**Packet Tracer - Connect Devices using Wireless Technologies**

**Objectives**

**Part 1: Connect a Laptop to the Office WLAN**

**Part 2: Connect Devices with Bluetooth Technology**

**Part 3: Tether a Laptop to Use a Cellular Network via the Smartphone**

**Background**

In this Packet Tracer activity, you will use different wireless technologies to connect end devices in an office. The activity is performed in the Packet Tracer Physical Mode only.

**Required Resources**

   Latest Packet Tracer version

**Instructions**

**Part 1: Connect a Laptop to the Office WLAN**

**Step 1: Install a wireless module to a Laptop.**

a.     Click the **Laptop** to open the configuration window.

b.     Under the **Physical** tab, power off the **Laptop** by clicking the power button.

c.     Remove the Ethernet module **PT-LAPTOP-NM-1CFE** from the laptop by dragging it from the **Laptop** to the list on the left.

d.     Insert the wireless module **WPC300N**by dragging it from the list on the left to the**Laptop**.

e.     Power on the **Laptop**.

**Step 2: Connect Laptop to the office WLAN.**

a.     Click the **Desktop** tab and select the **PC Wireless** tool.

b.     Click the **Connect** tab and wait until the **Employee SSID WLAN** is displayed. Note that you may have to click **Refresh**.

c.     Click the **Employee** **SSID** to select it. Click **Connect**.

d.     Enter **Cisco123** as the pre-shared key and click **Connect**.

e.     After connecting to the wireless network, close the **PC Wireless** window.

f.      Click the **Config** tab and select **Wireless0** in the left pane to verify in the **IP Configuration** sectionthat the **Laptop** has been assigned an IP address.

g.     Open the **Web Browser** from the **Desktop**. Navigate to **office.srv** to verify that the **Laptop** has connectivity.

h.     Close the **Laptop** window.

**Part 2: Connect Devices with Bluetooth Technology**

In this part, you will connect a Bluetooth speaker to a tablet installed with a music player via Bluetooth.

**Step 1: Enable Bluetooth ports on devices.**

a.     Click the **Bluetooth**Speaker.

b.     Click the **Config** tab.

c.     Click **Bluetooth** on the left pane and check that the Port Status is **On**. Note that the speaker is not paired with the **Office Tablet**.

**Step 2: Connect Bluetooth devices.**

a.     Open the **Office Tablet**.

b.     Click the **Config tab**.

c.     Click **Bluetooth** in the left pane and check the **On** box for Port Status.

d.     Click **Discover** and the **Bluetooth Speaker** device should be discovered.

e.     Select the **Bluetooth Speaker** in the **Devices** list and click **Pair**. The status should change to “Paired, Connected”. If prompted for permission to connect, click **Yes**.

f.      To test the Bluetooth connection, click the **Desktop** tab and select **Music Player**. Click **Play/Stop** to start the music. **Note**: Make sure your speaker is on.

g.     Click **Play/Stop** again to stop the sound.

**Part 3: Tether a Laptop to Use a Cellular Network via the Smartphone**

In this part, you will tether a laptop to a smartphone via Bluetooth. The laptop will use the cellular network to access a website.

**Step 1: Enable Bluetooth on the Laptop.**

a.     Click the **User-Laptop**. Select the **Config** tab.

b.     Click **Bluetooth** on the left panel. Click **On** for the Port Status.

c.     Leave the **User-Laptop** Bluetooth window open.

**Step 2: Connect a smartphone to the Cellular network and enable Bluetooth.**

a.     Click the **Smartphone** to open the configuration window.

b.     Click the **Config** tab. Check the **On** box for the Cellular Tethering setting in the **Global Settings**.

c.     Click the **3G/4G Cell1**interface. Verify that the **Smartphone** has an IP address from the cellular network.

d.     Click **Bluetooth** in the left pane and check the **On** box for the Port status on the **Smartphone**.

**Step 3: Connect Bluetooth devices and tethering to laptop**

a.     On the Bluetooth configuration for the **Smartphone**, click **Discover** to search for nearby Bluetooth enabled-devices.

**Note**: If **Smartphone** does not appear after a while, move **Smartphone** closer to **User-Laptop** and click **Discover** again.

b.     Select**User-Laptop** and click **Pair**. A pop-up window appears and asks for permission. Click **Yes**. The two devices are connected via Bluetooth.

c.     Return to the **User-Laptop**. In the Bluetooth panel of the **Config** tab, highlight **Smartphone** and click **Tether**.

d.     At the bottom pane of the Bluetooth configuration, notice that **User-Laptop** has now obtained an IP address.

e.     To test connectivity, navigate to **office.srv**. Click **Desktop** > **Web Browser**. Enter **office.srv** in the URL field. You can fast forward time to speed up the process.