Lab 6.4.4.1 Configure Bridge Services

Estimated Time: 30 minutes

Number of Team Members: Students will work in teams of two.

Objective

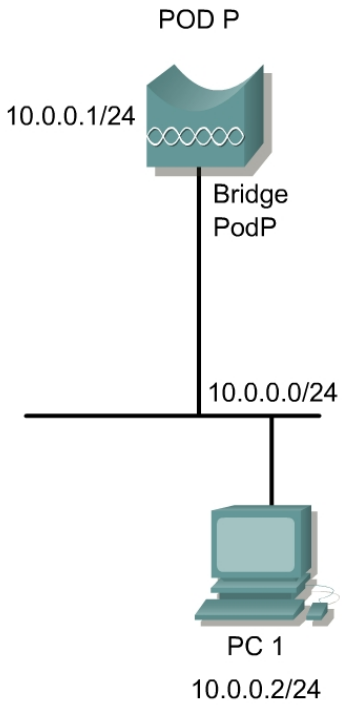
In this lab, students will configure the identity services, IP routing table, console parameters, and the time server parameters of the bridge unit.

Scenario

Configuring services includes the following:

- The Boot Server page determines how the bridge obtains its IP address and assigns required identifiers.
- Configuring the Routing Services page controls how IP packets originating from the bridge are forwarded.
- The Console/Telnet page can set up essential system parameters.
- The Time Server menu page is used to set time parameters.

Topology



Preparation

The students will read and familiarize themselves with the concepts and procedures of Chapter 6 prior to the lab.

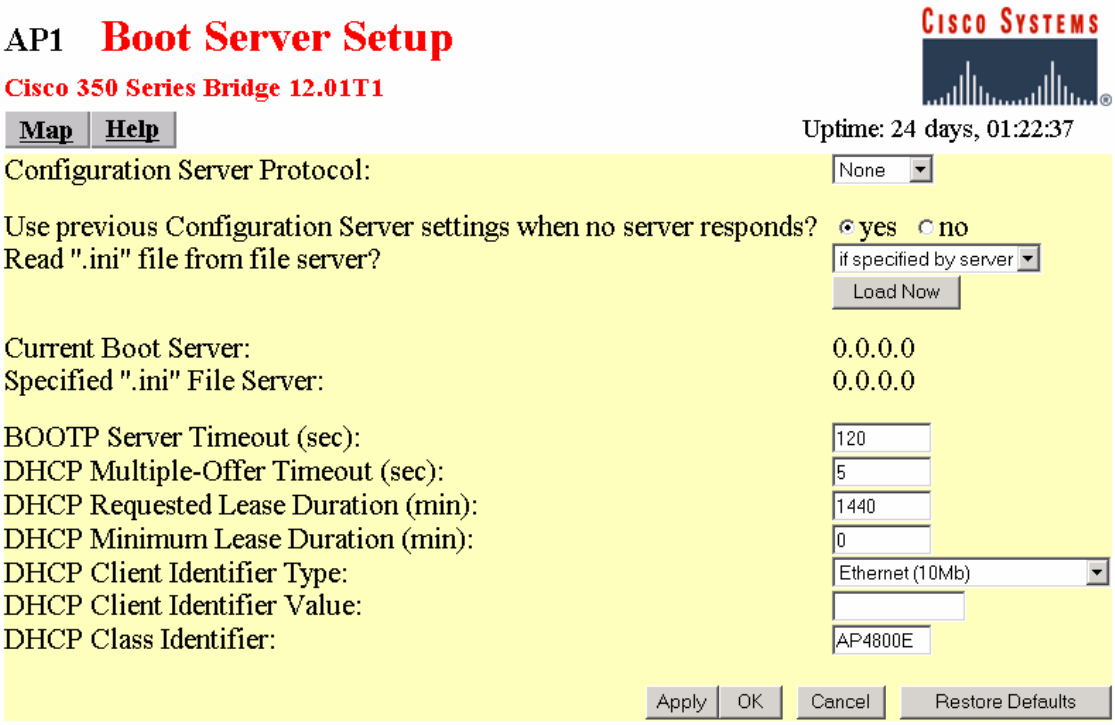
Tools and Resources

Each team will require the following:

- One multi-function wireless bridge properly set up for Web browser access
- One PC to configure each bridge

Step 1 Configuring the identity process of the bridge unit

After connecting to the bridge by way of a web browser, select the **Setup** tab to go to the Setup screen. From the Services section, select **Boot Server**.



Select the Identity process, Configuration Server Protocol that the bridge will use.

There are three options:

- **None** – Disableb BOOTP and DHCP, which is the default setting
- **BOOTP** – Configures BOOTP only
- **DHCP** – Configures DHCP

For Root Units, select **DHCP**.

For non-root units, select **None**.

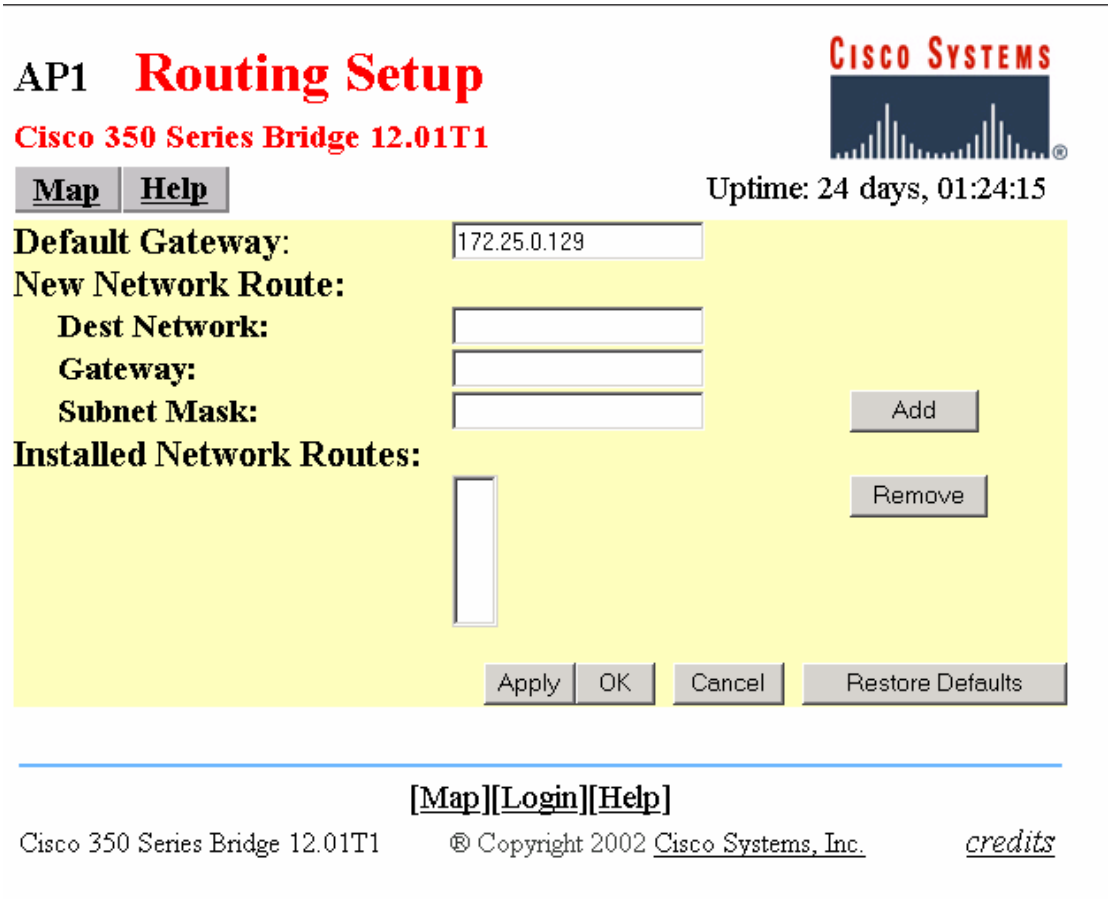
a. What is the BOOTP selection for?

_____

_____

Step 2 Configuring the IP routing table parameters of the bridge unit

From the Setup page in the Services section, select the **Routing** option.



If the destination IP address exactly matches a host entry in the routing table, the packet is forwarded to the MAC address corresponding to the next-hop IP address from the table entry.

If the destination address is on another subnet and matches the infrastructure portion of a net entry in the table (using the associated subnet mask), the packet is forwarded to the MAC address corresponding to the next-hop IP address from the table entry.

In order to configure the IP Routing Table parameters, complete the following steps:

- If DHCP has been used for the identity process, the default gateway router IP Address will be in the default gateway field.
- If a static route is to be added for handling destination addresses, fill in the following fields:

a. Dest. Network:

_____

b. Gateway:

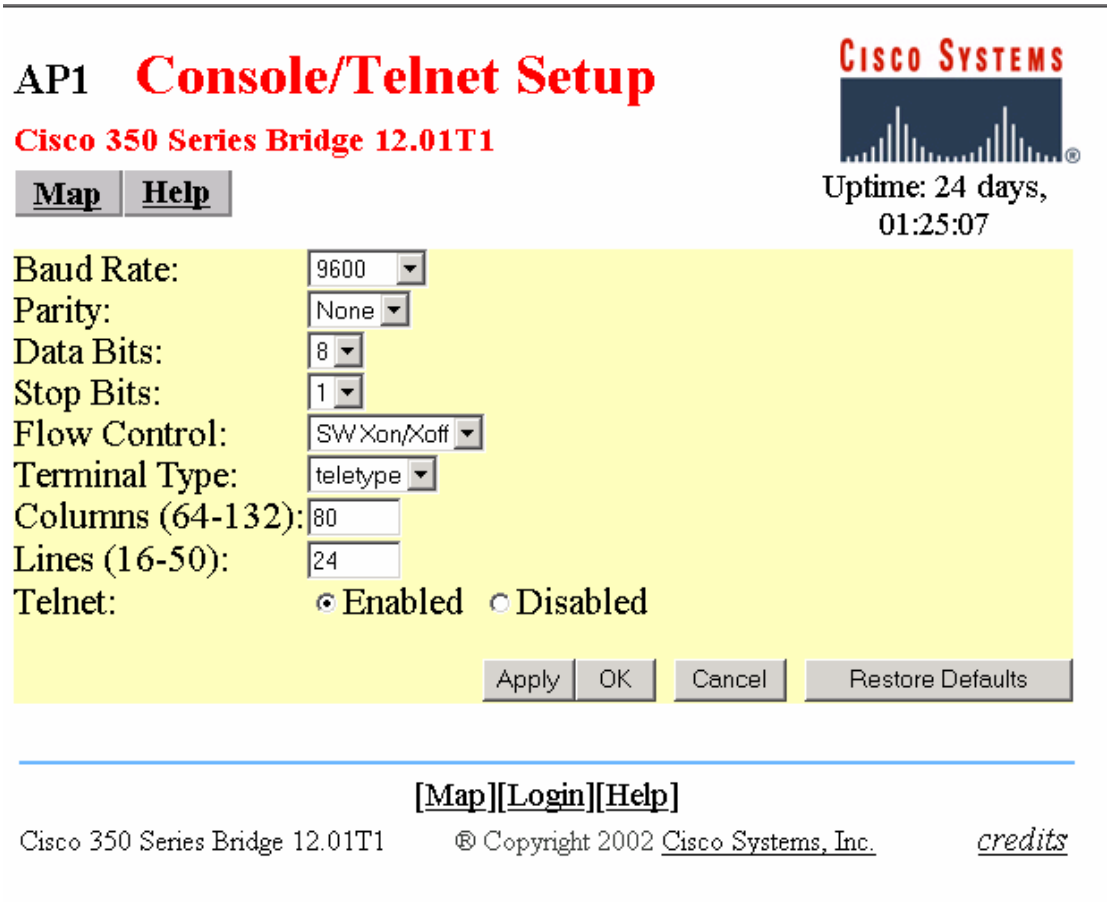
_____

c. Subnet Mask:

_____

Step 3 Configuring the console/Telnet parameters of the bridge unit

From the Setup page in the Services section, select the **Console/Telnet** option.



In order to configure the Console/Telnet parameters, complete the following steps:

- Use the Console/Telnet setup page to configure the parameters for HyperTerminal and/or Telnet sessions to the bridge unit.

Document the following settings:

a. Baud Rate

_____

b. Parity

_____

c. Data Bits

_____

d. Stop Bits

_____

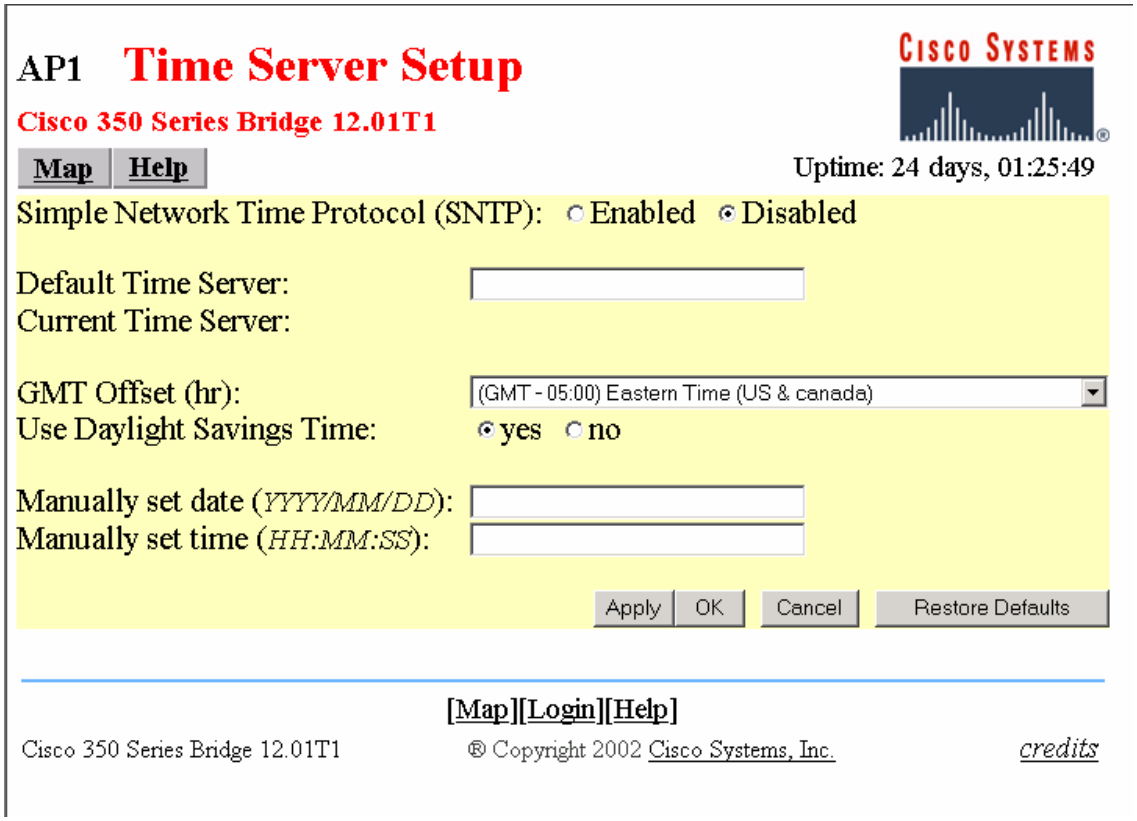
e. Flow Control

_____

- If remote access to the bridge is a concern, the Telnet feature of the bridge unit may be disabled by checking the **Disabled** button on this page.

Step 4 Configuring the time server parameters of the bridge unit to set the time

From the Setup page in the Services section, select the **Time Server** option.



Simple Network Time Protocol (SNTP) is a lightweight version of Network Time Protocol (NTP). NTP is designed for extreme accuracy, while SNTP is designed for easy synchronization. SNTP clients can obtain time form an NTP server. Even though SNTP is simple, it can easily provide accuracy within a few milliseconds.

In order to configure the Time Server parameters of the bridge unit to set the time, complete the following steps:

- Use the Time Server Setup page to change the time settings.
- Change the time to one hour ahead.
  a. When would this step be necessary?

  _____
- Change the time back to the current time.

