

PIX/ASA 7.x to 7.x Upgrade a Software Image using ASDM or CLI Configuration Example

Document ID: 69984

Introduction

Prerequisites

Requirements

Components Used

Related Products

Conventions

Upgrade a Software Image using ASDM

Upgrade an ASDM Image using ASDM

Upgrade a Software Image and ASDM Image using CLI

Verify

Troubleshoot

NetPro Discussion Forums – Featured Conversations

Related Information

Introduction

This document describes how to upgrade a software image on the Cisco ASA 5500 Series Adaptive Security Appliances using the Cisco Adaptive Security Device Manager (ASDM).

ASDM does not work if you upgrade (or downgrade) the security appliance software from 7.0 to 7.2 directly or upgrade (or downgrade) the ASDM software from 5.0 to 5.2 directly. You need to do it in incremental order.

Example: In order to perform the ASDM software upgrade from 5.0 to 5.2, first upgrade from 5.0 to 5.1 and then upgrade from 5.1 to 5.2. Likewise, for the security appliance, first upgrade from 7.0 to 7.1 and then upgrade from 7.1 to 7.2.

Note: If you want to upgrade or downgrade from version 7.1.(x) to 7.2(x) and vice versa, you must follow the steps in this procedure since older versions of the security appliance images do not recognize new ASDM images and new security appliance images do not recognize old ASDM images. Refer to the Upgrading to a New Software Version section of Cisco PIX Security Appliance Release Notes, Version 7.2(2) in order to learn more about the upgrade procedures.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on these software and hardware versions:

- Cisco ASA 5500 7.2(1)

- Cisco ASDM 5.2(1)

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Related Products

This configuration can also be used with Cisco PIX 500 Series Security Appliance Software Version 7.x.

Conventions

Refer to the Cisco Technical Tips Conventions for more information on document conventions.

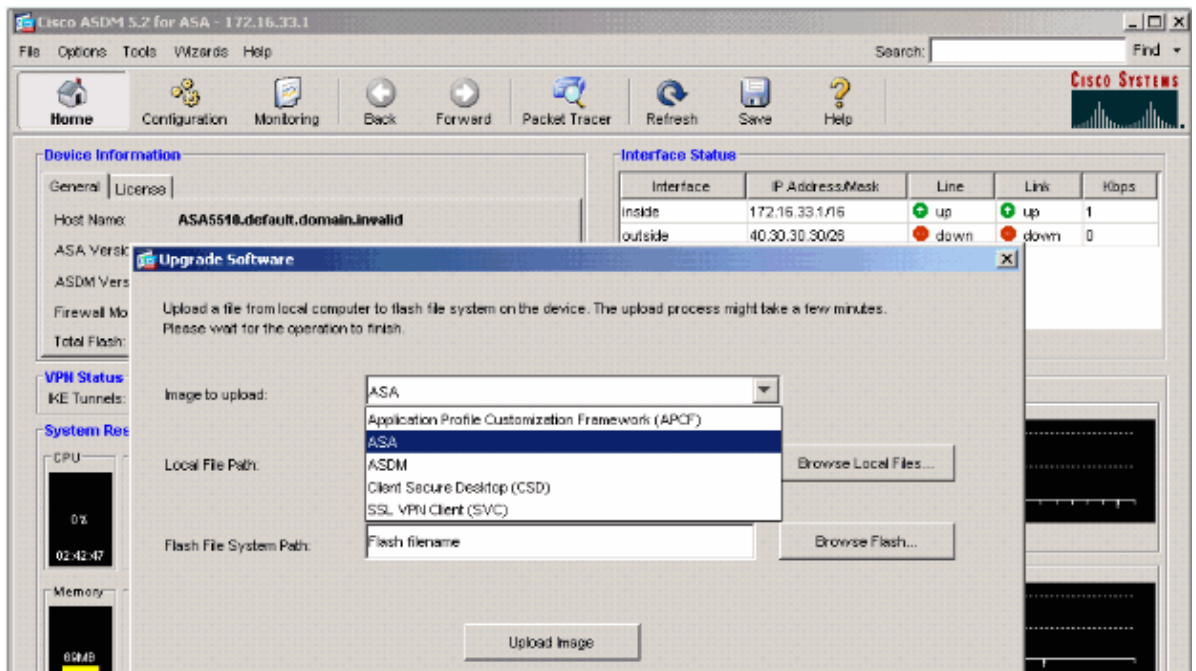
Upgrade a Software Image using ASDM

Complete these steps to upgrade a software image on the ASA 5500 using ASDM.

1. Select **Tools > Upgrade Software...** from the Home window of the ASDM.

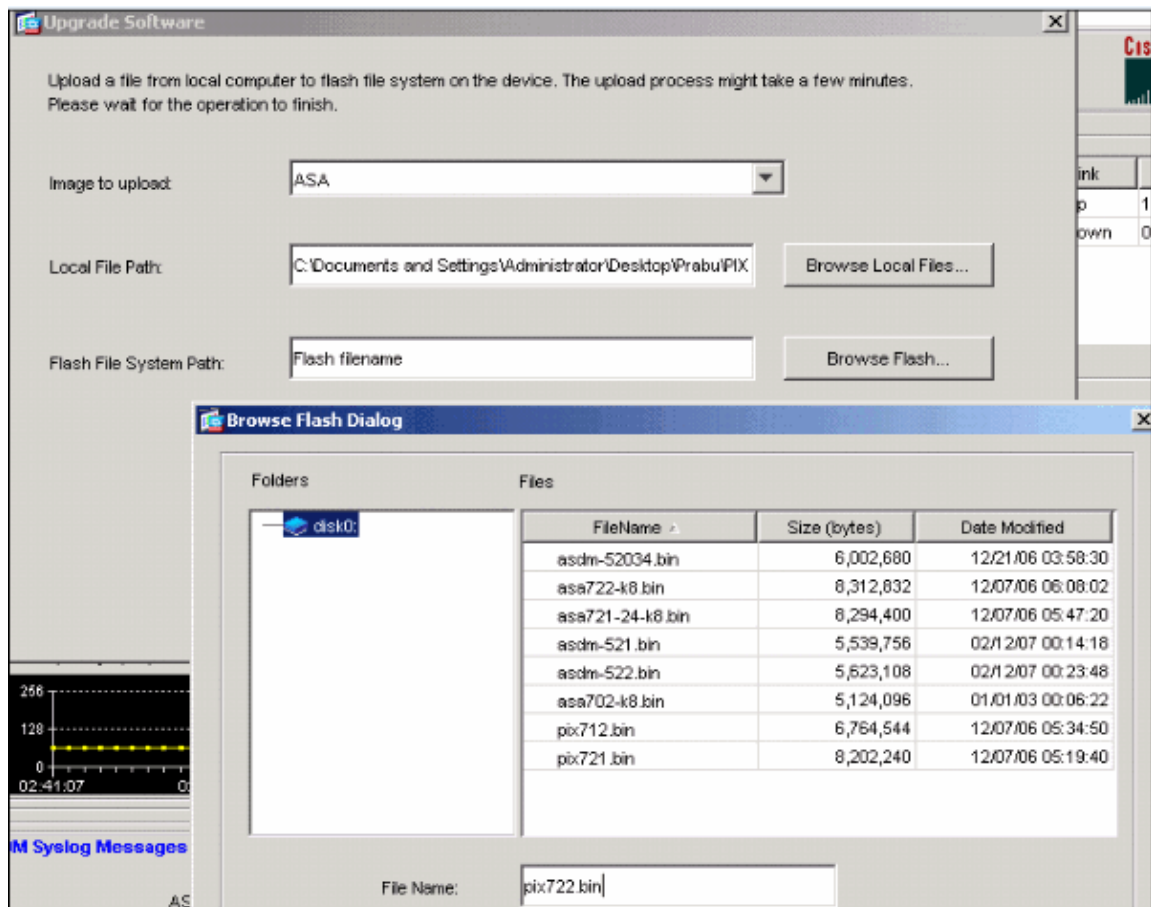


2. Select the type of image to upload from the drop-down menu.

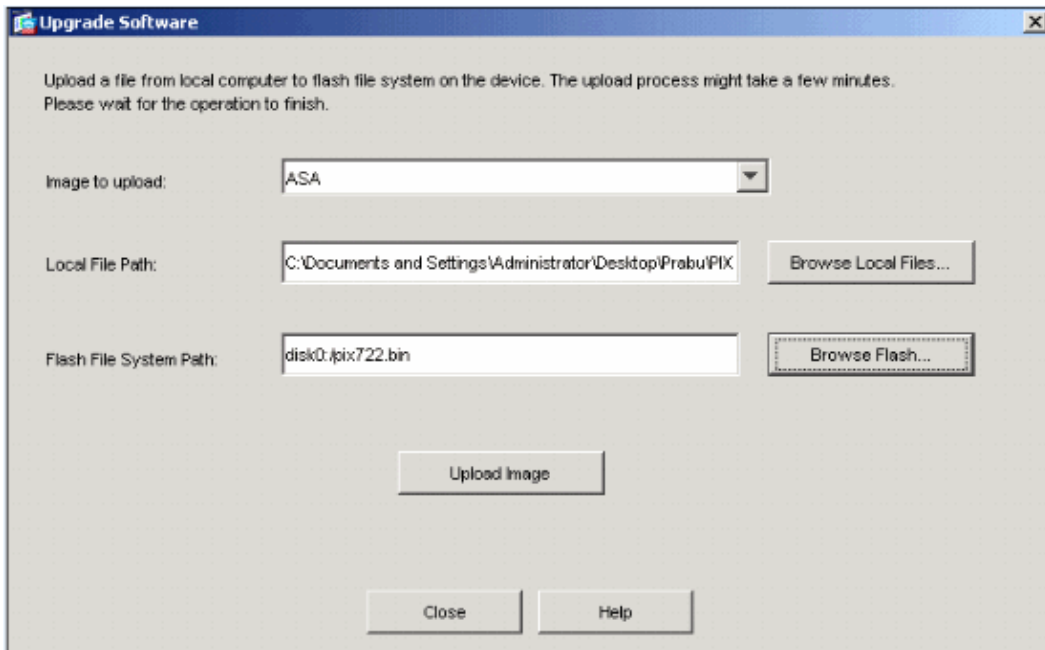


3. Click **Browse Local...** or type the path in the Local File Path field to specify the location of the software image on your PC.
4. Click **Browse Flash....**

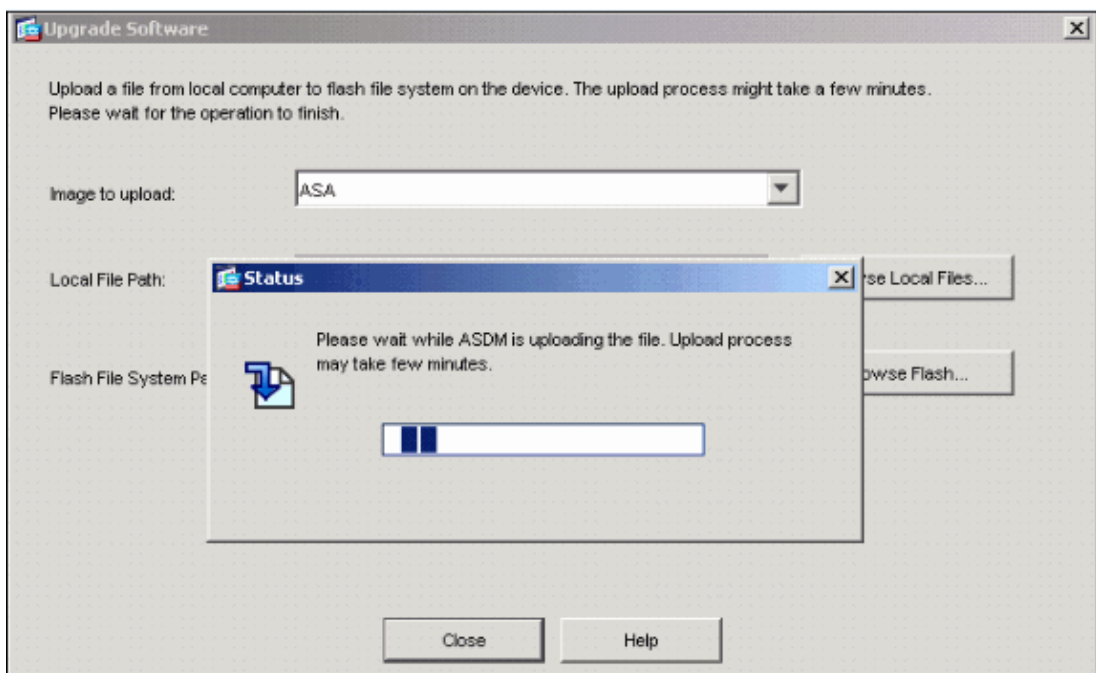
A Browse Flash Dialog window appears with the file name entered automatically. If the file name does not appear, enter it manually in the File Name field. Click **OK** when you are done.



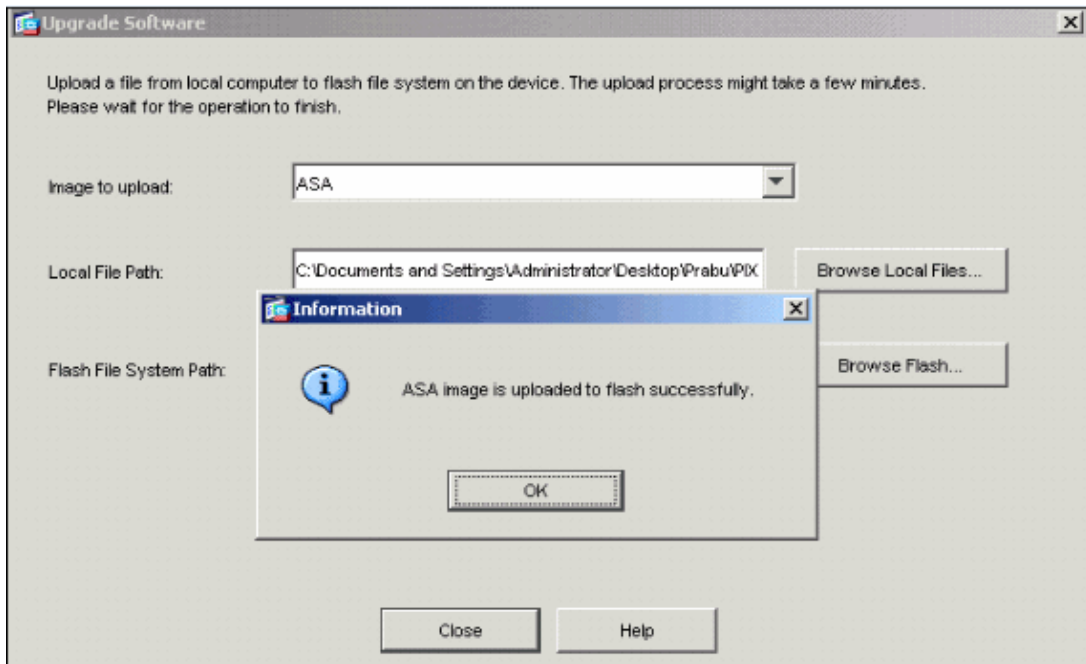
5. Once both the local and remote file names are specified, click **Upload Image**.



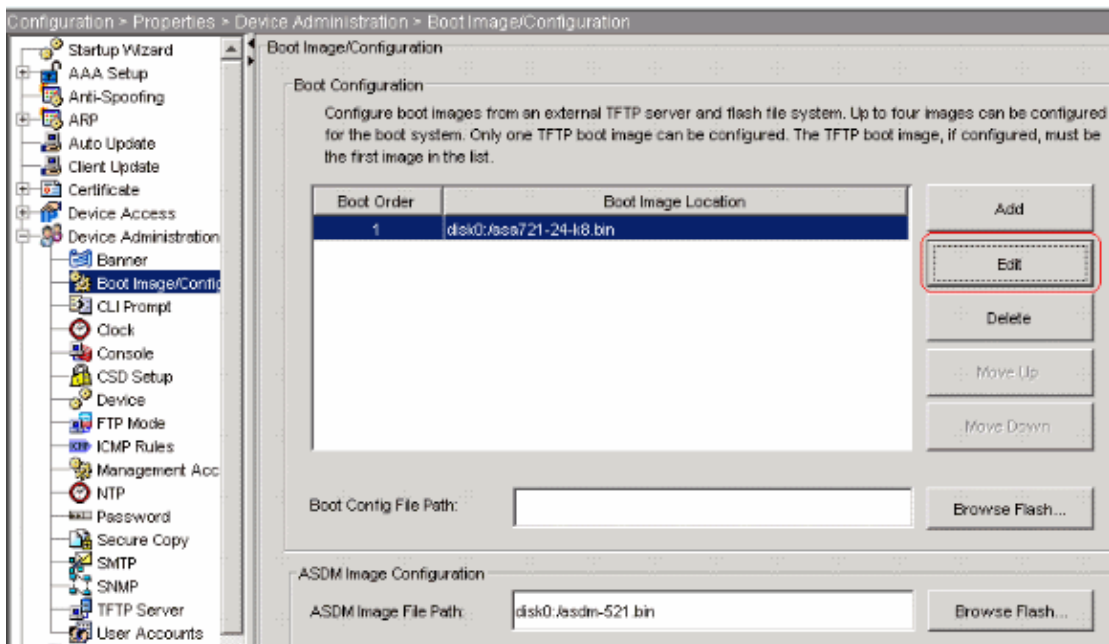
A Status window appears while ASDM writes the image to Flash.



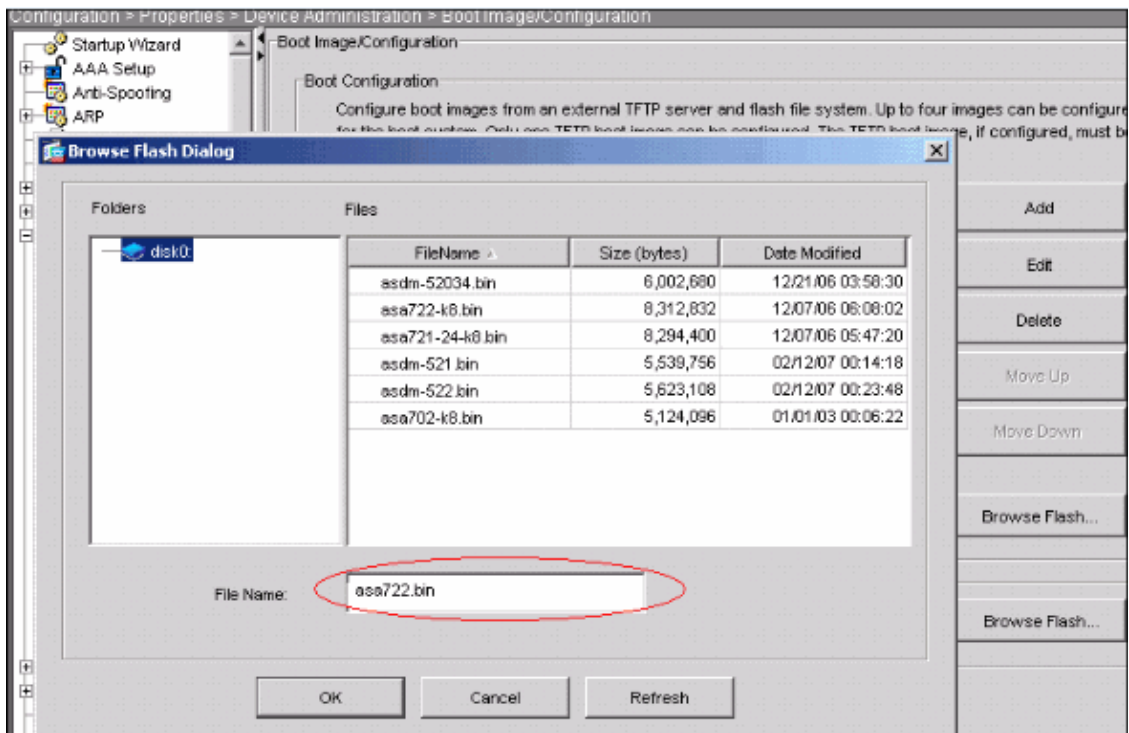
Once completed, an Information window appears that indicates a successful upload.



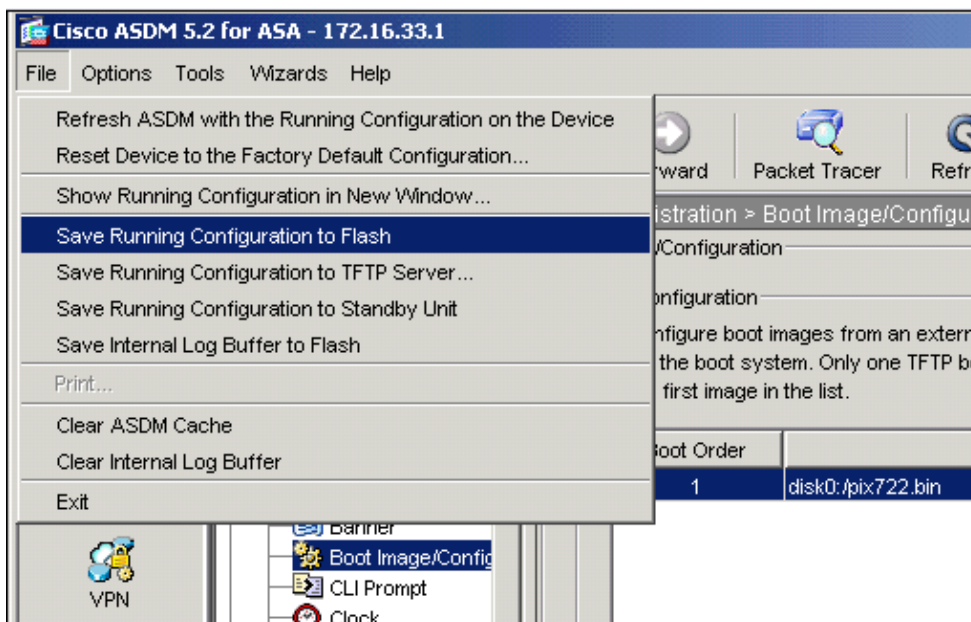
6. Click **OK** in the Information window and then **Close** in the Upload Image from Local PC window.
7. Choose **Configuration > Properties > Device Administration > Boot Image/Configuration > Edit** in order to change the boot image location.



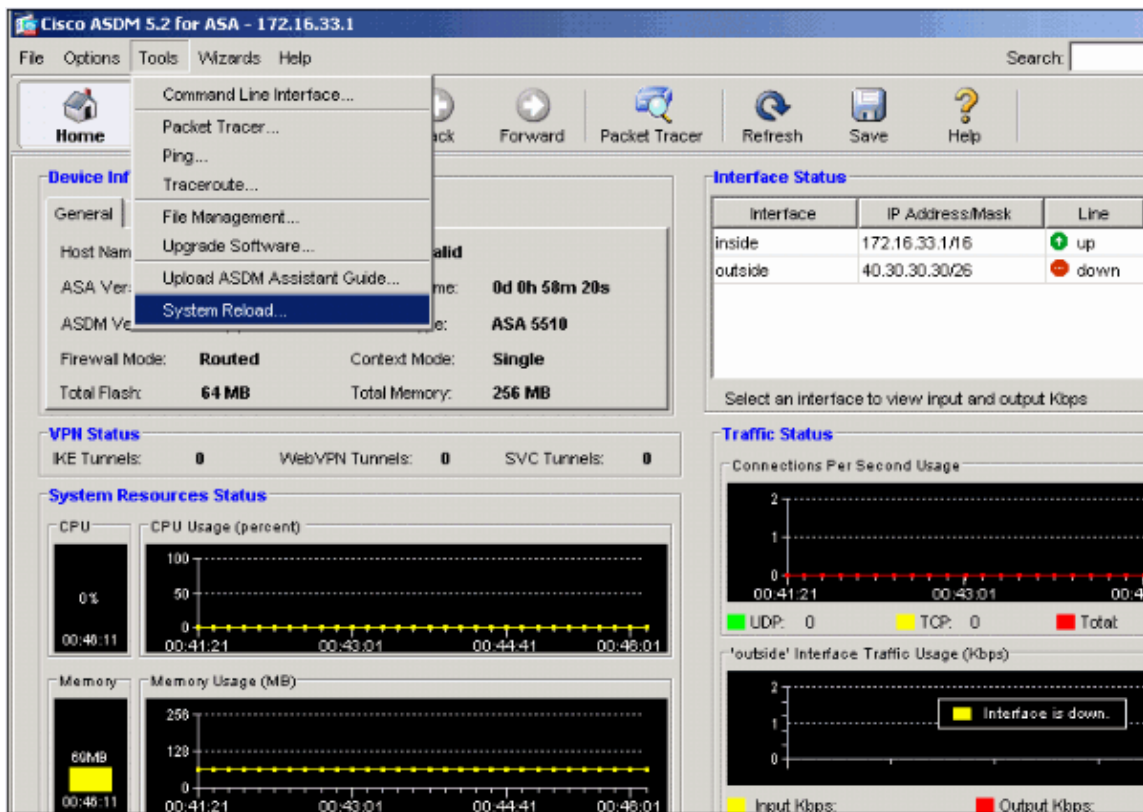
Click **Browse Flash** in order to choose or specify the ASA image file. Then click **OK**.



8. Choose **File > Save Running Configuration to Flash** in order to store the configuration to Flash memory.



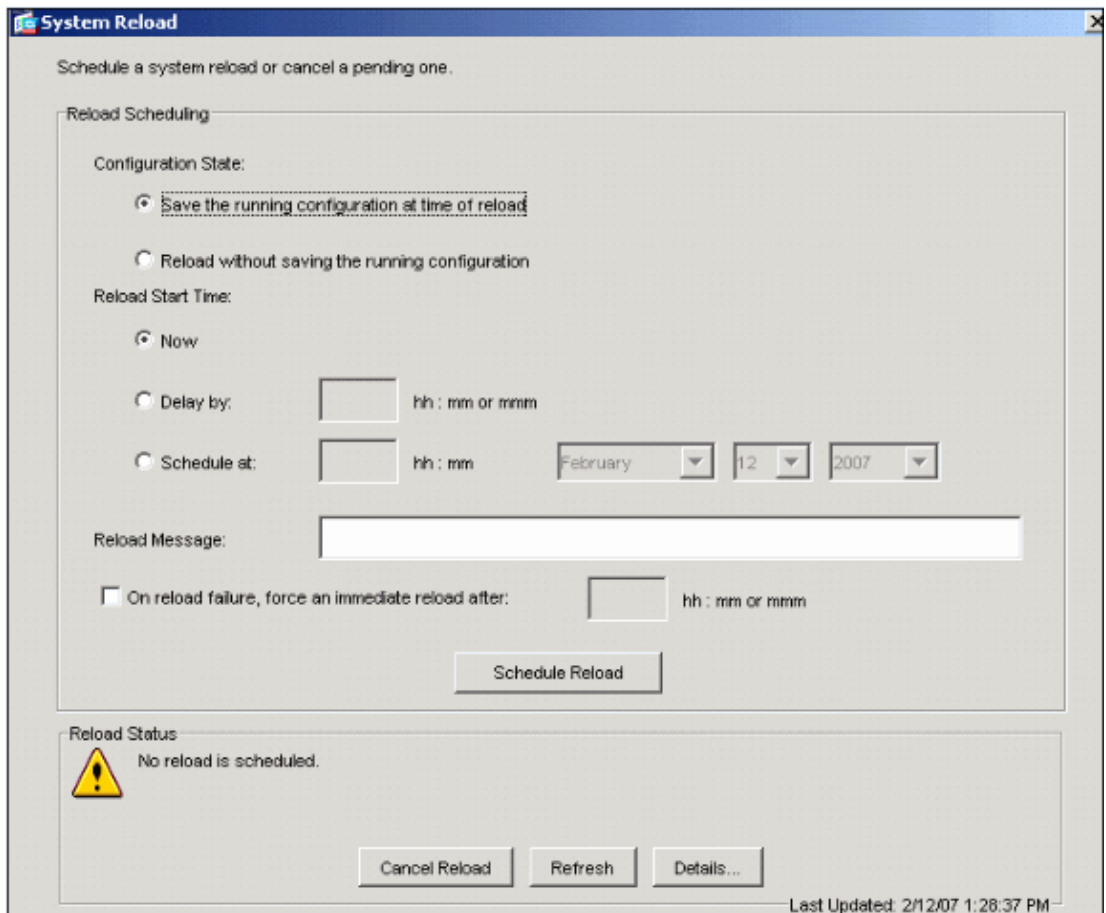
9. Choose **Tools > System Reload** from the Home window to reload the device.



10. A new window appears that asks you to verify the details of the reload. Select **Save the running configuration at the time of reload** and then choose a time to reload.

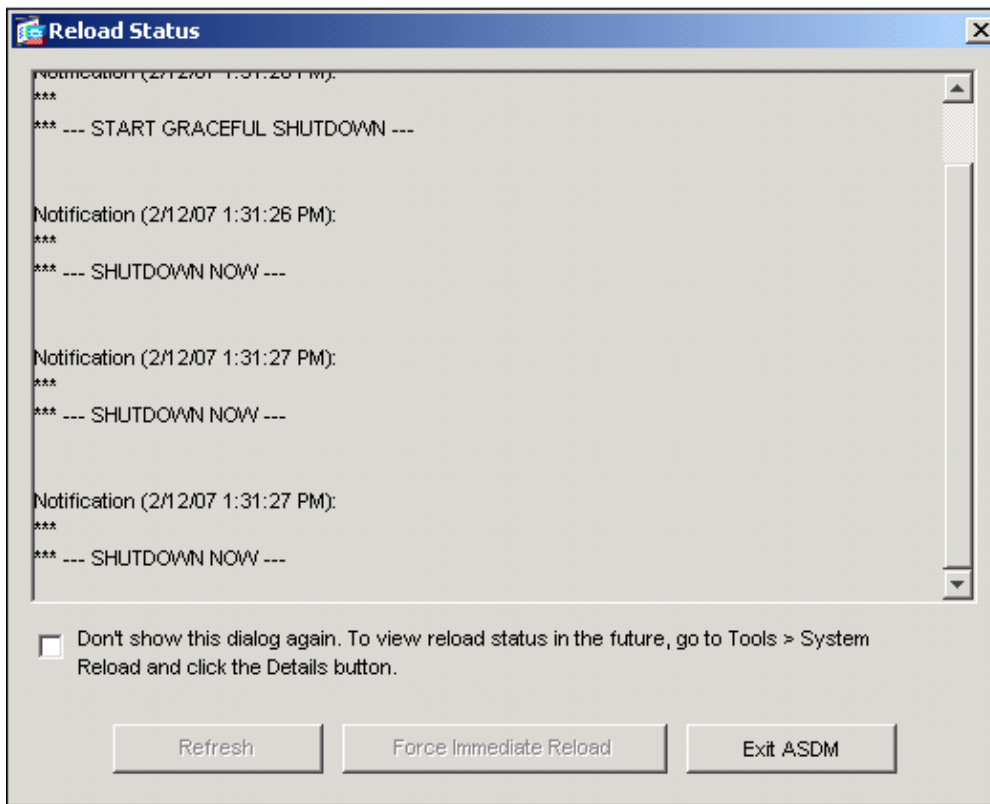
- ◆ **Now Reboot** the device immediately.
- ◆ **Delay By** Specify in how many minutes or hours from now to reload the device.
- ◆ **Schedule at** Specify a time and date to reload the device.

You can also specify whether or not the device should force a reload immediately if a scheduled reload fails. Check **On Reload failure, force an immediate reload after** and then specify a maximum hold time. This is the amount of time that the security appliance waits to notify other subsystems before a shutdown or reboot. After this time elapses, a quick (forced) shutdown/reboot occurs.



11. Once the reload is in progress, a Reload Status window appears that indicates that a reload is being performed. An option to exit ASDM is also provided.

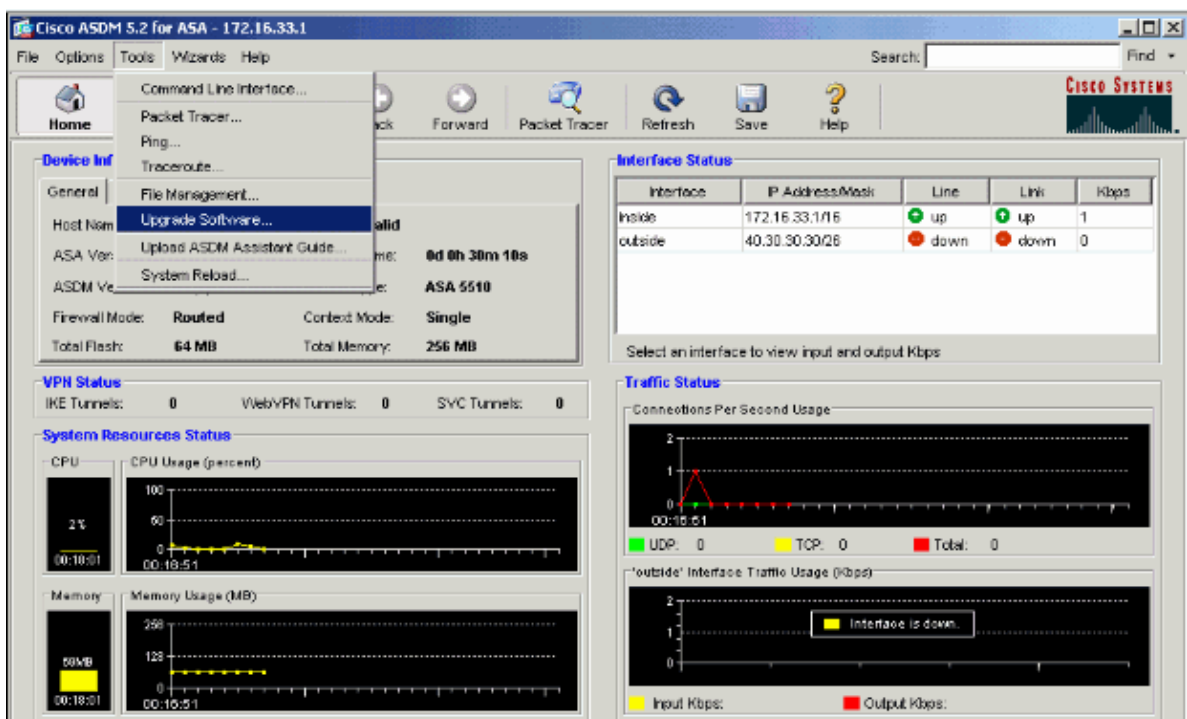
Note: Start ASDM again after the ASA reloads.



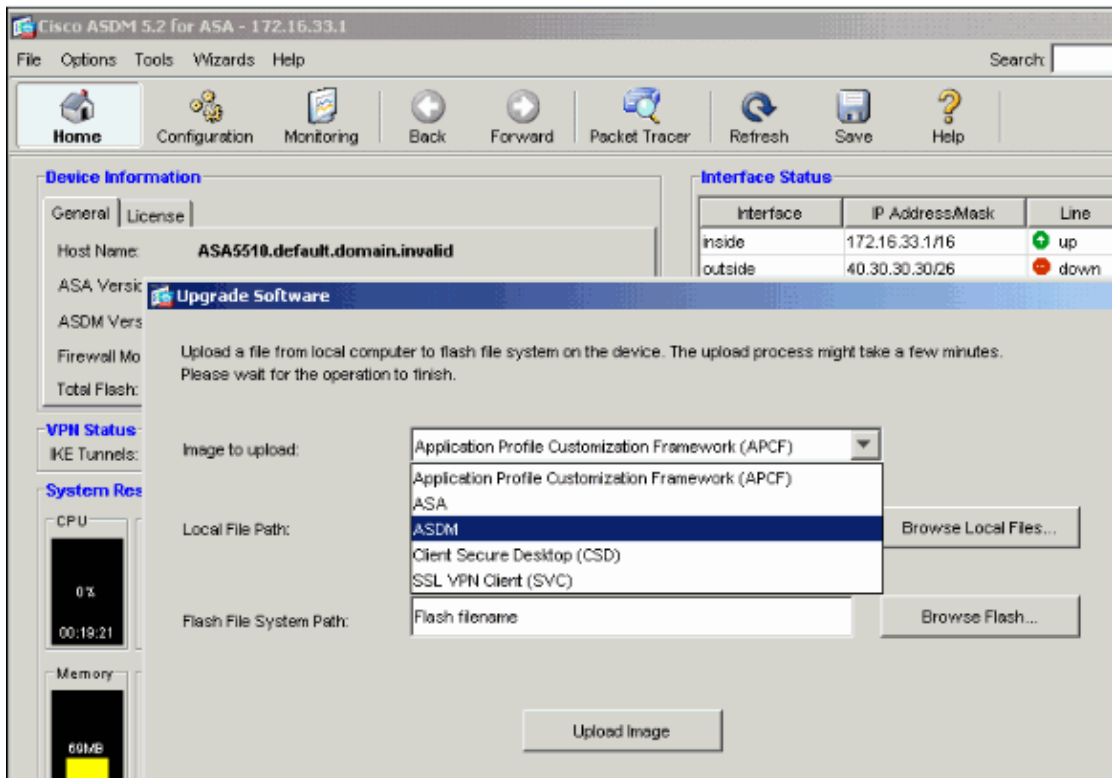
Upgrade an ASDM Image using ASDM

Complete these steps to upgrade an ASDM image on the ASA 5500 using ASDM.

1. Choose **Tools > Upgrade Software...** from the Home window of the ASDM.

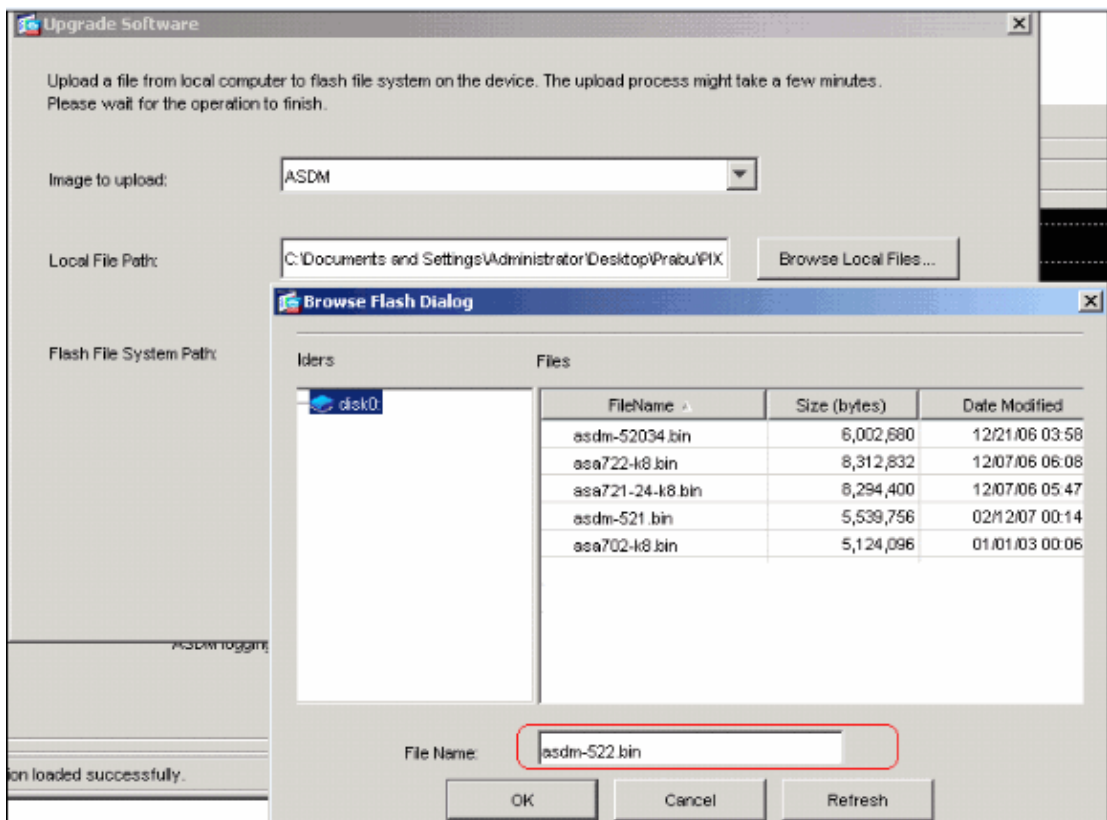


2. Select the type of image to upload from the drop-down menu.

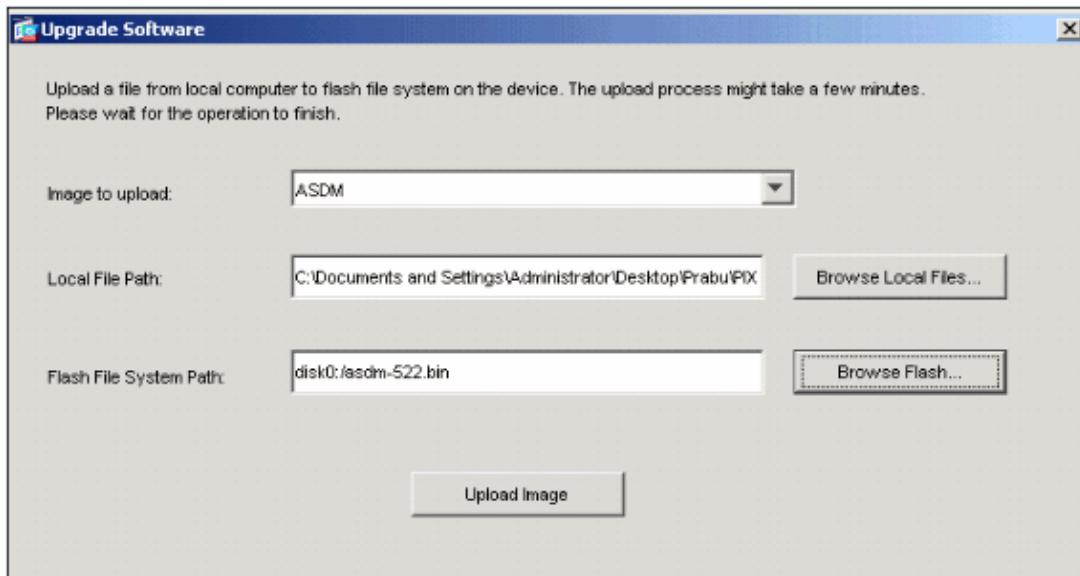


3. Click **Browse Local...** or type the path in the Local File Path field to specify the location of the ASDM image on your PC.
4. Click **Browse Flash...**

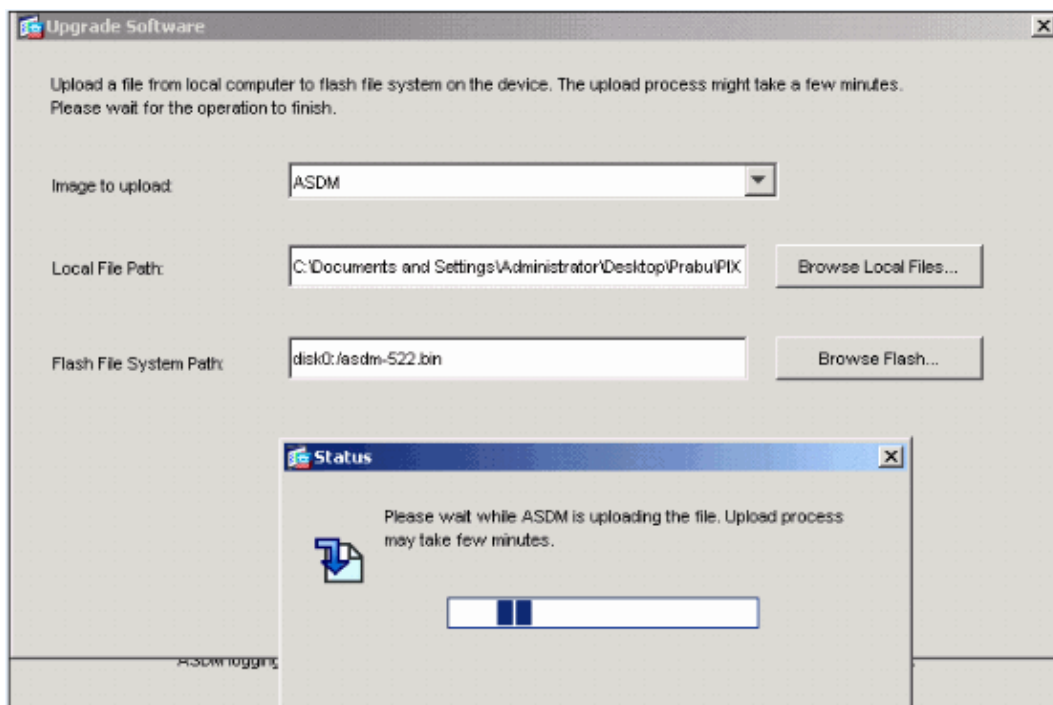
A Browse Flash Dialog window appears with the file name entered automatically. If the file name does not appear, enter it manually in the File Name field. Click **OK** when you are done.



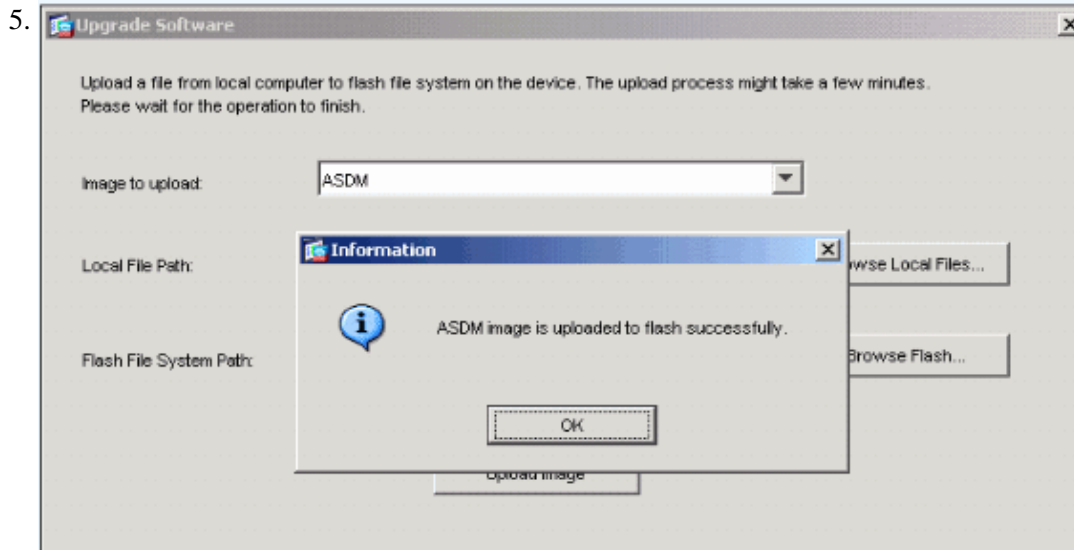
Once both the local and remote file names are specified, click **Upload Image**.



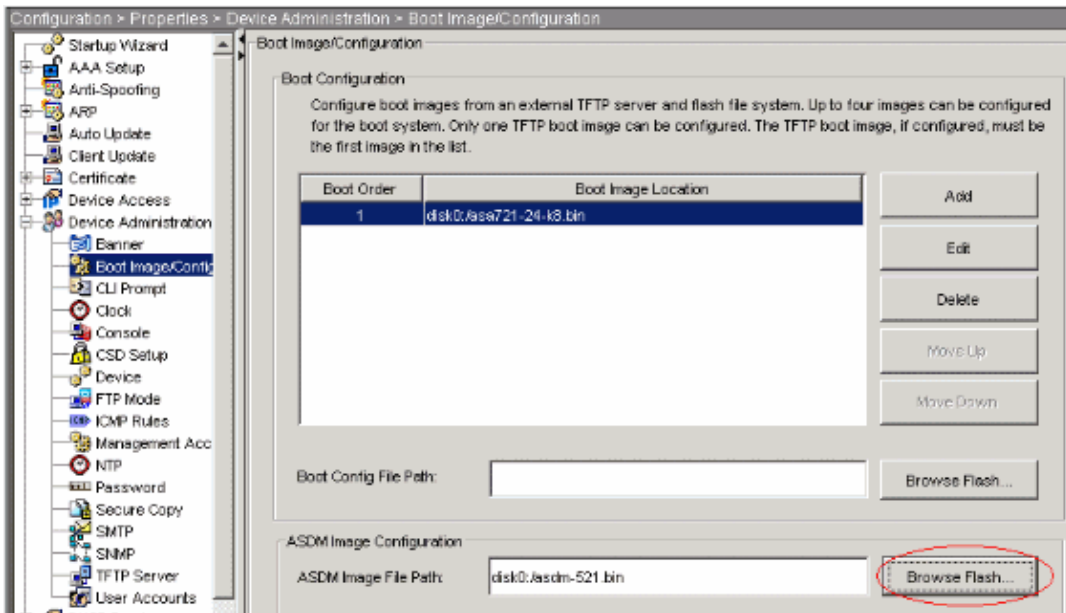
A Status window appears while ASDM writes the image to Flash.



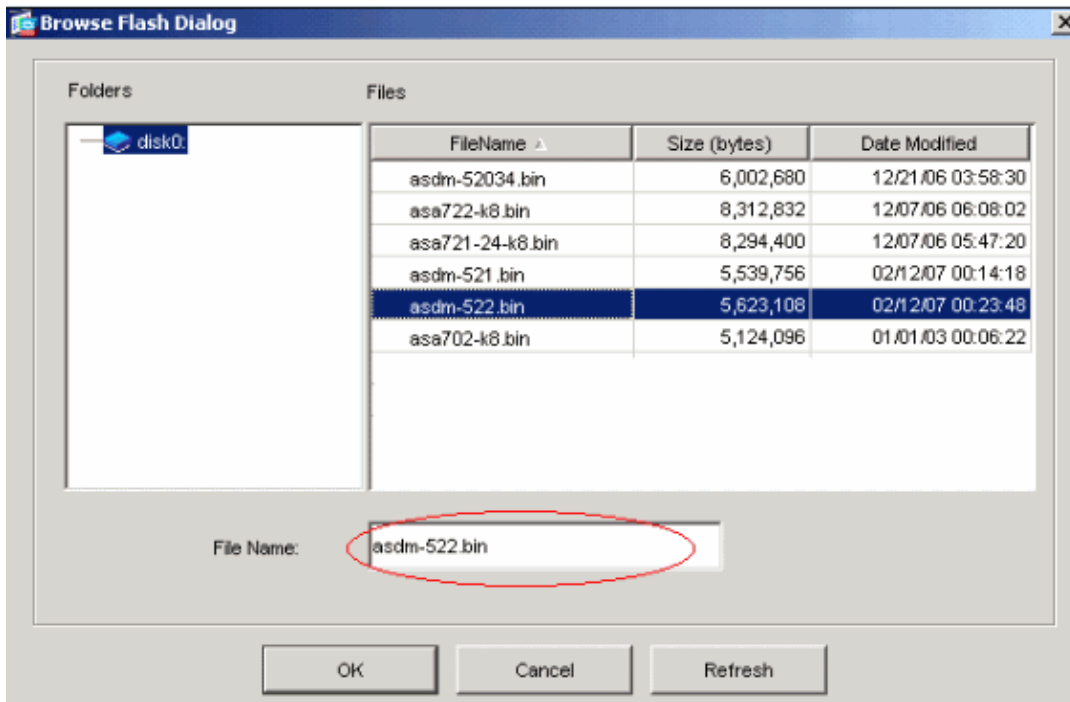
Once completed, an Information window appears that indicates a successful upload.



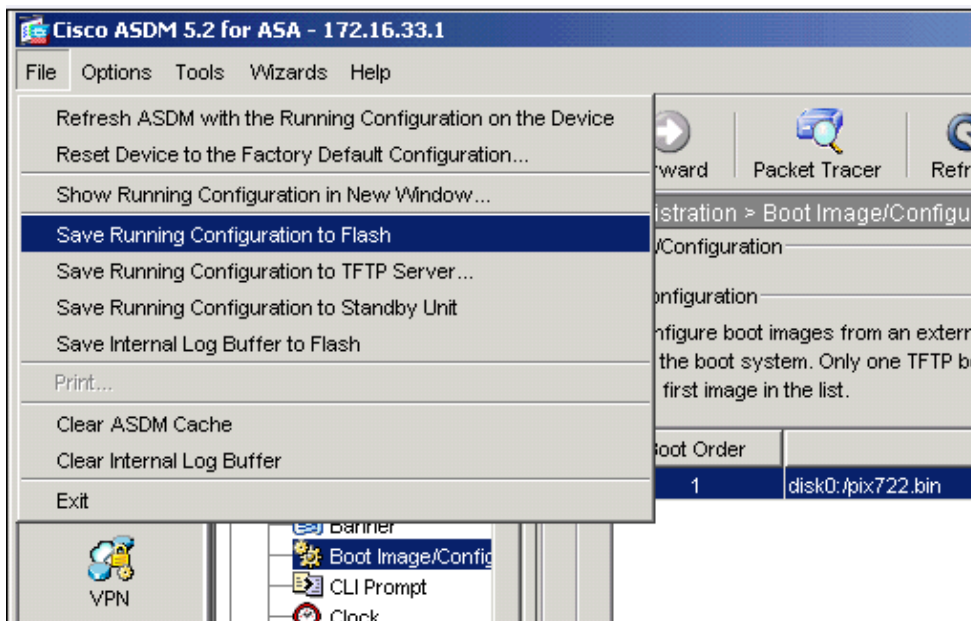
6. Click **OK** in the Information window and then **Close** in the Upload Image from Local PC window.
7. Choose **Configuration > Properties > Device Administration > Boot Image/Configuration** in order to change the ASDM image file name in the configuration.



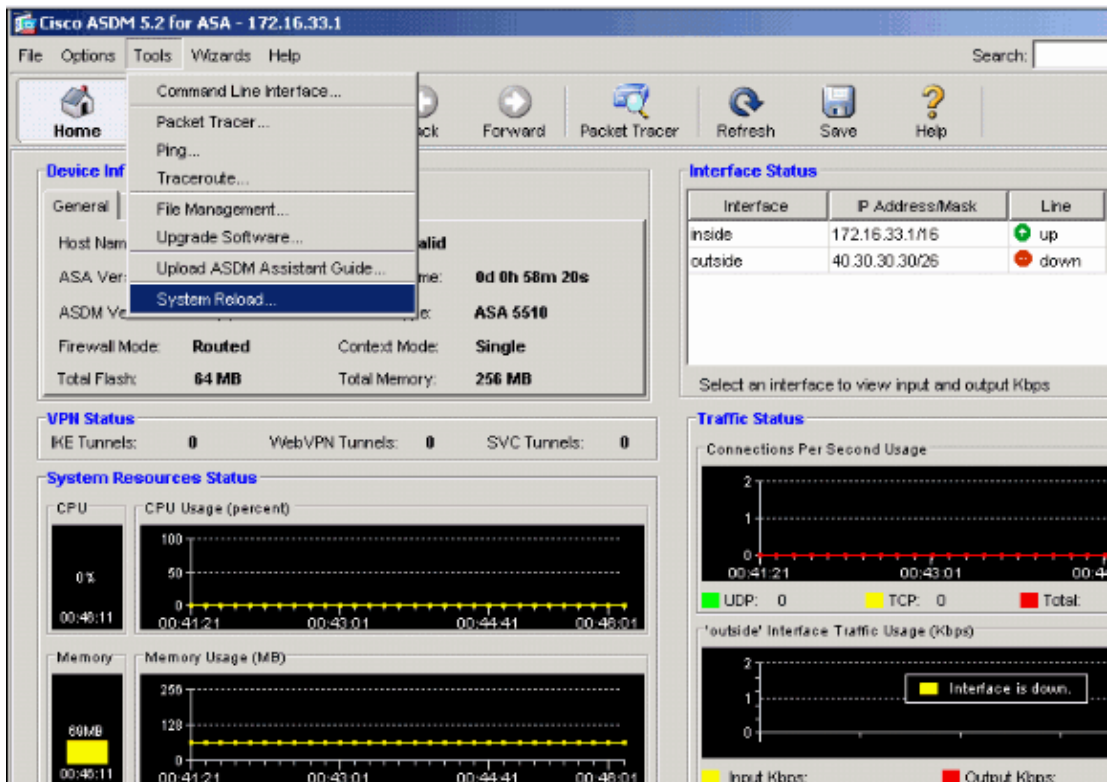
Click **Browse Flash** in order to choose or specify the ASDM image file. Then click **OK**.



8. Choose **File > Save Running Configuration to Flash** in order to store the configuration to Flash memory.



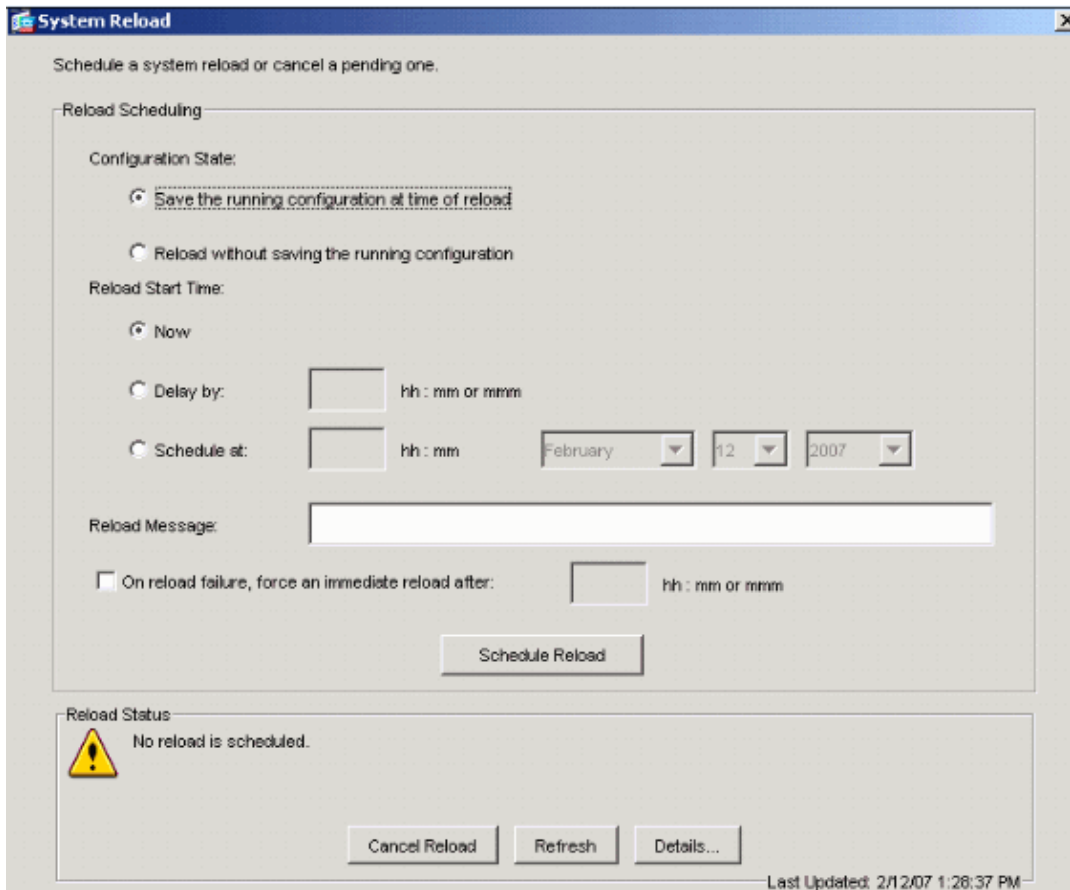
9. Choose **Tools > System Reload** from the Home window to reload the device.



10. A new window appears that asks you to verify the details of the reload. Click **Save the running configuration at the time of reload** and then choose a time to reload.

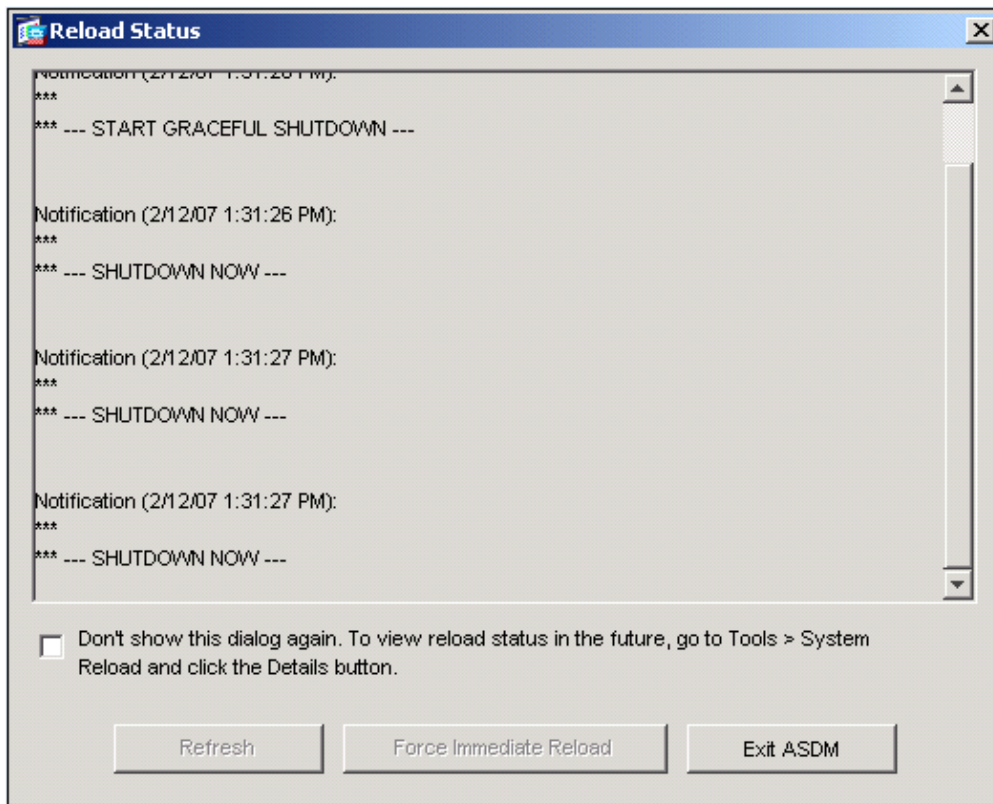
- ◆ **Now Reboot** the device immediately.
- ◆ **Delay By** Specify in how many minutes or hours from now to reload the device.
- ◆ **Schedule at** Specify a time and date to reload the device.

You can also specify whether or not the device should force a reload immediately if a scheduled reload fails. Check **On Reload failure, force an immediate reload after** and then specify a maximum hold time. This is the amount of time that the security appliance waits to notify other subsystems before a shutdown or reboot. After this time elapses, a quick (forced) shutdown/reboot occurs.



11. Once the reload is in progress, a Reload Status window appears that indicates that a reload is being performed. An option to exit ASDM is also provided.

Note: Start ASDM again after the ASA reloads.



Upgrade a Software Image and ASDM Image using CLI

A TFTP server is required to upgrade or downgrade a software image as well as an ASDM image for a PIX/ASA. Refer to TFTP Server Selection and Use in order to learn more about TFTP server selection.

The **copy tftp flash** command enables you to download a software image into the Flash memory of the firewall via TFTP. You can use the **copy tftp flash** command with any security appliance model. The image you download is made available to the security appliance on the next reload (reboot).

This is the output from the **copy tftp flash** command:

```
copy tftp[:[[/location] [/tftp_pathname]]] [[flash/disk0][:[image | asdm]]]
```

Note: For ASA, keyword *disk0* replaces *flash* in the **copy** command.

If the command is used without the location or pathname optional parameters, then the location and filename are obtained from the user interactively via a series of questions similar to those presented by Cisco IOS® software. If you only enter a colon, parameters are taken from the **tftp-server** command settings. If other optional parameters are supplied, then these values are used in place of the corresponding **tftp-server** command setting. If any of the optional parameters, such as a colon and anything after it are supplied, the command runs without a prompt for user input.

The location is either an IP address or a name that resolves to an IP address via the security appliance naming resolution mechanism, which is currently static mappings via the **name** and **names** commands. The security appliance must know how to reach this location via its routing table information. This information is determined by the **IP address**, the **route**, or the **RIP** commands. This depends on your configuration.

The pathname can include any directory names besides the actual last component of the path to the file on the server. The pathname cannot contain spaces. If a directory name has spaces set to the directory in the TFTP server instead of in the **copy tftp flash** command, and if your TFTP server is configured to point to a directory on the system from which you download the image, you only need to use the IP address of the system and the image filename. The TFTP server receives the command and determines the actual file location from its root directory information. The server then downloads the TFTP image to the security appliance.

These commands are needed to upgrade the software image as well as the ASDM image and make it as a boot image at the next reload.

```
ASA#copy tftp [[flash:/disk0:][software image name/asdm image name]]

!--- Command to set an image as bootup or specify the
!--- ASDM image file.

ASA(config)#boot system [flash:/disk0:]/[software image name]

!--- Save active configuration to the Flash.

ASA#write memory

!--- Reboot the security appliance and load
!--- with the new boot image as per the configuration file.

ASA#reload
```

Example:

```
ASA5510#copy tftp disk0:

Address or name of remote host []? 172.16.31.1
Source filename []? asa722-k8.bin
Destination filename [asa722-k8.bin]?
Accessing tftp://172.16.31.1/asa722-k8.bin...!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Writing file disk0:/asa722-k8.bin...
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
8312832 bytes copied in 163.350 secs (50998 bytes/sec)

ASA5510#show disk0:
-#- --length-- -----date/time----- path
  6 5124096   Jan 01 2003 00:06:22 asa702-k8.bin
  7 5623108   Feb 12 2007 00:23:48 asdm-522.bin
 10 5539756   Feb 12 2007 00:14:18 asdm-521.bin
 11 8294400   Dec 07 2006 05:47:20 asa721-24-k8.bin
 12 6002680   Dec 21 2006 03:58:30 asdm-52034.bin
 13 8312832   Feb 12 2007 22:46:30 asa722-k8.bin

23949312 bytes available (38932480 bytes used)

!--- Command to set "asa722-k8.bin" as the boot image.

ASA5510(config)# boot system disk0:/asa722-k8.bin

!--- Command to set "asdm-522.bin" as the ASDM image.

ASA5510(config)# asdm image disk0:/asdm-522.bin
ASA5510# write memory
```

```
ASA5510# reload
```

Verify

Use this section to confirm that your software upgrade was successful.

The Output Interpreter Tool (registered customers only) (OIT) supports certain **show** commands. Use the OIT to view an analysis of **show** command output.

After the ASA reloads and you have successfully logged into ASDM again, you can verify the version of the image that runs on the device. See the General tab on the Home window for this information.

The screenshot shows the Cisco ASDM 5.2 for ASA 172.16.33.1 interface. The main window is divided into several sections:

- Device Information:** General tab selected. Host Name: ASA5510.default.domain.invalid. ASA Version: 7.2(1)24. Device Uptime: [blank]. ASDM Version: 5.2(1). Device Type: ASA 5510. Firewall Mode: Routed. Context Mode: Single. Total Flash: 64 MB. Total Memory: 256 MB.
- Interface Status:** Table showing interface details.
- VPN Status:** IKE Tunnels, WebVPN Tunnels, SVC Tunnels.
- System Resources Status:** CPU usage (9%) and Memory usage (99MB) gauges.
- Traffic Status:** Connections Per Second Usage and 'outside' Interface Traffic Usage (Kbps) graphs.

Interface	IP Address.Mask	Line	Link	Kbps
inside	172.16.33.1/16	? r/w	? n/a	n/a
outside	40.30.30.30/26	? r/w	? n/a	n/a

Troubleshoot

There is currently no specific troubleshooting information available for this configuration.

NetPro Discussion Forums – Featured Conversations

Networking Professionals Connection is a forum for networking professionals to share questions, suggestions, and information about networking solutions, products, and technologies. The featured links are some of the most recent conversations available in this technology.

NetPro Discussion Forums – Featured Conversations for Security
Security: Intrusion Detection [Systems]
Security: AAA
Security: General
Security: Firewalling

Cisco – PIX/ASA 7.x to 7.x Upgrade a Software Image using ASDM or CLI Configuration Example

Related Information

- [Downloading Software or Configuration Files to Flash Memory, Cisco Security Appliance Command Line Configuration Guide](#)
 - [Cisco ASA 5500 Series Adaptive Security Appliances Product Support](#)
 - [Cisco Adaptive Security Device Manager Product Support](#)
 - [Cisco PIX Firewall Software](#)
 - [Cisco Secure PIX Firewall Command References](#)
 - [Security Product Field Notices \(including PIX\)](#)
 - [TFTP Server Selection and Use](#)
 - [Backup and Restore PIX Configuration Files](#)
 - [Requests for Comments \(RFCs\)](#)
 - [Technical Support & Documentation – Cisco Systems](#)
-

All contents are Copyright © 1992–2006 Cisco Systems, Inc. All rights reserved. Important Notices and Privacy Statement.

Updated: Feb 20, 2007

Document ID: 69984
