



Getting Started With Cisco ANA Manage

This chapter describes the Cisco ANA Manage working environment and how to access Cisco ANA Manage tools and commands. It also provides instructions for launching, and overviews operating Cisco ANA Manage application-using menu and toolbar options.

The Cisco ANA Manage window provides access to all Cisco ANA Manage's functionality.

- Starting Cisco ANA Manage—Describes how to open the Cisco ANA Manage window.
- The Cisco ANA Manage Window—Briefly describes the Cisco ANA Manage window, including the tree pane and workspace.
- Cisco ANA Manage Window, Menus and Toolbars—Provides a detailed description of the information displayed in the Cisco ANA Manage window, the menus, and toolbars.
- Logging Out—Describes how to log out of Cisco ANA Manage.

Starting Cisco ANA Manage

Cisco ANA Manage is password protected to ensure security, and is only available to users with administrator privileges. Before you start working with Cisco ANA Manage, make sure you know the username, password and the Cisco ANA gateway IP address or hostname that you require.



If a user does not log into the Cisco ANA Manage, NetworkVision or EventVision applications during a specified period of time (the default is one month) the user's account will be locked automatically. The default period can be changed in the Cisco ANA Registry. The period of time is measured from the time the user last logged out of any of the Cisco ANA client applications. For information about unlocking a user, see User's Rights, page 10-9.

To start Cisco ANA Manage:

Step 1 From the Start menu, choose the **Programs** folder, then **Cisco ANA/Cisco ANA Manage**. The Cisco ANA Manage - Login dialog box is displayed.

It is recommended that you change the login password after logging in for the first time.

The last four Cisco ANA gateways to which the user logged in successfully are displayed in the **Host** dropdown list. The list is displayed in chronological order with the most recent gateway displayed at the top of the list.

Step 2 Enter the Cisco ANA gateway information in the **Host** field, as an IP address or hostname,

or

Choose a Cisco ANA gateway from the Host dropdown list.

Note	

• The gateway IP address or hostname that was used when you last logged in is automatically displayed at the top of the **Host** dropdown list.

<u>Note</u>

Make sure that you use the leading IP address (the IP address on which the Cisco ANA gateway was configured) when logging into the system.

Step 3 Click **OK**. The Cisco ANA Manage window is displayed. The username and host information is displayed in the window title.

Note

Some of the workspaces in the Cisco ANA Manage window may appear empty when the application is opened for the first time.

The Cisco ANA Manage Window

The Cisco ANA Manage window is displayed below.

Figure 2	2-1 Cisco ANA Manage	Windo	N				
	ANA Servers ANA Gateway 192.168.2.166 ANA Unit 192.168.2.166 ANA Unit 192.168.2.185 AVM 100 AVM 100 AVM 500_930602377 AVM 500_930602132 Global Settings Client Licenses DB Segments Message of the Day Polling Groups Protection Groups Scopes Topology Users Workflow Engine	ID: Up Since VNEs Find: Key S_3 R_3 R_3 R_3 R_3 R_3 R_3 R_3 R_3 R_3 R	700 : 12:27:01 13/ 12:27:01 13/ 10:20.2.6 10.202.1.3 10.222.1.3 10.222.1.10 10.202.2.4 10.222.1.1 10.222.1.5 10.222.1.2 10.200.2.7 III	05/06 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Status : Max. Memory : Max. Memory : Maintenance false	Up 256 Up Since 12:27:08 13/ 12:27:08 13/ 12:27:08 13/ 12:27:08 13/ Actions Delete Propertie 12:27:48 13/	
	Marchar						ч
1	Menu bar						
2	Toolbar						
3	Tree pane						
4	Shortcut menu						
5	Workspace						
-							

6

Status bar

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The Cisco ANA Manage window includes:

- Tree Pane
- Cisco ANA Manage Window Workspace
- The Status Bar, displays the memory usage of the application process and connection status.

Dragging the borders in the window adjusts the size of each area.

Tree Pane

The tree pane displays a tree-and-branch representation of the Cisco ANA Manage folders. The branches can be expanded and collapsed in order to display and hide information as needed.

Cisco ANA Manage enables the user to manage and maintain information in Cisco ANA using the following branches in the Cisco ANA Manage window:

- ANA Servers—Enables the administrator to manage information relating to the Cisco ANA gateway, and Cisco ANA units, including the autonomous virtual machines (AVM) and the virtual network elements (VNE). This includes viewing a list of units, adding, editing and removing AVMs and VNEs, viewing VNE and AVM properties, starting and stopping AVMs and VNEs, and moving VNEs to maintenance mode. The ANA Servers branch includes the ANA gateway and AVM sub-branches. See ANA Servers Branch, page 2-7.
- Global Settings—Includes the Client Licenses, DB segments, Message of the Day, Polling Groups and Protection Groups sub-branches. The Global Settings branch enables the administrator to:
 - Install and manage client licenses.
 - View a table describing the storage allocated for all the database segments. See DB Segments Branch, page 2-21.
 - Manage the service disclaimer (message of the day). See Managing Client Licenses, page 7-1.
 - Manage the polling groups to be used by a group of devices. The administrator can define a few polling groups, and the devices will then be polled according to the polling group. Every polling group has a different set of polling intervals. See Managing Polling Groups, page 7-5.
 - Manage and change the default setup of the units by customizing protection groups (clusters) and then assigning units to these protection groups. See Managing Protection Groups, page 7-10.

For more information, see Global Settings Branch, page 2-18.

- **Scopes**—Group a collection of managed network elements together in order to enable the user to view and manage the network elements based on the user's role. See Scopes Branch, page 2-27.
- Topology—Manage topology-related parameters, namely, the static links between the devices. See Topology Branch, page 2-30.
- Users—Define and manage user accounts. See Users Branch, page 2-32.
- Workflow Engine—Manage workflow templates and running workflows in runtime. See Workflow Engine Branch, page 2-34.

Click on a branch in the tree pane to view information relating to the selected branch in the workspace. Right-click on a branch in the tree pane to open a shortcut menu to perform various functions.

The following icons are displayed in the Cisco ANA Manage window:

Branch	lcon	Description
6		ANA servers branch
	Ŷ	Cisco ANA gateway
	<u></u>	Cisco ANA units
		Cisco ANA redundant unit
		AVMs (VNE)
		Global Settings branch
	<u>í</u>	DB segments
	Í,	Client licenses
		Message of the day
	Ċ	Polling groups
		Protection groups
F		Scopes
P		Topology
<u>,</u>		Users
5		Workflow engine
	5	Templates
		Workflows

Table 2-1Cisco ANA Manage Window Icons



The menus and toolbar are context sensitive; the options vary depending on your selection in the tree pane and the workspace.

Cisco ANA Manage Window Workspace

The workspace pane displays the Cisco ANA Manage information according to the branch selected in the tree pane. The workspace is divided into two parts. The upper pane displays the properties of the element that is selected in the tree pane; the table in the lower pane displays its nested children.

Note

Use the Ctrl key when selecting multiple rows in a table is displayed in the workspace.

The status bar displays the number of selected rows and the total number of rows in the table, for example, 6/6 Selected. It also displays the location of the selected rows in the table, for example, Line 2.

Table Toolbar

Whenever a table forms part of the workspace, the same toolbar is displayed, no matter which branch is selected in the tree pane.

	Export to CSV —Save the current working environment as a file in Cisco ANA. See Exporting the Table To a File, page 4-5.							
2↓	Sort Table Values —Sort the information displayed in the table, for example, according to status or IP address.							
	Filter —Define a filter on the information displayed in the table of the workspace using the Filter dialog box. See Filtering Information, page 4-2.							
	NoteWhen a filter is applied the Set Selection Filter button and the Rewind All option under the Previous Selection Filter buttons are activated.							
	Set Selection Filter —Apply filters to the selected line or lines.							
	Note When you choose one or multiple lines in a table, the Previous Selection Filter button is activated.							
-	Previous Selection Filter—Undo the last applied filter selection.							
2	Rewind All —Undo all previous applied filter selections, and return all the originally displayed data to the table displayed in the workspace.							
	Note This option is only activated when a filter is applied.							
2	Opens the Cisco ANA Manage online help.							

Table 2-2Table Toolbar Tools

For details about choosing lines and applying filters, see Filtering Information, page 4-2 and Setting Selection Filters, page 4-3.

The **Find** field is used to search for information relating to the branch selected in the tree pane. See Finding Text In a Table, page 4-2.

Cisco ANA Manage Window, Menus and Toolbars

This section provides a detailed description of the information displayed in the Cisco ANA Manage window depending on the branch selected, the menus, and the toolbars.

For specific information about each branch, refer to:

- ANA Servers Branch
- ANA Server Entities Branch, including the ANA gateway and ANA units
- AVM Branch
- Global Settings Branch
- Scopes Branch
- Topology Branch
- Users Branch
- Workflow Engine Branch

ANA Servers Branch

Cisco ANA Manage maintains a list of all the servers defined in the system. The ANA Servers branch is used to add and remove unit servers.

You can expand this branch to view a list of the units, gateway and AVMs. Each gateway, unit and AVM has its own sub-branch. The ANA Servers branch (and associated sub-branches) is used to manage information relating to the AVMs and VNEs contained in the units.



AVMs and VNEs should reside on a unit (as a common configuration) but they can also reside on a gateway.

The ANA Servers branch is displayed below.

M Cisco ANA Manage - root@192.168.2.166							
File Tools Help							
New Properties							
🖃 🔂 DNA Servers		ervers					
	Find :						
AVM 100		IP Address	Status	Up Since	Physical Memory	Used Memory	Allocated Memory
avm500930602379 avm700930602132 avm700930602132 avm900930602132	ŵ `	192.168.2.166	Up	14:56:26 17/05/06	2.0G	1596M	1852M
	🖆 🔪	192.168.2.185	Up	15:00:51 17/05/06	2.0G	828M	828M
 	<			INI			
							Line 1 (Size 2)
					Memory:	6.%	Connected

The ANA Servers branch contains the following sub-branches:

- ANA Server Entities Branch
- AVM Branch

For more information about the ANA Server menu and toolbar options:

- ANA Servers Branch Menus
- ANA Servers Branch Toolbar

The workspace area displays a list of all the gateway and units and their status. Clicking on a column heading in the table in the workspace sorts the units in ascending or descending order according to the selected column.



Any changes that are made to the ANA Servers branch are saved automatically and registered immediately in Cisco ANA.

The following columns are displayed in the table in the workspace:

- IP Address—The IP address of the units, and gateways as defined in Cisco ANA Manage.
- **Status**—The status of the unit, as follows:
 - Up—The unit is up.
 - **Down**—The unit is down.
 - Unreachable—The unit cannot be reached.
- Up Since—The date and time when the unit was last loaded.
- Physical Memory—The physical memory of the unit.
- Used Memory—The memory being used by the unit.

- Allocated Memory—The amount of memory allocated to the unit. Allocated memory is the sum of all the memory settings for all the AVMs.
- Protection Group—The protection group to which the unit has been allocated.
- **AVM HA**—The unit is enabled for high availability (**true**) or disabled (**false**). By default this option is enabled for high availability.

For more information about the ANA Servers branch, see Chapter 5, "Managing Cisco ANA Units".

ANA Servers Branch Menus

This section provides a description of each option available in the menus when the ANA Servers branch is selected. The following menus are available:

- File Menu
- Tools Menu
- Help Menu
- Tree Pane Menu
- Workspace Shortcut Menu

File Menu

The File menu is displayed.

New ANA Unit

Creates a new unit.

Exit

Exits Cisco ANA Manage. See Logging Out, page 2-39.

Tools Menu

The Tools menu is displayed.

Change User Password

Enables the user to change the password used when logging into the client application suite. The change will take effect the next time the user logs into the application. The Tools menu option is the same throughout the application.

Help Menu

The Help menu is displayed.

The Help menu enables the user to access online help about the application and to also display application information, for example, the version number. The Help menu options are the same throughout the application.

Tree Pane Menu

When the user right-clicks on the ANA Servers branch the menu is displayed.

New ANA Unit

The user can add a new unit to the servers.

Workspace Shortcut Menu

When the user right-clicks on a selected unit the following shortcut menu (and sub-menu, when required) options are displayed.

New AVM

Adds an AVM to the selected unit. See Creating AVMs, page 6-1.

Properties

Displays the ANA Unit Properties dialog box. This dialog box lists the properties of the selected unit and indicates its status. See Editing Cisco ANA Unit Properties, page 5-4.

Delete

Deletes the selected unit.

Move VNEs

Move a VNE between AVMs. Actions can be performed on a single VNE or multiple VNEs.

ANA Servers Branch Toolbar

The ANA Servers branch contains the following toolbar options:

Table 2-3	ANA Servers Branch Tools
🐴 New)	Adds a new unit to the Cisco ANA server.

For more information about the ANA Servers branch, see Chapter 5, "Managing Cisco ANA Units".

ANA Server Entities Branch

The ANA Server Entities sub-branch includes the **ANA Gateway** and **ANA Unit** sub-branches. All the options described here refer to both sub-branches.

The ANA Server Entities sub-branch enables the user to manage information relating to the AVMs and VNEs on a selected unit. These include:

- Adding, editing and removing an AVM.
- Switching manually to the standby unit.
- Viewing AVM properties.

- Moving AVMs.
- Starting and stopping AVMs and VNEs.
- Adding VNEs.

An example of the Cisco ANA Manage window when a ANA Servers Entity sub-branch is selected is displayed below.

Figure 2-3 ANA Servers Entity Sub-Branch

M Cisco ANA Manage - root@192.16	8.2.166						
File Tools Help							
New Properties	I						
 DNA Servers DNA Gateway 192.168.2.166 	IP Address	81	192.168.2.185	Status :	Up		
⊞	Up Since :		15:00:51 17/05/06	Physical M	lemory : 2.0)G	
AVM 100	Used Mem	ory :	828M	Allocated M	Memory : 82	8M	
 avm500930602379 avm700930602132 avm900930602132 	Protection	Group :	default-pg	AVM HA :	tru	e	
✿ avm900930602132 ■ 🛐 Global Settings	AVMs						
Global Settings Global Settings Scopes Topology Users Workflow Engine	Find :			1 🔽 🛙			
🔁 Users	ID	Status	Up Since		Max. Memory	Key	
🗉 🕞 🛛 Workflow Engine	100	Up	12:27:00 13/05	/06	60		
	500	Up	12:27:02 13/05	/06	256	avm50093060	02379
	700	Up	12:27:01 13/05	/06	256	avm70093060	02132
	900	Up	12:27:01 13/05	/06	256	avm90093060	02132
							Line 1 (Size 4)
	1				Memory:	6%	Connected

Each row in the table in the workspace enables the user to view the status of an AVM. The AVMs can be sorted in ascending or descending order by clicking on the column heading in the table.

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Note

Any changes that are made to the ANA Servers Entity sub-branch are saved automatically and registered immediately in Cisco ANA.

The following columns are displayed in the workspace table for the AVMs that are listed or running under the server entity:

- ID—The name of the AVM as defined in Cisco ANA and unique to the AVM, for example, AVM 18.
- **Status**—The status of the AVM, as follows:
 - Starting Up—When an AVM is started.
 - Up—The AVM is up.
 - Shutting Down—When an AVM is stopped.
 - Down—The AVM is down.
 - Unreachable—The AVM cannot be reached.
- Up Since—The date and time that the unit was last started.
- **Max Memory**—The maximum allocated memory size as defined when the AVM was created in Cisco ANA Manage. The default value is 256 MB.
- Key—The key of the AVM, which is unique to the system. By default the key is displayed as "AVM + ID + timestamp".

For more information about specific menu and toolbar options, see:

- ANA Server Entities Branch Menus
- ANA Server Entities Branch Toolbar

ANA Server Entities Branch Menus

This section provides a description of each option available in the menus when the ANA Server sub-branch is selected. The following menus are available:

- File Menu
- Tools Menu
- Help Menu
- Tree Pane Shortcut Menu
- Workspace Shortcut Menu

File Menu

The File menu is displayed.

New AVM

Adds an AVM to the selected unit. See Creating AVMs, page 6-1.

Properties

Displays the ANA Unit Properties dialog box. This dialog box lists the properties of the selected unit and indicates its status. See Editing Cisco ANA Unit Properties, page 5-4.

Exit

Exits Cisco ANA Manage. See Logging Out, page 2-39.

Tree Pane Shortcut Menu

When the user right-clicks on the ANA Server Entities sub-branch in the tree pane the following shortcut menu is displayed.

New AVM

Adds an AVM to the selected unit.

Properties

Displays the properties of the selected unit.

Switch

This option is available when high availability is enabled and is only available for units. Manually switch to the standby unit. For more information, refer to the *Cisco Active Network Abstraction High Availability User Guide*.

Delete

Deletes the selected unit.

Workspace Shortcut Menu

New VNE

Creates a VNE for the selected AVM. See Creating AVMs, page 6-1.



A new VNE cannot be added to the reserved AVMs 0-100.

Actions

Starts or stops an AVM. See Starting and Stopping AVMs, page 6-5.

Delete

Deletes an AVM from the server.



Reserved AVMs 0-100 cannot be deleted.

Move AVM

Move an entire AVM between units. See Moving AVMs, page 6-6.



Reserved AVMs 0-100 cannot be moved.

Properties

Displays the properties of the selected AVM.

ANA Server Entities Branch Toolbar

When the ANA Server Entities sub-branch is selected in the tree pane the following tools are displayed on the toolbar:

Table 2-4 ANA Server Entities Tools

New	Creates a new AVM in the selected unit or gateway.
Properties	Displays the server properties and status.
	Deletes the selected unit.
(A.A.)	Search for a AVM/VNE amongst the Cisco ANA servers.
	Note The Search Tool searches only on the selected unit and its sub-branches. It does not search all units.

For more information on the ANA Servers Entity sub-branch, see Chapter 6, "Managing AVMs and VNEs".

AVM Branch

The AVM sub-branch enables the user to manage information relating to the VNEs in a selected AVM. This includes:

- Adding, editing and removing a VNE.
- Viewing VNE or AVM properties.
- Deleting an AVM.
- Moving AVMs and VNEs.
- Starting and stopping VNEs or AVMs.
- Moving VNEs to maintenance mode.

An example of the Cisco ANA Manage window when the AVM sub-branch is selected is displayed below.

Figure 2-4 AVM Sub-Branch

M Cisco ANA Manage-root@192.16	8.2.166							X
<u>File T</u> ools <u>H</u> elp								
Se New Toperties	I							
 □ (5) DNA Servers ■ (2) DNA Gateway 192.168.2.166 	ID :	700	St	atus :	Up			
 	Up Since :	12:27:01 13/0	5/06 Ma	ax. Memory :	256			
AVM 100	Key :	avm7009306	502132					
avm700930602132	-VNEs							
avm900_930602132 Global Settings Scopes Topology Users Workflow Engine	Find :			<u>2</u>] 🔽 🔳 🛛	70			
Topology	Key	IP Address	Status	Maintenance	Up Since	SNMP	Telnet	
Users	S_3	10.200.2.6	Up	false	12:27:08 13/	true	false	
🗉 🗓 🛛 Workflow Engine	R_3	10.222.1.3	Up	false	12:27:08 13/	true	true	
	R_10	10.222.1.10	Up	false	12:27:35 13/	true	true	
	S_2	10.200.2.4	Up	false	12:27:36 13/	true	true	
	MAR	10.222.1.1	Up	false	12:27:41 13/	true	true	
	R_5	10.222.1.5	Up	false	12:27:41 13/	true	true	
	R_2	10.222.1.2	Up	false	20:34:25 13/	true	true	
	S_5	10.200.2.7	Up	false	12:27:48 13/	true	true	~
	<						>	
						Li	ne 1 (Size	8)
Stop AVM				Memor	y: 5%	Conr	nected	

When the user chooses the AVM sub-branch the workspace displays the properties of the AVM and a table with the list of VNEs.



No VNEs are displayed when a special AVM (for example, AVM 66) that belongs to the gateway is selected.

The following columns are displayed in the workspace table:

- **Key**—The unique key of the VNE.
- IP Address—The IP address of the device as defined in Cisco ANA Manage.

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- Status—The status of the VNE, as follows:
 - Starting Up—When a VNE is started.
 - **Up**—The VNE is up.
 - Shutting Down—When a VNE is stopped.
 - Down—The VNE is down.
 - Unreachable—Cisco ANA failed to access the VNE.
- Maintenance—Indicates whether the VNE is or is not in maintenance mode, namely, true or false.
- Up Since—The date and time that the VNE was last started.
- SNMP—Indicates whether this option is enabled or disabled on the VNE, namely, true or false.
- Telnet-Indicates whether this option is enabled or disabled on the VNE, namely, true or false.
- Element Class—Detects the VNE category, namely, Auto Detect, Generic SNMP, Cloud or ICMP.
- Element Type—The device type (manufacturer name), for example, Cisco 7204.
- Polling Group—The name of the customized polling group or it is blank if it is an instance.

For more information about VNEs, see Chapter 6, "Managing AVMs and VNEs".

For more information about AVM menu and toolbar options see:

- AVM Branch Menus
- AVM Branch Toolbar

AVM Branch Menus

This section provides a description of each option available in the menus when the AVM sub-branch is selected. The following menus are available:

- File Menu
- Tools Menu
- Help Menu
- Tree Pane Shortcut Menu
- Workspace Shortcut Menu

File Menu

The File menu is displayed.

New VNE

Adds a VNE to the selected AVM.



A new VNE cannot be added to the reserved AVMs 0-100.

Properties

Displays the properties of the selected AVM and its status.

Exit

Exits Cisco ANA Manage. See Logging Out, page 2-39.

Tree Pane Shortcut Menu

When the user right-clicks on the AVM sub-branch in the tree pane the following menu is displayed.

New VNE

Creates a VNE for the selected AVM. See Creating AVMs, page 6-1.



A new VNE cannot be added to the reserved AVMs 0-100.

Actions

Starts or stops an AVM. See Starting and Stopping AVMs, page 6-5.

Delete

Deletes an AVM from the server.



Reserved AVMs 0-100 cannot be deleted.

Move AVM

Move an entire AVM between units. See Moving AVMs, page 6-6.



Reserved AVMs 0-100 cannot be moved.

Properties

Displays the properties of the selected AVM.

Workspace Shortcut Menu

When the user right-clicks on a selected VNE in the table the following shortcut menu (and sub-menu, when required) options are displayed.

Actions

Enables the user to start and stop a VNE. In addition, the VNE can be moved to maintenance mode. Actions can be performed on multiple VNEs.

Delete

Deletes the selected VNE from an AVM.

Move VNEs

Move a VNE between AVMs. Actions can be performed on a single VNE or multiple VNEs.

Properties

Displays the properties of the selected VNE.

Table 2-5

AVM Tools

AVM Branch Toolbar

When the AVM sub-branch is selected in the tree pane the following tools are displayed on the toolbar:

New	Creates a new VNE in the selected AVM.
Properties	Displays the properties of the selected AVM.
	Deletes the selected AVM.
	Starts the selected AVM.
	Stops the selected AVM.
M	Search for a Cisco ANA AVM/VNE amongst all the servers.

When a VNE is selected in the table in the workspace the following tools are displayed on the toolbar:

Table 2-6	VNE Tools
Rew	Creates a new VNE in the selected AVM.
Properties	Displays the properties of the selected VNE.
	Deletes the selected VNE from an AVM.
	Starts the selected VNE.
	Moves the selected VNE to maintenance mode.
	Stops the selected VNE.
M	Search for an AVM/VNE amongst all the servers.

Table 2-6 VNE Tools

For more information on the AVM sub-branch, see Chapter 6, "Managing AVMs and VNEs".

Global Settings Branch

The Global Settings branch maintains system-wide settings, for example, polling and protection groups. Any changes that are made to the settings affect the configuration throughout the entire system.

The Global Settings branch includes the following sub-branches:

- Client Licenses Branch
- DB Segments Branch
- Message of the Day Branch
- Polling Groups Branch Menus and Toolbar
- Protection Groups Branch Menus and Toolbar

Client Licenses Branch

The Client Licenses sub-branch enables control and monitoring of the number of client connections over a limited or unlimited period of time as defined in terms of the client license. The Cisco ANA Manage window with the Client Licenses sub-branch selected is displayed below.

M Cisco ANA Manage - root@192.1	68.2.166						
File Tools Help Image: New Properties Image: New Image: New Properties Image: New </td <td>Client Licenses</td> <td>License Type</td> <td>Eicense Users</td> <td>Priority</td> <td>D User Count</td> <td>Client Type</td> <td>Creation Date</td>	Client Licenses	License Type	Eicense Users	Priority	D User Count	Client Type	Creation Date
 AVM 100 AVM 100 avm500-930602377 avm700_930602132 Global Settings Client Licenses DB Segments Message of the Day Polling Groups Protection Groups Scopes Topology Users Workflow Engine 	Unlimited	Fixed	root		0	app,bql	09/06/04 - 15:10:
							Line 1 (Size 1)
Stop AVM				Memo	ry: 6	·**	Connected

Figure 2-5 Client Licenses Sub-Branch

The following columns are displayed in the workspace table when the Client Licenses sub-branch is selected:

• **Expiration Date**—Date of the expiration of the license. The license can be for a limited or unlimited period of time.

- License Type—The license type:
 - **Fixed**—The number of installed users are identified by usernames or IP addresses or both. For example, 5 users with the usernames a, b, c, d and e.
 - or
 - Floating—The number of installed users operating concurrently (unspecified). For example, 5 users.
- License Users—The usernames and IP addresses of the users.
- **Priority**—Unavailable in this version.
- User Count—The number of users allowed to operate the client applications, as defined in terms of the license. The exact number of users is displayed if the number is limited or 0 indicates an unlimited number of users.
- Creation Date—The date when the license was implemented.
- **Client Type**—The applications to which the user is authorized to connect, namely, BQL and client applications.

For more information about:

- Menus options, see Client Licenses Branch Menus and Toolbar, page 2-19.
- Toolbar options, see Client Licenses BranchToolbar, page 2-20.

Client Licenses Branch Menus and Toolbar

This section provides a description of each option available in the menus when the Client Licenses sub-branch is selected. The following menus are available:

- File Menu
- Tools Menu
- Help Menu
- Tree Pane Shortcut Menu
- Workspace Shortcut Menu

File Menu

The File menu is displayed.

New License

Install a new license.

Properties

Displays the properties of the selected license.

Exit

Exits Cisco ANA Manage. See Logging Out, page 2-39.

Tree Pane Shortcut Menu

Right-click the Client Licenses sub-branch to display the shortcut menu:

New License

Install a new license.

Workspace Shortcut Menu

Right-click in the table in the workspace to display the following shortcut menu:

Delete

Deletes the selected license.

Properties

Displays the properties of the selected license.

Client Licenses BranchToolbar

When the Client Licenses sub-branch is selected in the tree pane the toolbar contains the following tools:

ER New	Install a new license.
Properties	Displays the properties of the selected license.
	Deletes the selected license.

Table 2-7Client Licenses Tools

For more information about client licenses, see Managing Client Licenses, page 7-1.

DB Segments Branch

The DB segments branch in Cisco ANA Manage displays a table describing the storage allocated for all database segments. An example of the Cisco ANA Manage window when the DB segments branch is selected is displayed below.

file Tools Help								
New Properties								
DNA Servers	-DB Segments-							
DNA Gateway 192.168.2.166 DNA Unit 192.168.2.185	Find :		🖹 🛃 🔽					
AVM 100 avm500930602379 avm700930602132	Name 🕂 🛆	Туре	Tablespace 🔝	Partition 🚬	Extent	Next	Bytes	
avm700930602132	AFFECTED_OID	INDEX PARTI	SHEER	23	24	0	1572864	^
avm900930602132	AFFECTED_PAR	INDEX PARTI	SHEER	23	23	0	1507328	
∃ 🕢 Global Settings	AFFECTEDSNC	TABLE PARTI.	SHEER	23	30	0	1966080	
Client Licenses	ALARMNOTIFICA	TABLE	SHEER	1	9	0	589824	
Message of the Day	ALARMTICKET	TABLE PARTI.	SHEER	6	22	0	1441792	
Polling Groups	ALARMTICKET	INDEX PARTI	SHEER	6	6	0	393216	
	ALARMTICKET_L.	INDEX PARTI	SHEER	6	7	0	458752	
Scopes	ALARMTICKET	INDEX PARTI	SHEER	6	8	0	524288	
 math Scopes math Topology math Disers math Disers math Disers 	ALARMTICKET	INDEX PARTI	SHEER	6	7	0	458752	
🖬 🔂 Workflow Engine	ALARMTICKET	INDEX PARTI	SHEER	6	9	0	589824	
	ALARMTICKET	INDEX PARTI	SHEER	6	10	0	655360	
	AUDITEVENT	TABLE PARTI.	SHEER	5	38	0	5439488	×
	<					-	>	
							Line 1 (Size 13	0)

Figure 2-6 DB Segments Branch

The following columns are displayed in the workspace table when the DB segments branch is selected:

- Name—Name of the segment.
- **Type**—Type of segment, for example, INDEX PARTITION, TABLE PARTITION, TABLE, CLUSTER, INDEX, ROLLBACK, DEFERRED ROLLBACK, TEMPORARY, CACHE, LOBSEGMENT and LOBINDEX
- Tablespace Name—Name of the table space containing the segment.
- Partition Count—Number of partitions.
- Extent Count—Number of extents allocated to the segment where the data is stored.
- Next Extent Size—Size in bytes of the next extent to be allocated to the segment.
- **Bytes**—Size of the segment in bytes.

Message of the Day Branch

The Message of the Day sub-branch enables the user to define a message (service disclaimer) that will be displayed when a user logs into client applications. An example of the Cisco ANA Manage window when the Message of the Day sub-branch is selected is displayed below.

M Cisco ANA Manage - root@192.168.2.166 File Tools Help Properties 6 DNA Servers Terms of Use Title: DNA Gateway 192.168.2.166 9 1 1 DNA Unit 192.168.2.185 Message: Ō AVM 100 avm500_-930602379 avm700_-930602132 Ō čě avm900_-930602132 🗆 🔊 Global Settings **Client Licenses** DB Segments Message of the Day Polling Groups Protection Groups Scopes Τοροίοαν Users Workflow Engine Save 📑 🛛 Stop AVM Memory: Connected

Figure 2-7 Message Of The Day Sub-Branch

The following areas are displayed in the workspace:

- **Title**—The title of the message which is displayed as the title of the dialog box. By default the title "Terms of Use" is displayed.
- Message—A free text message for the user. The message supports HTML format.

The following button is displayed in the workspace:

• Save—Saves the message so that it is displayed when the user logs into a client application.

For more information about the Message of the Day branch, see Customizing a Message of the Day, page 7-4.

<u>Note</u>

The **Abort** and **Continue** buttons are displayed in the message dialog box by default, so the message must relate to these actions. The user must accept (Continue) the service disclaimer otherwise the user will be unable to login.

Polling Groups Branch Menus and Toolbar

The Polling Groups sub-branch enables the user to manage polling groups, by categorizing a group of devices to be polled according to pre-set intervals. The Polling Groups sub-branch is displayed below.

M Cisco ANA Manage - root@192.168.2.166 File Tools Help 1 New ... Properties **I F** A DNA Servers 6 Polling Groups DNA Gateway 192, 168, 2, 166 Ξ DNA Unit 192.168.2.185 Find AVM 100 Polling Description æ/ avm500 -930602379 O avm700_-930602132 default avm900_-930602132 õ Test For Test 🗆 🔊 Global Settings Client Licenses DB Segments Message of the Day Polling Group Protection Groups P Scopes Topology Users Workflow Engine Line 1 (Size 2) Stop AVM Connected Memory:

Figure 2-8 Polling Groups Sub-Branch

The following columns are displayed in the workspace table when the Polling Groups sub-branch is selected:

- Polling Group—The polling group name defined by the user
- **Description**—A description of the polling group.

Any changes that are made to the Polling Groups sub-branch are saved automatically and registered immediately in Cisco ANA.

For more information about:

- Polling Group Menus
- Polling Groups Branch Toolbar

Polling Group Menus

This section provides a description of each option available in the menus when the Polling Groups sub-branch is selected. The following menus are available:

- File Menu
- Tools Menu

Note

- Help Menu
- Tree Pane Shortcut Menu
- Workspace Shortcut Menu

File Menu

The File menu is displayed.

New Polling Group

Creates a new polling group.

Properties

Displays the properties of the selected polling group.

Exit

Exits Cisco ANA Manage. See Logging Out, page 2-39.

Tree Pane Shortcut Menu

Right-clicking on the Polling Groups sub-branch displays the shortcut menu.

New Polling Group

Creates a new polling group.

Workspace Shortcut Menu

When the user right-clicks in the table in the workspace the following shortcut menu, is displayed.

Properties

Displays the properties of the selected polling group.

Delete

Deletes the selected polling group.



The default polling group must not be deleted.

Polling Groups Branch Toolbar

When the Polling Groups sub-branch is selected in the tree pane the toolbar contains the following tools:

Table 2-8 Polling Groups Tools

(Ö New)	Creates a new polling group.
Properties	Displays the properties of the selected polling group.
	Deletes the selected polling group.
	Note The default polling group must not be delete.

When a polling group is selected in the table in the workspace, clicking **Properties** on the toolbar displays the properties of the polling group in a Properties dialog box.

For more information about polling groups, see Managing Polling Groups, page 7-5.

Protection Groups Branch Menus and Toolbar

By default all the units in the Cisco ANA fabric belong to one big cluster. The Protection Groups sub-branch enables the administrator to change the default setup of the units by customizing protection groups (clusters) and then assigning units to these protection groups.

For more information, refer to the Cisco Active Network Abstraction High Availability User Guide.

The Cisco ANA Manage window with the Protection Groups sub-branch selected is displayed below.

Figure 2-9 Protection Groups Sub-Branch

M Cisco ANA Manage-root@192.168.2.166	
Elle Tools Help	
	: 📔 🛃 🔽 🐺 🚳
avii1000_950602577	e €∠ Description
Global Settings Client Licenses DB Segments Message of the Day Olling Groups Protection Groups	
 B Scopes P Topology O Users Workflow Engine 	
	Line 1 (Size 1)
Stop AVM	Memory: 5% Connected

The following columns are displayed in the workspace table when the Protection Groups sub-branch is selected:

- Name—The protection group name defined by the administrator.
- **Description**—A description of the protection group.

For more information about:

- Protection Group Menus
- Protection Groups Branch Toolbar

Protection Group Menus

This section provides a description of each option available in the menus when the Protection Groups sub-branch is selected. The following menus are available:

- File Menu
- Tools Menu
- Help Menu
- Tree Pane Shortcut Menu
- Workspace Shortcut Menu

File Menu

The File menu is displayed.

New Protection Group

Creates a new protection group.

Properties

Displays the properties of the selected protection group.

Exit

Exits Cisco ANA Manage. See Logging Out, page 2-39.

Tree Pane Shortcut Menu

Right clicking on the Protection Groups sub-branch displays the shortcut menu.

New Protection Group

Creates a new protection group.

Workspace Shortcut Menu

When the user right-clicks in the table in the workspace the following shortcut menu is displayed.

Delete

Deletes the selected protection group.



The default protection group must not be deleted.

Properties

Displays the properties of the selected protection group in a Properties dialog box.

Table 2-9

🗜 New..

Properties

Figure 2-10

m

Protection Groups Branch Toolbar

When the Protection Groups sub-branch is selected in the tree pane the toolbar contains the following tools:

For more information about protection groups, refer to the Cisco Active Network Abstraction High Availability User Guide.

The default protection group must not be deleted.

Displays the properties of the selected protection group.

Scopes Branch

The Scopes branch enables the administrator to group a collection of managed network elements together in order to enable the user to view and manage the network elements based on the role granted to the user for the scope. For more information on the Scopes branch, see Chapter 10, "Managing Security".

The Scopes branch is displayed below.

Scopes Branch

Note

Protection Group Tools

Creates a new protection group.

Deletes the selected protection group.

M Cisco ANA Manage - root@192.168.	2.166
<u>File T</u> ools <u>H</u> elp	
New Properties	a M
DNA Servers DNA Gateway 192.168.2.166 DNA Unit 192.168.2.185 Global Settings Client Licenses DB Segments Message of the Day Polling Groups Protection Groups Topology Users Workflow Engine	Scope
	Memory: 7% Connected



154990

Each row in the table in the workspace displays the name of a scope as defined in Cisco ANA Manage. For more information about:

- Menu options, refer to following section.
- Scopes Branch Toolbar

Note

The menus and toolbar displayed in the Cisco ANA Manage window are context sensitive; the options vary depending on your selection in the tree pane and workspace.

Scopes Branch Menus

This section provides a description of each option available in the menus when the Scopes branch is selected. The following menus are available:

- File Menu
- Tools Menu
- Help Menu
- Tree Pane Shortcut Menu
- Workspace Shortcut Menu

File Menu

The File menu for the Scopes branch is displayed.

New Scope

Creates a new scope.

Properties

Displays the properties of the selected scope.

Exit

Exits Cisco ANA Manage. See Logging Out, page 2-39.

Tree Pane Shortcut Menu

When the user right-clicks on the Scopes branch in the tree pane the shortcut menu is displayed.

New Scope

Creates a new scope.

Workspace Shortcut Menu

When the user right-clicks in the table in the workspace the following shortcut menu is displayed.

Delete

Deletes the selected scope.

Properties

Displays the properties of the selected scope.

Note

The user cannot delete or edit the **All Managed Elements** scope in the table in the workspace. See Scopes, page 10-1.

Scopes Branch Toolbar

When the Scopes branch is selected in the tree pane the toolbar contains the following tools:

Table 2-10	Scopes Branch Tools
New	Creates a new scope. See Creating Scopes, page 10-5.
Properties	Displays the properties of the selected scope.
	Deletes the selected scope.

When a scope is selected in the table in the workspace, clicking **Properties** on the toolbar displays the properties of the selected scope in a Properties dialog box.

Topology Branch

The Topology branch enables the user to define static links between the network elements in order to supplement or override existing auto-discovered topology. The Cisco ANA Manage window with the Topology branch selected is displayed below.



M Cisco ANA Manage - root@192.168.2.166		
<u>File T</u> ools <u>H</u> elp		
New Properties		
 ► DNA Servers ► DNA Gateway 192.168.2.166 ► DNA Unit 192.168.2.185 ► AVM 100 ► avm500930602377 ► avm700930602132 ► Global Settings ► Client Licenses ► DB Segments ► Message of the Day ► Protection Groups ► Scopes ► Topology ► Users ► Workflow Engine 	Links Find : A Side	Z Side P-North#4: ATM4/0
	Me	emory: 7% Connected

The Topology branch displays all the static links defined in the system including the A side and Z side of the link.

For more information about:

- Menu options, see Topology Branch Menus, page 2-30.
- Toolbar options, see Topology Branch Toolbar, page 2-31.

Topology Branch Menus

This section provides a description of each option available in the menus when the Topology branch is selected. The following menus are available:

- File Menu
- Tools Menu
- Help Menu
- Tree Pane Shortcut Menu
- Workspace Shortcut Menu

File Menu

The File menu is displayed.

New Static Link

Creates a new static link.

Properties

This option is unavailable.

Exit

Exits Cisco ANA Manage. See Logging Out, page 2-39.

Tree Pane Shortcut Menu

When the user right-clicks on the Topology branch in the tree pane the shortcut menu is displayed.

New Static Link

Creates a new static link.

Workspace Shortcut Menu

When the user right-clicks in the table in the workspace the shortcut menu is displayed.

Delete

Deletes the selected static link.

Topology Branch Toolbar

The Topology branch contains the following tools:

Table 2-11Topology branch Tools

🏎 New	Opens the New Link dialog box enabling the user to create a link between two devices. See Creating a Static Link, page 8-1.
	Deletes the selected static link.

For more information about the Topology branch, see Chapter 8, "Managing Links".

Users Branch

The Users branch enables the administrator to define and manage user accounts. For more information about the Users branch, see Chapter 10, "Managing Security".

The Cisco ANA Manage window with the Users branch selected is displayed below.



M Cisco ANA Manage - root@192,168.2.166				
File Tools Help				
ONA Servers DNA Gateway 192168.2.166 DNA Unit 192168.2.185	-DNA Users	E 2		
AVM 100 avm500_+30602379 avm700930602132 avm700930602132	User Name 🕀 🛆	Description	Default Permission	Last Login
avm700930602132	Mark		Viewer	
avm900_930602132	root		Administrator	18/05/06 - 15:29:43
Image: Client Licenses DB Segments ■ Message of the Day Image: Polling Groups Image: Protection Groups Image: Protection Groups Image: Scopes Image: Topology Image: Users Image: Workflow Engine	<.	ШJ		Line 1 (Size 2)
		Memory	7%	

Each row in the table in the workspace displays the username and a description of the user.

The following columns are displayed in the workspace table:

- User Name—The username (unique) defined for the current client station.
- Description—A description of the user.
- **Default Permission**—The default permission of the user, namely, viewer to administrator. For example, a user with the default permission viewer can view maps and the Device List.

Note

The default permission only applies at an application level, namely, all the activities that are related to GUI functionality, not the activities related to devices. See Chapter 10, "Managing Security".

• Last Login—The date and time that the user last logged in.

For more information about:

- Users Branch Menus
- Users Branch Toolbar

<u>Note</u>

The menus and toolbar displayed in the Cisco ANA Manage window are context sensitive; the options vary depending on your selection in the tree pane and workspace.

Users Branch Menus

This section provides a description of each option available in the menus when the Users branch is selected. The following menus are available:

- File Menu
- Tools Menu
- Help Menu
- Tree Pane Menu
- Workspace Shortcut Menu

File Menu

The File menu is displayed.

New User

Creates a new user for the current client station.

Properties

Displays the properties of the selected user.

Exit

Exits Cisco ANA Manage. See Logging Out, page 2-39.

Tree Pane Menu

When the user right-clicks on the Users branch in the tree pane the shortcut menu is displayed.

New User

Creates a new user for the current client station.

Workspace Shortcut Menu

When the user right-clicks in the table in the workspace the shortcut menu is displayed.

Change Password

Displays the Set Password dialog box that enables the administrator to edit a user's password.

Delete

Deletes the selected username from the system.



The username **root** cannot be deleted.

Properties

Displays the properties of the selected user.

Users Branch Toolbar

The Users branch contains the following tools: .

Table 2-12	Users branch Tools
Pew	Opens the New User dialog box enabling the user to define a new user for the current client station.
Properties	Displays the properties of the selected user.
	Deletes the selected username from the system.

Workflow Engine Branch



The Workflow Engine branch is only visible if the Workflow option was purchased and installed.

The Workflow Engine branch enables the user to manage workflow templates and running workflows in runtime. The Workflow Engine branch includes the following sub-branches:

- **Templates**—Displays a list of the deployed workflow templates and enables the user to view the ٠ properties of the workflow template. For more information, refer to the section below.
- Workflows—Displays a list of the running or completed workflows and enables the user to view • and alter their current status. See Workflows, page 2-36.

Templates

The Templates sub-branch enables the user to:

- View a list of the deployed workflow templates.
- View the properties (attributes) of a workflow template. ٠
- Delete a workflow template. ٠

The Cisco ANA Manage window with the Templates sub-branch selected is displayed below.

News. Properties DNA Servers DNA Cateway 192.168.2.132 DNA Unit 192.168.2.146 AVM 100 AVM 100 -930602639 avm300930602639 Workflow Templates VF1 template WF1 template Olabal Settings WF1 template Client Licenses DB Segments DB Segments Message of the Day Polling Groups Protection Groups Scopes Topology Users Workflows	Ё 2↓ ▽ 幕 ▼ ▶ @
avma00_930602639 avma00_930602639 avma00_930602639 Global Settings Client Licenses DB Segments Message of the Day Polling Groups Protection Groups Scopes Topology Users Workflow Engine Templates	
Client Licenses DB Segments DB Segments Polling Groups Polling Groups Protection Groups Topology Users Workflow Engine Workflow Engine Templates	
Topology Users Workflow Engine	

Figure 2-13 Templates Sub-Branch

The table displays the names of the workflow templates (in the workspace), as defined using the Cisco Workflow Editor.

For more information about:

- Menu options, refer to the following section.
- Templates Branch Toolbar

Templates Branch Menus

This section provides a description of each option available in the menus when the Templates sub-branch is selected. The following menus are available:

- Tools Menu
- Help Menu
- Tree Pane Shortcut Menu
- Workspace Shortcut Menu

Tree Pane Shortcut Menu

Right clicking on the Templates sub-branch displays the shortcut menu.

Properties

Displays a list of the workflow templates available on the gateway.

Workspace Shortcut Menu

When the user right-clicks in the table in the workspace the shortcut menu is displayed.

Properties

Displays the properties (attributes) of the selected workflow template.

Delete

Deletes the selected workflow template.

Templates Branch Toolbar

When the Templates sub-branch is selected in the tree pane and a template is selected in the workspace, the toolbar contains the following tool:

Table 2-13 Templates Sub-Branch Tools



Deletes the selected workflow template.

For more information about workflows, refer to the *Cisco Active Network Abstraction Workflow User Guide*.

Workflows

The Workflows sub-branch enables the user to:

- View the list of running or completed workflows and the status of each.
- View the output of a workflow.
- Abort a workflow that is being processed or that has been completed, and initiate rollback.
- Delete a workflow.
- View the properties of a workflow.

The Cisco ANA Manage window with the Workflows sub-branch selected is displayed.

File Tools Help					
DNA Servers DNA Gateway 192.168.2.132 DNA Unit 192.168.2.146	Workflows Find:				
E 🔊 Global Settings	e	Name	State	Blocking Locks	Locks
前 Scopes 列 Topology しSers G Workflow Engine	10	Config-ADSL.template	Done		
Image: Figure 1 Workflow Engine Image: Figure 2 Templates Image: Figure 2 Workflows	11	Config-ADSL template	Done		Line 1 (Size 2)

Figure 2-14 Workflows Sub-Branch

The following columns are displayed in the workspace table when the Workflows sub-branch is selected:

- **ID**—A unique sequential number given to the workflow.
- Name—The name of the workflow, as defined using the Cisco Workflow Editor.
- State—The current status of the workflow, namely, Ready, Running, Done, or Aborted.
- Blocking Locks—The locks that this workflow is waiting to release.
- Locks—The locks that this workflow currently owns (is holding).

For more information about:

- Menu options, refer to the following section.
- Workflows Branch Toolbar

Workflows Menus

This section provides a description of each option available in the menus when the Workflows sub-branch is selected. The following menus are available:

- Tools Menu
- Help Menu
- Tree Pane Menu
- Workspace Shortcut Menu

Tree Pane Menu

Right clicking on the Workflows sub-branch displays the shortcut menu.

Properties

Displays a list of the scripts and their current status.

Workspace Shortcut Menu

When the user right-clicks in the table in the workspace the shortcut menu is displayed.

Show Output

View the output of the workflow.

Abort/Rollback

Aborts the workflow and performs rollback if the workflow is running, or if the workflow has already been completed it performs rollback.

Delete

Deletes the workflow from the database.

Note

A workflow can only be deleted from the database when it is **Done** or **Aborted**. It cannot be deleted while the process is still running.

Properties

Displays the properties (attributes) of the selected workflow, including its status.

Workflows Branch Toolbar

When the Workflows sub-branch is selected in the tree pane and a workflow is selected in the workspace, the toolbar contains the following tool:

Table 2-14 Workflows Sub-Branch Tools

Î	Deletes the workflow from the database.
---	---

For more information about workflows, refer to the *Cisco Active Network Abstraction Workflow User Guide*.

Logging Out

When the user has finished working with Cisco ANA Manage the user can log out of the application. Any changes that were made are automatically saved when logging out.

To log out of Cisco ANA Manage:

Step 1 From the File menu, choose Exit,

or

Click in the top right-hand corner to close the Cisco ANA Manage window.

A confirmation message is displayed.

Step 2 Click Yes. The Cisco ANA Manage window is closed.