



Phone NTP Reference Configuration

If you want to do so, you can configure phone Network Time Protocol (NTP) references in Cisco CallManager Administration to ensure that a Cisco SIP IP Phone gets its date and time from the NTP server. If all NTP servers do not respond, the SIP phone uses the date header in the 200 OK response to the REGISTER message for the date and time.

After you add the phone NTP reference to Cisco CallManager Administration, you must add it to a date/time group. In the date/time group, you prioritize the phone NTP references, starting with the first server that you want the phone to contact.

The date/time group configuration gets specified in the device pool, and the device pool gets specified on the phone page.

Use the following topics to configure phone NTP references:

- [Finding the Phone NTP References, page 8-1](#)
- [Configuring the Phone NTP References, page 8-2](#)
- [Phone NTP Reference Configuration Settings, page 8-3](#)
- [Deleting the Phone NTP Reference, page 8-4](#)

Finding the Phone NTP References

Because you can configure several phone NTP references in Cisco CallManager Administration, Cisco CallManager Administration allows you to locate specific phone NTP references. Use the following procedure to locate the phone NTP references that exist in Cisco CallManager Administration.



Note

During your work in a browser session, the cookies on the client machine store your find/list preferences. If you navigate to other menu items and return to this menu item, or if you close the browser and then reopen a new browser window, the system retains your Cisco CallManager search preferences until you modify your search.

Procedure

Step 1 Choose **System > Phone NTP Reference**.

The Find and List window displays.



Tip To find all phone NTP references that exist in the database, click **Find** without specifying any search criteria.

Step 2 If you want to do so, choose search criteria from the Find drop-down list boxes; enter the appropriate search text, if applicable, and click **Find**.

From the Find and List window, you can also specify how many items per page to display.

Step 3 From the list of records, click the phone NTP reference name that matches your search criteria.

Additional Information

See the [“Related Topics” section on page 8-4](#).

Configuring the Phone NTP References

This section describes how to add a phone NTP reference to the Cisco CallManager database or to update a phone NTP reference that exists in the database.

Procedure

Step 1 Choose **System > Phone NTP Reference**.

The Find and List window displays.

Step 2 Perform one of the following tasks:

- To add the phone NTP reference to the Cisco CallManager database, click the **Add New** button and continue with [Step 3](#).
- To update an existing phone NTP reference, locate the existing phone NTP reference as described in the [“Finding the Phone NTP References” section on page 8-1](#) and continue with [Step 3](#).

Step 3 Enter the appropriate settings as described in [Table 8-1](#).

Step 4 To save the configuration in the database, click the **Save** icon that displays in the tool bar in the upper, left corner of the window (or click the **Save** button that displays at the bottom of the window).

Next Steps

After you add a new phone NTP reference to the Cisco CallManager database, assign it to a date/time group. For more information, refer to the [“Configuring a Date/Time Group” section on page 6-3](#).

Additional Information

See the [“Related Topics” section on page 8-4](#).

Phone NTP Reference Configuration Settings

Table 8-1 describes the phone NTP reference configuration settings. For related procedures, see the “Related Topics” section on page 8-4.

Table 8-1 Phone NTP Reference Configuration Settings

Field	Description
IP Address	Enter the IP address of the NTP server that you want the SIP phone to use to get its date and time.  Note Cisco CallManager cannot be configured as Phone NTP References.
Description	Enter a description for the phone NTP reference. Cisco CallManager Administration automatically propagates the information in the IP Address field to the Description field. If you want to do so, you can change the information.
Mode	From the drop-down list box, choose the mode for the phone NTP reference. The values from which you can choose follow: - Directed Broadcast—If you choose this default NTP mode, the phone accesses date/time information from any NTP server but gives the listed NTP servers (1st = primary, 2nd = secondary) priority. For example, if the phone configuration contains NTP servers where A = primary NTP server and B = secondary/backup NTP server, the phone uses the broadcast packets (derives the date/time) from NTP server A. If NTP server A is not broadcasting, the phone accesses date/time information from NTP server B. If neither NTP server is broadcasting, the phone accesses date/time information from any other NTP server. If no other NTP server is broadcasting, the phone will derive the date/time from the Cisco CallManager 200 OK response to the REGISTER message. - Unicast—If you choose this mode, the phone will send an NTP query packet to that particular NTP server. If the phone gets no response, the phone will access date/time information from any other NTP server. If no other NTP servers respond, the phone will derive the date/time from the Cisco CallManager 200 OK response to the REGISTER message.  Note Cisco CallManager currently does not support the Multicast and Anycast modes. If you choose either of these modes, Cisco CallManager will default to the Directed Broadcast mode.

Deleting the Phone NTP Reference

This section describes how to delete a phone NTP reference from the Cisco CallManager database.

Before You Begin

Before you can delete the phone NTP reference from Cisco CallManager Administration, you must delete the phone NTP reference from the date/time group. To find which date/time groups use the phone NTP reference, choose **Dependency Records** from the Related Links drop-down list box in the Phone NTP Reference Configuration window and click **Go**. When you know which date/time groups use the phone NTP reference, you can then remove that phone NTP reference from that group.

If the dependency records feature is not enabled for the system, the dependency records summary window displays a message that shows the action that you can take to enable the dependency records; the message also displays information about high CPU consumption that is related to the dependency records feature. For more information about dependency records, refer to the [“Accessing Dependency Records” section on page A-2](#).

Procedure

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| Step 1 | By using the procedure in the “Finding the Phone NTP References” section on page 8-1 , find the phone NTP reference. |
| Step 2 | To delete multiple phone NTP references, check the check boxes next to the appropriate phone NTP references in the Find and List window; then, click the Delete Selected icon or the Delete Selected button. |
| Step 3 | To delete a single phone NTP reference, perform one of the following tasks: <ul style="list-style-type: none">• In the Find and List window, check the check box next to the appropriate phone NTP reference; then, click the Delete Selected icon or the Delete Selected button.• In the Find and List window, click the Name link for the phone NTP reference. After the Phone NTP Reference Configuration window for that specific phone NTP reference displays, click the Delete Selected icon or the Delete Selected button. |
| Step 4 | When prompted to confirm the delete operation, click OK to delete or Cancel to cancel the delete operation. |
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Additional Information

See the [“Related Topics” section on page 8-4](#).

Related Topics

- [Phone NTP Reference Configuration, page 8-1](#)
- [Finding the Phone NTP References, page 8-1](#)
- [Configuring the Phone NTP References, page 8-2](#)

- [Phone NTP Reference Configuration Settings, page 8-3](#)
- [Deleting the Phone NTP Reference, page 8-4](#)
- [Finding a Date/Time Group, page 6-1](#)
- [Configuring a Date/Time Group, page 6-3](#)
- [Date/Time Group Configuration Settings, page 6-4](#)
- [Deleting a Date/Time Group, page 6-5](#)

