

Packet Tracer - Configure CDP, LLDP, and NTP (Instructor Version)

Instructor Note: Red font color or gray highlights indicate text that appears in the instructor copy only.

10.8.1 Packet Tracer - Configure CDP, LLDP, and NTP Answers

Addressing Table

Device	Interface	IP Address
HQ	G0/0/0	192.168.1.1/24
	G0/0/1	192.168.2.1/24
	S0/1/0	192.168.3.1/30
Branch	G0/0/0	192.168.1.2
	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.

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.

Answer Scripts

Router HQ

```
enable
conf t
lldp run
interface GigabitEthernet0/0/0
```

```
no lldp transmit
lldp receive
interface GigabitEthernet0/0/1
  no lldp transmit
  lldp receive
no cdp run
ntp server 192.168.1.254
end
```

Router Branch

```
enable
conf t
cdp run
end
```

Switch HQ-SW-1

```
enable
conf t
lldp run
no cdp run
interface FastEthernet0/24
  no lldp receive
  no lldp transmit
interface GigabitEthernet0/1
  no lldp receive
end
```

Switch HQ-SW2

```
enable
conf t
lldp run
no cdp run
interface FastEthernet0/1
  no lldp receive
  no lldp transmit
interface GigabitEthernet0/1
  no lldp receive
end
```

Switch BR-SW-2

```
enable
conf t
int fa0/1
  no cdp enable
end
```

Switch BR-SW-3

```
ena
conf t
int fa0/1
  no cdp enable
end
```