Phone NTP reference setup

This chapter provides information to configure phone NTP references.

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About phone NTP reference setup

In Cisco Unified Communications Manager Administration, use the System > Phone NTP Reference menu path to configure phone NTP references.

If you want to do so, you can configure phone Network Time Protocol (NTP) references in Cisco Unified Communications Manager Administration to ensure that a phone that is running SIP gets its date and time from the NTP server. If all NTP servers do not respond, the phone that is running SIP 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 Unified Communications Manager 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.

Phone NTP references setup tips

After you add a new phone NTP reference to the Cisco Unified Communications Manager database, assign it to a date/time group.

Related Topics

- About date and time group setup

Phone NTP reference deletion

Before you can delete the phone NTP reference from Cisco Unified Communications Manager 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.

**Related Topics**

- Access dependency records

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**Phone NTP reference settings**

The following table describes the phone NTP reference settings.

*Table 1: Phone NTP reference settings*

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Address</td>
<td>Enter the IP address of the NTP server that you want the phone that is running SIP to use to get its date and time. Note: Cisco Unified Communications Manager cannot be configured as Phone NTP References.</td>
</tr>
<tr>
<td>Description</td>
<td>Enter a description for the phone NTP reference. Cisco Unified Communications Manager 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.</td>
</tr>
</tbody>
</table>
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 Unified Communications Manager 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 Unified Communications Manager 200 OK response to the REGISTER message.

**Note**

Cisco Unified Communications Manager currently does not support the Multicast and Anycast modes. If you choose either of these modes, Cisco Unified Communications Manager will default to the Directed Broadcast mode.

**Related Topics**

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