

# **Configuring Communication Services**

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## **Communication Services**

You can use the following communication services to interface third-party applications with Cisco UCS:

| <b>Communication Service</b> | Description  |
|------------------------------|--|
| CIM XML                      | This service is disabled by default and is only available in read-only mode. The default port is 5988.   |
|                              | This common information model is one of the standards defined by the Distributed Management Task Force.  |
| НТТР                         | This service is enabled on port 80 by default.   |
|                              | You must enable either HTTP or HTTPS to run Cisco UCS Manager GUI. If you select HTTP, all data is exchanged in clear text mode.                         |
|                              | For security purposes, we recommend that you enable HTTPS and disable HTTP.  |
| HTTPS                        | This service is enabled on port 443 by default.  |
|                              | You must enable either HTTP or HTTPS to run Cisco UCS Manager GUI. If you select HTTPS, all data is exchanged in encrypted mode through a secure server. |

| Communication Service | Description  |
|-----------------------|--|
|                       | For security purposes, we recommend that you enable HTTPS and disable HTTP.  |
| SMASH CLP             | This service is enabled for read-only access and supports a limited subset of the protocols, such as the <b>show</b> command. You cannot disable it. |
|                       | This shell service is one of the standards defined by the Distributed Management Task Force.   |
| SNMP                  | This service is disabled by default. If enabled, the default port is 161. You must configure the community and at least one SNMP trap.               |
|                       | Only enable this service if your system includes integration with an SNMP server.  |
| SSH                   | This service is enabled on port 22. You cannot disable it, nor can you change the default port.  |
|                       | This service provides access to the Cisco UCS Manager CLI.   |
| Telnet                | This service is disabled by default.   |
|                       | This service provides access to the Cisco UCS Manager CLI.   |

# **Configuring CIM-XML**

#### **Procedure**

| Step 1 | In the Navigation pane, click the Admin tab.  |
|--------|---|
| Step 2 | In the Admin tab, expand All > Communication Services.  |
| Step 3 | Select the Communication Services tab.  |
| Step 4 | In the <b>CIM-XML</b> area, click the <b>enabled</b> radio button.<br>The <b>CIM-XML</b> area expands to display the available configuration options. |
| Step 5 | (Optional) In the <b>Port</b> field, change the default port that Cisco UCS Manager GUI will use for CIM-XML. The default port is 5988.               |
| Sten 6 | Click Save Changes  |

Step 6 Click Save Changes.

# **Configuring HTTP**

#### Procedure

| Step 1 | In the Navigation pane, click the Admin tab.  |
|--------|---|
| Step 2 | In the Admin tab, expand All > Communication Services.  |
| Step 3 | Select the Communication Services tab.  |
| Step 4 | In the <b>HTTP</b> area, click the <b>enabled</b> radio button.<br>The <b>HTTP</b> area expands to display the available configuration options. |
| Step 5 | (Optional) In the <b>Port</b> field, change the default port that Cisco UCS Manager GUI will use for HTTP. The default port is 80.              |
| Step 6 | Click Save Changes.   |

# **Configuring HTTPS**

## **Creating a Key Ring**

#### Procedure

| Step 1 | In the Navigation pane, click the Admin tab.                           |  |
|--------|--|--|
| Step 2 | On the Admin tab, expand All > Key Management > Root.                  |  |
| Step 3 | Right-click Root and choose Create Key Ring.                           |  |
| Step 4 | <b>p 4</b> In the <b>Create Key Ring</b> dialog box, do the following: |  |
|        | a) In the <b>Name</b> field, enter a unique name for the key ring.     |  |
|        | b) In the Modulus field, select one of the following radio buttons:    |  |
|        | • mod512   |  |
|        |  |  |

- mod1024
- mod1536
- mod2048

### c) Click OK.

### What to Do Next

Create a certificate request for this key ring.

### **Creating a Certificate Request for a Key Ring**

#### Procedure

| Step 1 | In the Navigation pane, click the Admin tab.  |   |
|--------|---|---|
| Step 2 | On the Admin tab, expand All > Key Management > Root.                               |   |
| Step 3 | Click the key ring for which you wa   | nt to create a certificate request.                           |
| Step 4 | In the Work pane, click the Genera  | l tab.  |
| Step 5 | In the General tab, click Create Ce   | rtificate Request.  |
| Step 6 | Step 6 In the Create Certificate Request dialog box, complete the following fields: |   |
|        | Name  | Description   |
|        | Password field  | An optional password for this request.                        |
|        | Confirm Password field  | If you specified a password, enter it again for confirmation. |
|        | Subject field   | The fully qualified domain name of the fabric interconnect.   |
|        | IP Address field  | The IP address of the fabric interconnect.                    |

- Step 7 Click OK.
- **Step 8** Copy the text of the certificate request out of the **Request** field and save in a file.
- Step 9 Send the file with the certificate request to the trust anchor or certificate authority.

### What to Do Next

Create a trusted point and set the certificate chain for the certificate of trust received from the trust anchor.

### **Creating a Trusted Point**

- **Step 1** In the Navigation pane, click the Admin tab.
- **Step 2** On the Admin tab, expand All ➤ Key Management ➤ Root.
- Step 3 Right-click Root and choose Create Trusted Point.
- Step 4 In the Create Trusted Point dialog box, complete the following fields:

| Name                    | Description   |
|-------------------------|---|
| Name field              | The name of the trusted point.                      |
| Certificate Chain field | The certificate information for this trusted point. |

Step 5 Click OK.

#### What to Do Next

When you receive the certificate from the trust anchor or certificate authority, import it into the key ring.

## Importing a Certificate into a Key Ring

#### Procedure

| Step 1 | In the Navigation pane, click the Admin tab.   |
|--------|--|
| Step 2 | On the Admin tab, expand All > Key Management > Root.  |
| Step 3 | Click the key ring into which you want to import the certificate.  |
| Step 4 | In the Work pane, click the General tab.   |
| Step 5 | In the <b>Certificate</b> area, complete the following fields:   |
|        | a) From the <b>Trusted Point</b> drop-down list, select the trusted point for the trust anchor that granted this certificate.        |
|        | b) In the <b>Certificate</b> field, paste the text from the certificate you received from the trust anchor or certificate authority. |
|        | <b>Tip</b> If the fields in an area are not displayed, click the <b>Expand</b> icon to the right of the heading.                     |
| Step 6 | Click Save Changes.  |
|        |  |

### What to Do Next

Configure your HTTPS service with the key ring.

## **Configuring HTTPS**

| Step 1 | In the Navigation pane, click the Admin tab.   |
|--------|--|
| Step 2 | In the Admin tab, expand All > Communication Services.   |
| Step 3 | Select the Communication Services tab.   |
| Step 4 | In the <b>HTTPS</b> area, click the <b>enabled</b> radio button.<br>The <b>HTTPS</b> area expands to display the available configuration options.  |
| Step 5 | (Optional) In the <b>Port</b> field, change the default port that Cisco UCS Manager GUI will use for HTTPS. The default port is 443.   |
| Step 6 | <ul><li>(Optional) In the Key Ring field, enter the name of the key ring you created for HTTPS.</li><li>Caution If you update the Key Ring field, all current HTTP and HTTPS sessions will be closed without warning after you click Save Changes.</li></ul> |

Step 7Click Save Changes.Step 8Click OK.

## **Deleting a Key Ring**

### Procedure

| Step 1 | In the Navigation pane, click the Admin tab.                            |
|--------|---|
| Step 2 | On the Admin tab, expand All ➤ Key Management ➤ Root.                   |
| Step 3 | Right-click the key ring you want to delete and select Delete.          |
| Step 4 | If Cisco UCS Manager GUI displays a confirmation dialog box, click Yes. |

## **Deleting a Trusted Point**

#### Procedure

| Step 1 | In the Navigation pane, click the Admin tab.                            |
|--------|---|
| Step 2 | On the Admin tab, expand All ➤ Key Management ➤ Root.                   |
| Step 3 | Right-click the trusted point you want to delete and select Delete.     |
| Step 4 | If Cisco UCS Manager GUI displays a confirmation dialog box, click Yes. |
| Step 5 | Click OK.   |

# **Configuring SNMP**

## **Enabling SNMP**

| Step 1 | In the Navigation pane, click the Admin tab.                    |
|--------|---|
| Step 2 | In the Admin tab, expand All > Communication Services           |
| Step 3 | Select the Communication Services tab.                          |
| Step 4 | In the <b>SNMP</b> area, click the <b>enabled</b> radio button. |

The **SNMP** area expands to display the available configuration options. You cannot change the port on which Cisco UCS Manager communicates with the SNMP host.

Step 5 In the Community field, enter the default community name that Cisco UCS Manager GUI should include with any trap messages it sends to the SNMP server.The default community is public.

Step 6 Click Save Changes.

### **Configuring Trap Hosts**

- **Step 1** In the Navigation pane, click the Admin tab.
- **Step 2** In the Admin tab, expand All > Communication Services.
- **Step 3** Select the **Communication Services** tab.
- **Step 4** In the **SNMP Traps** area, click +.
- Step 5 In the Create SNMP Trap dialog box, complete the following fields:

| Name             | Description   |
|------------------|---|
| IP Address field | The IP address of the SNMP host to which the fabric interconnect should send the trap.  |
| Community field  | The community name the fabric interconnect includes when it sends<br>the trap to the SNMP host. This must be the same community as you<br>configured for the SNMP service.<br>Enter an alphanumeric string between 1 and 32 characters. |
| Port field       | The port on which the fabric interconnect communicates with the SNMP host.<br>The default port is 162.  |

- Step 6 Click OK.
- Step 7 Click Save Changes.

### **Configuring SNMPv3 users**

### Procedure

- **Step 1** In the Navigation pane, click the Admin tab.
- **Step 2** In the Admin tab, expand All > Communication Services.
- Step 3 Select the Communication Services tab.
- Step 4 In the SNMP Users area, click +.
- Step 5 In the Create SNMP User dialog box, complete the following fields:

| Name                           | Description   |
|--------------------------------|---|
| Name field                     | The username assigned to the SNMP user.               |
| Auth Type field                | The authorization type. This can be:                  |
|                                | • MD5   |
|                                | • SHA   |
|                                |   |
| Use AES-128 check box          | If checked, this user uses AES-128 encryption.        |
| Password field                 | The password for this user.                           |
| Confirm Password field         | The password again for confirmation purposes.         |
| Privacy Password field         | The privacy password for this user.                   |
| Confirm Privacy Password field | The privacy password again for confirmation purposes. |

Step 6 Click OK.

Step 7 Click Save Changes.

# **Enabling Telnet**

| Step 1 | In the Navigation pane, click the Admin tab.                      |
|--------|---|
| Step 2 | In the Admin tab, expand All > Communication Services.            |
| Step 3 | Click the Communication Services tab.                             |
| Step 4 | In the <b>Telnet</b> area, click the <b>enabled</b> radio button. |
| Step 5 | Click Save Changes.   |
|        |   |

# **Disabling Communication Services**



We recommend that you disable all communication services that are not required to interface with other network applications.

- **Step 1** In the Navigation pane, click the Admin tab.
- **Step 2** In the Admin tab, expand All > Communication Services.
- Step 3 On the Communication Services tab, click the disable radio button for each service that you want to disable.
- Step 4 Click Save Changes.

