CHAPTER 3

Manipulating WSA Physical Entities

This chapter explains how to create, modify, and use the physical entities available in the Cisco WSA Explorer application:

- Cards on page 3-2
- Locations on page 3-18
- Networks on page 3-24
- Nodes on page 3-29

Cards

The following sections give detailed information about the Cards entity:

- Cards—Description on page 3-2
- Cards—Create on page 3-3
- Cards—Modify on page 3-14
- Cards—Delete on page 3-16

Cards—Description

Cards are located in nodes in slots that have both front cards and rear cards. The physical ports on these cards are allocated to customer ports so that Connections and Net Links can be created between them.

Cards—Create

To create a new Card, select **Cards** from the network or location view and activate the **New...** right mouse menu from the list view popup menu, as shown in Figure 3-1, "Card List".

🚯 Cisco WSA - Networks						
<u>F</u> ile ⊻iew <u>T</u> ools <u>H</u> elp						
🕀 🔁 Americas	Slot	Front	Serial #	FWare Rev	. Status	Live 🔺
🗄 🚰 Anzacs	甌 1				LIVE	1999-0:
	B 2				LIVE	1999-0:
	B 3			Mou	Ē	1999-0:
BPX-London1	歐 4			new.		1999-0:
	■ 5	ASI-155		Refre	sh Ĕ	1999-0:
	6				LIVE	1999-0:
Ports	甌 7	BCC-3			LIVE	1999-0:
- Connections	6 400				LIVE	1999-0:
	6 400				LIVE	1999-0:
	B 10	BXM-E3-12			LIVE	1999-0:
	甌 11	BXM-T3-12			LIVE	1999-0:
e Net Links	B 12				LIVE	1999-0:
0	B 13				LIVE	1999-0;
						•
wsamain	pcu	ser	From: T	ODAY	To: TODA'	1.

Figure 3-1 Card List

An Add Card Wizard appears, as shown in Figure 3-2, "Add Card Wizard".



Figure 3-2 Add Card Wizard

Click **Next** to continue, and select a node to which to add a card or card pair, as shown in Figure 3-3, "Selecting a Node".

AXIS-London1-1 BPX-London1	Add Card Wizard	The new card must reside in an existing node. Use the network tree below to locate the node you wish to add the card to.
(Deals News) Connect		AXIS-London1-1 BPX-London1

Figure 3-3 Selecting a Node

Click **Next** to continue, and select either **Front Card**, **Rear Card**, or **Both** to indicate the slot position into which the card(s) will be inserted. Then select the card type(s) to insert. When inserting a card pair, selecting the front card type populates the rear card type list with cards that can safely be inserted with this front card type, as shown in Figure 3-4, "Selecting Card Types".



Figure 3-4 Selecting Card Types

Click **Next** to continue, and indicate the installation and cease dates for the card or card pair, as shown in Figure 3-5, "Selecting End Dates".

Add Card Wizard	The card installation date is when it becomes available for use
- A Barger	and the cease date is when it is no longer available.
	Select an installation and cease date for the card.
	Installation Date : Cease Date : March I 1999 Cecember 2037 C
	SMTWTFS SMTWTFS 123456 12345
Paris and	7 8 9 10 11 12 13 6 7 8 9 10 11 12 14 15 16 17 18 19 20 13 14 15 16 17 18 19 14 15 16 17 18 19 20 13 14 15 16 17 18 19
I allow	21 22 23 24 25 26 27 20 21 22 23 24 25 26 28 29 30 31 27 28 29 30 31
	< Back Next > Cancel

Figure 3-5 Selecting End Dates

Click **Next** to continue, and select one ore more slots into which to insert the card or card pair, as shown in Figure 3-6, "Selecting a Slot".

Add Card Wizard	The card type you selected, on the dates you selected, can only be added to the following slots of the the node you selected. Select a slot (or slots) to add the card(s) to.	×
	Slot Type II FUNC III FUNC III 03 III FUNC III 04 III FUNC III 09 III FUNC III FUNC III FUNC III FUNC III FUNC III FUNC III FUNC	
	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel	22700

Figure 3-6 Selecting a Slot

Note Only slots that do not already have a card or card pair in them between the end dates selected are shown in this list. The list shown in Figure 3-6, "Selecting a Slot", does not display slots 5, 10, or 11 because they already have cards in them. This list does not display slots 7, 8, or 15 because they are of the wrong type.

The list shown in Figure 3-6, "Selecting a Slot", is also filtered by the general type of the card or card pair selected for insertion. If the card type selected is an Alarm card, only slots that can support such a card are displayed.

If there are no empty slots of the correct type during the dates selected, the list shown in Figure 3-6, "Selecting a Slot", could be empty. In this case you must modify the date range or choose a different card type to insert.

Click **Next** to continue and give the new card a reference string. If this card supports more than one port type, choose the card insertion template and a port type, as shown in Figure 3-7, "Setting Card Properties".

Figure 3-7 Setting Card Properties

Add Card Wizard	×
	The new card has a number of mandatory attributes that take the defaults shown below. To alter the default values modify the text or select alternative items from the lists, then click next to continue. Card Ref. : New Card Template Service System System Card System Yes Port Type ATM
	<back mext=""> Cancel</back>

Note If the card being added is programmable, that is it can take one of a number of port types, you will be required to select the desired port type from the port type list in this section of the Wizard.

Click **Next** to continue, and select the installation and cease projects, as shown in Figure 3-8, "Selecting Projects".

Add Card Wizard	The new card must be alloca installation and cessation.	ated to a network project for	X
	Select an installation Project : Installation Project : Default	Cease Project : Default	1
	, < <u>B</u> ack		22702

Figure 3-8 Selecting Projects

Click **Next** to continue, and set the status for the card(s), as shown in Figure 3-9, "Setting Card Status".





Click **Next** to continue, and review the card insertion summary, as shown in Figure 3-10, "Card Insertion Summary".

Add Card Wizard	To add a card with the following properties, click finish. To modify any of the card's properties, click back. Network : Europe Node : BPX-London1 Card Type(s) : Front : ASI-155 Rear : LM-20C3-SMF Slot Number(s) : 02 Insert Project : Default Cease Project : Default Install Date : 1999-03-08 Cease Date : 2037-12-31 Status : LIVE
	< <u>B</u> ack <u>Einish</u> <u>C</u> ancel

Figure 3-10 Card Insertion Summary

Press Finish to insert the card records.

When the cards are successfully inserted, you are asked if you wish to insert another card, as shown in Figure 3-11, "Add Another Prompt".

Figure 3-11 Add Another Prompt

Add Card	Wizard 🛛 🕅	
i)	Card Insertion was successful Would you like to add another card?	
C	Yes <u>N</u> o	22705

Press **Yes** to return to the Add Card Wizard, or press **No** to close the Wizard and return to the Card List.

Cards—Modify

To modify an existing Card, select **Cards** in the network or location view and activate the **Properties...** right mouse menu from the item menu, as shown in Figure 3-12, "Selecting a Card for Modification".

- 🗆 × Cisco WSA - Networks <u>File View Tools Help</u> 8 뚢 88 50 🔁 Americas Slot Front Serial # FWare Rev. Status Live + ٠ ÷ 🔁 Anzacs HE 1 LIVE 1999-03-🗄 🚡 Europe 2 ASI-155 LIVE 1999-03-🗄 📶 Nodes Delete 圖•3 LIVE 1999-03-🗄 📶 BPX-London1 甌 4 LIVE 1999-03-■ 5 LIVE 1999-03-Set Filter... 🕮 Cards 🔤 6 LIVE 1999-03-Ports 파 7 Properties.. LIVE 1999-03-🔍 Connections 🔤 8 🗐 LIVE 1999-03--🥏 Net Links 🔤 9 -LIVE 1999-03-🕮 Cards 🔤 10 BXM-E3-12 LIVE 1999-03-🥪 Ports LIVE 1999-03-🖦 11 BXM-T3-12 🖌 Connections **■**12 · 1999-03-🥏 Net Links LIVE 🔤 13 -LIVE 1999-03- 🔻 • F 8 27 wsamain pcuser From: TODAY To: TODAY

Figure 3-12 Selecting a Card for Modification

A Card Properties dialog appears, as shown in Figure 3-13, "Slot Properties".

Slot Properties	×
Position Card Type	Live Date : 1999-03-08
Front ASI-155	Cease Date : 2037-12-31
iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Status : LIVE
	FW Rev :
Card Ref : New Card	Release : 0
Template : System Card 💌	Serial No :
Install Project : Default	Inserted by : pouser
Cease Project : Default	Date: 1999-03-11
	y <u>C</u> ancel 10

Figure 3-13 Slot Properties

In the top left list view, select the position of the card that you want to modify.

Once you complete the settings for this Card, press **OK** to save the record and close the dialog. If you decide not to modify the properties, press **Cancel** to close the dialog.

Cards—Delete

To delete a Card, select **Cards** in the tree view and activate the **Delete...** right mouse menu from the item menu, as shown in Figure 3-14, "Selecting a Card for Deletion—Part 1".

📲 Cisco WSA - Networks _ 🗆 🗵 File View Tools Help 멶 ₽ -88 Co Front Serial # FWare Rev. Status Live + 🖆 Americas Slot ± ∰ Anzacs = ∰ Europe 65a 1 LIVE 1999-03-🔤 2 LIVE 1999-03-Delete Modes É •3 LIVE 1999-03-E-BPX-London1 區 4 LIVE 1999-03-🗄 🗂 Shelves/Feeders 酃 5 Set Filter... LIVE 1999-03-🔤 Cards 🔤 6 LIVE 1999-03-🥪 Ports Properties... 甌 7. LIVE 1999-03-Connections 🔤 8 -LIVE 1999-03-🥏 Net Links 🔤 9 LIVE 1999-03-👜 Cards 🔤 10 BXM-E3-12 LIVE 1999-03-🥪 Ports ė, 🖷 11 BXM-T3-12 LIVE 1999-03-Connections 12 画 -LIVE 1999-03al Net Links 甌 13 LIVE 1999-03- 👻 -• Þ 22708 pcuser From: TODAY To: TODAY wsamain

Figure 3-14 Selecting a Card for Deletion—Part 1

If the selected slot has both a front and a rear card in place, a card delete selection dialog appears, as shown in Figure 3-15, "Selecting a Card for Deletion—Part 2".

Figure 3-15 Selecting a Card for Deletion—Part 2

Select cards t	o delete		×
C Front	C Rear	Both	
<u>k</u>		ancel	22709

Select one or more cards to delete and press **OK** to delete them. Press **Cancel** if you decide not to delete them.

If you selected **OK**, a delete confirmation dialog appears. Press **Yes** to delete the Card(s); press **No** if you decide not to delete them.

Locations

The following sections give detailed information about the Locations entity:

- Locations—Description on page 3-18
- Locations—Create on page 3-18
- Locations—Modify on page 3-22
- Locations—Delete on page 3-23

Locations—Description

Locations are considered one of the two top level physical entities in WSA. Refer to Chapter 1, "Getting Started" for more information.

Locations are grouped by country and can be regarded as **virtual** if they relate to another physical location. A virtual location is a location in which ports are presented for sale to customers, but no physical equipment is located at that site.

Locations—Create

To create a new Location, select the **Locations** tool bar button and activate the **New...** right mouse menu from the list view popup menu, as shown in Figure 3-16, "Locations List".





New Location х Name : | Live: 1999-03-10 Cease : 2037-12-31 Class : Major • Country : Australia • Real Pop: True • Real Site : Auckland Ŧ GeoX: 📊 GeoY: 0 Logical X : 👩 Logical Y: 0 Comment : * Inserted by : Date : <u>Ο</u>Κ Apply Cancel 22711

A New Location dialog appears, as shown in Figure 3-17, "New Location".

Figure 3-17 New Location

Enter the new location name, and adjust its end dates and class, if required. Correctly set the country that the location is in. Then the location appears in the appropriate section of the location tree view.

If the location is considered a virtual point of presence (POP), select False for the Real Pop property and select the associated real pop. The real site drop-down list box is disabled when the location is regarded as real itself.

Entering actual real and logical coordinates data is optional, as is supplying a comment.

Once you complete the settings for this Location, press **OK** to save the record and close the dialog. If you decide not to create this new Location, press **Cancel** to close the dialog.

Note The first time that a location is created in WSA, the previous method cannot be used, because the top level entities in the location tree view are countries, which can only be created in the WSA System Administration Client.

To create the first location in WSA, use the **File->New->Location** menu, as shown in Figure 3-18, "Selecting the New Location Menu".



Figure 3-18 Selecting the New Location Menu

A New Location dialog appears, as shown in Figure 3-17, "New Location".

Locations—Modify

To modify an existing Location, select **Locations** in the tree view and activate the **Properties...** right mouse menu from the item menu, as shown in Figure 3-19, "Selecting a Location for Modification".

- 🗆 × Cisco WSA - Locations <u>File View Tools H</u>elp ₽ 뚢 -🖃 📢 Australia Location Real POP Class Live Cease Comr 🗄 🚺 Locations Melbourn 1999-03-08 2037-12-31 Delete 🗄 🚺 Melbourne Sydney 1999-03-08 2037-12-31 🗄 🚺 Sydney 📜 Wollongo 1999-03-16 2037-12-31 🗄 🚺 Wollongong 🛰 Connections a Net Links Properties. 🗄 📢 Canada 🗄 🦪 France 🗄 📢 Germany 🗄 📢 İtaly 🗄 📢 New Zealand 🗄 📢 United Kingdom 🗄 🦪 United States 2 From: TODAY To: TODAY N wsamain pcuser

Figure 3-19 Selecting a Location for Modification

A Location Properties dialog appears, as shown in Figure 3-20, "Location Properties".

Location Properties	\mathbf{X}
Name : Melbourne	-
Live : 1999-03-08	
Cease : 2037-12-31	
Class : Major	
Country : Australia	
Real Pop : True	
Real Site : Auckland	
GeoX: 0 GeoY: 0	
Logical X : 0 Logical Y : 0	
Comment :	
Inserted by : pouser	
Date : 1999-03-08	
<u>OK</u> <u>Apply</u> <u>C</u> ancel	1.10

Figure 3-20 Location Properties

Once you complete the settings for this Location, press **OK** to save the record and close the dialog. If you decide not to modify the properties, press **Cancel** to close the dialog.

Locations—Delete

Note This version of Cisco WSA does not allow deletion of locations.

Networks

The following sections give detailed information about the Networks entity:

- Networks—Description on page 3-24
- Networks—Create on page 3-25
- Networks—Modify on page 3-27
- Networks—Delete on page 3-28

Networks—Description

Networks are the top level physical entity in WSA (refer to Chapter 1, "Getting Started,").

Networks—Create

To create a new Network, select **Networks** from the tree view and activate the **New...** right mouse menu from the list view popup menu, as shown in Figure 3-21, "Network List".

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<u>F</u> ile ⊻iew <u>T</u> ools <u>H</u> elp				
5 g & 2		Ð		
🕀 🔁 Americas	Netv	work No	des Type	Operator
Europe	<u></u> B⇒∧	mericas 0	Cisco BPX/IGX	Anglo Oz American Pty Ltc
	B E	urope 0	Cisco BPX/IGX	Anglo Oz American Pty Ltc
	4		New Refresh	
wsam	ain p	pcuser	From: TODAY	To: TODAY

Figure 3-21 Network List

New Network X Name : Reference : Live Date : 1999-03-08 Cease Date : 2037-12-31 Operator : Anglo Oz American Pty Ltd • Type : Cisco BPX/IGX • Comment : 22716 <u>0</u>K Cancel Apply

Figure 3-22 New Network

The network must be given a name and a reference string.

The live and cease dates determine the default live and cease dates for nodes (and hence, for cards) created within this network and can be adjusted as required.

A New Network dialog appears, as shown in Figure 3-22, "New Network".

Once you complete the settings for this Network, press **OK** to save the record and close the dialog. If you decide not to create this new Network, press **Cancel** to close the dialog.

Networks—Modify

To modify an existing Network, select **Networks** in the tree view and activate the **Properties...** right mouse menu from the item menu, as shown in Figure 3-23, "Selecting a Network for Modification".

Figure 3-23Selecting a Network for Modification



A Network Properties dialog appears, as shown in Figure 3-24, "Network Properties".

Network Prope	erties 🔀	
Name :	Anzacs	
Reference :	Anzacs	
Live Date :	1999-03-08	
Cease Date :	2037-12-31	
Operator :	Anglo Oz American Pty Ltd	
Type :	Cisco BPX/IGX	
Comment :	Australia & New Zealand	
<u>0</u> K	Apply Cancel	22718

Figure 3-24 Network Properties

Once you complete the settings for this Network, press **OK** to save the record and close the dialog. If you decide not to modify the properties, press **Cancel** to close the dialog.

Networks—Delete

Note This version of Cisco WSA does not allow deletion of networks.

Nodes

The following sections give detailed information about the Nodes entity:

- Nodes—Description on page 3-29
- Nodes—Create on page 3-30
- Nodes—Modify on page 3-33
- Nodes—Delete on page 3-35

Nodes—Description

Nodes are the second level physical entity in WSA (refer to Chapter 1, "Getting Started,") and are both *in* networks and *at* locations.

Nodes—Create

To create a new Node, select **Nodes** from either the network or location tree view and activate the **New...** right mouse menu from the list view popup menu, as shown in Figure 3-25, "Node List".

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<u>F</u> ile <u>V</u> iew <u>T</u> ools <u>H</u> elp					
88 S B C 🛅					
🖅 🚡 Americas	Node	Type SubType	Location	Ref.	Sta
Anzacs	AXIS-Auckland1-1	AXIS 16	Auckland	Unused	LIV
	📼 AXIS-Sydney1-1	AXIS 16	Sydney	Unused	LIN
	IIII BPX-Auckland1	BPX 15	Auckland	Unused	LIN
	IIII BPX-Melbourne1	BPX 15	Melbourne	Unused	LIN
⊞ BFX-Sydney1 ■ Contr	IIII BPX-Sydney1	BPX 15	Sydney	Unused	LIV
Ports	4	New Refrest			F
I					
wsamain	pcuser	From: TODAY	To: TOD	AY	

Figure 3-25 Node List

A New Node dialog appears, as shown in Figure 3-26, "New Node".

New Node	×
Details Name : Live Name : Reference : Unused IP Address : [127.0.0.0 SW Rev A : Undefined	Location Network : Anzacs Region : Anzacs Location : Auckland
SW Rev B : Undefined Owner :None Project : Default CoOrds X : O Comment : Comment	Access Type Type : AxIS Subtype : 16 Build : AxIS - Default
Routing Node / Parent Creation By : Date : 1999-03-08	Status Live Date : [1999-03-08] Cease Date : [2037-12-31] Status : [CANCELLED]
	oly <u>C</u> ancel

Figure 3-26 New Node

The node must be assigned a name, as displayed in WSA, and a live name as used by the WSA control system. The live name must be the name by which this node is managed in SV+. The node name can be the same as the live name, but can be expanded to be more readable if the live name is abbreviated.

The nodes IP address should be set if you wish to telnet to the node from the WSA Explorer Client.

The network of which the node will be a part, must be set, as must the region and location. Once created, the network and location cannot be changed. Once you complete the settings for this Node, press **OK** to save the record and close the dialog. If you decide not to create this new Node, press **Cancel** to close the dialog.

If the node is a feeder device (AXIS Shelf), you can press **Apply** to create the node in the database. Then press the ... button in the **Routing Node / Parent** section to define which routing node will control this feeder device, as shown in Figure 3-27, "Selecting a Parent / Router Node".

Figure 3-27 Selecting a Parent / Router Node

Select Node	D	×
BPX-Melbourne1	<u>0</u> K	
	<u>C</u> ancel	
<u> </u>		0200

Select a parent node and press **Apply** to return to the node properties dialog, or press **Cancel** if you decide not to allocate a parent at this time.

Nodes-Modify

To modify an existing Node, select **Nodes** in the tree view and activate the **Properties...** right mouse menu from the item menu, as shown in Figure 3-28, "Selecting a Node for Modification".

- 🗆 × Cisco WSA - Networks <u>File View T</u>ools <u>H</u>elp 뚢 8 86 -=1 🔁 Americas Node Type SubType Location Ref. S ÷ 🖻 🔂 Anzacs 📟 AXIS-Auckland1-1 AXIS 16 Auckland Unused LĹ 🗄 📶 Nodes AXIS-Melbourne1-1 10 Melbourne Unused - LI 🗄 📶 BPX-Auckland1 Delete 📟 AXIS-Sydney1-1 Sydney Unused LI 🗄 📶 BPX-Melbourne1 Connect... III BPX-Auckland1 Auckland Unused LI 🗄 📶 BPX-Sydney1 BPX-Melbourne1 Melbourne Unused Ll 👜 Cards III BPX-Sydney1 Sydney Unused LI 🥪 Ports **Properties** 🖥 Connections 🥏 Net Links 🗄 🔁 Europe 2722 From: TODAY To: TODAY wsamain pcuser

Figure 3-28 Selecting a Node for Modification

A Node Properties dialog appears, as shown in Figure 3-29, "Node Properties".

Name : AXIS Molbourno1 1 Live Name : AXIS-Melbourno1- Reference : Unused IP Address : 127.0.0.0	Network : Anzacs
SW Rev B : Undefined SW Rev B : Undefined Owner : Engineering - Australia Project : Default CoOrds X : O CoOrds Y : O Comment : Comment	Class Access Type Type : AXIS Subtype : 16
Routing Node / Parent BPX-Melbourne1 Creation By : pcuser Date : 1999-03-08	Status Live Date : [1999-03-08] Cease Date : [2037-12-31] Status : [LIVE]

Figure 3-29 Node Properties

Once you complete the settings for this Node, including modifying the routing node, press **OK** to save the record and close the dialog. If you decide not to modify the properties, press **Cancel** to close the dialog.

Nodes—Delete

To delete a Node, select **Nodes** in the tree view and activate the **Delete...** right mouse menu from the item menu, as shown in Figure 3-30, "Selecting a Node for Deletion".



Figure 3-30 Selecting a Node for Deletion

A delete confirmation dialog appears. Press **Yes** to delete the Node; press **No** if you decide not to delete it.

Note If any card in the node has a physical port that is allocated to a customer port (refer to the section Customer Ports on page 4-7), you will not be allowed to delete the node. A dialog then appears like the one in Figure 3-31, "Customer Ports Exist on Node".

Figure 3-31 Customer Ports Exist on Node

