

Class Activity - PPP Validation

Objective

Use **show** and **debug** commands to troubleshoot PPP.

Scenario

Three friends who are enrolled in the Cisco Networking Academy want to check their knowledge of PPP network configuration.

They set up a contest where each person will be tested on configuring PPP with defined PPP scenario requirements and varying options. Each person devises a different configuration scenario.

Below are some suggested scenarios:

Scenario 1

- Address the topology using IPv4.
- Configure PPP encapsulation with CHAP.
- Configure OSPF routing.
- Configure the clock to read today's date.
- Change the OSPF router priorities on both serial interfaces.

Scenario 2

- Address the topology using IPv6.
- Configure PPP encapsulation with PAP.
- Configure EIGRP routing.
- Configure the clock to read the current time.
- Place a description on both connected serial interfaces.

Scenario 3

- Address the topology using IPv6.
- Configure a Message of the Day.
- Configure PPP with CHAP.
- Configure OSPF routing.
- Configure the clock to read today's time and date.

Resources

- Packet Tracer software
- Stopwatch or timer

Step 1: Open Packet Tracer.

- a. Create a two-router topology with a serial connection.
- b. Include one PC and switch attached to each router.

Step 2: Complete the first scenario.

- a. Start the assigned scenario.
- b. The instructor calls the time when the scenario is completed; all students and groups must stop their configuration work at that time.
- c. The instructor checks the validity of the completed scenario configuration.
 - 1) The devices must be able to successfully ping from one end of the topology to the other.
 - 2) All scenario options requested must be present in the final topology.
 - 3) The instructor may ask you to prove your work by choosing different **show** and **debug** commands to display the configuration output.
- d. Begin the same process for the second scenario assigned by the instructor.
 - 1) Delete the configurations from the first scenario, but you can re-use the same.
 - 2) Complete Steps 1 and 2 again using the next scenario's requirements.