

# 1

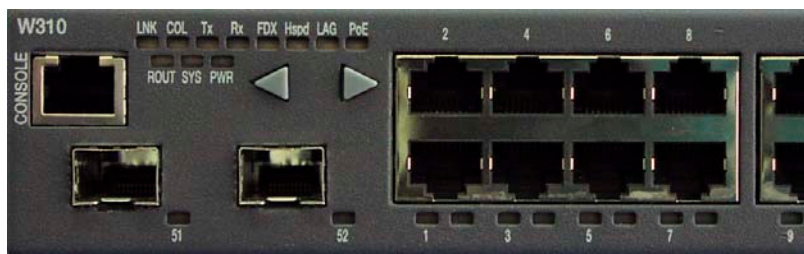
**WARNING:** Only trained and qualified personnel should be allowed to install or replace this equipment.

Unpack the hardware and make your connections.

- a. Unpack the W310 from its shipping box.
- b. Check the W310 package contents for the following:
  - one W310
  - one AC power cord
  - one RJ45 to DB9 serial adapter cable
  - one CD that contains the user documentation
  - this setup guide

Also, you should have at least one W110 Light Access Point in a separate package. The W110 includes a Quick Start Guide and a CD.

- c. Attach the AC power cord to the Power jack on the W310 rear panel. All front panel LEDs will illuminate briefly. Once the boot up and self-tests are complete, the LED labeled PWR will turn solid green.
- d. Connect the Ethernet cables from your W310 port(s) to the W110's LAN port or a wired Ethernet network station. Start with port 1 on the W310 to make your W110 connections. Once you make the connection(s), the associated Link LED will light. The Link LEDs are located underneath the ports.



Connect the Console cable to the W310 Console port.  
(Step 2)

Port 1 is located in the bottom left hand corner. The associated LINK LEDs are located directly below each port.

Connect the Ethernet cable from the W310 port to the W110 LAN port



# 1

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- e. Make sure the W310 and W110 are communicating properly. To verify communication, do the following:

- **For the W310** - The PoE (Power over Ethernet) LED for the port that is connected to the W110 will turn solid green indicating power is enabled and it is delivering power. If no W110 is connected (or detected), the PoE LED will flash.
- **For the W110** - The Ethernet LED will either be solid yellow or green indicating that there is a 10BaseT or 100BaseT connection.

- f. Now you are ready to assign a new IP address to the W310.

# 2

Assign a network IP address to the W310.

- a. Connect the Console cable to the port labeled Console on the W310 front panel (see above).
- b. Connect the other end of the cable to a PC or terminal.
- c. Start your terminal communication program (such as Microsoft® Windows' HyperTerminal).
- d. Configure the serial port settings for using a terminal or terminal emulator as follows:
  - Baud Rate - 9600 bps
  - Data Bits - 8 bits
  - Parity - None
  - Stop Bit - 1
  - Flow Control - None
  - Terminal Emulation - VT-100

**Example:** In HyperTerminal, you are prompted for the COM Port configuration settings when you first create the connection to the W310.

- e. When you are prompted for a Login Name, enter the default login: **root**.
- f. When you are prompted for a password, enter the default user level password: **root**. You are now in Supervisor Level.
- g. At the CLI (W310-1>#) prompt, type:

```
set interface inband <vlan> <ip_address> <netmask>
```

- Replace <vlan>, <ip\_address> and <netmask> with the VLAN set to 1, the IP address and subnet mask of the switch.

# 3

Use the W310 Device Manager to assign SSIDs (wireless network name) to the W110s.

**IMPORTANT:** The W310 Device Manager web interface will prompt you to install the Java Runtime Environment version 1.4.2 if you do not have it installed, or, if you have an earlier version. Click **Yes** to install or you will not be able to access the web interface.

- Open your browser.
- Enter the IP address you assigned in Step 2 to the W310. Use the format **http://aaa.bbb.ccc.ddd** where **aaa.bbb.ccc.ddd** is the IP address of the switch.
- Enter the default User Name and Password: **root**
- After the W310 Manager loads, click **Configure** and then **SSID Table** from the menu bar. The SSID Table appears.

Name	VLAN	Accessible VI	Security M	Broadcast	Closed Sys	WEP Key 1	WEP Key 2	WEP Key 3	WEP Key 4	Effective VI	Rekeying Info	LAP #1	LAP #2
default	by user gro...	<input type="checkbox"/>	none	Disable	Disable	XXXX	XXXX	XXXX	XXXX	Key 2	3600	<input type="checkbox"/>	<input type="checkbox"/>

Refresh Apply Undo Delete Insert Import

- To create a new SSID, click the **Insert** button on the bottom of the page. A new row displays underneath the "default." You can create up to 15 additional SSIDs.

# 3

(cont.)

## NOTE:

You can edit the "default" SSID row if necessary by selecting any of the parameters. However, you cannot delete the default SSID.

- Now you are ready to set the security for the wireless network.

# 4

Set the wireless network security.

- On the SSID Table dialog (Step 3), click the Security Mode column. The default Security Mode is none, but it is recommended that you set a security type for the wireless network to avoid improper access.
- From the drop-down menu, select the type of wireless network security you want to use.

— Select **WEP**. WEP or Wired Equivalent Privacy (WEP) encrypts the data portion of each packet exchanged on an 802.11 network using an encryption key.

Set the WEP key strings. WEP Key 1 is the default key if you are using the same WEP key for all SSIDs. Click on the text box for the key and type in an ASCII character string. Key 1 is also the default **Effective WEP Key**.

If you need to enter a WEP key for additional SSIDs, you must always use WEP Key 1 for each SSID. After you enter the key, select **Key 1** from the **Effective WEP Key** drop-down menu.

**CAUTION:** For WEP, make sure you enter the exact number of ASCII characters required. If you do not enter the correct number, the key will go back to the default.

Depending on the encryption type, you must use the exact number of ASCII characters, as listed below.

- 64-bit encryption requires a five (5) character string.
- 128-bit encryption requires a 13 character string.
- 152-bit encryption requires a 16 character string.

# 4

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— Select **WPA**. WiFi Protected Access (WPA) is a replacement for WEP that provides the following:

- Improved packet encryption using the Temporal Key Integrity Protocol (TKIP) and the Message Integrity Check (MIC).
- Per user, per session dynamic encryption keys.
- Dynamic key redistribution.
- Client/server mutual authentication.

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**IMPORTANT:** WPA uses 801.1x authentication to communicate with a RADIUS server and to authenticate clients. You must setup the RADIUS server in order to use this security mode.

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Click on the **Rekeying Interval** field and type in a number in seconds in this field. This interval determines how often a client's encryption key is changed. Use a value from 60 to 65535 seconds.

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**IMPORTANT:** Steps c through e are optional steps.

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- Optionally*, select whether you want to enable **Broadcast**. Use the drop-down menu to change the selection. When enabled, the SSID is included in the beacon broadcast. The default is disabled.
- Optionally*, select whether you want to enable **Closed System**. Use the drop-down menu to change the selection. When enabled, clients must have the same SSID as the Access Point in order to communicate. The default is disabled.

For example, a client set to “Any” will not be able to associate with an Access Point if it has an SSID named “Engineering”.

- Optionally*, select the VLAN for the SSID. By default, the VLAN is set to “by the user group table”. Click on the field to enter a value between 1 and 3072.
- Click **Apply**. Now you are ready to configure the mobility parameters for the SSID.

# 5

Configure the mobility master gateway (W310) parameters. The master gateway contains the mobility gateway database.

- From the W310 Manager menu bar, click **Configure** and then select **Wireless Domain Configuration**. The Wireless Domain dialog appears.
- Enter the **Master gateway IP address** (W310). You need to make this entry even if the W310 you are installing is the only one on the network.
- Enter a **Backup gateway IP address**, if you have more than one W310.
- Click **Apply**.
- For the parameters you have set - SSID Table and Wireless Domain (Steps 3, 4 and 5), you can import this configuration to other W310s by clicking the **Import** button on each of the W310 Device Manager dialogs. The configuration is imported from the active wireless domain gateway.

# 6

Copy the running configuration to the startup configuration. From the menu bar, select **Actions** and then **Commit**. This saves and re-executes the settings specified in this procedure.

# 7

For more information on advanced configuration features, it is recommended that you reference the *W310 Installation and Configuration Guide* for detailed descriptions and procedures.

- Set policy.
- Make changes to the LAP settings.
- Configure the RADIUS server settings.
- Change the security or authentication method of the wireless network.
- Configure User Groups and Access Point Groups.