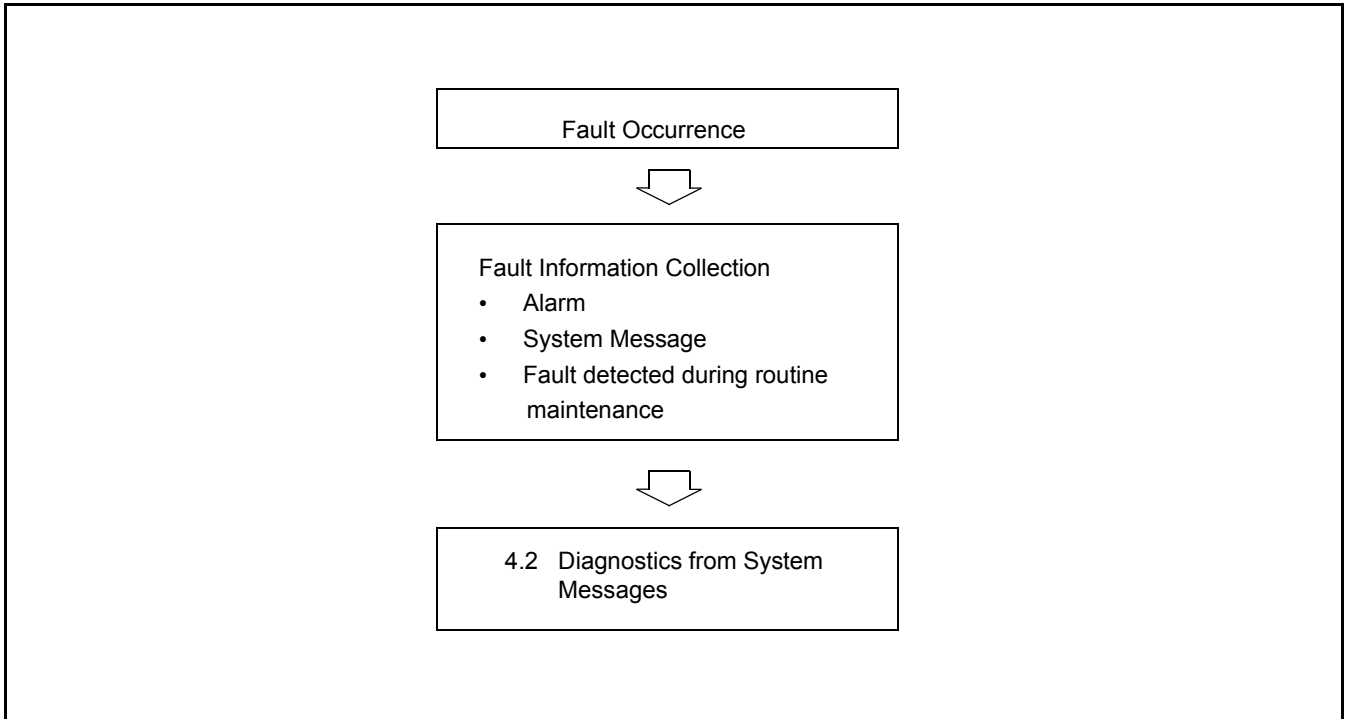
This system message is always indicated as 0.

4. FAULT DIAGNOSTICS

4.1 Fault Information and Fault Diagnostics

In case of trouble with the ACD system, alarms are indicated or system messages are displayed. By collecting such fault information promptly, the faulty positions can be diagnosed and recovery operations can be started quickly. The table below shows the flow from the occurrence of a fault to its diagnostics.

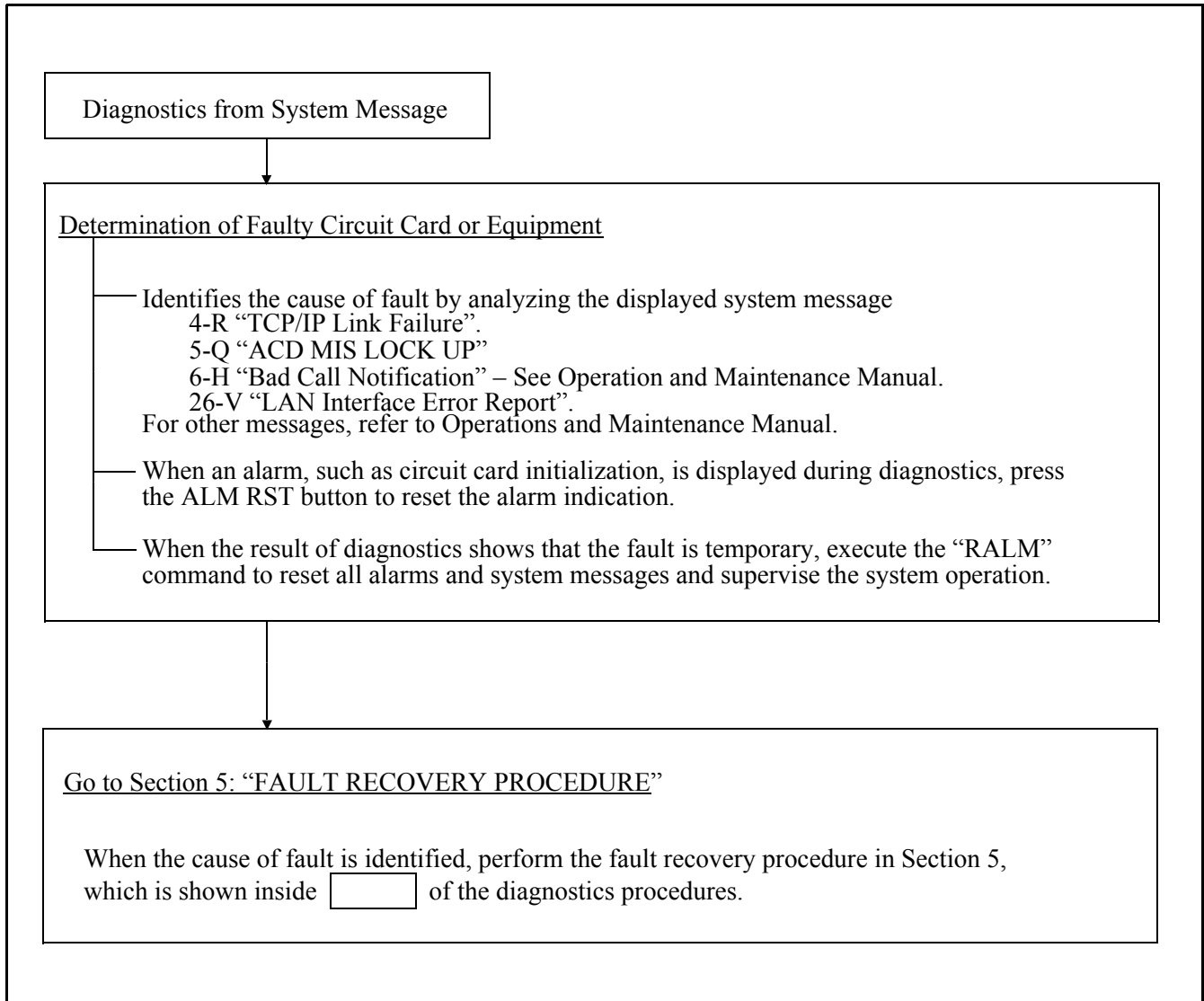
Flow from Fault Occurrence to Fault Diagnostics



4.2 Diagnostics from System Messages

The figure below shows the operations from the diagnostics based on system messages to the identification of the cause of fault.

Flow of Diagnostics from System Message



4.2.1 TCP/IP Link Failure

For details of System Message “4-R” and “26-V,” see Section 3.2.1 and Section 3.2.3 in this Chapter.

START

According to each fault situation, perform the repairing procedure referring to the table below.

- (1) When Message “4-R” is displayed:

Repairing Procedure for TCP/IP Link Failure (Message “4-R”)

ERRK	Detail information of ERRK	Check Item
01	TCP/IP connection is down for the TCP connection disconnection from Host.	Re-start the Host.
02	Incorrect text format is received.	[1] Check the software operation on the Host side.
		[2] Check the LAN cable connection.
0A	TCP/IP connection establishment is not completed for the TCP connection disconnection ordered from Host.	Re-start the Host.
0B	TCP/IP connection establishment is not completed for the TCP connection disconnection ordered from Host.	[1] Check the TCP/IP transmission capacity on the UAP side is proper or not.
		[2] Check the system operation on the UAP side.
0C	According to Heart Beat function of Host, abnormal status of the Host system operation is detected.	Check system operation of the Host.
0D	Not used	
0E	TCP port is released due to the detection of abnormal state in the TCP/IP port (such as B-level Infinite Loop, etc.).	Re-check the operation status of Host.
0F-FF	Not used	

A

A

(2) When Message “26-V” is displayed:

Repairing Procedure for TCP/IP Link Failure (Message “26-V”)

ERRK	Error Situation	Check Item
01	TCP/IP connection is down because the text is not transmitted continuously.	[1] Check the TCP/IP Transmission capacity on the UAP side is proper or not.
		[2] Check on the operation status on the UAP side is normal.
02	Incorrect text format is received.	[1] Check the software operation on the Host side.
		[2] Check the LAN cable connection status.
03	TCP/IP connection is released due to the TCP port disconnection order from the Host.	Re-start the Host computer.
04	TCP port is released due to the detection of abnormal state in the Host operation.	Re-check the operation status of Host.
05	TCP/IP connection cannot be established due to the connection port capacity over.	The number of allowed ports for application use via TCP/IP must be 16 or less. Adjust the total port number within this range.
06	TCP/IP connection cannot be established because IP/ACDP service is invalid.	[1] Check to see that “ASYDL, SYS1, Index 864, Bit 0”=1 (Built-in IP/ACDP is valid).
07~FF	Not used	

Host is still in abnormal status?

If yes,

Host is out of order. Repair the Host computer.

If no,

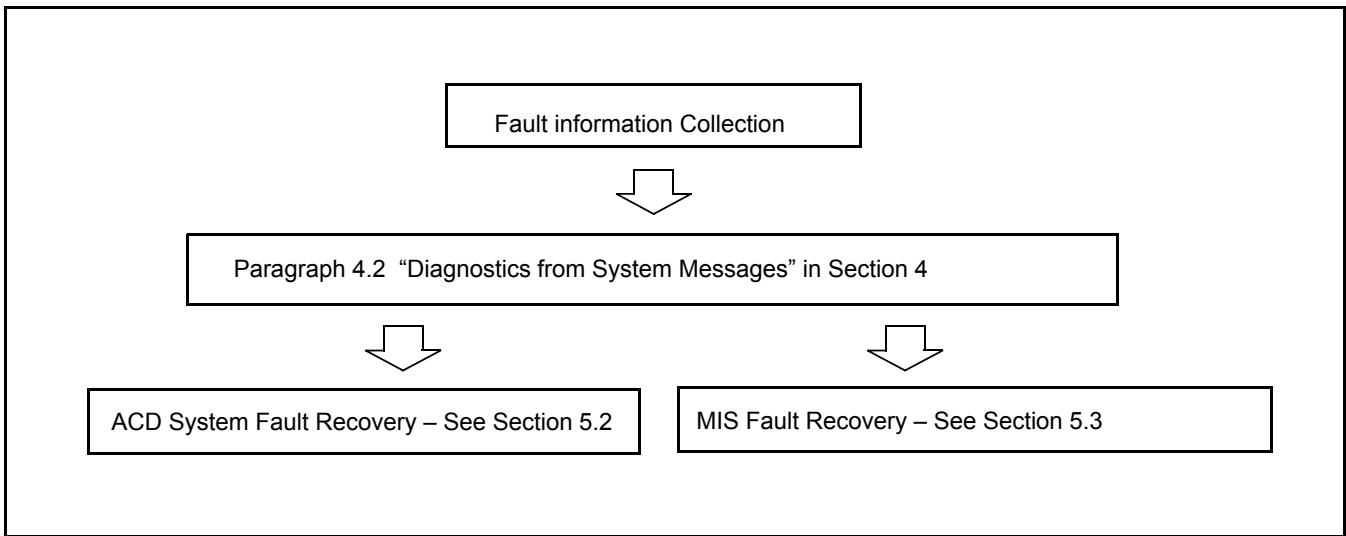
LANI is out of order. Please contact your local sales agency.

5. FAULT RECOVERY PROCEDURE

5.1 Before Starting Fault Recovery

After the fault diagnostics based on fault information such as the alarm and system messages, the next procedure to be done is the fault recovery. Before proceeding to this, it is required to examine when it should be started by comparing the emergency of repair and its influences. Particularly, when the fault is determined in the STBY system, the work should be done at night when the ACD system is operated less frequently. The fault recovery procedures can be divided into those on the ACD system and those on the MIS, as shown below.

Flow of Fault Recovery Procedures



5.2 ACD System Fault Recovery Procedures

See the Operations and Maintenance Manual for the fault recovery procedure related to the ACD system shown below.

- (1) ACDP of Fault - Fault occurs intermittently at ACT side
- (2) ACDP of Fault - STBY side is faulty

5.3 MIS Fault Recovery Procedures

This paragraph describes the fault recovery procedures related to the MIS in the order shown below.

(1) MIS Restart Processing

STEP 1: By selecting MIS System Stop, cause the MIS to stop operating.

STEP 2: Turn off the power supply to the MIS. After taking for 5 ~ 6 seconds, turn on the power supply again.

STEP 3: The MIS starts up.

STEP 4: Perform operation tests of the MIS.

(2) Check on Connection Cables

Check to see if the cable is connected between the MIS and the System.



APPENDIX

APPENDIX A GLOSSARY

ACD	Automatic Call Distribution.
ACDP	Automatic Call Distribution Processor. (As for the Telephony Server, the ACDP is built in the CPU of the Node)
ACD line	Virtual line of an ACD position.
ACD PCPro	PCPro on which the ACD commands are loaded.
After call mode	Selection of ACD position availability after ACD call completion. In Work mode, an ACD position becomes unavailable to receive ACD calls upon release from the ACD call. In Available mode, an ACD position becomes available to receive ACD calls upon release from the previous call.
Agent Personal Queue	Queues for calls that are directed to a specific ACD position.
Answer mode	Answer mode for ACD positions: either Auto or Manual. In Manual mode, incoming calls ring at the position and are required to be answered manually. In Auto mode, calls are connected using the headset or handset, and are introduced by a Zip Tone.
Auto Work mode	Occurs when the ACD position receives or places a call on the Non-ACD line.
Call Control Vector (CCV)	A list of instructions or steps for handling incoming ACD calls.
Circuits	The number of trunks in a trunk group that are designated as ACD trunks.
Conditional threshold	Threshold values set for call acceptance of conditional queue calls into the queue of a target split.
Default language	The language that will be shown on the display of an ACD position that is logged on to the ACD system.
Directory number	Night Assist and Emergency destination programmed in split data (ACDSPL).
Do Not Disturb	Occurs when none of the ACD positions of an ACD split are logged on.
Hardware type	Specifies if the position is a Desktop terminal or analog agent.
Holiday	A date designated as a holiday within the ACD system, subject to holiday call handling procedures (see ACDHC and ACDHS).
I-ACD	Integrated ACD.
I/O type	Defines which type of MIS or Infolink will be used on the input/output port.
Infolink	A data communications link between the ACD system and external computer equipment such as host.
Internal priority	Priority at which an internal call will be handled.
IVR	Interactive Voice Response unit. A voice prompting unit that can be guided through menus via DTMF signalling.
Language	Language to be used for ACD terminal display.
Logon ID	ID code used to log on to the ACD system.
Logon required	Specifies whether ID entry is required for an ACD position to gain access to the

	ACD system.
Maximum queue depth	The number of calls that can be placed in queue.
MIS	Management Information System.
MIS I/O port	Designates the I/O port(s) used for MIS.
Non-ACD line	The My Line of an ACD position.
PCPro	An application tool for system maintenance.
Pilot number	A number used for routing calls to a CCV or a Week Schedule.
Queue priority	Priority at which a trunk call is placed in queue to a split.
Route To	Defines the routing method for pilot number, such as CCV or Week Schedule. (See ACDCCV and ACDWS.)
Split	A hunt group of ACD positions.
Splits Allowed	Specifies which splits a position can take calls from.
Tenant	A software delineation between multiple groups that share a Node or ACD system, e.g., multiple companies which share the same switch, or separate divisions of one company that share an ACD systems.
Tenant name	Name associated with the occupant or user of an ACD system.
Tenant number	Number associated with the occupant or user of an ACD system.
Transfer priority	Priority at which a transferred call will be handled.
Trunk group	Route number associated with ACD.
Week schedule	A schedule consisting of a list of CCVs to be used in routing calls when the Week Schedule method of routing has been designated. (See ACDWS, ACDPLT, and ACDCCV commands.)

APPENDIX B FIELD VALUES FOR ACD SCREENS

Field Values for ACD Screens (1 of 8)

FIELD NAME	DESCRIPTION	VALUES	DEFAULT SETTING	REQUIRED /OPTIONAL
ACD Line	Line that receives all of the ACD calls for this position (via pilot numbers). (Virtual line)	Up to 5 digits	none	required
After call mode	The state of the position will be in after finishing a call from this split. If available mode is selected, the position will become available immediately upon disconnect from the previous call. If work mode is selected, the position will go into work mode.	available/ work	available	required
Agent priority queuing	Determines whether to use priorities when queuing available agents.	Priorities/ No Priorities	No Priorities	required
Alternate night destination CCV	Specifies the CCV to use for the pilot number's alternate night destination.	Index: 0 - 900 (0 = not used) Step: 1 - 20	0	optional
Analog agent access code	Number that invokes an ACD feature for an analog agent.	up to 5 digits	none	required
Analog agent break type	Break type to be associated with an analog agent access code.	1 - 9	none	optional
Analog agent feature	The feature associated with an analog agent access code. Possible values are: Logon with ID, Logon without ID, Logoff, Ready Mode, Work Mode, Break Mode, Tally Code, Trunk Trouble.	(see list at left)	none	required
Analog agent logon ID	Logon ID of agent or supervisor.	up to 9 digits	none	optional
Analog agent tally code	Tally code associate with the dialed analog agent access code.	up to 9 digits	none	optional
Analog agent work mode timeout	The maximum time (in seconds) that an analog agent can stay in Work mode. (0 = indefinite.)	0 - 9999	0	optional
Analog position	Specifies whether this position is analog or not.	Yes/No	No	optional

Field Values for ACD Screens (2 of 8)

FIELD NAME	DESCRIPTION	VALUES	DEFAULT SETTING	REQUIRED /OPTIONAL
Answer mode	Determines how the position can answer ACD calls for this split. If Manual is selected, the position must answer calls manually by pressing the Answer button or the ACD Line key. If Auto is selected, calls are connected automatically; the position will hear Zip Tone when a new call is connected.	manual/ auto	manual	required
Assist directory number	The directory number that will be dialed when an agent presses the Assist button while on an ACD call.	Up to 5 digits	none	optional
Assist key is:	Defines the function of the Assist key.	Assist/ Monitor	Assist	required
Auto work mode for IC PBX	Automatic work mode, which removes the position from receiving ACD queued calls while receiving an incoming call on the Non-ACD line.	Yes/No	No	required
Auto work mode for OG PBX	Automatic work mode, which removes the position from receiving ACD queued calls while placing an outgoing call on the Non-ACD line.	Yes/No	No	required
Break type	Specifies whether agents should be prompted for break type when entering Break mode.	0 (single)/ 1 (multiple)	0	required
Call recover time	Sets the amount of time (in seconds) an ACD call can ring at an agent position before being recovered. (0 = feature not used)	0 - 255	0	optional
Call waiting chime (ACDLOG)	Defines how the call waiting chime will function for personal queue calls. Off = no chime. First = chime will sound for the first call placed in queue. All = chime will sound for each call placed in queue.	Off/ First/ All	Off	required
Call waiting light threshold	The minimum number of calls in queue to this split before the call waiting lamp will light steadily.	0 - 999 (0 = off)	0	optional
Call waiting flash threshold	The minimum number of calls in queue to this split before the call waiting lamp will flash.	0 - 999 (0 = off)	0	optional
CCV index	The index (reference number) to a specific CCV.	1 - 900	none	required
CCV step	One of up to 20 steps in a Call Control Vector. (See ACDCCV command for details.) Possible steps are listed on the next page.	See the next page	none	required

Field Values for ACD Screens (3 of 8)

FIELD NAME	DESCRIPTION	VALUES	DEFAULT SETTING	REQUIRED /OPTIONAL
ACTION	ARGUMENT	DESCRIPTION		
Queue To	split number	Offer the call to the split		
Dequeue From	split number	Stop offering the call to the split		
Conditional Queue	split number	Offer the call to the split if it meets a conditional threshold		
If Not Queued Go To	CCV index and step	If the split queue is full, go to Busy or specified CCV index and step		
Go To	CCV index and step	Go to the specified CCV index and step		
Transfer To	1 - 10	Route the call to a number (up to 22 digits)		
New Priority	priority (1 - 250)	Change the call's priority to the specified value		
Up Priority	amount (1 - 250)	Change the call's priority by the specified amount		
Announcement	number (1 - 58)	Route the call to an announcement		
Hang Up	—	Disconnect the call		
Pause	seconds (1 - 999)	Pause before performing the next step		
End	—	End of CCV		
Skip	percentage (1 - 99)	Skip percentage to next step		
IVR Announcement	number (1 - 99)	Connect call to IVR for customized announcement		
Individual IVR	IVR access number	Individual IVR port number in a CCV step basis		
ETA Less	seconds (1 - 9999)	Execute next step if estimated time to answer is less than specified time		
ETA Greater	seconds (1 - 9999)	Execute next step if estimated time to answer is greater than specified time		
ETA Less in a specified split	split (1 - 900)/ seconds (1 - 9999)	Execute next step if estimated time to answer is less than specified time in a specified split		
ETA Greater in a specified split	split (1 - 900)/ seconds (1 - 9999)	Execute next step if estimated time to answer is greater than specified time in a specified split		
Ring Delay	seconds (1 - 15)	Delay time to start ringing for the next incoming call		
QUEUE greater	Split (1-250) Threshold (0-100) Condition (AND/OR) Bracket (Not/Used)	Execute next step if the number of calls in specified split queue is greater than the threshold.		
LOGON less:	Split (1-250) Threshold (1-100) Condition (AND/OR) Bracket (Not/Used)	Execute next step if the number of log-on agents for specified split is less than the threshold.		
READY less:	Split (1-250) Threshold (1-100) Condition (AND/OR) Bracket (Not/Used)	Execute next step if the number of agents in Ready mode for specified split is less than the threshold.		
WORKING-AGENTS greater:	Split (1-250) Threshold (0-500%) Condition (AND/OR) Bracket (Not/Used)	Execute next step if the number of calls in specified split queue is greater than the Variable Queue Depth.		

Field Values for ACD Screens (4 of 8)

FIELD NAME	DESCRIPTION	VALUES	DEFAULT SETTING	REQUIRED /OPTIONAL
EWTA Less	seconds (1 - 9999)	Execute next step if estimated waiting time to answer is less than specified time		
EWTA Greater	seconds (1 - 9999)	Execute next step if estimated waiting time to answer is greater than specified time		
EWTA Less in a specified split	split (1 - 900)/ seconds (1 - 9999)	Execute next step if estimated waiting time to answer is less than specified time in a specified split		
EWTA Greater in a specified split	split (1 - 900)/ seconds (1 - 9999)	Execute next step if estimated waiting time to answer is greater than specified time in a specified split		
Chime (ACDSPL)	Call Waiting chime that sounds when the call waiting threshold is met.	On/Off	Off	required
Conditional threshold method	Method for accepting calls into the split: <ul style="list-style-type: none"> No Calls Accepted: no calls are accepted into the queue. Agents Available: calls are accepted depending on the number of available positions. Calls in Queue: calls are accepted depending on the number of unanswered calls in queue. 	No Calls/ Agents Available/ Calls in Queue	No Calls Accepted	required
Conditional threshold value	Value used in conjunction with the method (described above): <ul style="list-style-type: none"> Agents Available: the number of positions that must be available before calls will be accepted. Calls in Queue: the least amount of unanswered calls in the queue before calls will be accepted. 	1 - 250 (Agents Available) 1 - 699 (Calls in Queue)	none	optional
Default language	The language used on a logged-off ACD position.	English/ Japanese/ Spanish/ Italian/ French/ German	English	required
Do Not Disturb	Specifies how ACD calls will be handled when there are no positions logged on to the split.	Queue/ Do Not Queue	Queue	required
Emergency directory number	The directory number that will be dialed when the agent presses the EMERGENCY button while on an ACD call.	up to 5 digits	none	optional
Emergency recorder number	Number of the recorder that will be connected to the call in progress when an agent requires and emergency recording to be made.	0 - 5 (0 = none)	0 (none)	optional
File comment (remark)	Any supplementary remarks you wish to be associated with the file.	up to 60 characters	none	optional

Field Values for ACD Screens (5 of 8)

FIELD NAME	DESCRIPTION	VALUES	DEFAULT SETTING	REQUIRED /OPTIONAL
Go to CCV (forward/full)	Defines action (CCV index and step) to be taken if the referenced logon ID is not logged on the system (forward), or if the personal queue is full (full).	CCV index (1 - 900) and step (1 - 20)	none	optional
Go to CCV (overflow)	Defines action (CCV index and step) to be taken when there is an overflow timeout.	CCV index (1 - 900) and step (1 - 20)	none	optional
Holiday CCV list	A list of entries to be followed when a Holiday Schedule is used. Each entry consists of a start time and a CCV index and step.	Time (HH:MM) CCV index and step	none	optional
Holiday date	The month and day that is defined as a holiday.	Date MM/DD	none	optional
Holiday schedule number	Reference number for a holiday schedule.	1 - 3	none	optional
Hot split	Specifies whether this split is to be used for hot positions.	Yes/No	No	optional
Internal priority	Priority that a station call will receive when queued within the local system, when presented to the pilot number.	1 (high) - 250 (low)	15	required
IVR directory number	The Node directory number that allows ACD to access a port on an Interactive Voice Response (IVR) unit.	up to 5 digits	none	required
IVR pilot number	The Node directory number used by ACD to access ports on an Interactive Voice Response (IVR) unit.	up to 5 digits	none	required
IVR port number	Associates a port on the IVR unit with the IVR directory number.			required
Language	The language a position's messages will be displayed in when a position is logged on.	English/ Japanese/ Spanish/ Italian/ French/ German	English	required
Logon ID	The agent's ID code used when logging on to the ACD system.	up to 9 digits	none	required
Logon ID is?	Used to control access to the split.	Required/ Not Used	Required	required

Field Values for ACD Screens (6 of 8)

FIELD NAME	DESCRIPTION	VALUES	DEFAULT SETTING	REQUIRED /OPTIONAL
Logon Name	The name to be displayed when logging on with a logon ID. (Displayed on ACD position's display.)	up to 20 characters	blank	optional
Max. queue depth	The maximum number of calls that can be queued to this split or personal pilot number.	1 - 999	99	required
Multi-split	Defines whether this logon ID has access to multiple splits simultaneously.	Yes/No	No	optional
Night directory number	The directory number to which calls will be routed when the split is in Night mode. (Must be a valid pilot number.)	up to 5 digits	none	optional
Operator access code	Defines the access code programmed for the operator in the Node database.	up to 5 digits	0	required
Outbound call answer timer	Time allowed for outbound calls to be considered successfully completed	0 - 60 seconds	30	required
Overflow timeout	Defines how long a call will stay in queue to the personal pilot number before it overflows. (0 = Indefinite.)	0 - 9999	none	required
PBX incoming	Specifies whether agents should be forced into Work mode upon receiving an incoming call on their Non-ACD line.	Yes/No	No	required
PBX outgoing	Specifies whether agents should be forced into Work mode upon receiving Dial Tone for an outgoing call on their Non-ACD line.	Yes/No	No	required
Personal assist request number	Overrides the assist request number programmed in ACDSPL.	up to 5 digits	none	optional
Personal emergency request number	Overrides the emergency request number programmed in ACDSPL.	up to 5 digits	none	optional
Personal pilot number	Defines the number programmed in AMNO/AMNOL/AMNON. (Not programmed in ACDPLT.)	up to 5 digits	none	optional
Personal queue announcement number	Defines the announcement used for calls directed to personal queue (for the entire tenant).	1 - 58	none	optional
Personal queue overflow/forward priority	Defines the priority for calls that overflow from a personal queue.	1 - 250	1	optional

Field Values for ACD Screens (7 of 8)

FIELD NAME	DESCRIPTION	VALUES	DEFAULT SETTING	REQUIRED /OPTIONAL
Pilot name	Name displayed when a call is answered at positions.	up to 20 characters	blank	optional
Pilot number (ACDPLT)	A directory number that calls can be presented to. (Personal pilot numbers are not programmed here.)	up to 5 digits	none	required
Position	The My Line of the ACD position.	up to 5 digits	none	required
Queue priority	Priority at which a call from this trunk group (route) is placed in the queue.	1 (high) - 250 (low)	1	required
Route to:	Method used to route a call when presented to this pilot number. Options are: <ul style="list-style-type: none"> CCV: index and step number Week Schedule: reference number 	CCV index (1 - 900) and step (1 - 20)/ week schedule (1 - 10)	CCV index 1, step 1	required
Split name	Name displayed at positions at logon time.	up to 20 characters	blank	optional
Split number	Number that references a split.	1 - 900	1	required
Split priority	Used when assigning calls to agents in multi-split mode.	1 - 900	1	required
Splits (ACDTN)	Maximum number of splits assigned to this tenant.	1 - 900	1	required
Splits (ACDLOG)	Designates what splits are allowed.	All, or up to 4 different splits	All	required
Splits allowed (ACDPSN)	Number of splits allowed to position.	1 - 900 or Any	1	required
Stranded calls CCV index	Designates the CCV index to use when recovering stranded calls. (0 = not used.)	0 - 900	0	optional
Successful feature activation announcement	Specifies the announcement to be connected to an analog agent notifying that a feature activation was successful. (0 = none.)	0 - 58	0	optional
Supervisor tally-oh codes	Specifies whether this position is allowed to use supervisor Tally-Oh codes.	Allow/ Do Not Allow	Do Not Allow	optional
Tenant name	Name printed at the top of reports.	up to 20 characters	blank	optional

Field Values for ACD Screens (8 of 8)

FIELD NAME	DESCRIPTION	VALUES	DEFAULT SETTING	REQUIRED /OPTIONAL
Tenant number	Reference number for the tenant.	1 - 9	none	required
Transfer priority	Priority of a transferred call when presented to a pilot number.	1 (high) - 250 (low)	15	required
Transfer numbers	Digits to be dialed for each "Transfer To" CCV step that references this number. Only digits 0 - 9 are allowed. This is only required when there is a "Transfer To" step referencing it.	up to 22 digits	blank	optional
Trunk group name	Name to be displayed when a call is answered at an ACD position.	up to 20 characters	blank	optional
Trunk group number	Number that references a trunk group (route).	1 - 254	1	required
Trunk circuits	Used for activating/deactivating the trunk's circuits as ACD circuits (trunks).	1 - 255	1 to 1	required
Trunk priority	The priority used when queueing ACD trunk calls to a pilot number.	1 (high) - 250 (low)	1	required
Week schedule CCV list	A list of entries to be followed when a week schedule is used. Each entry consists of a start time and the CCV index and step to be followed.	Time (HH:MM) CCV index and step number	none	optional
Week schedule number	Number that reference a week schedule.	1 - 10	1	required
Work mode	A mode that exempts the agent/position from receiving ACD calls in queue without logging out. Restricted or allowed on a per-split basis.	Allow/Restrict	Allow	required
Work mode timeout	Total time that an ACD position will be allowed to stay in Work mode. (0 = indefinite.)	0 - 9999 seconds	0	optional

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