



CHAPTER 19

Managing Elements in Network Manager

- [Displaying General Element Information, page 19-1](#)
- [Viewing all Network Elements, page 19-2](#)
- [Creating or Modifying an Element Profile, page 19-2](#)
- [Removing an Element Profile, page 19-3](#)
- [Searching for an Element Profile, page 19-4](#)
- [Defining Default Element Access Settings, page 19-4](#)
- [Overriding Default Element Access Settings, page 19-4](#)
- [How to Upgrade Element Software, page 19-5](#)
- [Cancelling Pending Offline Configuration Settings, page 19-7](#)
- [How to Manage the Element Software Upgrade Upload Log, page 19-7](#)
- [How to Automatically Detect New Elements on the Network, page 19-8](#)
- [Accessing an Element Web User Interface, page 19-10](#)
- [Accessing the Monitor Tab for a Specified Element, page 19-11](#)

Displaying General Element Information

The **Monitor** tab, which is the default tab displayed when an item is selected in the Network Tree view, displays general information about the item.

When the gatekeeper in a zone is unmanaged or inferred, the calls, bandwidth and registration information appears as zero.

The information displayed on the **Monitor** tab is dependent on the item selected in the tree.

Procedure

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- Step 1** Click **Network Tree** in the sidebar menu.
 - Step 2** Select the element you require in the tree.
 - Step 3** Click **Monitor**.
 - Step 4** (Optional) Click the link to display the element manager for the selected element.
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Viewing all Network Elements





The **Elements** tab displays a table of all elements related to the network, zone or folder selected in the tree.

Any element listed in the tree with a question mark (?) is considered to be an inferred element by the system. This means that the element is not listed in the database, but is presumed to exist because another known element refers to the element. Inferred elements cannot be managed, therefore we recommend that you either initiate auto-detect to discover an element, add an element manually or manually connect an inferred element.

Procedure


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- Step 1** Click **Network Tree** in the sidebar menu.
- Step 2** Select Network root element.
- Step 3** Click **Elements**.

The table in the **Elements** tab includes the following information about each element:


- Element status, indicated by an icon, as follows:
 -  Online
 -  Unmanaged
 -  Offline
 -  Faulty
 - Element type (MCU, gatekeeper and so on)
 - Element name (acts as a link to its element manager)
 - IP address
 - Version number
 - Location (as defined on the **Configure** tab of each element)
 - Number of calls
 - Traffic usage versus capacity
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Creating or Modifying an Element Profile

Procedure

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- Step 1** Click one of the network views (**Network Tree**, **Network Table** or **Network Map**) in the sidebar menu.
- Step 2** Do one of the following to modify an existing element profile:
- Right-click the element you require and select **Edit element**.
 - Select the element you require and select **Edit > Modify > Modify element**.
 - Select the element you require and and click **Edit element** .

Step 3 Select the location in the **Network Tree** or **Network Map** view where the new element should be added, and do one of the following to create a new user profile:

- Select **Edit > New > New element**.
- Click **Add element** .

Step 4 Enter the element name and IP address in the relevant fields.

Step 5 Select the required element type.



Note The element type cannot be modified.


Step 6 Select **Managed element** to enable Network Manager to manage the element.

Step 7 Select **Allow offline configuration** to allow offline configuration of the element.

The Network Manager can hold configuration details for offline elements and apply settings as each element goes online. Both added elements and existing elements can be configured to allow offline configuration.

Step 8 Click **OK** to save your changes.


Removing an Element Profile

Deleted elements are not added to the Network Manager database in any subsequent auto-detect operations. A deleted element can only be added manually either by using the **New element** option in the **Edit** menu, selecting the **Add element button**  in the network views (**Network Tree**, **Network Table** or **Network Map**), or by connecting to a deleted element that is inferred.

Procedure

Step 1 Click one of the network views (**Network Tree**, **Network Table** or **Network Map**) in the sidebar menu.

Step 2 Do one of the following to remove an existing element profile:


- Right-click the element you require and select **Delete element**.
- Select the element you require and select **Edit > Delete > Delete element**.
- Select the element you require and click **Delete element** .

Step 3 Click **Yes**.

The element profile is deleted from the scheduler and information about the element is removed from the database.

Searching for an Element Profile

Procedure

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- Step 1** Click one of the network views (**Network Tree**, **Network Table** or **Network Map**) in the sidebar menu.
- Step 2** Do one of the following to search for an element profile:
- Right-click the element you require and select **Delete element**.
 - Select **Edit > Find > Find element**.
 - Click **Find element** .
- Step 3** Enter the IP address of the element or select the element type.
- Step 4** Click **Find**.

The required element is highlighted in the Network Tree, Network Table or Network Map view.

Defining Default Element Access Settings

Default access settings allow access to a network element for monitoring and configuration without having to first go through the login window for that element.



Note

You can override default access settings for a specified element at Network Tree > Access.

Procedure

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- Step 1** Click **Settings** in the sidebar menu.
- Step 2** Click **Element Management**.
- Step 3** Click **Access**.
- Step 4** Select an element type.
- Step 5** Define SNMP read and write communities, user name and password, HTTP communication port and Telnet password in the relevant fields.
- SNMP community and Telnet information must match the settings defined in the selected element to enable Network Manager to retrieve information from the element.
- Step 6** Click **Upload** to save the information to the Network Manager database.
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Overriding Default Element Access Settings

Procedure

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- Step 1** Click **Network Tree** in the sidebar menu.

- Step 2** Select the required network element.
- Step 3** Click **Access**.
- Step 4** Check **Use default** to use the default access settings for the element type.
When unchecked, all other tab options are disabled.
Availability of the following access configuration parameters depends on the element type selected.
- Step 5** The Element type list appears when the selected element is an inferred gatekeeper. Select to display the appropriate access configuration parameters for the inferred gatekeeper.
- Step 6** Click **Connect** to connect to an inferred element and add it to the Network Manager database.
SNMP community and Telnet information must match the settings defined in the selected element to enable Network Manager to retrieve information from the element.
- Step 7** Configure the following parameters:
- SNMP read community
 - SNMP write community
 - User name
 - Password
 - HTTP port
 - Telnet password (MCU, Cisco IOS H.323 Gatekeeper)
 - Telnet user name (Cisco IOS H.323 Gatekeeper only)
 - Enable Telnet (Cisco IOS H.323 Gatekeeper only)
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How to Upgrade Element Software

Network Manager enables you to manage software upgrade files for Cisco Unified Videoconferencing 3500 MCUs and gateways, and Sony endpoints on your network.

- [Adding a Software Upgrade File, page 19-5](#)
- [Modifying a Software Upgrade File, page 19-6](#)
- [Removing a Software Upgrade File, page 19-6](#)

Adding a Software Upgrade File

Procedure

- Step 1** Click **Settings** in the sidebar menu.
- Step 2** Click **Element Management**.
- Step 3** Click **Software Upgrade Files**.
- Step 4** Select the type of element you require in the **Show** field.
- Step 5** Click **Add**.

- Step 6** Enter the full path of the software upgrade file to be added to the Network Manager database, or browse to the file.
- Step 7** Enter a name and description for the upgrade file in the relevant fields.
- Step 8** Click **OK** to save your changes.
-

Modifying a Software Upgrade File

You can change the name and description of a software upgrade file that you have already added to Network Manager.

Procedure

- Step 1** Click **Settings** in the sidebar menu.
- Step 2** Click **Element Management**.
- Step 3** Click **Software Upgrade Files**.
- Step 4** Select the type of element you require in the **Show** field.
- Step 5** Do one of the following:
- Double-click the software upgrade file you require.
 - Select the software upgrade file you require and click **Edit**.
 - Right-click the software upgrade file you require and select **Edit**.
- Step 6** Enter a new name and description for the upgrade file in the relevant fields.
- Step 7** Click **OK** to save your changes.
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Removing a Software Upgrade File

Procedure

- Step 1** Click **Settings** in the sidebar menu.
- Step 2** Click **Element Management**.
- Step 3** Click **Software Upgrade Files**.
- Step 4** Select the type of element you require in the **Show** field.
- Step 5** Do one of the following:
- Select the software upgrade file you require and click **Delete**.
 - Right-click the software upgrade file you require and select **Delete**.
- Step 6** Click **OK** to save your changes.
- The software upgrade file is removed from the database.
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Cancelling Pending Offline Configuration Settings

Procedure

Step 1 Click **Network Tree** in the sidebar menu.

Step 2 Right-click an offline element.

Step 3 Select **Clear offline updates**.

The element configuration settings which existed before the offline modifications are restored.

How to Manage the Element Software Upgrade Upload Log

- [Viewing Your Software Upgrade Upload History, page 19-7](#)
- [Uploading a File After a Failed Attempt, page 19-7](#)
- [Removing Entries from the Upload Log, page 19-8](#)

Viewing Your Software Upgrade Upload History

Procedure

Step 1 Click **Settings** in the sidebar menu.

Step 2 Click **Element Management**.

Step 3 Click **Upload Log**.

Step 4 Select the type of element you require in the **Show** field.

The Upload Log tab displays the history of all your attempts to upload a software upgrade file, and shows all scheduled future upload attempts.

Uploading a File After a Failed Attempt

Procedure

Step 1 Click **Settings** in the sidebar menu.

Step 2 Click **Element Management**.

Step 3 Click **Upload Log**.

Step 4 Select the type of element you require in the **Show** field.

Step 5 Do one of the following to attempt to upload a software upgrade file after a previous upload attempt has failed:

- Select the log entry you require and click **Retry**.

- Right-click the log entry you require and select **Retry**.

Step 6 Click **OK** to save your changes.

Removing Entries from the Upload Log

Procedure

- Step 1** Click **Settings** in the sidebar menu.
- Step 2** Click **Element Management**.
- Step 3** Click **Upload Log**.
- Step 4** Select the type of element you require in the **Show** field.
- Step 5** Do one of the following to remove a single log entry:
- Select the log entry you require and click **Delete**.
 - Right-click the log entry you require and select **Delete**.
- Step 6** Click **OK** to save your changes.
- Step 7** Click **Delete All** to remove all entries from the log.
- Step 8** Click **OK** to save your changes.
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How to Automatically Detect New Elements on the Network

Auto-detect enables you to search the network for elements and add them to the Network Manager database.

Auto-detect is performed by broadcasting requests to all SNMP communities defined in the Network Manager to Cisco elements. The access field definitions for SNMP communities and Telnet must correspond with the settings configured in the selected element.

Once these elements respond to the requests, the Network Manager can query the elements directly for full configuration and status details.

The auto-detect method of discovery may not find all the elements located behind equipment such as routers. Therefore, the Network Manager interface enables you to complete the database by adding elements manually.



Note


Elements manually deleted from the Network Manager database are not detected in subsequent auto-detect procedures. These elements must be manually added to the Network Manager database. For more information, see the [“Creating or Modifying an Element Profile” section on page 19-2](#).

- [Running the Auto-detect Mechanism Manually, page 19-9](#)
- [Running the Auto-detect Mechanism Automatically, page 19-9](#)
- [Adding or Modifying Auto-detect Element Access Information, page 19-9](#)

- [Removing an Element Type from the Auto-detect Mechanism, page 19-10](#)

Running the Auto-detect Mechanism Manually

Procedure

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- Step 1** Click one of the network views (**Network Tree**, **Network Table** or **Network Map**) in the sidebar menu.
- Step 2** Do one of the following:
- Select **Tools > Auto-detect elements**.
 - Click **Auto-detect elements** .
- Step 3** Click **Yes**.
- The Network Manager interface is updated accordingly.



Note The auto-detect procedure may take some time, depending on the size of the network.

Running the Auto-detect Mechanism Automatically

Procedure

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- Step 1** Click **Settings** in the sidebar menu.
- Step 2** Click **Auto-detect**.
- Step 3** (Optional) Click **Run auto-detect on server startup** to instruct Network Manager to look for new elements on the network whenever the Cisco Unified Videoconferencing Manager server is restarted.
- Step 4** (Optional) Click **Run auto-detect every (hrs)** and set an hourly interval to instruct Network Manager to look for new elements periodically.
- Step 5** (Optional) Click **Use default access information in auto-detect routine** to instruct Network Manager to use the default element access settings defined at **Settings > Element Management > Access**.
- Step 6** Click **Upload** to save your changes.
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Adding or Modifying Auto-detect Element Access Information

Procedure

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- Step 1** Click **Settings** in the sidebar menu.
- Step 2** Click **Auto-detect**.
- Step 3** Do one of the following to modify existing access settings for a network element:
- Double-click the element you require in the **Type** column.

- Select the element you require and click **Edit**.
 - Right-click the element you require in the Type column and select **Edit**.
- Step 4** Do one of the following to create new access settings for a network element:
- Click **Add**.
 - Right-click any link in the Recipient Name column and select **Add**.
- Step 5** Select the unit type you require.
- Step 6** Define an SNMP read community in the relevant field.
SNMP community information must match the settings defined in the selected element to enable Network Manager to retrieve information from the element.
- Step 7** (Optional) Define a description, SNMP write community, and user name and password in the relevant fields.
- Step 8** Click **Enabled** to activate the new access settings.
- Step 9** Click **OK** to save the information to the Network Manager database.
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Removing an Element Type from the Auto-detect Mechanism

Procedure

- Step 1** Click **Settings** in the sidebar menu.
- Step 2** Click **Auto-detect**.
- Step 3** Do one of the following:
- Select the element type you require and click **Delete**.
 - Right-click the element type you require and select **Delete**.
- Step 4** Click **OK** to save your changes.
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Accessing an Element Web User Interface

Procedure

- Step 1** Click one of the network views (**Network Tree**, **Network Table** or **Network Map**) in the sidebar menu.
- Step 2** Right-click the element you require and select **Open element manager**
–or–
Click the link to the name or IP address of the element.
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Accessing the Monitor Tab for a Specified Element

Procedure

- Step 1** Click **Network Table** in the sidebar menu.
- Step 2** Double-click the element you require the table.
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