IT2035C Networking Infrastructure Management

Lab 2 Hierarchical Network Model

Using the Packet Tracer file from Lab 1 Hierarchical Network Model, make the following updates:

PART 1 Add a Data Center and a second distribution switch

Next to the DMZ, add a LAN for a Data Center that contains two servers for Billing and Research Data. Add an access layer switch and connect to the servers. Label all devices.

Remove the connection between the DMZ Switch and Distribution Switch.

Add a second switch at the distribution layer and label Distribution Switch 2. Then connect the DMZ and the Data Center switches to Distribution Switch 2 using crossover cables.

Connect Distribution Switch 2 to the router using a fiber optic cable. Rename the router "Main Campus".

PART 2 Connect Main Campus to the Branch Office

Add a connection to the ISP (Cloud-PT)[1] and connect to the Main Campus Router to the ISP using a serial connection.

Diagram a separate network by adding a router, switch, and PC; label as Branch Router, Branch Switch, and Branch PC. Connect devices at the Branch Office. Use a serial connection between the Branch Router and ISP.

PART 3 Label the hierarchical layers.
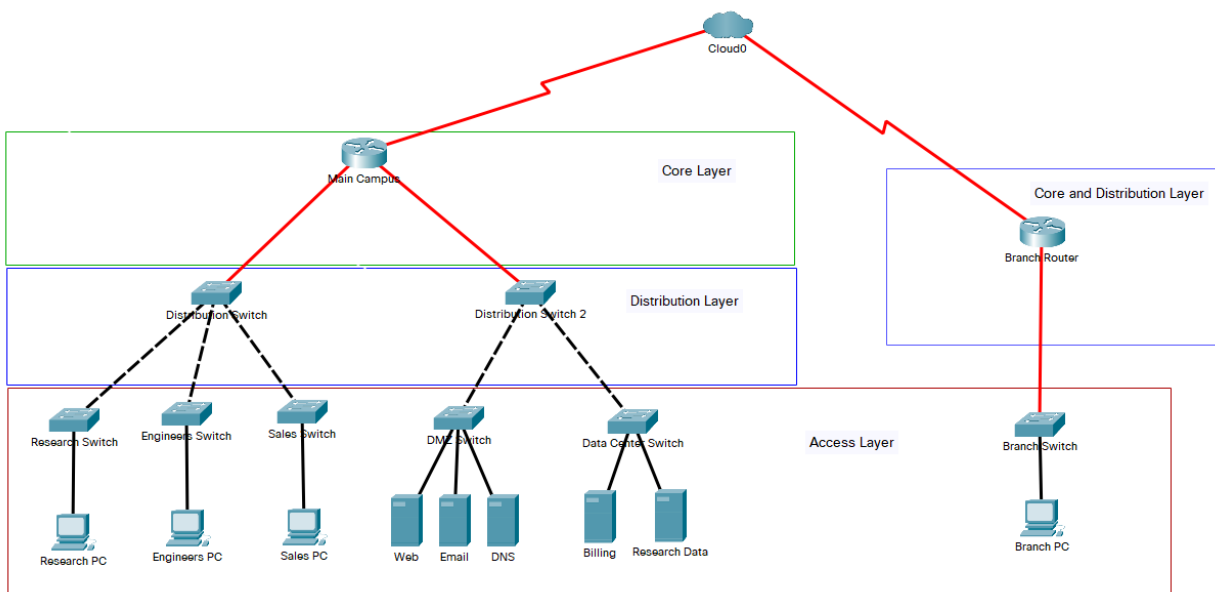
NOTE: The branch router is the distribution/core layer.

---

[1] The icon is located under Network Devices → WAN Emulation → PT-Cloud