Manageability Commands on Cisco IOS XR Software

This chapter describes the Cisco IOS XR software commands used to enable the HTTP server, enable router management through Extensible Markup Language (XML) agent services, and support the Common Object Request Broker Architecture (CORBA) infrastructure.

The XML Parser Infrastructure provides parsing and generation of XML documents with Document Object Model (DOM), Simple API for XML (SAX), and Document Type Definition (DTD) validation capabilities:

- DOM allows customers to programmatically create, manipulate, and generate XML documents.
- SAX supports user-defined functions for XML tags.
- DTD allows for validation of defined document types.

For more information about setting up management services, see *Cisco Craft Works Interface Quick Start Guide.*

For more information about setting up the CORBA XML agent, see *Cisco IOS XR XML API Guide*.

http server

To enable the HTTP server on the router and enable access to the Craft Works Interface (CWI), use the **http server** command in global configuration mode. To disable the HTTP server, use the **no** form of this command.

http server [**ssl**] [**access-group** *name*]

no http server

Syntax Description

access-group *name*	(Optional) Enables access to the CWI from IP addresses that meet the conditions of the access control list (ACL) specified for the *name* argument.
ssl	(Optional) Enables Secure Socket Layer (SSL).

Defaults

The HTTP server is disabled.

Command History

Release	Modification
Release 2.0	This command was introduced on the Cisco CRS-1.
Release 3.0	No modification.
Release 3.2	This command was first supported on the Cisco XR 12000 Series Router. Support for access groups was added. The **access-group** keyword and *name* argument were added to support access groups.
Release 3.3.0	No modification.
Release 3.4.0	No modification.
Release 3.5.0	No modification.
Release 3.6.0	No modification.

Command Modes

Global configuration

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes the proper task IDs. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of the *Cisco IOS XR System Security Configuration Guide*.

Use the **http server** command to enable the HTTP server on your router.

To display the home page of the router, use a Web browser pointed to http://*x.x.x.x*, where *x.x.x.x* is the router IP address. If a name has been set, use http://*router-name*.

Use the **http server ssl** command to run HTTP over a secure socket. This command enables the HTTP server to run SSL when accessing web pages or files provided by the HTTP server of the router and disables access through the regular HTTP port.

Use the **no** form of this command to disable the HTTP server.

Enabling the HTTP server enables authentication by default. After the HTTP server has been enabled, you then are prompted to provide a username and password to access web pages on the HTTP server.

Note The **http server** command enables the HTTP server process on Management Ethernet interfaces by default. For information about how to enable HTTP server on other inband interfaces, refer to the *Implementing Management Plane Protection on Cisco IOS XR Software* module in *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
config-services	read, write

Examples

The following example shows how to enable the HTTP server on the router:

```
RP/0/RP0/CPU0:router(config)# http server
```

The following example shows how to enable SSL to run HTTP over a secure socket:

```
RP/0/RP0/CPU0:router(config)# http server ssl
```

The following example shows how to enable SSL to run HTTP over a secure socket and to enable access to the CWI from only IP address that meeting the conditions of the access group named test:

```
RP/0/RP0/CPU0:router(config)# http server ssl access-group test
```

The following sample output from the **show ipv4 access-lists** commands displays the IPv4 access list named test:

```
RP/0/0/CPU0:router# show ipv4 access-lists test

ipv4 access-list test
 10 deny ip host 171.71.163.96 any
 20 permit ip host 64.102.48.34 any
```

Related Commands

Command	Description
xml agent corba	Enables XML CORBA agent services.

xml agent corba

To enable Extensible Markup Language (XML) Common Object Request Broker Architecture (CORBA) agent services so that you can manage and configure the router using an XML interface, use the **xml agent corba** command in global configuration mode. To disable XML agent services, use the **no** form of this command.

xml agent corba [**ssl**] [**access-group** *name*]

no xml agent corba

Syntax Description

access-group *name*	(Optional) Enables access to the XML CORBA services from IP addresses that meet the conditions of the access control list (ACL) specified for the *name* argument.
ssl	(Optional) Enables Secure Socket Layer (SSL) CORBA services.

Defaults

The XML agent is disabled.

Command Modes

Global configuration

Command History

Release	Modification
Release 2.0	This command was introduced on the Cisco CRS-1.
Release 3.0	No modification.
Release 3.2	This command was first supported on the Cisco XR 12000 Series Router. Support for access groups was added. The **access-group** keyword and *name* argument were added to support access groups.
Release 3.3.0	No modification.
Release 3.4.0	No modification.
Release 3.5.0	No modification.
Release 3.6.0	No modification.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes the proper task IDs. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of the *Cisco IOS XR System Security Configuration Guide*.

For the **xml agent corba** command to work, at least one interface on the router must be up and running. (Interfaces can be verified by pinging the host.)

SSL-enabled CORBA services can be activated using the **xml agent corba ssl** command. These same services can be deactivated using the **no xml agent corba** command.

Task ID

Task ID	Operations
config-services	read, write

Examples

The following example shows how to enable XML CORBA agent services:

```
RP/0/RP0/CPU0:router# config
RP/0/RP0/CPU0:router(config)# xml agent corba
```

Related Commands

Command	Description
ping	Checks host reachability and network connectivity on IP networks.
xml agent corba hostname	Enables the use of a static hostname for XML CORBA agent services.
xml agent tty	Enables XML requests over Secure Shell (SSH) and Telnet.

xml agent corba hostname

To enable the use of static hostname for XML over CORBA, use the **xml agent corba hostname** command in global configuration mode. To disable the static hostname and use the router hostname, use the **no** form of this command.

xml agent corba hostname *string*

no xml agent corba hostname

Syntax Description

string	Name of the static hostname for XML over CORBA.

Defaults

The router hostname is used.

Command Modes

Global configuration

Command History

Release	Modification
Release 3.4.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.5.0	No modification.
Release 3.6.0	No modification.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes the proper task IDs. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of the *Cisco IOS XR System Security Configuration Guide*.

By default, the router hostname is used. To enable the use of static hostname (regardless of configured hostname), use the **xml agent corba hostname** *string* command. The XML agent is restarted only if the effective hostname is changed.

Task ID

Task ID	Operations
config-services	read, write

Examples

The following example shows how to enable a static hostname for XML CORBA agent services. Use the **xml agent corba hostname** *string* command to enable a static hostname, and use the **xml agent corba** command to enable XML CORBA agent services:

```
RP/0/RP0/CPU0:router# config
RP/0/RP0/CPU0:router(config)# xml agent corba hostname router
RP/0/RP0/CPU0:router(config)# xml agent corba
```

Related Commands

Command	Description
xml agent corba	Enables XML CORBA agent services.

xml agent tty

To enable Extensible Markup Language (XML) requests over Secure Shell (SSH) and Telnet, use the **xml agent tty** command in global configuration mode. To disable XML requests over SSH and Telnet, use the **no** form of this command.

xml agent tty

no xml agent tty

Syntax Description

This command has no arguments or keywords.

Defaults

XML requests over SSH and Telnet are disabled.

Command Modes

Global configuration

Command History

Release	Modification
Release 3.2	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.3.0	No modification.
Release 3.4.0	No modification.
Release 3.5.0	No modification.
Release 3.6.0	No modification.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes the proper task IDs. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of the *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
config-services	read, write

Examples

The following example shows how to enable the tty agent for XML requests:

```
RP/0/RP0/CPU0:router(config)# xml agent tty
```

Related Commands

Command	Description
xml agent corba	Enables XML CORBA agent services.