Cisco Integrated Storage System Installation and Upgrade Guide

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Cisco Integrated Storage System Installation and Upgrade Guide

CONTENTS

Index

Overview of Cisco Integrated Storage System Software Installation

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This guide provides command-line interface (CLI) commands and procedures to install and upgrage application software for the Cisco Integrated Storage System Enhanced Network Module, referred to throughout this guide as the Cisco Integrated Storage System module.

This guide lists the features supported for version 1.0 and later versions of the Cisco Integrated Storage System network module. To view the product feature history, see the *Release Notes for the Cisco Video Management and Storage System*.

Note The Cisco Integrated Storage System module is shipped from the factory with the application software preinstalled. Do not reinstall the software.

To make sure that the Cisco Integrated Storage System module is operational, complete the following steps:

1. Make sure that the Cisco Integrated Storage System hardware is properly installed in the Integrated Services Router (Cisco ISR). For instructions on installing the Cisco Integrated Storage System hardware, see *Installing Cisco Network Modules in Cisco Access Routers*.
2. Activate IP connectivity to the Cisco Integrated Storage System software, as described in the "Activating IP Connectivity" chapter.
3. Complete the appropriate tasks and procedures in this guide for installing new software or upgrading the module from an earlier software version.
4. After the software is installed, perform the administrative tasks described in the *Cisco Integrated Storage System CLI Administrator Guide*.

This guide describes installation of new software or upgrades to existing software for the Cisco Integrated Storage System module. It does not provide information on installing Cisco routers or other Cisco network modules. For information about those topics, see the "Additional References" section on page 3.

This chapter contains the following sections:

Software Upgrade Process

For a complete list of versions and the upgrade processes available for them, see the software upgrade process matrix in the *Release Notes for the Cisco Video Management and Storage System*.

Upgrading the existing software of Cisco Integrated Storage System module involves the following procedures:

1. Follow the appropriate upgrade or clean installation process.
2. Configure new features, if appropriate. For details on configuring the software on the Cisco Integrated Storage System module, see the *Cisco Integrated Storage System CLI Administrator Guide*.

Types of Cisco Integrated Storage System Software Installations and Upgrades

Choose the appropriate software installation methods to upgrade or install new software on the Cisco Integrated Storage System module for the type of installation required.

- Upgrade installation—Follow this procedure to upgrade from an earlier software version to the current one. To upgrade, use the online installer with the **software install upgrade** command. See the "Upgrading Software Using the Online Installer" chapter for details.
- Clean installation—Use one of the following two processes to install software, depending on whether the system is operational or off line:
  - Clean installation without boot helper—Installs new software using the online installer with the **software install clean** command. The system remains operational while the new software files are downloaded in the background. See the "Installing New Software Using the Online Installer" chapter for details.

Caution The following **reload *** boot helper** command prompts you as to whether or not you want to preserve data on /media0. If you choose not to preserve the data, the entire hard drive is reformatted and all existing data erased.

  - Clean installation using boot helper—Installs software upgrades using the boot helper. This procedure is used for downloading new software versions when the system is off line or if other upgrade procedures are unsuccessful. This installation erases the hard drive memory before loading the new files on the disk. See "Installing Software Using the Boot Helper" chapter for details.

Note This procedure does not perform incremental upgrades.

Platforms and Cisco IOS Software Images

Cisco Integrated Storage System software applications use a set of commands that are similar in structure to Cisco IOS software commands. However, the Cisco Integrated Storage System commands do not affect the Cisco IOS configuration.

The Cisco Integrated Storage System hardware module uses the *module* command-line interface (CLI) commands for its operation.

See the *Release Notes for the Cisco Video Management and Storage System* for detailed information about the Cisco Integrated Storage System hardware and software platforms.

Uninterruptible Power Supply Recommendations

We strongly recommend attaching an uninterruptible power supply (UPS) to the router that houses the Cisco Integrated Storage System module. Any reliable UPS unit will provide continuous power to maintain the operation of both the router and the Cisco Integrated Storage System module. Consider the unit's capacity and run time because power consumption differs among Cisco platforms. Ideally, a UPS should include a signaling mechanism that directs the router to shut down the Cisco Integrated Storage System module properly; the UPS then powers off the router.

Additional References

The following sections provide references related to the Cisco Integrated Storage System module.

Related Documents

Related Topic	Document Title
Cisco Integrated Storage System and the Cisco Video Surveillance Solution	• *Release Notes for the Cisco Video Management and Storage System* • *Connecting Cisco Integrated Storage System Enhanced Network Modules to the Network* • *Cisco Integrated Storage System CLI Administrator Guide* • *Connecting Cisco Video Management and Storage System Enhanced Network Modules to the Network* • *Cisco Video Management and Storage System Installation and Upgrade Guide* • *Cisco Video Management and Storage System CLI Administrator Guide* • *Connecting Cisco Analog Video Gateway Network Modules to the Network* • *Cisco Analog Video Gateway Installation and Upgrade Guide* • *Cisco Analog Video Gateway CLI Administrator Guide* • *Cisco Analog Video Gateway XML API Guide* • *Open Source License Notice*
Cisco IOS software	*Cisco IOS Software*

Related Topic	Document Title
Network modules	*Installing Cisco Network Modules in Cisco Access Routers*
Technical documentation, including feedback and assistance	*What's New in Cisco Product Documentation* (including monthly listings of new and revised documents)

Related Cisco IOS Documents

Related Topic	Document Title
Cisco IOS configuration	*Cisco IOS Debug Command Reference, Release 12.4(11)T*

Technical Assistance

Description	Link
For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at: Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.	http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html
Cisco Feature Navigator website	http://www.cisco.com/go/cfn Use Cisco Feature Navigator to find information about platform support and Cisco IOS and Catalyst OS software image support. An account on Cisco.com is not required.
Cisco Software Center website	http://www.cisco.com/public/sw-center/

Activating IP Connectivity

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After you install the Cisco Integrated Storage System module hardware into the host router, activate the IP communication link between the host router and the Cisco Integrated Storage System module. For instructions on installing the Cisco Integrated Storage System hardware, see *Installing Cisco Network Modules in Cisco Access Routers.*

Note The Cisco Integrated Storage System software is installed on the module at the factory. Spare modules (that is, field-replaceable spare modules) are also shipped with the software installed.

Before installing new software or upgrading existing software to a later version, you must first establish communications with the Cisco Integrated Storage System module. After you install new software or upgrade existing software, begin configuring the Cisco Integrated Storage System software using the *Cisco Integrated Storage System CLI Administrator Guide*.

Activating Module Connectivity

Prerequisites

The following information is required for activating the software:

- Slot and unit numbers of the Cisco Integrated Storage System module on the Cisco IOS router that hosts the module.
- IP address and subnet mask of the Cisco IOS router that hosts the Cisco Integrated Storage System module, or the unnumbered interface type and number.
- IP address of the Cisco Integrated Storage System module.
- IP address of the default gateway of the module. This can be the IP address of the unnumbered interface.

SUMMARY STEPS

1. **interface integrated-service-engine** *slot/unit*
2. **ip unnumbered** *if-type number*
3. **service-module ip address** *ip-address subnet-mask*

4. **service-module external ip address** *ip-address subnet-mask*
5. **service-module ip default-gateway** *gw-ipaddr*
6. **exit**
7. **ip route** *ip-address subnet-mask* **integrated-service-engine** *slot/unit*

DETAILED STEPS

	Command or Action	Purpose

Step 1	**interface integrated-service-engine** *slot/unit*
	
	Example:
	`Router(config)# interface integrated-service-engine 2/0`
	`Router(config-if)#`
		Enters Cisco IOS interface configuration mode.

Step 2	`Router(config-if)#` **ip unnumbered** *if-type* **Example:** `Router(config-if)# ip unnumbered gigabitethernet 0/1`	Specifies the interface IP unnumbered interface type and slot/unit numbers for the Cisco IOS router that hosts the Cisco Integrated Storage System module.
Step 3	**service-module ip address** *ip-address subnet-mask* **Example:** `Router(config-if)# service-module ip address 172.16.153.11 255.255.255.0`	Specifies the IP address of the Cisco Integrated Storage System module interface.
Step 4	**service-module external ip address** *ip-address subnet-mask* **Example:** `Router(config-if)# service-module external ip address 10.0.0.19 255.255.255.0`	Specifies the external IP address of the interface.
Step 5	**service-module ip default-gateway** *ip-address* **Example:** `Router(config)# service-module ip default-gateway 172.16.153.21`	Specifies the IP address of the Cisco IOS router that hosts the Cisco Integrated Storage System module.

Step 6	**exit**
	
	Example:
	`Router(config-if)# exit`
	`Router(config)#`
		Exits Cisco IOS interface configuration mode and enters configuration mode.

Step 7	**ip route** *service-module-ip-address subnet-mask* **integrated-service-engine** *slot/unit* **Example:** `Router(config)# ip route 172.16.153.11 255.255.255.0 integrated-service-engine 2/0`	Sets the IP route IP address and subnet mask of the Cisco Integrated Storage System module. The IP route command is needed if the IP unnumbered interface type is used.

Examples

The following example shows the IP connectivity activation procedure:

```
Router(config)# interface GigabitEthernet0/1
Router(config-if)# ip address 10.0.0.8 255.255.0.0
Router(config-if)# duplex auto
Router(config-if)# speed auto
Router(config-if)# media-type rj45
Router(config-if)# no keepalive
Router(config-if)# exit
Router(config)# interface integrated-service-engine 2/0
Router(config-if)# ip unnumbered gigabitethernet 0/1
Router(config-if)# service-module ip address 10.0.0.9 255.255.0.0
Router(config-if)# service-module ip default-gateway ip 10.0.0.8
Router(config-if)# exit
Router(config)# ip route 10.0.0.9 255.255.255.255 integrated-service-engine 2/0
```

The following example shows output for the **show running-config** command:

```
Router# show running-config interface i2/0

interface integrated-Service-Engine2/0
ip unnumbered GigabitEthernet0/1
service-module ip address 10.0.0.9 255.255.255.255
service-module ip default-gateway 10.0.0.8
no keepalive
!
```

Upgrading Software Using the Online Installer

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This chapter provides the procedures for upgrading from a previous software version of the Cisco Integrated Storage System module to a later version using the "upgrade" online software installer in the application.

An *upgrade installation* replaces only the files on the disk that are necessary for creating the new software image. Your existing configuration will not be erased.

With this procedure, the software files are downloaded in the background while the Cisco Integrated Storage System module continues to operate. Anytime after the download is finished, you can perform the upgrade. Only an FTP/SFTP server is required.

This section includes the following sections:

Task List

Table 1 lists the tasks required for upgrading to a new software image.

Table 1 Task List for Upgrading from the Previous Cisco Unity Express Version

Checklist	Check Off
1. The Cisco Integrated Storage System hardware is properly installed in the integrated services router (ISR). See *Installing Cisco Network Modules in Cisco Access Routers.*	❑
2. The IP communications link to the Cisco Integrated Storage System software has been activated. See the "Activating IP Connectivity" chapter.	❑
3. Download and install the software image files. See the "Downloading and Installing an Upgrade Image" section on page 10.	❑

Prerequisites

- The Cisco Integrated Storage System module is properly installed.
- You have activated the IP communications link to the Cisco Integrated Storage System module.
- You know the Cisco.com download site of the Cisco Integrated Storage System software.
- Your FTP/SFTP servers are configured and active.
- You have the following information available:
  - FTP/SFTP server IP address
  - FTP/SFTP server user ID
  - FTP/SFTP server password
  - Software package name
- You have checked to make sure that you can ping the Cisco Integrated Storage System module from your FTP/SFTP server.

Note The Cisco Integrated Storage System software cannot be configured to use DNS, so you cannot use hostnames to identify the FTP/SFTP server. Use the IP address of the FTP/SFTP server instead.

Downloading and Installing an Upgrade Image

Follow this procedure to upgrade an existing Cisco Integrated Storage System module software version. Examples show are for an FTP server. If you are using SFTP, you need to modify the commands to support an SFTP server.

Note If the Cisco Integrated Storage System is mounted and archives are being sent to the Cisco Integrated Storage System, you must stop the video server on the Cisco Video Management and Storage System module before performing a software upgrade or installation. To stop the video server, enter the **video-surveillance task stop** command.

SUMMARY STEPS

1. Log in and go to the Cisco Software Center website at Download Software.
2. Click **ISR Video Surveillance–ISS** and download the following Cisco Video Management and Storage System software files and copy them to your FTP/SFTP server:
   - iss-full-k9.nme.*version*.prt1
   - iss-installer-k9.nme.*version*.prt1
   - iss-k9.nme.*version*.pkg
   - iss-upgrade-k9.nme.*prior-version_new-version*.prt1 (for future upgrades)
3. (Optional) To download the new software, enter the **software download upgrade** command.

Note Although the **software download upgrade** command is optional, it is useful for staging the installation. The command stores the software files on the local disk drive, which can save time during any subsequent installation or upgrade.

4. (Required for Step 5) To continue the download, enter **y**.
5. (Optional) To check the download status, enter the **software download status** command.
6. To upgrade to the new software, enter the **software install upgrade** command.
7. Enter **y** to install the upgrade, or enter **n** to stop the installation procedure.

   The system automatically reloads when the upgrade is complete.
8. To verify the upgrade, enter the **show software versions** command.

Tip To view what is in the download directory, enter the **show software directory download** command.

DETAILED STEPS

Step 1 Log in and go to the Cisco Software Center website and Download Software.

Step 2 Click **ISR Video Surveillance–ISS** and download the following Cisco Video Management and Storage System software files and copy them to your FTP/SFTP server:

- iss-full-k9.nme.*version*.prt1

  This is the package payload containing all data and executable files for a full installation of the Cisco Integrated Storage System on NME service modules.
- iss-installer-k9.nme.*version*.prt1

  This is the package payload containing all data and executable files for the installer subsystem associated with the Cisco Integrated Storage System on NME service modules.
- iss-k9.nme.*version*.pkg

  This is the main package for installing the Cisco Integrated Storage System on NME service modules.
- iss-upgrade-k9.nme.*prior-version_new-version*.prt1 (for future upgrades)

  This is the package payload containing all data and executable files for an upgrade of the Cisco Integrated Storage System on NME service modules.

Step 3 (Optional) To download the software from the FTP server, enter the **software download upgrade** command:

```
iss# software download upgrade url
ftp://ftp-server-ip-address/iss-upgradek9.nme.version.pkg username username password
password
```

Note This example uses the default anonymous FTP user.

or, if the FTP server has been configured:

```
iss# software download upgrade iss-k9.nme.version.pkg username username password password
```

Note If the FTP server has been set in configuration mode, you do not need to use the FTP parameters.

Step 4 (Required for Step 5) To begin the download, enter **y**:

```
WARNING:: This command will download the necessary software to
WARNING:: complete an upgrade.  It is recommended that a backup be done
WARNING:: before installing software.

Would you like to continue? [n] y
Downloading iss-k9.nme.version.pkg
Bytes downloaded :  xxxxx

Validating package signature ... done
Validating installed manifests ..........complete.
```

Note After you download the software, there are no other prompts for user input. The software package is downloaded from your FTP server to the Cisco Integrated Storage System module.

At this point, the new software loads from the FTP server and the system restarts.

Step 5 (Optional) To check the download status, enter the **software download status** command.

Step 6 To upgrade to the new software, enter the **software install upgrade** command.

Note The following example uses the default anonymous FTP user.

```
iss# software install upgrade url ftp://ftp_server_ip_address/iss-k9.nme.1.0.0.pkg
```

Note In the following example, either the files were previously downloaded using the **software download** command or the FTP/SFTP server was configured.

```
iss# software install upgrade iss-k9.nme.version.pkg
```

Step 7 Enter **y** to install the upgrade, or enter **n** to stop the installation procedure.

```
WARNING:: This command will install the necessary software to
WARNING:: complete an upgrade.  It is recommended that a backup be done
WARNING:: before installing software.

Would you like to continue? [n] y
```

Caution An upgrade does not replace everything on the local disk drive. It replaces only the files necessary for the upgrade.

The system automatically reloads when the upgrade is complete.

Step 8 To verify the upgrade, enter the **show software versions** command.

In the output displayed for the **show software versions** display, the Cisco Integrated Storage System software version is shown as the Global version. The other versions shown are for internal components of the product and may not correspond to the actual software version.

Tip To view what is contained the download directory, enter the **show software directory download** command.

What to Do Next

Open a session to the Cisco Integrated Storage System.

Installing New Software Using the Online Installer

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This chapter provides procedures for installing a new version of the Cisco Integrated Storage System software using the "clean" online software installer in the application.

This *clean* installation "cleans" the hard drive memory by erasing it before loading all new files. Only an FTP server is required for a clean installation.

With the **software download** command, the software files are downloaded in the background while the Cisco Integrated Storage System module continues to operate. Anytime after the download is finished, you can perform the install using the **software install** command.

Note If you are upgrading software from an *existing* Cisco Integrated Storage System module, you can use a different procedure. See the "Upgrading Software Using the Online Installer" section on page 9. If you are upgrading software to a new Cisco Integrated Storage System module, however, you must use the upgrade procedure in this section.

This section includes the following:

Task List

Table 2 lists the tasks required for upgrading from an earlier Cisco Integrated Storage System version.

Table 2 Task List for Upgrading from an Earlier Cisco Integrated Storage System Version

Checklist	Check Off
1. The Cisco Integrated Storage System hardware is properly installed in the Integrated Services Router (ISR). See *Installing Cisco Network Modules in Cisco Access Routers.*	❑
2. The IP communications link to the Cisco Integrated Storage System software has been activated. See the "Activating IP Connectivity" chapter.	❑
3. Download and install the software image files. See the "Downloading and Installing a New Software Image" section on page 16.	❑
4. Reboot the system.	❑

Prerequisites

- You have activated the IP communications link to the Cisco Integrated Storage System module.
- You know the Cisco.com download site of the Cisco Integrated Storage System software.
- Your FTP/SFTP and TFTP servers are configured and active.
- You have the following information available:
  - FTP/SFTP server IP address
  - FTP/SFTP server user ID
  - FTP/SFTP server password
  - Software package name
- You have checked to make sure that you can ping the Cisco Integrated Storage System module from your FTP/SFTP server.

Note The Cisco Integrated Storage System software cannot be configured to use DNS, so you cannot use hostnames to identify the FTP/SFTP server. Use the IP address of the FTP/SFTP server instead.

Downloading and Installing a New Software Image

Follow this procedure to upgrade an existing Cisco Integrated Storage System module software version. Examples show are for an FTP server. If you are using SFTP, you need to modify the commands to support an SFTP server.

Note If the Cisco Integrated Storage System is mounted and archives are being sent to the Cisco Integrated Storage System, you must stop the video server on the Cisco Video Management and Storage System module before performing a software upgrade or installation. To stop the video server, enter the **video-surveillance task stop** command.

SUMMARY STEPS

1. Log in and go to the Cisco Software Center website and Download Software.

2. Click **ISR Video Surveillance–ISS** and download the following Cisco Video Management and Storage System software files and copy them to your FTP/SFTP server:
   - iss-full-k9.nme.*version*.prt1
   - iss-installer-k9.nme.*version*.prt1
   - iss-k9.nme.*version*.pkg
   - iss-upgrade-k9.nme.*prior-version_new-version*.prt1 (for future upgrades)
3. (Optional) To download the new software from your FTP server:
   a. Enter the **service-module integrated** *slot/unit* **session** command to start a module session.
   b. Enter the **software download clean** command,

      or, if the FTP server has been configured,

      Enter the **software download clean pkg iss-k9.nme.***version***.pkg** command.

Tip Although the **software download** command is optional, it is useful for staging the installation. The command stores the software files on the local disk drive, which can save time during any subsequent installation or upgrade.

4. (Required for Step 5) To continue the installation, enter **y** when prompted by the system.
5. (Optional) To check the download status, enter the **software download status** command.
6. To install the new software, enter the **software install clean url** ftp://*ftp-server-ip-address*/**iss-k9.nme.***version***.pkg** command.

   The system automatically reloads when the installation is complete.
7. To begin the initial configuration, enter **y**.
8. Enter the hostname and domain name of your system.
9. Select your time zone by answering the series of questions when prompted.
10. Verify that the correct time zone has been selected.
11. Enter **y** to restore the configuration saved on the local disk drive, or enter **n** to use your backup software image to restore your configuration.

DETAILED STEPS

Step 1 Log in and go to the Cisco Software Center website and Download Software.

Step 2 Click **ISR Video Surveillance–ISS** and download the following Cisco Video Management and Storage System software files and copy them to your FTP/SFTP server:

- iss-full-k9.nme.*version*.prt1

  This is the package payload containing all data and executable files for a full installation of the Cisco Integrated Storage System on NME service modules.
- iss-installer-k9.nme.*version*.prt1

  This is the package payload containing all data and executable files for the installer subsystem associated with the Cisco Integrated Storage System on NME service modules.

- iss-k9.nme.*version*.pkg

  This is the main package for installing the Cisco Integrated Storage System on NME service modules.

- iss-upgrade-k9.nme.*prior-version_new-version*.prt1 (for future upgrades)

  This is the package payload containing all data and executable files for an upgrade of the Cisco Integrated Storage System on NME service modules.

Step 3 (Optional) To download the new software from the FTP server:

a. Enter the **service-module integrated** *slot/unit* **session** command to start a module session:

```
iss# service-module integrated slot/unit session
```

b. Enter the **software download clean** command:

```
iss> software download clean url ftp://ftp_server_ip_address/iss-k9.nme.version.pkg
username username password password
```

Or, if the FTP server has been configured:

Tip If you use FTP anonymously, you do not need to specify a username and password.

Enter the software download clean pkg command:

```
iss# software download clean pkg iss-k9.nme.version.pkg
```

Note If your FTP server has been set in configuration mode, you do not need to use the FTP parameters. To set your FTP server, use the **software download server** command.

Step 4 (Required for Step 5.) To continue the download, enter **y**:

```
WARNING:: This command will download the necessary software to
WARNING:: complete a clean install.  It is recommended that a backup be done
WARNING:: before installing software.

Would you like to continue? [n] y
```

Step 5 (Optional) To check the download status, enter the **software download status** command, as shown in the following example:

```
iss# software download status
Download request in progress.
downloading file : iss-k9.nme.version.pkg
bytes downloaded : 18612224
iss#


iss# software download status
Download request completed successfully.
iss#
```

Tip To view what is in the download directory, enter the **show software directory download** command.

Step 6 To install the new software, enter the **software install clean** command.

Caution This step erases the hard drive memory. All configurations will be lost after this step.

```
iss# software install clean url ftp://ftp-server-ip-address/iss-k9.nme.version.pkg
username username password password
```

or, to install the software when the FTP server has been configured,

```
iss# software install clean iss-k9.nme.version.pkg
```

The installation takes several minutes to complete.

Step 7 To begin the initial configuration, enter **y**:

```
IMPORTANT::
IMPORTANT::    Welcome to Cisco Systems Service Engine
IMPORTANT::     post installation configuration tool.
IMPORTANT::
IMPORTANT:: This is a one time process which will guide
IMPORTANT:: you through initial setup of your Service Engine.
IMPORTANT:: Once run, this process will have configured
IMPORTANT:: the system for your location.
IMPORTANT::
IMPORTANT:: If you do not wish to continue, the system will be halted
IMPORTANT:: so it can be safely removed from the router.
IMPORTANT::

Do you wish to start configuration now (y,n)? y
Are you sure (y,n)? y
```

Step 8 Select your time zone by answering the series of questions when prompted, as shown in the following example:

```
Please identify a location so that time zone rules can be set correctly.
Please select a continent or ocean.
1) Africa            4) Arctic Ocean     7) Australia       10) Pacific Ocean
2) Americas          5) Asia             8) Europe
3) Antarctica        6) Atlantic Ocean   9) Indian Ocean
#? 2
Please select a country.
 1) Anguilla              18) Ecuador               35) Paraguay
 2) Antigua & Barbuda     19) El Salvador           36) Peru
 3) Argentina             20) French Guiana         37) Puerto Rico
 4) Aruba                 21) Greenland             38) St Kitts & Nevis
 5) Bahamas               22) Grenada               39) St Lucia
 6) Barbados              23) Guadeloupe            40) St Pierre & Miquelon
 7) Belize                24) Guatemala             41) St Vincent
 8) Bolivia               25) Guyana                42) Suriname
 9) Brazil                26) Haiti                 43) Trinidad & Tobago
10) Canada                27) Honduras              44) Turks & Caicos Is
11) Cayman Islands        28) Jamaica               45) United States
12) Chile                 29) Martinique            46) Uruguay
13) Colombia              30) Mexico                47) Venezuela
14) Costa Rica            31) Montserrat            48) Virgin Islands (UK)
15) Cuba                  32) Netherlands Antilles  49) Virgin Islands (US)
16) Dominica              33) Nicaragua
17) Dominican Republic    34) Panama
#? 45
Please select one of the following time zone regions.
 1) Eastern Time
 2) Eastern Time - Michigan - most locations
 3) Eastern Time - Kentucky - Louisville area
```

```
 4) Eastern Time - Kentucky - Wayne County
 5) Eastern Standard Time - Indiana - most locations
 6) Eastern Standard Time - Indiana - Crawford County
 7) Eastern Standard Time - Indiana - Starke County
 8) Eastern Standard Time - Indiana - Switzerland County
 9) Central Time
10) Central Time - Michigan - Wisconsin border
11) Central Time - North Dakota - Oliver County
12) Mountain Time
13) Mountain Time - south Idaho & east Oregon
14) Mountain Time - Navajo
15) Mountain Standard Time - Arizona
16) Pacific Time
17) Alaska Time
18) Alaska Time - Alaska panhandle
19) Alaska Time - Alaska panhandle neck
20) Alaska Time - west Alaska
21) Aleutian Islands
22) Hawaii
#? 16

The following information has been given:

        United States
        Pacific Time
```

Step 9 Verify that the correct time zone has been selected.

```
Therefore TZ='America/Los_Angeles' will be used.
Is the above information OK?
1) Yes
2) No
#? 1

Local time is now:      Tue Sep 25 19:15:12 PDT 2007.
Universal Time is now:  Wed Sep 26 02:15:12 UTC 2007.
Configuring the system. Please wait...
Changing owners and file permissions.
chown: cannot access `/usr/tomcat': No such file or directory
Change BWhttpd port to 8079
Reloading cron database.
Setting file ownership and permissions ... complete.
```

What to Do Next

Open a Cisco Video Surveillance Management Server (VSMS) session to the Cisco Integrated Storage System module to verify that all configurations are preserved following the clean installation process.

Installing Software Using the Boot Helper

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This chapter provides the procedures for installing a new version of the Cisco Integrated Storage System module software using the boot helper.

To use this *clean* installation process, the system must be *off line* while you download the new software files. The clean installation erases the hard drive memory before loading the new files in memory. Both an FTP server and a TFTP server are required.

This chapter contains the following sections:

Boot Loader and Boot Helper

Before you install the Cisco Integrated Storage System software, opening a session brings up the boot loader. The boot loader is a small set of system software that runs when the system first powers up. It loads the operating system from the local disk drive or the network, which loads and runs the Cisco Integrated Storage System application. The boot loader may optionally load and run the boot helper. After you install the software, you can open a session to the module.

The boot helper is a small subset of the system software that runs on the module. It boots the module from the network and assists in software installation and upgrades, disaster recovery, and other operations when the module cannot access its software.

The application image contains the network module user functionality software. The application image is based on the Cisco Integrated Storage System module software.

Task List

Table 3 lists the tasks required for installing a new software image.

Table 3 Task List for Upgrading Using the Boot Helper

Checklist	Checkoff
1. Download the software image files. See the "Downloading the Software Files" section on page 22.	❑
2. Enter configuration parameter values. See the "Entering Configuration Parameter Values" section on page 23.	❑
3. Install the software files. See the "Installing the Software Image Files" section on page 25.	❑

Prerequisites

- A Cisco Integrated Storage System module is currently installed.
- You know the Cisco.com download site of the Cisco Integrated Storage System software.
- You have the following information available:
  - FTP/SFTP and TFTP server IP addresses
  - FTP/SFTP server user ID
  - FTP/SFTP server password
  - Software package name
- You have checked to make sure that you can ping the Cisco Integrated Storage System module from your FTP/SFTP and TFTP server.

Note The Cisco Integrated Storage System software cannot be configured to use DNS, so you cannot use hostnames to identify the FTP/SFTP server. Use the IP address of the FTP/SFTP server instead.

Downloading the Software Files

Review the prerequisites listed in Table 3 to ensure that all servers and modules are active and available.

Note If the Cisco Integrated Storage System is mounted and archives are being sent to the Cisco Integrated Storage System, you must stop the video server on the Cisco Video Management and Storage System module before performing a software upgrade or installation. To stop the video server, enter the **video-surveillance task stop** command.

SUMMARY STEPS

1. Log in and go to the Cisco Software Center website and Download Software.

2. Click **ISR Video Surveillance–ISS** and download the following Cisco Video Management and Storage System software files and copy them to your FTP/SFTP server:
3. Download the helper software file to your TFTP server.

DETAILED STEPS

Step 1 Log in and go to the Cisco Software Center website and Download Software.

Step 2 Click **ISR Video Surveillance–ISS** and download the following Cisco Video Management and Storage System software files and copy them to your FTP/SFTP server:

- iss-full-k9.nme.*version*.prt1

  This is the package payload containing all data and executable files for a full installation of the Cisco Integrated Storage System on NME service modules.

- iss-installer-k9.nme.*version*.prt1

  This is the package payload containing all data and executable files for the installer subsystem associated with the Cisco Integrated Storage System on NME service modules.

- iss-k9.nme.*version*.pkg

  This is the main package for installing the Cisco Integrated Storage System on NME service modules.

Step 3 Download the helper software file to your TFTP server:

- iss-boothelper.nme.*version*

  This is the Cisco Integrated Storage System boot helper image. To aid application installation on NME service modules when necessary.

  For offline installation of the helper, both TFTP and FTP/SFTP servers are needed. The TFTP server is used to download the helper file and FTP/SFTP server is used to download the application file.

What to Do Next

- Back up your configuration files.
- Configure several parameter values. See the "Entering Configuration Parameter Values" section on page 23.

Entering Configuration Parameter Values

You must configure several parameters in the server so that you can download the Cisco Integrated Storage System software files.

SUMMARY STEPS

1. **reload**
2. To enter boot loader mode, type "***."
3. **config**

4. Enter the values for the following parameters:
   - Gateway module IP address
   - Subnet mask
   - TFTP server address
   - Gateway router address
   - Ethernet interface
   - Default helper image
   - Default boot setting
   - Default boot loader is primary
5. Use the boot helper to boot the network module.

DETAILED STEPS

Step 1 To restart the system, enter **reload**.

Step 2 To enter the boot loader mode, enter "***."

Step 3 To enter configuration mode, enter **config**.

Tip You must configure the boot loader before you can ping it.

Step 4 Enter the values for the following parameters (make sure you save the configuration parameters; the module will not become operational without the proper parameters saved):

- Gateway module IP address
- Subnet mask
- TFTP server address
- Gateway router address
- Ethernet interface
- Default helper image
- Default boot setting: **disk**
- Default boot loader: **primary**

Note We recommend that you use the primary boot loader as the default when upgrading.

Step 5 To begin the installation, enter **boot helper**. This will load the installer.

What to Do Next

Install the software files. See the "Installing the Software Image Files" section on page 25.

Installing the Software Image Files

After you download the software files, you can install the software image files.

Prerequisites

Installing the software image files requires the following information:

- TFTP server IP address
- FTP server IP address
- FTP server user ID
- FTP server password
- Software package name

Note Back up your current system configuration files before you install new software.

SUMMARY STEPS

Starting from the module EXEC mode:

1. From the install menu, choose the first choice, **Install software**.
2. Enter the package name, FTP server address, username, and password.
3. To begin the initial configuration in the post-installation configuration menu, enter **y**.

DETAILED STEPS

Step 1 From the install menu, choose the first choice, **Install software**:

```
Welcome to Cisco Systems Service Engine Helper Software
Please select from the following
1       Install software
2       Reload module
(Type '?' at any time for help)
Choice: 1
```

Step 2 Enter the package name, FTP server address, username, and password, as shown in the following example:

```
Package name: iss-k9.nme.version.pkg
Server url: ftp://10.33.162.120/
Username: iss
Password: ******
Software installation will clear disk contents
Continue [y/n]? y
```

Caution This step cleans the hard drive. All configurations are lost after this step.

Step 3 To begin the initial configuration, enter **y**:

```
IMPORTANT::
IMPORTANT::    Welcome to Cisco Systems Service Engine
IMPORTANT::     post installation configuration tool.
IMPORTANT::
IMPORTANT:: This is a one time process which will guide
IMPORTANT:: you through initial setup of your Service Engine.
IMPORTANT:: Once run, this process will have configured
IMPORTANT:: the system for your location.
IMPORTANT::
IMPORTANT:: If you do not wish to continue, the system will be halted
IMPORTANT:: so it can be safely removed from the router.
IMPORTANT::

Do you wish to start configuration now (y,n)? y
```

What to Do Next

Open a session to the Cisco Integrated Storage System.

INDEX

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