



Bulk Data Manager

To access Bulk Data management tasks, log into the system (see [“Logging In” section on page 2-23](#)). Then, from the Home page, click the **Tools** tab. The Tools page appears.

From the Tools page, click **Bulk Data Mgr**. The Bulk Data Page appears showing:

- Upload Bulk Data
- Create Sample Data

XML DTD

The following example shows the Document Type Definition (DTD) for the XML bulk upload:

```
<?xml version="1.0" encoding="utf-8"?>
<!--
 * BulkUpload.dtd - dtd for bulk upload
 *
 * July 2008, Config Engine
 *
 * Copyright (c) 2005-2008, 2011 by cisco Systems, Inc.
 * All rights reserved.
-->

<!ELEMENT cns-bulk-upload (cns-element-data)>
<!ATTLIST cns-bulk-upload
  stop-on-error (true | false) "false"
  version (2.0 | 3.0) "3.0"
>
<!ELEMENT cns-element-data ( NSM-DATA | IMAGE-DATA)>
<!ELEMENT NSM-DATA (cns-device-info*, cns-sub-device-info*, cns-application-info*,
cns-group-info*)>
<!ATTLIST NSM-DATA
  op-type (add|edit|delete) #REQUIRED
  validate-data (true | false) "false"
>
<!ELEMENT cns-device-info (cns-device-name, cns-extended-attr*, dev-image-information?,
imgw-data?)>
<!ELEMENT cns-device-name (#PCDATA)>
<!ATTLIST cns-device-info
  dev-type (other | imgw | pix | asa) "other"
>
<!ELEMENT cns-extended-attr (#PCDATA)>
<!ATTLIST cns-extended-attr
  name CDATA #REQUIRED
>
```

```

<!ELEMENT dev-image-information (image-id, activation-template?, dev-image-info*)>
<!ELEMENT image-id (#PCDATA)>
<!ELEMENT activation-template (#PCDATA)>
<!ELEMENT dev-image-info (image-name, distribution)>
<!ELEMENT image-name (#PCDATA)>
<!ELEMENT distribution ( destination?, location)>
<!ATTLIST distribution
    overwrite (yes | no) "no"
    erase-flash (yes | no) "no"
    activate (true | false) "false"
>
<!ELEMENT destination (#PCDATA)>
<!ELEMENT location (#PCDATA)>

<!-- Imgw-data-->
<!ELEMENT imgw-data (gateway-id?, device-type?, simulation-agent*, hop-information*)>
<!ELEMENT gateway-id (#PCDATA)>
<!ELEMENT device-type (#PCDATA)>
<!ELEMENT simulation-agent (#PCDATA)>
<!ELEMENT hop-information (hop-type, ip-address?, port?, username?, password?)>
<!ELEMENT hop-type (#PCDATA)>
<!ELEMENT ip-address (#PCDATA)>
<!ELEMENT port (#PCDATA)>
<!ELEMENT username (#PCDATA)>
<!ELEMENT password (#PCDATA)>

<!-- sub-device info-->
<!ELEMENT cns-sub-device-info (cns-sub-device-name, sub-device-id, line-card-type,
cns-extended-attr*, main-device-name?)>
<!ELEMENT cns-sub-device-name (#PCDATA)>
<!ELEMENT sub-device-id (#PCDATA)>
<!ELEMENT line-card-type (#PCDATA)>
<!ELEMENT main-device-name (#PCDATA)>

<!ELEMENT cns-application-info (cns-application-name, cns-subject-mapping*)>
<!ELEMENT cns-application-name (#PCDATA)>
<!ELEMENT cns-subject-mapping (cns-original-subject, cns-pub-mapping*, cns-sub-mapping*,
cns-pub-default, cns-sub-default)>
<!ELEMENT cns-original-subject (#PCDATA)>
<!ELEMENT cns-pub-mapping (#PCDATA)>
<!ELEMENT cns-sub-mapping (#PCDATA)>
<!ELEMENT cns-pub-default (#PCDATA)>
<!ELEMENT cns-sub-default (#PCDATA)>

<!ELEMENT cns-group-info (cns-group-name,cns-group-new-name?, cns-group-member*)>
<!ELEMENT cns-group-name (#PCDATA)>
<!ELEMENT cns-group-new-name (#PCDATA)>
<!ELEMENT cns-group-member (#PCDATA)>
<!ATTLIST cns-group-member
    type (DEV | GRP) "DEV"
>
<!-- Here starts the definition for Image-data-->
<!ELEMENT IMAGE-DATA (image+)>
<!ATTLIST IMAGE-DATA
    op-type (add|edit|delete) #REQUIRED
    validate-data (true | false) "false"
>
<!ELEMENT image (name, image-info)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT image-info (img-name, img-chksum?, hdr-chksum?, software-version?,
system-description?, file-byte-size?, platform-family-name?, img-location*)>
<!ATTLIST image-info
    image-type (IOS | pix-image | pdm | asa-image | asdm | other) "IOS"
>

```

```

<!ELEMENT img-name (#PCDATA)>
<!ELEMENT img-chksum (#PCDATA)>
<!ELEMENT hdr-chksum (#PCDATA)>
<!ELEMENT file-byte-size (#PCDATA)>
<!ELEMENT system-description (#PCDATA)>
<!ELEMENT platform-family-name (#PCDATA)>
<!ELEMENT software-version (#PCDATA)>
<!ELEMENT img-location (#PCDATA)>

```

Uploading Bulk Data

- Step 1** From the Bulk Data main menu, click **Upload Bulk Data**.
The Upload Bulk Data parameters page appears (see [Figure 16-1](#)).

Figure 16-1 Upload Bulk Data Parameters

Upload Bulk Data:

Filename (required)

Data Format (required)

Note: The maximum file size that can be uploaded is 7 MB

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- Step 2** If you know the filename of the data file you want to load, enter it in the **Filename** field, otherwise use the browse function.

[Table 16-1](#) shows the valid values for this field.

Table 16-1 Valid Values for Upload Bulk Data

Attribute	Description	Valid Values
Filename	Name of the file containing the data to be uploaded.	a-z A-Z 0-9 -(hyphen) _ (under-score) . (period)

- Step 3** Use the drop-down arrow to select the Data Format:
- XML
 - CSV
- Step 4** To clear this task, click **Reset**.
- Step 5** To upload this data file, click **Upload**.

Command-Line Upload of Bulk Data

You can also upload the XML file to the directory using a command line utility as follows:

FTP the bulk upload XML file to the `$CISCO_CE_INSTALL_ROOT/CSCOdatscripts` directory on the host system.

- Step 6** Log into the box using Telnet.
- Step 7** Go to: `$CISCO_CE_INSTALL_ROOT/CSCOdatscripts`.
- Step 8** Run the following command to invoke the bulk upload command line utility:

```
./upload.sh <xml filename>
```

For example: `./upload.sh my_bulk_data.xml`

This uploads the data to the LDAP directory.

Using Data Converter Utility

There is a data converter utility that you can use to convert bulk upload data on a system with a release prior to 3.5. This will allow you to do a bulk upload of data to Cisco Configuration Engine.

You can find this utility in `<install base dir>/ConfigEngine/CSCOdats/XMLTransform`.

Creating Sample Data

Even though the DTD (see “XML DTD” section on page 16-157) outlines the structure of the input XML file, it does not convey the information about what values should be given for each tag. By looking at the sample data files in this section, you can get an idea of how the data should be arranged in the Bulk Upload XML file.

- Step 1** From the Bulk Data main menu, click **Add Bulk Data**.
The Upload Bulk Data page appears (see Figure 16-2).

Figure 16-2 Create Sample Data Page

Create Sample Data:

Prefix (required)	<input type="text"/>
Data Format	XML
Sample Data	Without image info

OK

Note: All device/group/application names in the sample data file will start with the prefix entered above.

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- Step 2** Enter the prefix name for this sample in the **Prefix** field.
Table 16-2 shows valid values for these fields.

Table 16-2 Valid Values for Create Sample Data

Attribute	Description	Valid Values
Prefix	Prefix that is used to create the device/application/group objects.	a-z A-Z 0-9 -(hyphen) _ (under-score) . (period)
Data Format	XML, CSV	From drop-down list
Sample Data Without image info	Creates application, group, device data without the image information for device.	From drop-down list
Sample Data With image info	Creates application, group, device data without the image information for device. Also creates IMAGE object data.	From drop-down list
Sample IMAGE Data only	Creates only IMAGE object data	From drop-down list

Step 3 Select Sample Data.

Step 4 To create this sample, click **OK**.

NSM Data Without Image Info

The following example shows sample device data in XML format:

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
  <!DOCTYPE cms-bulk-upload (View Source for full doctype...)>
  - <cms-bulk-upload stop-on-error="false" version="3.0">
  - <cms-element-data>
  - <NSM-DATA op-type="add" validate-data="false">
  - <cms-device-info dev-type="other">
    <cms-device-name>myDeviceDevice1</cms-device-name>
    <cms-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cms-extended-attr>
    <cms-extended-attr name="IOSConfigID">myDeviceDevice1</cms-extended-attr>
    <cms-extended-attr name="IOSEventID">myDeviceDevice1</cms-extended-attr>
  - <dev-image-information>
    <image-id>myDeviceDevice1</image-id>
  - </dev-image-information>
  - </cms-device-info>
  - <cms-device-info dev-type="other">
    <cms-device-name>myDeviceDevice2</cms-device-name>
    <cms-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cms-extended-attr>
    <cms-extended-attr name="parent">/config/myDeviceGroup1</cms-extended-attr>
    <cms-extended-attr name="IOSConfigID">myDeviceDevice2</cms-extended-attr>
    <cms-extended-attr name="IOSEventID">myDeviceDevice2</cms-extended-attr>
  - <dev-image-information>
    <image-id>myDeviceDevice2</image-id>
  - </dev-image-information>
  - </cms-device-info>
  - <cms-device-info dev-type="pix">
    <cms-device-name>myDeviceDevice3</cms-device-name>
    <cms-extended-attr name="ErrorAction">revert</cms-extended-attr>
    <cms-extended-attr name="AuthPassword">myDevicepwd</cms-extended-attr>
```

```

<cns-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cns-extended-attr>
<cns-extended-attr name="parent">/config/myDeviceGroup2</cns-extended-attr>
<cns-extended-attr name="ConfigAction">merge</cns-extended-attr>
<cns-extended-attr name="IOSConfigID">myDeviceDevice3</cns-extended-attr>
<cns-extended-attr name="IOSEventID">myDeviceDevice3</cns-extended-attr>
- <dev-image-information>
  <image-id>myDeviceDevice3</image-id>
</dev-image-information>
</cns-device-info>
- <cns-device-info dev-type="asa">
  <cns-device-name>myDeviceDevice4</cns-device-name>
  <cns-extended-attr name="ErrorAction">revert</cns-extended-attr>
  <cns-extended-attr name="AuthPassword">myDevicepwd</cns-extended-attr>
  <cns-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cns-extended-attr>
  <cns-extended-attr
name="parent">/config/myDeviceGroup2/myDeviceSubGroup1</cns-extended-attr>
  <cns-extended-attr name="ConfigAction">merge</cns-extended-attr>
  <cns-extended-attr name="IOSConfigID">myDeviceDevice4</cns-extended-attr>
  <cns-extended-attr name="IOSEventID">myDeviceDevice4</cns-extended-attr>
- <dev-image-information>
  <image-id>myDeviceDevice4</image-id>
</dev-image-information>
</cns-device-info>
- <cns-device-info dev-type="imgw">
  <cns-device-name>myDeviceDevice5</cns-device-name>
  <cns-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cns-extended-attr>
  <cns-extended-attr
name="parent">/config/myDeviceGroup2/myDeviceSubGroup2</cns-extended-attr>
  <cns-extended-attr name="IOSConfigID">myDeviceDevice5</cns-extended-attr>
  <cns-extended-attr name="IOSEventID">myDeviceDevice5</cns-extended-attr>
- <dev-image-information>
  <image-id>myDeviceDevice5</image-id>
</dev-image-information>
- <imgw-data>
  <gateway-id>myDeviceIMGWGatewayID5</gateway-id>
  <device-type>IOS</device-type>
  <simulation-agent>IMAGEAGENT</simulation-agent>
  <simulation-agent>CONFIGAGENT</simulation-agent>
- <hop-information>
  <hop-type>IOS_LOGIN</hop-type>
  <ip-address>0.0.0.0</ip-address>
  <port>0000</port>
  <username>myDeviceusr5</username>
  <password>myDevicepwd5</password>
</hop-information>
- <hop-information>
  <hop-type>IOS_EN</hop-type>
  <ip-address />
  <port />
  <username />
  <password>myDevicepasswd5</password>
</hop-information>
</imgw-data>
</cns-device-info>
- <cns-device-info dev-type="imgw">
  <cns-device-name>myDeviceDevice6</cns-device-name>
  <cns-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cns-extended-attr>
  <cns-extended-attr name="IOSConfigID">myDeviceDevice6</cns-extended-attr>
  <cns-extended-attr name="IOSEventID">myDeviceDevice6</cns-extended-attr>
- <dev-image-information>
  <image-id>myDeviceDevice6</image-id>
</dev-image-information>
- <imgw-data>
  <gateway-id>myDeviceIMGWGatewayID6</gateway-id>

```

```

<device-type>IOS</device-type>
<simulation-agent>IMAGEAGENT</simulation-agent>
<simulation-agent>CONFIGAGENT</simulation-agent>
- <hop-information>
  <hop-type>IOS_LOGIN</hop-type>
  <ip-address>0.0.0.0</ip-address>
  <port>0000</port>
  <username>myDeviceusr6</username>
  <password>myDevicepwd6</password>
</hop-information>
- <hop-information>
  <hop-type>IOS_EN</hop-type>
  <ip-address />
  <port />
  <username />
  <password>myDevicepasswd6</password>
</hop-information>
</imgw-data>
</cns-device-info>
- <cns-group-info>
  <cns-group-name>/config/myDeviceGroup1</cns-group-name>
  <cns-group-member type="GRP">myDeviceSubGroup1</cns-group-member>
</cns-group-info>
- <cns-group-info>
  <cns-group-name>/config/myDeviceGroup2</cns-group-name>
  <cns-group-member type="GRP">myDeviceSubGroup1</cns-group-member>
  <cns-group-member type="GRP">myDeviceSubGroup2</cns-group-member>
</cns-group-info>
</NSM-DATA>
</cns-element-data>
</cns-bulk-upload>

```

NSM Data Sample With Image Info

The following example shows sample data with the image in XML format:

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
  <!DOCTYPE cns-bulk-upload (View Source for full doctype...)>
- <cns-bulk-upload stop-on-error="false" version="3.0">
- <cns-element-data>
- <NSM-DATA op-type="add" validate-data="false">
- <cns-device-info dev-type="other">
  <cns-device-name>myDeviceDevice1</cns-device-name>
  <cns-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cns-extended-attr>
  <cns-extended-attr name="IOSConfigID">myDeviceDevice1</cns-extended-attr>
  <cns-extended-attr name="IOSEventID">myDeviceDevice1</cns-extended-attr>
- <dev-image-information>
  <image-id>myDeviceDevice1</image-id>
  <activation-template>DemoRouter.cfgtpl</activation-template>
- <dev-image-info>
  <image-name>myDeviceIMAGEObj1</image-name>
- <distribution activate="false" erase-flash="no" overwrite="yes">
  <destination>flash</destination>
  <location>tftp://test.com/c7200-js-mz1</location>
</distribution>
</dev-image-info>
</dev-image-information>
</cns-device-info>
- <cns-device-info dev-type="other">
  <cns-device-name>myDeviceDevice2</cns-device-name>

```

```

    <cns-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cns-extended-attr>
    <cns-extended-attr name="parent">/config/myDeviceGroup1</cns-extended-attr>
    <cns-extended-attr name="IOSConfigID">myDeviceDevice2</cns-extended-attr>
    <cns-extended-attr name="IOSEventID">myDeviceDevice2</cns-extended-attr>
  - <dev-image-information>
    <image-id>myDeviceDevice2</image-id>
    <activation-template>DemoRouter.cfgtpl</activation-template>
  - <dev-image-info>
    <image-name>myDeviceIMAGEObj2</image-name>
  - <distribution activate="false" erase-flash="no" overwrite="yes">
    <destination>flash</destination>
    <location>tftp://test.com/c7200-js-mz2</location>
    </distribution>
  </dev-image-info>
</dev-image-information>
</cns-device-info>
- <cns-device-info dev-type="pix">
  <cns-device-name>myDeviceDevice3</cns-device-name>
  <cns-extended-attr name="ErrorAction">revert</cns-extended-attr>
  <cns-extended-attr name="AuthPassword">myDevicepwd</cns-extended-attr>
  <cns-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cns-extended-attr>
  <cns-extended-attr name="parent">/config/myDeviceGroup2</cns-extended-attr>
  <cns-extended-attr name="ConfigAction">merge</cns-extended-attr>
  <cns-extended-attr name="IOSConfigID">myDeviceDevice3</cns-extended-attr>
  <cns-extended-attr name="IOSEventID">myDeviceDevice3</cns-extended-attr>
- <dev-image-information>
  <image-id>myDeviceDevice3</image-id>
  <activation-template>DemoRouter.cfgtpl</activation-template>
- <dev-image-info>
  <image-name>myDeviceIMAGEObj3</image-name>
- <distribution activate="false" erase-flash="no" overwrite="yes">
  <destination>flash</destination>
  <location>tftp://test.com/c7200-js-mz3</location>
  </distribution>
</dev-image-info>
</dev-image-information>
</cns-device-info>
- <cns-device-info dev-type="asa">
  <cns-device-name>myDeviceDevice4</cns-device-name>
  <cns-extended-attr name="ErrorAction">revert</cns-extended-attr>
  <cns-extended-attr name="AuthPassword">myDevicepwd</cns-extended-attr>
  <cns-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cns-extended-attr>
  <cns-extended-attr
name="/parent"/>/config/myDeviceGroup2/myDeviceSubGroup1</cns-extended-attr>
  <cns-extended-attr name="ConfigAction">merge</cns-extended-attr>
  <cns-extended-attr name="IOSConfigID">myDeviceDevice4</cns-extended-attr>
  <cns-extended-attr name="IOSEventID">myDeviceDevice4</cns-extended-attr>
- <dev-image-information>
  <image-id>myDeviceDevice4</image-id>
  <activation-template>DemoRouter.cfgtpl</activation-template>
- <dev-image-info>
  <image-name>myDeviceIMAGEObj4</image-name>
- <distribution activate="false" erase-flash="no" overwrite="yes">
  <destination>flash</destination>
  <location>tftp://test.com/c7200-js-mz4</location>
  </distribution>
</dev-image-info>
</dev-image-information>
</cns-device-info>
- <cns-device-info dev-type="imgw">
  <cns-device-name>myDeviceDevice5</cns-device-name>
  <cns-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cns-extended-attr>
  <cns-extended-attr
name="/parent"/>/config/myDeviceGroup2/myDeviceSubGroup2</cns-extended-attr>

```



```

    <cns-extended-attr name="IOSConfigID">myDeviceDevice5</cns-extended-attr>
    <cns-extended-attr name="IOSEventID">myDeviceDevice5</cns-extended-attr>
- <dev-image-information>
  <image-id>myDeviceDevice5</image-id>
  <activation-template>DemoRouter.cfgtpl</activation-template>
- <dev-image-info>
  <image-name>myDeviceIMAGEObj5</image-name>
- <distribution activate="false" erase-flash="no" overwrite="yes">
  <destination>flash</destination>
  <location>tftp://test.com/c7200-js-mz5</location>
  </distribution>
  </dev-image-info>
</dev-image-information>
- <imgw-data>
  <gateway-id>myDeviceIMGWGatewayID5</gateway-id>
  <device-type>IOS</device-type>
  <simulation-agent>IMAGEAGENT</simulation-agent>
  <simulation-agent>CONFIGAGENT</simulation-agent>
- <hop-information>
  <hop-type>IOS_LOGIN</hop-type>
  <ip-address>0.0.0.0</ip-address>
  <port>0000</port>
  <username>myDeviceusr5</username>
  <password>myDevicepwd5</password>
  </hop-information>
- <hop-information>
  <hop-type>IOS_EN</hop-type>
  <ip-address />
  <port />
  <username />
  <password>myDevicepasswd5</password>
  </hop-information>
</imgw-data>
</cns-device-info>
- <cns-device-info dev-type="imgw">
  <cns-device-name>myDeviceDevice6</cns-device-name>
  <cns-extended-attr name="IOSconfigtemplate">DemoRouter.cfgtpl</cns-extended-attr>
  <cns-extended-attr name="IOSConfigID">myDeviceDevice6</cns-extended-attr>
  <cns-extended-attr name="IOSEventID">myDeviceDevice6</cns-extended-attr>
- <dev-image-information>
  <image-id>myDeviceDevice6</image-id>
  <activation-template>DemoRouter.cfgtpl</activation-template>
- <dev-image-info>
  <image-name>myDeviceIMAGEObj6</image-name>
- <distribution activate="false" erase-flash="no" overwrite="yes">
  <destination>flash</destination>
  <location>tftp://test.com/c7200-js-mz6</location>
  </distribution>
  </dev-image-info>
</dev-image-information>
- <imgw-data>
  <gateway-id>myDeviceIMGWGatewayID6</gateway-id>
  <device-type>IOS</device-type>
  <simulation-agent>IMAGEAGENT</simulation-agent>
  <simulation-agent>CONFIGAGENT</simulation-agent>
- <hop-information>
  <hop-type>IOS_LOGIN</hop-type>
  <ip-address>0.0.0.0</ip-address>
  <port>0000</port>
  <username>myDeviceusr6</username>
  <password>myDevicepwd6</password>
  </hop-information>
- <hop-information>
  <hop-type>IOS_EN</hop-type>

```

```

<ip-address />
<port />
<username />
<password>myDevicepasswd</password>
</hop-information>
</imgw-data>
</cns-device-info>
- <cns-group-info>
  <cns-group-name>/config/myDeviceGroup1</cns-group-name>
  <cns-group-member type="GRP">myDeviceSubGroup1</cns-group-member>
</cns-group-info>
- <cns-group-info>
  <cns-group-name>/config/myDeviceGroup2</cns-group-name>
  <cns-group-member type="GRP">myDeviceSubGroup1</cns-group-member>
  <cns-group-member type="GRP">myDeviceSubGroup2</cns-group-member>
</cns-group-info>
</NSM-DATA>
</cns-element-data>
</cns-bulk-upload>

```

NOTES

- For Bulk Upload of NSM devices with Image Info, make sure that the image objects referenced in the **dev-image-info** element tag already exist.
- The location given should be one of the multiple image locations specified with the image object.
- If there are errors while adding the devices, please check the error file provided as a result of the Upload operation. There can be an exception given as CISException, which points to the CISDevice creation failed, which could have occurred if you had ignored the checklist. In this case, just recheck the information provided in the **dev-image-information** element tag. Correct the file and upload it again.

Image Sample Data

The following example shows image data sample:

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
  <!DOCTYPE cns-bulk-upload (View Source for full doctype...)>
- <cns-bulk-upload stop-on-error="false" version="3.0">
- <cns-element-data>
- <IMAGE-DATA op-type="add" validate-data="false">
- <image>
  <name>myDeviceIMAGEObj1</name>
- <image-info image-type="IOS">
  <img-name>c7200-js-mz1</img-name>
  <img-chksum>0x1256faf245</img-chksum>
  <software-version>12.2(8)T6</software-version>
  <system-description>Cisco Network Operating System</system-description>
  <file-byte-size>1040</file-byte-size>
  <platform-family-name>7200</platform-family-name>
  <img-location>tftp://test.com/c7200-js-mz1</img-location>
  </image-info>
</image>
- <image>
  <name>myDeviceIMAGEObj2</name>
- <image-info image-type="IOS">
  <img-name>c7200-js-mz2</img-name>
  <img-chksum>0x1256faf245</img-chksum>
  <software-version>12.2(8)T6</software-version>

```

```

<system-description>Cisco Network Operating System</system-description>
<file-byte-size>1040</file-byte-size>
<platform-family-name>7200</platform-family-name>
<img-location>tftp://test.com/c7200-js-mz2</img-location>
</image-info>
</image>
- <image>
  <name>myDeviceIMAGEObj3</name>
- <image-info image-type="pix-image">
  <img-name>c7200-js-mz3</img-name>
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