



Configuration management

Purpose

This document provides the Configuration Management strategy and procedures for the CICM 6.12 release. It is one of a set of seven documents in the CICM customer documentation suite:

- *NN10044-111 CICM Product and Technology Fundamentals*
- *NN10240-511 CICM Configuration Management*
- *NN10252-611 CICM Security and Administration*
- *NN10248-711 CICM Performance Management*
- *NN10233-911 CICM Fault Management*
- *NN10244-811 CICM Accounting*
- *NN10230-461 CICM Upgrades*

Configuration management strategy

The CICM is initially configured during initial installation by Nortel Networks system installers.

After initial system configuration, configuration may be changed or additional configuration completed by the Service Provider. The Configuration Wizard of the Element Manager Web pages are used for this configuration. These configuration procedures are provided in this document.

The Element Manager Web pages and the Configuration Wizard are used to configure the following:

- profiles
 - audio
 - enterprise
 - language
 - network
 - user
 - feature
- users
- client terminals
- Simple Network Management Protocol (SNMP)

Configuration data

Configuration data, such as IP addresses and the maximum number of concurrent sessions, resides within the Windows NT system registry. The operating company may use standard Windows NT backup tools to ensure that critical configuration data is archived externally to the CICM.

Previously backed up configuration data may be restored to the Windows NT registry in the event of data loss or data corruption. Service may then be resumed on a replacement or repaired system with minimal loss of service.

Element Managers can be configured to back up the configuration data of all CICMs on a periodic basis (e.g. every night at a specified time).

Tools and utilities

SERVORD

Provision CICM client lines

The procedure used to provision a CICM client on the CS2000 is similar to the method used to provision a line on other lines gateways. This procedure to provision CICM client lines is provided below.

Procedure 1 Provision CICM client lines

On a PC connected to the CICM Administration LAN

- 1 Connect to the SESM for the selected CS2000.
- 2 Ensure that the GWC is provisioned to support Large Lines Gateways.

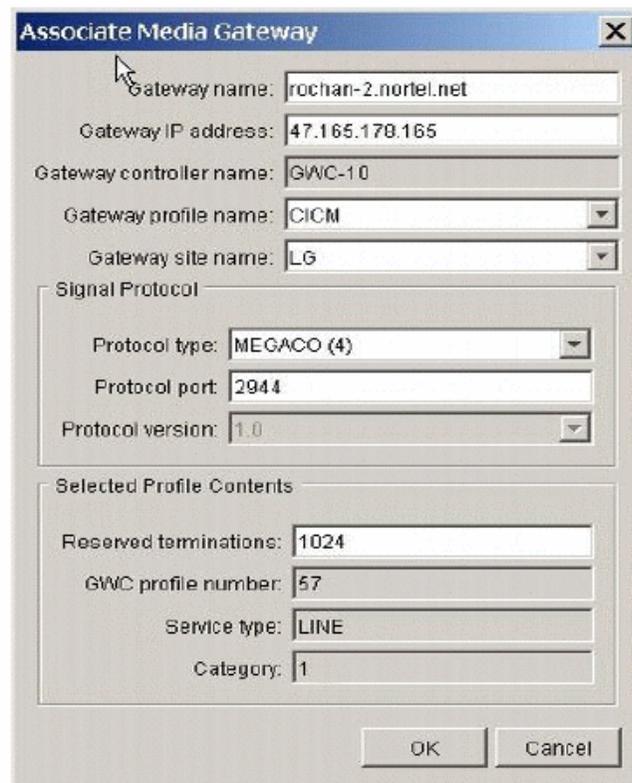
Profile _____

Current: LARGE_LINEINTL

Capability	Capacity	Units
Large Gateways	27	gateways
Lines	6400	ports

- 3 Select **Associate Media Gateway** to associate a CICM gateway with the selected GWC.

Response: The Associate Media Gateway dialog window opens.



The image shows a dialog window titled "Associate Media Gateway" with a close button (X) in the top right corner. The window contains several input fields and dropdown menus:

- Gateway name: rochan-2.nortel.net
- Gateway IP address: 47.165.178.165
- Gateway controller name: GWC-10
- Gateway profile name: CICM (dropdown menu)
- Gateway site name: LG (dropdown menu)
- Signal Protocol section:
 - Protocol type: MEGACO (4) (dropdown menu)
 - Protocol port: 2944
 - Protocol version: 1.0 (dropdown menu)
- Selected Profile Contents section:
 - Reserved terminations: 1024
 - GWC profile number: 57
 - Service type: LINE
 - Category: 1

At the bottom of the dialog are "OK" and "Cancel" buttons.

- 4 Datafill the Associate Media Gateway window, then press **OK**.

Response: The registration of the CICM gateway against the GWC is displayed.

Name	IP Address	Profile	Max T...	Res ...	Protocol	Pr...	Prot...	PEP Ser...	NAT Na...	Node N...	N...
cxip120a.nortel.net	47.165.76.120	CXIPCM	1000	1000	megaco	1.0	2944	NOT_SET	NOT_SET	LG 00 4	30
rochan-2.nortel.net	47.30.178.165	CXIPCM	1024	1024	megaco	1.0	2944	NOT_SET	NOT_SET	LG 00 6	43
test.nortel.net	0.0.0.1	CXIPCM	1000	1000	megaco	1.0	2944	NOT_SET	NOT_SET	LG 00 5	41

5 Create the logical group in table LGRPINV on the CS2000.

Response:

```
TABLE: LGRPINV
>lis all
TOP
GRPNO SRVRNAME GRPTYPE LGRPPTS
-----
LG 00 0 GWC 6 C $
LG 00 1 GWC 13 C $
LG 00 2 GWC 14 C $
LG 00 3 GWC 15 C $
LG 00 4 GWC 9 C $
LG 00 5 GWC 9 C $
LG 00 6 GWC 9 C $ ← RESULTING ENTRY
BOTTOM
```

6 Log into OSSGATE and issue the **NEW** command to create new lines.

Example input:

```
NEW $ 8124012 M5216 ETB3PRIVGRPA 0 0 208 1 Y rochan-2.nortel.net tp/0002 $
      DN      LCC                               CICM Gateway      Endpoints
```

Response on the SESM:

Name	Gateway	Node Number	Terminal Number
tp/0001	rochan-2.nortel.net	43	1
tp/0002	rochan-2.nortel.net	43	2

Response on the CS2000 (the QLEN command):

```

>qlen 8124012
-----
LEN:      LG      00 6 00 01
TYPE: SINGLE PARTY LINE
SNPA: 208
DIRECTORY NUMBER:      8124012
LINE CLASS CODE: M5216 SET
CUSTGRP:  ETB3PRIVGRPA  SUBGRP: 0  NCOS: 0  RING: Y
CARDCODE: GWLEBS      GND: N  PADGRP: PKNIL  ENV: NL MNO: Y
PM NODE NUMBER :      43
PM TERMINAL NUMBER :  2
OPTIONS:
  NONE
  KEY      DN
  ---     --
    1      DN      2088124012
  KEY      FEATURE
  ---     -
    NONE
  
```

GWLEBS is the International Line Cardcode for pPhone/EBS sets. In North American markets this value will be RDTEBS

7 This procedure is complete.

Configuration management procedures

This section provides the configuration procedures undertaken from the Element Manager Web pages.

Note: For all procedures provided in this document, it is required to use administrator userids and passwords to login to the Element Manager.

Configuration Wizard

The CICM is configured during initial installation by Nortel Networks system installers. After installation, the Service Provider must complete the configuration and configure terminals using the Configuration Wizard and other sections of the Element Manager Web pages.

Configure a CICM

Use this procedure to configure cards, VMGs, and global settings.

Procedure 2 Configure a CICM

On any PC on the Administration LAN,

- 1 Open **Internet Explorer**. At the Address bar, type **<ip address>/centrexip** then press enter.

Where **<ip address>** is the address of the Element Manager.

Example

http://47.160.108.143/centrexip

Response: The Network Password pop-up window opens.

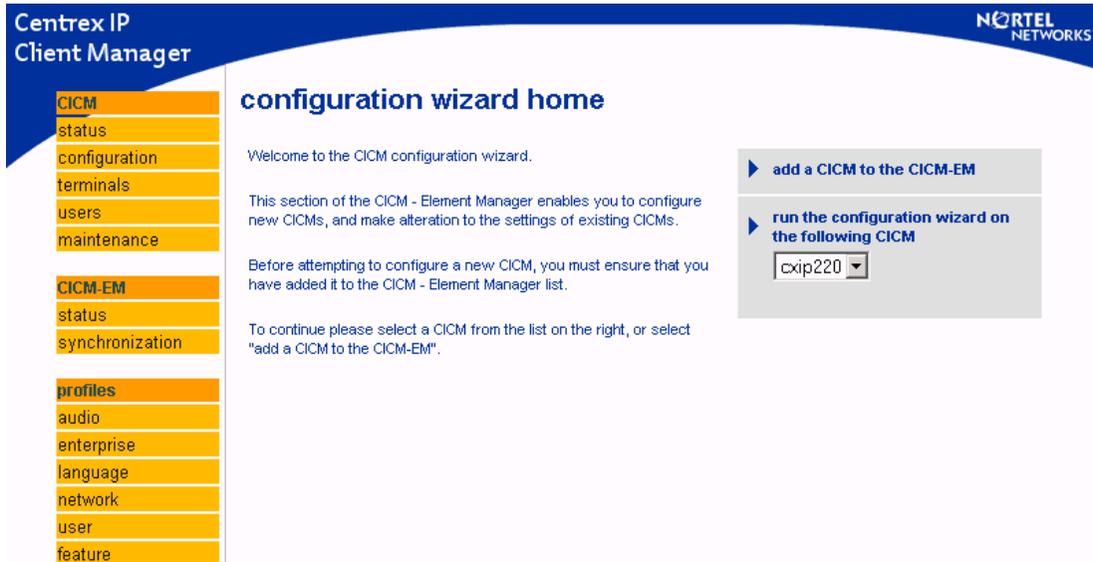
- 2 Enter the administrator **User Name** and **Password**, then press Enter.

*Response: The **cicm home** page opens.*

The screenshot shows the 'cicm home' page of the Centrex IP Client Manager. The page layout includes a blue header with the product name and logo, a left-hand navigation menu, and a main content area. The navigation menu is organized into several sections: 'CICM' (with sub-items: status, configuration, terminals, users, maintenance), 'CICM-EM' (with sub-items: status, synchronization), 'profiles' (with sub-items: audio, enterprise, language, network, user, feature), and 'diagnostics' (with sub-item: diagnostics). The main content area, titled 'cicm home', contains the following text: 'The CICM - Element Manager is used for managing Centrex IP Client Managers (CICMs). From this page, you can add or delete CICMs from the CICM - Element Manager, and view the status of the CICMs.' To the right of this text is a vertical list of five action buttons, each with a dropdown menu set to 'cxip220': 'view the status of the CICMs', 'view the status of the following CICM', 'change the list of CICMs stored on the CICM-EM', 'change the details of the following CICM', and 'run the configuration wizard on the following CICM'. A sixth button, 'show the backup sets available for', is partially visible at the bottom.

- 3 Select **configuration** from the left navigation bar.

*Response: The **configuration wizard home** page opens.*



At the configuration wizard home page

- 4 Ensure that the CICC to configure is on the CICC drop-down list.
 - a Check the drop-down menu in the **run the configuration wizard on the following CICC** option of the right menu.

b

If	Do
The CICC to configure is listed in the run the configuration wizard on the following CICC drop-down box	Proceed to step 5
The CICC to configure is not listed in the run the configuration wizard on the following CICC drop-down box	Add the CICC to the CICC-EM by completing the remaining sub-steps of step 4.

- c To add a CICC, click on **add a CICC to the CICC-EM** in the right menu.

*Response: The **cicm modification** page opens.*

Centrex IP Client Manager

cicm modification

Use this page to add and delete CICMs. Clicking on a CICM allows you to switch a CICM on and off line, and to change the node names in that CICM.

CICM	Node A	Status	Node B	Status	Delete
cxip220	cxip220a		cxip220a		

[add new CICM](#)

[cicm home](#)

d Click on **add new CICM**.

*Response: The **cicm creation** page opens.*

Centrex IP Client Manager

cicm creation

CICM Information

Name

Node A

Node B

[save new CICM](#)

[cancel](#)

[cicm home](#) [cicms](#)

e Datafill CICM name and node information, then click on **save new CICM**.

Response: The new CICM is added to the CICM-EM and the name is added to the CICM list.

5 From the **Configuration Wizard Home** page, select the CICM to configure from the drop-down menu in the **run the configuration wizard on the following CICM** menu option on the right.

*Response: The **configuration wizard home on <cicm_name>** page opens.*

Centrex IP Client Manager

configuration wizard home on cxi220

Configuration Wizard	
Global Settings	configured
Hardware Configuration	configured
Virtual Media Gateways	configured

add a CICM to the CICM-EM

run the configuration wizard on the following CICM

cxi220

- 6 Click on **Global Settings** in the center section
- Response: The **global settings modification on <cicm_name>** page opens.*

Centrex IP Client Manager

global settings modification on cxi220

Global Settings	
Description	CentrexIP International
Centrex Product Name	220-612-124
Maximum number of failed user login attempts	5
User login denial period (seconds)	600
Max Reboot Count	3
Maximum Number of Terminal Connections	2000

Locale Settings	
Default Language	English (UK)
Default Tone Set	English
Default Time difference	

save changes to the CICM

back to wizard home for cxi220

cancel

- 7 Configure settings as follows:
- Note:** Click on the ? icon for field definitions and datafill recommendations.
- Datafill the fields in the **Global Settings** section.
 - Datafill the fields in the **Local Settings** section.
 - Datafill the fields in the **Headset Confirmation Tone Configuration** section.
 - Click on the **save changes to the CICM** text on the right.

*Response: The **global settings update on <cicm_name>** page displays the status of the update and confirms completion.*

- e Click on the **back to wizard** menu option.

*Response: The **configuration wizard home on <cicm_name>** page is returned.*

- 8 View or change configuration of Virtual Media Gateways (VMGs) as follows:

Note: VMGs are configured when created. Refer to the **Add or delete VMGs** procedure in this document. Once created, there is normally no need to change their configuration.

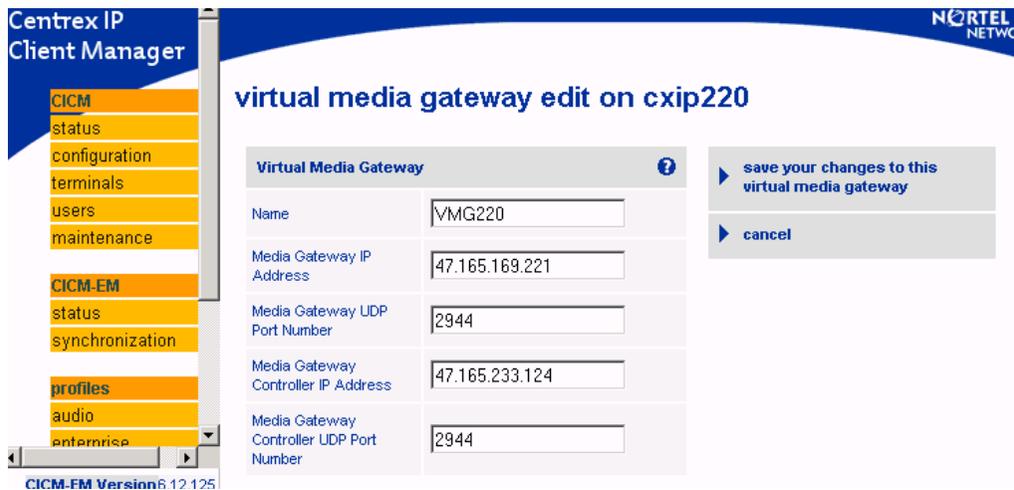
- a From the **configuration wizard home on <cicm_name>** page, select **Virtual Media Gateways** from the list.

*Response: The **Virtual Media Gateway modification on <cicm_name>** page opens.*



- b Select the specific VMG to view or change configuration from the Virtual Media Gateway list.

*The **virtual media gateway edit on <cicm_name>** page opens with the configuration datafill of the VMG.*



- c Change configuration datafill, as required.
- d Click on the **save your changes to this virtual media gateway** text on the right.
- 9 This procedure is complete.

Note: After these initial settings are configured, re-configuration is usually not needed.

Add or delete a VMG

Use this procedure to add and configure, or delete an additional Virtual Media Gateway.

Procedure 3 Add or delete a VMG

At the Configuration Wizard Home page on the element manager Web pages

- 1 Select the CICM from the drop-down menu on the right, then click on the **run the configuration wizard on the following CICM** text.

Response: The configuration wizard home on <cicm_name> page opens.



- 2 Click on the **Virtual Media Gateways** text.

Response: The virtual media gateway modification on <cicm_name> page opens.



- 3 Click on the name of any Virtual Media Gateway on the list.

Response: The Virtual Media Gateway edit on <cicm_name> page opens.

Centrex IP Client Manager

virtual media gateway edit on cxip220

Virtual Media Gateway

Name	VMG220
Media Gateway IP Address	47.165.169.221
Media Gateway UDP Port Number	2944
Media Gateway Controller IP Address	47.165.233.124
Media Gateway Controller UDP Port Number	2944

save your changes to this virtual media gateway

cancel

C1CM-EM Version 6.12.125

- To add a VMG, enter the new VMG name, and datafill the configuration of the new VMG to be added, then click on the **save your changes to this virtual media gateway** text.

Note: Changing the name of a VMG creates a new VMG with the new name. It does not delete the first VMG. To delete a VMG, refer to step 5 of this procedure.

*Response: The **virtual media gateway update on <cicm_name>** page opens to display the results of the action.*

- To delete a VMG, on the **virtual media gateway modification on <cicm_name>** page, in the **Virtual Media Gateway** field's list of VMG names, click on the **delete** (trash can) icon corresponding to the VMG to delete.

Response: The VMG is deleted, and a confirmation of the deletion is displayed.

- This procedure is complete.

Create and configure users

Use these procedures to create and configure users on the **Users** section of the **Element Manager** Web pages. The list of users on a C1CM may also be viewed and administered from these Web pages.

Create users

Users must be created before being configured. Users may be created and configured individually or in a batch.

Use the *Create Users* procedure or the *Batch Create Users* procedure to create users, then proceed to the *Configure Users* procedure.

Procedure 4 Create users

At the CICM Home page

- 1 Select **users** from the **CICM** section of the left menu.

*Response: The **User Home Page** opens.*

At the User Home Page

- 2 Select the CICM applicable from the drop-down menu in the bottom right menu, directly under the **audit users** option.

Note: This method of selecting CICM applies to both manually and automatically created users.

- Click on the **manually create multiple users** menu option on the right menu.

Note: Use this to manually create one or multiple users.

*Response: The **create users on <cicm_name>** page opens.*

User name	Line number	VMG	User profile ?
<input type="text"/>	0		

[create users](#)

- For each user to create, fill in the **user name**, then select by the drop-down menus the **line number**, **VMG**, and **user profile** to apply.

Note: For definitions of fields, click on the ? icon.
- After completing the field datafill, click on the **create users** menu option on the right.

Response: The status page displays the results of the action.
- This procedure is complete.

Procedure 5 Batch create users

ATTENTION

The **Batch create users** Web page has powerful functionality. Consider carefully the impact of your choices.

The batch method of creating users allows you to create up to 1023 users per drawer. You may create the usernames or have usernames automatically generated.

At the User Home Page of the element manager Web pages

- Select the CICM applicable from the drop-down menu in the bottom right menu, directly under the **audit users** option.

- Click on the **automatically create a range of users** option on the right menu.

*Response: The **batch create users on <cicm_name>** page opens.*

The screenshot shows the 'batch create users on cxip220' page in the Nortel Networks management interface. The page has a blue header with the Nortel Networks logo. A sidebar on the left contains navigation options: 'CICM', 'status', 'configuration', 'terminals', 'users', 'maintenance', 'CICM-EM', 'status', 'synchronization', 'profiles', 'audio', 'enterprise', 'language', and 'network'. The main content area has a title 'batch create users on cxip220' and a warning message: 'Warning. This page has very powerful functionality, please consider all input fields carefully.' Below the warning is a 'Create users' form with a question mark icon. The form has the following fields: 'Number of users to create' (text input with '1'), 'Starting Line' (dropdown menu with '0'), 'VMG' (dropdown menu with 'VMG220'), 'Profile' (dropdown menu), and 'Starting username' (text input). To the right of the form is a 'start operation' button. Below the form are two links: 'user home' and 'users on cxip220'.

- Enter information into each field on the **batch create users on <cicm_name>** page. There are two options for naming up to 1023 users per VMG:

Note: Click on the ? icon for definitions of each field.

- Number of users to create** is a number between 1 and 1023.
- Starting line** is CS2K provisioning information.
- VMG** is the VMG that all the users will be created on.
- Profile** is the user profile that all created users will be associated with.
- Starting username** is the username the first created user will have. Each subsequently created username will increment the username by one. The username must be numeric, from 4 to 15 characters long.

Note: Leading zeros are recognized.

- After completing field datafill, click on the **start operation** menu option.

Response: A status page opens and then confirms completion.

- This procedure is complete.

Configure or re-configure users

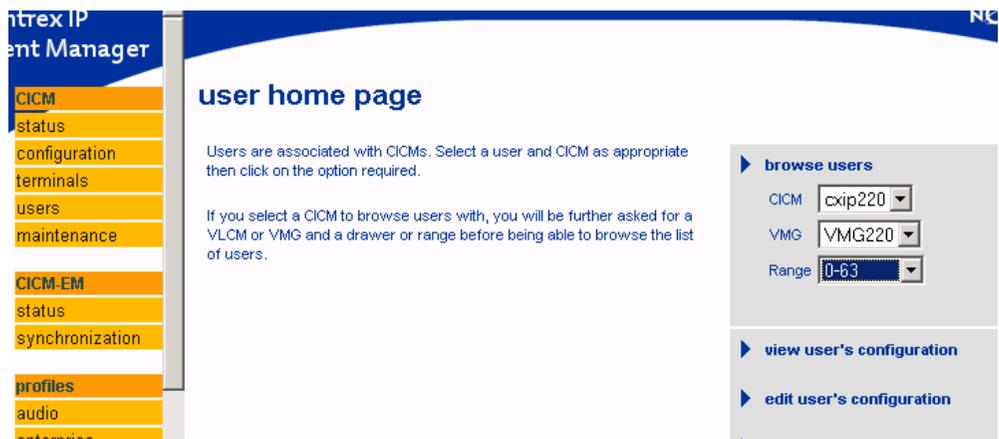
Use the following *Configure Users* procedure to configure new users and to change the current configuration of users. Use the *Batch Change Configuration of Users* procedure below to change configuration of a batch of users.

Procedure 6 Configure or re-configure users

At the User Home Page of the element manager Web pages

- 1 Select the CICM applicable from the drop-down menu directly below the **browse users** option in the right menu.

*Response: The **User Home Page** updates for the selected CICM, and displays **VMG** and user **Range** selections.*



- 2 Click on the **browse users** text.

*Response: the **Users on cicm <name> (range <#> on vmg <name>)** page opens.*



- 3 To configure or edit a user configuration, click on the user name to configure.

Note: Users must be created before being configured. See the *Create Users* procedure above.

Response: The **edit user <name> on <cicm_name>** page opens.

The screenshot shows the 'edit user 000001 on cxip180' page in the Centrex IP Client Manager. The left sidebar has a navigation menu with the following items: CICM (status, configuration, terminals, users, maintenance), CICM-EM (status, synchronization), profiles (audio, enterprise, language, network, user, feature), and diagnostics (diagnostics). The main content area is titled 'edit user 000001 on cxip180' and contains the following sections:

- User statistics:** A table with the following data:

User name	000001
Total Call Count	16
Login Status	Idle
Master Terminal	31-38-00-60-38-76-EB-2B
Slave Terminal	none
Sticky Login Terminals	none
Total Login Failures	1
Login Count	17
Login Failure Count	0
Login Time	2004/01/23 22:47
- User settings:** Fields for Password (1234), Profile (dropdown), and a ? icon.
- CS2k Provisioning Information:** Fields for VMG (CXIP180) and Line Number (1), both dropdown menus, and a ? icon.
- Audio profiles for recent terminals:** A section with a ? icon.

On the right side of the page, there is a vertical list of action buttons: save changes, force user logout, user overrides, reset user counters, delete user, and back to user pages for cxip180.

- 4 On the **edit user <name> on <cicm_name>** page, configure the user settings, CS2K provisioning, and audio profiles as required.

Note 1: Click on the ? icon for definitions of each field.

Note 2: There is not a fixed link between a username and its CS2K provisioning. It must be entered manually on this Web page.

Note 3: Users may be changed between lines and VMGs

- 5 After completing the user configuration, click on the **save changes** menu option.
Response: An update screen displays the result of the action.
- 6 This procedure is complete.

Procedure 7 Batch change configuration of users

ATTENTION

The **Batch change configuration** Web page has powerful functionality. Consider carefully the impact of your choices.

At the User home page of the element manager Web pages

- 1 Select the CICM applicable from the drop-down under the **audit users** option on the right menu, then click on the **edit the configuration of a range of users** text.
*Response: The **configure users on <cicm_name>: step 1 - select users** page opens.*

Centrex IP
Client Manager

CICM
status
configuration
terminals
users
maintenance

CICM-EM
status
synchronization

profiles
audio
enterprise
language
network
user
feature

diagnostics
diagnostics

configure users on cxip120: step 1 - select users

Step 1: Select the range of users for modification

Select User Range ⓘ

All Users

A list or range of users

Valid entries for List/Range are:

- a single user such as 000001, or
- a comma separated list of users, or
- a range of users separated by '-'

A standard regular expression

Some examples are

- .* - match all users
- - match all users with username of 4 numbers
- [1-5].... - match all usernames of 5 numbers that start with a 1 to 5

All the users on a specified VLCM

VMG0 ▾

▶ select actions

▶ Cancel

- 2 Select the range of users to change configuration on:
- All users
 - A range of users
 - Users defined by a standard regular expression
 - All the users on a VMG (specified by the drop-down menu)
- Then click on the **select actions** text on the right menu.
- Response: The **configure users on <cicm_name>: step 2 - select operations** page opens.*

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configure users on cxip120: step 2 - select operations

Step 1: Select the range of users for modification - Completed!

Selected User Range ⓘ

all

review actions

back to select users

Step 2: Select the operations you want to perform from the list below

Delete Users

This will delete all selected users

Modify user properties

Password Reset ⓘ

Should user passwords be reset

- 3 Select the operations to perform:
- Select **delete users** to delete all selected users, OR
 - Select **modify user properties**, then specify how to modify user properties.
 - password reset
 - counters reset
 - passwords view
 - user profile set/select

Then click on the **review actions** text on the right menu.

*Response: The **configure users on <cicm_name>: step 3 - review actions** page opens.*

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configure users on cxip120: step 3 - review actions

Warning. This page has very powerful functionality, please check all input fields carefully.

Step 1: Select the range of users for modification - Completed!

Selected User Range ⓘ	▶ start operation
all	▶ back to select operations

Step 2: Select the operations you want to perform - Completed!

Password Reset ⓘ	
Should user passwords be reset	yes
Selected Method	random
Number of random digits	6

- 4 After verifying the actions to perform:
 - To proceed, select **start operation** from the right menu.
 - To modify configuration or cancel the operation, select **back to select operations** from the right menu.

*Response: If **start operation** was selected, the operation will commence and a verification page will display. If **back to select operations** was selected, the step 2 page will display again.*
- 5 This procedure is complete.

View users list and user configuration

Use this procedures to view the list of users on a CICM. Use Procedure 9, *View user configuration*, to view the configuration for a user on a CICM.

Procedure 8 View users list

At the element manager home page

- 1 Select **users** from the left navigation bar.
Response: The user home page opens.

- 2 Select the CICM applicable from the drop-down menu in the **browse users** option on the right menu, then click on the **browse users** text.

Response: The users on CICM <cicm_name> (range <#-#> on vmg <name>) page opens with the list of current users on the CICM.

The screenshot shows the 'users on cicm cxip180 (range 0-63 on vmg 'cxip180')' page. On the left is a navigation menu with categories like CICM, CICM-EM, profiles, and diagnostics. The main content area contains a table of users and a right-hand control panel.

Line No	User	User Profile	Operation ?	Line No	User	User Profile	Operation ?
1	000001		delete	32	000032		delete
2	000002		delete	33	000033		delete
3	000003		delete	34	000034		delete
4	000004		delete	35	000035		delete
5	000005		delete	36	000036		delete
6	000006		delete	37	000037		delete
7	000007		delete	38	000038		delete
8	000008		delete	39	000039		delete
9	000009		delete	40	000040		delete
10	000010		delete	41	000041		delete
11	000011		delete	42	000042		delete
12	000012		delete	43	000043		delete
13	000013		delete	44	000044		delete
				45	000045		delete

The right-hand menu includes options: 'browse users on' (with dropdowns for CICM: cxip180, VMG: CXIP180, Range: 0-63), 'view user's configuration', 'edit user's configuration', 'delete user' (with a text input field), 'manually create multiple users', and 'list the active users'.

- 3 To view the user list for a different CICM, a different VMG, or a different range, select from the drop-down menus on the **browse users** menu option on the right.

Response: The page users on CICM <cicm_name> (range <#-#> on vmg <name>) updates to display the selection.

- 4 To view a list of active users with node and line number information, click on the **list the active users** option on the right menu.

Response: the active users on <cicm_name> page opens.

active users on cxip180

User	Node	Line
000002	CXIP180B	2
000004	CXIP180B	4
000005	CXIP180B	5

[back to user pages for cxip180](#)

5 This procedure is complete.

Procedure 9 View user configuration

At the users home page of the element manager Web pages

- 1 Select the CICM applicable from the drop-down menu under the **browse users** option on the right menu, then click on the **browse users** text.

Response: The users on CICM <cicm_name> (range <number> on vmg <name>) page opens.

users on cicm cxip120 (range 0-63 on vmg 'vmg0')

Line No	User	User Profile	Operation	Line No	User	User Profile	Operation
				32			add
1			add	33			add
2			add	34			add
3			add	35			add
4			add	36			add
5			add	37			add
6			add	38			add
7			add	39			add
8			add	40			add
9			add	41			add

browse users on
 CICM:
 VMG:
 Range:

view user's configuration
edit user's configuration
delete user

User:

- 2 To view a user configuration, enter a user name under the **delete user** option on the right menu, then click on the **view user's configuration** text.

The **view user <username> on <cicm_name>** page opens.

Centrex IP Client Manager

view user 000005 on cxip180

You can not change any user information on this page.

[edit user](#)

[reset user counters](#)

User statistics	
User name	000005
Total Call Count	3
Login Status	Active (CXIP180B)
Master Terminal	31-38-00-60-38-DD-48-56
Slave Terminal	none
Sticky Login Terminals	none
Total Login Failures	0
Login Count	2
Login Failure Count	0
Login Time	2004/01/23 22:59

User settings

Note: Changes cannot be made from this **view user <name> on <cicm_name>** page.

- 3 To configure or edit user configuration, click on the **edit user** option on the right menu, and refer to the *Configure users* procedure above.
- 4 This procedure is complete.

Delete a user

Use this procedure to delete a user from a CICM.

Procedure 10 Delete a user

At the user home page of the element manager Web pages

- 1 Select the CICM applicable from the drop-down under the **browse users on** option in the right menu, then click on the **browse users on** text.

*Response: The **users on CICM <cicm_name> (range <number> on vmg <name>** page opens.*

The screenshot shows the 'entrex IP Client Manager' interface. On the left is a navigation menu with categories: CICM (status, configuration, terminals, users, maintenance), CICM-EM (status, synchronization), profiles (audio, enterprise, language, network, user, feature), and diagnostics. The main content area is titled 'users on cicm cxip180 (range 0-63 on vmg 'cxip180')'. It contains a table with columns: Line No, User, User Profile, and Operation. The table lists users from 1 to 43, each with a 'delete' link in the Operation column. To the right of the table is a control panel with a 'browse users on' section containing dropdown menus for CICM (cxip180), VMG (CXIP180), and Range (0-63). Below this are buttons for 'view user's configuration', 'edit user's configuration', and 'delete user', along with a 'User' input field. At the bottom of the control panel is a button for 'manually create multiple users'.

Line No	User	User Profile	Operation ?	Line No	User	User Profile	Operation ?
				32	000032		delete
1	000001		delete	33	000033		delete
2	000002		delete	34	000034		delete
3	000003		delete	35	000035		delete
4	000004		delete	36	000036		delete
5	000005		delete	37	000037		delete
6	000006		delete	38	000038		delete
7	000007		delete	39	000039		delete
8	000008		delete	40	000040		delete
9	000009		delete	41	000041		delete
10	000010		delete	42	000042		delete
11	000011		delete	43	000043		delete

- In the **Operation** column, click on **delete** for the user(s) you want to delete.

Response: A status page displays the results of the action.

- This procedure is complete.

Force user logout

Use this procedure to force a user logout.

Procedure 11 Force user logout

At the users home page of the element manager Web pages

- Select the CICM applicable from the drop-down menu in the **browse users on** option, then click on the **browse users on** text.

*Response: The **users on CICM <name> (range <number> on vmg <name>**) page opens.*

- Enter a user name under the **delete users** option on the right menu, then click on the **edit a user's configuration** text.

*Response: The **edit user <name> on <cicm_name>** page opens.*

Centrex IP Client Manager

edit user 000005 on cxip180

User statistics	
User name	000005
Total Call Count	3
Login Status	Active (CXIP180B)
Master Terminal	31-38-00-60-38-DD-48-56
Slave Terminal	none
Sticky Login Terminals	none
Total Login Failures	0

- save changes
- force user logout
- user overrides
- reset user counters
- delete user
- back to user pages for cxip180

- Click on the **force user logout** option on the right menu.
Response: A status message appears with the result of the force logout action.
- This procedure is complete.

Reset user counters

Use this procedure to reset user counters. This will reset to zero the following counters:

- Total login failures
- Login count
- Login failure count
- Total call count

Procedure 12 Reset user counters

At the user home page of the element manager Web pages

- Select the CICM from the drop-down menu in the **browse users on** box, then click on the **browse users on** text.
Response: The users on CICM <cicm_name> (range <number> on vmg <name>) page opens.
- Click on the user name to reset counters for.
The edit user <username> on <cicm_name> page opens.

Client Manager

edit user 000005 on cxip180

User statistics	
User name	000005
Total Call Count	3
Login Status	Active (CXIP180B)
Master Terminal	31-38-00-60-38-DD-48-56
Slave Terminal	none
Sticky Login Terminals	none
Total Login Failures	0
Login Count	2
Login Failure Count	0
Login Time	2004/01/23 22:59

- ▶ save changes
- ▶ force user logout
- ▶ user overrides
- ▶ reset user counters
- ▶ delete user
- ▶ back to user pages for cxip180

- 3 Click on the **reset user counters** option on the right menu.
Response: A status page displays the results of the reset command.
- 4 This procedure is complete.

Create and configure profiles

The Element Manager Web pages are used to configure the CICMs by creating, modifying, and applying profiles. This allows configuration of many CICMs at one time. The profiles are maintained on the CICM Element Manager. This section contains the procedures for configuring profiles.

There are six types of profiles:

- **Audio Profiles**
An Audio Profile specifies audio parameters for making or receiving a call.
- **Enterprise Profiles**
Enterprise Profiles provide for groupings of Network Profiles and CICMs. The Enterprise Profile is created through the Element Manager and stored on the CICM, just as the Network Profile.
- **Language Profiles**
Multiple languages are supported for the Ethersets and CICM SoftClients. The language files which support language selection for

the Ethersets are stored on the CICM. However, a Language Profile must be applied to the specific CICM for the Ethersets to access a particular language.

Note: Although multiple languages are available on the m6350 SoftClient, the Language Profile does not apply to it. For information on language selection on the CICM SoftClient, refer to the *m6350 Centrex IP SoftClient User Guide*.

- **Network Profiles**

Network Profiles define the IP address domains that are supported by the CICM. Only terminals from within a valid IP address domain can be connected to the CICM. An IP address domain is identified by the network device that connects it to the public IP address space that contains the CICM. Typically, this is a Network Address Translation (NAT) device. Refer to the **NAT and firewalls** section in the **Security and Administration** section of this document for a detailed discussion.

- **User Profiles**

A User Profile contains a set of default user settings that can be applied to a group of users. A User Profile can contain feature key settings, language, timezones, and permissions. A user will inherit settings from the user profile configured, unless overridden locally.

- **Feature Profiles**

A Feature Profile governs how features behave on the terminals supported by a CICM. The attributes of each feature can be shown or hidden based on the state of other features on the terminal. This allows maximum use to be made of the feature keys. Some features behave like a DN feature; this is specified in another attribute.

Audio Profiles

Audio Profiles simplify the way in which users control the audio parameters that are used when making a call. The parameters which can be configured include voice coding type, voice activity detection and the voice packet size. These parameters are configured according to the specific network conditions that exist between the customer site and the CICM. Having several profiles available to users means that they can select the most appropriate profile for each call.

Implementing the parameters in the Audio Profile can range from applying a specific codec to changing QoS marking in the headers of the IP packets, which in turn will affect how other devices in the network treat those packets.

Examples of audio parameters are:

- Which codec the client terminal should apply to an outgoing media stream
- Voice Activity Detection (VAD) capability with G.729A and G.723.1
- Packet size (i.e. the number of voice frames per packet)
- Quality of Service (QoS) parameters to be applied to the IP packets originating from that terminal or destined for that terminal
- Jitter buffer setting on the terminal

The CICM administrator can adjust the parameters in an audio profile to compensate for different types of conditions in the network. For example, a telecommuter's IP voice packets may encounter one set of network conditions when a call is placed from the home, and a different set of conditions when a call is placed from the office. In this case the telecommuter would need two different audio profiles, one for each terminal.

The CICM administrator controls the Audio Profiles and determines which ones will be available for end users to select for their terminals. When a user logs in to a CICM through a specific terminal, the CICM updates the items on the Audio Profile selection menu and applies the Audio Profile to that specific terminal.

When an end user or the CICM administrator selects an Audio Profile for a terminal, the following occurs:

- The terminal implements the parameters for all outgoing voice traffic
- The CICM implements the parameters for all voice traffic destined for that terminal.

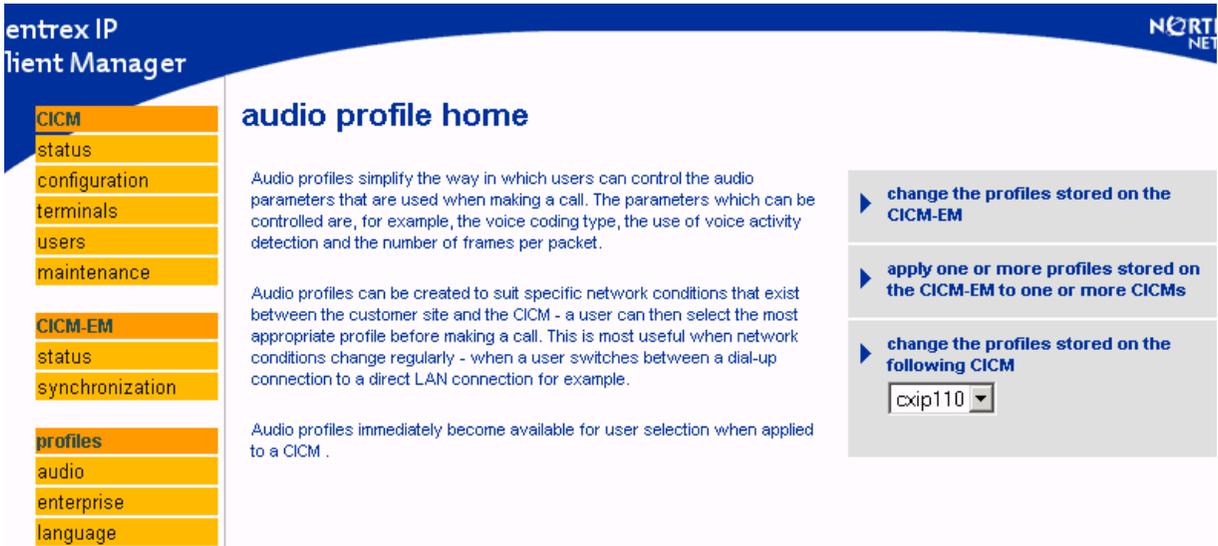
Audio profiles may be created, changed or deleted. Audio Profile changes take effect at the next call. They may be applied to a CICM or to a user.

Procedure 13 Create an Audio Profile on an EM

At the Element Manager home page

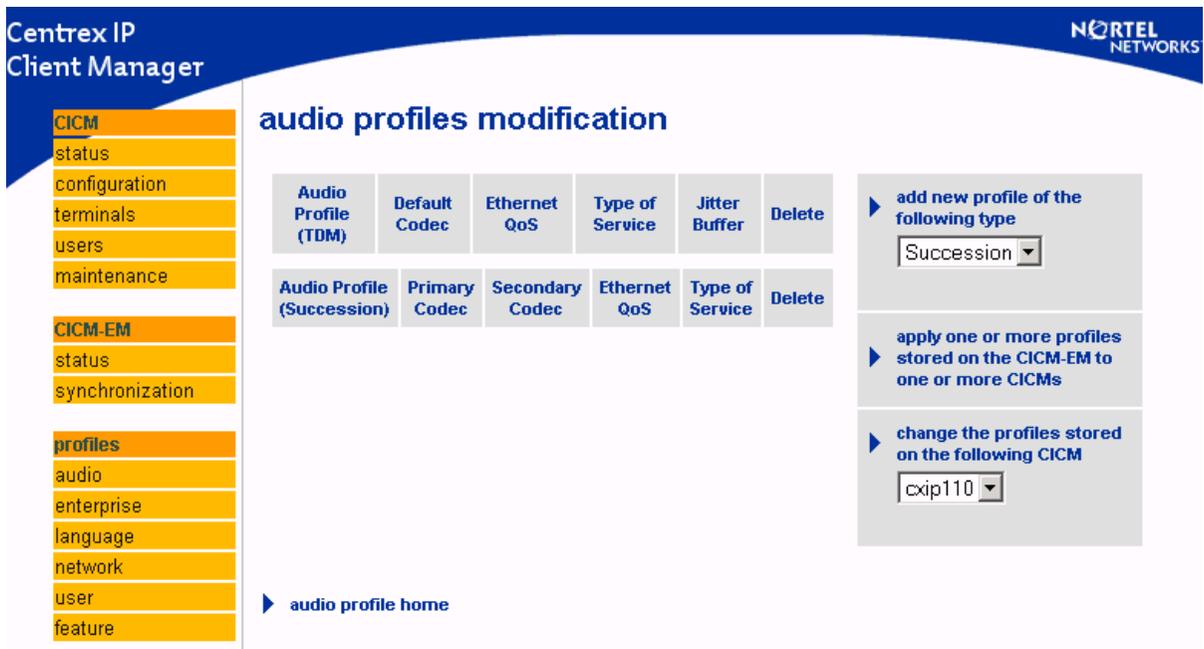
- 1 Select **audio** from the **profiles** section of the left menu bar.

*Response: The **audio profile home** screen opens.*



- 2 To create a new Audio Profile, click on the **change the profiles stored in the CICM-EM** option on the right menu.

Response: The audio profiles modification screen opens.



- 3 Choose Succession from the drop-down menu under the **add new profile of the following type** option on the right menu.

*Response: The **audio profile creation** page opens.*

- 4 Type the new profile name in the **Audio Profile Name** field, then create the profile by datafilling each of the fields.

Note: Click on the ? icon in each field for detailed descriptions and decision criteria.

- 5 After the fields are datafilled, click on the **create profile** option on the right menu.

*Response: The **profile creation results** window displays the profile creation status and confirms completion.*

Note: The profile created is stored on the Element Manager. To be activated, they must be applied to the CICMs by the *Apply an audio profile to a CICM* procedure below.

- 6 This procedure is complete.

Procedure 14 Change an Audio Profile on an EM

At the Audio Profile home page of the Element Manager Web pages

- 1 Select the CICM from the drop-down menu under the **change the profiles stored on the CICM-EM** text on the right.

*Response: The **audio profiles modification on <cicm_name>** page is displayed.*

2 Click on the audio profile to change.

Response: The audio profile edit on <cicm_name> page opens.

- 3 Edit the audio profile by modifying the fields.
Note: Click on the ? icon in each field for detailed descriptions and decision criteria.
- 4 Click on the **save your changes to this profile** option on the right menu to save the edited profile to the Element Manager.
*Response: The **profile save results** screen displays the results of the action.*
- 5 This procedure is complete.

Procedure 15 Apply an Audio Profile to a CICM

At the Element Manager home page

- 1 Select **audio profiles** from the navigation bar on the left.
*Response: The **audio profile home page** is displayed.*
- 2 Click on the **apply one or more profiles stored on the CICM-EM to one or more CICMs** option on the right menu.
*The **apply audio profile** page displays.*

The screenshot shows the 'apply audio profile' page in the Centrex IP Client Manager. The left navigation bar includes categories like CICM, CICM-EM, and profiles. The main content area is divided into two sections: 'Profile' and 'CICM'. The 'Profile' section has a 'Range of Profiles' box with two radio buttons: 'Apply only the selected audio profiles' (selected) and 'Apply all existing audio profiles'. Below it is a 'Profile Selection' box. The 'CICM' section has a 'Range of CICMs' box with two radio buttons: 'Apply only the selected CICMs' (selected) and 'Apply to all CICMs'. Below it is a 'CICM Selection' box containing 'cxip110' and 'cxip120'. A right-hand menu has an 'apply profile(s)' button.

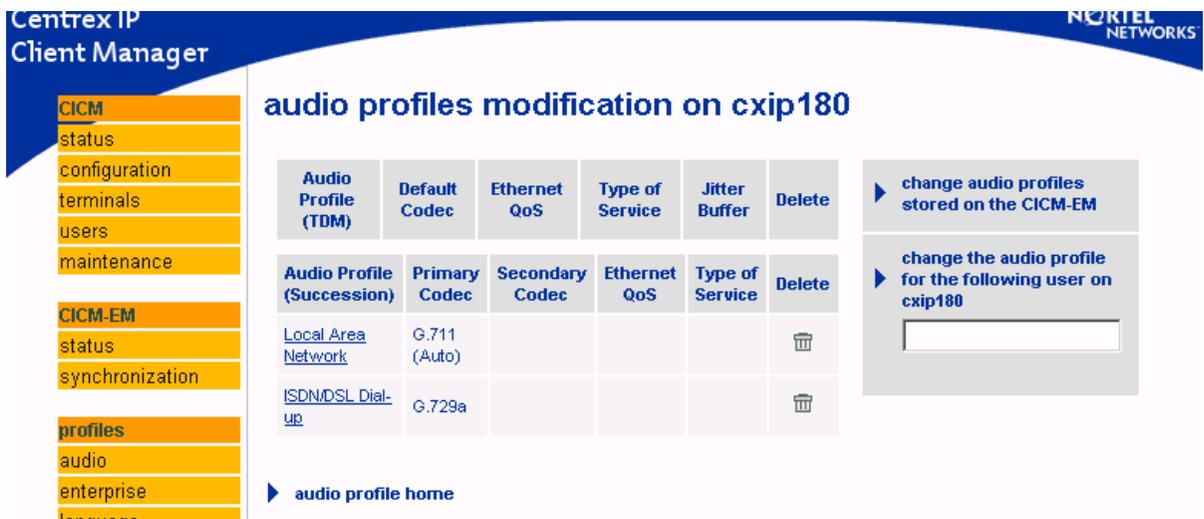
- 3 In the **Range of Profiles** box, click a radio button to:
 - apply only the selected audio profiles, or
 - apply all existing audio profiles

- 4 In the **Profile Selection** box, choose the profiles to apply by clicking. Use Shift+Click to add a range, or Control+Click to add a nonconsecutive selection.
- 5 In the **Range of CICMs** box, click a radio button to:
 - apply the profiles only to the selected CICM, or
 - apply the profiles to all CICMs.
- 6 In the **CICM Selection** box, choose the CICMs to apply the profiles to by clicking. Use Shift+Click to add a range, or Control+Click to add a selection.
- 7 Click on the **apply profile(s)** option on the right menu.
Response: A status page displays the results of the action and confirms completion.
- 8 This procedure is complete.

Procedure 16 Delete an Audio Profile from a CICM

From the audio profile home page of the Element Manager Web pages

- 1 Choose the CICM from the drop-down menu on the **change the profiles stored on the following CICM** menu option on the right.
*Response: The **audio profiles modification on <cicm_name>** page displays the list of audio profiles stored on the CICM.*



- 2 Click on the delete (trash can) icon for the audio profile to delete.
Response: A status page opens to confirm deletion.

3 This procedure is complete.

Procedure 17 Apply an Audio Profile to a user

At the User home page of the Element Manager home pages

1 Select the CICM that the user is on from the drop-down menu on the **browse users on** menu option, then click on the **browse users on** text.

Response: The users on CICM <name> (range <number> on vmg <name>) page opens and displays a list of users

2 Click on the user name to apply an Audio Profile to.

Response: The edit user <name> on <cicm_name> page opens.

The screenshot shows the 'edit user 000005 on cxip180' page in the Centrex IP Client Manager. The left-hand navigation menu includes sections for CICM, CICM-EM, profiles, and diagnostics. The main content area is divided into several sections:

- User statistics:** A table showing user details such as User name (000005), Total Call Count (3), Login Status (Active (CXIP180B)), Master Terminal (31-38-00-60-38-DD-48-56), Slave Terminal (none), Sticky Login Terminals (none), Total Login Failures (0), Login Count (2), Login Failure Count (0), and Login Time (2004/01/23 22:59).
- User settings:** Fields for Password (1234) and Profile (a dropdown menu).
- CS2k Provisioning Information:** Fields for VMG (CXIP180) and Line Number (5).
- Audio profiles for recent terminals:** A table listing terminal IDs and their associated users.

On the right side of the page, there is a vertical list of action buttons: save changes, force user logout, user overrides, reset user counters, delete user, and back to user pages for cxip180.

Terminal ID	User
31-38-00-60-38-DD-48-56	(master j2002)
31-38-00-60-38-76-06-95	(i2004)

- 3 In the **Audio profiles for recent terminals** section at the bottom, click on the user terminal to apply the Audio Profile to.
*Response: The **terminal <name> on <cicm_name>** page opens.*

Centrex IP Client Manager

terminal 31-38-00-60-38-dd-48-56 on cxi180

Terminal values	
Terminal Type	i2002
Connect Count	2
Firmware Level	1.57
Hardware Release Level	0
Pec	NT2K00GI
Display Contrast	
Time Last Connected	2004/01/23 22:59
Last Reset Reason Code	Reset by user key sequence or by gateway (5)
Sticky Login User	none

Terminal defaults	
Audio Profile	Local Area Network
Language	English (US)

save

- 4 In the **Audio Profiles** field of the **Terminal defaults** section, select the audio profile to apply from the drop-down menu, then click on the **save** option on the right menu.
- 5 This procedure is complete.

Enterprise Profiles

An Enterprise Profile groups the Network Profile(s) of an enterprise with the CICMs that serve that enterprise.

The purpose of the Enterprise Profile is to support the Selective CICM Login feature (i.e. Hot Desking capability) of the CICM 2.5.

With this feature, users of an enterprise that is served by multiple CICMs will be provided with an option at the login prompt, to choose which CICM to log in to, from a list of CICMs that serve this enterprise. The user can also log into any terminal connected to the selected CICM.

A CICM may be associated with many Enterprise Profiles if these enterprises are served by this CICM. However, a Network Profile can only be associated with a single Enterprise Profile.

Upon receiving the first packet from a client, the hosting CICM checks the source IP address of the packet against the list of Network Profiles stored on the CICM. If a Network Profile contains that source IP address and the Network Profile is also associated with an Enterprise Profile, the user is then presented with a list of all the CICMs associated with that Enterprise Profile, and will be able to redirect their terminal to any of these CICMs. Thus the Enterprise profile, in conjunction with the Network Profile, enhances security.

Note: The source IP address may or may not be the client's IP address. If the client is behind an enterprise NAT, then the source IP address is the public IP address of the NAT.

The Enterprise Profile is created, edited and deleted on the Element Manager. The Enterprise Profile may be written to it's associated CICMs, but it cannot be edited on them.

The complete process for creation and configuration of Enterprise Profiles is summarized as follows:

- **Create an Enterprise Profile.** See the *Create an Enterprise Profile* procedure below.
- **Associate Network Profiles to the Enterprise Profile.** See the *Associate and Apply an Enterprise Profile* procedure below.
- **Associate CICMs to the Enterprise Profile.** See the *Associate and Apply an Enterprise Profile* procedure below.
- **Apply the Enterprise Profile to the CICM.** This step downloads and saves the Enterprise Profile to the CICM. See the *Associate and Apply an Enterprise Profile* procedure below.

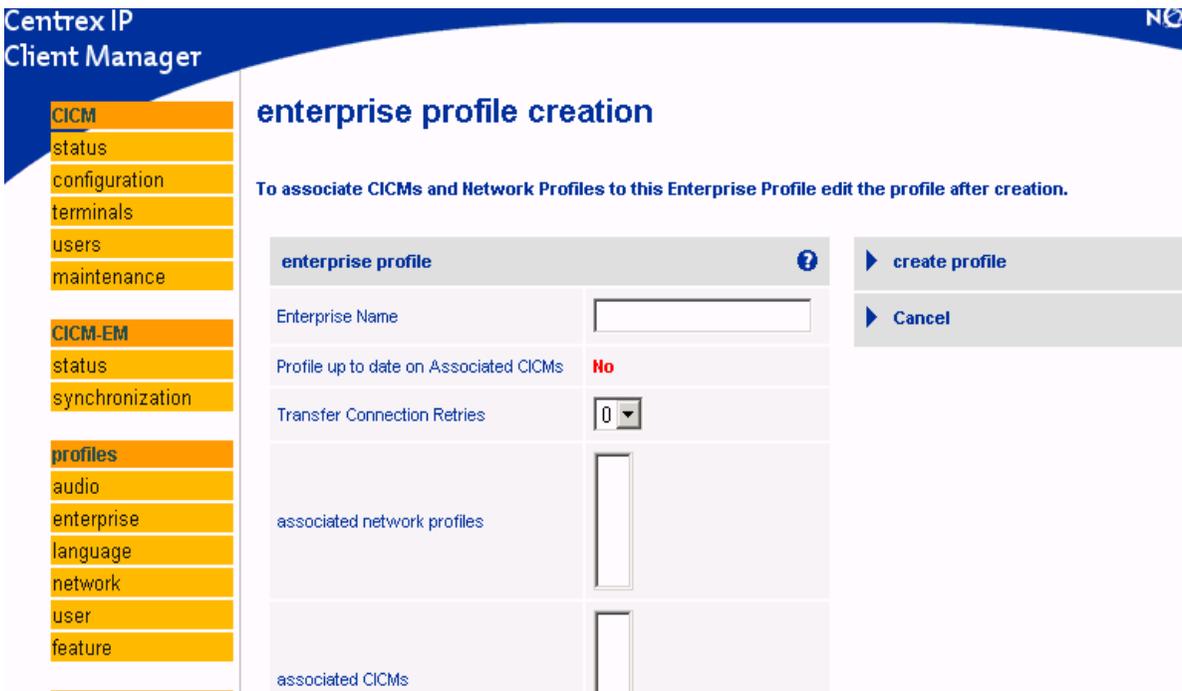
Procedure 18 Create an Enterprise Profile

At the CICM - Element Manager Home page

- 1 Select **enterprise profiles** from the left navigation bar.
*Response: The **enterprise profiles modification** page opens.*



- 2 Click on the add new profile menu option on the right.
The **enterprise profile creation** page opens.



- 3 Datafill the **Enterprise Name** field, then fill in the fields (refer to Table 1 below for field descriptions), then click on the **create profile** option on the right menu.

Table 1 Enterprise Profile fields

Field	Entry	Description
Enterprise Name	User determined name no more than 20 alpha-numeric characters.	The Enterprise Name is chosen upon creation and cannot be edited thereafter.
Profile up to date on Associated CICMs	Read-only. Yes or No	Indicates whether the profile is up-to-date on all of its associated CICMs. The state changes to No when a change is made to the Enterprise Profile. The state changes to Yes when it is successfully applied to all of the CICMs in the Associated CICMs list. Refer to the <i>Apply Enterprise Profile to CICMs</i> procedure.
Transfer Connection Retries	0 or 1 Default is 0	Recommended setting: 0 This is the number of times a terminal redirecting to another CICM will retry to connect to the target CICM. The value should be set to zero (the default) for most applications.
Associated Network Profiles	Read-only	A non-editable list of Network Profiles that are associated with this Enterprise Profile. When a CICM is disassociated from the Enterprise Profile, it will remain in this list with the postfix "disassociated" until the updated information is successfully applied to the CICMs in the list, whereupon it will be removed from the list. It will be blank for a new profile with no associations defined.
Associated CICMs	Read-only	A non-editable list of CICMs that are associated with this Enterprise Profile. It will be blank for a new profile with no associations defined.

Note: The **Associated Network Profiles** and **Associated CICMs** fields are non-editable. The Network Profiles and CICMs are not associated on this **Enterprise Profile Creation** Web page. You must create the Enterprise Profile name first.

*Response: The **profile creation results** page opens and displays the result of the creation.*

- 4 Proceed to the following *Associate and Edit an Enterprise Profile* procedure to associate Enterprise Profiles with Network Profiles and CICMs.
- 5 This procedure is complete.

Associate and apply an Enterprise Profile

Use this procedure to associate an Enterprise Profile to Network Profiles and to CICMs, and to apply an Enterprise Profile to a CICM.

Also use this procedure to change the associations of an Enterprise Profile, and to apply the Enterprise Profile changes to a CICM.

The complete process for creation and configuration of Enterprise Profiles is summarized as follows:

- **Create an Enterprise Profile.** See the *Create an Enterprise Profile* procedure above.
- **Associate Network Profiles to the Enterprise Profile.** See the *Associate and Apply an Enterprise Profile* procedure below.
- **Associate CICMs to the Enterprise Profile.** See the *Associate and Apply an Enterprise Profile* procedure below.
- **Apply the Enterprise Profile to the CICM.** This step downloads and saves the Enterprise Profile to the CICM. See the *Associate and Apply an Enterprise Profile* procedure below.

Procedure 19 Associate and apply an Enterprise Profile

At the CICM - Element Manager home page

- 1 Select **enterprise profiles** from the left navigation bar.
Response: The enterprise profiles modification page opens.

The screenshot shows the 'entrex IP Client Manager' interface. The left navigation bar has 'enterprise profiles' selected. The main content area is titled 'enterprise profiles modification'. It contains a table with the following data:

Name	Up To Date	Delete
kullyboy	No	

There is an 'add new profile' button on the right side of the table.

- 2 Select the Enterprise Profile to associate from the list of profiles by clicking on the profile name.

*Response: The enterprise profile edit page opens. This page displays the Network Profiles and CICMs that are currently associated to this Enterprise Profile. The **Profile up to date on the Associated CICMs** field indicates whether or not*

the Enterprise Profile has been downloaded to its associated CICMs.

The screenshot shows the 'enterprise profile edit' interface. On the left is a navigation menu with categories like 'CICM', 'CICM-EM', and 'profiles'. The main area contains a form with the following fields:

- enterprise profile** (header)
- Enterprise Name**: kullyboy
- Profile up to date on Associated CICMs**: No
- Transfer Connection Retries**: 0
- associated network profiles**: 47.0.0.0 / 255.0.0.0
- associated CICMs**: cxip220

On the right side, there is a vertical menu with the following options:

- ▶ save transfer retries
- ▶ associated network profiles
- ▶ associated CICMs
- ▶ audit enterprise profile
- ▶ apply enterprise profile to all associated CICMs
- ▶ Cancel

- 3 To associate Network Profiles to the selected Enterprise Profile:
 - a Click on the **associated network profiles** option on the right menu.

*Response: The **network profiles associated with enterprise profile <name>** page opens and lists the current associations.*

Centrex IP Client Manager

network profiles associated with enterprise profile kullyboy

Associated Network Profiles			
address	subnet	retries	disassociate
47.0.0.0	255.0.0.0	2	<input type="checkbox"/>

- associate one or more network profiles
- disassociate selected network profiles
- Cancel

return to enterprise profile kullyboy modification.

- b To associate additional profiles, click on the **associate one or more network profiles** option on the right menu.

*Response: The **network profile association with enterprise profile <name>** page opens to display a list of Network Profiles available to associate to the selected Enterprise Profile.*

entrex IP Client Manager

network profile association with enterprise profile kullyboy

Address	Subnet	Retries	Associate
47.130.34.100	255.255.255.0	1	<input type="checkbox"/>
47.130.120.12	255.0.0.0	1	<input type="checkbox"/>
47.165.230.101	255.255.255.255	6	<input type="checkbox"/>
47.165.230.102	255.255.255.255	6	<input type="checkbox"/>

- associate selected network profiles
- Cancel

- c Click in the check box of the **Associate** field to select the Network Profile(s) to associate this Enterprise Profile to, then click on the **associate selected network profiles** option on the right menu.

*Response: The **associating network profile(s)** page opens to display the results of the action.*

Note: Any modified profiles must be re-applied to the CICM (Step 7 of this procedure) to be effective.

- 4 To disassociate Network Profiles to the Enterprise Profile, from the **enterprise profile edit** page:
 - a Click on the **associated Network Profiles** menu option on the right menu.

*Response: The **network profiles associated with enterprise <name>** page opens to display the Network Profiles currently associated to the Enterprise Profile.*
 - b In the **disassociate** field, select the Network Profile to be disassociated from the Enterprise Profile by clicking the check box,
 - c Then click on the **disassociate selected network profile(s)** menu option on the right menu.

*Response: The **disassociating network profile(s)** page opens to display the results of the action.*

- 5 To associate CICMs to the Enterprise Profile: from the **enterprise profile edit** page:
 - a Click the **associated CICMs** menu option on the right menu.

*Response: The **cicms associated with enterprise profile <name>** page opens to display the current CICM associations.*
 - b Click on the **associate one or more cicms** option on the right menu.

*Response: The **cicm association with enterprise profile <name>** page opens to display a list of available CICMs to associate.*
 - c Select the CICMs to associate, then click on the **associate selected CICMs** text bar on the right menu.

*Response: The **associating cicm(s)** page opens to display the results of the action.*

- 6 To disassociate CICMs to the Enterprise Profile: from the **enterprise profile edit** page:
 - a Click the **associated CICMs** menu option on the right menu.

*Response: The **cicms associated with enterprise profile <name>** page opens to display the current CICM associations.*

- b** Select the CICMs to disassociate by clicking in the **Disassociate** field check box, then click on the **disassociate selected CICMs** menu option on the right.

*Response: The **disassociating cicms** screen opens to display the results of the action.*

7

ATTENTION

This step is required to apply all profile association/disassociation changes to the CICMs.

Upon completion of the Network Profile and CICM associations and disassociations, on the **enterprise profile edit** page, click on the **apply enterprise profile to all associated CICMs** option on the right menu bar.

*Response: The **enterprise profile application results** page opens to display the results of the action, and confirms the successful completion.*

- 8** This procedure is complete.

Procedure 20 Delete an Enterprise Profile

ATTENTION

All CICMs and Network Profiles must be disassociated from the Enterprise Profile before it can be deleted. Refer to the *Edit an Enterprise Profile* procedure above.

At the CICM - Element Manager home page

- 1** Select **enterprise profiles** from the left navigation bar.

*Response: The **enterprise profiles modification** page opens to display the current list of Enterprise Profiles.*

entrex IP Client Manager

enterprise profiles modification

Name	Up To Date	Delete
kullyboy	No	

add new profile

2

ATTENTION

The state of the Enterprise Profile (indicated in the Up To Date field on the enterprise profiles modification page) must be set to Yes before the Enterprise Profile can be deleted.

In the **Delete** field, click on the delete (trash can) icon corresponding to the Enterprise Profile to be deleted

Response: The results of the action is displayed, and the deletion is confirmed.

3 This procedure is complete.

Audit an Enterprise Profile

Use the following procedure to audit an Enterprise Profile on its associated Network Profiles and CICMs. The resulting audit report facilitates correct profile associations.

Procedure 21 Audit an Enterprise Profile***At the CICM - Element Manager home page***

1 Select **enterprise** from the **profiles** section of the left navigation bar.

*Response: The **enterprise profiles modification** page opens to display the current list of Enterprise Profiles.*

2 Click on the Enterprise Profile to audit from the list of current profiles.

*Response: The **enterprise profile edit** page opens.*

The screenshot displays the 'enterprise profile edit' interface. On the left, a navigation menu lists categories: CICM (status, configuration, terminals, users, maintenance), CICM-EM (status, synchronization), and profiles (audio, enterprise, language, network, user, feature). The main content area shows the profile details for 'kullyboy'. The 'Profile up to date on Associated CICMs' is marked as 'No'. The 'Transfer Connection Retries' is set to 0. The 'associated network profiles' field shows '47.0.0.0 / 255.0.0.0'. The 'associated CICMs' field shows 'cxip220'. On the right, a menu contains the following options: 'save transfer retries', 'associated network profiles', 'associated CICMs', 'audit enterprise profile', 'apply enterprise profile to all associated CICMs', and 'Cancel'.

- 3 Click on the **audit enterprise profile** text bar on the right menu.
*Response: Datafill related to the Enterprise Profile and its associated CICMs is checked, and the **Audit of Enterprise Profile < name> upon associated CICMs** report is displayed.*
- 4 This procedure is complete.

Language profiles

Language profiles available are English, German, Spanish, Italian and French. They are stored on the Element Manager and applied automatically to CICMs. Language profiles may be viewed from the Element Manager Web pages, but they cannot be created or changed. New languages will be added via new software releases or language patches.

Procedure 22 View Language Profiles

At the Element Manager home page

- 1 Select **language** from the **profiles** section of the left navigation bar.
*Response: The **language profile home** page opens.*

language profile home

All current language profiles (English, German, Spanish, Italian and French) are available. New languages will be added via a new software release or language patch. This is available from the next level of support.

view the profiles stored on the following CICM

cxi110

Note: Standard language profiles of English, French, German, Italian, and Spanish are currently provided.

- 2 Select the CICM from the drop-down menu on the **view the profiles stored on the following CICM** option on the right menu.

*Response: The **language profiles modification on <cicm_name>** page opens.*

Note: This is a view-only page. Language profiles cannot be modified.

Centrex IP Client Manager

language profiles modification on cxip130

All current language profiles (English, German, Spanish, Italian and French) are available. New languages will be added via a new software release or language patch. This is available from the next level of support.

Languages		
Name	Filename	Status
Deutsch	Lang_German.dll	Disabled
Español	Lang_Spanish.dll	Active
English (US)	Lang_English_US.dll	Active
Français	Lang_French.dll	Active
Italiano	Lang_Italian.dll	Active
English (UK)	lang_English_UK.dll	Active

3 This procedure is complete.

Network Profiles

Centrex by definition is a carrier-hosted featured voice service offer to enterprises. Centrex IP maintains feature transparency to CS2K Centrex.

One key difference between Centrex and Centrex IP is that with Centrex IP, enterprises are served over a converged IP network instead of a CS2K network. Each enterprise has its own enterprise IP network. It normally uses private IP addresses for communication within the enterprise, and public IP addresses for communication outside the enterprise through a Network Address Translator (NAT) associated with its gateway router.

Each enterprise IP network is uniquely represented by a network profile on the CICM that serves this enterprise. A Network Profile identifies the IP address domain of the enterprise, represented by the public IP address of the enterprise NAT, along with an associated VMG that serves this enterprise.

Network Profiles provide an effective means for authentication and control of Centrex IP traffic. Centrex IP traffic is only allowed to flow between the CICM and the IP address domains that are specified by the Network Profiles on the CICM.

Network profiles can only be created, changed and deleted by an administrator. They are stored on the Element Manager and applied to a CICM.

Network profile configuration changes are immediately effective for new terminal connections. You do not need to restart the CICM to implement the changes; they are immediate. However, it is required to restart terminals if they are assigned a new network domain.

Enterprise IP address domain representation For terminals behind a NAT, this NAT presence must be defined in the network profile. The network profile specifies the public IP address and the subnet of the NAT, and (optional) the associated VMG. This essentially specifies an IP address domain being served by a VMG, just as a NAT defines an IP address domain.

For an enterprise that uses public IP addresses (i.e. no NAT is needed), the administrator can still create a Network Profile for it, either by using the network domain "0.0.0.0, 0.0.0.0" or by specifying the subnet from which those customers originate (e.g. 47.165.169.0, 255.255.255.0).

VMG association There are three possible ways that a Network Profile may be associated with VMGs, depending on the number of terminals in the enterprise.

- For an enterprise with up to 639 terminals, the Network Profile of this enterprise needs to be associated with one VMG only.
- For an enterprise with more than 639 terminals, the Network Profile of this enterprise needs to be associated with two or more VMGs. Each VMG has a maximum of 639 terminals.
- One VMG can be associated with multiple small-sized enterprises whose terminals together add up to 639. In this case, the intraswitching for that VMG on the CS2K has to be turned off.

The purposes for making VMG associations are:

- **Security**
A user in one enterprise network domain cannot log in as a user from another enterprise because the VMG association only allows users from an enterprise to log in from the enterprise's own IP domain.
- **Administrative checkpoint**
Each VMG can be associated with a single network domain to provide an administrative checkpoint. If your intent is to put

intraswitching on a VMG, associate the VMG with a single network profile.

- Terminal count
The CICM keeps a count of the terminals in each network domain and records the high water mark.

Example: Network domain addressing In this section an example is provided to illustrate the concept of network domain addressing. In this example, there are the following two enterprises:

- Enterprise 1 has a NAT with a single public address 47.165.168.100, and is served off VMG1.
- Enterprise 2 has a NAT with a single public address 47.165.168.200, and is served off VMG2.

Intraswitching is VMG specific. It is only activated for calls between two lines on the same VMG. It is recommended to activate intraswitching because of the following advantages:

- Improved voice quality
- Increased CICM capacity
- Reduced bandwidth requirements from the enterprise to the carrier

However, intraswitched calls cannot traverse NAT boundaries (for example, a call between a user in enterprise 1 and a user in enterprise 2), for the following reasons:

- Routing will likely be blocked for security purposes (e.g. firewall rules that prevent it).
- RTP packets use non-routable private IP addresses that are either overlapped between two enterprises, or viewed unreachable.

The two enterprises will be configured through the CICM Element Manager's Network Profile Web page as follows:

- Enterprise 1: 47.165.168.100, 255.255.255.255
- Enterprise 2: 47.165.168.200, 255.255.255.255

The mask 255.255.255.255 informs CICM to consider only clients originating from the single IP address 47.165.168.100 to be in Enterprise 1.

A user in Enterprise 1 network domain cannot log in as a user from Enterprise 2 because the VMG association only allows users from an enterprise to log in from the enterprise's own IP domain.

In this example, if a new Enterprise 3 is created and the administrator wants to use spare capacity from VMG2, the association will prevent it. If new users from Enterprise 3 are assigned to VMG2 and the intraswitching for VMG2 on the CS2K is turned on, they can't log in until the association is removed or the intraswitching for VMG2 on the CS2K is turned off.

NATs often only have a single IP address into which they multiplex the active connections by mapping them to unique ports. A NAT with four interfaces, for example, would be datafilled with the two least significant bits missing. Thus for 47.165.168.100, the mask 255.255.255.252 would permit addresses 47.165.168.100, 101,102, and 103 to be considered part of the network domain.

Users in Enterprise 1 will be configured with LENS on VMG1, and users in Enterprise 2 will be configured with LENS on VMG2.

Procedure 23 Create a Network Profile

At the element manager home page

- 1 Click on the **network** option on profiles section of the left navigation bar.

*Response: The **network profile home** page opens.*

entrex IP Client Manager

NORTEL NETWORKS

network profile home

CICM
status
configuration
terminals
users
maintenance

CICM-EM
status
synchronization

profiles
audio
enterprise
language
network

Network profiles can be used to notify a CICM of [private] IP address domains which lie outside of the [public] IP address domain that the client side of the CICM belongs to. Typically, a private address domain can be created by using a Network Address Translation (NAT) device.

To ensure correct operation, a CICM must be configured with a network profile that describes each of the private networks that its terminals may originate from.

change the profiles stored on the CICM-EM

apply one or more profiles stored on the CICM-EM to one or more CICMs

change the profiles stored on the following CICM

cxip110

At the network profile home page

- Click on the **change the profiles stored on the CICM-EM** option on the right menu.

*Response: The **network profiles modification** page opens.*

entrex IP Client Manager

network profiles modification

Address	Subnet	Lease Period	Retries	Associated Enterprise Profile	Associated Middlebox Name/ID	Delete
0.0.0.0	0.0.0.0	2	2		0 (ID number)	
47.130.34.100	255.255.255.0	3	1		(none set)	
47.130.120.12	255.0.0.0	2	1		(none set)	
47.0.0.0	255.0.0.0	3	2	kullyboy	50 (ID number)	
47.165.230.101	255.255.255.255	6	6		4 (ID number)	
47.165.230.102	255.255.255.255	6	6		5 (ID number)	

[add new profile](#)
[apply one or more profiles stored on the CICM-EM to one or more CICMs](#)
[change the profiles stored on the following CICM](#)

[update all Global Middlebox IDs](#)

[network profile home](#)

- Click on the **add new profile** option on the right menu.

*Response: The **network profile creation** page opens.*

Centrex IP Client Manager NORTEL NETWORKS

- CICM
- status
- configuration
- terminals
- users
- maintenance
- CICM-EM
- status
- synchronization
- profiles
- audio
- enterprise
- language
- network
- user
- feature
- diagnostics
- diagnostics

network profile creation

network profile ?

Address

Subnet

Lease Period (min)

Retry Count

Associated Enterprise Profile

Global MiddleBox ID

[▶ create profile](#)

[▶ Cancel](#)

Network Profile Details

First IP Address

Last IP Address

Number of IP Addresses

Network Address

Broadcast Address

Network Address Size

4 Datafill the network profile fields.

Note: Click on the ? icon for detailed definitions of these fields.

- a Address.** This specifies the network address of the subnet that contains the range of public addresses available to a NAT device.
- b Subnet.** This specifies the subnet mask for the subnet that contains the range of public addresses available to a NAT device.

- c **Lease period (minutes).** The defined period for which any UDP port mapping is defined.

Note: For 2.5 EM and 2.5 gateways, the lease period is set at 2 minutes, and cannot be changed. The lease period field in the **network profile creation** page will be greyed out and have a **2** entry.

For 2.5 EM and pre-2.5 gateways, and for 6.12 EM and 6.12 gateways, the lease period is variable and the field can be datafilled.

- d **Associated Enterprise Profiles.** Intraswitching can only be successful if both terminals in the call are hosted in the same network domain. To prevent calls from failing when this condition is not met, a VMG can be associated with a particular network domain.

Note 1: A pre-2.5 CICM cannot be associated to an Enterprise Profile.

Note 2: A Network Profile created on a pre-2.5 EM cannot be associated to an Enterprise Profile. It is recommended to delete Network Profiles created on pre-2.5 EMs, and re-create them (if needed) on the upgraded 2.5 or 6.12 EM.

- 5 After completing the field datafill click on the **create profile** menu option.

*Response: The **profile creation results** page displays the results of the action.*

- 6 This procedure is complete.

Procedure 24 Change a Network Profile

At the network profile home page on the Element Manager Web pages

- 1 Click on the **change the profiles stored on the CICM-EM** menu option on the right navigation bar.

*Response: The **network profiles modification** page opens.*

ntrex IP
ent Manager

NORTE
NETV

CICM

- status
- configuration
- terminals
- users
- maintenance

CICM-EM

- status
- synchronization

profiles

- audio
- enterprise
- language
- network
- user
- feature

network profiles modification

Address	Subnet	Lease Period	Retries	Associated Enterprise Profile	Associated Middlebox Name/ID	Delete
0.0.0.0	0.0.0.0	2	2		0 (ID number)	
47.130.34.100	255.255.255.0	3	1		(none set)	
47.130.120.12	255.0.0.0	2	1		(none set)	
47.0.0.0	255.0.0.0	3	2	kullyboy	50 (ID number)	
47.165.230.101	255.255.255.255	6	6		4 (ID number)	
47.165.230.102	255.255.255.255	6	6		5 (ID number)	

- ▶ add new profile
- ▶ apply one or more profiles stored on the CICM-EM to one or more CICMs
- ▶ change the profiles stored on the following CICM
 -
- ▶ update all Global Middlebox IDs

- 2 Click on the IP address of the network profile to edit.
*Response: The **network profile edit** page opens.*

entrex IP Client Manager NORTEL NETWORKS

CICM

status

configuration

terminals

users

maintenance

CICM-EM

status

synchronization

profiles

audio

enterprise

language

network

user

feature

diagnostics

diagnostics

network profile edit

network profile ?	
Address	<input type="text" value="47.130.120.12"/>
Subnet	<input type="text" value="255.0.0.0"/>
Lease Period (min)	<input type="text" value="2"/>
Retry Count	<input type="text" value="1"/>
Associated Enterprise Profile	<input type="text"/>
Global MiddleBox	<input type="text" value="...Manual Entry..."/> ID <input type="text" value="-1"/>

Network Profile Details	
First IP Address	<input type="text" value="undefined.undefined.0"/>
Last IP Address	<input type="text" value="undefined.undefined.0"/>
Number of IP Addresses	<input type="text" value="16777214"/>
Network Address	<input type="text" value="undefined.undefined.0"/>
Broadcast Address	<input type="text" value="undefined.undefined.0"/>
Network Address Size	<input type="text" value="8"/>
Host Address Size	<input type="text" value="24"/>

- 3 Edit the network profile fields as required.
 - Note:** Click on the ? icon for definitions of these fields.
- 4 Click on the **save your changes to this profile** option on the right menu.

*Response: The **profile save results** page confirms the update completion.*
- 5 This procedure is complete.

Procedure 25 Delete a Network Profile

At the network profile home page of the element manager Web pages

- 1 Click on the **change the profiles stored on the CICM-EM** menu option on the right navigation bar.

*Response: The **network profiles modification** page opens.*

Address	Subnet	Lease Period	Retries	Associated Enterprise Profile	Associated Middlebox Name/ID	Delete
0.0.0.0	0.0.0.0	2	2		0 (ID number)	
47.130.34.100	255.255.255.0	3	1		(none set)	
47.130.120.12	255.0.0.0	2	1		(none set)	
47.0.0.0	255.0.0.0	3	2	kullyboy	50 (ID number)	

- 2 Click on the **delete** (trash can) icon for the network IP address to be deleted.

Response: The status page confirms the deletion.

- 3 This procedure is complete.

Procedure 26 Apply a Network Profile stored on the EM to a CICM

At the network profile home page of the element manager Web pages

- 1 Click on the **apply one or more profiles stored on the CICM-EM to one or more CICMs** option on the right menu.

*Response: The **apply network profile** page opens.*

The screenshot shows the 'apply network profile' configuration page in the Nortel Networks Element Manager. The page is divided into a left-hand navigation menu and a main configuration area. The navigation menu includes categories like CxICM, CxICM-EM, profiles, and diagnostics. The main configuration area is titled 'apply network profile' and contains two sections: 'Profile' and 'CxICM'. Each section has radio buttons for 'Apply only the selected' and 'Apply to all' options, and a list box for selection. The 'Profile' list box contains IP ranges, and the 'CxICM' list box contains feature codes like cxip110 through cxip220. An 'apply profile(s)' button is located on the right side of the configuration area.

2 Databind the **Profile** and **CxICM** fields.

Note: Click on the ? icon for definitions of these fields.

3 Click the **apply profile(s)** menu option on the right.

*Response: The **profile apply results** status page opens and confirms completion.*

4 This procedure is complete.

Procedure 27 Enable/disable network domain address licensing

At the network profile home page of the element manager Web pages

1 On the **network profile home** page

network profile home

Network profiles can be used to notify a CICC of [private] IP address domains which lie outside of the [public] IP address domain that the client side of the CICC belongs to. Typically, a private address domain can be created by using a Network Address Translation (NAT) device.

To ensure correct operation, a CICC must be configured with a network profile that describes each of the private networks that its terminals may originate from.

- change the profiles stored on the CICC-EM
- apply one or more profiles stored on the CICC-EM to one or more CICMs
- change the profiles stored on the following CICC
 - cxip110

On the drop-down menu in the **change the profiles stored on the following CICC** menu option, select the CICC to enable this feature on.

*Response: The **network profiles modification on <cicm_name>** page opens.*

network profiles modification on cxip110

Address	Subnet	Lease Period	Retries	Associated Enterprise Profile	Associated VLCM	Delete
0.0.0.0	0.0.0.0	2				

- change network profiles stored on the CICC-EM
- Enable Network Domain Address Licensing

[network profile home](#)

- On the right menu bar, click on the **Enable/Disable Network Domain Address Licensing** text bar to toggle between **enable** and **disable** as required.

Response: A status page opens and confirms the results of the action.

- This procedure is complete.

User Profiles

A user profile is a set of default settings for a group of users. User profiles may be created, changed and deleted. They are stored on the

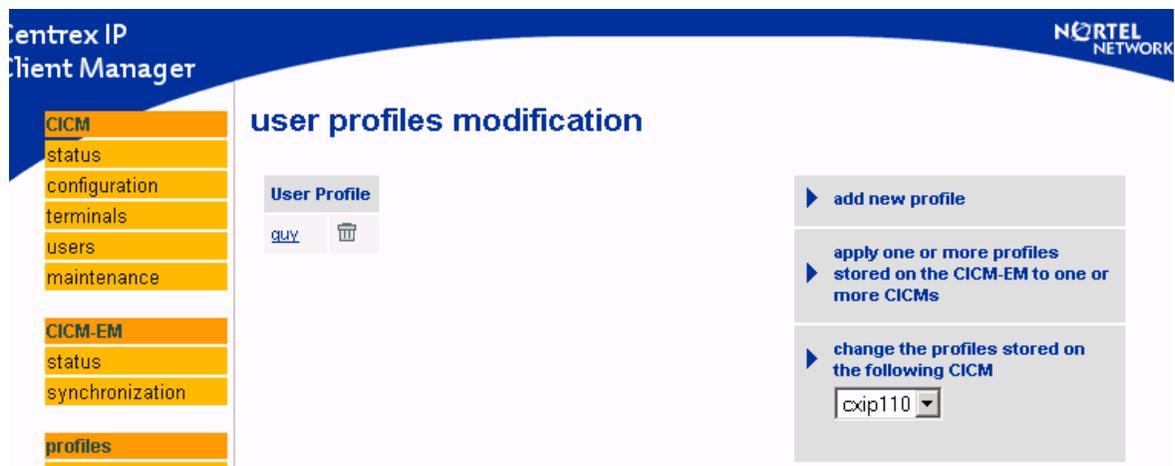
Element Manager and applied to a selected CICM. Overrides to user profiles may be applied or deleted by the administrator.

Note: To create users (user ID, password, etc.), refer to the *Security and Administration* section of this document.

Procedure 28 Create a User Profile

At the Element Manager home page

- 1 Select **user** from the profiles section of the left menu bar.
Response: The user profile home page opens.
- 2 Click on the **change the profiles stored on the CICM-EM** menu option on the right.
Response: The user profiles modification page opens.



- 3 Click on the **add new profile** option on the right menu.
Response: The user profile creation screen opens.

Centrex IP Client Manager NORTEL NETWORKS

user profile creation

User Settings

User profile name	<input type="text"/>
Language	<input type="text"/>
Time difference from GMT	<input type="text"/> Minutes (i200x only)
Daylight Setting	<input type="text"/> (i200x only)
Auto Answer On Ring	<input type="text"/> (i200x only)
Disable Missed Call Indicator	<input type="text"/>
Outbox Feature Key	<input type="text"/>
Default Key	<input type="text"/>
Never auto-hide feature keys	<input type="text"/>
Number of Extension Modules	<input type="text"/> (m6350 only)
Disable Adv. Functionality	<input type="text"/> (i200x only)
User can't change audio profile	<input type="text"/>
User can't change key assignments	<input type="text"/>
User can't change key labels	<input type="text"/>
User can't configure sticky login	<input type="text"/> (i200x only)
User can't logout	<input type="text"/> (i200x only)

- 4 Datafill the fields, then click on the **create profile** menu option on the right.

Note: For definitions of these fields, click on the ? icon for each field.

*Response: The **user creation results** screen displays confirmation of file creation. The user profile is stored on the CICM Element Manager.*

- 5 This procedure is complete.

Procedure 29 Change a User Profile

At the user profile home page on the Element Manager Web pages

- 1 Select the **change the profiles stored on the CICM-EM** menu option on the right.

*Response: The **user profiles modification** page opens.*



- 2 Click on the user profile name that you want to modify.

*Response: the **user profile edit** page opens.*

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NORTEL
NETWORKS

CICM

status

configuration

terminals

users

maintenance

CICM-EM

status

synchronization

profiles

audio

enterprise

language

network

user

feature

diagnostics

diagnostics

user profile edit

User Settings	
User profile name	<input type="text" value="guy"/>
Language	<input type="text" value="English (UK)"/>
Tone Set	<input type="text"/>
Time difference from GMT	<input type="text"/> Minutes (i200x only)
Daylight Setting	<input type="text"/> (i200x only)
Auto Answer On Ring	<input type="text"/> (i200x only)
Disable Missed Call Indicator	<input type="text"/>
Outbox Feature Key	<input type="text"/>
Default Key	<input type="text"/>
Never auto-hide feature keys	<input type="text"/>
Number of Extension Modules	<input type="text"/> (m6350 only)
Disable Adv. Functionality	<input type="text"/> (i200x only)
User can't change audio profile	<input type="text"/>
User can't change key assignments	<input type="text"/>
User can't change key labels	<input type="text"/>
User can't configure sticky login	<input type="text"/> (i200x only)

- 3 Revise the user profile fields as required, then click on the **save your changes to this profile** menu option on the right.

Note: For definitions of these fields, click on the ? icon for each field.

Response: The status page opens and confirms completion of the edit.

- 4 This procedure is complete.

Procedure 30 Delete a User Profile

At the user profile home page on the Element Manager Web page

- 1 Click on the **change the profiles stored on the CICM-EM** menu option on the right.

*Response: The **user profiles modification** page opens.*

- 2 Click on the **delete** (trash can) icon for the profile you want to delete.

Response: A status page opens and confirms the deletion.

- 3 This procedure is complete.

Procedure 31 Apply a User Profile to a CICM

At the user profile home page of the element manager Web pages

- 1 Click on the **apply one or more profiles stored on the CICM-EM to one or more CICMs** menu option on the right.

*Response: The **apply user profile** page opens.*

Element Manager

CICM

- status
- configuration
- terminals
- users
- maintenance

CICM-EM

- status
- synchronization

profiles

- audio
- enterprise
- language
- network
- user
- feature

diagnostics

- diagnostics

apply user profile

Profile ⓘ ▶ apply profile(s)

Range of Profiles

- Apply only the selected user profiles
- Apply all existing user profiles

Profile Selection

guy

CICM ⓘ

Range of CICMs

- Apply only the selected CICMs
- Apply to all CICMs

CICM Selection

cxip110
cxip120
cxip130
cxip180
cxip220

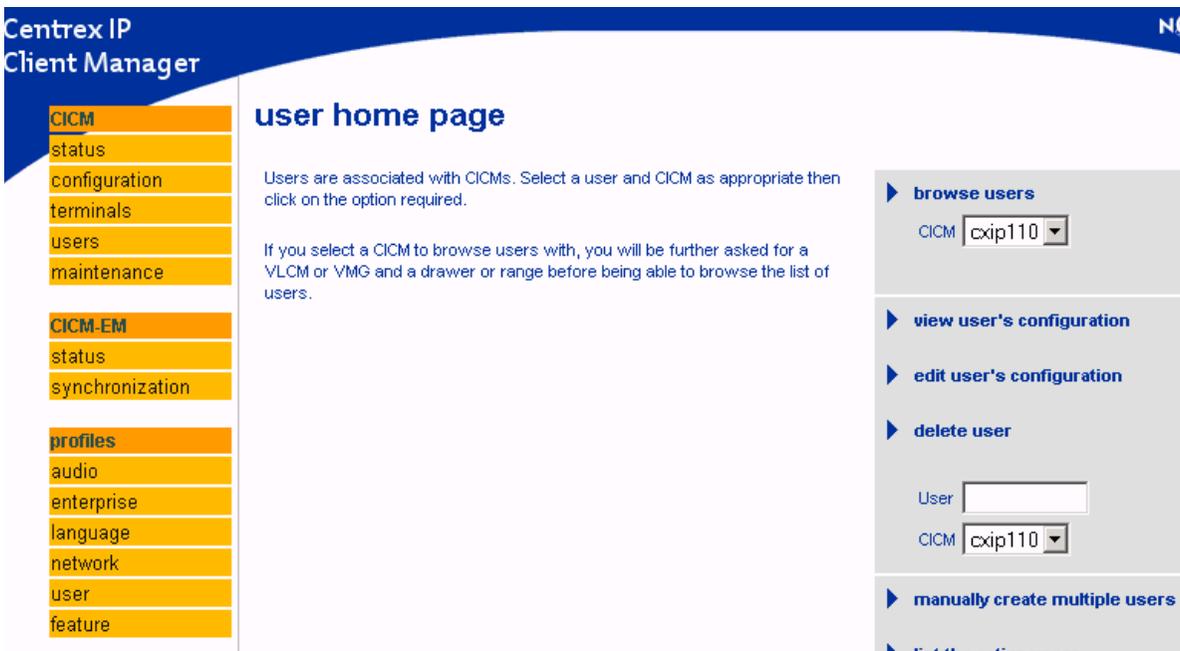
- 2 Select the profiles to apply and the CICMs to apply them to, by datafilling the fields on the **apply user profile** page.
 - Note 1:** Click on the ? icon for definitions of each field.
 - Note 2:** Use the CTRL key to select more than one CICM.
- 3 Click the **apply profile(s)** menu option on the right.
- 4 This procedure is complete.

Procedure 32 Apply/remove User Profile overrides

At the element manager home page

- 1 Click on the **users** option from the **CICM** section of the left navigation bar

Response: The user home page opens



At the user home page

- 2 Select the CICM from the **browse users on** drop-down menu, then click on the **browse users on** text.

Response: The users on CICM <cicm_name> (range <#-#> on vmg <name>) page opens.

entrex IP
Client Manager

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NETWORKS

users on cicm cxip120 (range 0-63 on vmg 'vmg0')

Line No	User	User Profile	Operation ?	Line No	User	User Profile	Operation ?
				32			add
1			add	33			add
2			add	34			add
3			add	35			add
4			add	36			add
5			add	37			add
6			add	38			add
7			add	39			add
8			add	40			add
9			add	41			add
10			add	42			add

► **browse users on**

CICM

VMG

Range

► **view user's configuration**

► **edit user's configuration**

► **delete user**

User

► **manually create multiple users**

- 3** In the User list, click on the user ID that you want to apply/remove overrides to,
OR
Enter the user number in the **edit a user's configuration** menu option, then click on the **edit a user's configuration** text.
- Response: The **edit user <username> on <cicm_name>** page opens.*

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edit user 000005 on cxip180

User statistics	
User name	000005
Total Call Count	3
Login Status	Active (CXIP180B)
Master Terminal	31-38-00-60-38-DD-48-56
Slave Terminal	none
Sticky Login Terminals	none
Total Login Failures	0
Login Count	2
Login Failure Count	0
Login Time	2004/01/23 22:59

User settings	
Password	<input type="text" value="1234"/>
Profile	<input type="text" value=""/>

CS2k Provisioning Information	

- ▶ save changes
- ▶ force user logout
- ▶ user overrides
- ▶ reset user counters
- ▶ delete user
- ▶ back to user pages for cxip180

- 4 Click on **user overrides** menu option on the right.

*Response: The **profile overrides for user <name> on <cicm_name>** page opens. The default settings are loaded from the user's profile (if one exists).*

entrex IP
Client Manager

NORTEL
NETWORKS

profile overrides for user 000001 on cxip180

This page allows you to save changes to an individual user, which will override the default settings which are loaded. Setting any field to blank will cause the CICM to use the setting from the user's profile

User Settings	
User profile name	<input type="text" value="000001"/>
Language	<input type="text"/>
Tone Set	<input type="text"/>
Time difference from GMT	<input type="text"/> Minutes (i200x only)
Daylight Setting	<input type="text"/> (i200x only)
Auto Answer On Ring	<input type="text"/> (i200x only)
Disable Missed Call Indicator	<input type="text"/>
Outbox Feature Key	<input type="text"/>
Default Key	<input type="text"/>
Never auto-hide feature keys	<input type="text"/>
Number of Extension Modules	<input type="text"/> (m6350 only)
Disable Adv. Functionality	<input type="text"/> (i200x only)

- 5 Databfill the fields that you want to override for this user, then click on the **save changes** option on the right.
 - Note 1:** For field definitions, click on the ? icon for each field.
 - Note 2:** Fields databfilled will override the default settings on the user's profile.
 - Note 3:** Fields left blank will default to the user profile.
 - Note 4:** To remove an override in a particular field, set the field to blank.

Response: The status page opens to confirm the action taken.
- 6 To remove all overrides, click on the **remove all overrides** menu option on the right.

Response: The status page opens to confirm the action taken.
- 7 This procedure is complete.

Feature Profiles

The Feature Profile governs how features behave on the terminals supported by a CICM. The attributes of each feature can cause the feature to be hidden or shown, based on the state of other features on the terminal. This allows maximum use to be made of the limited number of feature keys available on some terminals.

Use the following procedure to configure Feature Profiles.

Procedure 33 Configure Feature Profile

At the CICM - Element Manager home page

- 1 Select **feature profiles** from the left navigation bar.

Response: The feature profile home page opens.

The screenshot shows the 'feature profile home' page in the Centrex IP Client Manager. The left navigation bar is on the left, with 'profiles' selected. The main content area has a title 'feature profile home' and three paragraphs of text. The first paragraph explains that a feature profile governs how features behave on terminals supported by a CICM. The second paragraph states that attributes of each feature can cause it to be hidden or shown based on the state of other features. The third paragraph notes that some features behave like a DN feature, which can be specified in another attribute. Below the text is a 'Note' section with three bullet points. On the right side, there are three action buttons: 'change the profiles stored on the CICM-EM', 'apply one or more profiles stored on the CICM-EM to one or more CICMs', and 'change the profiles stored on the following CICM'. The third button has a dropdown menu with 'cxip110' selected.

- 2 Select the relevant CICM from the drop-down menu on the right navigation bar, then click on the **change the profiles stored on the following CICM** text.

Response: The feature profiles modification on <cicm_name> page opens. This provides a list of all feature, and their attribute configuration.

Centrex IP Client Manager NORTEL NETWORKS

- CICM
- status
- configuration
- terminals
- users
- maintenance
- CICM-EM
- status
- synchronization
- profiles
- audio
- enterprise
- language
- network
- user
- feature
- diagnostics
- diagnostics

feature profiles modification on cxi120

Name	Attributes
3Way Call	Hide when DN Active
Agent	DN Feature
Agent Stat	
ActSummary	
Ans. Agent	
Ans. Emerg	
Autodial	
Call Agent	
Call Force	
Call Super	
Call Wait	
Conference	Hide when DN Active
CtrlFlow	
Dir. Park	
DN	DN Feature
Emergency	
Empty	
Fast Xfer	Hide when DN Active
Forward	Hide when DN Active

▶ change feature profiles stored on the CICM-EM

- 3 On the **feature profiles modification on <cicm_name>** page, click on the name of the feature you want to configure.
Response: The feature profile edit on <cicm_name> page opens. The following figure illustrates the 3 Way Call feature.

Centrex IP Client Manager

feature profile edit on cxip120

Feature Profile

Feature: 3 Way Call

DN Feature: No

Hide Mode: When DN is active

save your changes to this profile

Cancel

- 4 To configure this feature as a DN (dynamic) feature, choose **Yes** from the drop-down menu on the **DN Feature** line, or choose **NO** to not designate it as a **DN Feature**.
- 5 To configure the **Hide Mode**, choose from the drop-down menu on the **Hide Mode** line:
 - Never
 - When DN is active
 - when DN is inactive
- 6 To configure other features, repeat steps 4 and 5 for each feature.
- 7 Click on the **save your changes to this profile** text on the right.
*Response: The **profile save results** page displays configuration results.*

Centrex IP Client Manager

profile save results

Performing update:

- Updated profile/featureprofile/11/dnfeature = No
- Updated profile/featureprofile/11/hidewhendnactive = Yes
- Deleted profile/featureprofile/11/hidewhendinactive

Update completed successfully

Warning: Re-applying the master profile from the element manager will overwrite the locally changed copy on this gateway.

feature profiles modification

feature profiles modification on cxip120

8 This procedure is complete.

Enable/Disable Dynamic Feature Key

Use the following Procedure 34 to enable/disable dynamic feature key functionality on a terminal type basis, using the EM Terminal Configuration Web pages. This setting cannot be overridden by any other setting (i.e. if the Dynamic feature key functionality is disabled on a terminal type basis the feature cannot be activated in any other way for that specific terminal type).

Note: Users logged into the gateway when the functionality is enabled/disabled will not pick up the changes until they log out and back into the CICM.

Use Procedure 35 to enable or disable the Dynamic Feature Key functionality by user overrides. These setting changes will take effect immediately.

The user may also disable the functionality from the terminal itself in the **Menu\Feature\Options** menu. These setting changes will take effect immediately.

Procedure 34 Enable/Disable Dynamic Feature key (terminal type)

At the CICM - Element Manager home page

1 Click on **terminals** from the left CICM menu.

*Response: The **terminal configuration** page opens.*



2 Select the relevant CICM from the drop-down menu on the right navigation bar, then click on the **go to terminal configuration on CICM** text.

*Response: The **terminals on <cicm_name>** page opens.*

The screenshot shows the 'Centrex IP Client Manager' interface. The left sidebar contains a navigation menu with categories: CICM (status, configuration, terminals, users, maintenance), CICM-EM (status, synchronization), and profiles (audio, enterprise, language, network, user, feature). The main content area is titled 'terminals on cxip120' and contains three paragraphs of text explaining the page's purpose. Below the text is a 'Terminal Settings' section with a 'Retry Count' dropdown menu set to '6'. The right sidebar contains several expandable sections: 'save retry count', 'view terminal' (with an empty input field), 'terminal audit', 'firmware update' (with a dropdown menu set to 'm6350'), and 'configuration' (with a dropdown menu set to 'm6350').

- 3 On the **terminals on <cicm_name>** page, select the terminal type you want to configure from the drop-down menu on the right.

Response: The <type> terminal configuration <cicm_name> page opens. The following figure illustrates the i2004 type of terminal.

Centrex IP Client Manager

i2004 terminal configuration (cxip120)

Feature Key Attributes ? ▶ Apply changes

Number of physical feature keys (on the main set)	<input type="text" value="6"/>
Number of features available on the main set (pages of features are used if there are not enough physical feature keys)	<input type="text" value="11"/>
Automatically hide features	<input type="text" value="Yes"/>

Voice Parameters ?

Default Audio Profile	<input type="text"/>
Default Voice Codec	<input type="text" value="G.711 (Auto)"/>
Secondary Voice Codec	<input type="text" value="G.729a"/>
RTP port number (must be an even number)	<input type="text" value="25000"/>

ACD Options ?

Disable Handset	<input type="text" value="No"/>
Disable Handsfree	<input type="text" value="No"/>

Default Volume Settings ?

Users cannot modify Default Volumes	<input type="text"/>
-------------------------------------	----------------------

- 4 To configure this terminal type as a DN (dynamic) feature, choose **Yes** from the drop-down menu on the **Automatically hide features** key attribute, then click on the **Apply changes** text on the right.

Note: Users logged into the gateway when the functionality is enabled/disabled will not pick up the changes until they log out and back into the CICM.

Response: The **updating terminal configuration** Web page opens to confirm changes.

The screenshot displays the Centrex IP Client Manager interface. On the left is a navigation menu with categories: CICM (status, configuration, terminals, users, maintenance), CICM-EM (status, synchronization), profiles (audio, enterprise, language, network, user, feature), and diagnostics. The main content area is titled "updating terminal configuration" and shows a "Connecting to cxip120" status. A list of updates follows, including changes to features, codecs, audio profiles, and transducer settings. A "Update completed successfully" message is shown at the bottom of the list. A breadcrumb trail at the bottom reads: home > terminal home > terminals on cxip120.

5 This procedure is complete.

Procedure 35 Enable/Disable Dynamic Feature key (user overrides)

At the CICM - Element Manager home page

1 Click on **users** from the left CICM menu.

*Response: The **user home page** opens.*

Centrex IP Client Manager

user home page

Users are associated with CICMs. Select a user and CICM as appropriate then click on the option required.

If you select a CICM to browse users with, you will be further asked for a VLCM or VMG and a drawer or range before being able to browse the list of users.

Navigation Bar:

- ▶ **browse users** (CICM: cxip220)
- ▶ **view user's configuration**
- ▶ **edit user's configuration**
- ▶ **delete user**
- User:
- CICM: cxip220
- ▶ **manually create multiple users**
- ▶ **list the active users**
- ▶ **edit the configuration of a range of users**
- ▶ **automatically create a range of**

- 2 Select the CICM from the drop-down menu on **browse users** option of the right navigation bar, then click on the **browse users** text.

Response: The users on CICM <cicm_name> (range) page opens.

users on cicm cxip180 (range 0-63 on vmg 'cxip180')

Line No	User	User Profile	Operation ?	Line No	User	User Profile	Operation ?
				32	000032		delete
1	000001		delete	33	000033		delete
2	000002		delete	34	000034		delete
3	000003		delete	35	000035		delete
4	000004		delete	36	000036		delete
5	000005		delete	37	000037		delete
6	000006		delete	38	000038		delete
7	000007		delete	39	000039		delete
8	000008		delete	40	000040		delete
9	000009		delete	41	000041		delete
10	000010		delete	42	000042		delete

browse users on
 CxIP:
 VMG:
 Range:

view user's configuration
edit user's configuration
delete user
 User:

- From the list in the **User** column, click on the user name to configure
*Response: The **edit user <name> on <cicm_name>** page opens.*

edit user 000001 on cxip180

User statistics ?	
User name	000001
Total Call Count	16
Login Status	Idle
Master Terminal	31-38-00-60-38-76-EB-2B
Slave Terminal	none
Sticky Login Terminals	none
Total Login Failures	1
Login Count	17
Login Failure Count	0
Login Time	2004/01/23 22:47

User settings ?

save changes
force user logout
user overrides
reset user counters
delete user
back to user pages for cxip180

- 4 Click on the **User overrides** option on the right menu.
*Response: The **profile overrides for user <name> on <cicm_name>** Web page opens.*

The screenshot shows the Centrex IP Client Manager interface. The left navigation menu includes sections for CICM, CICM-EM, profiles, and diagnostics. The main content area is titled 'profile overrides for user 000001 on cxip180'. Below the title is a warning: 'This page allows you to save changes to an individual user, which will override the default settings which are in the user's profile. Setting any field to blank will cause the CICM to use the setting from the user's profile.' The 'User Settings' form contains the following fields:

User Settings	
User profile name	<input type="text" value="000001"/>
Language	<input type="text" value=""/>
Tone Set	<input type="text" value=""/>
Time difference from GMT	<input type="text" value=""/> Minutes (i200x only)
Daylight Setting	<input type="text" value=""/> (i200x only)
Auto Answer On Ring	<input type="text" value=""/> (i200x only)
Disable Missed Call Indicator	<input type="text" value=""/>
Outbox Feature Key	<input type="text" value=""/>
Default Key	<input type="text" value=""/>
Never auto-hide feature keys	<input type="text" value=""/>
Number of Extension Modules	<input type="text" value=""/> (m6350 only)

- 5 To enable dynamic feature key functionality, choose **No** from the drop-down menu in the **Never auto-hide feature keys User Setting** field,
 OR
 To disable dynamic feature key functionality, choose **Yes** from the drop-down menu in the **Never auto-hide feature keys User Setting** field.
 Then
 Click on the **save changes** text on the right menu
Response: A confirmation of the override change is displayed.
- 6 This procedure is complete.

Line provisioning for CICM clients

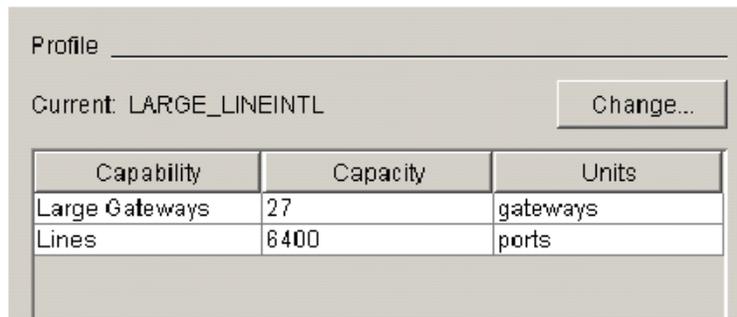
The procedure used to provision a CICM client on the CS2000 is very similar to the method used to provision a line on other line gateways.

Procedure 36 CS2000 Line provisioning for CICM clients

At the Element Manager desktop

- 1 Connect to the SESM for the chosen CS2000
- 2 Ensure that the GWC is provisioned to support Large Lines Gateways.

Example:



Profile _____

Current: LARGE_LINEINTL

Capability	Capacity	Units
Large Gateways	27	gateways
Lines	6400	ports

- 3 Use the Associate Media Gateway dialog box to associate a CICM gateway with the chosen GWC.

Response 1: The Gateway List will display a registration of the CICM gateway against the GWC.

Name	IP Address	Profile	Max T...	Res ...	Protocol	Pr...	Prot...	PEP Ser...	NAT Na...	Node N...	N...
cxip120a.nortel.net	47.165.76.120	CXIPCM	1000	1000	megaco	1.0	2944	NOT_SET	NOT_SET	LG 00 4	30
rochan-2.nortel.net	47.30.178.165	CXIPCM	1024	1024	megaco	1.0	2944	NOT_SET	NOT_SET	LG 00 6	43
test.nortel.net	0.0.0.1	CXIPCM	1000	1000	megaco	1.0	2944	NOT_SET	NOT_SET	LG 00 5	41

Response 2: A logical group will automatically be created in table LGRPINV on the CS2000.

```

TABLE: LGRPINV
>lis all
TOP
GRPNO SRVRNAME GRPTYPE LGRPOPTS
-----
LG 00 0 GWC 6 C $
LG 00 1 GWC 13 C $
LG 00 2 GWC 14 C $
LG 00 3 GWC 15 C $
LG 00 4 GWC 9 C $
LG 00 5 GWC 9 C $
LG 00 6 GWC 9 C $ ← RESULTING ENTRY
BOTTOM

```

- 4 Log into OSSGATE and issue the NEW command to create new lines.

Example

```

NEW $ 8124012 M5216 ETB3PRIVGRPA 0 0 208 1 Y rochan-2.nortel.net tp/0002 $
      DN      LCC                               CICM Gateway      Endpoints

```

*Response 1:
On the SESM:*

Line List			
Name	Gateway	Node Number	Terminal Number
tp/0001	rochan-2.nortel.net	43	1
tp/0002	rochan-2.nortel.net	43	2

*Response 2:
On the CS2000 (use the QLEN command):*

```
>qlen 8124012
-----
LEN:      LG      00 6 00 01
TYPE: SINGLE PARTY LINE
SNPA: 208
DIRECTORY NUMBER:      8124012
LINE CLASS CODE: M5216 SET
CUSTGRP:  ETB3PRIVGRPA SUBGRP: 0  NCOS: 0  RING: Y
CARDCODE: GWLEBS      GND: N  PADGRP: PKNIL  BNV: NL  MNO: Y
PM NODE NUMBER :      43
PM TERMINAL NUMBER :  2
OPTIONS:
  NONE

  KEY      DN
  ---      --
    1      DN          2088124012

  KEY      FEATURE
  ---      -
    NONE
```

GWLEBS is the International Line Cardcode for pPhone/EBS sets. In North American markets this value will be RDTEBS

5 This procedure is complete.

