



# Set the Network Time Protocol

## Element Software

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# Set the Network Time Protocol

Setting up the Network Time Protocol (NTP) can be achieved in one of two ways: either instruct each node in a cluster to listen for broadcasts or or instruct each node to query an NTP server for updates.

The NTP is used to synchronize clocks over a network. Connection to an internal or external NTP server should be part of the initial cluster setup.

## Configure Network Time Protocol servers for the cluster to query

You can instruct each node in a cluster to query a Network Time Protocol (NTP) server for updates. The cluster contacts only configured servers and requests NTP information from them.

Configure NTP on the cluster to point to a local NTP server. You can use the IP address or the FQDN host name. The default NTP server at cluster creation time is set to `us.pool.ntp.org`; however, a connection to this site cannot always be made depending on the physical location of the SolidFire cluster.

Using the FQDN depends on whether the individual storage node's DNS settings are in place and operational. To do so, configure the DNS servers on every storage node and ensure that the ports are open by reviewing the Network Port Requirements page.

You can enter up to five different NTP servers.



You can use both IPv4 and IPv6 addresses.

### What you'll need

You must have cluster administrator privileges to configure this setting.

### Steps

1. Configure a list of IPs and/or FQDNs in the server settings.
2. Ensure that the DNS is set properly on the nodes.
3. Click **Cluster > Settings**.
4. Under Network Time Protocol Settings, select **No**, which uses the standard NTP configuration.
5. Click **Save Changes**.

### Find more information

- [SolidFire and Element Software Documentation](#)
- [NetApp Element Plug-in for vCenter Server](#)

## Configure the cluster to listen for NTP broadcasts

By using the broadcast mode, you can instruct each node in a cluster to listen on the network for Network Time Protocol (NTP) broadcast messages from a particular server.

### What you'll need

- You must have cluster administrator privileges to configure this setting.
- You must configure an NTP server on your network as a broadcast server.

### Steps

1. Click **Cluster > Settings**.
2. Enter the NTP server or servers that are using broadcast mode into the server list.
3. Under Network Time Protocol Settings, select **Yes** to use a broadcast client.
4. To set the broadcast client, in the **Server** field, enter the NTP server you configured in broadcast mode.
5. Click **Save Changes**.

### Find more information

- [SolidFire and Element Software Documentation](#)
- [NetApp Element Plug-in for vCenter Server](#)

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