Attribute Reference

This section references all objects and their attributes that are used by the Cisco 6400 Equipment Module.

The attribute tables in this section follow a convention that will help you easily identify important information such as derived values and mandatory attributes.

Table A-1 Cisco 6400 Equipment Module Attribute Reference Tables

Element Type	Element Name	Table
Fabric Elements	Network	Table A-3
	Radius Server	Table A-4
	Node	Table A-5
	Physical Port	Table A-6
Service Elements	Logical Port	Table A-7
	Cross Connection	Table A-8
	NRP Internal PVC	Table A-9
	Singlehop Tunnel	Table A-10
	Multihop Tunnel	Table A-11
	Aggregation Key	Table A-12
	SHTunnel Destination	Table A-13
	MHTunnel Destination	Table A-14
	Service List	Table A-15
	IOSQOS	Table A-16
	VC CLass	Table A-17
	Virtual Template	Table A-18
	Access Control List	Table A-19
	Access Control Element	Table A-20
	Route Entry	Table A-21
	Authenticator	Table A-22
	Physical Port Profile	Table A-23
	Logical Port Profile	Table A-24

Cisco 6400 Equipment Module Attribute Reference Tables (continued)

Element Type	Element Name	Table
Service Elements	Cross-connection Profile	Table A-25
	NRP Internal PVC Profile	Table A-26

Table Conventions

The following codes describe attribute behaviour. They appear on a separate line in the attribute column for each attribute.

Table A-2 Attribute Reference Table Conventions

Code	Description
M	Attribute is Mandatory.
R | W | C	R—Attribute is read-only.
	W—Attribute is writable.
	C—Attribute is writable upon creation, and read-only thereafter.
A | RDP	A—Attribute is autogenerated.
	RDP—Reverse Data Path. Attribute value is retrieved from the element or network management system after you create the corresponding object.
P	Attribute can be profiled.

Note Some attributes contain restrictions or dependencies that are out of the scope of the above table conventions. In this case, the restriction or dependency will be included with the attribute description in the table or in a footnote.

Network

Object Name: C4ntNetwork

OAF: C4ntNetwork.oaf

Table A-3 Network

Attributes	Acceptable Values	Default Values
Name [srname] This is the network name. This name must be unique across all networks. M, C	Text (64)	
Customer [vpn] This is the customer name. This attribute is optional. W	Text (16)	
Domain [domain] This is the domain name. This attribute is optional. W	Text (16)	
Common Parameters		
Containing Network [srsubnet.srname] This is the name of the network of which this network object is a subnet. M, C	Text (32)	
Transit Cost [srcost] This is the cost of crossing the sub-network. This attribute is used by the Threader to determine the lowest cost path when threading a service. M	Numb (10) Range=0-2147483647	50
Class [srclass] The CPC class name for the network object. R	Text (4)	"C4nt"
Opaque [sropaque] The threading strategy (opaque or transparent). This value should be set to "False" to disable path threading. W	Bool (5)	False
Use Backup EMS [srusebackupems] Specify whether or not to use a backup EMS. Disabled to use the primary EMS. Enabled to use the backup EMS. W	Bool (5)	False

Table A-3 Network (continued)

Attributes	Acceptable Values	Default Values
Resource Map [srrmmap] This attribute is an integer used to carry a bit map of services supported by this Network. W	Numb (10) Range=0-2147483647	48
Pre-provisioned [srpreprov] Indicates if the object is pre-provisioned or not. The default value is None, indicating that the network object is not pre-provisioned. If Full or Init is selected, existing Service Elements (SEs) can be used by new Service Objects. The Threader will assign the proper SE that matches the Service Object criteria. In Init mode, if a suitable existing SE is not found, the Threader will attempt to create one for the Service Object. In Full mode, if a suitable existing SE is not founds, the Threader will not create one and report an error. This attribute is effective only when Opaque attribute (above) is TRUE. R	Enum (4) "Full" "Init" "None"	None

RADIUS Server

Object Name: C4rdRadius

OAF: C4rdRadius.oaf

Table A-4 RADIUS Server

Attributes	Acceptable Values	Default Values
Name [srname] This is the network name. After the network is saved and committed to the database, this field will be read-only. M | C	Text (64)	
Customer [vpn] This is the customer name. W	Text (16)	
Domain [domain] This is the domain name. W	Text (16)	
Class [srclass] This is the class name of the RADIUS server object. R	Text (4)	"C4rd"

Table A-4 RADIUS Server (continued)

Attributes	Acceptable Values	Default Values
RADIUS		
Radius Version [c4_rad_ver] This is the RADIUS version. Cisco Provisioning Center supports Merit RADIUS version 3.6B. R	Enum (14) "none" "Merit_AAA_3.6B"	
Primary RADIUS		
Radius User Name [c4_rad_user1] Specify a valid user name for the RADIUS server. M | W	Text (32)	
Radius Password [c4_rad_passwd1] Specify a valid password for the user name that you have entered for the RADIUS server. M | W	Text (32)	
Primary Radius Server [c4_rad_name1] This is the name of the primary RADIUS server. You can use the hostname or the IP address of the RADIUS server. M | W	Text (32)	
Primary Radius Auth Port [c4_rad_authport1] This is the authentication port on the primary RADIUS server. M | W	Numb (10) Range=0-2147483647	1645
Primary Radius Acct Port [c4_rad_actport1] This is the accounting port on the Primary RADIUS server. M | W	Numb (10) Range=0-2147483647	1646
Primary Radius IP Address [c4_rad_ip1] This is the IP address of the primary RADIUS server. This address must be specified in dotted decimal notation. M | R	Text (15)	
Backup RADIUS		
Backup Radius User Name [c4_rad_user2] Specify a valid user name for the backup RADIUS server. W	Text (32)	
Backup Radius Password [c4_rad_passwd2] Specify a valid password for the user name that you have entered for the backup RADIUS server. W	Text (32)	

Table A-4 RADIUS Server (continued)

Attributes	Acceptable Values	Default Values
Backup Radius Server [c4_rad_name2] This is the name of the backup RADIUS server. You can use the hostname or the IP address of the RADIUS server. W	Text (32)	
Backup Radius Auth Port [c4_rad_authport2] This is the authentication port on the backup RADIUS server. W	Numb (10) Range=0-2147483647	1645
Backup Radius Acct Port [c4_rad_actport2] This is the accounting port on the backup RADIUS server. W	Numb (10) Range=0-2147483647	1646
Backup Radius IP Address [c4_rad_ip2] This is the IP address of the secondary RADIUS server. This address must be specified in dotted decimal notation. R	Text (15)	
LDAP		
LDAP Server [c4_ldap_name] This attribute is not supported in this release. W	Text (32)	
LDAP User [c4_ldap_user] This attribute is not supported in this release. W	Text (32)	
LDAP Passwd [c4_ldap_passwd] This attribute is not supported in this release. W	Text (32)	
LDAP IP Address [c4_ldap_ip] This attribute is not supported in this release. W	Text (15)	
LDAP Port [c4_ldap_port] This attribute is not supported in this release. W	Numb (10) Range=0-2147483647	0
LDAP Version [c4_ldap_ver] This attribute is not supported in this release. R	Text (32)	

Node

Object Name: C4ndNode

OAF: C4ndNode.oaf

Table A-5 Node

Attributes	Acceptable Values	Default Values
Common Attributes		
Name [srname] This is the node name. After the node is saved and committed to the database, this field will be read-only. M | C	Text (64)	
Customer [vpn] This is the customer name. This attribute is optional. W	Text (16)	
Domain [domain] This is the domain name. This attribute is optional. W	Text (16)	
Containing Network [srnetwork.srname] This is the name of the containing network. R | A	Text (32)	
Management Address [srmgmtaddress] This is the management address. This value is the same as the NSP IP address. M | C	Text (32)	
Transit Cost [srcost] This is the cost of transiting the network. This attribute is used by the threader to decide on an optimum route for the service. This is typically assigned the value of 100. W	Numb (10) Range=0-2147483647	100
Node Type [srtype] The node type. R | A	Text (24)	"C6400UAC"
Class [srclass] The node object class name. R | A	Text (4)	"C4nd"

Table A-5 Node (continued)

Attributes	Acceptable Values	Default Values
Containing Region [srarea] The name of the administrative area containing the router (a LATA, for example). This attribute is optional. W	Text (32)	
Geographical Location [srgeogloc] This is the geographical location of the router (for example, a GPS reference). This attribute is optional. W	Text (32)	
Organizational Location [srorgloc] This is the organizational location of the router (for example, an X.500 directory reference). This attribute is optional. W	Text (64)	
Pre-provisioned [srpreprov] Indicates if the object is pre-provisioned or not. The default value is None, indicating that the node object is not pre-provisioned. If Full or Init is selected, existing Service Elements (SEs) can be used by new Service Objects. The Threader will assign the proper SE that matches the Service Object criteria. In Init mode, if a suitable existing SE is not found, the Threader will attempt to create one for the Service Object. In Full mode, if a suitable existing SE is not founds, the Threader will not create one and report an error. This attribute is effective only when Opaque attribute (above) is TRUE. M | C	Enum (4) "Full" "Init" "None"	None
Upload State [srustate] Indicates the upload status. W	Enum (13) Required, Not_Required, Indeterminate	
Upload State Modification Time [srustime] Indicates the date and time that the upload state was last modified. R	Text (24)	
Last Successful Upload Time [srutime] Indicates the date and time of the last upload from this node. R	Text (24)	
Last Upload Type [srutype] Indicates the type of the last upload from this node. R	Text (16)	
NSP Specific Information		

Table A-5 Node (continued)

Attributes	Acceptable Values	Default Values
Access User Name [c4_accname] This is the same value as the NSP Management Access username configured on the NSP. M | C	Text (32)	
Access Password [c4_accpasswd] This is the same value as the NSP Management Access password configured on the NSP. M | C	Text (32)	
Enable Password [c4_enablepasswd] This is the enable password for the NSP. M | C	Text (32)	
IOS Version [c4_iosversion] This is the IOS version. The value is fulfilled by performing a node upload. R	Text (16)	
Host Name [c4_hostname] This is the same value as the NSP hostname. This attribute is mandatory. R	Text (32)	
Redundant [c4_redundant] This value specifies whether there is an NSP counterpart available for redundancy. R	Bool (5)	
Maximum Cross-connections [c4_maxpvcs] This value represents the maximum internal/external PVCs. R	Numb (10) Range=0-2147483647	32000
SNMP Community [c4_snmp_commun] The SNMP community. W	Text (32)	"PUBLIC"
SNMP Port [c4_snmp_port] The SNMP port. W	Numb (10) Range=0-2147483647	161

Physical Port

Object Name: C4alACLProf

OAF: C4alACLProf.oaf

Table A-6 Physical Port

Attributes	Acceptable Values	Default Values
Common Attributes		
Name [srname] This is the physical port name. M | C	Text (24)	
Customer [vpn] This is the customer name. W	Text (16)	
Domain [domain] This is the domain name. W	Text (16)	
Port Type [srporttype] Indicates the type of port. R	Enum (5) DS3, OC3, OC12, CPU, NRP, NRP2, Other	
Port Number [srportnumber] Indicates the number of the port on the card. R	Numb	
Shelf Slot Number [srslotnumber] Indicates the slot number being used. R	Text (16)	
Provisionable Bandwidth (kbits/s) [srbandwidth] Indicates the total bandwidth of the port, in kbits/s. R	Numb (10) Range=0-2147483647	0
Max PDU Size (bytes) [srmaxpdusize] Indicates the maximum PDU size, in bytes. R	Numb (10) Range=0-2147483647	53
Subscriber ID [srsubscriberid] The mapping to the DSL circuit ID on the DSLAM. W	Text (32)	
Class [srclass] The CPC class for this physical port profile object. R	Text (4)	C4pp
Maximum Channels [srmazchans] This attribute is not used with this release.	Numb (10) Range=0-2147483647	0

Table A-6 Physical Port (continued)

Attributes	Acceptable Values	Default Values
EMS Name [sremsname] The name of the physical port used in the Element Management System. R		
Administrative State [sradminstatus] Indicates the administrative state of the physical port profile. R	Enum (8) Locked, Unlocked	
Resource Model Specific Map [srrmmap] Resource model specific map. R	Numb (10) Range=0-2147483647	0
First Channel on this Pport [srstartchan] The channel number of the first channel on this port. W	Numb (10) Range=0-2147483647	1
Reserved Channels [srrezchanmap] This attribute is not used.	Text (38)	
User Label [sruserlabel] Use this field to add user information. W	Text (64)	
Contained By		
Network [srnetwork.srname] The network containing the physical port. R	Text (32)	
Node [srnode.srname] The node containing the physical port. R	Text (32)	
MPTP LInk This attribute is not used.		
Relationship Attributes		
Lower Layer PPort [srport.srname] The lower layer port supporting this physical port. R	Text (32)	
Peer Physical Port [srpeer] The peer physical port for for this port connected by a Plink. R	Text (32)	
Card [srcard.srname] The card containing the physical port. W	Text (32)	

Table A-6 Physical Port (continued)

Attributes	Acceptable Values	Default Values
6400 Physical Port Parameters		
Access Name [c4_accname] The IOS account name for the NRP/NRP2 associated with this port. W	Text (32)	
Access Password [c4_accpasswd] The IOS account password for the NRP/NRP2 associated with this port. W	Text (32)	
Enable Password [c4_enablepasswd] The IOS enable password for the NRP/NRP2 associated with this port. W	Text (32)	
NRP IP Address [srmgmtaddress] The IP address of the NRP/NRP2 associated with this port. W	Text (15)	
Redundant [c4_redundant] Indicates if the port has a counterpart for redundancy. NRP2 does not support redundancy. M | R	Bool (5)	FALSE

Logical Port

Object Name: C4alACLProf

OAF: C4alACLProf.oaf

Table A-7 Logical Port

Attributes	Acceptable Values	Default Values
Name [srname] This is the logical port name. M | C	Text (24)	
Customer [vpn] This is the customer name. W	Text (16)	

Table A-7 Logical Port (continued)

Attributes	Acceptable Values	Default Values
Domain [domain] This is the domain name. W	Text (16)	
Protocol [srprotocol] Specify the protocol. M	Text (10)	"ATM"
Signalling Role [srsignallingrole] A DCE logical port represents the "network side" equipment. This logical port type supports all types of PVCs. A DTE is almost identical to the DCE logical port except for SVC applications. It assumes the role of the "user side" of the UNI signalling interface. W	Enum (3) "DTE" "DCE"	
NNI Enable [srnnienabled] You can enable or disable NNI for the logical port. W	Bool (5)	
Admin Status [sradminstatus] Specify the administrative status for the logical port. W	Enum (12) "Locked" "Unlocked" "ShuttingDown"	
Maximum Connections [srconnections] Specify the maximum number of connections for the logical port. For internal ports it is 2048. W	Numb (10) Range=0-2147483647	0
Class [srclass] The CPC class for this logical port object. R | A	Text (4)	"C4lp"
Resource Map [srrmmap] This attribute is an integer used to carry a bit map of services supported by this Network. W	Numb (10) Range=0-2147483647	48
QOS [srqos] Specify the Quality of Service. W	Text (32)	
Group [srgroup] Specifies the logical group membership. Allows several logical ports to be put in a common group as a pooled resource. W	Text (32)	

Table A-7 Logical Port (continued)

Attributes	Acceptable Values	Default Values
Priority [srpriority] The logical port usage priority. W	Numb (10) Range=0-2147483647	0
Multiple Service Ranges [srmultirange] Indicates if the logical port has multiple service ranges. W	Bool (5)	
Multiple Fabric Ranges [sremultirange] Indicates if the logical port has multiple fabric ranges. W	Bool (5)	
Multiple Reserved Ranges [srmultiresrange] Indicates if the logical port has multiple reserved ranges. W	Bool (5)	
User Label [sruserlabel] Use this field to add user information. W	Text (64)	’" "
Service Map [srservmap] Map of supported service types. W	Text (32)	DDDDDDDDDD DDDDDDDDDD DDDDDDDDDD DD
Contained By		
Network [srnetwork.srname] The network containing the logical port. R	Text (32)	
Node [srnode.srname] The node containing the logical port. R	Text (32)	
Backup Lport [srbackupport.srname] This attribute is not used. R	Text (32)	
Physical Port [srport.srportnumber] The associated physical port. R	Text (32)	
Slot Number [srport.srslotnumber] The slot number on the physical port. R	Text (32)	

Table A-7 Logical Port (continued)

Attributes	Acceptable Values	Default Values
EMS Name [sremsname] The name of the logical port used in the Element Management System. R	Text (65)	
Bandwidth		
Incoming		
Maximum (kbits/s) [sraz_bandwidth] The maximum incoming bandwidth for the logical port. W	Numb (10) Range=0-2147483647	
Nominal Threshold (%) [sraz_cbnt] Specify the incoming committed bandwidth nominal threshold percentage. W	Numb (10) Range=0-2147483647	100
Provisionable (kbits/s) [sraz_cbw] The incoming committed bandwidth is auto-calculated based on the nominal threshold and bandwidth. W	Numb (10) Range=0-2147483647	0
Outgoing		
Maximum (kbits/s) [srza_bandwidth] The maximum outgoing bandwidth for the logical port. W	Numb (10) Range=0-2147483647	
Nominal Threshold (%) [srza_cbnt] Specify the outgoing committed bandwidth nominal threshold percentage W	Numb (10) Range=0-2147483647	100
Provisionable (kbits/s) [srza_cbw] The outgoing committed bandwidth is auto-calculated based on the nominal threshold and bandwidth W	Numb (10) Range=0-2147483647	0

Table A-7 Logical Port (continued)

Attributes	Acceptable Values	Default Values
6400 NRP Specific		
Routing [c4_routing] Specify whether to enable or disable routing. W	Bool (5)	
Tunneling [c4_tunneling] Specify whether to enable or disable tunneling. W	Bool (5)	
Multihopping [c4_multihop] Specify whether to enable or disable multihopping. W	Bool (5)	
Host Name [c4_hostname] The host name of the NRP/NR2 associated with this logical port. M | R	Text (32)	
IOS Version [c4_iosversion] Specifies the IOS version being used. R	Text (32)	
Maximum Internal Connections [c4_maxintpvcs] Specifies the maximum number of internal connections for the logical port. M	Numb (10) Range=0-2147483647	2048
Primary Radius Server [c4_rad_name1] Specifies the primary RADIUS server. W	Text (32)	
Backup Radius Server [c4_rad_name2] Specifies the backup RADIUS server W	Text (32)	

Cross Connection

Object Name: C4vcPvcx

OAF: C4vcPvcx.oaf

Table A-8 Cross Connection

Attributes	Acceptable Values	Default Values
Common Attributes		
Name [srname] Specify a name for the cross-connection. M | C	Text (64)	
Customer [vpn] This is the customer. This attribute is optional. W	Text (16)	
Domain [domain] This is the domain. This attribute is optional. W	Text (16)	
Profile [srprofile.sy_profname] Select a profile for the cross connection on the NSP. This attribute is optional. W	Text (32)	
Common Attributes		
Network [srnetwork.srname] This is the network that contains the 6400 UAC chassis that contains the NSP. R | A	Text (32)	
Node [srnode.srname] This is the node containing the PVC. R	Text (32)	
Recovery Priority [srpriority] This is the recovery priority for NNI resiliency. W	The lower the value, the higher the priority; 0 having infinitely low priority, and 1 having the highest priority.	0
UNI Recovery Priority [srunipriority] This is the recovery priority for UNI resiliency. W	The lower the value, the higher the priority; 0 having infinitely low priority, and 1 having the highest priority.	0
Provider Service [srdestserv] This is the provider service associated with this cross connection.	Text (32)	

Table A-8 Cross Connection (continued)

Attributes	Acceptable Values	Default Values
Transit Cost [srcost] This is the cost of crossing the sub-network. This attribute is used by the Threader to determine the lowest cost path when threading a service. M	Numb (10) Range=0-2147483647	0
ATM LPort Associations		
A Endpoint		
LPort [sra_tp.srname] This is the logical port designated as the A endpoint of the cross-connection. R | A	Text (32)	
VPI [raa_vpi] This is the VPI for the A endpoint. If you want to let Cisco Provisioning Center auto-select the VPI, enter -1. M | C	Numb (3) Range=-3-255	-1
VCI [raa_vci] This is the VCI for the A endpoint. If you want to let Cisco Provisioning Center auto-select the VPI, enter 0. M | C	Numb (5) Range=-3-16383	-1
Enable Frame Discard [raa_frdisc] This attribute specifies whether to enable frame discard. W	Bool (5)	
Z Endpoint		
LPort [srz_tp.srname] This is the logical port designated as the Z endpoint. of the cross-connection. R | A	Text (32)	
VPI [raz_vpi] This is the VPI for the Z endpoint. If you want to let Cisco Provisioning Center auto-select the VPI, enter -1. This attribute is mandatory. M | C	Numb (3) Range=-1-255	-1
VCI [raz_vci] This is the VCI for the Z endpoint. If you want to let Cisco Provisioning Center auto-select the VPI, enter 0. This attribute is mandatory. M | C	Numb (5) Range=-1-16383	-1
Enable Frame Discard [raz_frdisc] This attribute specifies whether to enable frame discard. W	Bool (5)	
ATM Attributes		

Table A-8 Cross Connection (continued)

Attributes	Acceptable Values	Default Values
Circuit Type [ratype] Specify the circuit type. It can be either a virtual circuit (VP) or virtual path (VP). C | P	Enum (2) "VC" "VP"	
Class of Service [raqos] You can specify the class of service for ATM traffic. The class of service determines which traffic descriptor you can select. M | W | P	Enum (7) "CBR" "ABR" "UBR" "rt_VBR" "nrt_VBR"	
Fixed Round-Trip Time [ra_frtt] This attribute specifies the round-trip time in milliseconds. W	Numb (8) Range=0-16700000	0
A to Z Direction		
Bandwidth (kbits/s) [sraz_bandwidth] This is the bandwidth consumed by the A endpoint in the A to Z direction. M | W | P	Numb (10) Range=0-2147483647	0
Primary logical port [sra_primtp] This is the logical port used as the primary A side termination point when this NC is using a backup UNI logical port. R | A	Text (44)	
Sustainable Cell Rate (cells/s) [raaz_scr] SCR is the maximum average cell transmission rate that is allowed over a given period of time on a given circuit. It allows the network to allocate sufficient resources for guaranteeing the network performance objectives are met. W | P	Numb (10) Range=0-2147483647	0
Peak Cell Rate (cells/s) [raaz_pcr] PCR is the maximum allowed cell transmission rate. It defines the shortest time period between cells and provides the highest guarantee that network performance objectives (based on cell loss ratio) will be met. W | P	Numb (10) Range=0-2147483647	0
Minimum Cell Rate (cells/s) [raaz_mcr] MCR is the minimum cell rate, which is the minimum allocated bandwidth for a connection. W | P	Numb (10) Range=0-2147483647	0

Table A-8 Cross Connection (continued)

Attributes	Acceptable Values	Default Values
Maximum Burst Size (cells) [raaz_mbs] MBS is the maximum number of cells that can be received at the PCR. This allows a burst of cells to arrive at a rate higher than the SCR. If the burst is larger than anticipated, the additional cells are either tagged or dropped. This parameter applies only to VBR traffic. W | P	Numb (10) Range=0-2147483647	0
CDVT (microseconds) [raaz_cdvt] Cell Delay Variation Tolerance establishes the time scale over which the PCR is policed. This is set to allow for jitter (CDV). W | P	Numb (10) Range=0-2147483647	0
Traffic Desc [raaz_tdtype] This is the traffic descriptor type which describes the specified traffic parameters for the service (for more information consult the *ATM Service Application Solutions Guide*). M | W | P	Enum (7) "None" "ABR_FC" "ABR_NFC" "CBR.1" "UBR.1" "UBR.2" "VBR.1" "VBR.2" "VBR.3" "Other"	
Z to A Direction		
Bandwidth (kbits/s) [srza_bandwidth] This is the bandwidth consumed by the A endpoint in the Z to A direction. M | W	Numb (10) Range=0-2147483647	
Primary logical port [srz_primtp] This is the logical port used as the primary Z side termination point when this NC is using a backup UNI logical port. R | A	Text (44)	
Sustainable Cell Rate (cells/s) [raza_scr] SCR is the maximum average cell transmission rate that is allowed over a given period of time on a given circuit. It allows the network to allocate sufficient resources for guaranteeing the network performance objectives are met. W | P	Numb (10) Range=0-2147483647	0
Peak Cell Rate (cells/s) [raza_pcr] PCR is the maximum allowed cell transmission rate. It defines the shortest time period between cells and provides the highest guarantee that network performance objectives (based on cell loss ratio) will be met. W | P	Numb (10) Range=0-2147483647	0

Table A-8 Cross Connection (continued)

Attributes	Acceptable Values	Default Values
Minimum Cell Rate (cells/s) [raza_mcr] MCR is the minimum cell rate, which is the minimum allocated bandwidth for a connection. W | P	Numb (10) Range=0-2147483647	0
Maximum Burst Size (cells) [raza_mbs] MBS is the maximum number of cells that can be received at the PCR. This allows a burst of cells to arrive at a rate higher than the SCR. If the burst is larger than anticipated, the additional cells are either tagged or dropped. This parameter applies only to VBR traffic. W | P	Numb (10) Range=0-2147483647	0
CDVT (microseconds) [raza_cdvt] Cell Delay Variation Tolerance establishes the time scale over which the PCR is policed. This is set to allow for jitter (CDV). W | P	Numb (10) Range=0-2147483647	0
Traffic Desc [raza_tdtype] This is the traffic descriptor type which describes the specified traffic parameters for the service (for more information consult the *ATM Service Application Solutions Guide*). M | W | P	Enum (7) "None" "ABR_FC" "ABR_NFC" "CBR.1" "UBR.1" "UBR.2" "VBR.1" "VBR.2" "VBR.3" "Other"	
6400 NSP Specific		
A to Z		
Usage Parameter Control [c4az_upc] This is the usage parameter control type. W	Enum (4) pass, tag, drop, none	
Cast Type [c4az_cast] This is the cast type. W	Enum (9) p2mp-leaf, p2mp-root, p2p, none	
Z to A		
Usage Parameter Control [c4za_upc] This is the usage parameter control type. W	Enum (4) pass, tag, drop, none	
Cast Type [c4za_cast] This is the cast type. W	Enum (9) p2mp-leaf, p2mp-root, p2p, none	

NRP Internal PVC

Object Name: C4cxPvcx

OAF: C4cxPvcx.oaf

Table A-9 NRP Internal PVC

Attributes	Acceptable Values	Default Values
Common Attributes		
Name [srname] Specify a name for the cross connection. M | C	Text (30)	
Customer [vpn] This is the customer name. W	Text (16)	
Domain [domain] This is the domain name. W	Text (16)	
Profile [srprofile.sy_profname] This is a pointer for the PVC profile object. R	Text (32)	
Contained/Carried By		
Network [srnode.srnetwork.srname] This is the network containing the PVC. R	Text (32)	
Node [srnode.srname] This is the node containing the PVC. R	Text (32)	
LPort [z_tp.srname] This is the logical port associated with the PVC. R	Text (32)	
Access Control List [c4acl.acl_id] The access control list for this PVC. R	Text (32)	
6400 NRP Specific		
Description [c4_description] This is a description of the interface. This attribute applies only on a point to point subinterface. For a multipoint subinterface, this attribute is fulfilled by upload only. W	Text (80)	

Table A-9 NRP Internal PVC (continued)

Attributes	Acceptable Values	Default Values
CNX Type [c4_type] This is the CNX type. W	Enum (11) subscriber, service, multihop_in, idsl_sub, pppip, other	
Service Name [c4_servicename] This attribute is used only on a Subscriber C4CNX-Static Domain binding. W	Text (32)	
Sub-interface Type [c4_subif] This is the sub interface number. W	numb (10) Range=1-2147483647	
Unnumbered IP Address [c4_unnumbered] The unnumbered IP address of the sub interface. W	Text (40)	
Sub-interface IP Address [c4_subifipaddr] The IP address of the subinterface. W	Text (15)	
Sub-interface Network Mask [c4_subifmask] The subinterface mask number. W	Text (15)	
Bridge Group [c4_bgroup] The sub interface bridge group. Zero (0) indicates there is no bridge group for the sub interface. W	Numb (10) Range=1-2147483647	
Circuit Type [ratype] The circuit type (VC or VP). W	Text (2)	VC
PVC Handler [c4_handler] An optional handle for the PVC. This should be a unique name. W	Text (15)	
VPI [c4_z_vpi] Specify the VPI for endpoint Z. W	Numb (3) Range=0-255 for NRP, 0-15 for NRP2	
VCI [c4_z_vci] Specify the VCI for endpoint Z. W	Numb (4) Range=1-2047 for NRP, 1-1023 for NRP2	
PVC Mapping on IP		

Table A-9 NRP Internal PVC (continued)

Attributes	Acceptable Values	Default Values
Next-Hop IP Address [c4_remtipaadr] The IP address of the remote end of the PVC sub interface. W	Text (15)	
Upper Layer Protocol [c4_protocol] This is the upper layer protocol type. W	Enum (14) ip_broadcast, ip_nobroadcast, inarp, none	
VC Class Attributes		
QoS Class [c4_qos] This indicates the class of service. W	Enum (9) NRP1 supports UBR and nrt.VBR only. NRP2 supports UBR and nrt.VBR only. NSP supports CBR	
PCR [c4_pcr] This is the peak cell rate, which is the maximum allowed cell transmission rate (expressed in cells per second). It defines the shortest time period between cells and provides the highest guarantee that network performance objectives (based on cell loss ratio) are met. W	Numb (10) Range=0-2147483647	365566
MCR [c4_mcr] The minimum cell rate. W	Numb (10) Range=0-2147483647	0
NRP-NSP Bandwidth [c4_az_bandwidth] This is the A - Z bandwidth from the NRP/NRP2 to the NSP. W	Numb (10) Range=0-2147483647	0
NSP-NRP Bandwidth [c4_za_bandwidth] This is the Z - A bandwidth from the NSP to the NRP/NRP2. W	Numb (10) Range=0-2147483647	0
Encapsulation [c4_encapsulation] This is the encapsulation type. W	Enum (10) aal5ciscoppp, aal5autoppp, aal5snap, aal5mux	
Virtual Template Attributes		

Table A-9 NRP Internal PVC (continued)

Attributes	Acceptable Values	Default Values
Authentication [c4_authenticate] This is the authentication type. W	ms-chap, pap, chap, callin, optional, one-time (or a combination of these in the correct sequence)	
Unnumbered IP Address in VT [c4_vt_ipaddr] Specify an interface or subinterface that will enable IP without a static IP address (i.e. fastethernet 0/0/0). W	Text (40)	

Singlehop Tunnel

Object Name: C4mtTunnel

OAF: C4mtTunnel.oaf

Table A-10 Singlehop Tunnel

Attributes	Acceptable Values	Default Values
Common Attributes		
Customer [vpn] This is the customer name. W	Text (16)	
Domain [domain] This is the domain name. W	Text (16)	
Tunnel Specific Parameters		
Service Name [servicename] This is a key for binding subscriber traffic. This attribute is valid for tunnels of type dial_out_s only. W	Text (32)	
Dial In/Out [dial_type] This is the dial type for the tunnel. W	Enum (10) dial_out_s, other	
Tunnel Type [tunneltype] Specify the tunnel type. W	Enum (4) l2tp, 12f,	

Table A-10 Singlehop Tunnel (continued)

Attributes	Acceptable Values	Default Values
Tunnel Name [tunnelname] The is the tunnel named used for authentication at a remote site./ W	Text (32)	
Tunnel Password [password] This is the tunnel password. W	Text (32)	
Contained/Carried By		
Radius [c4radius.srname] This is the RADIUS server that deposits this tunnel. R	Text (32)	

Multihop Tunnel

Object Name: C4mtTunnel

OAF: C4mtTunnel.oaf

Table A-11 Multihop Tunnel

Attributes	Acceptable Values	Default Values
Common Attributes		
Customer [vpn] This is the customer name. W	Text (16)	
Domain [domain] This is the domain name. W	Text (16)	
Tunnel Specific Parameters		
VPDN Group [tunnelid] The VDPN group for the tunnel. W	Text (32)	
Tunnel Name [tunnelname] The tunnel name for authentication on a remote site. W	Text (64)	
Tunnel Password [password] The tunnel password for authentication. W	Text (32)	

Table A-11 Multihop Tunnel (continued)

Attributes	Acceptable Values	Default Values
Remote Tunnel Name [rtunnel] The tunnel name for the counterpart at the LAC. This attribute applies to only MHIT). W	Text (64)	
Remote Tunnel Password [rpassword] The remote tunnel password (MHIT only). W	Text (32)	
Authentication Type [authentication] This is the authentication type. W	ms-chap, pap, chap, callin, optional, one-time (or a combination of these in the correct sequence)	
Enable IP Processing Without an Explicit IP Address [c4_vt_ipaddr] Specify the interface that you want IP enabled on without assigning a specific IP address (i.e. fastethernet 0/0/0). This attribute is used when configuring a virtual template to assign PPP features to a PVC. W	Text (40)	
Dial In/Out [dial_type] This is the dial type for the tunnel. W	Enum (8) dial_in, dial_out, other	
Tunnel Type [tunneltype] Specify the tunnel type. W	Enum (5) l2tp, 12f, pppoe	
Contained/Carried By		
LPort [c4lport.srname] The logical port that contains the tunnel. R	Text (32)	
Node [c4node.srname] The node that contains the tunnel. R	Text (32)	
Network [c4node.srnetwork.srname] The network that contains the tunnel. R	Text (32)	
Virtual Template [c4vt.vtindex] A pointer to the virtual template. This attribute is required for dial_in type tunnels. R	Text (32)	

Aggregation Key

Object Name: C4akAggrKey

OAF: C4akAggrKey.oaf

Table A-12 Aggregation Key

Attributes	Acceptable Values	Default Values
Customer [vpn] This is the customer name. This attribute is optional.	Text (16)	
Domain [domain] This is the domain name. This attribute is optional.	Text (16)	

Table A-12 Aggregation Key (continued)

Attributes	Acceptable Values	Default Values
Common Parameters		
Aggregation Key [aggrkey] This is the type of aggregation key.	Text (64)	
Aggregation Type [aggrtype] This is the cost of crossing the sub-network. This attribute is used by the Threader to determine the lowest cost path when threading a service. M	Enum (10) TunnelName, Domain	50
Contained/Carried By		
Multihop Tunnel [c4mtunnel.tunnelname] This is the pointer to the tunnel aggregator (MHET). R	Text (32)	
NRP [c4mtunnel.c4lport.srname] This is the logical port that contains the NRP/NRP2. R	Text (32)	
Node [c4mtunnel.c4node.srname] This is the node that contains the NRP/NRP2. R	Text (32)	

Singlehop Tunnel Destination

Object Name: C4tdTnldest

OAF: C4tdTnldest.oaf

Table A-13 Singlehop Tunnel Destination

Attributes	Acceptable Values	Default Values
Common Attributes		
Customer [vpn] This is the customer name. W	Text (16)	
Domain [domain] This is the domain name. W	Text (16)	

Table A-13 Singlehop Tunnel Destination (continued)

Attributes	Acceptable Values	Default Values
Authenticator Specific Parameters		
Destination IP Address [dest_ip] The destination IP address. W	Text (15)	
Session Limit [sessionlimit] The limit for the number of sessions that can run over the tunnel. A -1 indicates no delivery. W	Numb (5) Range=0-32767	0
Priority [priority] The priority for the tunnel destination. W	Numb (5) Range=1-32767	1
Contained/Carried By		
Tunnel [c4tunel.tunnelname] A pointer to the SHTunnel object. R	Text (32)	
Radius [c4tunnel.c4radius.srname] A pointer to the RADIUS server containing the tunnel. R	Text (32)	

Multihop Tunnel Destination

Object Name: C4tdTnldest

OAF: C4tdTnldest.oaf

Table A-14 Multihop Tunnel Destination

Attributes	Acceptable Values	Default Values
Common Attributes		
Customer [vpn] This is the customer name. W	Text (16)	
Domain [domain] This is the domain name. W	Text (16)	

Table A-14 Multihop Tunnel Destination (continued)

Attributes	Acceptable Values	Default Values
Tunnel Specific Parameters		
Destination IP Address [dest_ip] The destination IP address. This is the IP address of the LNS. W	Text (15)	
Session Limit [sessionlimit] The maximum number of sessions per tunnel. W	Text (10)	
Priority [priority] The priority for the tunnel destination. W	Text (10)	
Contained/Carried By		
Multihop Tunnel [c4mtunnel.tunnelname] A pointer to the multihop tunnel. R	Text (32)	
NRP [c4mtunnel.c4lport.srname] The NRP/NRP2 for the multihop tunnel. R	Text (32)	
Node [c4mtunnel.c4node.srname] The node that contains the multihop tunnel. R	Text (32)	

Service List

Object Name: C4slSservlist

OAF: C4slSservlist.oaf

Table A-15 Service List

Attributes	Acceptable Values	Default Values
Common Attributes		
Domain [domain] This is the domain name. W	Text (16)	
Customer [vpn] This is the customer name. W	Text (16)	

Table A-15 Service List (continued)

Attributes	Acceptable Values	Default Values
Service List Parameters		
Subscriber ID [subscriberid] Specify the subscriber ID. W	Text (64)	
Service Name [servicename] This is the service associated with the tunnel. W	Text (255)	
Contained/Carried By		
Radius [c4radius.srname] A pointer to the RADIUS server containing the tunnel. R	Text (32)	

IOS QOS

Object Name: C4iqQos

OAF: C4iqQos.oaf

Table A-16 IOS QOS

Attributes	Acceptable Values	Default Values
Common Attributes		
Domain [domain] This is the domain. W	Text (16)	
Customer [vpn] This is the customer. W	Text (16)	
IOS QoS Parameters		
Quality of Service [qos] This is the quality of service (QoS). M | C	Enum (9) "CBR" "UBR" "ABR" "rt_VBR.1" "rt_VBR" "nrt_VBR" "nrt_VBR.1" "none"	
SCR [scr] SCR is the maximum average cell transmission rate that is allowed over a given period of time on a given circuit. It allows the network to allocate sufficient resources for guaranteeing the network performance objectives are met. C	Numb (10) Range=0-2147483647	0

Table A-16 IOS QOS (continued)

Attributes	Acceptable Values	Default Values
PCR [pcr] PCR is the maximum allowed cell transmission rate. It defines the shortest time period between cells and provides the highest guarantee that network performance objectives (based on cell loss ratio) will be met. C	Numb (10) Range=0-2147483647	0
MCR [mcr] MCR is the minimum cell rate, which is the minimum allocated bandwidth for a connection. C	Numb (10) Range=0-2147483647	0
MBS [mbs] MBS is the maximum number of cells that can be received at the PCR. This allows a burst of cells to arrive at a rate higher than the SCR. If the burst is larger than anticipated, the additional cells are either tagged or dropped. This parameter applies only to VBR traffic. C	Numb (10) Range=0-2147483647	0
CDVT [cdvt] Cell Delay Variation Tolerance establishes the time scale over which the PCR is policed. This is set to allow for jitter (CDV). C	Numb (10) Range=0-2147483647	0
Contained By		
Node [srnode.srname] This is the node that you are configuring QoS templates on. R | A	Text (32)	

VC Class

Object Name: C4clVCClass

OAF: C4clVCClass.oaf

Table A-17 VC Class

Attributes	Acceptable Values	Default Values
Common Attributes		
Domain [domain] This is the domain. This attribute is optional. W	Text (16)	

Table A-17 VC Class (continued)

Attributes	Acceptable Values	Default Values
Customer [vpn] This is the customer. This attribute is optional. W	Text (16)	
VC-Class Parameters		
VC-Class Name [vcclassname] This is the VC-Class name as in IOS. By default, this value is autocalculated, but a value can be supplied. M | C	Text (16)	
Service Name [c4_servicename] This is the service name key that associates a subscriber with a tunnel. This attribute is used for static binding only. For dynamic binding, leave this field empty. C	Text (32)	
QOS [qos] This is the quality of service. C	Enum (9) "CBR" "UBR" "UBR+" "ABR" "rt_VBR.1" "rt_VBR" "nrt_VBR" "nrt_VBR.1" "Other"	
PCR [pcr] PCR is the maximum allowed cell transmission rate. It defines the shortest time period between cells and provides the highest guarantee that network performance objectives (based on cell loss ratio) will be met. C	Numb (10) Range=0-2147483647	0
MCR [mcr] MCR is the minimum cell rate, which is the minimum allocated bandwidth for a connection. C	Numb (10) Range=0-2147483647	0
NRP->NSP Bandwidth [az_bandwidth] This is the bandwidth in cells/s from the NRP/NRP2 to the NSP. M | C	Numb (10) Range=0-2147483647	0
NSP->NRP Bandwidth [za_bandwidth] This is the bandwidth in cells/s from the NSP to the NRP/NRP2. M | C	Numb (10) Range=0-2147483647	0

Table A-17 VC Class (continued)

Attributes	Acceptable Values	Default Values
Encapsulation [encapsulation] Specify the ATM adaptation layer (aal) and the encapsulation type. C	Enum (12) "aal5ciscoppp" "aal5autoppp" "aal5snap" "aal5mux" "aal5nlpid"	
Used In [c4_use] This is the use parameter. Specify the type of service which will use this VC Class.[1] C	Enum (7) "ppp" "pppoe" "pppof" "service" "pppip" "other"	

Table A-17 VC Class (continued)

Attributes	Acceptable Values	Default Values
Virtual Template Parameters		
Authentication [authentication] This is the authentication type. When none is selected, no authentication will be performed. PAP will enable Password Authentication Protocol to authenticate the tunnel. CHAP will enable Challenge Handshake Authentication Protocol to authenticate the tunnel. C	Text (80)	
Unnumbered IP Address [c4_vt_ipaddr] Specify an interface or subinterface that will enable IP without a static IP address (i.e. fastethernet 0/0/0). C	Text (40)	
Contained By		
LPort [z_tp.srname] This is the logical port that contains this VC class. R | A	Text (32)	
Node [srnode.srname] This is the node that contains the VC class. R | A	Text (32)	

1. Restrictions for each usage parameter are described in Table A-18.

Virtual Template

Object Name: C4vtVT

OAF: C4vtVT.oaf

Table A-18 Virtual Template

Attributes	Acceptable Values	Default Values
Common Attributes		
Domain [domain] This is the domain. This attribute is optional. W	Text (16)	
Customer [vpn] This is the customer. This attribute is optional. W	Text (16)	

Table A-18 Virtual Template (continued)

Attributes	Acceptable Values	Default Values
Virtual Template Parameters		
Virtual-Template index [vtindex] This is the virtual template index number that is auto assigned by IOS. A	Numb (4) Range=0-2000	0
Description [c4_description] This is a text field provided for a usage description of the virtual template object. For example, one virtual template could be used for a PPPoA subscriber without termination, and another could be used for a PPPoE subscriber with termination on the NRP/NRP2. This attribute is optional. W	Text (80)	""
Authentication [authentication] This is the authentication type. When none is selected, no authentication will be performed. PAP will enable Password Authentication Protocol to authenticate the tunnel. CHAP will enable Challenge Handshake Authentication Protocol to authenticate the tunnel. W	Text (80)	""
Enable IP Processing Without [c4_vt_ipaddr] Specify an interface or subinterface that will enable IP without a static IP address (i.e. fastethernet 0/0/0) C	Text (40)	FastEthernet0/0/0
Used In [c4_use] This is the use parameter. Specify the type of service which will use the virtual template. If **"ppp"** **aal5autoppp** **"pppoe"** **"aal5snap"** **"multi-hop in"** **"other"**		
Contained By		
Node [srnode.srname]		
Lport [z_tp.srname]		

Access Control List

Table A-19 Access Control List

Attributes	Acceptable Values	Default Values
Common Attributes		
Domain [domain]		
Customer [vpn]		
Profile [srprofile.sy_profname]		
Control List Parameters		
Access Control List ID [acl_id]		
Description [name]		
Contained/Carried By		
Lport [nrp.srname]		
Node [nrp.srnode.srname]		
Network [nrp.srnode.srnetwork.srname]		

Access Control Element

Table A-20 Access Control Element

Attributes	Acceptable Values	Default Values
Common Attributes		
Domain [domain]		
Customer [vpn]		
Access Control Element Parameters		
Service Name [ace_service]		
Source Type [source_type]		
Source IP [source_ip_addr]		
Source Mask [source_mask]		
Destination Type [dest_type]		
Destination IP [dest_ip_addr]		

Table A-20 Access Control Element (continued)

Attributes	Acceptable Values	Default Values
Destination Mask [dest_mask]		
Contained By		
Access Control List [c4acl.acl_id]		
Lport [nrp.srname]		
Node [srnode.srname]		
Network [srnode.srnetwork.srname]		

Route Entry

Table A-21 Route Entry

Attributes	Acceptable Values	Default Values
Common Attributes		
Customer [vpn]		
Domain [domain]		
Profile [srprofile.sy_profname]		
Route Entry Specific Parameters		

Table A-21 Route Entry (continued)

Attributes	Acceptable Values	Default Values
IP Address [ip_address]		
Netmask [mask]		
Mapping Target [target]		
Contained/Carried By		
LPORT [c4lport.srname]		
Node [c4lport.srnode.srname]		
Network [c4lport.srnetwork.srname]		

Authenticator

Table A-22 Authenticator

Attributes	Acceptable Values	Default Values
Common Attributes		
Customer [vpn]		
Domain [domain]		

Table A-22 Authenticator (continued)

Attributes	Acceptable Values	Default Values
Profile [srprofile.sy_profname]		
Authenticator Specific Parameters		
Username [username]		‘
Password [password] The password for authentication. W	Text (255)	
Encrypted [encrypted] Use this attribute to set encryption for authentication. R	Bool (5)	
Contained/Carried By		
LPORT [c4lport.srname] The containing logical port. R	Text (32)	
Node [c4lport.srnode.srname] The containing node. R	Text (32)	
Network [c4lport.srnetwork.srname] The containing network. R	Text (32)	

Physical Port Profile

Table A-23 Physical Port Profile

Attributes	Acceptable Values	Default Values
Common Attributes		
Name [sy_profname] This is the physical port profile name. W	Text (24)	

Table A-23 Physical Port Profile (continued)

Attributes	Acceptable Values	Default Values
Customer [vpn] This is the customer name. W	Text (16)	
Domain [domain] This is the domain name. W	Text (16)	
Port Type [srporttype] Indicates the type of port. W	Enum (5) DS3, OC3, OC12, CPU, NRP, NRP2, Other	
Provisionable Bandwidth (kbits/s) [srbandwidth] Indicates the total bandwidth of the port, in kbits/s.	Numb (10) Range=0-2147483647	0
Max PDU Size (bytes) [srmaxpdusize] INdicates the maximum PDU size, in bytes.	Numb (10) Range=0-2147483647	53
Class [srclass] The CPC class for this physical port profile object.	Text (4)	C4pp
Maximum Channels [srmazchans] This attribute is not used with this release.	Numb (10) Range=0-2147483647	0
Administrative State [sradminstatus] Indicates the administrative state of the physical port profile.	Enum (8) Locked, Unlocked	
Resource Model Specific Map [srrmmap] Resource model specific map. R	Numb (10) Range=0-2147483647	0
First Channel on this Pport [srstartchan] The channel number of the first channel on this port. W	Numb (10) Range=0-2147483647	1
Reserved Channels [srrezchanmap] This attribute is not used.	Text (38)	
User Label [sruserlabel] Use this field to add user information. W	Text (64)	
6400 Physical Port Parameters		
Access Name [c4_accname] The IOS account name for the NRP/NRP2 associated with this port. W	Text (32)	

Table A-23 Physical Port Profile (continued)

Attributes	Acceptable Values	Default Values
Access Password [c4_accpasswd] The IOS account password for the NRP/NRP2 associated with this port. W	Text (32)	
Enable Password [c4_enablepasswd] IOS enable password for the NRP/NRP2 associated with the physical port.	Text (32)	
NRP IP Address [srmgmtaddress] This the IP address for the NRP card. Do not use this attribute if you are using an NRP2 card.	Text (15)	
Redundant [c4_redundant] Indicates if there is a redundant physical port. NRP2 cards do not support redundancy.	Bool (5)	FALSE

Logical Port Profile

Object Name: C4lpLportProfile

OAF: C4lpLportProfile.oa

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Table A-24 Logical Port Profile

Attributes	Acceptable Values	Default Values
Common Attributes		
Name [sy_profname] This is the logical port profile name. W	Text (24)	
Customer [vpn] This is the customer name. W	Text (16)	
Domain [domain] This is the domain name. W	Text (16)	
Protocol [srprotocol] Specify the protocol. M	Text (10)	"ATM"

Table A-24 Logical Port Profile (continued)

Attributes	Acceptable Values	Default Values
Signalling Role [srsignallingrole] A DCE logical port represents the "network side" equipment. This logical port type supports all types of PVCs. A DTE is almost identical to the DCE logical port except for SVC applications. It assumes the role of the "user side" of the UNI signalling interface. W	Enum (3) "DTE" "DCE"	
NNI Enable [srnnienabled] You can enable or disable NNI for the logical port. W	Bool (5)	
Admin Status [sradminstatus] Specify the administrative status for the logical port. W	Enum (12) "Locked" "Unlocked" "ShuttingDown"	
Maximum Connections [srconnections] Specify the maximum number of connections for the logical port. For internal ports it is 2048. W	Numb (10) Range=0-2147483647	0
Class [srclass] The CPC class for this logical port object. R | A	Text (4)	"C4lp"
Resource Map [srrmmap] Resource model specific map. W	Numb (10) Range=0-21477483647	48
QOS [srqos] Specify the Quality of Service W	Text (32)	
Group [srgroup] Specifies the logical group membership. Allows several logical ports to be put in a common group as a pooled resource. W	Text (32)	
Priority [srpriority] The logical port usage priority. W	Numb (10) Range=0-2147483647	0
Multiple Service Ranges [srmultirange] Indicates if there are multiple ranges for the logical port. W	Bool (5)	

Table A-24 Logical Port Profile (continued)

Attributes	Acceptable Values	Default Values
Multiple Fabric Ranges [sremultirange] Indicates if there are multiple fabric ranges for the logical port. W	Bool (5)	
Multiple Reserved Ranges [srmultiresrange Indicated if there are multiple reserved ranges for the logical port. W	Bool (5)	
User Label [sruserlabel] Use this field to add user information. W	Text (64)	’" "
Service Map [srservmap] Map of supported service types. W	Text (32)	DDDDDDDDDD DDDDDDDDDD DDDDDDDDDD DD

Table A-24 Logical Port Profile (continued)

Attributes	Acceptable Values	Default Values
Bandwidth		
Incoming		
Maximum (kbits/s) [sraz_bandwidth] The maximum incoming bandwidth for the logical port. W	Numb (10) Range=0-2147483647	
Nominal Threshold (%) [sraz_cbnt] Specify the incoming committed bandwidth nominal threshold percentage. W	Numb (10) Range=0-2147483647	100
Provisionable (kbits/s) [sraz_cbw] The incoming committed bandwidth is auto-calculated based on the nominal threshold and bandwidth. W	Numb (10) Range=0-2147483647	0
Outgoing		
Maximum (kbits/s) [srza_bandwidth] The maximum outgoing bandwidth for the logical port. W	Numb (10) Range=0-2147483647	
Nominal Threshold (%) [srza_cbnt] Specify the outgoing committed bandwidth nominal threshold percentage W	Numb (10) Range=0-2147483647	100
Provisionable (kbits/s) [srza_cbw] The outgoing committed bandwidth is auto-calculated based on the nominal threshold and bandwidth W	Numb (10) Range=0-2147483647	0
6400 NRP Specific		
Routing [c4_routing] Specify whether to enable or disable routing. W	Bool (5)	
Tunneling [c4_tunneling] Specify whether to enable or disable tunneling. W	Bool (5)	
Multihopping [c4_multihop] Specify whether to enable or disable multihopping. W	Bool (5)	

Table A-24 Logical Port Profile (continued)

Attributes	Acceptable Values	Default Values
Host Name [c4_hostname] The host name for the NRP/NRP2 associated with the logical port. M | R	Text (32)	
IOS Version [c4_iosversion] Specifies the IOS version being used. M | R	Text (32)	
Maximum Internal Connections [c4_maxintpvcs] Specifies the maximum number of internal connections for the logical port. M	Numb (10) Range=0-2147483647	2048
Primary Radius Server [c4_rad_name1] Specifies the primary RADIUS server. W	Text (32)	
Backup Radius Server [c4_rad_name2] Specifies the backup RADIUS server W	Text (32)	

Cross Connection Profile

Object Name: C4vcPvcxProf

OAF: C4vcPvcxProf.oaf

Table A-25 Cross Connection Profile

Attributes	Acceptable Values	Default Values
Common Attributes		
Name [sy_profname] This is the cross connection profile name. W	Text (24)	
Customer [vpn] This is the customer name. W	Text (16)	
Domain [domain] This is the domain name. W	Text (16)	

Table A-25 Cross Connection Profile (continued)

Attributes	Acceptable Values	Default Values
Recovery Priority [srpriority] This is the recovery priority for NNI resiliency.The lower the value, the higher the priority; 0 having infinitely low priority, and 1 having the highest priority. M	Numb (10) Range=0-2147483647	0
UNI Recovery Priority [sruni priority] This is the recovery priority for UNI resiliency. The lower the value, the higher the priority; 0 having infinitely low priority, and 1 having the highest priority. W	Numb (10) Range=0-2147483647	0
Provider Service [srdestserv] This is the Provider Service. W	Text (32)	
ATM Lport Associations		
A Endpoint		
Enable Frame Discard [raa_frdisc] This attribute specifies whether to enable frame discard.	Bool (5)	
Z Endpoint		
Enable Frame Discard [raz_frdisc] This attribute specifies whether to enable frame discard.	Bool (5)	
ATM Attributes		
Circuit Type [ratype] This is the circuit type. It can be either a virtual circuit (VP) or virtual path (VP).	Enum (2) "VC" "VP"	
Class of Service [raqos] You can specify the class of service for ATM traffic. The class of service determines which traffic descriptor you can select. W	Enum (7) "CBR" "ABR" "UBR" "rt_VBR" "nrt_VBR"	
Fixed Round-Trip Time [ra_frtt] This attribute specifies the round-trip time in milliseconds.	Numb (8) Range=0-16700000	0
A to Z Direction		
Bandwidth (kbits/s) [sraz_bandwidth] This is the bandwidth consumed by the A endpoint for the AZ direction. M | W	Numb (10) Range=0-2147483647	
Primary logical port [sra_primtp] The original logical port that is being backed up by UNI resiliency (*nodename/portname*).	Text (44)	

Table A-25 Cross Connection Profile (continued)

Attributes	Acceptable Values	Default Values
Sustainable Cell Rate (cells/s) [raaz_scr] SCR is the maximum average cell transmission rate that is allowed over a given period of time on a given circuit. It allows the network to allocate sufficient resources for guaranteeing the network performance objectives are met. W		
Peak Cell Rate (cells/s) [raaz_pcr] PCR is the maximum allowed cell transmission rate. It defines the shortest time period between cells and provides the highest guarantee that network performance objectives (based on cell loss ratio) will be met. W	Numb (10) Range=0-2147483647	0
Minimum Cell Rate (cells/s) [raaz_mcr] MCR is the minimum cell rate, which is the minimum allocated bandwidth for a connection. W	Numb (10) Range=0-2147483647	0
Maximum Burst Size (cells) [raaz_mbs] MBS is the maximum number of cells that can be received at the PCR. This allows a burst of cells to arrive at a rate higher than the SCR. If the burst is larger than anticipated, the additional cells are either tagged or dropped. This parameter applies only to VBR traffic. W	Numb (10) Range=0-2147483647	0
CDVT (microseconds) [raaz_cdvt] Cell Delay Variation Tolerance establishes the time scale over which the PCR is policed. This is set to allow for jitter (CDV). W	Numb (10) Range=0-2147483647	0
Traffic Desc [raaz_tdtype] This is the traffic descriptor type which describes the specified traffic parameters for the service (for more information consult the *ATM Service Application Solutions Guide*). M | W	Enum (7) "None" "ABR_FC" "ABR_NFC" "CBR.1" "UBR.1" "UBR.2" "VBR.1" "VBR.2" "VBR.3" "Other"	
Z to A Direction		
Bandwidth (kbits/s) [srza_bandwidth] This is the bandwidth consumed by the Z endpoint for the ZA direction.	Numb (10) Range=0-2147483647	
Primary logical port [srz_primtp] The original logical port that is being backed up by UNI resiliency (*nodename/portname*).	Text (44)	

Table A-25 Cross Connection Profile (continued)

Attributes	Acceptable Values	Default Values
Sustainable Cell Rate (cells/s) [raza_scr] SCR is the maximum average cell transmission rate that is allowed over a given period of time on a given circuit. It allows the network to allocate sufficient resources for guaranteeing the network performance objectives are met. W		
Peak Cell Rate (cells/s) [raza_pcr] PCR is the maximum allowed cell transmission rate. It defines the shortest time period between cells and provides the highest guarantee that network performance objectives (based on cell loss ratio) will be met. W	Numb (10) Range=0-2147483647	0
Minimum Cell Rate (cells/s) [raza_mcr] MCR is the minimum cell rate, which is the minimum allocated bandwidth for a connection. W		
Maximum Burst Size (cells) [raza_mbs] MBS is the maximum number of cells that can be received at the PCR. This allows a burst of cells to arrive at a rate higher than the SCR. If the burst is larger than anticipated, the additional cells are either tagged or dropped. This parameter applies only to VBR traffic. W	Numb (10) Range=0-2147483647	0
CDVT (microseconds) [raza_cdvt] Cell Delay Variation Tolerance establishes the time scale over which the PCR is policed. This is set to allow for jitter (CDV). W	Numb (10) Range=0-2147483647	0
Traffic Desc [raza_tdtype] This is the traffic descriptor type which describes the specified traffic parameters for the service (for more information consult the *ATM Service Application Solutions Guide*). M | W	Enum (7) "None" "ABR_FC" "ABR_NFC" "CBR.1" "UBR.1" "UBR.2" "VBR.1" "VBR.2" "VBR.3" "Other"	

Table A-25 Cross Connection Profile (continued)

Attributes	Acceptable Values	Default Values
6400 NSP Specific		
A to Z		
Usage Parameter Control [c4az_upc] This is the usage parameter control type.	Enum (4) pass, tag, drop, none	
Cast Type [c4az_cast] This is the cast type.	Enum (9) p2mp-leaf, p2mp-root, p2p, none	
Z to A		
Usage Parameter Control [c4za_upc] This is the usage parameter control type.	Enum (4) pass, tag, drop, none	
Cast Type [c4za_cast] This is the cast type.	Enum (9) p2mp-leaf, p2mp-root, p2p, none	

NRP Internal PVC Profile

Object Name: C4cxPvcxProf

OAF: C4cxPvcxProf.oaf

Table A-26 NRP Internal PVC Profile

Attributes	Acceptable Values	Default Values
Common Attributes		
Name [sy_profname] This is the PVC profile name. This attribute is mandatory. M | C	Text (24)	
Domain [domain] This is the domain. W	Text (16)	
Customer [vpn] This is the customer name. W	Text (16)	
6400 NRP Specific		
Description [c4_description] This is a description of the interface. This attribute applies only on a point to point subinterface. For a multipoint subinterface, this attribute is fulfilled by upload only. W	Text (80)	

Table A-26 NRP Internal PVC Profile (continued)

Attributes	Acceptable Values	Default Values
CNX Type [c4_type] Specify the connection type. This attribute is used to determine what function the internal PVC will have. An NRP/NRP2 internal PVC can serve several roles. It can be a subscriber downlink involved in binding a subscriber stream to a tunnel, an ingress tunnel for multihop PPP aggregation, a service uplink with tunnel support, or a termination point for PPP sessions (PPPoA or PPPoE traffic) to be routed as IP packets to their destination. W	Enum (11) "subscriber" "service" "multihop_in" "idsl_sub" "pppip" "other"	
Service Name [c4_servicename] This is the service name key that associates a subscriber with a tunnel. This attribute is required if static binding is configured. W	Text (32)	
Sub-interface Type [c4_subiftype] Specify the type of sub-interface that this internal PVC will use. C	Enum (14) "multipoint" "tag-switching" "point-to-point"	
Bridge Group [c4_bgroup] Indicates a bridge group. A value of 0 indicates no bridge group for this subinterface. R	Numb (10) Range=0-2147483647	0
Circuit Type [ratype] This is the circuit type. It can be either a virtual circuit (VP) or virtual path (VP). C	Text (2)	"VC"
PVC mapping on IP (only for service CNX)		
Upper Layer Protocol [c4_protocol] This is the upper layer protocol for the PVC. C	Enum (14) "ip_broadcast" "ip_nobroadcast" "inarp" "none"	
VC-Class Attributes		
QoS Class [c4_qos] Specify the QoS class. W	Enum (9) "CBR" "UBR" "UBR+" "ABR" "rt_VBR.1" "rt_VBR" "nrt_VBR" "nrt_VBR.1" "Other"	

Table A-26 NRP Internal PVC Profile (continued)

Attributes	Acceptable Values	Default Values
PCR [c4_pcr] PCR is the maximum allowed cell transmission rate. It defines the shortest time period between cells and provides the highest guarantee that network performance objectives (based on cell loss ratio) will be met. W	Numb (10) Range=0-2147483647	365566
MCR [c4_mcr] MCR is the minimum cell rate, which is the minimum allocated bandwidth for a connection. W	Numb (10) Range=0-2147483647	0
NRP->NSP Bandwidth [c4_az_bandwidth] The bandwidth from the NRP/NRP2 to the NSP. C	Numb (10) Range=0-2147483647	0
NSP->NRP Bandwidth [c4_za_bandwidth] The bandwidth from the NSP to the NRP/NRP2. C	Numb (10) Range=0-2147483647	0
Encapsulation [c4_encapsulation] Specify the ATM adaptation layer (aal) and the encapsulation type. W	Enum (12) "aal5ciscoppp" "aal5autoppp" "aal5snap" "aal5mux"	
Virtual Template Attributes		
Authentication [c4_authenticate] This is the authentication type. When none is selected, no authentication will be performed. PAP will enable Password Authentication Protocol to authenticate the tunnel. CHAP will enable Challenge Handshake Authentication Protocol to authenticate the tunnel. W	Text (80)	
Unnumbered IP Address in VT [c4_vt_ipaddr] Specify the interface that you want IP enabled on without assigning a specific IP address (i.e. fastethernet 0/0/0). This attribute is used when configuring a virtual template to assign PPP features to a PVC. W	Text (40)	