Service/Subscriber Provisioning

The Cisco 6400 SCM allows you to make and manage network connections through a set of menu options available by right clicking on an appropriate card in **MapViewer**. They allow you to create and configure Subscribers and Services, and to manage the subsequent connection of Subscribers to Services.

This chapter details the tasks you may need to use during day to day Service Connection Management, the name we provide to combined subscriber and service provisioning.

Accessing SCM Windows

The tasks and windows that are required in Service Connection Management are accessed from the Chassis map in **MapViewer**.

Tasks and windows can also be accessed from the **Objects** manager, and from different objects and more than one containment tree when required. Refer to Table 6-1 for further details.

				L	aunch	Points				
Tasks	NSP	NRP	NRP ATM Port	Line Card	Line Card ATM Port	DSLAM	Service Instance	Subscriber	Subscriber QoS	Connection
Configure Service Profiles	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Configure QoS Profiles	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
Configure Services	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes
Configure Subscribers	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Configure Subscriber QoS	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
Connect Subscribers	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Disconnect Subscribers	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Deploy DSLAM	No	No	Yes	Yes	Yes	No	No	No	No	No
Deploy Subscriber and QoS	No	No	Yes	Yes	Yes	Yes	No	No	No	No
Deploy Subscriber QoS	No	No	Yes	Yes	Yes	Yes	No	Yes	No	No

 Table 6-1
 SCM Window Launch Points

								L	aun	ch	Poi	nts								
Tasks		NSP		NRP		NRP ATM Port		Line Card	Line Card	ATM Port		DSLAM		Service Instance		Subscriber		Subscriber QoS		Connection
Deploy Service Instance	No		No		Yes		Yes		Yes		No		No		No		No		No	

Table 6-1 SCM Window Launch Points (continued)

Defining Policies For Service Provisioning

Many service providers and telecommunications carriers now offer tiered service levels to their customers and/or subscribers. These service levels are generally defined by the marketing policy of the carrier or service provider.

Configuration of the 6400 SCM service and subscriber provisioning involves the definition of a large number of parameters that are common across these policies.

The 6400 SCM utilizes the concept of a configuration profile to simplify the definition of both service parameters and subscriber QoS parameters.

A configuration profile is therefore a set of configuration parameters (or attributes) that can be set up in advance before the actual configuration operation. These profiles are saved in the CEMF database. The 6400 SCM profiles therefore speeds up both subscriber provisioning and service provisioning.

Without the use of profiles, you would have to enter a repetitive definition of the same (or similar) information for service or subscriber provisioning operations.

For example, you may wish to define "bronze" (low data rate, inexpensive), "silver" and "gold" (high data rate, expensive) profiles for subscriber QoS. This provides a simple method for use during the subscriber provisioning operation and saves retyping all of the QoS parameters individually for each new subscriber.

A typical work flow is described in this section, you can use this example as a tutorial.

Figure 6-1 Defining Profiles For Service Provisioning



This section describes how to use the 6400 SCM profile definition windows. The precise parameter values that you select for each service or subscriber QoS are dependent upon your network topology and market service offerings.

Refer to the "Service Profile Configuration Window" section on page 7-1 for further information on the meaning of each service topology and service parameter.

Creating Service Profiles (for PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed Services)

This section describes the use of service profiles to simplify 6400 SCM service provisioning. There are two methods for accessing the various Cisco 6400 SCM Service Profile windows:

1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure Service Profiles** option from an NSP object using the MapViewer application (for service types PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed).

OR

2 Select the Cisco 6400 UAC, Profiles, Configure <*Service*> Profiles option from an NSP object using the MapViewer application (for service types RBE, PTA-MD, and RFC1483 Routing. Where <*Service*> is service type RBE, PTA-MD, or RFC1483 Routing.

Service profiles are used to define configuration parameters for the uplink from the 6400 UAC to the service provider.

Note Service profiles cannot be set up for pure ATM services.

You can set up profiles and apply them or, alternatively, you can configure a service manually. The services available on the 6400 UAC have a number of parameters to configure. It is worth setting up a number of service profiles with at least some of the values complete (that can be applied later) to save time.

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure Service Profiles** option from any card type (that is NSP, NRP or Line Card). Profiles are "globally" obtained within the 6400 SCM.

The Service Profile Configuration window appears with the General tab displayed:

		Service Frofile Configuration	5.1.
East Options Hovigation	Window Actions		Hote
	0		
	General ppp-p ppp-L	TP Staged-Bidged Staged-Routed	
	a service of the serv		
	Service Details		
	Service Description		÷
		FIL	
	Service Type	ADM 2	
1000000			
Create Profile			

Figure 6-2 Service Profile Configuration Window (General Tab)



A Prompt window appears.

Figure 6-3 Prompt Window

– Prompt	· □
Enter profile name :	
Premium Profile	
<u>O</u> k	Cancel

Step 3 Enter a name for the profile in the **Enter profile name** data entry box. **Premium Profile** was entered in the example shown in Figure 6-3.

Note Each service profile must have a unique name.

The Service Profile Configuration window reappears with the new profile name displayed in the left-hand-side of the window.

Step 4 Select the **General** tab (shown in Figure 6-2) if it is not already selected.

Note Select the **Copy** and **Copy Page Configuration** options in the **Edit** menu to cut and paste between different profiles. This is useful when you wish to copy profile information from one to the next.

- Step 5 Enter a description into the **Service Description** data entry box in the **Service Details** frame.
- Step 6 Select a **Service Type** from the drop down list. This **Service Type** is a range of options you can use to configure the uplink from the 6400 UAC to the upstream service provider.

Note Refer to the "Service Profile Configuration Window" section on page 7-1 for details of the parameters displayed on each of the tabs in the Service Profile Configuration window.

As an example, the **PPP-IP Service Type** is selected.

Note When a **Service Type** is selected the service tabs that do not relate to this service are greyed out and cannot be selected. For example, when the **PPP-IP** service is selected the **PPP-L2TP**, **Bridged-Bridged** and **Bridged-Routed** tabs are greyed out.

R = 0 1 0	0				
am Protis	General (PPP-P) (HER-LCTF) (What Tonglate Parameters IP Address Subnet Mask Authoritication Type	202 , 8 , 7 , 1 205 , 86 , 7 , 1 206 , 956 , 956 , 9	IP Address Poel Lower IP Address Higher IP Address WC Class Persenters	221, [0,]2, [2 22, [0,]2, [2	
12					

Figure 6-4 Service Profile Configuration (PPP-IP Tab)

Step 7 Edit the parameters into the **Virtual Template Parameters** frame, as required. The **Virtual Template Parameters** describe the PPP characteristics used to terminate the incoming PPP traffic. You should set the parameters appropriate to your network topology and services to be offered.

Note If you enable Peer DHCP, it is assumed that you are using an external DHCP Server for IP address allocation and any values entered into the **IP Address Pool** frame are ignored.

- Step 8 Edit the parameters in the **IP Address Pool** frame, as required. The **IP Address Pool** set the range of IP addresses available to a subscriber.
- Step 9 Select the **Encapsulation Type** in the **VC Class Parameters** frame. The **VC Class Parameters** define the characteristics of the incoming ATM traffic.
- Step 10 Select **Save** from the **File** menu to save the parameters you have selected for your service profile.
- Step 11 Select **Close** from the **File** menu to close the window.

Editing Existing PPP-IP, PPP-L2TP, Bridged-Bridged or Bridged-Routed Service Profiles

To edit an existing service profile, proceed as follows:

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure Service Profiles** option from an NRP Card on the **MapViewer**.

The Service Profile Configuration window appears with the **General** tab displayed. Existing service profiles are displayed at the left-hand-side of the window.

jin Edit Options Movigation (Watew Actions	ar Manager/Elico-5400/Premizes Profile/Servicemstance	inte
	0		
Parents Perfor	General PEP-IP (200-1	200 Ridged-Bedged Budger-States	
9r-8r 9r-19	Service Details		
Sbb-p (Sb w,	Service Description	Add a description have	
		kı (2 ¹⁴	
	Service Type	Endped-Bridged	
H (4)			
Create Profile			
GPTNL,			

Figure 6-5 Service Profile Configuration Window (General Tab)

- Step 2 Select the profile you wish to edit from the list of profiles displayed. The **Premium Profile** is selected in the example shown in Figure 6-5.
- Step 3 Select the **General** tab (shown in Figure 6-2) if it is not already selected.
- Step 4 Edit the parameters in the **General** tab as required.
- Step 5 Select the appropriate service tab for the **Service Type** selected.

Note When a **Service Type** is selected the service tabs that do not relate to this service are greyed out and cannot be selected. For example, when the **PPP-IP** service is selected the **PPP-L2TP**, **Bridged-Bridged** and **Bridged-Routed** tabs are greyed out.

- Step 6 Edit the parameters in the appropriate service tab as required.
- Step 7 Select Save from the File menu to save the configuration.
- Step 8 Select **Close** from the **File** menu to close the window and save the changes made.

Deleting Existing PPP-IP, PPP-L2TP, Bridged-Bridged or Bridged-Routed Service Profiles

To delete an existing service profile, proceed as follows:

To edit an existing subscriber QoS profile, proceed as follows:

Step 1 Select the Cisco 6400 UAC, Profiles, Configure Service Profiles option from an NRP Card.

The Service Profile Configuration window appears with the **General** tab displayed. Existing service profiles are displayed at the left-hand-side of the window.

Figure 6-6 Service Profile Configuration Window

the second second	COLUMN TRACE	en Massegel (close-14000/11991Len 211014/nervicantitary) e	-
Fox Ocean Revibues	Sector Score		100
	- 		
And the second second	T General Statute Manual	29 Designet-Designed (Electric Fielder)	
н-та <u>Ворна</u> И Ха 92-Ф	Informer Oxynei fal Remain Oxynei Stam Oxynei Namm anzenption	And a description form	
	Sareca Type	Bridged-Bildged	
0	n an		
Onputie Photile			
14.			

- Step 2 Select the existing service profile that you wish to delete. In the example (shown in Figure 6-21) the **Premium Profile** is selected.
- Step 3 Right click and select **Delete object**(s) option.

The Deletion Summary Screen appears.

Figure 6-7 Deletion Summary Screen

	Deletion Summ	ary screen	13
Beletion Summary	-	-	
The fullowing object Class Name; Anailabi Biject name: profile	t and all its descendents LeServiceProFile eContainment:/Hanager/Cip	will be deleted: cr-6400/Promium Pro	
		New York	
9			

- Step 4 Check the details in the Deletion Summary Screen.
- Step 5 Select **Finish** to delete the selected profile. The delete operation is initiated.

8

Step 6 Select **Dismiss** to close the Deletion Summary Screen.

Creating Service Profiles for a PTA-MD Service

Service profiles are used to define configuration parameters for the uplink from the 6400 UAC to the service provider.

You can set up profiles and apply them or, alternatively, you can configure a service manually. The services available on the 6400 UAC have a number of parameters to configure. It is worth setting up a number of service profiles with at least some of the values complete (that can be applied later) to save time.

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure PTA-MD Profiles** option from any card type (that is NSP, NRP or Line Card) using the **MapViewer** application.

The PTA-MD Service Profile Window (PTA-MD Tab) appears. The PTA-MD Service Profile window has two tabbed sections: **PTA-MD** and **Local Service Profiles**.

File Edit Options Navigation Wind	lew Actions		Help
	E The second		
	PTA-MD Local Service Pr	dia	
	GeS Parameters		
	GeS Category	ubr	
	Peak Cell Rate	10000	
	Gustaliurela Cali Rota		
	Minimum Cell Role		
	Hadowe Buck Cell Sc	*	
	Cell Delay Variation To	lerance	
_	Sub-Interface Paramet	urs .	
a	IP Address	192 , 168 , 248 , 120	
	Subnet Mask	275 , 275 , 275 , 0	
Create Profile	Encopsulation Type	aafiinap	
KETHL		Dynam	ic updates are evabled
			4

Figure 6-8 PTA-MD Service Profile Window (PTA-MD Tab)

Step 2 Select Create Profile.

A Prompt window appears.

Figure 6-9 Prompt Window

-	Promp ⁻	t • [□	J
Enter profil	e name :		l
Premium F	rofile		
<u>O</u> k]	<u>C</u> ancel	

Step 3 Enter a name for the profile in the **Enter profile name** data entry box. **Premium Profile** was entered in the example shown in Figure 6-9.

Note Each service profile must have a unique name.

The PTA-MD Service Profile window reappears with the new profile name displayed in the left-hand-side of the window.

Step 4 Select the **PTA-MD** tab (shown in Figure 6-8) if it is not already selected.

Note Select the **Copy** and **Copy Page Configuration** options in the **Edit** menu to cut and paste between different profiles. This is useful when you wish to copy profile information from one to the next.

Step 5 Edit the parameters in the **QoS Parameters and Sub-Interface Parameters** frames as required.

Note Refer to the "PTA-MD Service Configuration Window" section on page 7-32 for details of the parameters displayed on each of the tabs in the PTA-MD Service Profile window.

Step 6 Select the Local Service Profile tab.

File Edit Options Novigation	Mindow Actions		Help
488 = 5√ 0	0		
ptand1 tantsB test3	PTA-MD Local Service Profile Ceneral Name Description Type Mode Sequential Poissword Domain Name(t)	Service Route Next Hap IP Address 0 + 0 + 0 Next Hap Gatoway Key I Idle Timesul (seconds) Session Timesul (seconds)	, 0
Greate Profile	DNS Fault Tolerance DNS Fault Tolerance Primary DNS Server 0 , 0 , 0 Secondary DNS Server 0 , 0 , 0	RADIUS IP Address 0 • 0 • 0 RADIUS IP Address 0 • 0 • 0 RADIUS Auth-Port • 0 RADIUS Auth-Port • 0 RADIUS Secret	. 0 0
1894.		Bynamic updates an	e enabled

Figure 6-10 PTA-MD Service Profile Window (Local Service Profile Tab)

Step 7 Enter parameters into the General, DNS Redirection/Fault Tolerance, and the Remote RADIUS Configuration frames.

Note Refer to the "Local Service Profile Tab" section on page 7-12 for details of the parameters displayed on each of the tabs in the PTA-MD Service Profile window. "Local Service Profile" on the PTA-MD windows refer to the 6400 NRP-SSG profiles, as hosted on the (selected) NRP. RADIUS-based service profiles are not supported by this 6400 SCM release.

- Step 8 Select **Save** from the **File** menu to save the parameters you have selected for your service profile.
- Step 9 Select **Close** from the **File** menu to close the window.

Editing an Existing PTA-MD Service Profile

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure PTA-MD Profiles** option from any card type (that is NSP, NRP or Line Card).

The PTA-MD Service Profile Window (PTA-MD Tab) appears. The PTA-MD Service Profile window (shown in Figure 6-8) has two tabbed sections: **PTA-MD** and **Local Service Profiles**.

Step 2 Select the profile you wish to edit from the list of profiles displayed on the left-hand-side of the window.

Step 3 Edit the parameters in the **PTA-MD** and **Local Service Profiles** tabs as required.

Note Refer to the "PTA-MD Service Configuration Window" section on page 7-32 for details of the parameters displayed on each of the tabs in the PTA-MD Service Profile window.

- Step 4 Select **Save** from the **File** menu to save the configuration.
- Step 5 Select **Close** from the **File** menu to close the window and save the changes made.

Deleting an Existing PTA-MD Service Profile

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure PTA-MD Profiles** option from any card type (that is NSP, NRP or Line Card).

The PTA-MD Service Profile Window (PTA-MD Tab) appears. The PTA-MD Service Profile window (shown in Figure 6-8) has two tabbed sections: **PTA-MD** and **Local Service Profiles**.

- Step 2 Select the profile you wish to edit from the list of profiles displayed on the left-hand-side of the window.
- Step 3 Right click and select **Delete object**(s) option.

The Deletion Summary Screen appears.

Figure 6-11 Deletion Summary Screen

Teletum Summu	Deletion Summ	arý Scieen	ų
he following ob Lass Rame; Anni Bjørt rame: prof	 eet and all its descendents ablaGarvicaFrofile ilaCartainment:/Manager/Cis	will be deleted; ce-6400/Promium Pro	
9			
re Back	anvani 🗤	Cancel	Pleish

- Step 4 Check the details in the Deletion Summary Screen.
- Step 5 Select **Finish** to delete the selected profile. The delete operation is initiated.
- Step 6 Select **Dismiss** to close the Deletion Summary Screen.

Creating Service Profiles for an Route Bridge Encapsulation (RBE) Service

Service profiles are used to define configuration parameters for the uplink from the 6400 UAC to the service provider.

You can set up profiles and apply them or, alternatively, you can configure a service manually. The services available on the 6400 UAC have a number of parameters to configure. It is worth setting up a number of service profiles with at least some of the values complete (that can be applied later) to save time.

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure RBE Profiles** option from any card type (that is NSP, NRP or Line Card) using the **MapViewer** application.

Figure 6-12 RBE Service Profile Window (Route Bridge Encapsulation Tab)

File Edit Options Navigation	Medow Actions		Help
148 = 0√ 0	0		
70112	Route Bridge Encapsulation		
	GoS Parameters		
	GoS Category	ubr	
	Peak Cell Rate		
	Surd-enable Cell Rale		
	Minimum Cell Rate		
	Michael Bard Slag		
	Cell Delay Variation Tolerand	a	
	Sub-Interface Parameters		
	IP Address	0.0.0.0	
	Subnet Mask	0 - 0 - 0 - 0	
Greate Profile	Encapsulation Type	aalSexux (p	
17 Day		hered	c undatas ara arabitat
in the second se		EQUAL.	o records the matrice

Step 2 Select Create Profile.

A Prompt window appears.

Figure 6-13 Prompt Window

Promp	t 🔽
Enter profile name :	
Premium Profile	
	Cancel

Step 3 Enter a name for the profile in the **Enter profile name** data entry box. **Premium Profile** was entered in the example shown in Figure 6-13.

Note Each service profile must have a unique name.

The RBE Service Profile window reappears with the new profile name displayed at the left-hand-side of the window.

Note Select the **Copy** and **Copy Page Configuration** options in the **Edit** menu to cut and paste between different profiles. This is useful when you wish to copy profile information from one to the next.

Step 4 Edit the parameters in the **QoS Parameters and Sub-Interface Parameters** frames as required.

Note Refer to the "RBE Service Profile Window" section on page 7-14 for details of the parameters displayed on each of the tabs in the RBE Service Profile window.

- Step 5 Select **Save** from the **File** menu to save the parameters you have selected for your service profile.
- Step 6 Select **Close** from the **File** menu to close the window.

Editing an Existing RBE Service Profile

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure RBE Profiles** option from any card type (that is NSP, NRP or Line Card).

The RBE Service Profile Window appears.

- Step 2 Select the profile you wish to edit from the list of profiles displayed on the left-hand-side of the window.
- Step 3 Edit the parameters in the **QoS Parameters** and **Sub-Interface Parameters** frames as required.

Note Refer to the "Route Bridge Encapsulation (RBE) Service Configuration Window" section on page 7-36 for details of the parameters displayed on each of the tabs in the RBE Service Profile window.

- Step 4 Select **Save** from the **File** menu to save the configuration.
- Step 5 Select **Close** from the **File** menu to close the window and save the changes made.

Deleting an Existing RBE Service Profile

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure RBE Profiles** option from any card type (that is NSP, NRP or Line Card).

The RBE Service Profile Window (RBE Tab) appears.

- Step 2 Select the profile you wish to edit from the list of profiles displayed on the left-hand-side of the window.
- Step 3 Right click and select **Delete object**(s) option.

The Deletion Summary Screen appears.

Figure 6-14 Deletion Summary Screen

Centron Sunn	ary screen	1.2
Belietson Suevery	4	
The following object and all its descendents Class Hame; ResidubleServiceFrofile Bajact name: profileCentainment2/Manager/Con	will be deleted; ca-5400/Prestum Pro	
4		
1		

- Step 4 Check the details in the Deletion Summary Screen.
- Step 5 Select **Finish** to delete the selected profile. The delete operation is initiated.
- Step 6 Select **Dismiss** to close the Deletion Summary Screen.

Creating Service Profiles for an RFC1483 Service

Service profiles are used to define configuration parameters for the uplink from the 6400 UAC to the service provider.

You can set up profiles and apply them or, alternatively, you can configure a service manually. The services available on the 6400 UAC have a number of parameters to configure. It is worth setting up a number of service profiles with at least some of the values complete (that can be applied later) to save time.

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure RFC1483 Profiles** option from any card type (that is NSP, NRP or Line Card) using the **MapViewer** application.

Figure 6-15 RFC1483 Service Profile Window (RFC1483 Tab)

- RFC14	83 Service Profile Man	ager/Cisco-6400/vnc1/ServiceInstance	
Te Edit Options Novigation	Madow Actions		Hab
	0		
wa¢1	RFC1483 Routed		
	QoS Parameters		
	Gos Category	utr -	
	Peak Cell Rate	10000	
	Sectionation (Set Sale		
	Minimum Catl Plate		
	Minmuti Euro Call GL		
	Cell Delay Variation Tr	letance	
	Sub-Interface Parame	ters.	
er i i i i i i i i i i i i i i i i i i i	IP Address	152 , 268 , 245 , 200	
Greate Profile	Subnet Mask	255 . 255 . 255 . 0	
0794		bye	mic updates are enabled
			A

Step 2 Select Create Profile.

A Prompt window appears.

Figure 6-16 Prompt Window

Prompt	· []
Enter profile name :	
Premium Profile	
<u>0</u> k	Cancel

Step 3 Enter a name for the profile in the **Enter profile name** data entry box. **Premium Profile** was entered in the example shown in Figure 6-16.

Note Each service profile must have a unique name.

The RFC1483 Service Profile window reappears with the new profile name displayed in the left-hand-side of the window.

Note Select the **Copy** and **Copy Page Configuration** options in the **Edit** menu to cut and paste between different profiles. This is useful when you wish to copy profile information from one to the next.

Step 4 Edit the parameters in the **QoS Parameters and Sub-Interface Parameters** frames as required.

Note Refer to the "RFC1483 Service Configuration Window" section on page 7-38 for details of the parameters displayed on each of the tabs in the PTA-MD Service Profile window.

- Step 5 Select **Save** from the **File** menu to save the parameters you have selected for your service profile.
- Step 6 Select **Close** from the **File** menu to close the window.

Editing an Existing RFC1483 Service Profile

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure RFC1483 Profiles** option from any card type (that is NSP, NRP or Line Card).

The RBE Service Profile Window (shown in Figure 6-15) appears.

- Step 2 Select the profile you wish to edit from the list of profiles displayed on the left-hand-side of the window.
- Step 3 Edit the parameters in the **QoS Parameters** and **Sub-Interface Parameters** frames as required.

Note Refer to the "RFC1483 Service Configuration Window" section on page 7-38 for details of the parameters displayed on each of the tabs in the RBE Service Profile window.

- Step 4 Select **Save** from the **File** menu to save the configuration.
- Step 5 Select **Close** from the **File** menu to close the window and save the changes made.

Deleting an Existing RFC1483 Service Profile

Step 1 Select the **Cisco 6400 UAC**, **Profiles**, **Configure RFC1483 Profiles** option from any card type (that is NSP, NRP or Line Card).

The RFC1483 Service Profile Window appears.

- Step 2 Select the profile you wish to edit from the list of profiles displayed on the left-hand-side of the window.
- Step 3 Right click and select **Delete object**(s) option.

The Deletion Summary Screen appears.

Figure 6-17 Deletion Summary Screen

Deletion Summ	tary Screen	1.5
	4	
ni. Ta ang sang sang sang sang sang sang sang		
ject and all its descendents lableServiceProfile	s will be deleted:	
13eCentaineent:/Neveger/Cis	co-6400/Prestus Pro	
	and the second s	
hamaged as	Cascel	Persh

- Step 4 Check the details in the Deletion Summary Screen.
- Step 5 Select **Finish** to delete the selected profile. The delete operation is initiated.
- Step 6 Select **Dismiss** to close the Deletion Summary Screen.

Creating Subscriber QoS Profiles

A QoS profile is a method of defining a set of QoS parameters in advance that can be applied to a number of subscriber QoS objects without having to enter the same information each time.

The subscriber QoS profile applies to the subscriber traffic incoming to the Cisco 6400 UAC, for example, from the DSLAM to the 6400 UAC.

To create a subscriber QoS profile, proceed as follows:

- Step 1 Start **MapViewer** and select the Chassis map.
- Step 2 Select the **Cisco 6400 UAC**, **Profiles**, **Configure Subscriber QoS Profiles** option from a Line Card.

The Subscriber QoS Profiles window appears.

Figure 6-18 Subscriber QoS Profiles Window

8	5.6	somber oos inchies		100
He filt Options Havipation	Wedow Actions			194
日日日日日(日日日)	0			
	Gell Porcentions			
	GeS Description			
	GoS Persentars			
	Ord Calegory	<u>ur</u>	Exclamable Call Hale	
	Peak Call Role		Maximum Dunci Cell Size	
ta isi	Mnimum Cell Flate		Cell Delay Variation Tolerance	
Create Perfile				
			Byrance update	a are evabled
				A

Note The profile list (displayed above the **Create Profile** button) is initially empty, as shown in Figure 6-18.

Step 3 Select the **Create Profile** button.

A Prompt window appears.

Figure 6-19 Prompt Window

	Prompt	· · ·
Enter profi	le name :	
Gold-Qo	S-Profile	
Ok	1	Cancol
		Cancer

Step 4 Enter a name for the QoS profile in the **Enter profile name** data entry box.

In the example (shown in Figure 6-19) **Gold-QoS-Profile** is entered as an example. Typical names are **Gold**, **Silver** or **Bronze** profile.

- Step 5 Click **Ok** to accept the profile name. The new profile name appears in the profile list (displayed above the **Create Profile** button) in the Subscriber QoS Profiles window.
- Step 6 Enter a description in the **QoS Description** entry box. This is an optional parameter that allows you to add additional relevant information.
- Step 7 Enter/select values in the QoS Parameters frame. Select ubr as the QoS Category, enter900 for the Peak Cell Rate and leave the remaining fields blank.

The values entered into the **QoS Parameters** frame are normally defined in the Service Providers policy.

Note You do not need to set all the values in the **QoS Parameters** tab as these values can be added to or updated later.

Step 8 Select the **Save** option from the **File** menu to save to save the parameters you have selected for your QoS profile.

Note The profiles can be changed at any time. So you can set up a general profile, change the parameters and then save it with an appropriate name.

Step 9 Select the **Close** option from the **File** menu to close the Subscriber QoS Profiles window.

Editing an Existing Subscriber QoS Profile

To edit an existing subscriber QoS profile, proceed as follows:

- Step 1 Start **MapViewer** and select the Chassis map.
- Step 2 Select the **Cisco 6400 UAC**, **Profiles**, **Configure Subscriber QoS Profiles** option from a Line Card.

The Subscriber QoS Profiles window appears.

the Edit Options Havipation	Vindow Actions			Hulp
0 VBE 241	0			
getil Miller	Ges Parameters			
	GaS Description	Sine-p	a smallar	
	GoS Parameters			
	GoS Category	<u>887</u>	Sastamatik Cell Rate	
	Peak Cell Rate	1200	Maximum Burnt Cell Size	
ta13'	Minimum Cell Rate		Cell Delay Variation Tolorance	
Create Profile				
0894.			Bunanis andote	s are evabled

Figure 6-20 Subscriber QoS Profiles Window

Step 3 Select the existing QoS profile that you wish to edit. In the example (shown in Figure 6-20) the **silver** profile is selected.

Note Select the **Copy** and **Copy Page Configuration** options in the **Edit** menu to cut and paste between different profiles. This is useful when you wish to copy profile information from one to the next.

- Step 4 Edit the description in the **QoS Description** entry box (if required).
- Step 5 Enter/select values in the **QoS Parameters** frame as required.
- Step 6 Select the **Save** option from the **File** menu.
- Step 7 Select the **Close** option from the **File** menu to close the Subscriber QoS Profiles window.

Deleting an Existing Subscriber QoS Profile

To delete an existing subscriber QoS profile, proceed as follows:

- Step 1 Start **MapViewer** and select the Chassis map.
- Step 2 Select the **Cisco 6400 UAC**, **Profiles**, **Configure Subscriber QoS Profiles** option from a Line Card.

The Subscriber QoS Profiles window appears.

House -	Suba	criber QoS Profiles	Manager/Cisco-6400	3/silver/QoSTemplate	100
File Edit Options	Servigation Winds	ner Actions			Hub
	100				
gald	<u> </u>	2oS Paraweters			
in the	Delete object(a	d			
	AW TonLs Object	as Description	savet-ba	raneter	
9		GeS Parameters GoS Category Peak Cell Rate Minimum Cell Rate	utr 1200	Sustainable Cell Rate Maximum Burst Cell Size Cell Delay Variation Tolerance	
Greate Pro	m.				
HORMAL				Byranic updates	are enabled

Figure 6-21 Subscriber QoS Profiles Window

- Step 3 Select the existing QoS profile that you wish to delete. In the example (shown in Figure 6-21) the **silver** profile is selected.
- Step 4 Right click and select **Delete object**(s) option.

The Deletion Summary Screen appears.

Figure 6-22 Deletion Summary Screen

	Deletion Summ	ary Screen	
Beletim Sum	r)	14	
The Following Class Name: O Object name: (object and all its descendents schemplataProfile mofileConteinments/Manager/Cio	will be deleted: co-6000/51:ver	
-		12	
ee Der K	forwardss	Cancel	Thish
			11

- Step 5 Check the details in the Deletion Summary Screen.
- Step 6 Select **Finish** to delete the selected QoS profile.
- Step 7 Select **Dismiss** to close the Deletion Summary Screen.

Service Provisioning

One of the most important aspect of the Cisco 6400 SCM application is Service Connection Management. The Cisco 6400 UAC contains multiple network elements, an ATM switch, multiple router cards (NRPs), and multiple line cards. Services are deployed across these network elements, a multistage process involving both SNMP and Cisco IOS management commands. The Cisco 6400 SCM application enables point-and-click connection of end subscribers to 6400-based services with all of the underlying IOS and SNMP operation hidden.

This section describes service subscriber management using a number of work flows to describe how to connect services to subscribers.

Setting Up Services on the Cisco 6400 UAC

The 6400 SCM software is designed to help simplify Cisco 6400 UAC service configuration.

A typical work flow is described in this section, you can use this example as a tutorial.

Figure 6-23 Setting Up Services on the Cisco 6400 UAC



Note The"Commissioning a Service Instance" section on page 6-33 is the only section that involves direct configuration of the 6400 UAC hardware.

Creating a Service Instance

A service instance is an object that holds all the information related to that service. Service Instances are deployed from different launch points (depending on the type of service instance you wish to deploy).

Step 1 Select the **Deploy, Cisco 6400, Service Instance** option from the egress ATM line card object using the MapViewer application for the pure ATM switching service.

OR

Select the **Deploy, Cisco 6400, Service Instance** option from an NSP object using the MapViewer application for all other NRP based service types (that is, PPP-IP, PPP-L2TP, Bridged-Bridged, Bridged-Routed, PTA-MD, RBE, and RFC1483 routing).

The Deployment Selector Screen appears.

Figure 6-24 Deployment Selector Screen

Without a

- Step 2 Select the **Create Service Instance(s)** option (if not already selected).
- Step 3 Select Forward.

The Deployment Details Screen appears.

- Step 4 Enter the Number of Service Instances to create. Enter "1" for this example.
- Step 5 Select Forward.
- Step 6 Enter a Service Instance Name. Enter Premium as an example.
- Step 7 Select Forward.

Note Proceed to Step 14 when deploying a service instance for a pure ATM switching service.

- Step 8 Select the **NRP ATM Port** the Service Instance is to reside on in the serviceInstanceContainment window.
- Step 9 Select Apply.

- Step 10 Select the **NRP ATM Port** that the Service Instance is to reside on in the mgmtContainment window.
- Step 11 Select Apply.
- Step 12 Repeat steps 6 to 11 for the Number of Service Instances entered in step 4.
- Step 13 Click Forward. The Deployment Summary screen appears.

The **Deployment Summary** details appear in the Deployment Summary Screen.

Step 14 Click **Finish** (if the **Deployment Summary** information is correct) to commit the deployment and create the Service Instance.

Note If the **Deployment Summary** information is incorrect, click **Back** until the screen showing the incorrect information is displayed. Correct the information and click **Forward** until the correct **Deployment Summary** information re-appears.

Step 15 Click **Dismiss** to close the Deployment Summary Screen.

Applying a Service Profile to a Service Instance

Step 1 Select the **Cisco 6400 UAC**, **Service**, **Configure Services** option from an NRP Card (for all services except pure ATM switching). You cannot apply a profile to the pure ATM switching service.

The Service Instance Configuration window appears.

Figure 6-25 Service Instance Configuration Window

the first Options Havigation Me	dow gettens	24
100 ≥ ≣ ≣ √ 0 0	2	
857-192168.23519	General ATM PPP-P PPP-L2TP Endged-Endged Endged-Routed	
Tigde Sultch Processor	Egress VPI (0-252) Egress VCI (02-16383)	
Port-1-1-E Port-2-D-1 Port-2-D-1 Port-2-D-1 Port-5-D-1 Port-5-D-1 Port-5-D-1 Port-5-D-1 Port-5-D-1 Port-5-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1 Port-1-D-1		
Service Instance		
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- Step 2 Select the appropriate **NSP**, **ATM Port** and **Service Instance** from the appropriate list displayed at the left-hand-side of the window.
- Step 3 Select **Apply Profile** from the **Edit** menu. The profile parameters are copied to the appropriate service instance parameters.
- Step 4 Select the appropriate profile from the list of profiles displayed.
- Step 5 Add or modify parameter options, if required.
- Step 6 Select **Save** to save the Service Instance.
- Step 7 Commission the Service Instance after a Service Profile has been applied. To configure a service instance, you can either apply a pre-defined service profile or directly edit the service parameters.
- Step 8 Select Close from the File menu to close the Service Instance Configuration window.

Step 9 Proceed to the "Commissioning a Service Instance" section on page 6-33. You should select the ATM port upon which you previously created (that is, deployed) a service instance.

Configuring a Service Instance Manually

Service Instances are deployed from different launch points (depending on the type of service instance you wish to deploy).

Step 1 Select the **Deploy, Cisco 6400, Configure Service** option from the egress ATM line card object using the MapViewer application for the pure ATM switching service.

OR

Select the **Deploy, Cisco 6400, Configure Service** option from an NSP object using the MapViewer application for all other NRP based service types (that is, PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed).

Note You must have a service instance already created for that port. Existing service instances for the selected port are displayed in the **Service Instance** list box at the bottom left-hand corner of the window.

The Service Instance Configuration window appears.

Figure 6-26 Service Instance Configuration Window (General Tab)

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NASEM DISKNO	General Ward Sources	err-Lerr migaz-ki	ter triget-redet	
	Service Betalls Service Description	Servicebraterico-provide		
ode Builds Processor	Service Type	ATM 1	Adam Overvales; spiner 👾 Adam	
995-8-8-8 995-8-8-8 995-7-8-8	Canvacitores			
TM Pwi		<u> </u>	Connection Details Subscriber Hans	
larvorlidarca-Koldv Constitutarios argentino Inliged-childged pildged-matted	1		Subscriber VPI Subscriber VCI	
neo: 09-03 09-03			Darvice Indance VCI Darvice Indance VCI	
-	- B	(2)		
Camanication Service				

Step 2 Select the appropriate **NSP**, **ATM Port** and **Service Instance** from the appropriate list displayed at the left-hand-side of the window.

Note You can apply a service profile at this stage containing some of the parameters required for the service instance, and then add or edit the parameters as appropriate. Refer to the "Applying a Service Profile to a Service Instance" section on page 6-28 for details of how to apply a service profile to a service instance.

- Step 3 Select the **General** tab (shown in Figure 6-26) if it is not already selected.
- Step 4 Enter a description into the **Service Description** data entry box in the **Service Details** frame.
- Step 5 Select whether to Allow or Prevent oversubscription.

The **Oversubscription** option is set to **Allow** by default and an unlimited number of subscribers can be connected to the service. Selecting to **Prevent Oversubscription** ensures that the SCM limits the number of subscribers connected such that the sum of the subscriber's peak cell rates never exceeds the peak cell rate reserved for the service on the uplink. **Oversubscription** functionality is not applicable to the PPP-IP and ATM services.

Step 6 Select a **Service Type** from the drop down list. This **Service Type** is a range of options you can use to configure the uplink from the 6400 UAC to the upstream service provider.

Note Refer to the appropriate section in the "Cisco 6400 SCM Services" section on page 2-22 for further details on the selected **Service Type**.

As an example, the **ATM** service type is selected.

Note When a **Service Type** is selected the service tabs that do not relate to this service are greyed out and cannot be selected. For example, when the **ATM** service is selected the **PPP-IP**, **PPP-L2TP**, **Bridged-Bridged** and **Bridged-Routed** tabs are greyed out.

Secular Instance Configuration	n Mahayan/Top-Dite/19215	8.208.10/N/IF	18216625610/NRT-6/Port-6-0-0/5	ar els erret area - is arritar
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107-10210020010	General ATM PPP-P PPP-S	rtr Iniged-Di	tyed Dricgod-Fercted	
	Egress Part Parameters			
	Egr#11 VPI (8-255)		0,	
a	Egress VCI (32-16383)		0	
Port-8-1-3 Port-8-0-0 Port-8-0-0 Port-5-0-0 Port-5-0-0 Rati-1-0-0 Service alroatence-folvely Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port-5-0 Port				
eronalistania (1879)(1889)				A

Figure 6-27 Service Instance Configuration Window (ATM Tab)

- Step 7 Enter/select values for each of the parameters displayed in the selected service tab, as appropriate.
- Step 8 Select **Save** from the **File** menu to save the configuration.
- Step 9 Select **Close** from the **File** menu to close the window.

Note Proceed to the "Commissioning a Service Instance" section on page 6-33. You should select the ATM port upon which you previously created (that is, deployed) a service instance.

Commissioning a Service Instance

This is the first stage at which you actually "roll" the selected service configuration onto the 6400 UAC hardware.

Commissioning the ATM Service

Note Service profiles are not applicable to the pure ATM switching service as there are no generic service parameters for this type of service.

The ATM service is set up by configuring the parameters displayed in the Service Instance Configuration window, shown in Figure 6-28.

To configure the pure ATM switching service, proceed as follows:

- Step 1 Select the line card (from **MapViewer**) upon which you wish to deploy the ATM service instance.
- Step 2 Select the **Cisco 6400 UAC**, **Services**, **Configure Services** option.

The Service Instance Configuration window (General tab) appears.

Figure 6-28 Service Instance Configuration Window (General Tab)

IN THE REAL PROPERTY OF	General ATM (1997-191	FRE-LOTE DEN		at Denne America	
	Service Details			117 B. L. 18 W	
	Service Description	Bevertutarco	• C	9	
alao Butch Processor		a		1	
Port-1-0-0	Service Type	ATM		Allow Oversubscriptice 😳 Allow	
Port-2-0-0	Connections				
CTM Part			Ţ	Connection Details	
				Subscitter VPI	
				Subsciber VD	
				Service Instance VPI Service Instance VCI	
	51	12	3		
Carrico Initanza					
Committation Service					

Step 3 Enter a Service Description in the Service Details frame, if required.

- Step 4 Select a Service Type (ATM option) in the Service Details frame.
 When a Service Type is selected the service tabs that do not relate to this service are greyed out and cannot be selected. For example, when the ATM service is selected the PPP-IP, PPP-L2TP, Bridged-Bridged and Bridged-Routed tabs are greyed out.
- Step 5 Select the **ATM** tab. The Service Instance Configuration Window (ATM Tab) is displayed.

Figure 6-29 Service Instance Configuration Window (ATM Tab)

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	o.	
202203000000000	General ATM PPP-IP PPP-L2TP Endged-Bridged Endged-Routed	
	Egress Part Parameters	
	Egress (49 (8-258)	
si/a ¹¹	Egrain VCI (72-16883)	
Vade Switch Processor		
Parts Inde		
Port-2-0-E Port-4-1-E		
Port-5-0-8		
KTM Port		
1		
a (1		
Service Instance		
Invalidate with constants		
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Step 6 Enter values into the Egress Port Parameters frame, as required.

Refer to the "Service Instance Configuration Window" section on page 7-22 for details on each of the parameters displayed on the **ATM** tab.

Step 7 Select **Commission Service** to roll the service onto the 6400 UAC.

A pop up window appears for you to confirm that you wish to commission the selected service.

Figure 6-30 About to Change Service State Confirmation Window

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Step 8 Select **Yes** to commission the service (or **No** to return to the Service Instance Configuration window).

The Action Report window appears.

Figure 6-31 Action Report Window

Telnetting to : 19	2,168,238,10		Ê
>>>terminal length	0		
Rincewind Cache file /tmp/c6	400_cache_192.168.238.10	_6_0_0 doesn't exist.	
Refreshing free VP Chosen 0 40, 46	I/VCI cache		
>>>configure termi Enter configuratio Rincewind(config) Telnetting to : 19	nal n commands, one per line 2.168.238.12	•. End with CNTL/Z.	
>>>terminal length NRP	0		
\triangleleft			

The Action Report window details the IOS commands executed when the service is commissioned. Invalid IOS commands result in a failure to commission the service.

- Step 9 Check the details in the Action Report window to ensure that the service was commissioned successfully.
- Step 10 Select Save to save the Action Report, if required.
- Step 11 Select **Close** to close the Action Report window and return to the Service Instance Configuration window.
- Step 12 Select **Close** from the **File** menu to close the Service Instance Configuration window.

Commissioning the PPP-IP Service

The PPP-IP service is set up by configuring the various parameters displayed in the Service Instance Configuration window (PPP-IP tab), shown in Figure 6-33.

To commission the PPP-IP service, proceed as follows:

- Step 1 Select the NRP (from **MapViewer**) upon which you wish to deploy the PPP-IP service instance.
- Step 2 Select the **Cisco 6400 UAC**, **Services**, **Configure Services** option at an NRP. The Service Instance Configuration Window (General Tab) appears.

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eferer: (0000001331000)	A

Figure 6-32 Service Instance Configuration Window (General Tab)

Step 3 Select the **Apply Profile** option from the **Edit** menu, if applicable. Select the profile you wish to apply from the list of profiles displayed. When a profile is applied the parameters are copied and saved automatically.

Refer to the "Creating Service Profiles (for PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed Services)" section on page 6-4 for details of how to create service profiles.

Refer to the "Service Instance Configuration Window" section on page 7-22 for details on each of the parameters displayed on the **PPP-IP** tab.

- Step 4 Enter a Service Description in the Service Details frame, if required.
- Step 5 Select the **PPP-IP** option as the **Service Type** in the **Service Details** frame.

When a **Service Type** is selected the service tabs that do not relate to this service are greyed out and cannot be selected. For example, when the **PPP-IP** service is selected the **ATM**, **PPP-L2TP**, **Bridged-Bridged** and **Bridged-Routed** tabs are greyed out.

Step 6 Select the **PPP-IP** tab.
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		erenter meneration interest	E-NOVINE	
	Wrbail Template Porane	Kens	IP Address Peol	
	P 468910	132 , 368 , 54 , 140	Lover IP Address	182 - 188 - 194 - 120
IP ^M	Subret Mark	291 , 225 , 229 , 8	Higher II" Address	192 + 103 + 104 + 139
de Svitch Pracessor	Authentication Type	pag	VC Gass Parameters	
5661(6) 11-7-1-8	Peer DHOP	doutile -	Encapsulation Type	asticicappy
rt-8-8-9 rt-5-8-8				
4-2-1-8				
W Part				
4 Pan				
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Figure 6-33 Service Instance Configuration Window (PPP-IP Tab)

Step 7 Enter values into the Virtual Template Parameters, IP Address Pool, and VC Class Parameters frames, as required.

Refer to the "Creating Service Profiles (for PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed Services)" section on page 6-4 for details of how to create service profiles.

- Step 8 Refer to the "Service Instance Configuration Window" section on page 7-22 for details on each of the parameters displayed on the **PPP-IP** tab.
- Step 9 Select **Commission Service** to roll the service onto the 6400 UAC.

A pop up window appears for you to confirm that you wish to commission the selected service.

Figure 6-34 About to Change Service State Confirmation Window

-	1127.2
About to change	service state. OK?

Step 10 Select **Yes** to commission the service (or **No** to return to the Service Instance Configuration window).

The Action Report window appears.

Action Report r Telnetting to : 192,168,238,10 >>>terminal length 0 Rincewind Cache file /tmp/c6400_cache_192,168,238,10_6_0_0 doesn't exist... Refreshing free VPI/VCI cache... Chosen 0 40, 46 >>>configure terminal Enter configuration commands, one per line. End with CNTL/Z. Rincewind(config) Telnetting to : 192,168,238,12 >>>terminal length 0 NRP Save Cose

Figure 6-35 Action Report Window

The Action Report window details the IOS commands executed when the service is commissioned. Invalid IOS commands result in a failure to commission the service.

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- Step 11 Check the details in the Action Report window to ensure that the service was commissioned successfully.
- Step 12 Select **Save** to save the Action Report, if required.
- Step 13 Select **Close** to close the Action Report window and return to the Service Instance Configuration window.
- Step 14 Select **Close** from the **File** menu to close the Service Instance Configuration window.

Additional IOS Configuration For the PPP-IP Service

For the PPP-IP service to pass traffic to a designated trunk port, Cisco IOS must be used (to route traffic via layer 3 to a destination network). One way of doing this is to create a PVC on the NRP to support the routing of traffic to the trunk port and then create the required entries in the IP Routing Table.

Execute (on the selected NRP) the following IOS commands to configure a PPP-IP service to pass traffic to a designated trunk port:

NRP(config)#interface atm0/0/0.<Sub-Interface Number> point-to-point

NRP(config-if)#ip address <IP Address> <Subnet Mask>

NRP(config-if)#pvc </NRP-Interface-vpi>/<NRP-Interface-vci>

NRP(config-if-vc)#class <vc-class-name>

NRP(config-if-vc)#protocol ip <Dest IP Address> no broadcast

where,

<Sub-Interface Number> is a number for the sub-interface

<IP Address> is the IP Address of the sub-interface

<Subnet Mask> is the Subnet Mask of the sub-interface

<NRP-Interface-vpi> is the same VPI value as used when a PVC is created on the NSP

<NRP-Interface-vci> is the same VPI value as used when a PVC is created on the NSP

<Dest IP Address> is the destination IP Address mapped to the PVC

<vc-class-name> is the name of the vc-class created previously

Now create the required entries in the IP Routing Table:

NRP(config)#ip route <*Dest IP Address*> 255.255.255.255 atm0/0/0.<*Sub-Interface Number*> where,

<Dest IP Address> is as configured previously

<Sub-Interface Number> is as configured previously.

Commissioning the PPP-L2TP Service

The PPP-L2TP service is set up by configuring the various parameters displayed in the Service Instance Configuration window (PPP-L2TP tab), shown in Figure 6-37.

To commission the PPP-L2TP service, proceed as follows:

- Step 1 Select the NRP (from **MapViewer**) upon which you wish to deploy the service instance.
- Step 2 Select the **Cisco 6400 UAC**, **Services**, **Configure Services** option at an NRP. The Service Instance Configuration Window (General Tab) appears.

. . . .

Figure 6-36	Service Instance Configuration Window (General Tab)

Note Deficit Processor Part-1-0-0 Part-2-0-0 Sectored Anno-1 Text Part	Service Desception Service Type Connectors	Devoetvelaego-	Allow Oversubscription Allow	
V04-1-1-0 Port-2-0-0 State et 42 V04-5-0-0 TM PM STORE STATE C	Connectants	ų	Connection Details	
	21	, s ^ŭ	Subscriber VFI Subscriber VCI Service Instance VFI Service Instance VCI	
Generalization Service				

Step 3 Select the **Apply Profile** option from the **Edit** menu, if applicable. Select the profile you wish to apply from the list of profiles displayed. When a profile is applied the parameters are copied and saved automatically.

Refer to the "Creating Service Profiles (for PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed Services)" section on page 6-4 for details of how to create service profiles.

Refer to the "Service Instance Configuration Window" section on page 7-22 for details on each of the parameters displayed on the **PPP-L2TP** tab.

- Step 4 Enter a Service Description in the Service Details frame, if required.
- Step 5 Select the **PPP-L2TP** option as the **Service Type** in the **Service Details** frame.

When a **Service Type** is selected the service tabs that do not relate to this service are greyed out and cannot be selected. For example, when the **PPP-L2TP** service is selected the **ATM**, **PPP-IP**, **Bridged-Bridged** and **Bridged-Routed** tabs are greyed out.

Step 6 Select the **PPP-L2TP** tab.

Figure 6-37 Service Instance Configuration Window (PPP-L2TP Tab)

	INCOMPANY AND ADDRESS OF	Gerand ATM PPP-P PPP-LITP bridged-bridged bridged-housed						
		Egnoss Part Parameters	HSP/HRP Interface PVC Parameters					
		Egress VFI (0-205)	VPI (8-255)					
	1.1	Egress VCI (82-16383)	VCI (32-16383)					
	Node Switch Precessor	Egress Port	VPV/O Alocation Automatic					
ct ATM	20000	Egress Part GoS Parameters	Taxast Parameters					
or NRP	Pon-1-1-8 Pon-2-8-8	GeS Category 30	Tunnel Number					
wish to	Port-4-8-8 Port-5-8-8	Pess Cell Rate	Dewain Name					
ploy on	ATA Part	Sustainates Cot Rate	Destruites P Antress + + +					
		Minimum Cell Rate	Authentication Name					
		Maximum Burri Cell Sire	Authentication Passand					
		Les deby variable release	VC Gass Parameters					
		Sub-Interface Parameters	Encapeutation Type +25min(1)					
		P Adawas	P Address					
	21 12	Suitent More	Subscriber Excapsulation SHREECOSES					
	Service Instance		Virtual Template Parameters					
			Authentication Type					

Step 7 Enter values into the Egress Port Parameters, Egress Port QoS Parameters, Sub-Interface Parameters, NSP/NRP Interface PVC Parameters, Tunnel Parameters, VC Class Parameters, and Virtual Template Parameters frames, as required.

Refer to the "Creating Service Profiles (for PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed Services)" section on page 6-4 for details of how to create service profiles.

Refer to the "Service Instance Configuration Window" section on page 7-22 for details on each of the parameters displayed on the **PPP-IP** tab.

Step 8 Select **Commission Service** to roll the service onto the 6400 UAC.

A pop up window appears for you to confirm that you wish to commission the selected service.

Figure 6-38 About to Change Service State Confirmation Window

About to char	ge service state. OK?

Step 9 Select **Yes** to commission the service (or **No** to return to the Service Instance Configuration window).

The Action Report window appears.

Figure 6-39 Action Report Window

Telnetting to : 192,168,238,10	
>>>terminal length 0	
Rincewind	
Cache file /tmp/c6400_cache_192.168.238.10_6_0_0 doesn't ex	ist
Ketreshing free VPI/VLI cache	
chosen V 4V, 46	
>>>configure terminal	
Enter configuration commands, one per line. End with CNTL/	Z.
Rincewind(config)	
Telnetting to : 192.168.238.12	
Wtominal length 0	
NRP	
21	
	
Save	Close

The Action Report window details the IOS commands executed when the service is commissioned. Invalid IOS commands result in a failure to commission the service.

- Step 10 Check the details in the Action Report window to ensure that the service was commissioned successfully.
- Step 11 Select Save to save the Action Report, if required.
- Step 12 Select **Close** to close the Action Report window and return to the Service Instance Configuration window.
- Step 13 Select **Close** from the **File** menu to close the Service Instance Configuration window.

Commissioning the Bridged-Bridged Service

The Bridged-Bridged service is set up by configuring the various parameters displayed in the Service Instance Configuration window (Bridged-Bridged tab), shown in Figure 6-41.

To commission the Bridged-Bridged service, proceed as follows:

- Step 1 Select the NRP (from **MapViewer**) upon which you wish to deploy the service instance.
- Step 2 Select the **Cisco 6400 UAC**, **Services**, **Configure Services** option at an NRP. The Service Instance Configuration Window (General Tab) appears.

	C.			
CALIFACTION OF T	OCOMBI NUM Inter-16.	sear-rate: sandra-ero	(er) anngez-Houter)	
	Service Details			
5	Service Description	Several seco-	4	
6			FI	
de Dvitch Processor	10001200	1		
ort-1-0-0 ort-1-1-0	Service Type	A3M	Allow Oversido crigido	
01-2-0-0 01-2-0-0	Connections			
ori-5-0-0			51 - 5 Marco	
MINN		8	Connection Details	
			Duboctber Nami	
Arweinstance-			Subscatter VFI	
			Subciber VO	
			Service Instance VM	
			Service Instance VCI	
	-	fi		
1	14			
(G				
rvice Initiance				
Commission Servica				
set (MOMPISSING)				

Figure 6-40 Service Instance Configuration Window (General Tab)

Step 3 Select the **Apply Profile** option from the **Edit** menu, if applicable. Select the profile you wish to apply from the list of profiles displayed. When a profile is applied the parameters are copied and saved automatically.

Refer to the "Creating Service Profiles (for PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed Services)" section on page 6-4 for details of how to create service profiles.

Refer to the "Service Instance Configuration Window" section on page 7-22 for details on each of the parameters displayed on the **Bridged-Bridged** tab.

- Step 4 Enter a Service Description in the Service Details frame, if required.
- Step 5 Select the **Bridged-Bridged** option as the **Service Type** in the **Service Details** frame.

When a **Service Type** is selected the service tabs that do not relate to this service are greyed out and cannot be selected. For example, when the **Bridged-Bridged** service is selected the **ATM**, **PPP-IP**, **PPP-L2TP**, **Bridged-Bridged** and **Bridged-Routed** tabs are greyed out.

Step 6 Select the **Bridged-Bridged** tab.

	-		
IS A REPORT OF A DESCRIPTION OF	Goneral ATM PPP-IP PPP-L2TP Dridg	#-Dridge# Bridged-Route#	
	Egross Part Parameters	NSP/NRP Interface PVC Par	waters
	Egreco VP1 (0-255)	VP1 (8-255)	
	Egters VCI (22-16303)	VCI (32~16382)	
ode Switch Presenor	Egress Port	VPVVCI Alacation	Autonaliz 👘
Material and	Egross Part GoS Parameters	Subscriber Policy	
041+1-1-8 041-2-8-8	Ge8 Cotegory 11	Address Resolution Protocal	Dette
Vf1-4-8-8	Peak Cell Rido	Broadcast	Dera
1	Sustamatia Cel Nela	Multicard	Dera
MPER	Minimum Cell Rafa	Usknown Destmation	Cera 1
	Maximum Parent Call Stre	Starrey Tee Princel	Cera
	Call Color Manufacture Transmiss	Church Database	Devis -1
	Cel Celay variation Telefance	Cites Decovery Presco	
	Bridge Parameters	VC Gass Parameters	
	Bridge Protocol	Escapsulation Type	watten in the section
	Bridge Group		
envice Instance			

Figure 6-41 Service Instance Configuration Window (Bridged-Bridged Tab)

Step 7 Enter values into the Egress Port Parameters, Egress Port QoS Parameters, Bridge Parameters, NSP/NRP Interface PVC Parameters, Subscriber Policy, and VC Class Parameters frames, as required.

Refer to the "Creating Service Profiles (for PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed Services)" section on page 6-4 for details of how to create service profiles.

Refer to the "Service Instance Configuration Window" section on page 7-22 for details on each of the parameters displayed on the **Bridged-Bridged** tab.

Step 8 Select **Commission Service** to roll the service onto the 6400 UAC.

A pop up window appears for you to confirm that you wish to commission the selected service.

Figure 6-42 About to Change Service State Confirmation Window

P. About to cha	nge service state. OK?

Step 9 Select **Yes** to commission the service (or **No** to return to the Service Instance Configuration window).

The Action Report window appears.

Figure 6-43 Action Report Window

Telnetting to : 192.168.238.10	
>>>terminal length 0	
Rincewind Cache file /tmp/c6400_cache_192.168.238.10_6_0_0 doesn	't exist
Refreshing free VPI/VCI cache Chosen 0 40, 46	
>>>configure terminal Enter configuration commands, one per line. End with (Rincewind(config) Telnetting to : 192,168,238,12	CNTL/Z.
>>>terminal length 0 VRP	
<	

The Action Report window details the IOS commands executed when the service is commissioned. Invalid IOS commands result in a failure to commission the service.

- Step 10 Check the details in the Action Report window to ensure that the service was commissioned successfully.
- Step 11 Select Save to save the Action Report, if required.
- Step 12 Select **Close** to close the Action Report window and return to the Service Instance Configuration window.
- Step 13 Select **Close** from the **File** menu to close the Service Instance Configuration window.

Commissioning the Bridged-Routed Service

The Bridged-Routed service is set up by configuring the various parameters displayed in the Service Instance Configuration window (Bridged-Routed tab), shown in Figure 6-45.

To commission the Bridged-Routed service, proceed as follows:

- Step 1 Select the NRP (from **MapViewer**) upon which you wish to deploy the service instance.
- Step 2 Select the **Cisco 6400 UAC**, **Services**, **Configure Services** option at an NRP. The Service Instance Configuration Window (General Tab) appears.

- service initiates Configuration Manager	
fi ♥ □ ≡ @ < 0 0.	
	Inter-UP (PPP-L2TP) Benges-Backet) Benges-Backet recepter Beneededdaeco Alter Alter Oversadocriptics Alter Alter Detection Details Detection Details
etwart (000901551000)	A

Figure 6-44 Service Instance Configuration Window (General Tab)

Step 3 Select the **Apply Profile** option from the **Edit** menu, if applicable. Select the profile you wish to apply from the list of profiles displayed. When a profile is applied the parameters are copied and saved automatically.

Refer to the "Creating Service Profiles (for PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed Services)" section on page 6-4 for details of how to create service profiles.

Refer to the "Service Instance Configuration Window" section on page 7-22 for details on each of the parameters displayed on the **Bridged-Routed** tab.

- Step 4 Enter a Service Description in the Service Details frame, if required.
- Step 5 Select the **Bridged-Routed** option as the **Service Type** in the **Service Details** frame.

When a **Service Type** is selected the service tabs that do not relate to this service are greyed out and cannot be selected. For example, when the **Bridged-Routed** service is selected the **ATM**, **PPP-IP**, **PPP-L2TP**, **Bridged-Bridged** and **Bridged-Bridged** tabs are greyed out.

Step 6 Select the **Bridged-Routed** tab.

100220015	General ATM PPP-IP PPP-L2TP Bridged-Bridged	Entged-Reated
	Egross Part Parameters	RSPSNIP Interface PVC Parameters
	Egress VPI (0-255)	VP1 (0-255)
	Egross VCI (32-16383)	VCI (82-16383)
witch Processor	Egness Port	VPsVCI Allocation Activitiality
-8-0	Figness Part GoS Parameters	Subscriber Policy
-1-0 -8-0	GoS Category NU	Address Resolution Protocol
-8-0 -8-0	Peak Cell Rate	Breadcost Extra
. 12	Sustainable Call fields	Matical Even
- 	Minimum Cell Rate	Unknown Destination
	Maximum Bunti Cell Size	Spanning Tree Protacol
	Cell Delay Variation Talesonce	Cisco Discevery Protocol
	Bridge Parasetlers	VC Gass Parameters
	Bridge Pratocol	Encapisation Type
	Virtual Interface IP Address + + +	P A&Reis - + - +
Instance	Virtual Interface Subret Mask	Sub-Interface Parameters
	Virtual Interface MAC Address	P ABROS + + +
	Bridge Group	Subret Mark + + +

Figure 6-45 Service Instance Configuration Window (Bridged-Routed Tab)

Step 7 Enter values into the Egress Port Parameters, Egress Port QoS Parameters, Bridge Parameters, NSP/NRP Interface PVC Parameters, Subscriber Policy, VC Class Parameters, and Sub-Interface Parameters frames, as required.

Refer to the "Creating Service Profiles (for PPP-IP, PPP-L2TP, Bridged-Bridged, and Bridged-Routed Services)" section on page 6-4 for details of how to create service profiles.

Refer to the "Service Instance Configuration Window" section on page 7-22 for details on each of the parameters displayed on the **Bridged-Routed** tab.

Step 8 Select **Commission Service** to roll the service onto the 6400 UAC.

A pop up window appears for you to confirm that you wish to commission the selected service.

Figure 6-46 About to Change Service State Confirmation Window

About to char	ige service state. OK?

Step 9 Select **Yes** to commission the service (or **No** to return to the Service Instance Configuration window).

The Action Report window appears.

Figure 6-47 Action Report Window

Telnetting to : 192,168,238,10	Δ
>>>terminal length 0	
Rincewind	
Cache file /tmp/c6400_cache_192.168.238.10_6_0_0 doesn't exist	
Refreshing free VPI/VCI cache	
nosen V 4V, 46	
>>>configure terminal	
Inter configuration commands, one per line. End with CNTL/Z.	
Rincewind(config)	
[elnetting to : 192.168.238.12	
>>>terminal length 0	
IRP	-
	2
	_

The Action Report window details the IOS commands executed when the service is commissioned. Invalid IOS commands result in a failure to commission the service.

- Step 10 Check the details in the Action Report window to ensure that the service was commissioned successfully.
- Step 11 Select Save to save the Action Report, if required.
- Step 12 Select **Close** to close the Action Report window and return to the Service Instance Configuration window.

Select Close from the File menu to close the Service Instance Configuration window.

Commissioning the PTA-MD Service

The PTA-MD service is set up by configuring the parameters displayed in the PTA-MD Service Configuration window (**PTA-MD** tab), shown in Figure 6-48.

To commission the PTA-MD service, proceed as follows:

- Step 1 Select the NRP (from **MapViewer**) upon which you wish to deploy the PTA-MD service instance.
- Step 2 Select the **Cisco 6400 UAC**, **Services**, **Configure PTA-MD Service** option at an NRP to display the PTA-MD Service Instance Configuration window.

Re Options Novigation Actions	Eitt Layout	vice Configuration			Holp
148 E	0				
Cisca9483_NSP 0 Cisca9488_NSP 1 Cisca9488_NSP 2 Cisca9488_NSP 3 Node Switch Processor	PTA-MD Local Service Profile GoS Parameters GoS Category Peak Cell Rate	ubr String 527	Egness Part Parameters Egness VP1 (8-252) Egness VCI (32-16382)	112 20	
ATMPort 1 ATMPort 1 ATMPort 2 ATMPort 3	Sustainaizle Cell Rate Minimum Cell Rate Minimum Bartt Cell Size	String 65 String 45 String 194	Egross Port IVC Configuration VPI (0-255)	413 / 302 / 74	
ServiceIsitance 0 ServiceIsitance 1 ServiceIsitance 2 ServiceIsitance 3 ServiceIsitance 4	Cell Delay Vatadon Tolerance Seb-Interface Parameters	String 623	VCI (32-16383) VPVVCI Auto Allocation	439 Automatic	
Service Initiance	IP Address 22 . Sabret Mork 124 .	232 , 990 , 175 239 , 96 , 198	Encapsulation Type Assigned Number	sationap String 989	

Figure 6-48 PTA-MD Service Configuration Window (PTA-MD Tab)

Step 3 Select the **Apply Profile** option from the **Edit** menu, if applicable. Select the profile you wish to apply from the list of profiles displayed. When a profile is applied the parameters are copied and saved automatically.

Refer to the "Creating Service Profiles for a PTA-MD Service" section on page 6-11 for details of how to create service profiles.

Step 4 Enter values into the **QoS Parameters**, **Sub-Interface Parameters**, **Egress Port Parameters**, and **PVC Configuration** frames, as required.

Refer to the "PTA-MD Service Configuration Window" section on page 7-32 for details on each of the parameters displayed on the **PTA-MD** tab.

Step 5 Select the Local Service Profile tab.

▲告 ■回√ @ (2				
	PTA-MD Local Service Prof	ller			
	General				
j.	Name	1000	Service Route	192 168 34 35 255 258 25	
ate Dates Personne	Description	descentee	Next Line ID deletant	190 . 12 . 13 . 15	
DOM SWIETS PTECHOLOF			rand rap in nation	les the the the	
ort-2-1-0	Туре	Proxy	Next Hop Gateway Key		
ort=8=0=0	Made	Concurrent	Idle Timeout (seconds)		
ort-8-0-1		Meterican	the cases become		
Ci .	Paseward	pastwal	Session Timeout (recently	b) []	
TM Part	Domain Name(t)	dan.com			
endositetanos-tte	DNS Resirection / Fault	Tolerance	Remote RADIUS Configur	otion	
erviceinstance-rtc	THE Cash Talasana	Persitive	RADIUS IP Address	0.0.8.0	
tand-di3	Uno Fast Iderance	FUSING	BADIUS Anth-Pat	1647	
and op.	Primary DNS Server	8.8.0.0	The second second second	1075	
arvice Instance	Canadian Chill Samar	8. 8. 0. 0	RADIUS Acci-Part	1645	
	advantary cred derver	1.5. F).5. F).55 F).55	RADIUS Secret		
Decommission Service					

Figure 6-49 PTA-MD Service Configuration Window (Local Service Profile Tab)

Step 6 Enter values into the General, DNS Redirection/Fault Tolerance, and Remote RADIUS Configuration frames, as required.

The **Remote RADIUS Configuration** parameters are only available when **Proxy** is selected as the service **Type**.

Refer to the "Local Service Profile Tab" section on page 7-34 for details on each of the parameters displayed on the **Local Service Profile** tab.

Step 7 Select **Commission Service** to roll the service onto the 6400 UAC.

A pop up window appears for you to confirm that you wish to commission the selected service.

Figure 6-50 About to Change Service State Confirmation Window

About to chara	je service state. OK?
*	

Step 8 Select **Yes** to commission the service (or **No** to return to the Service Instance Configuration window).

The Action Report window appears.

Figure 6-51 Action Report Window



The Action Report window details the IOS commands executed when the service is commissioned. Invalid IOS commands result in a failure to commission the service.

- Step 9 Check the details in the Action Report window to ensure that the service was commissioned successfully.
- Step 10 Select **Save** to save the Action Report, if required.
- Step 11 Select **Close** to close the Action Report window and return to the Service Instance Configuration window.
- Step 12 Select **Close** from the **File** menu to close the Service Instance Configuration window.

Commissioning the RBE Service

The RBE service is set up by configuring the parameters displayed in the RBE Service Configuration window (**Route Bridge Encapsulation** tab), shown in Figure 6-52.

To commission the RBE Service Configuration window (**Route Bridge Encapsulation** tab), proceed as follows:

- Step 1 Select the NRP (from **MapViewer**) upon which you wish to deploy the RBE service instance.
- Step 2 Select the **Cisco 6400 UAC**, **Services**, **Configure RBE Service** option at an NRP to display the RBE Service Configuration window.

The RBE Service Configuration window (Route Bridge Encapsulation Tab) appears.

Q C = D A Q	0			
210.2	Route Bridge Encapsulation			
	GoS Parameters		Egress Port Parameters	
	GoS Category	str 😳	Egress VPI (8-255)	79
lode Switch Processor	Peak Cell Rate	80	Egress VCI (32-16383)	345
Port-2-1-8	Sudensble Cell Role		Egress Pert	1 / 0 / 0
Port-6-0-8 Port-6-0-1 Port-7-1-1	Moan Cell Rate		PVC Configuration	60
ATM Port	Mounter Durch State		90.000-163E8	1 50
ServiceInstance-pta	Cell Delay Variation Tol	erance	VPVVCI Auto Allocation	Automatic
ServiceInstance- nc	Sub Interface Paramet	ana -		
ptand-rep.	IP Address	382 . 388 . 12 . 4	Encapsulation Type	aatSunap
ptered-oc3	Submit Misk	225 , 225 , 225 , 0	Assigned Number	545004827
iervice Instance	Rest Hop			
Decommission Service	Next Hop IP Astress	132 . 180 . 12 . 5	Next Hop Gateway Key	mgt

Figure 6-52 RBE Service Configuration Window (Route Bridge Encapsulation Tab)

Step 3 Select the **Apply Profile** option from the **Edit** menu, if applicable. Select the profile you wish to apply from the list of profiles displayed. When a profile is applied the parameters are copied and saved automatically.

8

Refer to the "Creating Service Profiles for an Route Bridge Encapsulation (RBE) Service" section on page 6-15 for details of how to create service profiles.

Step 4 Enter values into the **QoS Parameters**, **Sub Interface Parameters**, **Egress Port Parameters**, **PVC Configuration**, and **Next Hop** frames, as required.

Refer to the "Route Bridge Encapsulation (RBE) Service Configuration Window" section on page 7-36 for details on each of the parameters displayed on the **Route Bridge Encapsulation** tab.

Step 5 Select **Commission Service** to roll the service onto the 6400 UAC.

A pop up window appears for you to confirm that you wish to commission the selected service.

Figure 6-53 About to Change Service State Confirmation Window



Step 6 Select **Yes** to commission the service (or **No** to return to the Service Instance Configuration window).

The Action Report window appears.

Figure 6-54 Action Report Window

-	Action Report 🔹 👘 🗖
	Telnetting to : 192.168.238.10
	>>>terminal length 0
	Rincewind Sacha Sila (Analy Sido) and a 100, 100, 070, 10, 5, 6, 6, dagas (h. saciat
ľ	Lache file /tmp/c6400_cache_132.168.238.10_6_0_0 doesn t exist
	Refreshing free VPI/VCI cache
	Chosen 0 40, 46
	<pre>>>>configure terminal Enter configuration commands, one per line. End with CNTL/Z. Rincewind(config) Telnetting to : 192.168.238.12</pre>
	>>>terminal length 0
	NRP
L	
	Save

The Action Report window details the IOS commands executed when the service is commissioned. Invalid IOS commands result in a failure to commission the service.

- Step 7 Check the details in the Action Report window to ensure that the service was commissioned successfully.
- Step 8 Select **Save** to save the Action Report, if required.
- Step 9 Select **Close** to close the Action Report window and return to the Service Instance Configuration window.
- Step 10 Select **Close** from the **File** menu to close the Service Instance Configuration window.

Commissioning the RFC1483 Service

The RFC1483 service is set up by configuring the parameters displayed in the RBE Service Configuration window (**Route Bridge Encapsulation** tab), shown in Figure 6-52.

To commission the RFC1483 service, proceed as follows:

- Step 1 Select the NRP (from **MapViewer**) upon which you wish to deploy the RBE service instance.
- Step 2 Select the **Cisco 6400 UAC**, **Services**, **Configure RFC1483 Service** option at an NRP to display the RFC1483 Service Configuration window.

The RFC Service Configuration window (RFC1483 Routed tab) appears.

e) arters ovy I Cell Rade	er Ding 25 Sang Mé	Uplink: PPC Canfiguration Caso-Set08uplinkPvC (Caso-Set08uplinkPvC Caso-Set08uplinkPvC Caso-Set08uplinkPvC	VC Gass Paraenters CPE rapports APP Encogradulos Type IP Address 22	yes Jathran y
e) esters 299 Inde 1 Cell Rade	iter Dirtig 25 String 164	Uplink: PPC Canfiguration Caso-Babilupine:PrC (Caso-Babilupine:PrC (Caso-Babilupine:PrC Caso-Babilupine:PrC	VC Gass Paraenters CPE rapports APP Encogradulos Type IP Address 22	yes Jathran y
t etars My tale i Cell Rado	eter Direng 25 Staning Med	Uplick: PPE Canfiguration Casco-BADDLplexPVC (Casco-BADDLplexPVC Casco-BADDLplexPVC Casco-BADDLplexPVC	W: Gass Parwinters CPE rapports APP Encogenitation Type IP Address 22	jes Jatheya y
andara Jantas 1 Cett Radas	ater String 25 String Stat	Ceso- Entilization PVC (Ceso- Entilization PVC Ceso- Entilization PVC Ceso- Entilization PVC Ceso- Entilization PVC	VC Gass Paraveters CPE supports AEP Encogradulor Type IP Address 22	yes activacy
late Cell Rade	Dring 25 Story 844	Caso-6408UpinkPVC Caso-6408UpinkPVC Caso-6408UpinkPVC	CPG supports AHP EncogeoAddice Type IP Address 22	yez Jaithean ip
Cell Rate	String dild.		P.Addres 23	
				2 + 251 + 350 + 224
et Pate	385 prett		Egnos Fort Parameters	
unt Cell Stre	Sinny 387		Egness VCI (32-18383)	133
Variation Talerance	String 197		Epose Port 3	427 / 418 / 941
ace Parameters		1	PVC Coefigeration VP1 (0-258)	87
181	. 100 . 209 . 124	Aplink PVCs	VCI (82-1688)	75
lander Date	0.975	Autor	VPVVCI Auto Allecation	Automatic
	unt Cell Stre Variaturi Talecande Side Paraselten. (151 anter 1519 anter 1519	unt Cell Ster Deng 357 Variation Tolerance Dang 197 sce Parasettes IST - 136 - 136 - 134 a IST - 136 - 136 - 134 anter Bang 375	unt Cell Stre Dining 361 Vastatum Talierance Dining 167 sce Parasettem. ISE , 106 , 106 , 104 a UTS , 107 , 107 , 108 andor Strang 575 Add	urri Cell Sze Sinng 357 Vastatum Talerande Sinng 157 sze Parwelten. IKI , 106 , 206 , 104 A IDT , 166 , 206 , 104

Figure 6-55 RFC1483 Service Configuration Window (RFC1483 Routed Tab)

Step 3 Select the **Apply Profile** option from the **Edit** menu, if applicable. Select the profile you wish to apply from the list of profiles displayed. When a profile is applied the parameters are copied and saved automatically.

Refer to the "Creating Service Profiles for an RFC1483 Service" section on page 6-18 for details of how to create service profiles.

Step 4 Enter values into the QoS Parameters, Sub Interface Parameters, VC Class Parameters, Egress Port Parameters, and PVC Configuration frames, as required.

Refer to the "RFC1483 Service Configuration Window" section on page 7-38 for details on each of the parameters displayed on the **RFC1483 Routed** tab.

Step 5 Select Commission Service to roll the service onto the 6400 UAC.

A window appears for you to confirm that you wish to commission the selected service.

Figure 6-56 About to Change Service State Confirmation Window

About to cha	nge service state. OK?
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Step 6 Select **Yes** to commission the service (or **No** to return to the Service Instance Configuration window).

The Action Report window appears.

Figure 6-57 Action Report Window

- Action Report -	
Zelnetting to : 192.168.238.10	
>>>terminal length 0	Ш
Rincewind Cache file /tmp/c6400_cache_192.168.238.10_6_0_0 doesn't exist	
Refreshing free VPI/VCI cache Chosen 0 40, 46	
>>>configure terminal Enter configuration commands, one per line. End with CNTL/Z. Rincewind(config) Telnetting to : 192.168.238.12	
>>>terminal length 0 NRP	
	1
Save	

The Action Report window details the IOS commands executed when the service is commissioned. Invalid service parameter options result in a failure to commission the service.

Caution The 6400 SCM will roll-back configuration changes applied if an error is detected in the execution of the IOS command sequence with your selected parameters. This insures that the 6400 UAC remains in a consistent state, even when errors are made entering parameters.

- Step 7 Check the details in the Action Report window to ensure that the service was commissioned successfully.
- Step 8 Select **Save** to save the Action Report, if required. This may be useful for troubleshooting purposes.
- Step 9 Select **Close** to close the Action Report window and return to the Service Instance Configuration window.
- Step 10 Select **Close** from the **File** menu to close the Service Instance Configuration window.

Subscriber Provisioning

Figure 6-58 shows a typical work flow example that describes how to set up (provision) a subscriber (that is, the end customer). You can use this work flow as a tutorial.

Figure 6-58 Subscriber Provisioning Work Flow



The first step is to create DSLAMs and subscribers using the deployment wizard.

Each subscriber created must have at least one Quality of Service (QoS) object. They can have multiple QoS objects. One subscriber may be connected to many different types of service, and each of these may have a different subscriber QoS. You can either configure the subscriber QoS at runtime or you can create QoS profiles in advance.

The final step of the work flow is to apply the QoS profile or configure the subscriber QoS or manually at runtime. This option is available through the CEMF maps.

Creating a DSLAM Object

Subscribers within the 6400 SCM application are modeled in relation to the network. First of all you have to define a connectivity point (that is, a DSLAM).

Note The DSLAM object is simply a "placeholder" object. It may represent an actual DSLAM in your network, or alternatively a POP or other type of network element.

To create DSLAM objects, proceed as follows:

Step 1 Select the **Deploy, Cisco 6400 UAC, DSLAM** option from a Line Card.

The Deployment wizard launches.

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Figure 6-59 Deployment Selector Screen

- Step 2 Select Create DSLAM(s) in the Deployments frame (if it not already selected).
- Step 3 Select Forward.
- Step 4 Enter the **Number of DSLAMs:** to create. Enter **1** as an example.
- Step 5 Select Forward.
- Step 6 Enter a **DSLAM Name**. Enter **DSLAM-1** as an example.
- Step 7 Select Forward.

The Containment Details window appears.

Step 8 Click Select.

The subscriberContainment window appears.

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subscriberContainment.44	P-13216023815/053-8-0/Pat-8-8-0	Guest

Figure 6-60 subscriberContainment Window

- Step 9 Select a **Port** to deploy the DSLAM onto. Only ports with a "green" color icon are valid. In the example shown in Figure 6-60, **Port-8-0-0** is selected.
- Step 10 Select Apply.

The Containment Details window reappears.

Step 11 Select Forward.

Note You must repeat steps 6 to 11 for each DSLAM object, if you entered more than one DSLAM object in step 4.

The Deployment Summary window appears.

- Step 12 Select **Finish** to commit the deployment.
- Step 13 Select **Dismiss** to close the Deployment wizard.

You have just created a DSLAM object connected to a selected line card port. You can now view the DSLAM object created through **Objects** manager on the CEMF Launchpad.

Creating a Subscriber and Associated Subscriber QoS

Subscriber's hold information related to the end subscriber. Subscribers are created by deploying onto a selected Line Card and connecting them to appropriate ports in the DSLAM.

To create subscribers, proceed as follows:

Step 1 Select the **Deploy, Cisco 6400 UAC, Subscriber and QoS** option from a Line Card.

The Deployment Selector screen appears.

Figure 6-61 Deployment Selector Screen

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- Step 2 Select the **Create Subscribers and associated QoSs** option from the list of deployments (if not already selected).
- Step 3 Click Forward.
- Step 4 Enter the **Number of Subscribers** to create.
- Step 5 Click Forward.
- Step 6 Enter the **Subscriber Name**.
- Step 7 Click Forward.

The Containment Details Screen appears.

Step 8 Click Select.

The subscriberContainment window appears.

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Figure 6-62 subscriberContainment Object Selector Window

- Step 9 Select a **DSLAM** to deploy the subscriber onto. The DSLAM objects were deployed earlier in this work flow. **DSLAM-1** is selected in the example shown in Figure 6-62.
- Step 10 Select Apply. The Containment Details window reappears.
- Step 11 Select Forward.

Note Repeat steps 6 to 11 if more than one subscriber was entered in step 4.

The Object Details window appears.

- Step 12 Enter the Subscriber QoS name.
- Step 13 Select Finish to commit the deployment and create the Subscriber.
- Step 14 Select **Dismiss** to close the Deployment Summary window.

Creating Additional Subscriber QoS (Optional)

Note This step is not essential as a Subscriber QoS is associated with a subscriber during subscriber creation.

You may wish to create more than one subscriber QoS. It is possible that a subscriber will subscribe to multiple services and may require or may be prepared to pay for different subscriber QoS. For example, the subscriber may have a bridge service that is uses for work purposes and is paid for by their employer. This service is probably quite high-value. The subscriber may also have their own personal Internet link that would probably be a lower grade service. So this type of subscriber would need multiple subscriber QoS objects created.

To create a new subscriber QoS, proceed as follows:

Step 1 Select the Deploy, Cisco 6400 UAC, Subscriber QoS option from a Line Card.

The Deployment wizard launches.

Figure 6-63 Deployment Selector Screen

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- Step 2 Select the **Create Subscriber QoS(s)** option from the list of deployments (if not already selected).
- Step 3 Select Forward.
- Step 4 Enter the Number of Subscriber QoSs to create. Enter "1" as an example.
- Step 5 Select Forward.

The Object Details screen appears.

- Step 6 Enter the Subscriber QoS Name in the Attributes frame.
- Step 7 Select Forward.
- Step 8 Click Select in the Containments frame. The subscriberContainment window appears.
- Step 9 Select the **Subscriber from the object map**.
- Step 10 Select Apply.

Step 11 Select Forward.

Note Repeat steps 6 to 11 if more than one subscriber was entered in step 4.

- Step 12 Select **Finish** to commit the deployment and create the Subscriber QoS.
- Step 13 Select **Dismiss** to close the Deployment Summary window.

Configuring a Subscriber QoS

The Subscriber QoS Configure window allows you to configure existing Subscriber QoS parameters.

Step 1 Select the **Cisco 6400 UAC**, **Subscriber**, **Configure Subscriber QoS** option at a Line Card.

The Subscriber QoS Configuration window appears.

Figure 6-64 Subscriber QoS Configuration Window

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- Step 2 Select the appropriate **NSP**, **DSLAM** and **Subscriber** to display the **QoS Parameters** associated with the selected **Subscriber**.
- Step 3 Configure the parameters in the **QoS Parameters** frame, as required, or alternatively apply a QoS profile. Refer to the "Applying a QoS Profile to a Subscriber QoS" section on page 6-65 for further details.
- Step 4 Select the **Save** option from the **File** menu to save the information.
- Step 5 Select the **Close** option from the **File** menu to close the Subscriber QoS Configuration window.

Deleting a Subscriber QoS

Step 1 Start **MapViewer** and select the Chassis map.

Note Alternatively you can start in Objects manager and select subscriberContainment

- Step 2 Select a Line Card.
- Step 3 Select the Cisco 6400 UAC, Subscriber, Configure Subscriber QoS option.
- Step 4 Select the Subscriber QoS and right click.
- Step 5 Select **Delete Objects**.
- Step 6 Check the details in the Deletion Summary window.
- Step 7 Click **Finish**.
- Step 8 Click **Dismiss**.

Applying a QoS Profile to a Subscriber QoS

You can apply an existing QoS profile or configure the QoS Parameters individually.

Note QoS profiles are available from the **Edit** menu (assuming they have already been defined in advance). Refer to the "Creating Subscriber QoS Profiles" section on page 6-21 for further details.

To apply a QoS profile to a subscriber QoS, proceed as follows:

- Step 1 Select the Cisco 6400 UAC, QoS, Configure Subscriber QoS option from a Line Card.
- Step 2 Select the **Apply Profile** option from the **Edit** menu.
- Step 3 Select the profile from the list of profiles displayed.
- Step 4 The **QoS Profile** parameters are now copied into the **QoS Parameters** frame and saved automatically.
- Step 5 Click **Dismiss**.

Subscriber Connection Management

Subscriber Connection Management is the process of configuring the subscriber PVC incoming to the Cisco 6400 UAC, and connecting the subscriber to the required service.

Note It is assumed that the required service has already been configured and commissioned.

Figure 6-65 Subscriber Connection Management



Creating a Subscriber and Associated Subscriber QoS

Refer to the "Creating a Subscriber and Associated Subscriber QoS" section on page 6-59 for further details.

Configuring an Existing Subscriber

Step 1 Start MapViewer and select the Chassis map.

Note Alternatively you can start in Objects manager and select subscriberContainment.

Step 2 Select a Line Card.

Step 3Select the Cisco 6400 UAC, Subscriber, Configure Subscribers option.The Subscriber Configuration window appears.

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Figure 6-66 Subscriber Configuration Window (Subscriber Details Tab)

Step 4 Select the **Subscriber Details** tab (if not already selected).

Note Select the **Copy** and **Copy Page Configuration** options in the **Edit** menu to cut and paste between different profiles. This is useful when you wish to copy profile information from one to the next.

- Step 5 Select an **NSP**, **DSLAM** and **Subscriber** from the appropriate lists at the left-hand-side of the window.
- Step 6 Enter a **Contact Name** and **Contact Address** into the **Contact Name & Address** frame for the selected subscriber, as required.
- Step 7 Enter a Subscriber Name and Subscriber Address into the Subscriber Name & Address frame, as required.

Note Entering information into the **Subscriber Details** tab is optional. You can enter any information you like into the **Subscriber Details** tab. For example, you may decide to enter a subscriber identification in the **Subscriber Name** box and an e-mail address in the **Subscriber Address** box.

Step 8 Select the **Connections** tab.

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Figure 6-67 Subscriber Configuration Window (Connections Tab)

Step 9 Select Activate Polling or Deactivate Polling (as required) in the Bandwidth Utilization frame.

The **Bandwidth Utilization** frame enables you to switch on/off, on an individual subscriber PVC basis, bandwidth utilization monitoring. Activate utilization polling using the **Activate Polling** button (shown in Figure 6-67). The **Receive/Transmit Utilization** gauges indicate the utilized bandwidth as a percentage of the Peak Cell Rate specified for the connection. The 6400 UAC permits the subscriber to exceed their allocated bandwidth. The gauge shows 100% when a user exceeds their peak cell rate.

Note **Receive/Transmit Utilization** gauges are displayed from a subscriber's point of view, that is, the **Transmit Utilization** value shows the number of cells per second the subscriber is transmitting and the **Receive Utilization** value shows the number of cells per second the subscriber is receiving.

- Step 10 Select the Save option from the File menu to save the subscriber information.
- Step 11 Select the Close option from the File menu to close the Subscriber Configuration window.

Deleting a Subscriber

Note Alternatively you can start in Objects manager and select subscriberContainment.

- Step 2 Select a Line Card.
- Step 3 Select the Cisco 6400 UAC, Subscriber, Configure Subscribers option.
- Step 4 Select the Subscriber and right click.
- Step 5 Select Delete Objects.
- Step 6 Check the Deletion Summary details.
- Step 7 Select Finish.

Connecting a Subscriber to a Service Instance

Step 1 Select the Cisco 6400 UAC, Subscriber, Connect Subscribers option from an NSP card.

The Service/Subscriber Connection window (shown in Figure 6-68) appears.



Figure 6-68 Service/Subscriber Connection Window

The Service/Subscriber Connection window is divided into four tabbed sections, **Connect**, **RFC1483 Routed**, **PTA-MD** and **RBE**.

Step 1 Start **MapViewer** and select the Chassis map.

Step 2 Select the Subscriber and the Subscriber QoS.

Note You can select one or more **Subscriber QoS** for each subscriber. You must have at least one configured with appropriate parameters.

- Step 3 Select the **ATM Port** that the **Service Instance** resides on.
- Step 4 Select a Service Instance.

Note The **Service Instance** is a service object, that is, a single service deployed on the 6400 UAC. It contains all the configuration information required for a service to run, for example, PPP-IP services or PPP-L2TP services. The **Service Instance** object is associated with a particular ATM port. So that will be on one of the NRP ATM ports for NRP-based services such as tunnelling or bridge-routed. For the ATM, pure ATM switching service, that will reside on one of the ATM line card ports. Inappropriate tabs are greyed out when a **Service Instance** is selected. For example, when a **Service Instance** relating to an RBE service is selected, the **RFC1483 Routed** and **PTA-MD** tabs are greyed out.

- Step 5 Select and the appropriate tab and enter relevant information when connecting to RFC1483 Routed, PTA-MD or RBE services. Refer to the "Service Configuration Windows" section on page 7-21 for further details on the parameters contained in the RFC1483 Routed, PTA-MD and RBE tabs.
- Step 6 Enter a Username and Password in the Authentication (PPP-IP only) frame.
- Step 7 Select the Automatic VPI/VCI Allocation in the Internal PVC Parameters frame.
- Step 8 Click **Connect**. A pop up window appears displaying the IOS transaction log as connection occurs.

Note The **Connect** button is greyed out when the Service Instance is in a commissioned state.

If the **Connect** operation fails the service instance remains in the **Decommissioned** state (that is, no configuration will have been applied to the Cisco 6400 UAC). Failure diagnostics information can be located by examining the IOS log.

Common failure causes include:

- Specifying duplicate (already utilized) incoming PVC details.
- Forgetting to configure the subscriber QoS Parameters.
- Specifying invalid Ingress PVC details.
- Selecting the **Manual** option for **Internal PVC Parameters** allocation and selecting a PVC that is already allocated.

Disconnecting a Subscriber from a Service Instance

Step 1 Select the Cisco 6400 UAC, Subscriber, Disconnect Subscribers option from an NSP card.

The Service/Subscriber Disconnection window appears.

Figure 6-69 Service/Subscriber Disconnection Window

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Step 2 Select the **Subscriber**.

- Step 3 Select the connection object that connects the Subscriber to the **Premium Service** Service Instance.
- Step 4 Click **Disconnect**.

A pop up window appears to warn you that the selected subscriber is about to be disconnected.

Figure 6-70 About to Disconnect Subscriber

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P	About to Disconnect	Subscriber, OK?
	Yes	No

Step 5 Click **Yes** to disconnect the subscriber. The Action Report window appears confirming that the subscriber has been disconnected.

Figure 6-71 Action Report Window



Click **Close** to close the Action Report window or click **Save** to save the Action Report. The Action Report can be saved and used for diagnostic purposes. The "*** *No errors encountered* ***" message appears to show that disconnection was successful.
Administration

Editing a Commissioned Service

This may be used, if for example, you wish to alter the upstream data rate.

To edit a commissioned service, proceed as follows:

- Step 1 Select Configure Services from an NRP
- Step 2 Select the service instance you require.
- Step 3 Decommission the service (beware, this will cause subscriber service interruption).
- Step 4 Edit the service as required.
- Step 5 Commission the service.

Editing a Currently Connected Subscriber

This operation can be performed without disconnecting the subscriber.

- Step 1 Select the **Configure Subscribers** option from a line card.
- Step 2 Select the NSP, DSLAM and Subscriber to display the subscribers details.
- Step 3 Enter the contact and subscriber details and then save your changes.

Moving Subscribers between Services (or NRPs)

- Step 1 From a line card select disconnect subscribers.
- Step 2 Select the subscriber to disconnected.
- Step 3 Press the **Disconnect** button.
- Step 4 Select a new service.
- Step 5 Connect the subscriber to a new service instance (and NRP, if appropriate).