

LAB Configuring Basic AP Settings

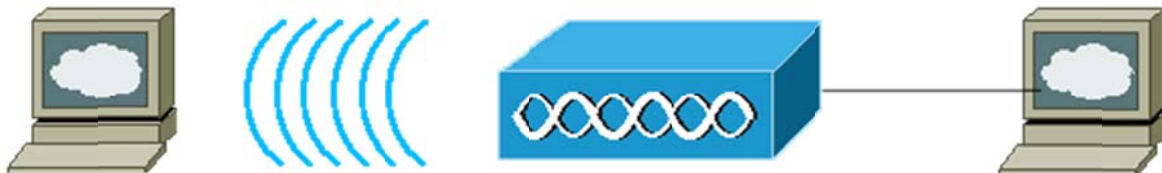
Objective

In this lab, the student will assign basic parameters to the AP using the GUI and IOS CLI. The Express Setup page will also be accessed through a web browser to assign the IP address, subnet mask, default gateway, and SSID to the AP.

Scenario

Basic configuration of an AP can be done through the GUI or IOS CLI.

Topology



Preparation

The student PC should be connected to the AP through an isolated wired network or crossover cable. The AP should be set to factory defaults.

Tools and Resources

- One AP with AP power supply or source
- A PC (PC1) that is connected to the same wired network as the AP
- A wireless PC or laptop (PC2)

Step1 Connect to the AP using a console

Connecting a Cisco rollover cable (console cable) between PC1 and the AP

Open a terminal emulator. (TeraTerm or HyperTerminal)

Enter these settings for the connection:

Bits per second (baud rate): 9600 Data bits: 8 Parity: none Stop bits: 1 Flow control: none

Step 2 Resetting to the Default Configuration

Use Cisco IOS Configuration Guide for AP as a reference and follow steps for resetting configuration.

Step 3 Configure Hostname

The system name, while not an essential setting, helps identify the AP on your network. The system name appears in the titles of the management system pages.

- a. Enter into configuration mode

```
ap>enable
```

```
Password:
```

```
ap#
```

```
ap#configure terminal
```

```
ap(config)#
```

- b. Now configure the host name with the following command:

```
ap(config)#hostname PodP
```

(where P is the pod number)

Step 4 Configure the Bridge Virtual Interface (BVI)

Enter the bvi1 interface mode to configure the ip address, subnet mask settings:

Assign an IP address and address mask to the BVI.

```
PodP(config)#interface bvi1
```

```
PodP(config-if)#ip address 10.0.P.1 255.255.255.0
```

```
PodP(config-if)# no shutdown
```

Step 5 Configure passwords

Now configure the enable password to cisco. Also, configure the secret password to class.

The password is not encrypted and provides access to level 15 (traditional privileged EXEC mode access):

```
PodP(config)#enable password cisco
```

```
PodP(config)#enable secret class
```

Use the level keyword to define a password for a specific privilege level. After you specify the level and set a password, give the password only to users who need to have access at this level. Use the privilege level global configuration command to specify commands accessible at various levels. Now set the configure command to privilege level 15 and define cisco as the password users must enter to use level 15 commands:

```
PodP(config)#privilege exec level 15 configure
```

```
PodP(config)#enable password level 15 cisco
```

Step 6 Configure SSID

Name an SSID and set the maximum number of client devices that can associate using this SSID to 15.

```
PodP(config)#interface dot11radio 0
PodP(config-if)#ssid APP
(where P is the pod number)
PodP(config-if-ssid)#authentication open
PodP(config-if-ssid)#max-associations 15
PodP(config-if-ssid)#exit
PodP(config-if)# no shutdown
PodP(config-if)#exit
```

Step 7 Check the running configuration and interface status

Display the current configuration of the device

```
PodP#show running-config
```

Display the condition and information of the device interfaces.

```
PodP#show interfaces
```

Step 8 Save and verify the configuration is saved to Flash

Save the current configuration of the device into the configuration file.

```
PodP#copy running-config startup-config
```

Verify the startup configuration saved in Flash.

```
PodP#show startup-config
```

Step 9 Connect to the AP using a wireless PC

Using a laptop or desktop with a wireless adapter, connect to the correct AP. Make sure the wireless device is not connected through the wired network.

- a. Configure and select a profile to connect to the AP. Make sure the SSID is configured in the profile to match the AP.
- b. Configure a unique Client Name in the profile, such as a first initial last name of one of the team members Make sure to check or configure the TCP/IP settings of the laptop or desktop to connect to the proper IP network. If a DHCP server is running, configure TCP/IP to receive the address automatically, or configure static IP setting.

Step 10 Verify the Associations

View the current device associations. The wireless device configured should appear in the association output.

```
PodP#show dot11 associations
```

Step 11 Configure PC1

Make sure the AP is connected to PC1 by way of a wired connection.

a. Configure the IP address, subnet mask, and gateway on PC1.

IP address 10.0.P.2

Subnet Mask 255.255.255.0

Gateway 10.0.P.1

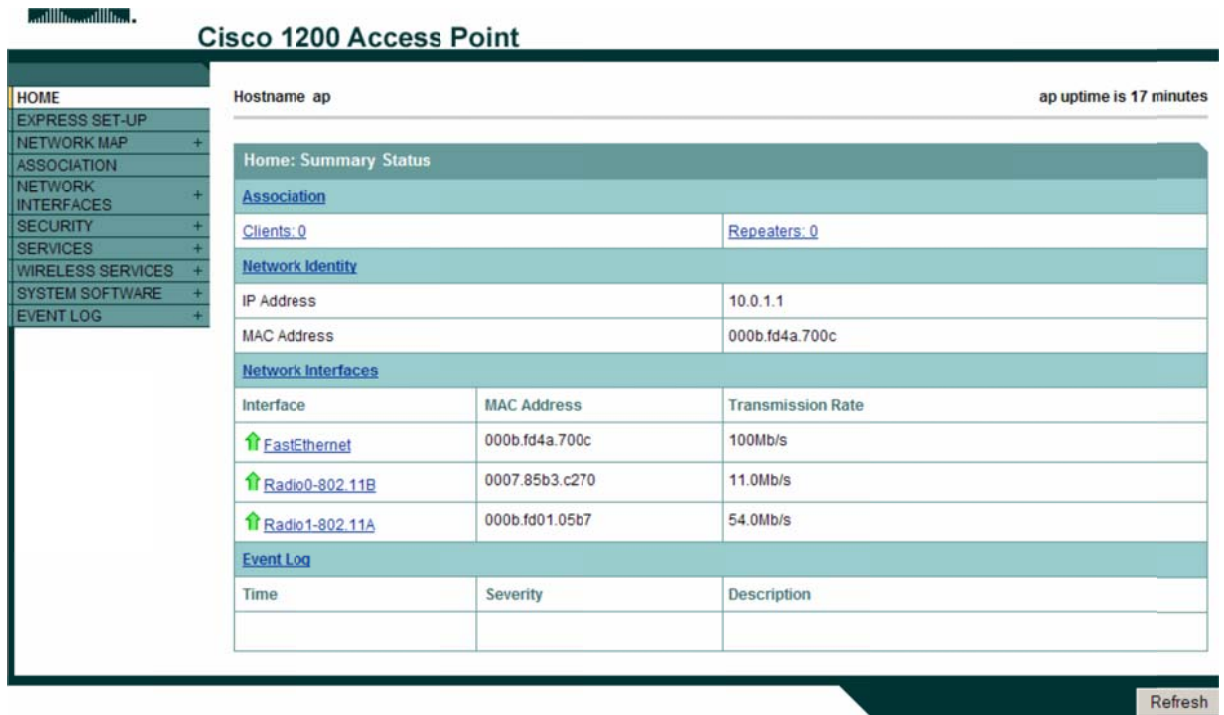
Step 12 Connect to AP using the web browser

a. Open an Internet browser.

b. Type the AP IP address in the browser address location field. Press Enter.

c. A log in screen appears. Type in the password of cisco (case sensitive) and click OK.

d. Obtain the AP information from different pages : for example AP HOME page, Express Setup page , Security page.



The screenshot shows the Cisco 1200 Access Point web interface. The title is "Cisco 1200 Access Point". The hostname is "ap" and the uptime is 17 minutes. The interface includes a navigation menu on the left with options like HOME, EXPRESS SET-UP, NETWORK MAP, ASSOCIATION, NETWORK INTERFACES, SECURITY, SERVICES, WIRELESS SERVICES, SYSTEM SOFTWARE, and EVENT LOG. The main content area displays "Home: Summary Status" with sections for Association, Network Identity, Network Interfaces, and Event Log.

Home: Summary Status		
Association		
Clients: 0	Repeaters: 0	
Network Identity		
IP Address	10.0.1.1	
MAC Address	000b.fd4a.700c	
Network Interfaces		
Interface	MAC Address	Transmission Rate
FastEthernet	000b.fd4a.700c	100Mb/s
Radio0-802.11B	0007.85b3.c270	11.0Mb/s
Radio1-802.11A	000b.fd01.05b7	54.0Mb/s
Event Log		
Time	Severity	Description

It is important for the network administrator to be familiar with the settings on the network equipment. Investigate how to:

- assign SSID
- configure BVI
- configure Radio Interface
- configure Fast Ethernet Interface
- configure AP security