

Contents

Software upgrade commands	1
boot-loader file	1
boot-loader update	3
bootrom update	4
display boot-loader	5

Software upgrade commands

As a best practice, store the startup images in a fixed storage medium. If you store the startup images in a hot swappable storage medium, do not remove the hot swappable storage medium during the startup process.

boot-loader file

Use `boot-loader file` to specify startup image files.

Syntax

```
boot-loader file boot filename system filename [ feature filename<1-30> ]  
[ patch filename<1-16> ] { all | slot slot-number } { backup | main }  
  
boot-loader file ipe-filename [ patch filename<1-16> ] { all | slot  
slot-number } { backup | main }
```

Views

User view

Predefined user roles

network-admin

Parameters

boot: Specifies a boot image file.

system: Specifies a system image file.

feature: Specifies a space-separated list of up to 30 feature image files.

patch: Specifies a space-separated list of up to 16 patch image files. You can specify only non-incremental patch image files.

filename: Specifies a .bin file in the *filesystemname/filename.bin* format. The file must be stored in the root directory of a file system on the device. Excluding the file system location section (if any), the value string can have a maximum of 63 characters. For more information about specifying a file, see *Fundamentals Configuration Guide*.

ipe-filename: Specifies an .ipe image package file in the *filesystemname/filename.ipe* format. The file must be stored in the root directory of a file system on the device. Excluding the file system location section (if any), the value string can have a maximum of 63 characters. For more information about specifying a file, see *Fundamentals Configuration Guide*.

all: Specifies all hardware components to which the specified images apply.

slot slot-number: Specifies the IRF member ID of a member device.

backup: Specifies the files as backup startup image files. Backup images are used only when main images are not available.

main: Specifies the files as main startup image files. The device always first attempts to start up with main startup files.

Usage guidelines

The `boot-loader file` command overwrites the entire startup image list. To add new startup feature images, specify all feature image files in the old startup image list, including feature image files. The new startup image list will contain only the feature image files that are specified in the command.

To load the specified startup software images, you must reboot the system.

If the upgrade images are not found in the file system on the slot specified to upgrade, the system automatically copies the images to that file system. The destination directory is the root directory of the file system. If the destination root directory already contains a startup image with the same name as an upgrade image, you must choose whether to overwrite the image.

Examples

Specify flash:/all.ipe as the main startup image file for slot 1.

```
<Sysname> boot-loader file flash:/all.ipe slot 1 main
Verifying the file flash:/all.ipe on slot 1.....Done.
H3C S6520X-54HC-EI images in IPE:
    boot.bin
    system.bin
    feature.bin
This command will set the main startup software images. Continue? [Y/N]:Y
Add images to slot 1.
File flash:/boot.bin already exists on slot 1.
File flash:/system.bin already exists on slot 1.
File flash:/feature.bin already exists on slot 1.
Overwrite the existing files? [Y/N]:Y
Decompressing file boot.bin to flash:/boot.bin.....Done.
Decompressing file system.bin to flash:/system.bin.....Done.
Decompressing file feature.bin to flash:/feature.bin.....Done.
Verifying the file flash:/boot.bin on slot 1...Done.
Verifying the file flash:/system.bin on slot 1.....Done.
Verifying the file flash:/feature.bin on slot 1.....Done.
The images that have passed all examinations will be used as the main startup software
images at the next reboot on slot 1.
```

Specify flash:/all.ipe as the main startup image file for all IRF member devices.

```
<Sysname> boot-loader file slot1#flash:/all.ipe all main
Verifying the file flash:/all.ipe on slot 1.....Done.
H3C S6520X-54HC-EI images in IPE:
    boot.bin
    system.bin
    feature.bin
This command will set the main startup software images. Continue? [Y/N]:y
Add images to slot 1.
File flash:/boot.bin already exists on slot 1.
File flash:/system.bin already exists on slot 1.
File flash:/feature.bin already exists on slot 1.
Overwrite the existing files? [Y/N]:y
Decompressing file boot.bin to flash:/boot.bin.....Done.
Decompressing file system.bin to flash:/system.bin.....Done.
Decompressing file feature.bin to flash:/feature.bin.....Done.
The images that have passed all examinations will be used as the main startup software
images at the next reboot on slot 1.
File flash:/boot.bin already exists on slot 2.
Do you want to overwrite the file?
Y: Overwrite the file.
```


- If the master device has started up with main startup images, its main startup images are synchronized to the subordinate device, regardless of whether any main startup image has been respecified on the master device.
- If the master device has started up with backup startup images, its backup startup images are synchronized to the subordinate device, regardless of whether any backup startup image has been respecified on the master device.

If a patch installation or ISSU has been performed on the master, use the **install commit** command to update the set of main startup images on the master before software synchronization. This command ensures startup image consistency between the master and the subordinate device.

Startup image synchronization fails if any software image being synchronized is not available or is corrupted.

Examples

Synchronize startup images to a slot.

```
<Sysname> boot-loader update slot 2
```

```
This command will update the specified standby MPU. Continue? [Y/N]:y
```

```
Updating. Please wait...
```

```
Verifying the file flash:/boot.bin on slot 1...Done.
```

```
Verifying the file flash:/system.bin on slot 1...Done.
```

```
Copying main startup software images to slot 2. Please wait...
```

```
Done.
```

```
Setting copied images as main startup software images for slot 2...
```

```
The images that have passed all examinations will be used as the main startup software images at the next reboot on slot 2.
```

```
Done.
```

```
Successfully updated the startup software images of slot 2.
```

Related commands

display boot-loader

install commit

bootrom update

Use **bootrom update** to load the BootWare image from a file system to the Normal BootWare area.

Syntax

```
bootrom update file file slot slot-number-list [ subslot subslot-number-list ]
```

Views

User view

Predefined user roles

network-admin

Parameters

file file: Specifies the file that contains the BootWare image. The *file* argument represents the file name, a string of 1 to 63 characters.

slot slot-number-list: Specifies a space-separated list of up to seven slot number items. An item specifies an IRF member device by its member ID or a range of IRF member devices in the

form of *start-slot-number* to *end-slot-number*. The end slot number must be equal to or greater than the start slot number.

subslot *subslot-number-list*: Specifies a list of up to seven subslot number items. Each item specifies a subcard by its subslot number or a range of subcards in the form of *start-subslot-number* to *end-subslot-number*. If you do not specify a subcard, this command loads the BootWare image for the base card.

The **subslot** *subslot-number-list* option takes effect only if the switch is installed with an LSPM6FWD subcard.

Usage guidelines

BootWare images are contained in the .bin Comware boot image file. You can specify a Comware boot image file in this command to upgrade the BootWares in the system before you upgrade the Comware images. If you do not upgrade BootWares before upgrading Comware images, the system automatically upgrades BootWares as necessary when loading Comware images.

The new BootWare images take effect after you reboot the device.

Examples

Use the file **a.bin** in the root directory of the flash memory to upgrade the BootWare image.

```
<Sysname> bootrom update file flash:/a.bin slot 1
```

```
    This command will update the Boot ROM file on the specified board(s), Continue? [Y/N]:y
```

```
    Now updating the Boot ROM, please wait.....Done.
```

Related commands

boot-loader file

display boot-loader

Use **display boot-loader** to display current software images and startup software images.

Syntax

```
display boot-loader [ slot slot-number ]
```

Views

Any view

Predefined user roles

network-admin

network-operator

Parameters

slot *slot-number*: Specifies the member ID of an IRF member device. If you do not specify a member device, this command displays the software images on each IRF member device.

Examples

Display the current software images and startup software images.

```
<Sysname> display boot-loader
```

```
Software images on slot 1:
```

```
Current software images:
```

```
    flash:/boot.bin
```

```
    flash:/system.bin
```

```
    flash:/feature.bin
```

```
Main startup software images:
```

```
flash:/boot.bin
flash:/system.bin
flash:/feature.bin
Backup startup software images:
flash:/boot.bin
flash:/system.bin
flash:/feature.bin
```

Table 1 Command output

Field	Description
Current software images	Comware images that have been loaded.
Main startup software images	Primary Comware images for the next startup.
Backup startup software images	Backup Comware images for the next startup.

Related commands

boot-loader file