

A through Z Commands



format global

To specify a default Operational Data Model (ODM) specification file other than the built-in specification file for XML-formatted requests, use the **format global** command in global configuration mode. To remove the default file, use the **no** form of this command.

format global location : local-filename

no format global

Syntax Description	location:local-filename	Command ODM file location and filename. Valid locations are bootflash: , flash: , nvram: , and any valid disk or slot number (such as disk0: or slot1:).
		ODM spec files have a .odm suffix.
Command Default	The built-in spec file is used.	
Command Modes	Global configuration (config)	
Command History	Release	Modification
	12.4(20)T	This command was introduced.
	12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.
	12.2(54)SG	This command was integrated into Cisco IOS Release 12.2(54)SG.
	12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.
	15.1(1)SY	This command was integrated into Cisco IOS Release 15.1(1)SY.

Usage Guidelines

Use the **format global** command to specify an ODM spec file as the default for all XML-formatted requests coming from NETCONF operations. The NETCONF file search precedence is to look first for the file associated by the **netconf format** command, then for the file defined by the **format global** command, and finally for the built-in spec file.

The ODM spec file must exist on the files ystem before NETCONF can be configured to use it. If the file does not exist, the **format global** command is rejected.

Examples

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The following example shows how to define a default ODM file to be used for all requests, then associates that file with NETCONF for all XML-formatted requests. If no file is specified, the built-in spec file is used for all requests:

Router(config)# format global disk0:spec3.3.odm
Router(config)# netconf format disk2:spec3.3.odm

Related Commands	Command	Description
	netconf format	Associates NETCONF with an ODM spec file for XML-formatted requests.
	spec-file install built-in	Replaces the current spec file with the built-in spec file.
	spec-file install file	Replaces a local spec file with a remote spec file.

netconf format

To associate Network Configuration Protocol (NETCONF) with an Operational Data Model (ODM) specification file for XML-formatted requests, use the **netconf format** command in global configuration mode. To remove the association, use the **no** form of this command.

netconf format *location* : *local-filename* **no netconf format**

Syntax Description	location:local-filename	Command ODM file location and filename. Valid locations are bootflash: , flash: , nvram: , and any valid disk or slot number (such as disk0: or slot1:).
		ODM spec files have a .odm suffix.
Command Default	The spec file defined by the format global	command is used.
Command Modes	Global configuration (config)	
command History	Release	Modification
ommand History	Release 12.4(20)T	Modification This command was introduced.
ommand History		
ommand History	12.4(20)T	This command was introduced. This command was integrated into Cisco IOS
ommand History	12.4(20)T 12.2(33)SRE	This command was introduced. This command was integrated into Cisco IOS Release 12.2(33)SRE. This command was integrated into Cisco IOS

Usage Guidelines

Use the **netconf format** command to make an association with NETCONF to use the specified ODM spec file for all XML-formatted requests coming from NETCONF operations. The ODM spec file must exist on the files ystem before NETCONF can be configured to use it. If the file does not exist, the **netconf format** command is rejected.

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Examples The following example shows how to associate a file named spec3.3.odm with NETCONF:

Router(config)# netconf format disk0:spec3.3.odm

Related Commands	Command	Description
	netconf lock-time	Limits the amount of time NETCONF can lock a configuration.
	netconf max-sessions	Limits the total number of NETCONF sessions.
	netconf ssh	Enables NETCONF over SSHv2.

show format

To display a fully expanded list of commands that have a spec file entry (SFE), display the SFE of a specific command, or validate a specific spec file, use the **show format** command in privileged EXEC mode.

show format [built-in | location:local-filename] [cli command | validate]

Syntax Description	built-in	(Optional) Displays the commands with SFEs in the built-in spec file, and validates the built-in spec file when used with the validate keyword. Displays the SFE for a specific command when used with the cli keyword and <i>command</i> argument.
	location:local-filename	(Optional) Command Operational Data Model (ODM) spec file location and filename. Valid locations are bootflash: , flash: , nvram: , and any valid disk or slot number (such as disk0: or slot1:).
		ODM spec files have a .odm suffix. The pipe () output modifier can be used in the command.
		Note These arguments are not required if you want to use a default ODM file defined with the format global command.
	cli command	(Optional) Displays only the SFE for the specified command. Enter a fully expanded command name.
	validate	(Optional) Validates the built-in spec file or a specific spec file.
Command Modes	Privileged EXEC (#)	
Command History	Release	Modification
	12.4(20)T	This command was introduced.
	12.2(33)SRE	This command was modified. The built-in and validate keywords were added.
	12.2(54)SG	This command was integrated into Cisco IOS Release 12.2(54)SG.

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	Release	Modification
	12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.
	15.1(1)SY	This command was integrated into Cisco IOS Release 15.1(1)SY.
Usage Guidelines	Use the show format command to display an index of commands that have an SFE in the spec file, display the SFE of a specific command, or validate a spec file. The SFE of any command is in XML format. Use the show format command to display an index of commands with an SFE in the current spec file. Some commands have an SFE in the built-in spec file of the image. Use the show format built-in command to display an index of the commands with an SFE in the built-in spec file.	
	To display the SFE for a specific command in the built-in spec file, use the show format built-in cli <i>command</i> command. For example, if show inventory is present in the built-in spec file, then the show format built-in cli show inventory command will display the spec entry for this CLI. To display the SFE for a specific command in a specific spec file, use the show format <i>location:local-filename</i> cli <i>command</i> command.	
	To validate the built-in spec file use the s spec file use the show format <i>location</i> : <i>lo</i>	show format built-in validate command. To validate a specific <i>ccal-filename</i> validate command.
Examples		of commands that have SFEs in the built-in spec file of the image:
	Router# show format built-in The following CLI are supported in show inventory show ip interface brief	built-in
	The following example shows a list of fu	lly expanded command names that have spec files in the that lists an incorrectly defined command.
	Router# show format slot0:spec3.3.	odm
	The following CLI are supported in show arp show bootvar show cdp neighbors detail show context show flash: show interfaces* show interfaces show inventory show ip interface*	<pre>slot0:spec3.3.odm</pre>
	show ip interface brief show ip nat translations show line value show line show processes memory show region show spanning-tree	

The following example shows the output when the spec entry for a particular command is requested from the default ODM file:

Router# show format cli show inventory

```
<?xml version='1.0' encoding='utf-8'?>
<ODMSpec>
<Command>
<Name>show inventory</Name>
</Command>
<OS>ios</OS>
<DataModel>
<Container name="ShowInventory">
<Container name="NAME:" alias = "InventoryEntry" dynamic = "true">
<Property name="NAME:" alias = "ChassisName" distance = "1" length = "1" end-de>
<property name="DESCR:" alias = "Description" distance = "1" length = "-1" type>
<Property name="PID:" alias="PID" distance = "1" length = "5" end-delimiter = ">
<Property name="VID:" alias="VID" distance = "1" length = "1" end-delimiter = ">
<Property name="SN:" alias="SN" distance = "1" length = "1" end-delimiter = ",">
</Container>
</Container>
</DataModel>
</ODMSpec>
```

The following example shows the output when the spec entry for a particular command is requested from a specific ODM file:

```
Router# show format slot0:spec3.3.odm cli show ip interface brief
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ODMSpec>
          <Command>
                    <Name>show ip interface brief</Name>
          </Command>
          <0S>ios</0S>
          <DataModel>
                    <Container name="ShowIpInterfaceBrief">
                              <Table name="IPInterfaces">
                                         <Header name="Interface" type="String" start="0"
end="23"/>
                                        <Header name="IP-Address" type="IpAddress" start="24"
end="41"/>
                                         <Header name="OK" type="String" start="42" end="46"/>
                                        <Header name="Method" type="String" start="47" end="53"/>
<Header name="Status" type="String" start="54" end="75"/>
<Header name="Protocol" type="String" start="76"</pre>
end="-1"/>
                              </Table>
                    </Container>
</DataModel>
</ODMSpec>
```

The following example validates the built-in spec file:

Router# show format built-in validate

The file built-in has been validated The following example shows the output when a spec file fails to validate: Router# show format disk2:/spec3.4.odm validate The following problem was detected in disk2:/spec3.4.odm bad format in the spec file, show line value The following example shows the output when a specific spec file is validated: Router# show format disk2:/spec3.user1.odm validate The file disk2:/spec3.user1.odm has been validated

The following example specifies the spec file named spec3.user2.odm as the default spec file instead of the built-in spec file, replaces the current spec file with it, and ensures that it is validated as the current spec file:

Router(config)# format global disk2:/spec3.user2.odm

```
Router(config)# exit
Router# spec-file install disk2:/spec3.user2.odm built-in
Replace existing file? [yes]: Enter
Router#
Router# show format validate
```

The file disk2:/spec3.user2.odm has been validated

Each display from the **show format** command is self-explanatory; see the "Usage Guidelines" section for more information.

Related Commands	Command	Description
	format global	Specifies a default ODM spec file other than the built-in spec file.
	show odm-format	Displays the schema of the spec file.
	show xsd-format	Generates XSD output for a command.
	spec-file install built-in	Replaces the current spec file with the built-in spec file.

show odm-format

To display the schema of the spec file, use the **show odm-format** command in privileged EXEC mode.

show odm-format

- Syntax Description This command has no arguments or keywords.
- **Command Modes** Privileged EXEC (#)

Command History Release Modification This command was introduced. 12.4(20)T12.2(33)SRE This command was integrated into Cisco IOS Release 12.2(33)SRE. 12.2(54)SG This command was integrated into Cisco IOS Release 12.2(54)SG. 12.2(50)SY This command was integrated into Cisco IOS Release 12.2(50)SY. 15.1(1)SY This command was integrated into Cisco IOS Release 15.1(1)SY.

Usage Guidelines The **show odm-format** command displays the spec file structure in a fixed output that you can refer to in order to understand the spec file tag hierarchy.

Examples

The following example shows the fixed output from the show odm-format command:

Router# show odm-format

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```
<EndOfTheTable> Either 0 or 1 allowed
<Property> 0 or more is allowed
  <Option> 0 or more is allowed
<Container> 0 or more is allowed
  <Table> 0 or more is allowed
    <Header> At least 1 required
      <Option> 0 or more is allowed
    <EndOfTheTable> Either 0 or 1 allowed
  <Property> 0 or more is allowed
    <Option> 0 or more is allowed
     <Container> 0 or more is allowed
  <Legends> 0 or more is allowed
  <Legend> At least 1 required
<IgnorableLinesList> 0 or more is allowed
    <Line> At least 1 required
<Legends> 0 or more is allowed
  <Legend> At least 1 required
<IgnorableLinesList> 0 or more is allowed
  <Line> At least 1 required
```

The output from the **show odm-format** command is self-explanatory; see the "Usage Guidelines" section for more information.

Related Commands	Command	Description
	show xsd-format	Generates XSD output for a command.

show xsd-format

To generate XML Schema Definition (XSD) output for a command, use the **show xsd-format** command in privileged EXEC mode.

show xsd-format [location:local-filename] cli command

Syntax Description	location:local-filename	(Optional) Command Operational Data Model (ODM) file location and filename. Valid locations are bootflash: , flash: , nvram: , and any valid disk or slot number (such as disk0: or slot1:).
		ODM spec files have a .odm suffix. The pipe () output modifier can be used in the command.
		Note These arguments are not required if you want to use a default ODM file defined with the format global command.
	cli command	Displays the XSD output for the specific command. Enter a fully expanded command name.
Command Modes	Privileged EXEC (#)	
	Privileged EXEC (#) Release	Modification
		Modification This command was introduced.
Command Modes	Release	
	Release 12.4(20)T	This command was introduced. This command was integrated into Cisco IOS
	Release 12.4(20)T 12.2(33)SRE	This command was introduced. This command was integrated into Cisco IOS Release 12.2(33)SRE. This command was integrated into Cisco IOS

Usage Guidelines

The **show xsd-format** command searches through the ODM spec file to find a match for the specified command name and generates XSD format. The spec file must exist on the local file system. If no spec entry is found, an error is returned.

```
Note
```

The **show running-config** command output is generated natively in XML, so the spec filename could be an empty file or, if a default spec file has been defined with the **format global** command, no filename is required.

```
Examples
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The following example displays the XSD generated for the show arp command:

```
Router# show xsd-format disk2:spec3.3.odm cli show arp
<?xml version="1.0"?>
  <xsd:schema elementFormDefault="qualified" attributeFormDefault="unqualified"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <xsd:complexType name="ShowArp_def">
      <xsd:sequence>
        <xsd:choice minOccurs="0" maxOccurs="unbounded">
          <xsd:element ref="Info"/>
          <xsd:element name="ARPTable" minOccurs="0">
            <xsd:complexType>
              <xsd:sequence>
                <xsd:element name="entry" minOccurs="0" maxOccurs="unbounded">
                  <xsd:complexType>
                    <xsd:sequence>
                      <xsd:element name="Protocol" minOccurs="0" type="string" />
                      <re><rsd:element name="Address" minOccurs="0" type="string" /></r>
                      <re><xsd:element name="Age" minOccurs="0" type="integer" />
                      <xsd:element name="MAC" minOccurs="0" type="string" />
                      <xsd:element name="Type" minOccurs="0" type="string" />
                      <re><xsd:element name="Interface" minOccurs="0" type="string" />
                    </xsd:sequence>
                  </xsd:complexType>
                </xsd:element>
              </xsd:sequence>
            </xsd:complexType>
          </xsd:element>
        </xsd:choice>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:element name="Info" type="xsd:string"/>
    <rest</re>
  </xsd:schema>
```

The output from the **show xsd-format** command is self-explanatory; see the "Usage Guidelines" section for more information.

Related Commands	Command	Description
	format global	Specifies a default ODM spec file other than the built-in spec file for XML-formatted requests coming from NETCONF operations.
	show odm-format	Displays the schema of the spec file.

spec-file install add-entry

To copy a spec file entry (SFE) from a remote location and add it to the local spec file, use the **spec-file install add-entry** command in privileged EXEC mode.

spec-file install [force] location : local-filename add-entry url : remote-filename command

Syntax Description	force	(Optional) Performs the action without prompting.
	location:local-filename	Spec filename, which must be on a local file system. Valid locations are bootflash: , flash: , nvram: , and any valid disk or slot number (such as disk0: or slot1:).
		Spec files have a .odm suffix.
		You will be prompted to confirm adding the SFE, unless the optional force keyword is used.
	url:remote-filename	Location (URL) and filename of the remote spec file. Valid URLs are archive: , bootflash: , cns: , flash: , ftp: , http: , null: , nvram: , pram: , rcp: , scp: , system: , tar: , tftp: , tmpsys: , and any valid disk or slot number (such as disk0: or slot1:).
Command Modes	<i>command</i> Privileged EXEC (#)	Command SFE to be added to the spec file.
	Privileged EXEC (#)	Command SFE to be added to the spec file. Modification This command was introduced.
	Privileged EXEC (#) Release	Modification
Command Modes	Privileged EXEC (#) Release 12.4(20)T	Modification This command was introduced. This command was integrated into Cisco IOS
	Privileged EXEC (#) Release 12.4(20)T 12.2(33)SRE	Modification This command was introduced. This command was integrated into Cisco IOS Release 12.2(33)SRE. This command was integrated into Cisco IOS

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Related Commands	Command Description
	Pressing the Enter key is the same as typing yes . Type no and press Enter to stop either process.
	create new spec file? [yes]: CLI exists, delete it? [yes]:
	Unless you add the force keyword to the command string, you will be prompted as follows:
	Router# spec-file install slot0:spec_file.odm add-entry tftp://system1/user1/show_arp.odm show arp
Examples	The following example adds the show arp command SFE from the remote show_arp.odm file at location "tftp://system1/user1" to the local file:
	If the spec file does not exist, you will be prompted before the file is created. If the command SFE already exists in the spec file, you will be prompted before the command SFE is replaced. A backup copy of the local spec file is created before the remote SFE is added.
Usage Guidelines	Use the spec-file install add-entry command to add an SFE to a spec file. A check is performed on the loaded SFE to ensure that the command is not already present in the spec file, and that the SFE can be parsed correctly in XML.

ooninnana	Description
spec-file install built-in	Replaces the current spec file with the built-in spec file.
spec-file install file	Replaces a local spec file with a remote spec file.
spec-file install remove-entry	Removes an SFE from a spec file.
spec-file install restore	Restores a spec file to its previous contents using a backup file.

spec-file install built-in

To replace the current spec file with the built-in spec file, use the **spec-file install built-in** command in privileged EXEC mode.

spec-file install [force] location : local-filename built-in

Syntax Description	force	(Optional) Performs the action without prompting.
	location:local-filename	Spec filename, which must be on a local file system. Valid locations are bootflash: , flash: , nvram: , and any valid disk or slot number (such as disk0: or slot1:).
		Spec files have a .odm suffix.
		If <i>local-filename</i> exists, you will be prompted for a yes or no response before the file is replaced, unless the optional force keyword is used.
Command Modes	Privileged EXEC (#)	Modification
		Modification This command was introduced.
	Release	
	Release 12.4(20)T	This command was introduced. This command was integrated into Cisco IOS
	Release 12.4(20)T 12.2(33)SRE	This command was introduced. This command was integrated into Cisco IOS Release 12.2(33)SRE. This command was integrated into Cisco IOS

Usage Guidelines

Use the **spec-file install built-in** to replace the current spec file with the built-in spec file. You will be prompted before the current file is replaced and *filename*.bak will be created.

Examples The following example shows how to start the process to replace the current spec file with the built-in spec file:

Router# spec-file install slot0:spec_file.odm built-in

Unless you add the force keyword to the command string, you will be prompted as follows:

Replace existing file? [yes]:

Press the **Enter** key to make a backup copy of the current file and then replace it with the built-in spec file. Type **no** and press **Enter** to stop the process.

Related Commands	Command	Description
	spec-file install add-entry	Copies an SFE from a remote location and adds it to a local spec file.
	spec-file install file	Replaces a local spec file with a remote spec file.
	spec-file install remove-entry	Removes an SFE from a spec file.
	spec-file install restore	Restores a spec file to its previous contents using a backup file.

spec-file install file

To replace a local spec file with a remote spec file, use the **spec-file install file** command in privileged EXEC mode.

spec-file install [force] location : local-filename file url : remote-filename

Syntax Description	force	(Optional) Performs the action without prompting.
	location:local-filename	Spec filename, which must be on a local file system. Valid locations are bootflash: , flash: , nvram: , and any valid disk or slot number (such as disk0: or slot1:).
		Spec files have a .odm suffix.
		When <i>local-filename</i> exists, you will be prompted for a yes or no response before the file is copied, unless the optional force keyword is used.
	url:remote-filename	Location (URL) and filename of the remote spec file. Valid URLs are archive: , bootflash: , cns: , flash: , ftp: , http: , null: , nvram: , pram: , rcp: , scp: , system: , tar: , ftp: , tmpsys: , and any valid disk or slot number (such as disk0: or slot1:).
	Privileged EXEC (#)	Modification
	Release	Modification
	Release 12.4(20)T	Modification This command was introduced. This command was integrated into Cisco IOS
Command Modes	Release 12.4(20)T 12.2(33)SRE	Modification This command was introduced. This command was integrated into Cisco IOS Release 12.2(33)SRE. This command was integrated into Cisco IOS Release 12.2(33)SRE.

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Usage Guidelines		copy a remote spec file to a local spec file. A check of the loaded fied command is included only once, and that the spec file entry	
Examples	The following example shows how to copy a remote spec file on "tftp://system1/user1" to the local file:		
	Router# spec-file install slot0:spec_file.odm file tftp://system1/user1/spec_file.odm		
	Unless you add the force keyword to the command string, you will be prompted as follows:		
	Replace existing file? [yes]:		
	Press the Enter key to complete the comm	and. Type no and press Enter to stop the process.	
Related Commands	Command	Description	
	spec-file install add-entry	Copies an SFE from a remote location and adds it to a local spec file.	
	spec-file install built-in	Replaces the current spec file with the built-in spec file.	
	spec-file install remove-entry	Removes an SFE from a spec file.	
	spec-file install restore	Restores a spec file to its previous contents using a backup file.	

spec-file install remove-entry

To remove a spec file entry (SFE) from a spec file, use the **spec-file install remove-entry** command in privileged EXEC mode.

spec-file install [force] location : local-filename remove-entry command

Syntax Description	force	(Optional) Performs the action without prompting.
	location:local-filename	Spec filename, which must be on a local file system. Valid locations are bootflash: , flash: , nvram: , and any valid disk or slot number (such as disk0: or slot1:).
		Spec files have a .odm suffix.
	command	Command SFE to be removed from the spec file.
Command Modes	Privileged EXEC (#)	
Command History		
Command History	Release	Modification
Command History	Release 12.4(20)T	Modification This command was introduced.
Command History		
Command History	12.4(20)T	This command was introduced. This command was integrated into Cisco IOS
Command History	12.4(20)T 12.2(33)SRE	This command was introduced. This command was integrated into Cisco IOS Release 12.2(33)SRE. This command was integrated into Cisco IOS

Usage Guidelines

Use the **spec-file install remove-entry** command to remove a command SFE from a spec file. A check is performed to ensure that the command SFE is present in the spec file. If the spec file does not exist, this command fails. A backup copy of the spec file is created before the SFE is removed.

Examples The following example shows how to remove the **show arp** command SFE from the remote show_arp.odm file to the local spec_file.odm file: Router# spec-file install slot0:spec_file.odm remove-entry show arp **Related Commands** Command Description spec-file install add-entry Copies an SFE from a remote location and adds it to a local spec file. spec-file install built-in Replaces the current spec file with the built-in spec file. spec-file install file Replaces a local spec file with a remote spec file. Restores a spec file to its previous contents using a spec-file install restore backup file.

spec-file install restore

To restore a spec file to its previous contents using a backup file, use the **spec-file install restore** command in privileged EXEC mode.

spec-file install [force] location : local-filename restore

Syntax Description	force	(Optional) Performs the action without prompting.
Command Modes	location:local-filename	Spec filename, which must be on a local file system. Valid locations are bootflash: , flash: , nvram: , and any valid disk or slot number (such as disk0: or slot1:).
		Spec files have a .odm suffix.
	Privileged EXEC (#)	
Command History	Release	Modification
	12.4(20)T	This command was introduced.
	12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.
	12.2(54)SG	This command was integrated into Cisco IOS Release 12.2(54)SG.
	12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.
	15.1(1)SY	This command was integrated into Cisco IOS Release 15.1(1)SY.
Usage Guidelines	Use the spec-file install restore command to a file. If the .bak file does not exist, this command	revert a spec file to its original contents using a backup (.bak) nd fails.
Examples	The following example shows how to restore t	
LAUNPIOU	Router# spec-file install slot0:spec_fi	

Related Commands

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Command	Description
spec-file install add-entry	Copies an SFE from a remote location and adds it to a local spec file.
spec-file install built-in	Replaces the current spec file with the built-in spec file.
spec-file install file	Replaces a local spec file with a remote spec file.
spec-file install remove-entry	Removes an SFE from a spec file.

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