4ipnet®
for your IP network

Quick Installation Guide

HSG3200 V1.20

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FCC Caution

This equipment has been tested and proven to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

➤ Reorient or relocate the receiving antenna.
➤ Increase the separation between the equipment and receiver.
➤ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
➤ Consult the dealer or an experienced radio/TV technician for help.

Preface

4ipnet HSG3200 Giga Wireless Hotspot Gateway in 19" rack-mountable is designed to provide an easy-to-use, all-in-one solution for hotspot service providers. A single HSG3200 enables a hotspot provider to service multiple hot-spot franchises in a mall area through the feature of multiple-Service-Zone. Each service zone can have its own login skin and an independent SSID. HSG3200 is also ideal for hospitality application. For example, a hotel can use the service zone feature to separate the privileges of staff, guest, and VIP usage for accessing Internet.

This Quick Installation Guide provides instructions and reference materials for getting started with 4ipnet HSG3200. This guide will also show how to connect HSG3200 to other network devices.

Package Contents

1. 4ipnet HSG3200 x 1
2. Quick Installation Guide x 1
3. CD-ROM (with User Manual and QIG) x 1
4. Power Cord x 1
5. Straight-through Ethernet Cable x 1
6. Cross-over Ethernet RJ-45 Cable x 1
7. RS-232 DB9 to RJ45 Console Cable x 1
8. Rack Mounting Bracket (with Screws) x 1

⚠️ *It is recommended to keep the original packing material for possible future shipment when repair or maintenance is required. Any returned product should be packed in its original packaging to prevent damage during delivery.*

System Overview

Front Panel
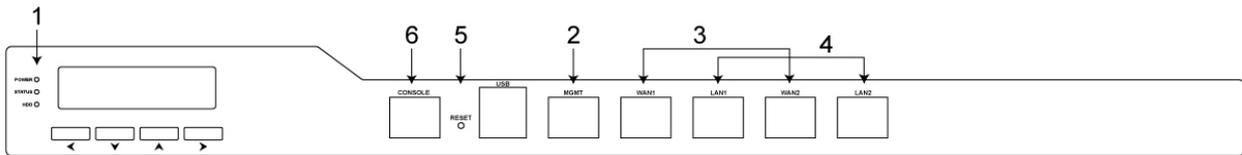
1. **LED Indicators:** There are three kinds of LED, **Power**, **Status** and **Hard-disk**, to indicate different status of the system.
2. **Mgmt:** For management use only, it always will open WMI (Web Management Interface) homepage. If connect to this port with PC directly, please use *crossover* Ethernet cable.
3. **WAN1/ WAN2:** Two WAN ports (10/100/1000 Base-T RJ-45) are connected to the external network, such as the ADSL Router from your ISP (Internet Service Provider).
4. **LAN1/ LAN2:** Client machines connect to HSG3200 via LAN ports (10/100/1000 Base-T RJ-45).
5. **Reset:**
   - Press and hold the Reset button for about 5 seconds and status of LED on front panel will start to blink before restarting the system.
   - Press and hold the Reset button for more than 10 seconds and status of LED on the front panel will start to speed up blinking before resetting the system to default configuration.
6. **Console:** The system can be configured via a serial console port. The administrator can use a terminal emulation program such as Microsoft's Hyper Terminal to login to the configuration console interface to change admin password or monitor system status, etc.

Rear Panel
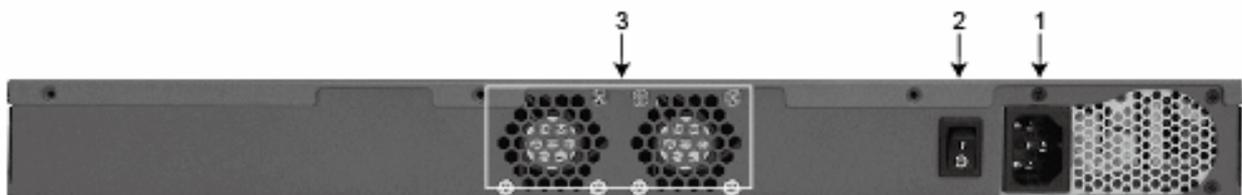
1. **Power Supply Socket:** Connecting the power cord to the built-in open-frame power supply (Input: 100~240 VAC, 50/60 Hz).
2. **Power Switch:** Power-On (|) & Power-Off (O).
3. **Device Cooling Fan:** Don't block the cooling fans. Leave enough open space for ventilation.

①

Hardware Installation
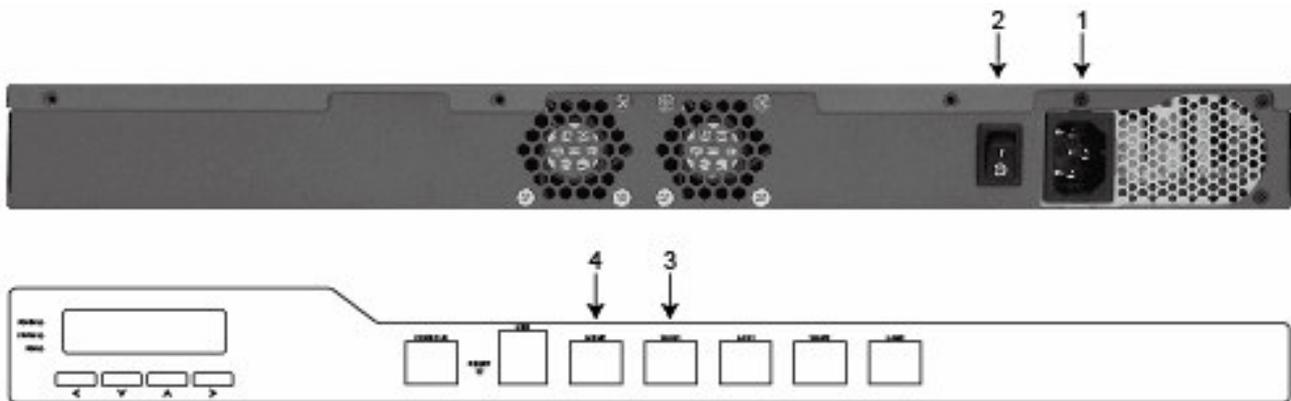
1. Connect the power cord to the power socket on the rear panel.

2. Turn on the power switch on the rear panel. The Power LED should be on to indicate a proper connection.

3. 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 of an internal network. The LED of this port should be on to indicate a proper connection.

4. Connect a *crossover* Ethernet cable to the Mgmt Port on the front panel. Connect the other end of the Ethernet cable to an administrator PC for configuring the HSG3200 system, an AP for extending wireless coverage, a switch for connecting more wired clients, or a client PC. The LED of Mgmt port should be on to indicate a proper connection.

Getting Started

4ipnet HSG3200 supports web-based configuration. Upon the completion of hardware installation, HSG3200 can be configured through a PC by using its web browser with JavaScript enabled such as Internet Explorer version 6.0.

Steps:

1. Set DHCP in TCP/IP of the administrator PC to get an IP address dynamically. Connect the PC to any Mgmt Port of HSG3200. An IP address will be assigned to the PC automatically via the HSG3200 built-in DHCP server.

2. Launch a web browser to access the web management interface of HSG3200 by entering **"https://192.168.255.254"** or **http://192.168.255.254"** in the address field.

▶▶ **Note:** **"https"** is used for a secured connection.

3. The following Administrator Login Page will then appear. Enter **"admin"** (the default value) in the *Username* and *Password* fields, and then click *Login* to log in.

4. The **Home Page** will appear after a successful login.

▶▶ **Note:** To logout, simply click the *Logout* button at the upper right hand corner of the interface to return to the Administrator Login Page.

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Common Settings

< Setup Wizard >

HSG3200 provides a **Setup Wizard** for quick configuration. To quickly configure HSG3200 by using the **Setup Wizard**, click on the **Setup Wizard** button to start the configuration process.

Step 1: General

- Enter a new password in the *New Password* field, and re-enter it again in the *Verify Password* field (a maximum of 20 characters and no spaces allowed in between).
- Select an appropriate time zone from the *Time Zone* drop-down list box to set up the system time.
- Click *Next* to continue.

⚠ *For security concern, it is strongly recommended to change the administrator's password*

Step 2: WAN1 Interface

For setting up both wired WAN and wireless LAN functions:

- Select a proper type of Internet connection for WAN1 interface from the following three available connections: **Static**, **Dynamic**, or **PPPoE**. Your ISP or network administrator can advise on the connection type available to you. Below depicts an example for **Dynamic**.
- Click *Next* to continue.

Step 3: Local User Account (Optional)

New local accounts can be created and added into the database via this optional function. If local user accounts are not required, click *Skip* to go directly to **Step 4**. However, It is recommended to create at least one local user account in order to verify the system's readiness upon completion of this **Setup Wizard**.

- Enter the *Username* (e.g. **"testuser**) and *Password* (e.g. **"testuser"**) to create a new local account.
- Click *Next* to continue.
- More local accounts can be added by clicking the *Back* button in **Step 4**.

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Step 4: Confirm and Restart

- Click *Finish* to save current settings and restart the system.

- A confirmation dialog box will then appear. Click *OK* to continue.

- A **Confirm and Restart** message will appear on the screen during the restarting process. Please do not interrupt the system until the Administrator Login Page appears.

▶▶ **Note:** The system is trying to locate a DNS server at this stage. Therefore, a longer startup time is required if the configured DNS cannot be found.

- When the following Administrator Login Page appears, it means the restart process is now completed.

< User Login >

To verify whether the configuration of the new local user account(s) created via the **Setup Wizard** has been completed successfully:

1. Connect a client device (e.g. laptop, PC) to any LAN Port of HSG3200. The device will obtain an IP address automatically via DHCP.

2. Open a web browser on a client device, access any URL, and then the default **User Login Page** will appear.

3. Enter the *Username* and *Password* of a local user account previously generated via Setup Wizard (e.g. **"testuser@local"** as the *Username* and **"testuser"** as the *Password*); then Click *Login*.

▸ **Note:**
1. HSG3200 supports multiple authentication options including built-in local user database and external authentication database (e.g. RADIUS). The system will automatically identify which authentication option is used from the full username entered.
2. The format of a full (valid) username is **userid@postfix**, where **"userid"** is the user ID and **"postfix"** is the name of the selected authentication option.
3. **Exception:** The postfix can be omitted only when the default authentication option is used. For example, **"LOCAL"** is the default authentication option at this system; therefore, you may enter either **"testuser"** or **"testuser@local"** in the *Username* field.

Congratulation!

The Login Success Page will appear after a client has successfully logged into HSG3200 and has been authenticated by the system.

The appearance of Login Success Page means that HSG3200 has been installed and configured properly.

Service Zone – Deployment Example

< Small and Mid-size Business Network Environment >

In a Small and Mid-size Business (SMB) network environment, devices such as switches, hubs, and access points are commonly used, and Internet connection is usually via an ADSL or a cable modem. HSG3200 uses virtual LAN (VLAN) technology to partition one physical network under its control into nine logical virtual networks, called Service Zones, including one untagged zone and eight tagged zones. The untagged zone is also referred as the Default Service Zone in this system, which is always enabled. On the other hand, the other four tagged zones can be enabled or disabled respectively. By default, port-based configuration is used and all of the four physical LAN ports are set to use the Default Service Zone.

The figure below demonstrates an example of the SMB network deployed with HSG3200.
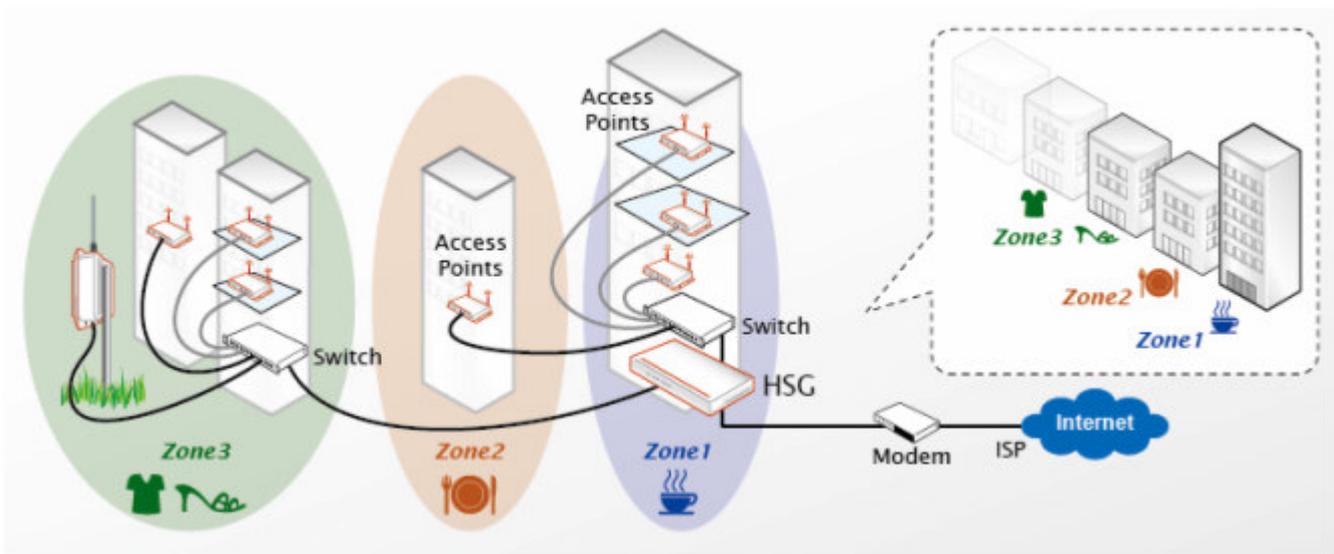
【 *Example: Managed network deployment*】

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< Port-Based Service Zone Configuration Example >

In **Port-Based** mode, each LAN port can only serve traffic from one Service Zone. An example of network application diagram is shown as below: one Service Zone for **Guest** and one for **Employee**.
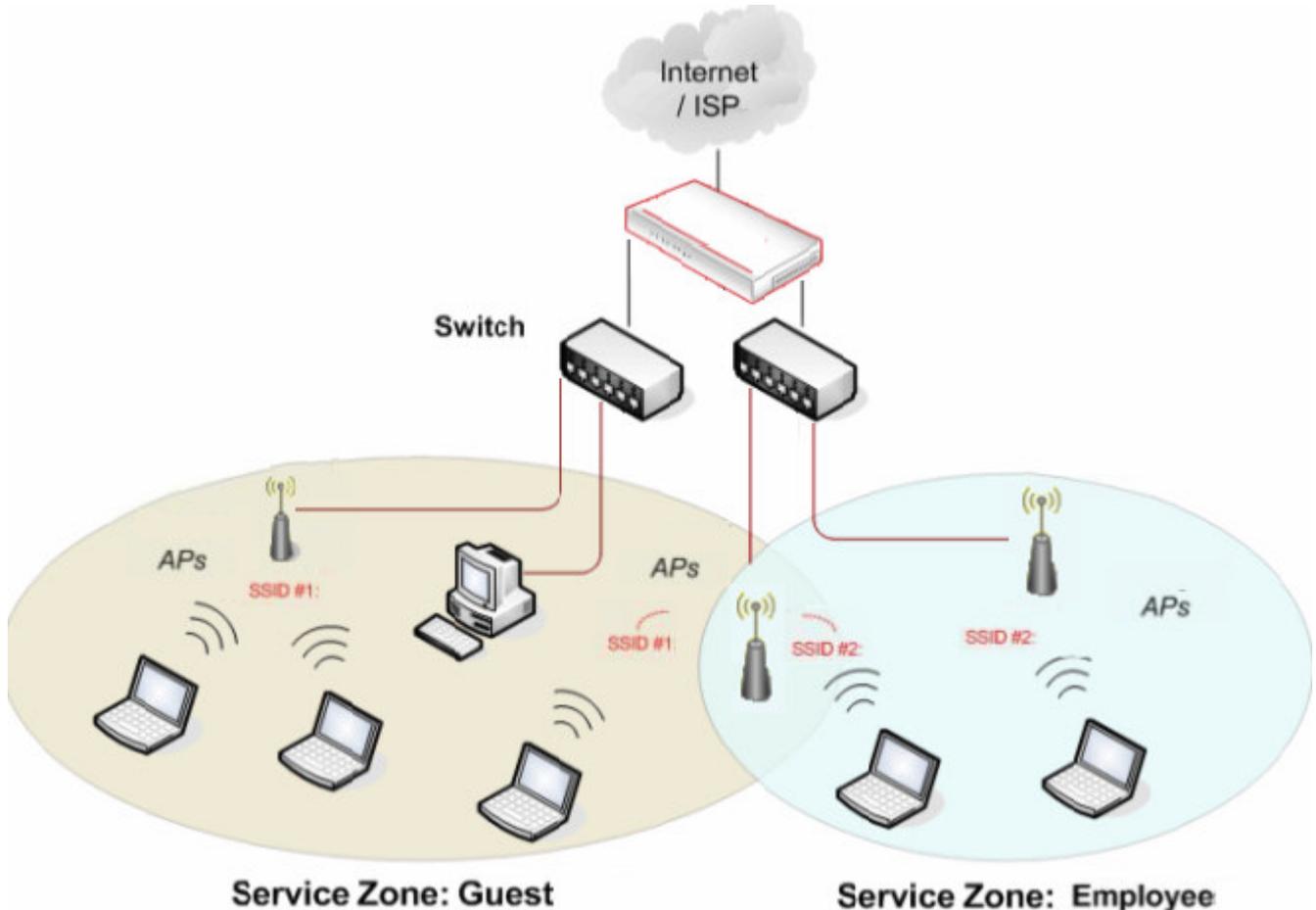
⚠ *The switches deployed under HSG3200 in **Port-Based** mode must be **Layer 2 switches** only.*

Configuration Steps:

Step 1: Configure Service Zone 1 for Guest

Assume that **LAN1** is assigned to the **Service Zone 1** (**SZ1**) for **Guest**. Click the **System** menu and select the **Service Zones** tab. Click *Configure* of SZ1.

Step 2: Configure Basic Settings for SZ1

Check the **Enabled** radio button of *Service Zone Status* to activate SZ1.

Enter a name for SZ1 (e.g. **"Guest"**) in the *Service Zone Name* field.

Step 3: Configure Authentication Settings for SZ1

Check the **Enabled** radio button to enable *Authentication Required for the Zone*.

Check the **Default** button and **Enabled** box of *Guest Users* to set **ONDEMAND** authentication method as default.

Disable all other authentication options. Then, click **Apply** to activate the settings made so far. A warning message **"You should restart the system to activate the changes."** will appear at the bottom of the page. Do NOT restart the system until you have completed all the configuration steps.

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Authentication Settings

Authentication Required For the Zone	⊙ Enabled ○ Disabled				
	Auth Option	Auth Database	Postfix	Default	Enabled
	Server 1	LOCAL	local	○	☐
	Server 2	POP3	pop3	○	☐
Authentication Options	Server 3	RADIUS	radius	○	☐
	Server 4	LDAP	ldap	○	☐
	On-demand User	ONDEMAND	ondemand	⊙	☑
	SIP	SIP	N/A	○	☐

Step 4: Configure LAN Port Mapping for SZ1

Select the **LAN Port Mapping** tab from the *System* menu to enter the **LAN Ports and Service Zone Mapping** page. Select *Guest* from the drop-down list box of LAN1. Click *Apply* to save the selection.

General \ WAN1 \ WAN2 \ WAN Traffic \ LAN Port Mapping \ Service Zones

Main Menu > System > Service Zone Port Role

LAN Ports and Service Zone Mapping

Select the mode for Service Zone ⊙ Port-Based
                                   ○ Tag-Based

Specify a desired Service Zone for each LAN Port:

Guest ▾   Defaul ▾

LAN1   LAN2

[Apply]   [Clear]

A warning message **"You should restart the system to activate the changes."** will appear at the bottom of the page. Do NOT restart the system until you have completed all the configuration steps.

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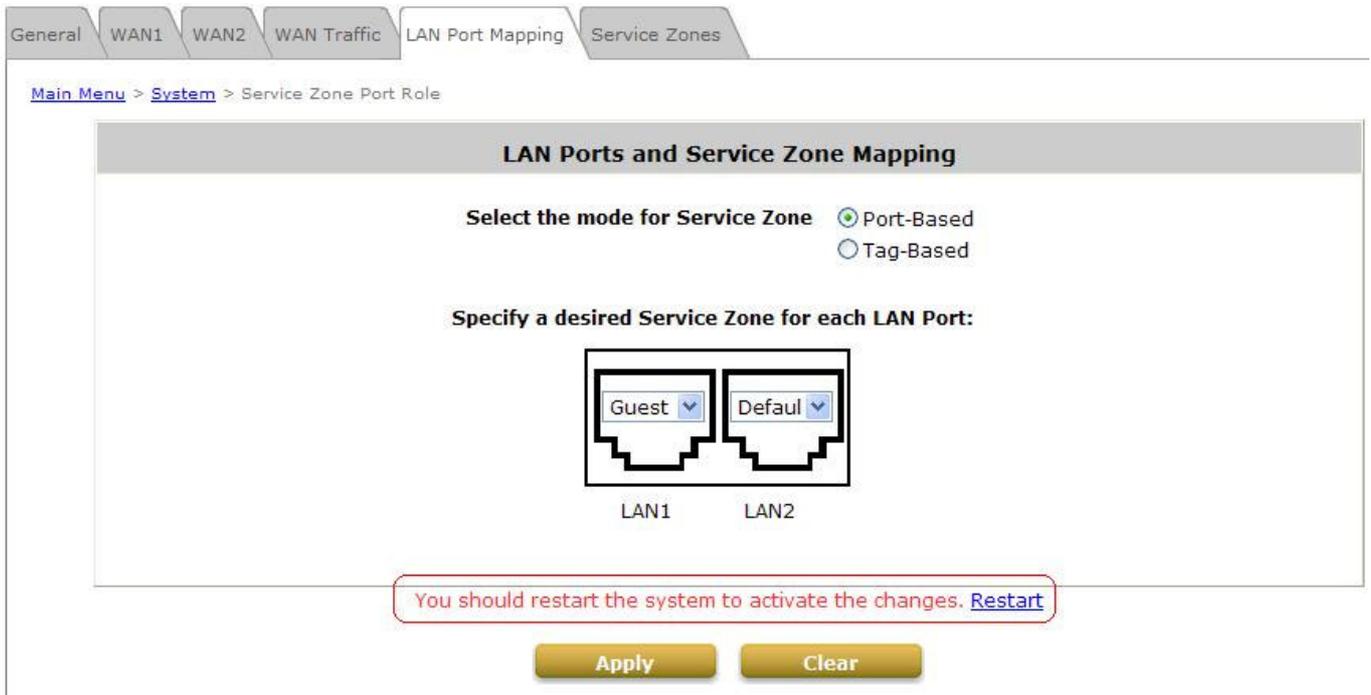
LAN1 is now configured for **Guests**.

Step 5: Configure Service Zone 2 for Employee

Assume that **LAN2** is assigned to the **Service Zone 2** (**SZ2**) for **Employee**. Select the **Service Zones** tab and click **Configure** of SZ2.
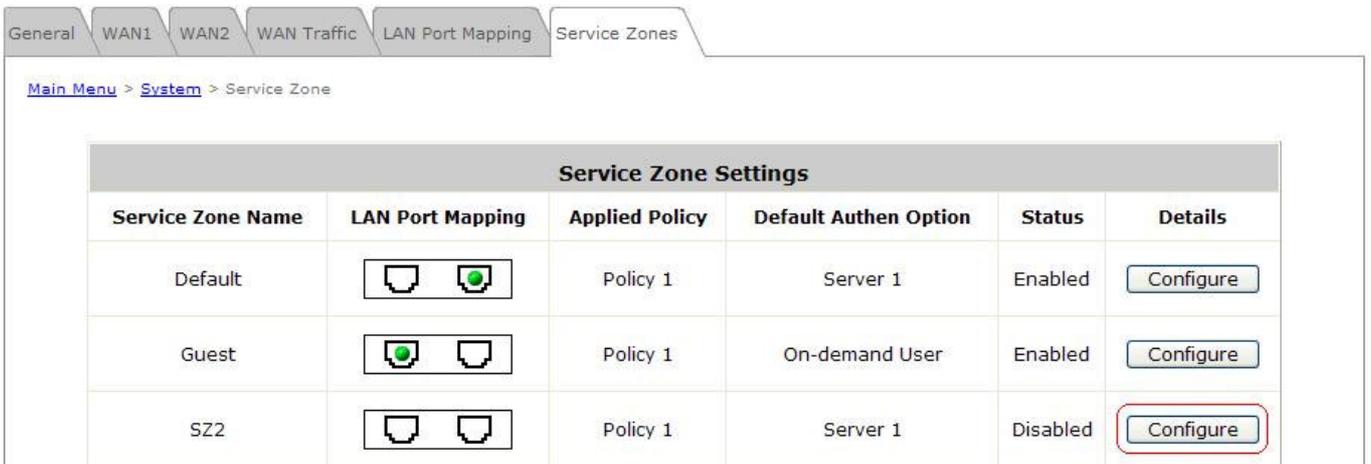
Step 6: Configure Basic Settings for SZ2

Check the **Enabled** radio button of *Service Zone Status* to activate SZ2.

Enter a name for SZ2 (e.g. **Employee**) in the *Service Zone Name* field.

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Step 7: Configure Authentication Settings for SZ2

Check the *Enabled* radio button to enable *Authentication Required for the Zone*.

Check the *Default* button and *Enabled* box of *Server 1* to set **LOCAL** authentication method as default. Disable all other authentication options. Then, click *Apply* to activate the settings made so far. A warning message **"You should restart the system to activate the changes."** will appear at the bottom of the page. Do NOT restart the system until you have completed all the configuration steps.

Step 8: Configure LAN Port Mapping for SZ2

Select the **LAN Port Mapping** tab from the *System* menu to enter the **LAN Ports and Service Zone Mapping** page. Select *Employee* from the drop-down list box of LAN2. Click *Apply* to save the selection.
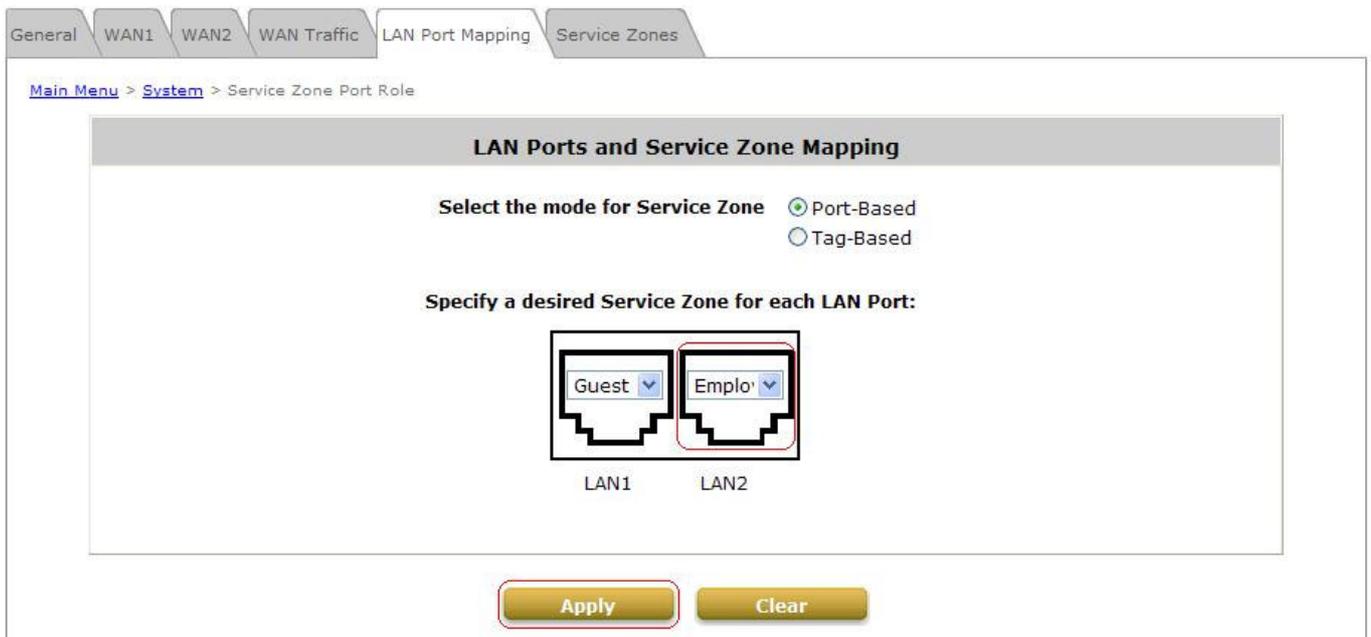
⑬

A warning message **"You should restart the system to activate the changes."** will appear at the bottom of the page. Click the hyperlink of **Restart** to restart the system and activate all configurations.
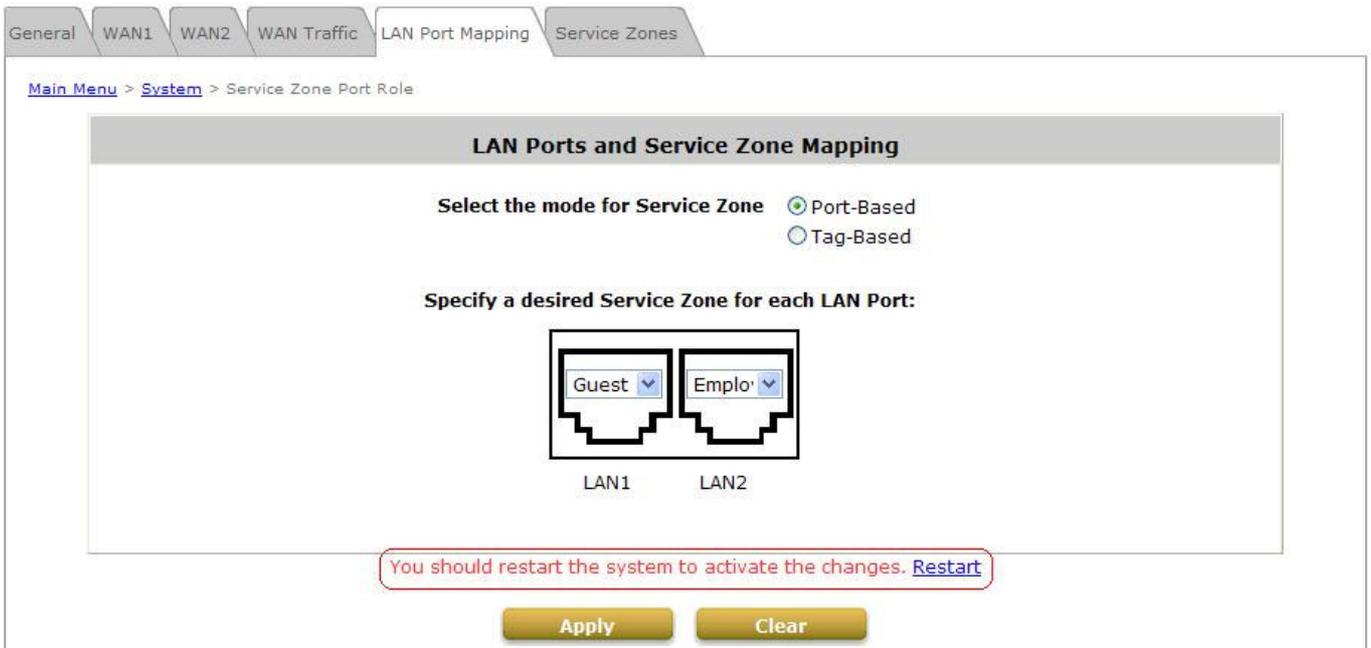
⚠️ *Please do not interrupt the system during the restarting process.*

Once the settings of two Service Zones are completed, the configured result will be displayed in the **Service Zone Settings** page: **SZ1** and **SZ2** are both enabled.

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> **For configuration of Tag-based/Port-Based service zone and information, please refer to the User's Manual.**

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