



## Image Service

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This chapter describes Image Service management tasks. To access the Image Service feature, click the **Image Service** tab. The Image Service Functional Overview page appears showing:

- Images
- Search Parameters



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**Note** For External Directory Mode, the Search Parameters tab is called Preconditions.

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## Working with Images

From the Image Service Functional Overview page, click **Images**. The Images Functional Overview page appears showing:

- View Image
- Create Image
- Edit Image
- Delete Image
- Associate Image with Device(s)

## Viewing an Image

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**Step 1** From the Images Functional Overview page, click **View Image**.

The list of images to view appears (see [Figure 18-1](#)).

**Figure 18-1 View Image List****View Image**

Search :

Name	Image Locations
<a href="#">image1</a>	ftp://ftp.test@10.1.7.24/tftp/c7200-is-mz.123-1.9.T
<a href="#">image2</a>	ftp://ftp.test@10.1.7.24/tftp/c3640-tea-mz_geo_20030810
<a href="#">image3</a>	ftp://ftp.test@10.1.7.24/tftp/c7200-tk8ea-mz_geo_20030721.T
<a href="#">image4</a>	ftp://ftp.test@10.1.7.24/tftp/c7200-tk8ea-mz.v123-3_20030714.T

10.1545

**Step 2** From the Name column, select the image you want to view.

The image information appears (see [Figure 18-2](#)).

**Figure 18-2 View Image Information****View Image**

image1	
<b>Image Name</b>	C7200-IS-MZ
<b>Version</b>	12.3(1.9)T,
<b>Platform Family</b>	C7200
<b>Image Checksum</b>	8fc6160c10141ed4122b6db19f01d2f0
<b>Size</b>	17723372 bytes
<b>Description</b>	Cisco Internetwork Operating System Software IOS (tm) 7200 Software (C7200-IS-MZ), Version 12.3(1.9)T, MAINTENANCE INTERIM SOFTWARE Synced to technology version 12.3(1.9) TAC Support: <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a> Copyright (c) 1986-2003 by cisco Systems, Inc. Compiled Thu 12-Jun-03 17:19 by ccai
<b>Image Type</b>	IOS
<b>Image Locations</b>	ftp://ftp.test@10.1.7.24/tftp/c7200-is-mz.123-1.9.T

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**Adding an Image**

**Step 1** From the Image Service Functional Overview page, click **Create Image**.

The Create Image page appears (see [Figure 18-3](#)).

Figure 18-3 Create Image

## Create Image

<b>Name</b> (required)	<input type="text"/>
<b>Image Name</b>	<input type="text"/>
<b>Version</b>	<input type="text"/>
<b>Platform Family</b>	<input type="text"/>
<b>Image Checksum</b>	<input type="text"/>
<b>Size</b> (required)	<input type="text"/>
<b>Description</b>	<input type="text"/>
<b>Image Type</b>	IOS <input type="button" value="v"/>
<b>Image Locations</b>	<input type="text"/>
	<input type="text"/>
	<input type="button" value="Add Another Row"/>

Enter a location as <protocol>://<hostname><absolutefilepath>  
For example: ftp://username.password@ftp.server.com/directory/imagefile

Populate image attributes by acquiring values from image location

[Lookup image attributes from CCC](#)

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There are two methods for creating an Image Object:

**Manual data entry**

To enter image information manually, jump to [Step 2](#).

**Timesaver**

You can get image attributes for manual entry by clicking the link: **Lookup image attributes from Cisco.com**.

**Automatic data entry**

- a. In the **Image Location** field, enter a valid URL for the desired image.
- b. Click **Populate**.

**Step 2** Enter the name of the image used by Image Service to identify this image object in the **Name** field.

[Table 18-1](#) shows valid values for these attributes.

**Table 18-1** Valid Values for Create Image

Attribute	Description	Valid Values
Name	The name used by Image Services to identify this image object.	a-z A-Z 0-9 # _ (under-score) - (hyphen)
Image Name	The actual Image name.	a-z A-Z 0-9 - (hyphen)
Version	Version of the image.	a-z A-Z 0-9 . (period) ( (open braces) ) (close braces)
Platform Family	Platform family of the image.	a-z A-Z 0-9 - (hyphen)
Image Checksum	Checksum generated by MD5 hashing algorithm	128-bit hex number
Size	File size	0 – 9
Description	Description of the image.	Any text except Ctrl characters.
Image Type	(i) PDM (ii) QDM (iii) VDM (iv) Other (v) Pix-image	From drop-down list.
Image Location	- Any Valid URL: (i) http (ii) https (iii) ftp (iv) tftp - rcp	Valid URL as per RFC 1738.

- Step 3** Enter the actual image name in the **Image Name** field.
- Step 4** Enter the version of the image in the **Version** field.
- Step 5** Enter the name of the platform family in the **Platform Family** field.

- Step 6** Enter the image checksum for the image in the **Image Checksum** field.
- Step 7** Enter the size of this file in the **Size** field.
- Step 8** Enter a description of the image in the space provided.
- Step 9** Select an image type from the **Image Type** drop-down list.
- Step 10** Enter a valid URL for the image location in the **Image Location** field.  
Follow the proper syntax as described.



**Note** You can create an image without specifying a location. You can add a location later by using the **Edit Image** function.

- Step 11** To add another row for image location, click **Add Another Row**.  
You can locate multiple copies of an image on separate servers. This allows you to do load-sharing when updating a large number of devices. Each device in a large group can be associated with a copy of the image (see “[Adding Devices](#)” section on page 3-31) located at one of many server locations.
- Step 12** To cancel this task, click **Cancel**.
- Step 13** To create this image, click **Create**.

## Editing an Image

- Step 1** From the Image Service Functional Overview page, click **Edit Image**.  
The Edit Image page appears (see [Figure 18-4](#)).

**Figure 18-4** *Edit Image*

### Edit Image

Search:

Name	Image Locations
<a href="#">image1</a>	ftp://ftp:test@10.1.7.24/ftp/c7200-is-mz.123-1.9.T
<a href="#">image2</a>	ftp://ftp:test@10.1.7.24/ftp/c3640-tea-mz.geo_20030810
<a href="#">image3</a>	ftp://ftp:test@10.1.7.24/ftp/c7200-tk8ea-mz.geo_20030721.T
<a href="#">image4</a>	ftp://ftp:test@10.1.7.24/ftp/c7200-tk8ea-mz.v123-3_20030714.T

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- Step 2** Select the image you want to edit by clicking the Image Name.  
The Edit Image information page appears (see).

**Figure 18-5** Edit Image Information**Edit Image**

<b>Name</b>	<input type="text" value="image2"/>
<b>Image Name</b>	C3640-TEA-MZ
<b>Version</b>	12.3(20030811:051206)
<b>Platform Family</b>	C3640
<b>Image Checksum</b>	0df47cfe9c86c497e7937da132efc5dc5
<b>Size</b>	7889812 bytes
<b>Description</b>	Cisco Internetwork Operating System Software IOS (tm) 3600 Software (C3640-TEA-MZ), Experimental Version 12.3(20030811:051206) [anrichar-georgia-20030810 105] Copyright (c) 1986-2003 by cisco Systems, Inc. Compiled Sun 10-Aug-03 23:43 by anrichar
<b>Image Type</b>	IOS
<b>Image Locations</b>	<input type="text" value="ftp://ftp.test@10.1.7.24/ftp/c3640-tea-mz.geo_20030811"/>
	<input type="text"/> <input type="button" value="Add Another Row"/>
	<input type="button" value="Edit"/> <input type="button" value="Cancel"/>

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**Step 3** To edit the image name, enter a new value in the **Name** field.

**Table 18-2** Valid Values for Edit Image

Attribute	Description	Valid Values
Name	The name used by Image Services to identify this image object.	a-z A-Z 0-9 # _ (under-score) - (hyphen)
Image Location	- Any Valid URL: (i) http (ii) https (iii) ftp (iv) tftp - rcp	Valid URL as per RFC 1738.

**Step 4** To edit the image location, enter a valid URL in the **Image Location** field.

**Step 5** To cancel this task, click **Cancel**.

**Step 6** To make these changes, click **Edit**.

## Deleting an Image

- Step 1** From the Image Service Functional Overview page, click **Delete Image**.  
The Delete Image page appears (see [Figure 18-6](#)).

**Figure 18-6 Delete Image**

### Delete Image

Search:

Please select Image(s) from the following list:

<input type="checkbox"/>	Select All	Name	Image Name	Version	Platform
<input type="checkbox"/>		image1	C7200-IS-MZ	12.3(1.9)T,	C7200
<input type="checkbox"/>		image2	C3640-TEA-MZ	12.3(20030811:051206)	C3640
<input type="checkbox"/>		image3	C7200-TK8EA-MZ	12.3(20030722:022836)	C7200
<input type="checkbox"/>		image4	C7200-TK8EA-MZ	12.3(20030715:044015)	C7200

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- Step 2** Check the image(s) you want to delete.
- Step 3** To cancel this task, click **Cancel**.
- Step 4** To make these changes, click **Delete**.

## Associating Images with Devices



**Note**

To associate a device with the image, the device must have been registered for image service during device object creation by providing an ImageID. If this has not been done, before trying to associate the device, the device must be edited and an ImageID must be provided.

- Step 1** From the Image Service Functional Overview page, click **Associate Image with Device(s)**.  
The Associate Image with Device(s) page appears (see [Figure 18-7](#)).

**Figure 18-7 Associate Image with Device(s)**

### Associate Image with Device(s)

Search:

Please Select an Image:

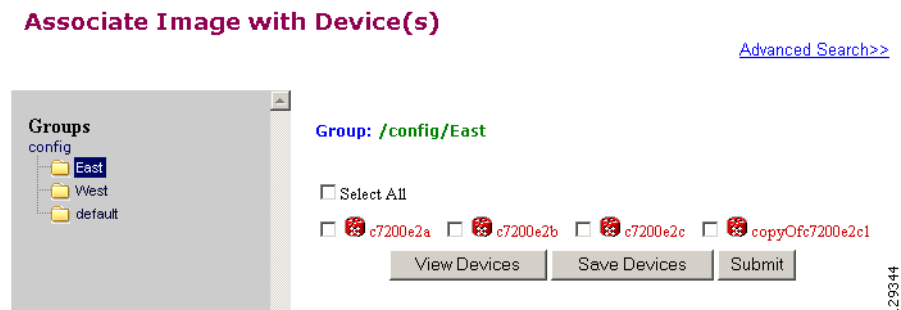
Name	Image Type	Image Locations	Over Write	Erase File System	Destination
image1	IOS	ftp://ftp.test@10.1.7.24/ftp/c7200-is-mz.123-1.9.T	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

Set this image as the image to be activated on device(s).

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- Step 2** Select the image from the **Name** drop-down list.  
The **Image Type** field and **Image Location** drop-down box are populated with corresponding information for the image.
- Step 3** From the **Image Location** drop-down list, select the desired location.
- Step 4** In the Destination field, enter a valid URL where the image will be copied.  
For example:  
**disk0:/c7200-mz**
- Step 5** To assign this image to be the active image after distribution, check **Set this image as the Image to be activated on device**.
- Step 6** To cancel this task, click **Cancel**.
- Step 7** To continue, click **Next**.  
The Group list page appears.
- Step 8** To associate this image with a group of devices, check the group, then click **Submit**.
- Step 9** To associate this image with specific devices, click **View**.  
The Device list page appears (see [Figure 18-8](#)).

**Figure 18-8** Device List



- Step 10** Check the desired device(s).
- Step 11** To cancel this task, click **Cancel**.
- Step 12** To associate this image to the selected devices, click **Submit**.  
A confirmation page appears.



# Search Parameters

Each Search Parameter can be associated with an action to be performed. In this release, Search Parameters are associated with the action to delete certain files from the file system on a device.

For example, if you want to delete all files that contain **.bin** from a device, you can create a Search Parameter that states: **FileName contains .bin** and use this Precondition from the **Devices > Delete Files**.

From the Image Service Functional Overview page, click **Search Parameters**.



## Note

For External Directory Mode, the Search Parameters tab is called Preconditions.

The Search Parameters Functional Overview page appears showing:

- View Search Parameters
- Create Search Parameter
- Edit Search Parameter
- Delete Search Parameters

## Viewing Search Parameters

- Step 1** From the Search Parameters Functional Overview page, click **View Search Parameters**.  
The View Search Parameters page appears (see [Figure 18-9](#)).

**Figure 18-9** View Search Parameters

### View Search Parameters

Name	Description	
sp1a	File Size is greater than 80000 bytes	EDIT
sp1b	File Name contains 7200	EDIT
test2	File Size is greater than 11 bytes	EDIT

Search:  Go

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- Step 2** To edit a Precondition, click **Edit** for the desired Precondition, then go to [“Editing Search Parameters”](#) section on page 18-181.

## Creating Search Parameters

- Step 1** From the Search Parameters Functional Overview page, click **Create Search Parameter**.  
The Create Search Parameter page appears (see [Figure 18-10](#)).

**Figure 18-10 Create Search Parameter**

### Create Search Parameter

The screenshot shows a web form titled "Create Search Parameter". It has two main sections: "Name (required)" and "Content (required)". The "Name" section contains a single text input field. The "Content" section contains three elements: a dropdown menu with "File Size" selected, a second dropdown menu with "is greater than" selected, and a final text input field. Below the form are two buttons: "Create" and "Cancel". On the right side of the form, there is a vertical text string "129346".

- Step 2** Enter the name of this Search Parameter.
- Step 3** Use the drop-down arrow in the left Content menu to select:
- File Size**
  - File Name**
  - File Timestamp**
- a. For **File Size**, use the drop-down arrow in the center Content menu to select:
    - is greater than**
    - is less than**
    - is equal to**
  - b. For **File Name**, the only choice is **contains**.
  - c. For File Timestamp, the only choice is **before**.
- Step 4** Enter the remaining portion of the argument in the right Content field.  
For example:  
**File Size is greater than 80,000 bytes**
- Step 5** To cancel this task, click **Cancel**.
- Step 6** Click **Create**.

## Editing Search Parameters

- Step 1** From the Search Parameters Functional Overview page, click **Edit Search Parameter**.  
The Edit Search Parameter page appears.
- Step 2** Select the Search Parameter you want to edit.  
The argument page for the Search Parameter appears (see [Figure 18-11](#)).

**Figure 18-11 Edit Search Parameter Argument**

### Edit Search Parameter

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- Step 3** Edit the name or argument as required.
- Step 4** To cancel this task, click **Cancel**.
- Step 5** To save your changes, click **Edit**.

## Deleting Search Parameters

- Step 1** From the Search Parameters Functional Overview page, click **Delete Search Parameter**.  
The Delete Search Parameters page appears (see [Figure 18-12](#)).

**Figure 18-12 Delete Search Parameters**

### Delete Search Parameters

Search :  Go

Please select Search Parameter(s) from the following list:

	Name	Content
<input type="checkbox"/>	sp1a	File Size is greater than 80000 bytes
<input type="checkbox"/>	sp1b	File Name contains 7200
<input type="checkbox"/>	test2	File Size is greater than 11 bytes

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- Step 2** Check to select the Search Parameter(s) to delete, then click **Delete**.

