



Quick Installation Guide

RANGER SERIES

**WIRELESS ACCESS
CONTROLLER, 5GE LAN, 2GE
WAN, 1GE DMZ, USB**

DG-WU2005V

V1.0
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Package Contents

The following items should be present in your package:

- DG-WU2005V
- Power Cord
- Patch Cord (1 No.)
- Rack Mount Kit
- Installation Guide CD (includes User Manual & QIG)

Make sure that the package contains above items. If any of the listed items is damaged or missing, please contact your retailer immediately.

Product Overview

Congratulations on your purchase of this outstanding product: DG-WU2005V Multi-Service Gateway with WLAN Controller. The multi-service security gateway comes with fruitful functions to meet SMB fast growing intranet access requirement. Multi-WAN NAT function allows multiple clients to have high speed access. VPN technology can enable secure access within intranet. By AP controller function, it is easy to deploy Wi Fi access infrastructure. Firewall and access control can prevent from hackers attack and avoid unproductive activity. Friendly setting and professional network management function, supervisor can easily take control of whole intranet. Besides being used for SMB corporate, when combined with various other gateway series, it is also quite suitable for commercial, mobile office, hot spot deployment and M2M-IoT application. For optimal IT investment, DG-WU2005V will guarantee maximum ROI and highest reliability.

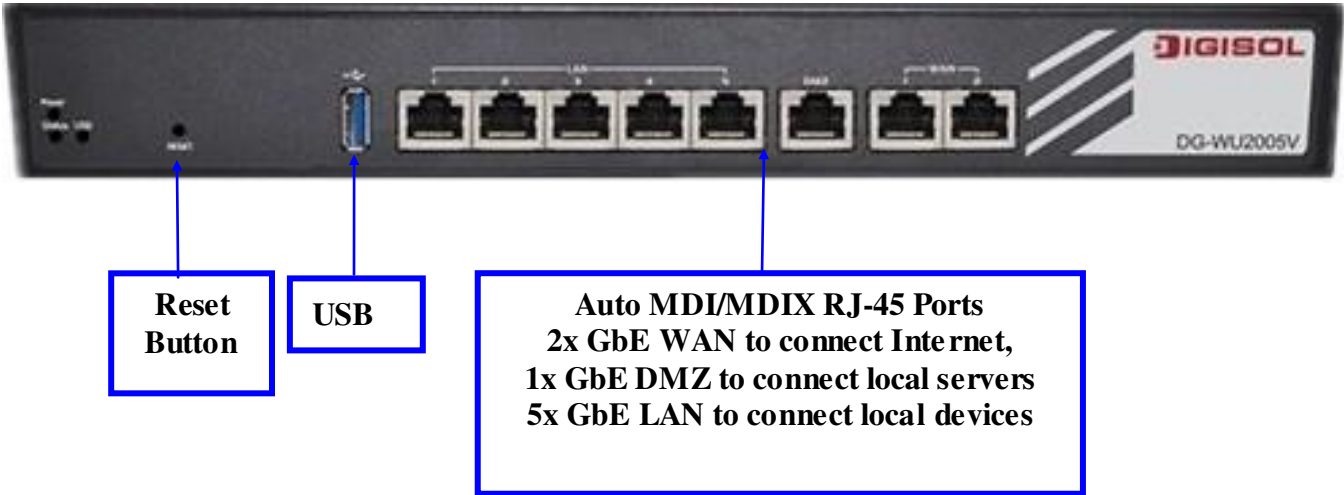
Instructions for installing and configuring this product can be found in this manual. Before you install and use this product, please read this manual carefully for fully exploiting the functions of this product.

System Requirements

The following system requirements are recommended

Network Requirements	<ul style="list-style-type: none">• An Ethernet RJ45 cable or DSL modem• 10/100/1000 Ethernet adapter on PC / NB.
Web-based Configuration Utility Requirements	Computer with the following: <ul style="list-style-type: none">• Windows®, Macintosh, or Linux-based operating system.• An installed Ethernet adapter. Browser Requirements: <ul style="list-style-type: none">• Internet Explorer 6.0 or higher• Chrome 2.0 or higher• Firefox 3.0 or higher• Safari 3.0 or higher.
CD Installation Wizard Requirements	Computer with the following: <ul style="list-style-type: none">• Windows® 7 / 8, Vista®, or XP with Service Pack 2.• An installed Ethernet adapter.• CD-ROM drive.

Front View



The below mentioned table illustrates the working of the LED indicators:

LED	Description
Power	OFF: Device is powered down.
	Green: Device is powered on.
Status	Green in flash: Device is in normal operation.
	Green in fast flash: Device is in recovery mode or abnormal state.
USB (for 3G/4G)	OFF: USB 3G/4G connection is not established.
	Green: USB 3G/4G connection is established.
	Green in flash: data packet transferred via USB 3G/4G.
LAN-1 ~ LAN-5 / DMZ	Green: Ethernet connection is established.
	Green in flash: data packet transferred via Ethernet.
	OFF: No Ethernet cable attached or Device not linked.
WAN-1 / WAN-2	Green: Ethernet connection is established.
	Green in flash: Data packet transferred through WAN.
	OFF: No Ethernet cable attached or Device not linked.

Rear View



**Console Port
(DB9)**

**Power
ON/OFF
Switch**

**Receptor
for Power
Cable**

Getting Started

Before you can use this product, you need to connect your PC or NB to this gateway first. You can connect your PC to one of LAN1~LAN5 ports through an Ethernet cable.

You can browse web UI to configure the device. Firstly you need to launch the Setup Wizard browser first and then the Setup Wizard will guide you step-by-step to finish the basic setup process.

Browse to Activate the Setup Wizard

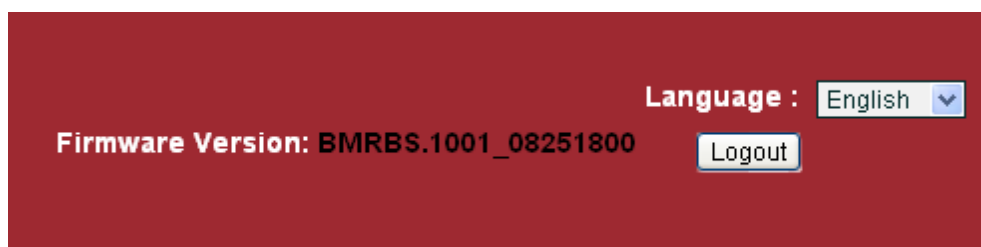
Type in the IP Address (**http://192.168.123.254**)



When you see the login page, type the password '**admin**'¹ and then click '**login**' button.



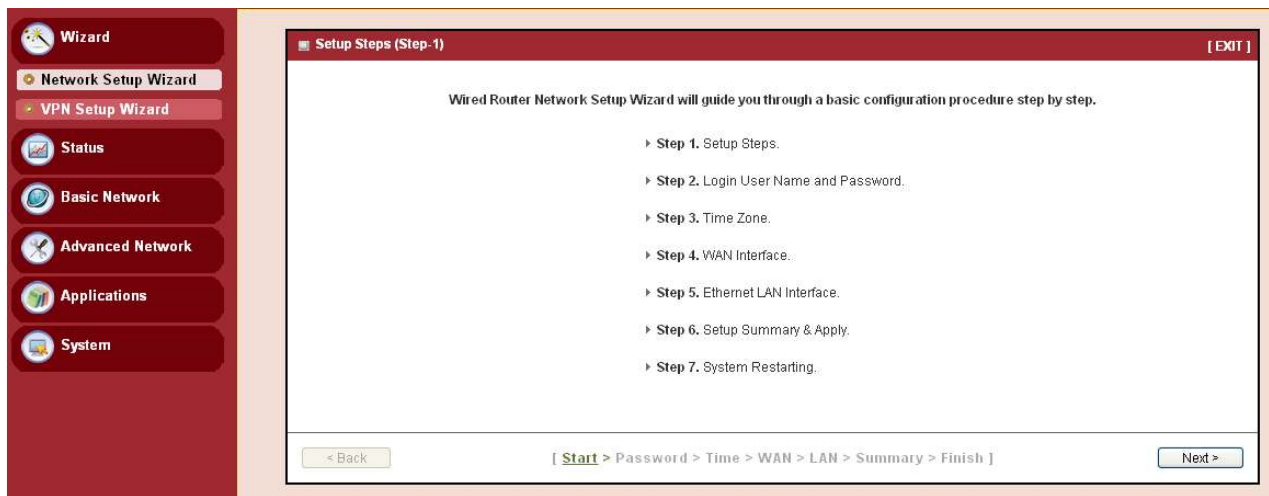
After login, select your language from the list.



¹ It's strongly recommending that you change this login password from default value.

Wizard

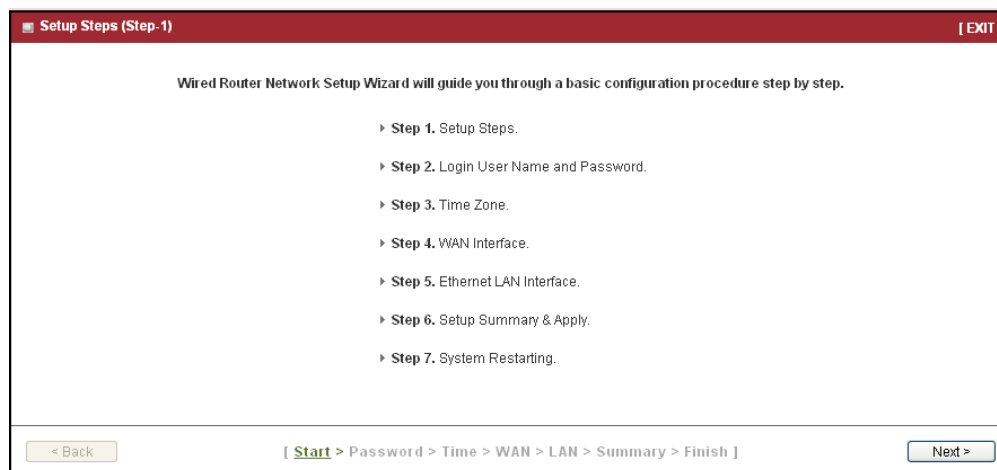
Select “Wizard” for basic network settings and VPN settings in a simple way. Or, you can go to **Basic Network / Advanced Network / Applications / System** to setup the configuration by your own selection.



2.2.1.1 Configure with the Network Setup Wizard

Step 1

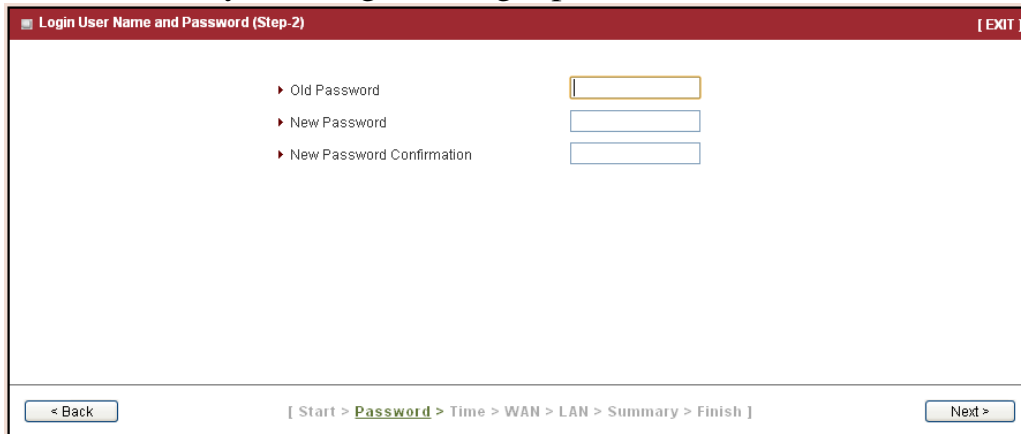
The network setup wizard will guide you to finish some basic settings, including login password, time zone, WAN interface and LAN interface. One “**Exit**” button at the upper-right corner of each window is provided for you to quit the setup process.



Press “**Next**” to start the wizard.

Step 2: Change Password

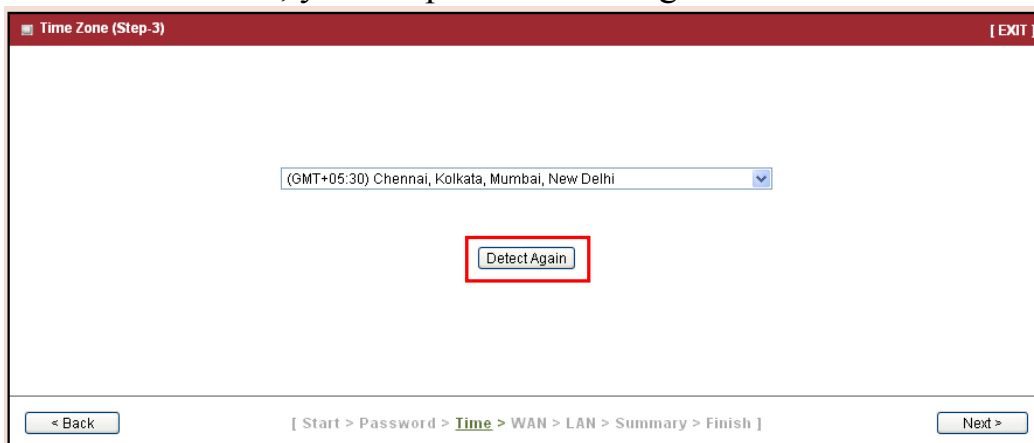
Password setting. You can change the login password of web UI here. It's strongly recommended that you change this login password from default value.



Press “Next” to continue.

Step 3: Time Zone

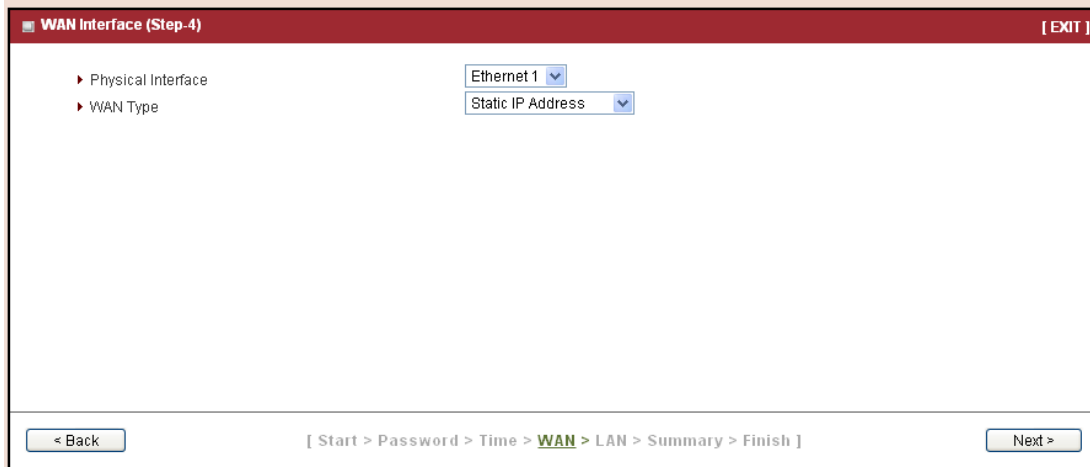
Time Zone setting. It will detect your time zone automatically. If the result of auto detection is not correct, you can press “Detect Again” button or select manually.



Press “Next” to continue.

Step 4: WAN

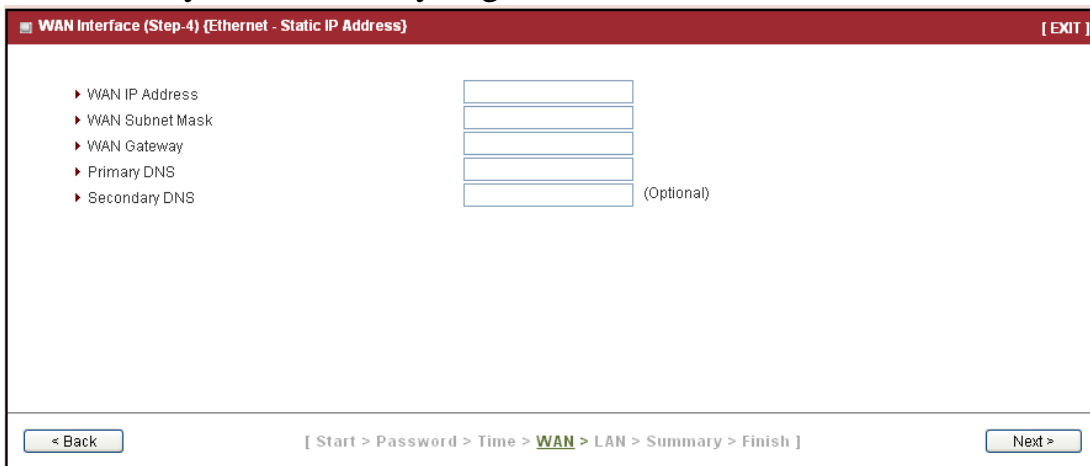
WAN Interface setting. Choose the type of WAN connection. You can select Ethernet WAN if you want to connect to Internet through fixed line. Or select USB 3G/4G if you want to connect to Internet through 3G/4G network. A variety of WAN types are available for Ethernet WAN connection.



Press “Next” to continue.

Step 4-1: Ethernet (Static IP Address)

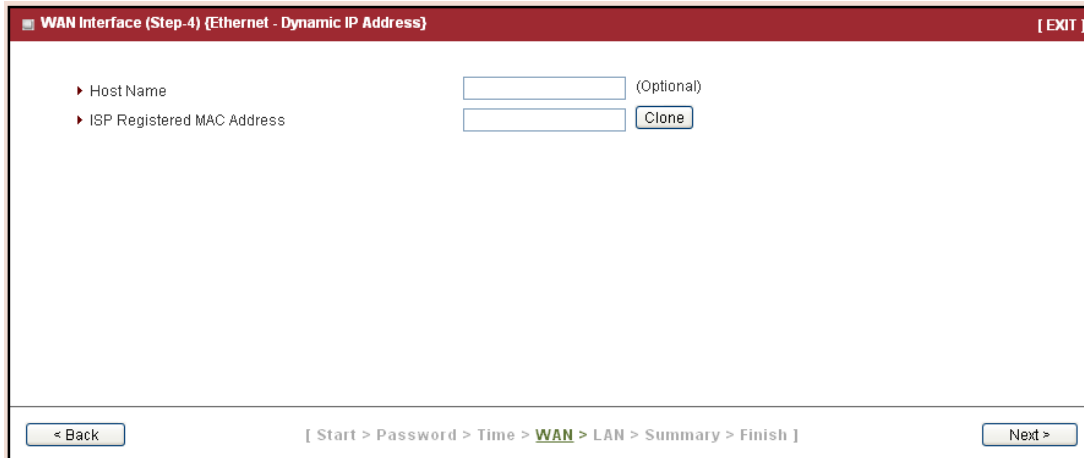
If you choose Ethernet->Static IP Address, you need to input all IP address that you get from ISP (Internet Service Provider) manually. This Static IP WAN Type option is usually chosen when you get a fixed IP address from ISP.



Press “Next” to continue.

Step 4-2: Ethernet (Dynamic IP Address)

If you choose Ethernet->Dynamic IP Address, you can input host name or registered MAC address when your ISP requests it. In most cases, you can leave them as blank and go to next. This Dynamic IP WAN Type option is usually chosen when you get a dynamic IP address from ISP.

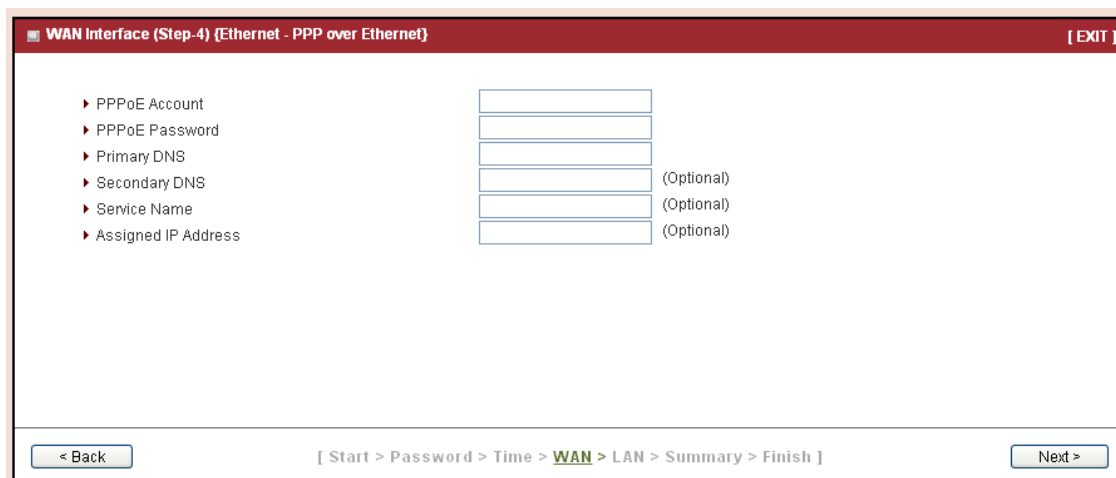


The screenshot shows a configuration window titled "WAN Interface (Step-4) (Ethernet - Dynamic IP Address)" with an "[EXIT]" button in the top right corner. The main area contains two fields: "Host Name" with an input box and "(Optional)" text, and "ISP Registered MAC Address" with an input box and a "Clone" button. At the bottom, there is a navigation bar with a "< Back" button, a breadcrumb trail "[Start > Password > Time > WAN > LAN > Summary > Finish]", and a "Next >" button.

Press “Next” to continue.

Step 4-3: Ethernet (PPPoE)

If you choose Ethernet->PPP over Ethernet (so-called PPPoE), you need to input account and password that you get from ISP. For other fields, you can leave them as blank in most cases. This PPPoE WAN Type option is usually chosen when you use ADSL for WAN connection.



The screenshot shows a configuration window titled "WAN Interface (Step-4) (Ethernet - PPP over Ethernet)" with an "[EXIT]" button in the top right corner. The main area contains six fields: "PPPoE Account", "PPPoE Password", "Primary DNS", "Secondary DNS", "Service Name", and "Assigned IP Address", each with an input box. The last three fields have "(Optional)" text to their right. At the bottom, there is a navigation bar with a "< Back" button, a breadcrumb trail "[Start > Password > Time > WAN > LAN > Summary > Finish]", and a "Next >" button.

Press “Next” to continue.

Step 4-4: Ethernet (PPTP)

If you choose Ethernet->PPTP, you need to input required dial-up information that you get from ISP. This PPTP WAN Type option is usually chosen when your ISP requests it.

The screenshot shows a configuration window titled "WAN Interface (Step-4) (Ethernet - PPTP)" with an "[EXIT]" button in the top right corner. On the left, there is a list of configuration items with expandable arrows: IP Mode, WAN IP Address, WAN Subnet Mask, WAN Gateway, Server IP Address / Name, PPTP Account, and PPTP Password. On the right, there are corresponding input fields: a dropdown menu for IP Mode set to "Dynamic IP Address", and text input boxes for WAN IP Address, WAN Subnet Mask, WAN Gateway, Server IP Address / Name, PPTP Account, and PPTP Password. At the bottom, there is a navigation bar with a "< Back" button on the left, a breadcrumb trail "[Start > Password > Time > WAN > LAN > Summary > Finish]" in the center, and a "Next >" button on the right.

Press "Next" to continue.

Step 4-5: Ethernet (L2TP)

If you choose Ethernet->L2TP, you need to input required dial-up information that you get from ISP. This L2TP WAN Type option is usually chosen when your ISP requests it.

The screenshot shows a configuration window titled "WAN Interface (Step-4) (Ethernet - L2TP)" with an "[EXIT]" button in the top right corner. On the left, there is a list of configuration items with expandable arrows: IP Mode, WAN IP Address, WAN Subnet Mask, WAN Gateway, Server IP Address / Name, L2TP Account, and L2TP Password. On the right, there are corresponding input fields: a dropdown menu for IP Mode set to "Dynamic IP Address", and text input boxes for WAN IP Address, WAN Subnet Mask, WAN Gateway, Server IP Address / Name, L2TP Account, and L2TP Password. At the bottom, there is a navigation bar with a "< Back" button on the left, a breadcrumb trail "[Start > Password > Time > WAN > LAN > Summary > Finish]" in the center, and a "Next >" button on the right.

Press "Next" to continue.

Step 5: LAN

LAN Interface setting. Change the LAN IP address and subnet mask of this gateway. You can keep the default setting and go to next step.

Ethernet LAN Interface (Step-5) [EXIT]

▶ LAN IP Address 192.168.123.254
▶ Subnet Mask 255.255.255.0 (/24)

< Back [Start > Password > Time > WAN > LAN > Summary > Finish] Next >

Press “Next” to continue.

Step 6: Confirm and Apply

Check the new settings again. If all information is correct, please press “Apply” button to save new settings. Then it will take 95 seconds to restart this gateway and take new settings effective.

Wired Router Network Setup Summary & Apply (Step-6) [EXIT]

Please confirm the information below.

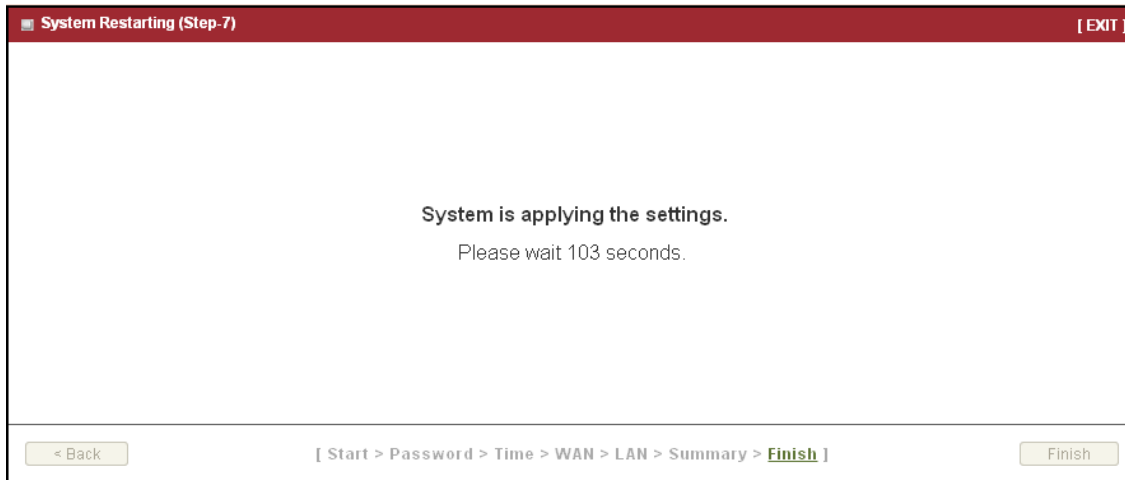
[WAN Settings]	
WAN Interface	Ethernet
WAN Type	L2TP
WAN IP Address	
WAN Subnet Mask	
WAN Gateway	
Server IP Address / Name	
L2TP Account	
L2TP Password	*****

[Ethernet LAN Settings]	
IP Address	192.168.123.254
Subnet Mask	255.255.255.0

Cancel [Start > Password > Time > WAN > LAN > Summary > Finish] Apply

Step 7: Counting Down

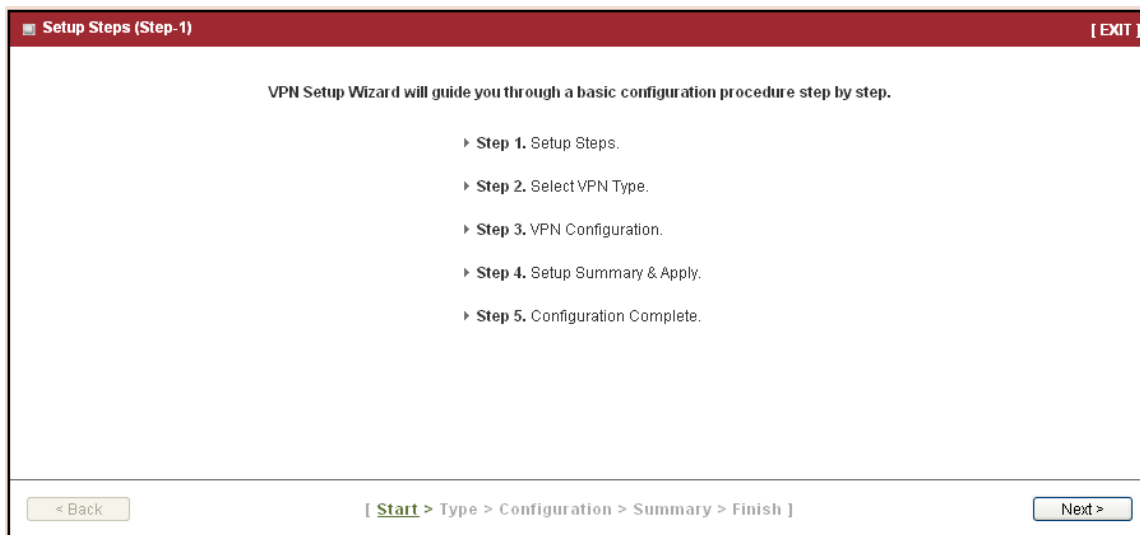
Configuration is completed. Press “Finish” button to close Setup Wizard and browser counts down for 65 seconds and provides you with “Click here” button to reconnect to the device.



Configure with the VPN Setup Wizard

Step 1

The VPN setup wizard will guide you to finish profiles of IPSec, PPTP and L2TP VPN connection quickly.



Press “Next” to start the wizard.

Step 2: VPN Type

Select type of VPN connection you want to create. Here you can choose IPSec, PPTP, L2TP or GRE.

Select VPN Type (Step-2) [EXIT]

VPN Type

IPSec
IPSec
PPTP
L2TP
GRE

< Back [Start > Type > Configuration > Summary > Finish] Next >

Press “Next” to continue.

Step 2-1: IPSec

If you choose IPSec, there are five options of tunnel scenario which can be chosen. “Site to Site” is for two offices to create a VPN tunnel. “Site to Host” is for one office to create a VPN tunnel to the control center. “Host to Site” is for the device as the control center to create a VPN tunnel to a branch office. “Host to Host” is for creating a peer to peer secure tunnel.

VPN Configuration (Step-3) (IPSec) [EXIT]

Tunnel Name IPSec #1

Tunnel Scenario Site to Site

Local Subnet 10.0.75.0

Local Netmask 255.255.255.0

Remote Subnet 10.0.76.0

Remote Netmask 255.255.255.0

Remote Gateway www.ipsec.com.lv

Pre-shared Key 1234567890

< Back [Start > Type > Configuration > Summary > Finish] Next >

“Dynamic VPN” is for remote users to connect to the device securely. For other options, please go to Advanced Network >> VPN to setup. Input the required network information and pre-shared key for VPN connection.

For Dynamic VPN, you don't need to input network information of remote subnet and remote gateway.

The screenshot shows a configuration window titled "VPN Configuration (Step-3) (IPSec)" with an "[EXIT]" button in the top right corner. On the left, there is a list of configuration items with expandable arrows: Tunnel Name, Tunnel Scenario, Local Subnet, Local Netmask, Remote Subnet, Remote Netmask, Remote Gateway, and Pre-shared Key. On the right, there are input fields: a text box containing "Dynamic IPSec", a dropdown menu showing "Dynamic VPN", and several empty text boxes. At the bottom, there is a "< Back" button, a breadcrumb trail "[Start > Type > Configuration > Summary > Finish]", and a "Next >" button.

Press "Next" to continue.

Step 2-2: PPTP

If you choose PPTP, there are two options of mode can be chosen. Choose "Client" if you want this device to connect to another PPTP server. Or choose "Server" if you want other PPTP clients to connect to it.

The screenshot shows a configuration window titled "Select VPN Type (Step-2)" with an "[EXIT]" button in the top right corner. On the left, there is a list of configuration items with an expandable arrow: VPN Type. On the right, there are two dropdown menus: the first shows "PPTP" and the second shows "Server". At the bottom, there is a "< Back" button, a breadcrumb trail "[Start > Type > Configuration > Summary > Finish]", and a "Next >" button.

Press "Next" to continue.

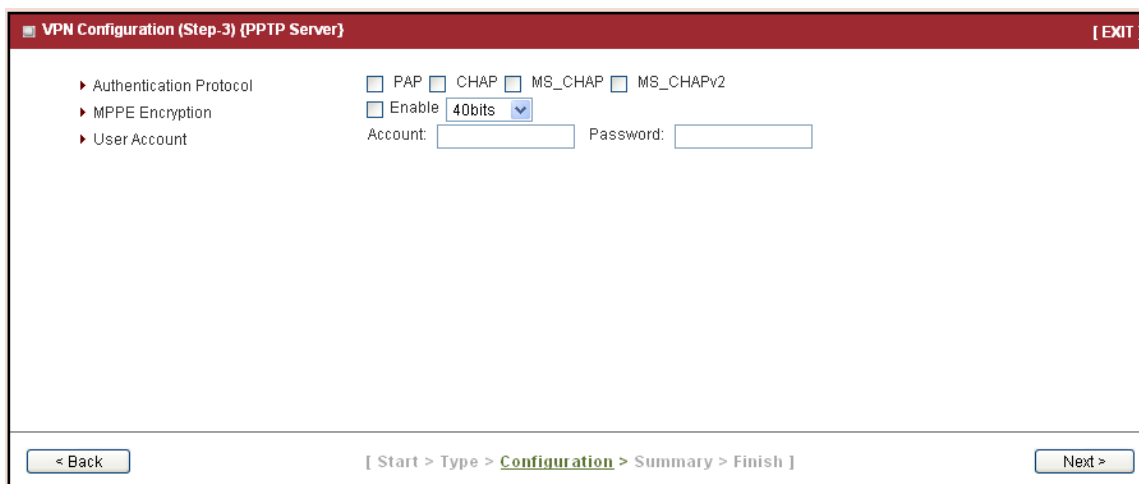
If you choose PPTP Client, please input tunnel name, IP/FQDN of PPTP server, username/password, authentication and MPPE options. Please make sure these

settings are accepted by PPTP server. Otherwise, remote PPTP server will reject the connection.



Press “Next” to continue.

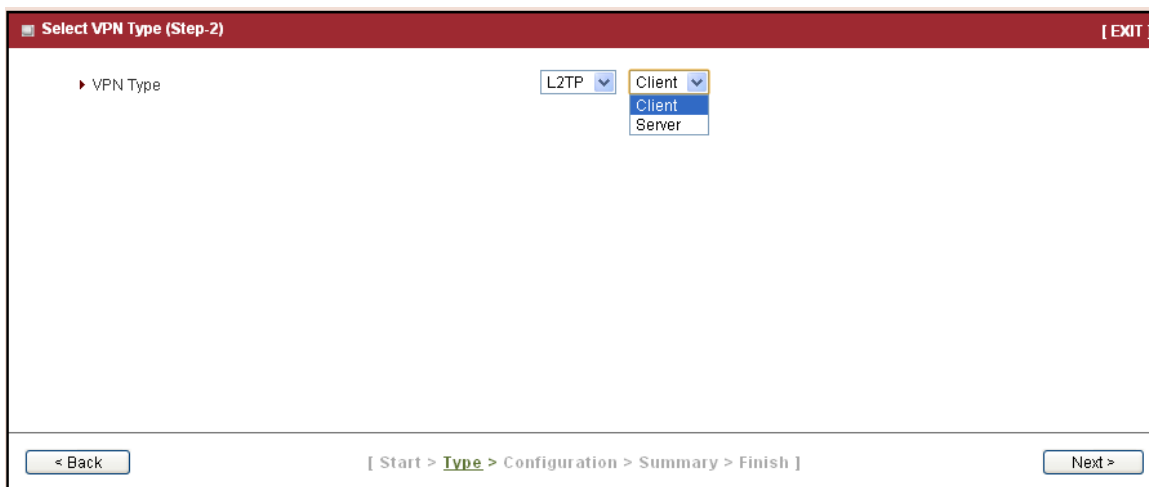
If you choose PPTP Server, please select options of authentication and MPPE. You also need to create a set of username and password for PPTP clients. In this wizard, you can only create one user account. If you want to create more user accounts, please go to Advanced Network >> VPN >> PPTP to add more users.



Press “Next” to continue.

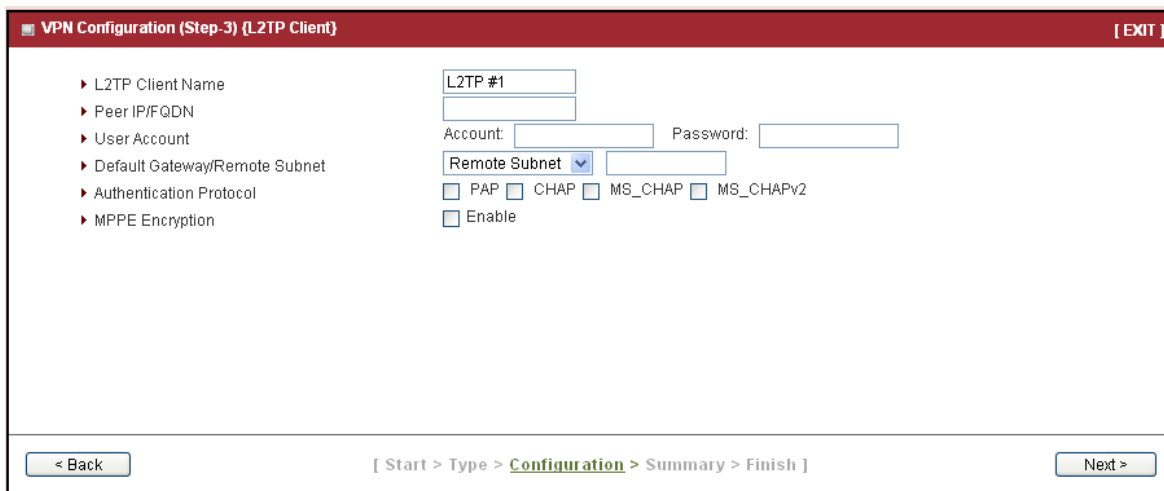
Step 2-3: L2TP

If you choose L2TP, there are two options of mode can be chosen. Choose “Client” if you want this device to connect to another L2TP server. Or choose “Server” if you want other L2TP clients to connect to it.



Press “Next” to continue.

If you choose L2TP Client, please input tunnel name, IP/FQDN of L2TP server, username/password, authentication and MPPE options. Please make sure these settings are accepted by L2TP server. Otherwise, remote L2TP server will reject the connection.



Press “Next” to continue.

If you choose L2TP Server, please select options of authentication and MPPE. You also need to create a set of username and password for L2TP clients. In this wizard, you can only create one user account. If you want to create more user accounts, please go to Advanced Network >> VPN >> L2TP to add more users.

VPN Configuration (Step-3) (L2TP Server) [EXIT]

- ▶ Authentication Protocol
 - PAP
 - CHAP
 - MS_CHAP
 - MS_CHAPv2
- ▶ MPPE Encryption
 - Enable
 - 40bits
- ▶ User Account
 - Account:
 - Password:

[< Back] [Start > Type > **Configuration** > Summary > Finish] [Next >]

Press “Next” to continue.

Step 3: Confirm and Apply

Confirm new settings. If all new settings are correct, please press “Apply” button to save these new settings and make them effective.

Setup Summary & Apply (Step-4) [EXIT]

Please confirm the information below.

[VPN Type]	
VPN Type	IPSec

[VPN Settings]	
Tunnel Name	IPSec #1
Tunnel Scenario	Site to Site
Local Subnet	10.0.75.0
Local Netmask	255.255.255.0
Remote Subnet	10.0.76.0
Remote Netmask	255.255.255.0
Remote Gateway	www.ipsec.com.tw
Pre-shared Key	1234567890

[Cancel] [Start > Type > Configuration > **Summary** > Finish] [Apply]

FAQ

Following are the solutions to problems that may occur during the installation and operation of the **Digisol DG-WU2005V**.

1 Why can't I configure the router even when the cable is plugged and the LED is lit?

Do a Ping test to make sure that the Wireless Access Controller is responding.

Note: It is recommended that you use an Ethernet connection to configure it

Go to **Start > Run**.

1. Type **cmd**.



2. Press **OK**.
3. Type **ipconfig** to get the IP of default gateway.
4. Type **“ping 192.168.123.254”**. Assure that you ping the correct IP Address assigned to this wireless access controller. It will show four replies if you ping correctly.

```
Pinging 192.168.123.254 with 32 bytes of data:  
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64  
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64  
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64  
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
```

Ensure that your Ethernet Adapter is working, and that all network drivers are installed properly. Network adapter names will vary depending on your specific adapter. The installation steps listed below are applicable for all network adapters.

1. Go to **Start > Right click on “My Computer” > Properties**.
2. **Select the Hardware Tab**.
3. Click **Device Manager**.
4. Double-click on **“Network Adapters”**.
5. Right-click on **Wireless Card bus Adapter** or **your specific network adapter**.
6. Select **Properties** to ensure that all drivers are installed properly.

7. Look under **Device Status** to see if the device is working properly.
8. Click “OK”.

2 What can I do if my Ethernet connection does not work properly?

1. Make sure the RJ45 cable connects with the router.
2. Ensure that the setting on your Network Interface Card adapter is “Enabled”.
3. If settings are correct, ensure that you are not using a crossover Ethernet cable, not all Network Interface Cards are MDI/MDIX compatible, and using a patch cable is recommended.
4. If the connection still does not work properly, then you can reset it to default.

3 How to reset to default?

1. Ensure that the wireless access controller is powered on
2. Find the **Reset** button on the right side
3. Press the **Reset** button for 8 seconds and then release.
4. After the wireless access controller reboots, it gets back to the factory **default** settings.

This product comes with One Year warranty. For further details about warranty policy and Product Registration, please visit support section of www.smartlink.co.in



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