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for your IP network

Quick Installation Guide

WHG301 V2.00

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Preface

This Quick Installation Guide provides instructions and reference material for getting started with the 4ipnet WHG301 Secure WLAN Controller. This guide will also show how to connect 4ipnet WHG301 to other network equipments.
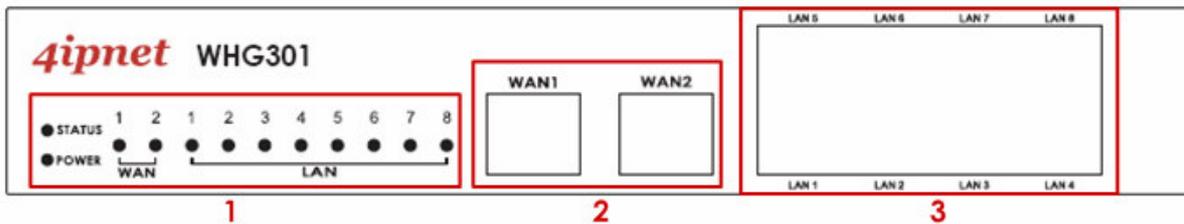
Package Contents

1. 4ipnet WHG301 x 1
2. Quick Installation Guide (QIG) x 1
3. CD-ROM (with User's Manual and QIG) x 1
4. DC 12V Power Adaptor x 1
5. Ethernet Cable x 1
6. Console Cable x 1

⚠️ *It is highly recommended to use all the supplies in the package instead of substituting any components by other suppliers to guarantee best performance.*

System Overview

Front Panel

1. **LED Indicators:** There are four kinds of LED, **Power**, **Status**, **WAN** and **LAN**, to indicate different status of the system.
2. **WAN1/WAN2:** Two WAN ports (10 Base-T / 100Base-TX RJ-45) are connected to a network.
3. **LAN1~LAN8:** Client machines connect to WHG301 via 8 LAN ports (10 Base-T / 100Base-TX RJ-45).
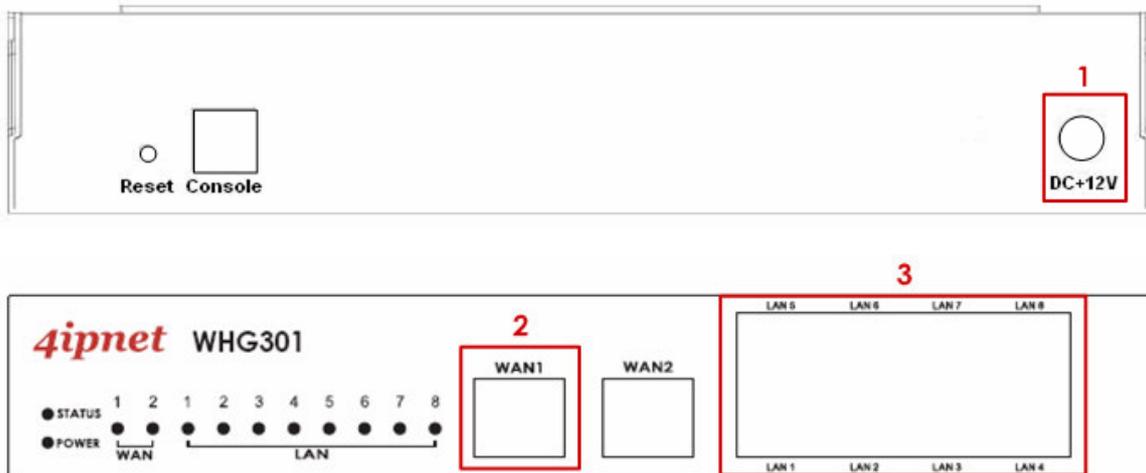
Rear Panel

1. **Reset:** Press this button to restart the system
2. **Console:** The system can be configured via a serial console port. The administrator can use a terminal emulation program such as Microsoft's HyperTerminal to login to the configuration console interface to change admin password or monitor system status, etc.
3. **Power Socket:** The power adapter attaches here.

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Hardware Installation

Please follow the following steps to install WHG301:

1. Connect the 12V power adapter to the power socket on the rear panel. The Power LED should be on to indicate a proper connection.

2. Connect an Ethernet cable to the WAN1 Port on the front panel. Connect the other end of the Ethernet cable to an xDSL/cable modem, or a switch/hub on the LAN of a company/organization. The LED of this port should be on to indicate a proper connection.

3. Connect an Ethernet cable to one of the LAN1~LAN8 Ports on the front panel. Per your needs, connect the other end of the Ethernet cable to an administrator PC for configuring the WHG301 system, an AP for extending wireless coverage, a switch for connecting more wired clients, or a client PC. The LED of the connected port should be on to indicate a proper connection.

> ⚠ *WHG301 supports Auto Sensing MDI/MDIX. You may use either a straight-through or a cross-over Ethernet cable to connect the Ethernet port.*

Getting Started

< System Concept >

4ipnet WHG301 is capable of managing user authentication, authorization and accounting. The user account information is stored in the local database or a specified external database server. Featured with user authentication and integrated with external payment gateway, WHG301 allows users to easily pay the fee and enjoy the Internet service using credit cards through **Authorize.net**, **PayPal** or **SecurePay**. With centralized AP management feature, the administrator does not need to worry about how to manage multiple wireless access point devices. Furthermore, WHG301 introduces the concept of Service Zones - multiple virtual networks, each with its own definable access control profiles. This is very useful for hotspot owners seeking to provide different customers or staff with different levels of network services. The following diagram is an example of WHG301 set to manage the Internet and network access services at a hotspot venue.
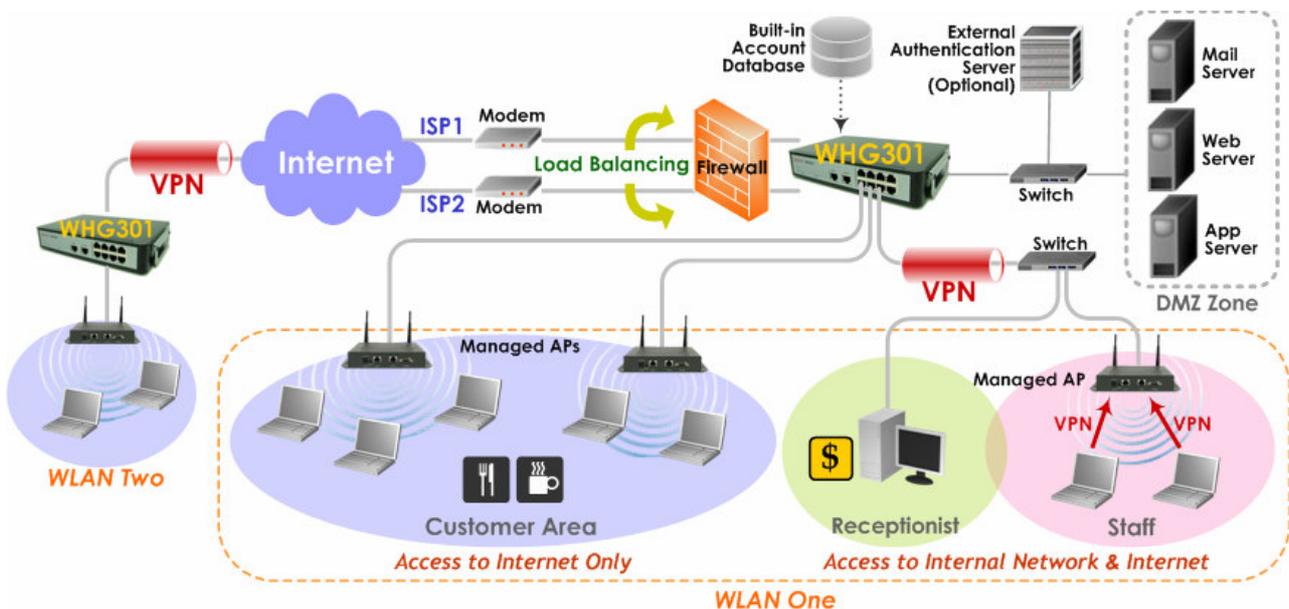

< Web Management Interface >

4ipnet WHG301 supports web-based configuration. Upon the completion of hardware installation, WHG301 can be configured via web browsers with JavaScript enabled such as Internet Explorer version 6.0 and above or Firefox.

1. To access the web management interface, connect a PC to one of the LAN1~8 ports, and then launch a browser. **Make sure you have set DHCP in TCP/IP of your PC to get an IP address dynamically.**

2. Next, enter the gateway IP address of WHG301 at the address field. The default gateway IP address is *"https://192.168.1.254"* (**"https"** is used for a secured connection).

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3. The administrator login page will appear. Enter *"admin"*, the default username, and *"admin"*, the default password, in the User Name and Password fields. Click **Enter** to log in.
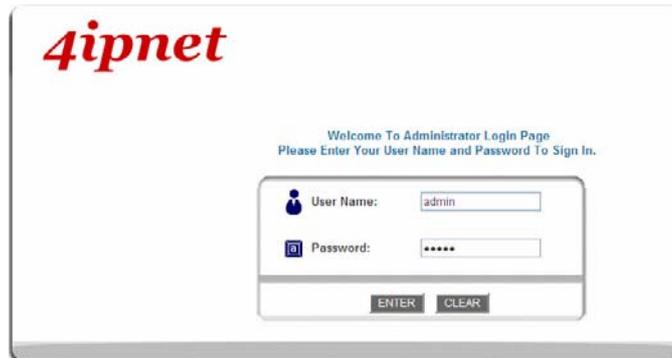
4. After a successful login, a "Welcome to System Administration" page will appear on the screen.

For the first time, if WHG301 is not using a **trusted SSL certificate**, there will be a **"Certificate Error"**, because the browser treats WHG301 as an illegal website. Please press **"Continue to this website"** to continue. The default user login page will then appear in the browser. *For more information, please see **4.2.5 Additional Configuration, WHG301 User's Manual**.*

*If you can't get the login screen, the reasons may be: (1) The PC is set incorrectly so that the PC can't obtain the IP address automatically from the LAN port; (2) The IP address and the default gateway are not under the same network segment. Please use default IP address such as 192.168.1.xx in your network and then try it again. For the configuration on PC, please refer to **WHG301 User's Manual, Appendix F. Network Configuration on PC.***

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Common Settings

< Configuration Wizard >

1. After a successful login to WHG301, a web management interface with a welcome message will appear.

Note: To logout, simply click the *Logout* icon on the upper right corner of the interface to return to the login screen.

2. To quickly configure WHG301 by using the **Configuration Wizard**, click *System Configuration* from the top menu to go to the **System Configuration** page.

3. Then, click *Configuration Wizard* on the left.

4. Click the *Run Wizard* button to begin the **Configuration Wizard**.

5. The **Configuration Wizard** will appear in a pop-up browser window.

6. Click *Next* to begin.

Configuration Wizard

Welcome to the Setup Wizard. The wizard will guide you through these 6 quick steps. Begin by clicking on Next.

Step 1. Change Admin's Password

Step 2. Choose System's Time Zone

Step 3. Set System Information

Step 4. Select the Connection Type for WAN Port

Step 5. Add Local User Account (Optional)

Step 6. Save and Restart 4ipnet WHG301

[Next]   [Exit]

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Step 1. Change Admin's Password

➤ Enter a **New Password** for the admin account and retype it in the **Verify Password** field (20-character maximum and no spaces).

➤ Click **Next** to continue.

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Step 1. Change Admin's Password

You may change the Admin's account password by entering a new password. Click Next to continue.

New Password: ●●●●●   *

Verify Password : ●●●●●   *

[Back]   [Next]   [Exit]

➤➤ **Note:** During every step of the wizard, if you wish to go back to modify the settings, please click the **Back** button to go back to the previous step.

Step 2. Choose System's Time Zone

➤ Select a proper time zone from the drop-down list box.

➤ Click **Next** to continue.

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Step 2. Choose System's Time Zone

Select the appropriate time zone for the system. Click Next to continue.

(GMT+08:00)Taipei ▼

[Back]   [Next]   [Exit]

Step 3. Set System Information

➤ **Home Page:** Enter the URL that users should be initially directed to when successfully authenticated to the network.

➤ **NTP Server:** Enter the URL of the external time server for 4ipnet WHG301 time synchronization or use the default setting.

➤ Click **Next** to continue.

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Step 3. Set System Information

Enter System Information. Click Next to continue.

Home Page: http://www.4ipnet.com   *
(e.g. http://www.4ipnet.com)

NTP Server: tock.usno.navy.mil   *
(e.g. tock.usno.navy.mil)

[Back]   [Next]   [Exit]

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Step 4. Select Connection Type for WAN1 Port

➤ There are three types of WAN connections to be selected from: **Static IP Address**, **Dynamic IP Address** and **PPPoE Client**. Select a proper Internet connection type. Below depicts an example of using Static IP connection.

➤ Click **Next** to continue.

Step 4 (Cont). Set WAN1 Port's Static IP Address

➤ Enter the **IP Address, Subnet Mask, Default Gateway** and **DNS Server** provided by your ISP. Contact the ISP if the DNS IP Address is unknown.

➤ Click **Next** to continue.

➤ For **Dynamic IP Address** or **PPPoE Client**, follow the instructions showing on the screen.

Step 5. Add Local User Account (Optional)

➤ A new user can be added to the Local User database. To add a user here, enter the **Username** (e.g. test), **Password** (e.g. test), **MAC Address** (optional, to specify the valid MAC address of this user) and assign an **Applied Group** to this particular user (or use the default **None**).

➤ More users can be added by clicking the **Add Now** button.

➤ Click **Next** to continue.

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Step 6. Save and Restart WHG301

➤ Click **Restart** to save current settings and restart WHG301. The Setup Wizard is now complete.

➤ While restarting WHG301, a **"Restarting now. Please wait for a moment."** message will appear on the screen.

Please do NOT interrupt WHG301 restart process until the **Configuration Wizard** pop-up window has disappeared – which indicates the restart process has been completed.

Now, the basic configuration is completed. If all steps are done properly, you can start working on the system or refer to the user's manual for advanced settings.

< User Login >

After completing the configuration wizard, the user account generated in Step 5 can be used to login to the system to verify whether the configuration is done properly.

First, connect a client device (e.g. laptop, PC) to one of the LAN1~LAN8 Ports. If the client device already has a static IP setting, the administrator can enable the **"IP PnP"** function to support static IP without changing the IP setting on client device. Otherwise, the client device must be set to use **DHCP** in TCP/IP configuration to obtain an IP address automatically.

1. Open an Internet browser on a client device and access any URL, the default **User Login Page** will be displayed.

2. Enter a username and password previously created in the Local User account database (e.g. **"test@local"** for *Username* and **"test"** for *Password*) or from an On-demand User account.

   Check the **Remember Me** box to store the username and password on the current computer in order to automatically login to the system at next login. Then, click the **Submit** button.

   The **Remaining** button on the **User Login Page** is for on-demand users only, where they can check their Remaining Usage time.

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⚠️ *To provide temporary users with free or paid wireless Internet access, the administrator can enable **On-demand User** authentication to create On-demand User accounts. Please refer to **4.2.1.6 Authentication Method – On-demand User, WHG301 User's Manual**.*

3. **Congratulation!**

    The **Login Successful** page appearing means WHG301 has been installed and configured successfully. Now, you are connected to the network and Internet!
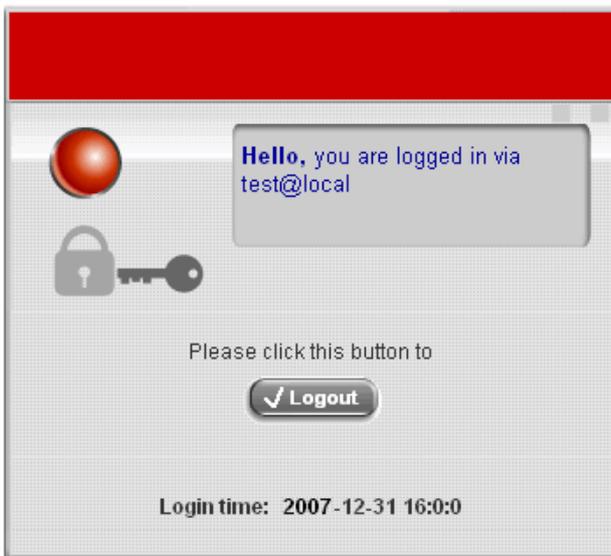
< Service Zone & AP Management >

4ipnet WHG301 has introduced an important new concept called **"Service Zone"**. For how to set up Service Zones, please refer to the User's Manual, **Appendix C. Service Zone Deployment Example - Port-based Service Zone** and **Tag-based Service Zone**.

WHG301 can centrally manage up to 12 access points (APs). For how to set up the **"AP Management"** feature, please refer to the **"AP Management"** section of the User's Manual.

For further configuration and information, please refer to the User's Manual.

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