

## LABORATORIO 2

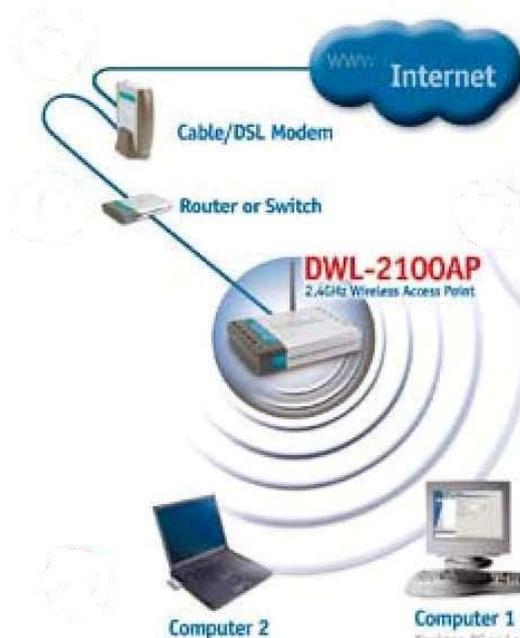
Realizaremos la conexión por puenteo inalámbrico del laboratorio 1 (donde estará el puente DWL-2100AP) y el laboratorio 4 (donde estará el computer 1).

Paso 1: Reconocer el material que utilizaremos en el laboratorio.

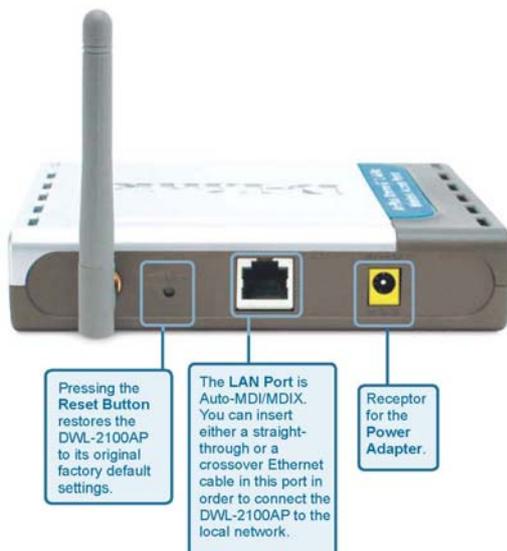
Paso 2: Configurar el puente AP Mode , LAN y Dynamic pool con el computer 2.

Paso 3: Configurar el computer 1 con el conector USB para red inalámbrica con DHCP.

Paso 4: Probar la conexión a Internet con el explorador



## Connections



## LEDs

LED stands for Light-Emitting Diode. The DWL-2100AP Wireless Access Point has 3 LEDs as shown below:



# Using the Configuration Menu (continued)

Home > Wireless > AP Mode



**Wireless Band-**

IEEE 802.11g.

**Mode-**

Access Point is selected from the pull down menu..

**SSID-**

Service Set Identifier(SSID)is the name designated for a specific wireless local area network(WLAN).The SSID factpru default setting is default.The SSID can be easily changed to connect to an existing network or to establish a new wireless network.

**SSID Broadcast-**

Enable or Disable SSID Broadcast. Enabling this feature broadcasts the SSID across the network.

**Channel-**

6 is the default channel. All devices on the network must share the same channel.

**Auto Channel Scan-** Select Enable or Disable.(Enable this feature to auto-select the channel for best wireless performance.)

**Radio-**

Select **On** or **Off**.

**Super G Mode-**

Super G is a group of performance enhancement features that increase end user application throughput in an 802.11g network. Super G is backward compatible to standard 802.11g devices. For top performance, all wireless devices on the network should be Super G capable. Select either **Disabled**, **Super G without Turbo**, or **Super G with Dynamic Turbo**.

# Using the Configuration Menu (continued)

## Home > Wireless> AP Mode(continued)

**Disabled:** Standard 802.11g support, no enhanced capabilities.

**Super G without Turbo:** Capable of Packet Bursting, Fast Frames, Compression, and no Turbo mode.

**Super G with Dynamic Turbo:** Capable of Packet Bursting, Fast Frames, Compression, and Dynamic Turbo mode. This setting is backwards compatible with non-Turbo (legacy) devices. Dynamic Turbo mode is only enabled when all devices on the wireless network are configured with Super G with Dynamic Turbo enabled.

### WMM-

Select **Enable** or **Disable**, **Disable** is selected by default. WMM stands for Wi-Fi Multimedia, by enabling this feature it will improve the user experience for audio and video applications over a Wi-Fi network.

- Authentication:**
- Open System**
  - Shared Key**
  - Open System/Shared Key**
  - WPA-EAP**
  - WPA-PSK**
  - WPA2-EAP**
  - WPA2-PSK**
  - WPA-Auto-EAP**
  - WPA-Auto-PSK**

Select **Open System** to communicate the key across the network.

Select **Shared Key** to limit communication to only those devices that share the same WEP settings.

Select **Open System/Shared Key** to allow either form of data encryption.

Select **WPA-EAP**, **WPA2-EAP**, **WPA-Auto-EAP** to secure your network with the inclusion of a RADIUS server.

Select **WPA-PSK**, **WPA2-PSK**, **WPA-Auto-PSK** to secure your network using a password and dynamic key changes. (No RADIUS server required).

## Home > Wireless>AP Mode>WEP Encryption

**Encryption:** Select **Disabled** or **Enabled**. (**Disabled** is selected here).

**Key Type\*:** Select **HEX** or **ASCII**.

**Key Size:** Select **64-**, **128-**, **152-**bits.

**Valid Key:** Select the **1st** through the **4th** key to be the active key.

**First through Fourth keys:** Input up to **four keys** for encryption. You will select one of these keys in the valid key field.

*\*Hexadecimal digits consist of the numbers 0-9 and the letters A-F*

*ASCII (American Standard Code for Information Interchange) is a code for representing English letters as numbers from 0-127*

# Using the Configuration Menu (continued)

## Advanced > DHCP Server > Dynamic Pool Settings

**DHCP Server Control-**  
Enable or Disable the DHCP function here.

### Dynamic Pool Settings

#### IP Assigned From-

Input the first IP address available for assignment in your network.

#### The Range of Pool (1-255)-

Enter the number of IP addresses available for assignment.

The screenshot shows the configuration page for a D-Link DWL-2100AP. The page title is "AirPlus XtremeG High-Speed 2.4GHz Wireless Access Point". The navigation tabs are "Home", "Advanced", "Tools", "Status", and "Help". The "Advanced" tab is selected, and the "Dynamic Pool Settings" sub-tab is active. The "DHCP Server Control" section shows "Function Enable/Disable" set to "Disabled". The "Dynamic Pool Settings" section includes fields for "IP Assigned From", "The Range of Pool (1-255)", "SubMask", "Gateway", "Wins", "DNS", "Domain Name", "Lease Time (60 - 31536000 sec)", and "Status" (set to "OFF"). A sidebar on the left contains buttons for "Performance", "Filter", "DHCP Server", and "Multi-SSID". At the bottom right, there are "Apply", "Cancel", and "Help" buttons.

#### SubMask-

Enter the subnet mask.

#### Gateway-

Enter the IP address of the router on the network.

#### Wins-

**Windows Internet Naming Service** is a system that determines the IP address of a network computer that has a dynamically assigned IP address.

#### DNS-

Enter the IP address of the DNS server. The DNS server translates domain names such as `www.dlink.com` into IP addresses.

#### Domain Name-

Enter the Domain Name of the DWL-2100AP.

#### Lease Time (60-31536000 sec)-

The **Lease Time** is the period of time before the DHCP server will assign a new IP address.

#### Status-

Turn the **Dynamic Pool Settings** ON or OFF here.

#### Apply-

Click Apply if you have made any changes.

# Using the Configuration Menu (continued)

Home > LAN



LAN is short for Local Area Network. This is considered your internal network. These are the IP settings of the LAN interface for the DWL-2100AP. These settings may be referred to as private settings. You may change the LAN IP address if needed. The LAN IP address is private to your internal network and cannot be seen on the Internet.

## Get IP From-

Select **Static (Manual)** or **Dynamic (DHCP)** as the method you will use to assign an IP address to the DWL-2100AP.

## IP Address-

The IP address of the LAN interface. The default IP address is: **192.168.0.50**

## Subnet Mask-

The subnet mask of the LAN interface. The default subnet mask is **255.255.255.0**

## Default Gateway-

This field is optional. Enter in the IP address of the gateway on your network.

## Apply-

Click **Apply** to save the changes.