Lab 29 - Packet Tracer - Configure CDP, LLDP, and NTP

# Addressing Table

| Device | Interface | IP Address |
| --- | --- | --- |
| HQ | G0/0/0 | 192.168.1.1/24 |
| HQ | G0/0/1 | 192.168.2.1/24 |
| HQ | S0/1/0 | 192.168.3.1/30 |
| Branch | G0/0/0 | 192.168.1.2 |
| Branch | S0/1/0 | 192.168.3.2/30 |
| HQ-SW-1 | VLAN 1 | Not configured |
| HQ-SW-2 | VLAN 1 | Not configured |
| BR-SW-1 | VLAN 10 | 192.168.4.250 |
| BR-SW-2 | VLAN 10 | 192.168.4.253 |
| BR-SW-3 | VLAN 10 | 192.168.4.254 |
| NTP Server | NIC | 192.168.1.254 |
| PC1 | NIC | 192.168.2.10 |
| PC2 | NIC | 192.168.4.10 |
| PC3 | NIC | 192.168.4.20 |

# Objectives

In this activity, you will configure a router to receive time information over NTP and configure devices with CDP and LLDP.

* Configure CDP to run globally on a device.
* Disable CDP on device interfaces where necessary.
* Configure LLDP to run globally on a device.
* Configure LLDP to send and receive messages according to requirements.
* Configure a router to use an NTP server.

# Background / Scenario

A network administrator has been asked to investigate a new client’s network. Documentation is incomplete for the network, so some information needs to be discovered. In addition, the NTP server needs to be configured on a router. Discovery protocols must also be adjusted to control traffic discovery protocol traffic and prevent information about the network from being received by potentially unauthorized hosts.

Some of the device IP addresses are unknown to you. You must determine what the IP addresses are so that you can connect to the devices over SSH in order to configure them. You can enter them into the Addressing Table as you discover them.

# Instructions

Use the table below to logon to the Branch switches when you need to do so.

| Device | Username | User Password | Enable Secret |
| --- | --- | --- | --- |
| BR-SW1 | admin | SW1admin# | SW1EnaAccess# |
| BR-SW2 | admin | SW2admin# | SW2EnaAccess# |
| BR-SW3 | admin | SW3admin# | SW3EnaAccess# |

**Note:** Click the **Fast Forward Time** button in the blue bar below the topology to speed up STP convergence. You can also click it several times to speed up the CDP update process.

Open configuration window

Configure LLDP as follows:

* Disable CDP on the HQ router.
* Enable LLDP globally on HQ.
* On HQ, configure the links to the switches to only receive LLDP messages.
* Disable CDP on the HQ-SW-1 and HQ-SW-2 switches.
* Enable LLDP on the HQ-SW-1 and HQ-SW-2 switches.
* On the HQ-SW-1 and HQ-SW-2 switches, configure the links to the HQ router to only send, not receive, LLDP messages.
* Disable LLDP completely on the HQ-SW-1 and HQ-SW-2 access ports that are in use.

Configure CDP as follows:

* Activate CDP on the Branch router.
* Connect to switch BR-SW1 over SSH. You will not be able to open a CLI window by clicking the Branch switches.
* Connect to switches BR-SW2 and BR-SW3 over SSH. Configure the access ports that are in use to not send CDP messages out of the ports.

Configure NTP:

* Configure HQ to use the device at 192.168.1.254 as an NTP server.

Close configuration window

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