Prototyping a Network

Objectives

- Prototype a network using Packet Tracer

Background

A client has requested that you set up a simple network with two PCs connected to a switch. Verify that the hardware, along with the given configurations, meet the requirements of the client.

Step 1: Set up the network topology

a) Add two PCs and a Cisco 2950T switch.

b) Using straight-through cables, connect **PC0** to interface **Fa0/1** on **Switch0** and **PC1** to interface **Fa0/2** on **Switch0**.

c) Configure PC0 using the **Config** tab in the PC0 configuration window:

1. IP address: 192.168.10.10
2. Subnet Mask 255.255.255.0

d) Configure PC1 using the **Config** tab in the PC1 configuration window:

1. IP address: 192.168.10.11
2. Subnet Mask 255.255.255.0

Step 2: Test connectivity from PC0 to PC1

a) Use the **`ping`** command to test connectivity.

1. Click PC0.
2. Choose the **Desktop** tab.
3. Choose **Command Prompt**.
4. Type: **`ping 192.168.10.11`** and press *enter*.

b) A successful **`ping`** indicates the network was configured correctly and the prototype validates the hardware and software configurations. A successful ping should resemble the below output:

```
PC>ping 192.168.10.11
```

```
Pinging 192.168.10.11 with 32 bytes of data:

Reply from 192.168.10.11: bytes=32 time=170ms TTL=128
Reply from 192.168.10.11: bytes=32 time=71ms TTL=128
Reply from 192.168.10.11: bytes=32 time=70ms TTL=128
Reply from 192.168.10.11: bytes=32 time=68ms TTL=128

Ping statistics for 192.168.10.11:
   Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
   Minimum = 68ms, Maximum = 170ms, Average = 94ms
```

Close the configuration window.

c) Click the **Check Results** button at the bottom of the instruction window to check your work.