ASDM Graphical User Interface

This chapter describes how to use the ASDM user interface.

About the ASDM User Interface

The ASDM user interface is designed to provide easy access to the many features that the ASA supports. The ASDM user interface includes the following elements:

- A menu bar that provides quick access to files, tools, wizards, and help. Many menu items also have keyboard shortcuts.
- A toolbar that enables you to navigate ASDM. From the toolbar you can access the **Home**, **Configuration**, and **Monitoring** panes. You can also get help and navigate between panes.
- A dockable left **Navigation** pane to move through the **Configuration** and **Monitoring** panes. You can click one of the three buttons in the header to maximize or restore this pane, make it a floating pane that

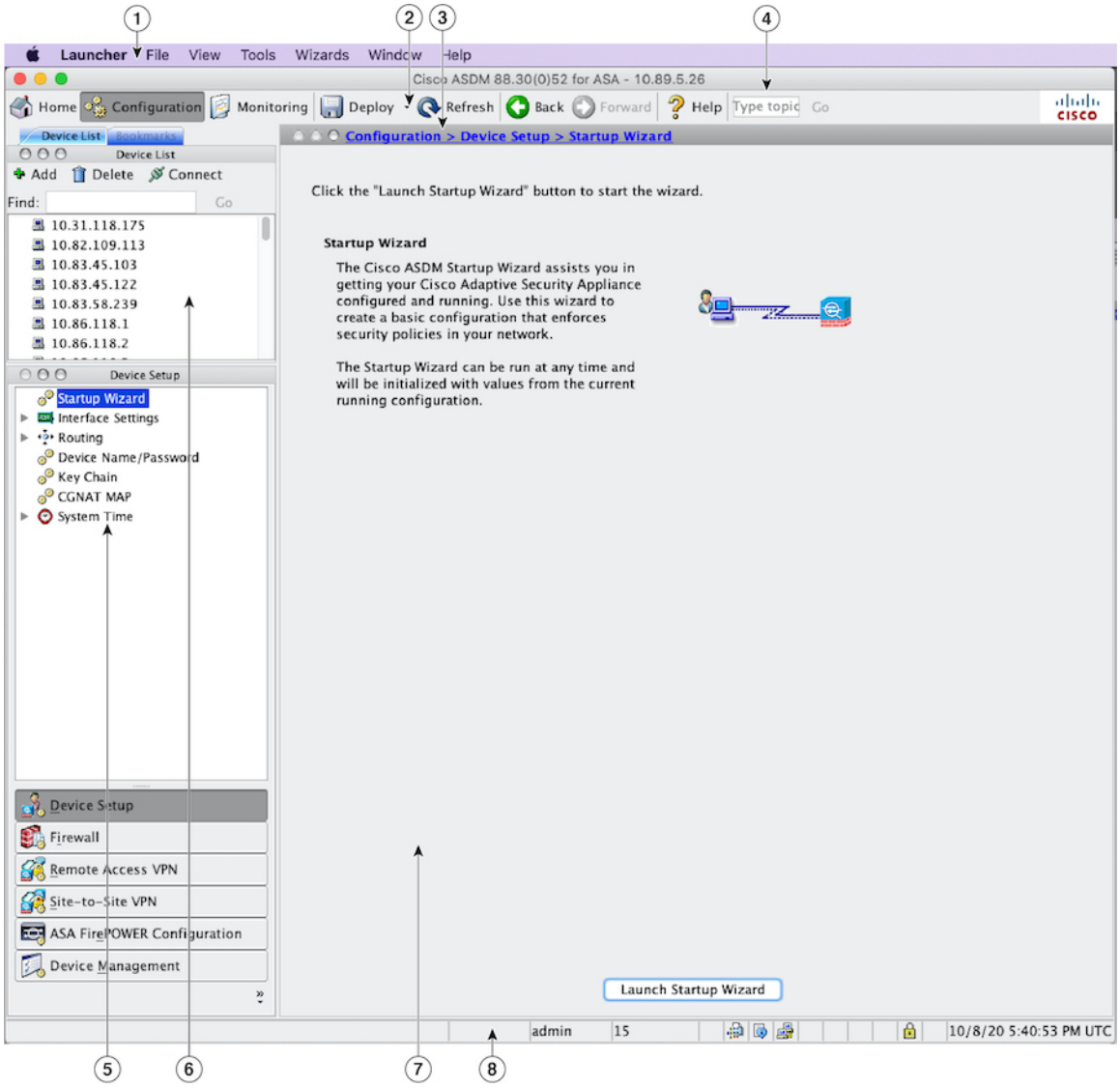
you can move, hide it, or close it. To access the **Configuration** and **Monitoring** panes, you can do one of the following:

- Click links on the left side of the application window in the left **Navigation** pane. The **Content** pane then displays the path (for example, **Configuration > Device Setup > Startup Wizard**) in the title bar of the selected pane.
- If you know the exact path, you can type it directly into the title bar of the **Content** pane on the right side of the application window, without clicking any links in the left **Navigation** pane.

- A maximize and restore button in the right corner of the **Content** pane that lets you hide and show the left **Navigation** pane.
- A dockable **Device List** pane with a list of devices that you can access through ASDM. You can click one of the three buttons in the header to maximize or restore this pane, make it a floating pane that you can move, hide it, or close it.
- A status bar that shows the time, connection status, user, memory status, running configuration status, privilege level, and SSL status at the bottom of the application window.
- A left **Navigation** pane that shows various objects that you can use in the rules tables when you create access rules, NAT rules, AAA rules, filter rules, and service rules. The tab titles within the pane change according to the feature that you are viewing. In addition, the **ASDM Assistant** appears in this pane.

The following figure shows the elements of the ASDM user interface.

Figure 1: ASDM User Interface



Legend

GUI Element	Description
1	Menu Bar
2	Toolbar
3	Navigation Path
4	Search Field
5	Left Navigation Pane
6	Device List Pane

GUI Element	Description
7	Content Pane
8	Status Bar

Note Tool tips have been added for various parts of the GUI, including **Wizards**, the **Configuration** and **Monitoring** panes, and the **Status Bar**. To view tool tips, hover your mouse over a specific user interface element, such as an icon in the status bar.

Navigate the ASDM User Interface

To move efficiently throughout the ASDM user interface, you may use a combination of menus, the toolbar, dockable panes, and the left and right **Navigation** panes, which are described in the previous section. The available functions appear in a list of buttons below the **Device List** pane. An example list could include the following function buttons:

- **Device Setup**
- **Firewall**
- **Botnet Traffic Filter**
- **Remote Access VPN**
- **Site to Site VPN**
- **Device Management**

The list of function buttons that appears is based on the licensed features that you have purchased. Click each button to access the first pane in the selected function for either the Configuration view or the Monitoring view. The function buttons are not available in the Home view.

To change the display of function buttons, perform the following steps:

Procedure

Step 1 Choose the drop-down list below the last function button to display a context menu.

Step 2 Choose one of the following options:

- Click **Show More Buttons** to show more buttons.
- Click **Show Fewer Buttons** to show fewer buttons.
- Click **Add or Remove Buttons** to add or remove buttons, then click the button to add or remove from the list that appears.
- Choose **Option** to display the **Option** dialog box, which displays a list of the buttons in their current order. Then choose one of the following:
  - Click **Move Up** to move up a button in the list.

- Click **Move Down** to move down a button in the list.
- Click **Reset** to return the order of the items in the list to the default setting.

Step 3 Click **OK** to save your settings and close this dialog box.

Menus

You can access ASDM menus using the mouse or keyboard.

File Menu

The **File** menu lets you manage ASA configurations.

File Menu Item	Description
Refresh ASDM with the Running Configuration on the Device	Loads a copy of the running configuration into ASDM.
Reset Device to the Factory Default Configuration	Restores the configuration to the factory default.
Show Running Configuration in New Window	Displays the current running configuration in a new window.
Save Running Configuration to Flash	Writes a copy of the running configuration to flash memory.
Save Running Configuration to TFTP Server	Stores a copy of the current running configuration file on a TFTP server.
Save Running Configuration to Standby Unit	Sends a copy of the running configuration file on the primary unit to the running configuration of a failover standby unit.
Save Internal Log Buffer to Flash	Saves the internal log buffer to flash memory.
Deploy FirePOWER Changes	Saves configuration changes made to ASA FirePOWER module policies to the module. This option is available only if you install an ASA FirePOWER module and manage it through ASDM.
Print	Prints the current page. We recommend landscape page orientation when you print rules. When you use Internet Explorer, permission to print was already granted when you originally accepted the signed applet.
Clear ASDM Cache	Removes local ASDM images. ASDM downloads images locally when you connect to ASDM.
Clear ASDM Password Cache	Removes the password cache if you have defined a new password and still have a existing password that is different than the new password.

File Menu Item	Description
Clear Internal Log Buffer	Empties the syslog message buffer.
Exit	Closes ASDM.

View Menu

The **View** menu lets you display various parts of the ASDM user interface. Certain items are dependent on the current view. You cannot select items that cannot be displayed in the current view.

View Menu Item	Description
Home	Displays the Home view.
Configuration	Displays the Configuration view.
Monitoring	Displays the Monitoring view.
Bookmarks	Displays a list of bookmarked pages in a dockable pane.
Device List	Displays a list of devices in a dockable pane.
Navigation	Shows and hides the display of the **Navigation** pane in the Configuration and Monitoring views.
ASDM Assistant	Searches and finds useful ASDM procedural help about certain tasks.
Latest ASDM Syslog Messages	Shows and hides the display of the **Latest ASDM Syslog Messages** pane in the Home view. This pane is only available in the Home view. If you do not have sufficient memory to upgrade to the most current release, syslog message %ASA-1-211004 is generated, indicating what the installed memory is and what the required memory is. This message reappears every 24 hours until the memory is upgraded.
Addresses	Shows and hides the display of the **Addresses** pane. The **Addresses** pane is only available for the **Access Rules**, **NAT Rules**, **Service Policy Rules**, **AAA Rules**, and **Filter Rules** panes in the Configuration view.
Services	Shows and hides the display of the **Services** pane. The **Services** pane is only available for the **Access Rules**, **NAT Rules**, **Service Policy Rules**, **AAA Rules**, and **Filter Rules** panes in the Configuration view.
Time Ranges	Shows and hides the display of the **Time Ranges** pane. The **Time Ranges** pane is only available for the **Access Rules**, **Service Policy Rules**, **AAA Rules**, and **Filter Rules** panes in the Configuration view.
Select Next Pane	Highlights the next pane shown in a multi-pane display, for example, going from the Service Policies Rules pane to the Address pane beside it.
Select Previous Pane	Highlights the previous pane shown in multi-pane displays.

View Menu Item	Description
Back	Returns to the previous pane.
Forward	Goes to the next pane previously visited.
Find in ASDM	Locates an item for which you are searching, such as a feature or the **ASDM Assistant**.
Reset Layout	Returns the layout to the default configuration.
Office Look and Feel	Changes the screen fonts and colors to the Microsoft Office settings.

Tools Menu

The **Tools** menu provides you with the following series of tools to use in ASDM.

Tools Menu Item	Description
Command Line Interface	Sends commands to the ASA and view the results.
Show Commands Ignored by ASDM on Device	Displays unsupported commands that have been ignored by ASDM.
Packet Tracer	Traces a packet from a specified source address and interface to a destination. You can specify the protocol and port of any type of data and view the lifespan of a packet, with detailed information about actions taken on it. See the firewall configuration guide for more information.
Ping	Verifies the configuration and operation of the ASA and surrounding communications links, as well as performs basic testing of other network devices. See the firewall configuration guide for more information.
Traceroute	Determines the route that packets will take to their destination. See the firewall configuration guide for more information.
File Management	Views, moves, copies, and deletes files stored in flash memory. You can also create a directory in flash memory. You can also transfer files between various file systems, including TFTP, flash memory, and your local PC.
Check for ASA/ASDM Updates	Upgrades ASA software and ASDM software through a wizard.
Upgrade Software from Local Computer	Uploads an ASA image, ASDM image, or another image on your PC to flash memory.
Downgrade Software	Loads an older ASA image than the one you are currently running.
Backup Configurations	Backs up the ASA configuration, a Cisco Secure Desktop image, and SSL VPN Client images and profiles.

Tools Menu Item	Description
Restore Configurations	Restores the ASA configuration, a Cisco Secure Desktop image, and SSL VPN Client images and profiles.
System Reload	Restarts the ASDM and reload the saved configuration into memory.
Administrator's Alert to Clientless SSL VPN Users	Enables an administrator to send an alert message to clientless SSL VPN users. See the VPN configuration guide for more information.
Migrate Network Object Group Members	If you migrate to 8.3 or later, the ASA creates named network objects to replace inline IP addresses in some features. In addition to named objects, ASDM automatically creates non-named objects for any IP addresses used in the configuration. These auto-created objects are identified by the *IP address* only, do not have a name, and are not present as named objects in the platform configuration. When the ASA creates named objects as part of the migration, the matching non-named ASDM-only objects are replaced with the named objects. The only exception are non-named objects in a network object group. When the ASA creates named objects for IP addresses that are inside a network object group, ASDM retains the non-named objects as well, creating duplicate objects in ASDM. Choose **Tools > Migrate Network Object Group Members** to merge these object. See *Cisco ASA 5500 Migration to Version 8.3 and Later* for more information.
Preferences	Changes the behavior of specified ASDM functions between sessions.
ASDM Java Console	Shows the Java console.

Wizards Menu

The **Wizards** menu lets you run a wizard to configure multiple features.

Wizards Menu Item	Description
Startup Wizard	Guides you, step-by-step, through the initial configuration of the ASA.
VPN Wizards	There are separate wizards for a variety of VPN configurations. See the VPN configuration guide for more information.
High Availability and Scalability Wizard	Allows you to configure failover: VPN cluster load balancing, or ASA clustering on the ASA.
Unified Communication Wizard	Enables you to configure unified communication features, such as an IP phone, on the ASA. See the firewall configuration guide for more information.

Wizards Menu Item	Description
ASDM Identity Certificate Wizard	When using Java 7 update 51 and later, the ASDM Launcher requires a trusted certificate. An easy approach to fulfill the certificate requirements is to install a self-signed identity certificate. You can use Java Web Start to launch ASDM until you install a certificate using this wizard. See http://www.cisco.com/go/asdm-certificate for more information.
Packet Capture Wizard	Allows you to configure packet capture on the ASA. The wizard runs one packet capture on each ingress and egress interface. After you run the capture, you can save it on your computer, and then examine and analyze the capture with a packet analyzer.

Window Menu

The **Window** menu enables you to move between ASDM windows. The active window appears as the selected window.

Help Menu

The **Help** menu provides links to online help, as well as information about ASDM and the ASA.

Help Menu Items	Description
Help Topics	Opens a new browser window to show the ASDM online help. If you are managing an ASA FirePOWER module in ASDM, this item is labeled **ASDM Help Topics**.
ASA FirePOWER Help Topics	Opens a new browser window to show online help for the ASA FirePOWER module. This item is available only if you have installed the module and are managing it in ASDM.
Help for Current Screen	Opens context-sensitive help about the screen you are viewing. Alternatively, you can also click the **? Help** button in the tool bar.
Release Notes	Opens the most current version of the *ASDM release notes* on Cisco.com. The release notes contain the most current information about ASDM software and hardware requirements, and the most current information about changes in the software.
Cisco ASA Series Documentation	Opens a document on Cisco.com that includes links to all of the available product documentation.
ASDM Assistant	Opens the **ASDM Assistant**, which lets you search downloadable content from Cisco.com, with details about performing certain tasks.
About Cisco Adaptive Security Appliance (ASA)	Displays information about the ASA, including the software version, hardware set, configuration file loaded at startup, and software image loaded at startup. This information is helpful in troubleshooting.

Help Menu Items	Description
About Cisco ASDM	Displays information about ASDM such as the software version, hostname, privilege level, operating system, device type, and Java version.

Toolbar

The **Toolbar** below the menus provides access to the Home view, Configuration view, and Monitoring view. It also lets you choose between the system and security contexts in multiple context mode, and provides navigation and other commonly used features.

Toolbar Button	Description
Home	Displays the **Home** pane, which lets you view important information about your ASA such as the status of your interfaces, the version you are running, licensing information, and performance. In multiple mode, the system does not have a Home pane.
Configuration	Configures the ASA. Click a function button in the left **Navigation** pane to configure that function.
Monitoring	Monitors the ASA. Click a function button in the left **Navigation** pane to monitor various elements.
Save	Saves the running configuration to the startup configuration for write-accessible contexts only. The button is replaced by the **Deploy** button if you have an ASA FirePOWER module installed on the device and you are configuring it through ASDM.
Deploy	If you have an ASA FirePOWER module installed on the device and you are configuring it through ASDM, the **Deploy** button replaces the **Save** button and contains the following options: • **Deploy FirePOWER Changes**—Saves configuration changes made to ASA FirePOWER module policies to the module. • **Save Running Configuration to Flash**—Writes a copy of the ASA running configuration to flash memory. This is equivalent to the **Save** button for devices that do not include an ASA FirePOWER module.
Refresh	Refreshes ASDM with the current running configuration, except for graphs in any of the Monitoring panes.
Back	Returns to the last pane of ASDM that you visited.
Forward	Goes forward to the last pane of ASDM that you visited.
Help	Shows context-sensitive help for the screen that is currently open.

Toolbar Button	Description
Search	Searches for a feature in ASDM. The Search function looks through the titles of each pane and presents you with a list of matches, and gives you a hyperlink directly to that pane. Click **Back** or **Forward** to switch quickly between two different panes that you found.

ASDM Assistant

The ASDM Assistant lets you search and view useful ASDM procedural help about certain tasks. This feature is available in routed and transparent modes, and in the single and system contexts.

Choose**View** > **ASDM Assistant** > **How Do I?** or enter a search request from the **Look For** field in the menu bar to access information. Choose **How Do I?** from the **Find** drop-down list to begin the search.

To use the ASDM Assistant, perform the following steps:

Procedure

Step 1 Choose **View** > **ASDM Assistant**.

The **ASDM Assistant** pane appears.

Step 2 Enter the information that you want to find in the **Search** field, then click **Go**.

The requested information appears in the **Search Results** pane.

Step 3 Click any links that appear in the **Search Results and Features** areas to obtain more details.

Status Bar

The **Status Bar** appears at the bottom of the ASDM window. The following table lists the areas shown from left to right.

Area	Description
Status	The status of the configuration (for example, “Device configuration loaded successfully.”)
Failover	The status of the failover unit, either active or standby.
User Name	The username of the ASDM user. If you logged in without a username, the username is “admin.”
User Privilege	The privilege of the ASDM user.
Commands Ignored by ASDM	Click the icon to show a list of commands from your configuration that ASDM did not process. These commands will not be removed from the configuration.

Area	Description
Connection to Device	The ASDM connection status to the ASA.
Syslog Connection	The syslog connection is up, and the ASA is being monitored.
SSL Secure	The connection to ASDM is secure because it uses SSL.
Time	The time that is set on the ASA.

Connection to Device

ASDM maintains a constant connection to the ASA to maintain up-to-date **Monitoring** and **Home** pane data. This dialog box shows the status of the connection. When you make a configuration change, ASDM opens a second connection for the duration of the configuration, and then closes it; however, this dialog box does not represent the second connection.

Device List

The Device List is a dockable pane. You can click one of the three buttons in the header to maximize or restore this pane, make it a floating pane that you can move, hide it, or close it. This pane is available in the Home, Configuration, Monitoring, and System views. You can use this pane to switch to another device, and between the System and contexts; however, that device must run the same version of ASDM that you are currently running. To display the pane fully, you must have at least two devices listed. This pane is available in routed and transparent modes, and in the single, multiple, and system contexts.

To use this pane to connect to another device, perform the following steps:

Procedure

Step 1 Click **Add** to add another device to the list.

The **Add Device** dialog box appears.

Step 2 Enter the device name or IP address of the device, then click **OK**.

Step 3 Click **Delete** to remove a selected device from the list.

Step 4 Click **Connect** to connect to another device.

The **Enter Network Password** dialog box appears.

Step 5 Enter your username and password in the applicable fields, then click **Login**.

Common Buttons

Many ASDM panes include buttons that are listed in the following table. Click the applicable button to complete the desired task:

Button	Description
Apply	Sends changes made in ASDM to the ASA and applies them to the running configuration.
Save	Writes a copy of the running configuration to flash memory.
Reset	Discards changes and reverts to the information displayed before changes were made or the last time that you clicked Refresh or Apply. After you click **Reset**, click **Refresh** to make sure that information from the current running configuration appears.
Restore Default	Clears the selected settings and returns to the default settings.
Cancel	Discards changes and returns to the previous pane.
Enable	Displays read-only statistics for a feature.
Close	Closes an open dialog box.
Clear	Remove information from a field, or remove a check from a check box.
Back	Returns to the previous pane.
Forward	Goes to the next pane.
Help	Displays help for the selected pane or dialog box.

Keyboard Shortcuts

You can use the keyboard to navigate the ASDM user interface.

The following table lists the keyboard shortcuts you can use to move across the three main areas of the ASDM user interface.

Table 1: Keyboard Shortcuts Within the Main Window

To display the	Windows/Linux	MacOS
Home Pane	Ctrl+H	Shift+Command+H
Configuration Pane	Ctrl+G	Shift+Command+G
Monitoring Pane	Ctrl+M	Shift+Command+M
Help	F1	Command+?
Back	Alt+Left Arrow	Command+[
Forward	Alt+Rightarrow	Command+]
Refresh the display	F5	Command+R
Cut	Ctrl+X	Command+X

To display the	Windows/Linux	MacOS
Copy	Ctrl+C	Command+C
Paste	Ctrl+V	Command+V
Save the configuration	Ctrl+S	Command+S
Popup menus	Shift+F10	—
Close a secondary window	Alt+F4	Command+W
Find	Ctrl+F	Command+F
Exit	Alt+F4	Command+Q
Exit a table or text area	Ctrl_Shift or Ctrl+Shift+Tab	Ctril+Shift or Ctrl+Shift+Tab

The following table lists the keyboard shortcut you can use to navigate within a pane.

Table 2: Keyboard Shortcuts Within a Pane

To move the focus to the	Press
Next field	Tab
Previous field	Shift+Tab
Next field when the focus is in a table	Ctrl+Tab
Previous field when the focus is in a table	Shift+Ctrl+Tab
Next tab (when a tab has the focus)	Right Arrow
Previous tab (when a tab has the focus)	Left Arrow
Next cell in a table	Tab
Previous sell in a table	Shift+Tab
Next pane (when multiple panes are displayed)	F6
Previous pane (when multiple panes are displayed)	Shift+F6

The following table lists the keyboard shortcuts you can use with the Log Viewers.

Table 3: Keyboard Shortcuts for the Log Viewer

To	Windows/Linux	MacOS
Pause and Resume Real-Time Log Viewer	Ctrl+U	Command+
Refresh Log Buffer Pane	F5	Command+R
Clear Internal Log Buffer	Ctrl+Delete	Command+Delete

To	Windows/Linux	MacOS
Copy Selected Log Entry	Ctrl+C	Command+C
Save Log	Ctrl+S	Command+S
Print	Ctrl+P	Command+P
Close a secondary window	Alt+F4	Command+W

The following table lists the keyboard shortcuts you can use to access menu items.

Table 4: Keyboard Shortcuts to Access Menu Items

To access the	Windows/Linux
Menu Bar	Alt
Next Menu	Right Arrow
Previous Menu	Left Arrow
Next Menu Option	Down Arrow
Previous Menu Option	Up Arrow
Selected Menu Option	Enter

Find Function in ASDM Panes

Some ASDM panes contain tables with many elements. To make it easier for you to search, highlight, and then edit a particular entry, several ASDM panes have a find function that allows you to search on objects within those panes.

To perform a search, you can type a phrase into the Find field to search on all columns within any given pane. The phrase can contain the wild card characters "*" and "?". The * matches one or more characters, and ? matches one character. The up and down arrows to the right of the **Find** field locate the next (up) or previous (down) occurrence of the phrase. Check the **Match Case** check box to find entries with the exact uppercase and lowercase characters that you enter.

For example, entering B*ton-L* might return the following matches:

```
Boston-LA, Boston-Lisbon, Boston-London
```

Entering Bo?ton might return the following matches:

```
Boston, Bolton
```

Find Function in Rule Lists

Because ACLs and ACEs and other rules contain many elements of different types, the find function in the any pane that displays rules allows for a more targeted search than the find function in other panes. This includes access rules, service policy rules, the ACL Manager, and any other pane that lists ACL rules, and also the NAT rules.

To find elements within the rule lists, perform the following steps:

Procedure

Step 1 Click **Find**.

Step 2 Choose one of the following options in the **Filter** field from the drop-down list.

The items you can search on differ depending on the rule type, and correspond to the columns in the table. Select **Query** if you want to create a complex search that uses more than one field.

Step 3 Unless you picked **Query**, in the second field, choose one of the following options from the drop-down list:

- **is**—Specifies an exact match to the search string. This is always the option for queries.
- **contains**—Specifies a match to any rule that includes, whether exactly or partially, your search string.

Step 4 In the third field, enter the string you want to find. Click **...** to pick an object from a list. If you are using a query, click **Define Query**.

If you search for an IP address, you can get matches to addresses that are in a network object or group, so long as that object or group was created by ASDM. That is, the group name begins with DM_INLINE. The find feature cannot find IP addresses within user-created objects.

Step 5 Click **Filter** to perform the search.

The view is updated to show only those rules that match. The rule numbers are maintained so that you can see their absolute location within the rule list.

Step 6 Click **Clear** to remove the filter and see the complete list again.

Step 7 When you are finished, click the red **x** to close the find controls.

Enable Extended Screen Reader Support

By default, labels and descriptions are not included in tab order when you press the **Tab** key to navigate a pane. Some screen readers, such as JAWS, only read screen objects that have the focus. You can include the labels and descriptions in the tab order by enabling extended screen reader support.

To enable extended screen reader support, perform the following steps:

Procedure

Step 1 Choose **Tools** > **Preferences**.

The **Preferences** dialog box appears.

Step 2 Check the **Enable screen reader support** check box on the **General** tab.

Step 3 Click **OK**.

Step 4 Restart ASDM to activate screen reader support.

Organizational Folder

Some folders in the navigation pane for the configuration and monitoring views do not have associated configuration or monitoring panes. These folders are used to organize related configuration and monitoring tasks. Clicking these folders displays a list of sub-items in the right **Navigation** pane. You can click the name of a sub-item to go to that item.

Home Pane (Single Mode and Context)

The ASDM **Home** pane lets you view important information about your ASA. Status information in the **Home** pane is updated every ten seconds. This pane usually has two tabs: **Device Dashboard** and **Firewall Dashboard**.

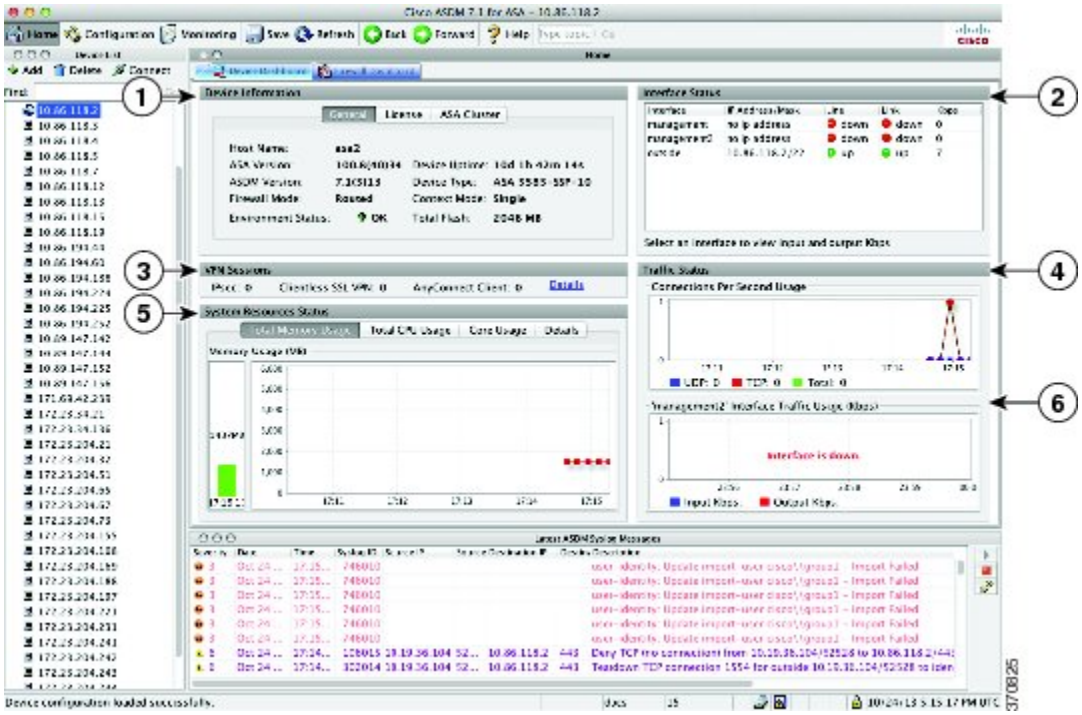
If you have hardware or software modules installed on the device, such as IPS, CX, or ASA FirePOWER modules, there are separate tabs for those modules.

Device Dashboard Tab

The **Device Dashboard** tab lets you view, at a glance, important information about your ASA, such as the status of your interfaces, the version you are running, licensing information, and performance.

The following figure shows the elements of the **Device Dashboard** tab.

Figure 2: Device Dashboard Tab



Legend

GUI Element	Description
1	Device Information Pane, on page 18
2	Interface Status Pane, on page 20
3	VPN Sessions Pane, on page 20
4	Traffic Status Pane, on page 20
5	System Resources Status Pane, on page 20
6	Traffic Status Pane, on page 20
—	Device List, on page 12
—	Latest ASDM Syslog Messages Pane, on page 20

Device Information Pane

The **Device Information** pane includes two tabs that show device information: **General** tab and **License** tab. Under the **General** tab you have access to the **Environment Status** button, which provides an at-a-glance view of the system health:

General Tab

This tab shows basic information about the ASA:

- **Host name**—Shows the hostname of the device.
- **ASA version**—Lists the version of ASA software that is running on the device.
- **ASDM version**—Lists the version of ASDM software that is running on the device.
- **Firewall mode**—Shows the firewall mode in which the device is running.
- **Total flash**—Displays the total RAM that is currently being used.
- **ASA Cluster Role**—When you enable clustering, shows the role of this unit, either Master or Slave.
- **Device uptime**—Shows the time in which the device has been operational since the latest software upload.
- **Context mode**—Shows the context mode in which the device is running.
- **Total Memory**—Shows the DRAM installed on the ASA.
- **Environment status**—Shows the system health. View hardware statistics by clicking the plus sign (+) to the right of the **Environment Status** label in the **General** tab. You can see how many power supplies are installed, track the operational status of the fan and power supply modules, and track the temperatures of the CPUs and the ambient temperature of the system.

  In general, the **Environment Status** button provides an at-a-glance view of the system health. If all monitored hardware components within the system are operating within normal ranges, the plus sign (+) button shows OK in green. Conversely, if any one component within the hardware system is operating outside of normal ranges, the plus sign (+) button turns into a red circle to show Critical status and to indicate that a hardware component requires immediate attention.

  See the hardware guide for your particular device for more information about specific hardware statistics.

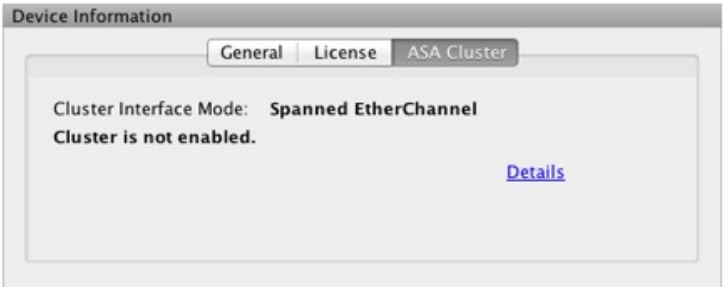
Note If you do not have enough memory to upgrade to the most current release of the ASA, the **Memory Insufficient Warning** dialog box appears. Follow the directions that appear in this dialog box to continue using the ASA and ASDM in a supported manner. Click **OK** to close this dialog box.

License Tab

This tab shows a subset of licensed features. Click **More Licenses** to view detailed license information, or to enter a new activation key; the **Configuration > Device Management > Licensing > Activation Key pane** appears.

Cluster Tab

This tab shows the cluster interface mode, as well as the cluster status



Virtual Resources Tab (ASAv)

This tab shows the virtual resources used by the ASA virtual, including the number of vCPUs, RAM, and whether the ASA virtual is over- or under-provisioned.

Interface Status Pane

This pane shows the status of each interface. If you select an interface row, the input and output throughput in Kbps displays below the table.

VPN Sessions Pane

This pane shows the VPN tunnel status. Click **Details** to go to the **Monitoring > VPN > VPN Statistics > Sessions** pane.

Failover Status Pane

This pane shows the failover status.

Click **Configure** to start the High Availability and Scalability Wizard. After you have completed the wizard, the failover configuration status (either Active/Active or Active/Standby) appears.

If failover is configured, click **Details** to open the **Monitoring > Properties > Failover > Status** pane.

System Resources Status Pane

This pane shows CPU and memory usage statistics.

Traffic Status Pane

This pane shows graphs for connections per second for all interfaces and for the traffic throughput of the lowest security interface.

When your configuration contains multiple lowest security level interfaces, and any one of them is named "outside," then that interface is used for the traffic throughput graphs. Otherwise, ASDM picks the first interface from the alphabetical list of lowest security level interfaces.

Latest ASDM Syslog Messages Pane

This pane shows the most recent system messages generated by the ASA, up to a maximum of 100 messages. Click **Enable Logging** to enable logging if it is disabled.

The following figure shows the elements of the **Latest ASDM Syslog Messages** pane.

Figure 3: Latest ASDM Syslog Messages Pane

Legend

GUI Element	Description
1	Drag the **divider** up or down to resize the pane.
2	Expands the pane. Click the **double-square** icon to return the pane to the default size.
3	Makes a floating pane. Click the **docked pane** icon to dock the pane.
4	Enables or disables Auto-hide. When Auto-hide is enabled, move your cursor over the **Latest ASDM Syslog Messages** button in the left, bottom corner and the pane displays. Move your cursor away from the pane, and it disappears.
5	Closes the pane. Choose **View Latest ASDM Syslog Messages** to show the pane.
6	Click the **green** icon on the right-hand side to continue updating the display of syslog messages.
7	Click the **red** icon on the right-hand side To stop updating the display of syslog messages.
8	Click the **filters** icon on the right-hand side to open the **Logging Filters** pane.

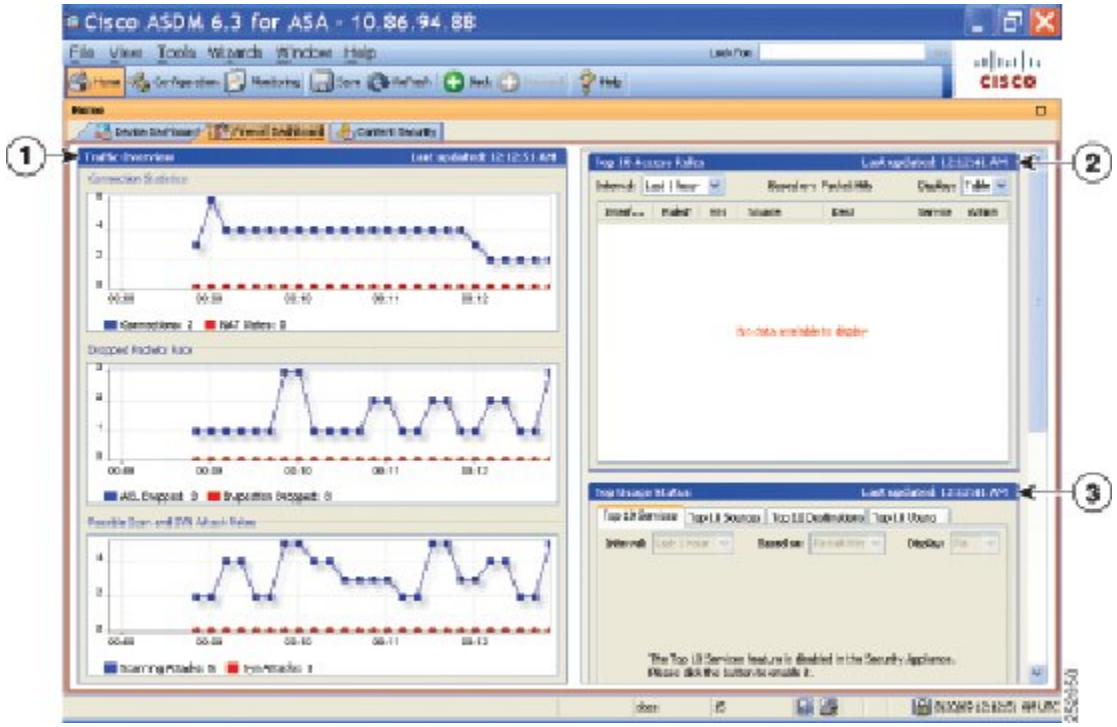
- Right-click an event and choose **Clear Content** to clear the current messages.
- Right-click an event and click **Save Content** to save the current messages to a file on your PC.
- Right-click an event and choose **Copy** to copy the current content.
- Right-click an event and choose **Color Settings** to change the background and foreground colors of syslog messages according to their severity.

Firewall Dashboard Tab

The **Firewall Dashboard** tab lets you view important information about the traffic passing through your ASA. This dashboard differs depending on whether you are in single context mode or multiple context mode. In multiple context mode, the **Firewall Dashboard** is viewable within each context.

The following figure shows some of the elements of the **Firewall Dashboard** tab.

Figure 4: Firewall Dashboard Tab



Legend

GUI Element	Description
1	Traffic Overview Pane, on page 22
2	Top 10 Access Rules Pane, on page 23
3	Top Usage Status Pane, on page 23
(not shown)	Top Ten Protected Servers Under SYN Attack Pane, on page 23
(not shown)	Top 200 Hosts Pane, on page 24
(not shown)	Top Botnet Traffic Filter Hits Pane, on page 24

Traffic Overview Pane

Enabled by default. If you disable basic threat detection (see the firewall configuration guide), then this area includes an **Enable** button that lets you enable basic threat detection. The runtime statistics include the following information, which is *display-only*:

- The number of connections and NAT translations.
- The rate of dropped packets per second caused by access list denials and application inspections.
- The rate of dropped packets per second that are identified as part of a scanning attack, or that are incomplete sessions detected, such as TCP SYN attack detected or no data UDP session attack detected.

Top 10 Access Rules Pane

Enabled by default. If you disable threat detection statistics for access rules (see the firewall configuration guide), then this area includes an **Enable** button that lets you enable statistics for access rules.

In the Table view, you can select a rule in the list and right-click the rule to display a popup menu item, **Show Rule**. Choose this item to go to the Access Rules table and select that rule in this table.

Top Usage Status Pane

Disabled by default. This pane include the following four tabs:

- **Top 10 Services**—Threat Detection service
- **Top 10 Sources**—Threat Detection service
- **Top 10 Destinations**—Threat Detection service
- **Top 10 Users**—Identity Firewall service

The first three tabs—**Top 10 Services**, **Top 10 Sources**, and **Top 10 Destinations**—provide statistics for threat detection services. Each tab includes an **Enable** button that let you enable each threat detection service. You can enable them according to the firewall configuration guide.

The **Top 10 Services Enable** button enables statistics for both ports and protocols (both must be enabled for the display). The **Top 10 Sources** and **Top 10 Destinations Enable** buttons enable statistics for hosts. The top usage status statistics for hosts (sources and destinations), and ports and protocols are displayed.

The fourth tab for **Top 10 Users** provides statistics for the Identity Firewall service. The Identity Firewall service provides access control based on users' identities. You can configure access rules and security policies based on user names and user groups name rather than through source IP addresses. The ASA provides this service by accessing an IP-user mapping database.

The **Top 10 Users** tab displays data only when you have configured one of the following features:

- Identity Firewall service configuration, which includes configuring these additional components: Microsoft Active Directory and Cisco Active Directory (AD) Agent. The Identity Firewall service is enabled using the **user-identity enable** command (enabled by default) and the **user-accounting statistics** command.
- VPN configuration using a RADIUS server for authenticating, authorizing, or accounting VPN users.

Depending on which option you choose, the **Top 10 Users** tab shows statistics for received EPS packets, sent EPS packets, and sent attacks for the top 10 users. For each user (displayed as *domain\user_name*), the tab displays the average EPS packet, the current EPS packet, the trigger, and total events for that user.

Caution Enabling statistics can affect the ASA performance, depending on the type of statistics enabled. Enabling statistics for hosts affects performance in a significant way; if you have a high traffic load, you might consider enabling this type of statistics temporarily. Enabling statistics for ports, however, has a modest effect.

Top Ten Protected Servers Under SYN Attack Pane

Disabled by default. This area includes an **Enable** button that lets you enable the feature, or you can enable it according to the firewall configuration guide. Statistics for the top ten protected servers under attack are displayed.

For the average rate of attack, the ASA samples the data every 30 seconds over the rate interval (by default 30 minutes).

If there is more than one attacker, then "<various>" displays, followed by the last attacker IP address.

Click **Detail** to view statistics for all servers (up to 1000) instead of just 10 servers. You can also view history sampling data. The ASA samples the number of attacks 60 times during the rate interval, so for the default 30-minute period, statistics are collected every 60 seconds.

Top 200 Hosts Pane

Disabled by default. Shows the top 200 hosts connected through the ASA. Each entry of a host contains the IP address of the host and the number of connections initiated by the host, and is updated every 120 seconds. Enter the **hpm topnenable** command to enable this display.

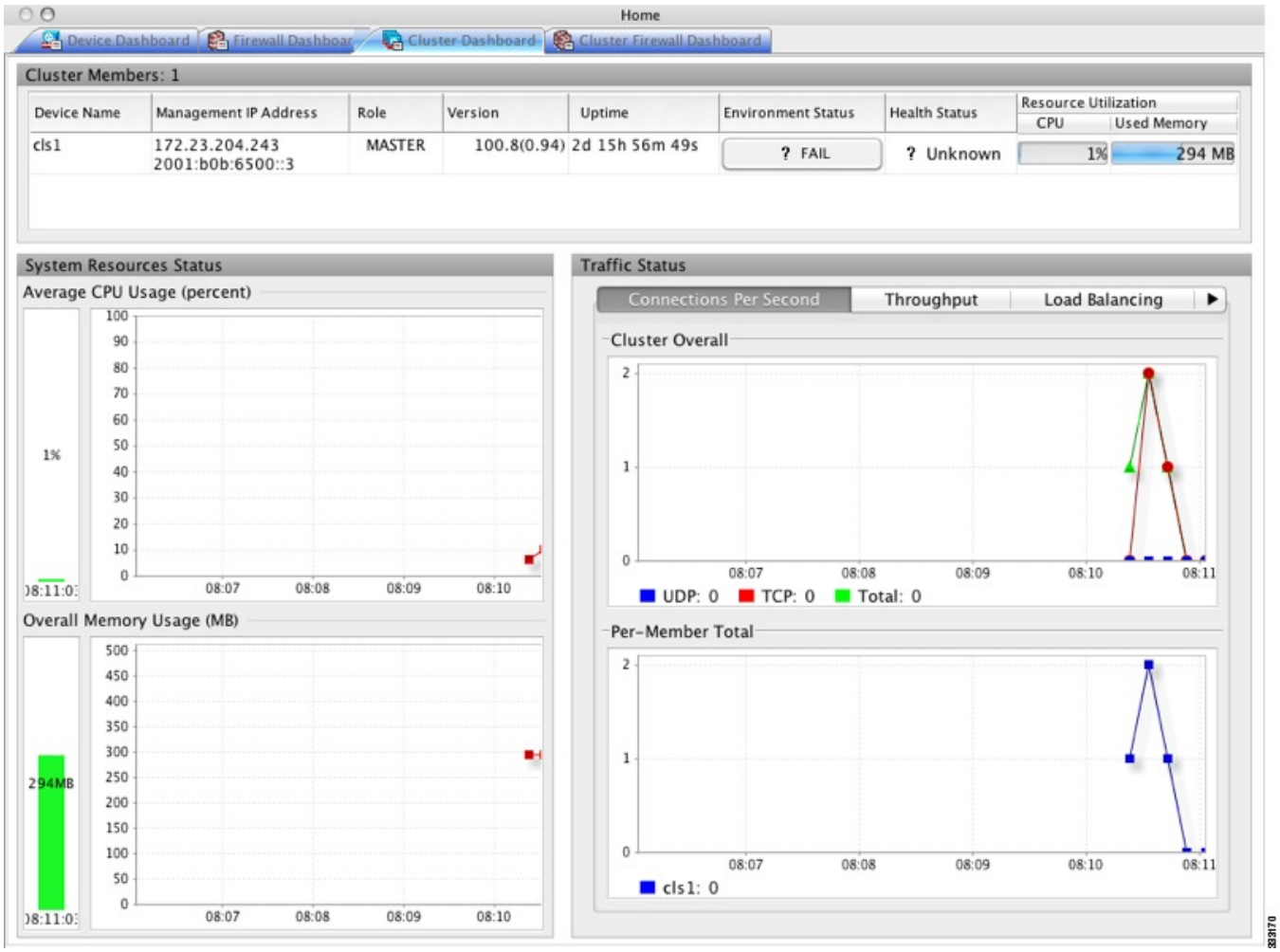
Top Botnet Traffic Filter Hits Pane

Disabled by default. This area includes links to configure the Botnet Traffic Filter. Reports of the top ten botnet sites, ports, and infected hosts provide a snapshot of the data, and may not match the top ten items since statistics started to be collected. If you right-click an IP address, you can invoke the whois tool to learn more about the botnet site.

See the Botnet configuration guide for more information.

Cluster Dashboard Tab

When you enable ASA clustering and are connected to the master unit, the **Cluster Dashboard** tab shows a summary of cluster membership and resource utilization.



- **Cluster Members**—Shows the names and basic information about the members comprising the cluster (their management IP address, version, role in the cluster, and so on) and their health status (environment status, health status, and resource utilization).

Note In multiple context mode, if you connect ASDM to the admin context, and then change to a different context, the management IP address listed does not change to show the current context management IP addresses; it continues to show the admin context management IP addresses, including the main cluster IP address to which ASDM is currently connected.

- **System Resource Status**—Shows resource utilization (CPU and memory) across the cluster and traffic graphs, both cluster-wide and per-device.
- **Traffic Status**—Each tab has the following graphs.
  - **Connections Per Second** tab:

    Cluster Overall—Shows the connections per second throughout the cluster.

Per-Member Total—Shows the average connections per second for each member.

- **Throughput** tab:

  Cluster Overall—Shows the aggregated egress throughput throughout the cluster.

  Per-Member Throughput—Shows the member throughput, one line per member.

- **Load Balancing** tab:

  Per-Member Percentage of Total Traffic—For each member, shows the percentage of total cluster traffic that the member receives.

  Per-Member Locally Processed Traffic—For each member, shows the percentage of traffic that was processed locally.

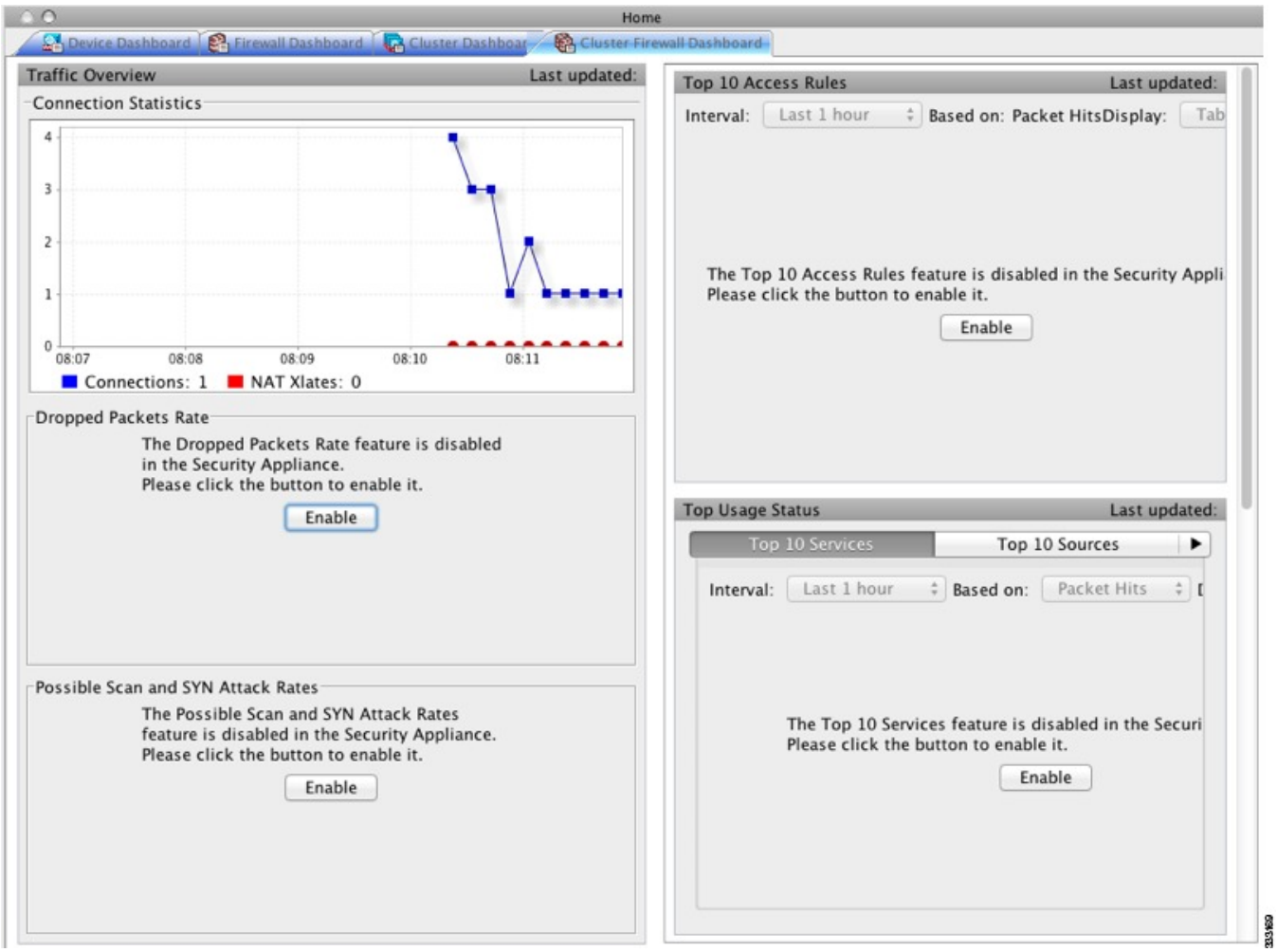
- **Control Link Usage** tab:

  Per-Member Receival Capacity Utilization—For each member, shows the usage of the transmittal capacity.

  Per-Member Transmittal Capacity Utilization—For each member, shows the usage of the receival capacity.

Cluster Firewall Dashboard Tab

The **Cluster Firewall Dashboard** tab shows traffic overview and the "top N" statistics, similar to those shown in the **Firewall Dashboard**, but aggregated across the whole cluster.



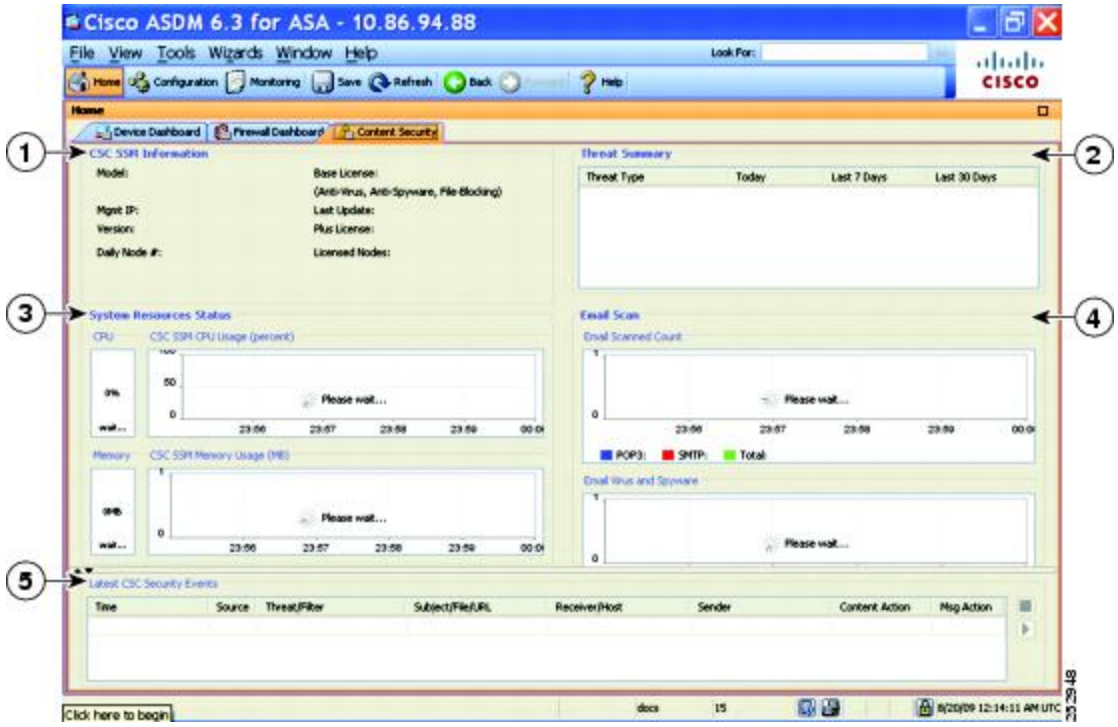
Content Security Tab

The **Content Security** tab lets you view important information about the Content Security and Control (CSC) SSM. This pane appears only if CSC software running on the CSC SSM is installed in the ASA.

Note If you have not completed the **CSC Setup Wizard** by choosing **Configuration > Trend Micro Content Security > CSC Setup**, you cannot access the panes under **Home > Content Security**. Instead, a dialog box appears and lets you access the **CSC Setup Wizard** directly from this location.

The following figure shows the elements of the **Content Security** tab.

Figure 5: Content Security Tab



Legend

GUI Element	Description
1	**CSC SSM Information** pane.
2	**Threat Summary** pane. Shows aggregated data about threats detected by the CSC SSM, including the following threat types: Virus, Spyware, URL Filtered or Blocked, Spam. Blocked, Files Blocked, and Damage Control Services.
3	**System Resources Status** pane.
4	**Email Scan** pane. The graphs display data in ten-second intervals.
5	**Latest CSC Security Events** pane.

Intrusion Prevention Tab

The **Intrusion Prevention** tab lets you view important information about IPS. This tab appears only when you have an IPS module installed on the ASA.

To connect to the IPS module, perform the following steps:

1. Click the **Intrusion Prevention** tab.

   The **Connecting to IPS** dialog box appears.

2. Enter the IP address, port, username and password. The default IP address and port is 192.168.1.2:443. The default username and password is **cisco** and **cisco**.
3. Check the **Save IPS login** information on local host check box to save the login information on your local PC.
4. Click **Continue**.

See the IPS quick start guide for more information about intrusion prevention.

The following figure shows the elements of the **Health Dashboard** tab, located on the **Intrusion Prevention** tab.

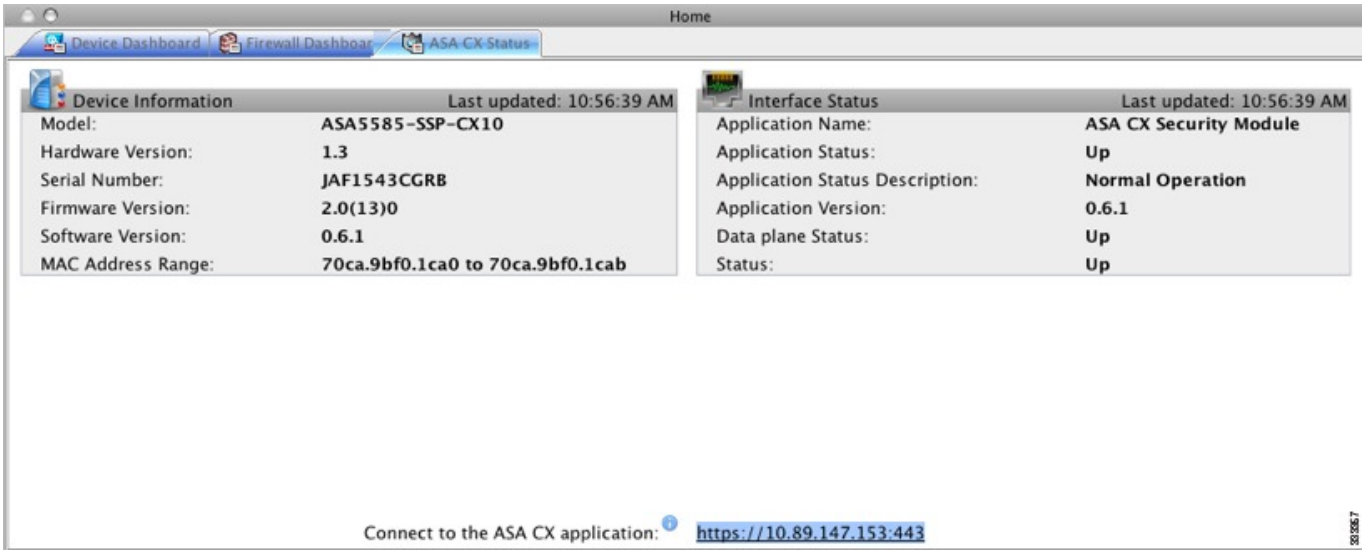
Figure 6: Intrusion Prevention Tab (Health Dashboard)

Legend

GUI Element	Description
1	**Sensor Information** pane.
2	**Sensor Health** pane.
3	**CPU**, **Memory**, and **Load** pane.
4	**Interface Status** pane.
5	**Licensing** pane.

ASA CX Status Tab

The **ASA CX Status** tab lets you view important information about the ASA CX module. This tab appears only when you have an ASA CX module installed on the ASA.



ASA FirePower Status Tabs

The **ASA FirePOWER Status** tab lets you view information about the module. This includes module information, such as the model, serial number, and software version, and module status, such as the application name and status, data plane status, and overall status. If the module is registered to a FireSIGHT Management Center, you can click the link to open the application and do further analysis and module configuration.

This tab appears only if you have an ASA FirePOWER module installed in the device.

If you are managing the ASA FirePOWER module with ASDM rather than FireSIGHT Management Center, there are additional tabs:

- **ASA FirePOWER Dashboard**—The dashboard provides summary information about the software running on the module, product updates, licensing, system load, disk usage, system time, and interface status.

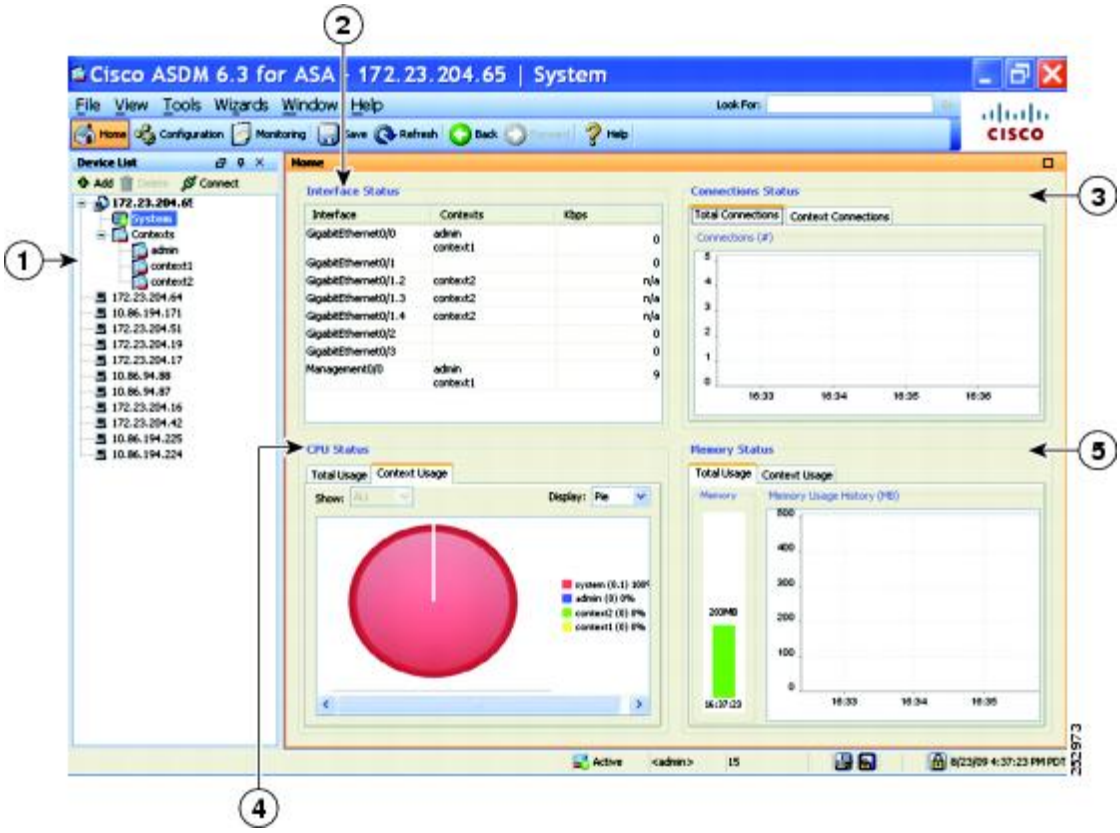
- **ASA FirePOWER Reporting**—The reporting page provides Top 10 dashboards for a wide variety of module statistics, such as web categories, users, sources, and destinations for the traffic passing through the module.

Home Pane (System)

The ASDM System **Home** pane lets you view important status information about your ASA. Many of the details available in the ASDM System **Home** pane are available elsewhere in ASDM, but this pane shows at-a-glance how your ASA is running. Status information in the System **Home** pane is updated every ten seconds.

The following figure shows the elements of the System **Home** pane.

Figure 7: System Home Pane



Legend

GUI Element	Description
1	System vs. Context selection.
2	**Interface Status** pane. Choose an interface to view the total amount of traffic through the interface.

GUI Element	Description
3	**Connection Status** pane.
4	**CPU Status** pane.
5	**Memory Status** pane.

Define ASDM Preferences

You can define the behavior of certain ASDM settings.

To change various settings in ASDM, perform the following steps:

Procedure

Step 1 Choose **Tools** > **Preferences**.

The **Preferences** dialog box appears, with three tabs: **General**, **Rules Table**, and **Syslog**.

Step 2 To define your settings, click one of these tabs: the **General** tab to specify general preferences; the **Rules Table** tab to specify preferences for the Rules table; and the **Syslog** tab to specify the appearance of syslog messages displayed in the **Home** pane and to enable the display of a warning message for NetFlow-related syslog messages.

Step 3 On the **General** tab, specify the following:

- Check the **Warn that configuration in ASDM is out of sync with the configuration in ASA** check box to be notified when the startup configuration and the running configuration are no longer in sync with each other.
- Check the **Show configuration restriction message to read-only user** check box to display the following message to a read-only user at startup. This option is checked by default.

```
"You are not allowed to modify the ASA configuration,
because you do not have sufficient privileges."
```

- Check the **Show configuration restriction message on a slave unit in an ASA cluster** check box to display a configuration restriction message to a user connected to a slave unit.
- Check the **Confirm before exiting ASDM** check box to display a prompt when you try to close ASDM to confirm that you want to exit. This option is checked by default.
- Check the **Enable screen reader support (requires ASDM restart)** check box to enable screen readers to work. You must restart ASDM to enable this option.
- Check the **Warn of insufficient ASA memory when ASDM loads** check box to receive notification when the minimum amount of ASA memory is insufficient to run complete functionality in the ASDM application. ASDM displays the memory warning in a text banner message at bootup, displays a message in the title bar text in ASDM, and sends a syslog alert once every 24 hours.
- In the **Communications** area:

- Check the **Preview commands before sending them to the device** check box to view CLI commands generated by ASDM.
- Check the **Enable cumulative (batch) CLI delivery** check box to send multiple commands in a single group to the ASA.
- In the **Minimum Configuration Sending Timeout** field, enter the minimum amount of time in seconds for a configuration to send a timeout message. The default is 60 seconds.
- For the System in multiple context mode, in the **Graph User time interval in System Context** field, enter the amount of time between updates for the graphs on the Home pane, between 1 and 40 seconds. The default is 10 seconds.

- In the **Logging** area:
  - Check the **Enable logging to the ASDM Java console** check box to configure Java logging.
  - Set the severity level by choosing a **Logging Level** from the drop-down list.
- In the **Packet Capture Wizard** area, to display captured packets, enter the name of the **Network Sniffer Application** or click **Browse** to find it in the file system.
- In the **SFR Location Wizard** area, specify the location to install ASA FirePOWER module local management files. You must have read/write privileges to the configured location.

Step 4 On the **Rules Table** tab, specify the following:

- Display settings let you change the way rules appear in the Rules table.
  - Check the **Auto-expand network and service object groups with specified prefix** check box to display the network and service object groups automatically expanded based on the Auto-Expand Prefix setting.
  - Enter the prefix of the network and service object groups to expand automatically when displayed in the **Auto-Expand Prefix** field.
  - Check the **Show members of network and service object groups** check box to display members of network and service object groups and the group name in the Rules table. If the check box is not checked, only the group name is displayed.
  - Enter the number of network and service object groups to display in the **Limit Members To** field. When the object group members are displayed, then only the first *n* members are displayed.
  - Check the **Show all actions for service policy rules** check box to display all actions in the Rules table. When unchecked, a summary appears.
- Deployment settings let you configure the behavior of the ASA when deploying changes to the Rules table.
  - Check the **Issue “clear xlate” command when deploying access lists** check box to clear the NAT table when deploying new access lists. This setting ensures the access lists that are configured on the ASA are applied to all translated addresses.
- Access Rule Hit Count Settings let you configure the frequency for which the hit counts are updated in the Access Rules table. Hit counts are applicable for explicit rules only. No hit count will be displayed for implicit rules in the Access Rules table.

- Check the **Update access rule hit counts automatically** check box to have the hit counts automatically updated in the Access Rules table.
- Specify the frequency in seconds in which the hit count column is updated in the Access Rules table. Valid values are 10 - 86400 seconds.

Step 5 On the **Syslog** tab, specify the following:

- In the **Syslog Colors** area, you can customize the message display by configuring background or foreground colors for messages at each severity level. The **Severity** column lists each severity level by name and number. To change the background color or foreground color for messages at a specified severity level, click the corresponding column. The **Pick a Color** dialog box appears. Click one of the following tabs:
  - Choose a color from the palette on the **Swatches** tab and click **OK**.
  - Specify the H, S, and B settings on the **HSB** tab, and click **OK**.
  - Specify the Red, Green, and Blue settings on the **RGB** tab, and click **OK**.
- Check the **Warn to disable redundant syslog messages when NetFlow action is first applied to the global service policy rule** check box in the **NetFlow** area to enable the display of a warning message to disable redundant syslog messages.

Step 6 After you have specified settings on these three tabs, click **OK** to save your settings and close the **Preferences** dialog box.

Note Each time that you check or uncheck a preferences setting, the change is saved to the .conf file and becomes available to all the other ASDM sessions running on the workstation at the time. You must restart ASDM for all changes to take effect.

Search with the ASDM Assistant

The ASDM Assistant tool lets you search and view useful ASDM procedural help about certain tasks.

Choose **View** > **ASDM Assistant** > **How Do I?** to access information, or enter a search request from the **Look For** field in the menu bar. Choose **How Do I?** From the **Find** drop-down list to begin the search.

To view the ASDM Assistant, perform the following steps:

Procedure

Step 1 Choose **View** > **ASDM Assistant**.

The **ASDM Assistant** pane appears.

Step 2 Enter the information that you want to find in the **Search** field, and click **Go**.

The requested information appears in the **Search Results** pane.

Step 3 Click any links that appear in the **Search Results and Features** sections to obtain more details.

Enable History Metrics

The History Metrics pane lets you configure the ASA to keep a history of various statistics, which ASDM can display on any graph/table. If you do not enable history metrics, you can only monitor statistics in real time. Enabling history metrics lets you view statistics graphs from the last 10 minutes, 60 minutes, 12 hours, and 5 days.

To configure history metrics, perform the following steps:

Procedure

Step 1 Choose **Configuration** > **Device Management** > **Advanced** > **History Metrics**.

The **History Metrics** pane appears.

Step 2 Check the **ASDM History Metrics** check box to enable history metrics, then click **Apply**.

Unsupported Commands

ASDM supports almost all commands available for the ASA, but ASDM ignores some commands in an existing configuration. Most of these commands can remain in your configuration; see **Tools > Show Commands Ignored by ASDM on Device** for more information.

Ignored and View-Only Commands

The following table lists commands that ASDM supports in the configuration when added through the CLI, but that cannot be added or edited in ASDM. If ASDM ignores the command, it does not appear in the ASDM GUI at all. If the command is view-only, then it appears in the GUI, but you cannot edit it.

Table 5: List of Unsupported Commands

Unsupported Commands	ASDM Behavior
capture	Ignored.
coredump	Ignored. This can be configured only using the CLI.
crypto engine large-mod-accel	Ignored.
dhcp-server (tunnel-group name general-attributes)	ASDM only allows one setting for all DHCP servers.
eject	Unsupported.

Unsupported Commands	ASDM Behavior
established	Ignored.
failover timeout	Ignored.
fips	Ignored.
nat-assigned-to-public-ip	Ignored.
pager	Ignored.
pim accept-register route-map	Ignored. You can configure only the **list** option using ASDM.

service-policy global	Ignored if it uses a **match access-list** class. For example:
	
	`access-list myacl extended permit ip any any`
	`class-map mycm`
	`  match access-list myacl`
	`policy-map mypm`
	`  class mycm`
	`    inspect ftp`
	`service-policy mypm global`

set metric	Ignored.
sysopt nodnsalias	Ignored.
sysopt uauth allow-http-cache	Ignored.
terminal	Ignored.
threat-detection rate	Ignored.

Effects of Unsupported Commands

If ASDM loads an existing running configuration and finds other unsupported commands, ASDM operation is unaffected. Choose **Tools > Show Commands Ignored by ASDM on Device** to view the unsupported commands.

Discontinuous Subnet Masks Not Supported

ASDM does not support discontinuous subnet masks such as 255.255.0.255. For example, you cannot use the following:

```
ip address inside 192.168.2.1 255.255.0.255
```

Interactive User Commands Not Supported by the ASDM CLI Tool

The ASDM CLI tool does not support interactive user commands. If you enter a CLI command that requires interactive confirmation, ASDM prompts you to enter "[yes/no]" but does not recognize your input. ASDM then times out waiting for your response.

For example:

1. Choose **Tools** > **Command Line Interface**.
2. Enter the **crypto key generate rsa** command.

   ASDM generates the default 1024-bit RSA key.
3. Enter the **crypto key generate rsa** command again.

   Instead of regenerating the RSA keys by overwriting the previous one, ASDM displays the following error:

```
Do you really want to replace them? [yes/no]:WARNING: You already have
RSA ke0000000000000$A key
Input line must be less than 16 characters in length.

%Please answer 'yes' or 'no'.
Do you really want to replace them [yes/no]:

%ERROR: Timed out waiting for a response.
ERROR: Failed to create new RSA keys names <Default-RSA-key>
```

Workaround:

- You can configure most commands that require user interaction by means of the ASDM panes.
- For CLI commands that have a **noconfirm** option, use this option when entering the CLI command. For example:

```
crypto key generate rsa noconfirm
```