

Configuring the System Clock Source

It is important that timing be consistent between elements of a VoIP topology. Sourcing the SBC Edge clock is critical in keeping the SBC Edge synchronized with other elements of the topology. The SBC Edge may obtain its clock from a network (T1/E1) source such as a PBX or Central Office, or it may use its own internal clock which may itself be synchronized to an [NTP source](#). Where the clock source originates depends entirely on the topology itself and varies on a case-by-case basis.

Configuring System Timing

To configure system timing using a network clock source:

1. In the WebUI, click the **Settings** tab.
2. In the left navigation pane, go to **System > System Timing**.

The screenshot shows the 'System Timing' configuration page. The 'Configuration' section has three dropdown menus: 'Clock Source' (Network), 'Primary Clock Port' ((T1) Port 1:1), and 'Secondary Clock Port' (None). The 'Status' section shows 'Current Active Clock' as 'Free Run'. An 'Apply' button is at the bottom right.

Configuration - Field Definitions

Clock Source

Specifies the source of the systems transmit clock.

- **System:** The built-in oscillator is used to transmit data over synchronous links. The system's internal clock can be modified by the system administrator, see [Configuring the System Date and Time](#).
- **Network:** The clock is derived from the data received from the peer devices on the network.

Primary Clock Port

Specifies the DS1 port from which the clock will be derived. This field is visible only if Network is specified as the Clock Source.

Secondary Clock Port

Specifies the DS1 port from which the clock will be derived. This field is visible only if Network is specified as the Clock Source. The Secondary Clock Source is used only if the primary clock source is not of sufficient quality or becomes unavailable.