



Installing Software Using the Boot Helper

Last Updated: April 26, 2010

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, page 21](#)
- [Task List, page 22](#)
- [Prerequisites, page 22](#)
- [Downloading the Software Files, page 22](#)
- [Entering Configuration Parameter Values, page 23](#)
- [Installing the Software Image Files, page 25](#)

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.