Chapter 2
Configuring NTP on C-series Controllers with the C-Web Interface

This chapter discusses how to configure the Network Time Protocol (NTP) for a C-series Controller by using the C-Web interface. Topics include:

- Specifying a Basic NTP Configuration on a C-series Controller with the C-Web Interface on page 14

- Configuring NTP Client Mode for a C-series Controller with the C-Web Interface on page 14

- Configuring an NTP Peer for a C-series Controller with the C-Web Interface on page 15

- Configuring NTP Broadcast Mode on a C-series Controller with the C-Web Interface on page 15

- Configuring NTP as a Multicast Client on a C-series Controller with the C-Web Interface on page 16

- Specifying an Authentication Key for NTP on C-series Controllers with the C-Web Interface on page 16

- Configuring NTP Authentication with the C-Web Interface on page 17

Specifying a Basic NTP Configuration on a C-series Controller with the C-Web Interface

We recommend that you configure NTP on C-series Controllers.

To configure NTP to operate on a C-series controller:

1. Click **Configure**, expand **System**, and then click **NTP**.

   The NTP pane appears.

2. Click **Create**, enter information as described in the Help text in the main pane, and then click **Apply**.

   NOTE: If you do not configure a boot server, NTP cannot synchronize with a time server if the server's time is very far off the local system's time.

Related Topics

- *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers, NTP Support on C-series Controllers*

- *Configuring NTP on a C-series Controller on page 114 in SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

Configuring NTP Client Mode for a C-series Controller with the C-Web Interface

To configure an NTP server that the C-Series Controller uses for time synchronization:

1. Click **Configure**, expand **System**, and then click **NTP**.

   The NTP pane appears.

2. In the Create new list, select **Server**. Type an IPV4 or IPV6 address for the server, and click **OK**.

   The Server pane appears.

3. Enter information as described in the Help text in the main pane, and click **Apply.**

   NOTE: If the remote system has authentication enabled, specify an authentication key and value. The system transmits the specified authentication key when transmitting packets.

Related Topics

- *NTP Support on C-series Controllers* on page 113 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

- *Configuring NTP on a C-series Controller* on page 114 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

Configuring an NTP Peer for a C-series Controller with the C-Web Interface

To configure NTP to operate as a peer:

1. Click **Configure,** expand **System**, and then click **NTP**.

   The NTP pane appears.

2. In the Create new list, select **Peer**. Type an IPV4 or IPV6 address for the server and click **OK**.

3. Enter information as described in the Help text in the main pane, and click **Apply**.

   👉 **NOTE:** If the remote system has authentication enabled, specify an authentication key and value. The system transmits the specified authentication key when transmitting packets.

Related Topics

- *NTP Support on C-series Controllers* on page 113 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

- *Configuring NTP on a C-series Controller* on page 114 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

Configuring NTP Broadcast Mode on a C-series Controller with the C-Web Interface

To configure NTP to operate in broadcast mode:

1. Click **Configure,** expand **System**, and click **NTP**.

   The NTP pane appears.

2. In the Create new list, select **Broadcast**. Type an IP address or a hostname on one of the local networks or a multicast address assigned to NTP. Click **OK**.

3.   Enter information as described in the Help text in the main pane, and click **Apply**.

👉   **NOTE:** If the remote system has authentication enabled, specify an authentication key and value. The system transmits the specified authentication key when transmitting packets.

Related Topics

- *NTP Support on C-series Controllers* on page 113 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

- *Configuring NTP on a C-series Controller* on page 114 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

Configuring NTP as a Multicast Client on a C-series Controller with the C-Web Interface

To configure NTP to operate in multicast mode on a C-series controller:

1.   Click **Configure,** expand **System > NTP**, and then click **Multicast Client**.

     The Multicast Client pane appears.

2.   Click **Create**, enter information as described in the Help text in the main pane, and then click **Apply**.

Related Topics

- *NTP Support on C-series Controllers* on page 113 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

- *Configuring NTP on a C-series Controller* on page 114 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

Specifying an Authentication Key for NTP on C-series Controllers with the C-Web Interface

Only time servers transmitting network time packets that contain one of the specified key numbers and whose key matches the value configured for that key number are eligible for synchronization. Other systems can synchronize with the local system without being authenticated.

To configure an NTP authentication key that is shared among systems that run NTP:

1.   Click **Configure**, expand **System**, and then click **NTP**.

     The NTP pane appears.

2.   In the Create new list, select **Authentication Key**. Type the key number for the key. The key number must match on all systems using that particular key for authentication. Click **OK**.

Related Topics

- *NTP Support on C-series Controllers* on page 113 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

- *Configuring NTP on a C-series Controller* on page 114 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

- *Configuring NTP Authentication with the C-Web Interface* on page 17

Configuring NTP Authentication with the C-Web Interface

You can specify authentication keys for the various modes you configure for NTP.

To configure the authentication key for a mode:

- In the main pane, specify a key value for a mode.

  - Client mode—See *Specifying a Basic NTP Configuration on a C-series Controller with the C-Web Interface* on page 14

  - Server mode—See*Configuring NTP Client Mode for a C-series Controller with the C-Web Interface* on page 14

  - Broadcast mode—See *Configuring NTP Broadcast Mode on a C-series Controller with the C-Web Interface* on page 15

  - Symmetric active (peer) mode—See *Configuring an NTP Peer for a C-series Controller with the C-Web Interface* on page 15

Related Topics

- *NTP Support on C-series Controllers* on page 113 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

- *Configuring NTP on a C-series Controller* on page 114 in *SRC-PE Getting Started Guide, Chapter 15, Configuring NTP for C-Series Controllers*

- *Specifying an Authentication Key for NTP on C-series Controllers with the C-Web Interface* on page 16