

4: DNS and Web Server Setup Using Cisco Packet Tracer

Description:

To set up DNS (Domain Name System) and Web Server services in Cisco Packet Tracer so you can access a website using a domain name.

What is DNS and a Web Server?

- **DNS** helps change website names (like cisco.com) into IP addresses that computers understand.
- **Web Server** stores websites and shows them when people visit.

Steps to Set Up:

1. Creating the Network:

- Open Cisco Packet Tracer.
- Add these devices:
 - 1 Switch
 - 1 PC (PC0)
 - 2 Servers (Server0 - Web Server, Server1 - DNS Server)
- Connect them with straight-through cables:
 - PC0 to Switch
 - Server0 to Switch
 - Server1 to Switch

2. Assigning IP Addresses:

- Give IP addresses to each device:
 - **Server0 (Web Server):** 192.168.1.3
 - **Server1 (DNS Server):** 192.168.1.2
 - **PC0:** 192.168.1.4

3. Setting Up the Servers:

- Click on **Server1 (DNS Server):**
 - Go to 'Desktop' > 'IP Configuration' and set the IP address.
 - Go to 'Services' > 'DNS.'
 - Turn on DNS.
 - Add a new record:
 - **Name:** CN.com
 - **Address:** 192.168.1.3 (IP of Server0)
 - Click "Add."
- Click on **Server0 (Web Server):**
 - Go to 'Desktop' > 'IP Configuration' and set the IP address.
 - Go to 'Services' > 'HTTP.'
 - Turn on the HTTP service (it's usually on by default).
 - (Optional) Edit the homepage if you want to change the website content.

4. Configuring the PC:

- Click on **PC0**:
 - Go to 'Desktop' > 'IP Configuration.'
 - Set the IP address.
 - Set the **DNS Server** to 192.168.1.2 (the DNS Server's IP).
- On **PC0**, open the 'Command Prompt':
 - Test connection to Server1: `ping 192.168.1.2`
 - Test connection to Server0: `ping 192.168.1.3`
 - Test the website: `ping CN.com`
- Open the **Web Browser** on PC0:
 - Type `CN.com` in the address bar.
 - You should see the website hosted on Server0.

6. Fixing Issues:

- Make sure all devices are turned on.
- Check the cables are connected correctly.
- Verify IP addresses and DNS settings are correct.
- Confirm DNS records are set properly.
- Ensure the HTTP service is turned on in Server0.

