NFW-560

Quick Installation Guide

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Quick Installation Guide

Hardware Installation

H.1 Front panel: （Figure H-1）

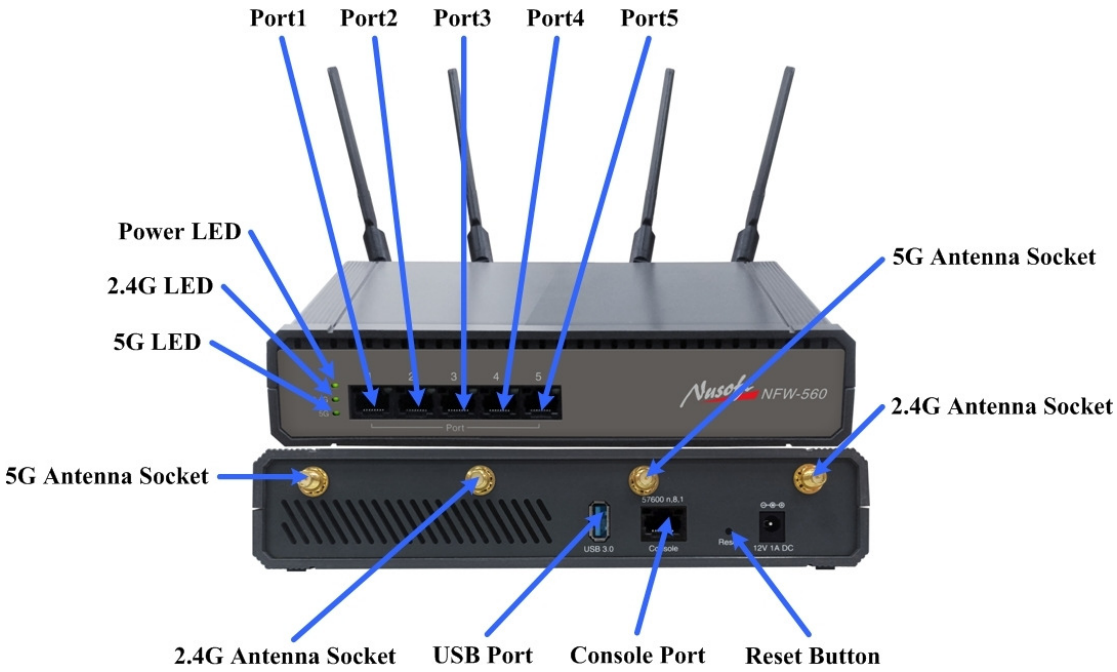


Figure H-1 Front Panel of the NFW-560

- **Power LED:** Lights up in green when power is on.
- **2.4G LED**: Steady green indicates 2.4G Wi-Fi is enabled. Flashing green indicates users are accessing the Internet via 2.4G Wi-Fi.
- **5G LED**: Steady green indicates 5G Wi-Fi is enabled. Flashing green indicates users are accessing the Internet via 5G Wi-Fi.
- **Console Port:** Uses a RJ-45 connector for troubleshooting or, if needed, resetting the device to the factory default settings.
- **Port 1 / 2 / 3 / 4 / 5** can be defined as:
  - LAN Port: For connecting to a switch.
  - WAN Port: For connecting to a perimeter router.
  - DMZ Port: For providing the public with services, such as email or Web, using a physically-separated network segment, while at the same time preventing any potential security threats.
- **2.4G Antenna Socket**: Connects the 2.4G antenna to NFW-560. (using the accessory 5dBi omni-directional antenna)
- **5G Antenna Socket**: Connects the 5G antenna to NFW-560. (using the accessory 5dBi omni-directional antenna)

- **USB Port**:
  - Connects the USB disk (a hard disk is recommended) for storing the operation logs. (Note: The USB disk is required to be formatted before using. Therefore, make sure to back up your data)
  - Connects the 3G/4G modem.
- **Reset Button**: For resetting NFW-560 to factory default settings.

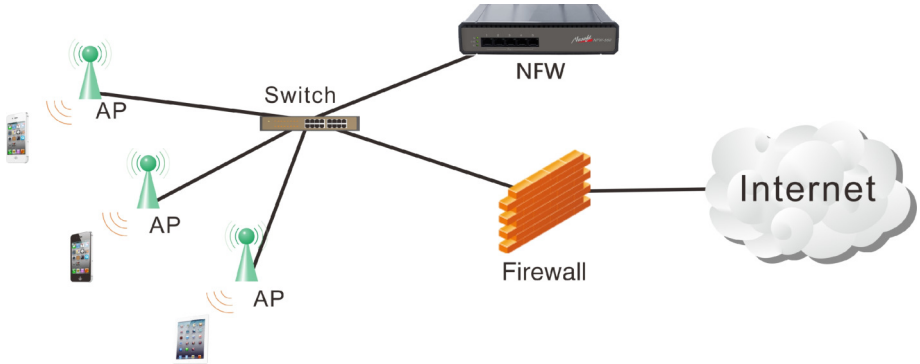
Note：

1. Port LED Indications:
- Flashing green indicates that packets are processed through the device.
- Steady green indicates a link speed at 10/100/1000 Mbps.

2. When connecting both USB disk and 3G/4G modem to the USB port, a USB hub with power adapter is required.

H.2 NFW-560 Deployment：（Figure H-2）

- **Non-inline mode:** The unit is attached to your LAN switch without any network interference. It is best suited for a network where management is needed for wireless clients.（Figue H-2）



Figue H-2 NFW-560 Deployed in Non-inline Mode

- **Inline mode:** The unit is deployed between your existing firewall and LAN without a change being made to the current infrastructure. It is best suited for a network where advanced security and management are needed for both the wired and wireless traffic.（Figure H-3）

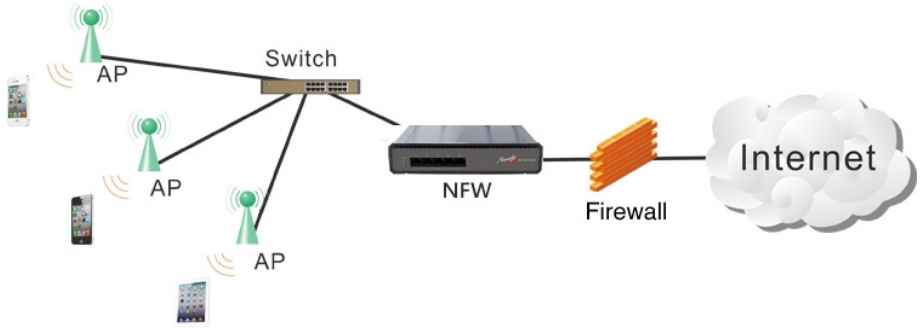


Figure H-3 NFW-560 Deployed in Inline Mode

- **Gateway mode:** The unit is deployed to replace your existing firewall. It is best suited for a network where outbound load balancing and advanced management are needed for both the wired and wireless traffic.（Figure H-4）

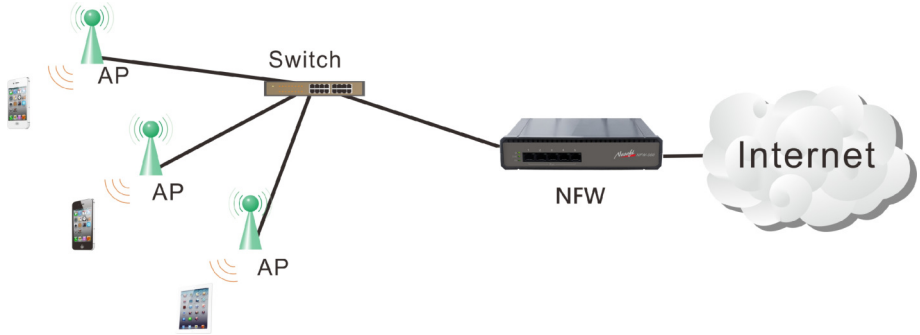


Figure H-4 NFW-560 Deployed in Gateway Mode

Basic System Configuration

Step 1. Connect the IT administrator's network adaptor and NFW-560's port1 (LAN1) to the same hub / switch, and then launch a browser (IE or Firefox) to link the management interface at http://192.168.1.1.

Step 2. The browser prompts you for the login credentials. (Both are "admin" by default.) (**Figure S-1**)

Figure S-1 Typing in the User Name and Password

Step 3. The user interface consists of the following two panels: (**Figure S-2**)

- **Menu Panel**: Presents all the available system configurations in a tree directory structure. (See Overview of Functions for further details)
- **Configuration Panel**: Displays the data or configurable settings of the corresponding item selected on the **Menu Panel**.

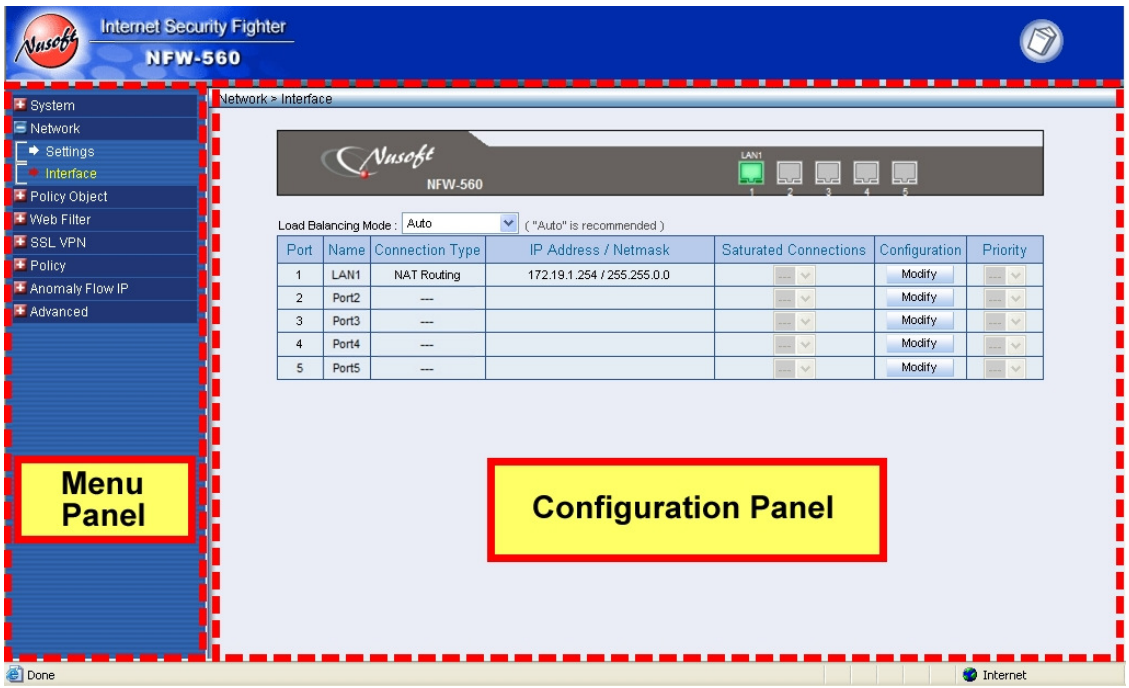


Figure S-2 The NFW-560's Management Interface

Note：

1. For your reference, you may configure your management address based on the available subnet ranges below.

10.0.0.0 ~ 10.255.255.255
172.16.0.0 ~ 172.31.255.255
192.168.0.0 ~ 192.168.255.255

Step 4. At the first login, you will be guided through the basic settings that are required to install NFW-560 by the wizard. （**Figure S-3**）

Figure S-3 The Install Wizard

Step 5. Select the language and character encoding for your management interface. （**Figure S-4**）

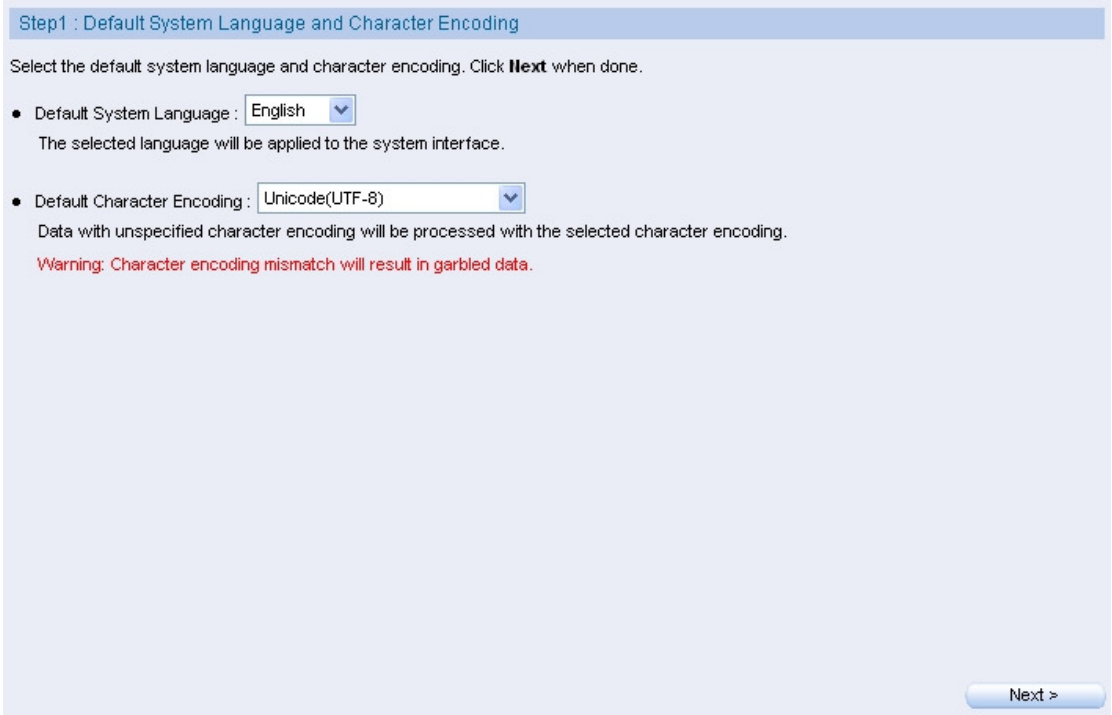


Figure S-4 Selecting the Language and Default Character Encoding

Important：

1. The default encoding will be applied to the data of unspecified encoding.

Deploying NFW-560 in Gateway Mode

Step 6. Configure the LAN settings: (according to your network infrastructure). **（Figure S-5）**

- Specify the **IPv4 Address** and **Netmask**.

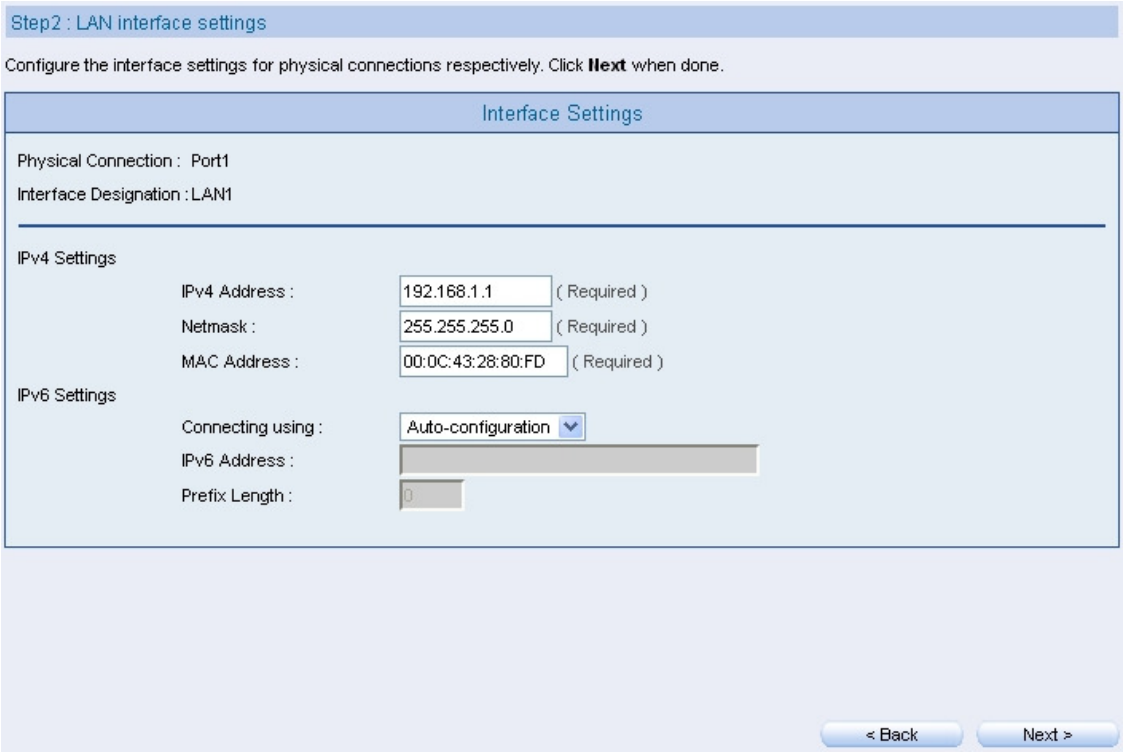


Figure S-5 Configuring the LAN Interface Settings

Important :

1. The access to the management interface is subject to the **Interface Settings** from the **Installation Wizard Step2**. Therefore, enter the management address to a Web browser correspondingly if any change has been made to the default IP address (192.168.1.1).

Step 7. Configure the WAN Interface (please refer to your ISP for the details).(**Figure S-6**)

- Select your **Connection Type**.
- Complete the remaining fields according your network.

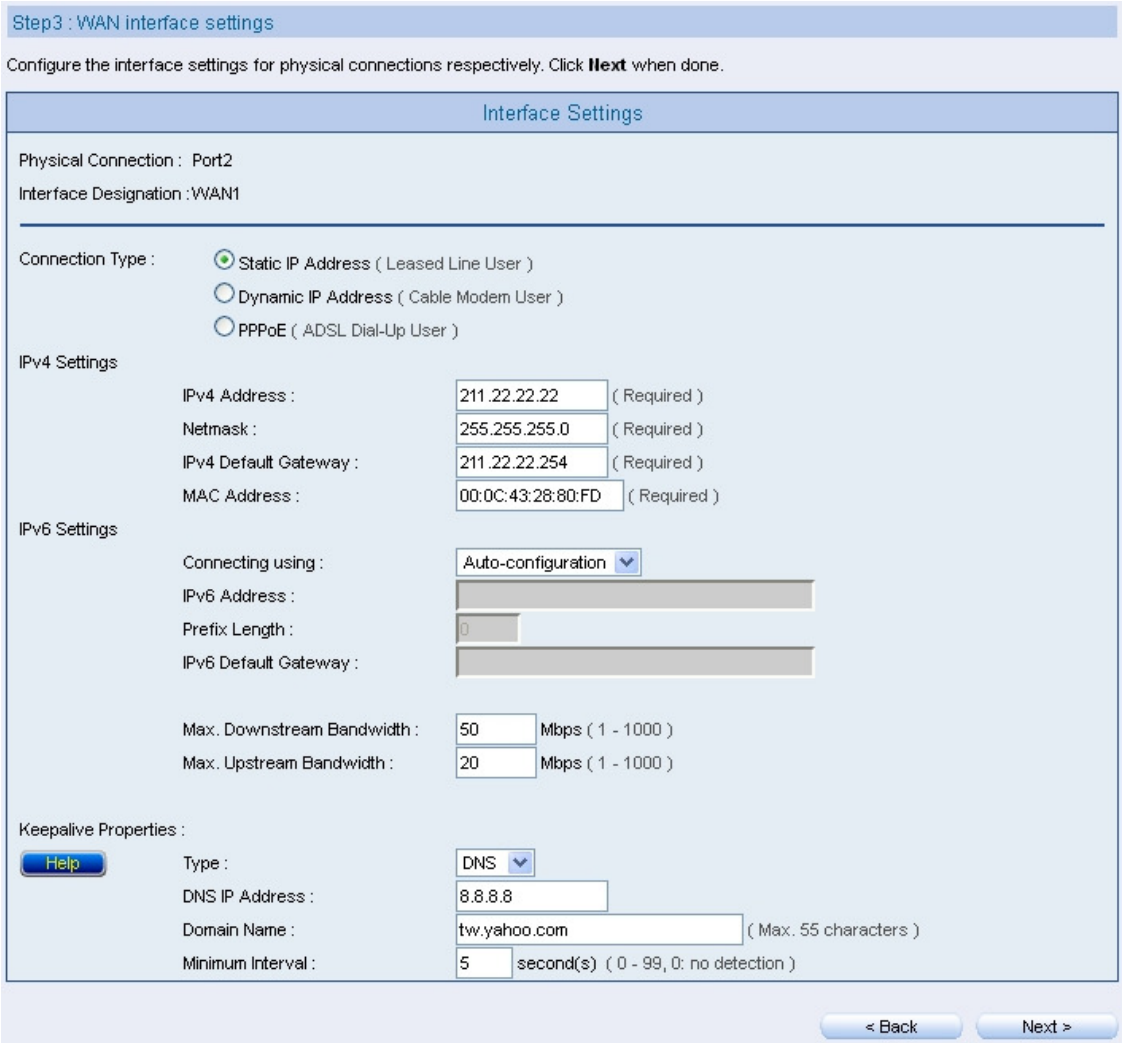


Figure S-6 WAN Configuring the WAN Interface Settings

Step 8. Tick the box of "**Synchronize to an NTP server**" to ensure the accuracy of system clock. (**Figure S-7**)

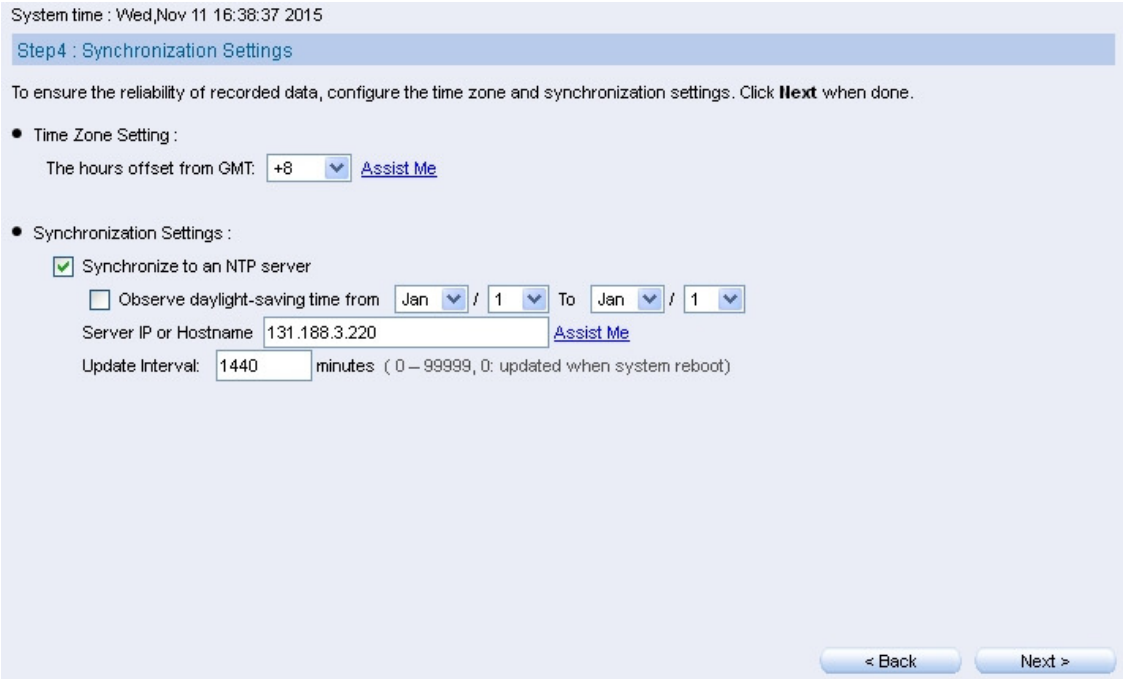


Figure S-7 Configuring the System Clock Settings

Step 9. Configure the wireless network settings. (**Figure S-8**)

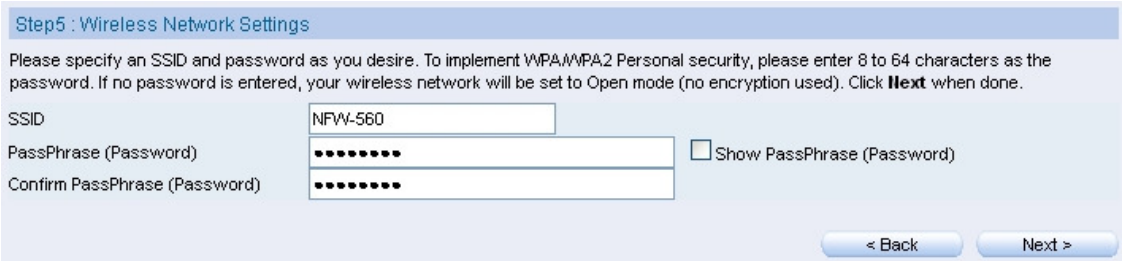


Figure S-8 The Wireless Network Settings

Step 10. This step confirms what interface addresses have been assigned to NFW-560. (**Figure S-9**)

Step6 : Settings Confirmation

Confirm the settings made from previous steps. Click **Finish** to complete the installation when confirmed. If not, click **Back** to modify settings.

Port	Name	Forwarding Mode	IP Address / Netmask
1	LAN1	NAT	192.168.1.1 / 255.255.255.0
2	WAN1	Static IP	211.22.22.22 / 255.255.255.0
3	Port3	---	0.0.0.0 / 0.0.0.0
4	Port4	---	0.0.0.0 / 0.0.0.0
5	Port5	---	0.0.0.0 / 0.0.0.0

CAUTION: Please connect your LAN hub or switch to Port 1 and your xDSL / cable modem to Port 2.

Wireless network is configured as the following:

SSID	Authentication	Password
NFW-560	WPA / WPA2 Personal	12345611

CAUTION: To add or modify an SSID and password at a later time, please go to AP Controller > Configuration > SSID Profile.

< Back Finish >

Figure S-9 Confirmation on Interface Settings

Step 11. Installation is completed after clicking **Finish** from the previous step. (**Figure S-10**)

Installation Wizard

Installation completed. The page will reload automatically in 5 seconds.

Figure S-10 Installation Completed

Note：

1. After the completion of wizard, an outgoing network policy is created correspondingly under **Policy > Outgoing**. （**Figure S-11**）
   - **Source Address** is defaulted to “Inside_Any”.
   - **Destination Address** is defaulted to “Outside_Any”.
   - **Service** is defaulted to “Any”.

Figure S-11 The Policy Allowing LAN Users to Access External Network Resources

2. To allow Internet access to LAN users, assign their PCs with static IP addresses within the same subnet as NFW-560 as well as designate NFW-560 as the default gateway. Otherwise, enable DHCP service to automatically distribute IP addresses to them. LAN traffic can be regulated by the means of network policies if desired.

Deploying NFW-560 in Non-inline Mode

On the existing firewall, specify a LAN subnet 172.19.x.x/16 (with the gateway set to 172.19.1.254)
Place NFW-560 on the LAN behind the firewall.

Step 6. Configure the LAN interface as below (using the subnet of 192.168.1.x/24): **(Figure S-12)**

- Specify the **IPv4 Address** and **Netmask**.

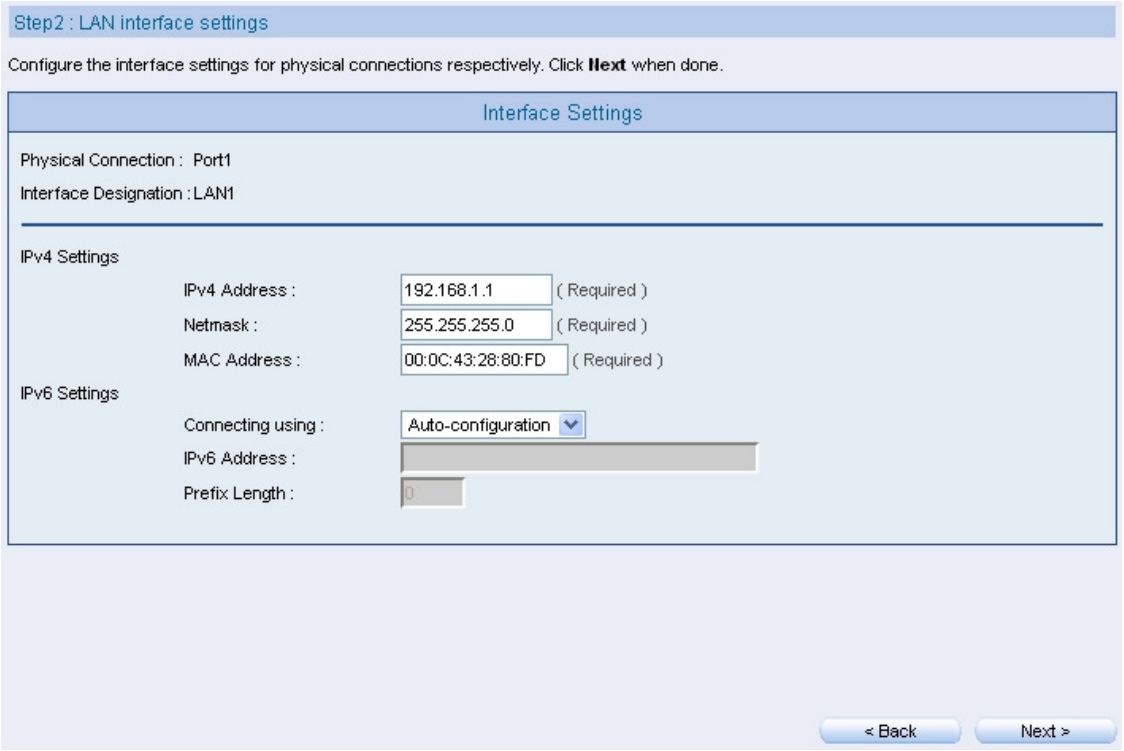


Figure S-12 Configuring the LAN 1 Interface Settings

Step 7. Configure the WAN interface as below (using the subnet of 172.19.20.x/16): (**Figure S-13**)

- Select your **Connection Type**.
- Complete the remaining fields according to your network.

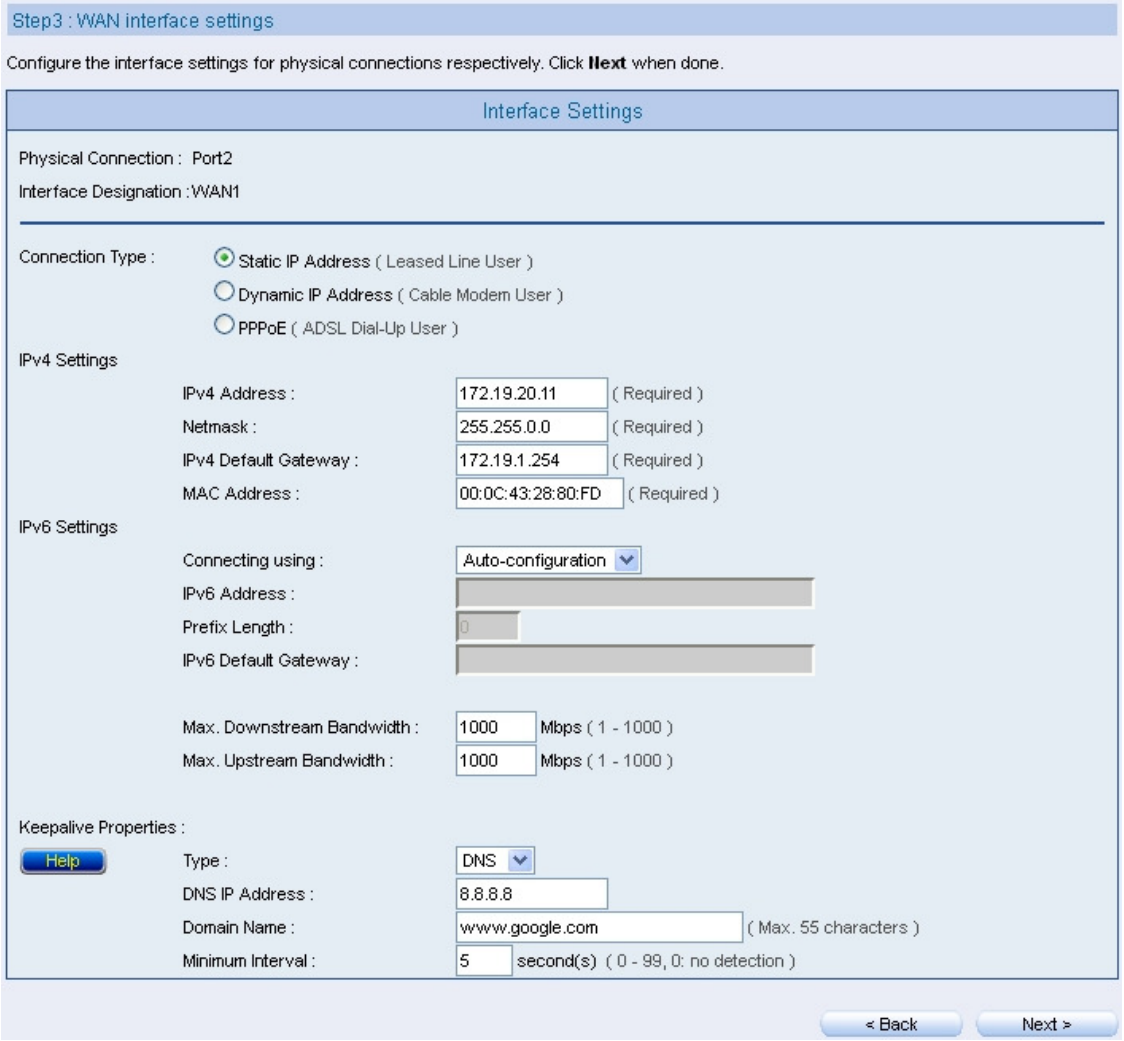


Figure S-13 Configuring the WAN 1 Interface Settings

Step 8. Tick the box of "Synchronize to an NTP server" to ensure the accuracy of system clock. (**Figure S-14**)

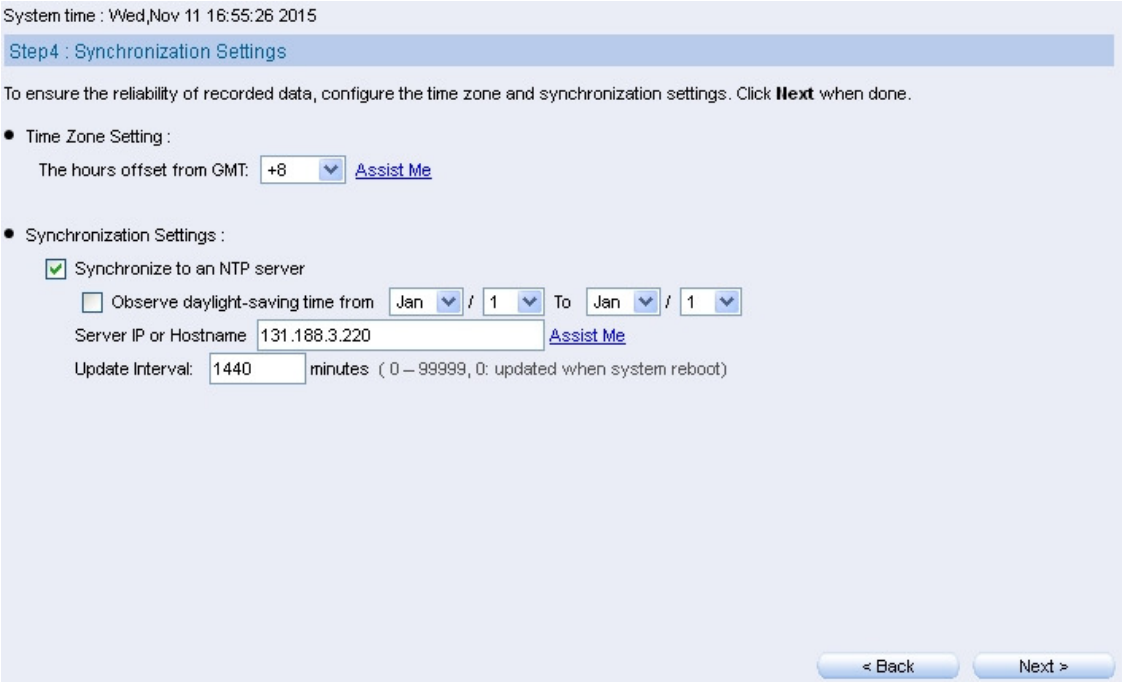


Figure S-14 Configuring the System Clock Settings

Step 9. Configure the wireless network settings. (**Figure S-15**)

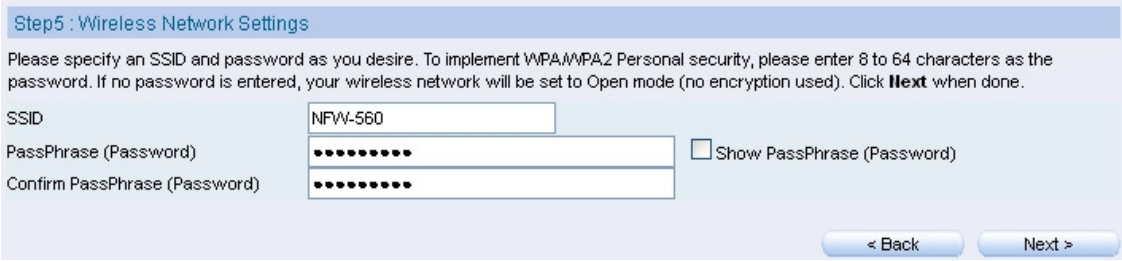


Figure S-15 The Wireless Network Settings

Step 10. This step confirms what interface addresses have been assigned to NFW-560. (**Figure S-16**)

Step6 : Settings Confirmation

Confirm the settings made from previous steps. Click **Finish** to complete the installation when confirmed. If not, click **Back** to modify settings.

Port	Name	Forwarding Mode	IP Address / Netmask
1	LAN1	NAT	192.168.1.1 / 255.255.255.0
2	WAN1	Static IP	172.19.20.11 / 255.255.0.0
3	Port3	---	0.0.0.0 / 0.0.0.0
4	Port4	---	0.0.0.0 / 0.0.0.0
5	Port5	---	0.0.0.0 / 0.0.0.0

CAUTION: Please connect your LAN hub or switch to Port 1 and your xDSL / cable modem to Port 2.

Wireless network is configured as the following:

SSID	Authentication	Password
NFW-560	WPA / WPA2 Personal	123456789

CAUTION: To add or modify an SSID and password at a later time, please go to AP Controller > Configuration > SSID Profile.

< Back Finish >

Figure S-16 Confirmation on Interface Settings

Step 11. Installation is completed after clicking **Finish** from the previous step. (**Figure S-17**)

Installation Wizard

Installation completed. The page will reload automatically in 5 seconds.

Figure S-17 Installation Completed

Step 12. Under **Network > Interface**, set as shown below: (**Figure S-18**)

- Click **Modify** corresponding to the Port 1.
- Select "LAN" for **Interface Type**.
- Select "Transparent Bridging" for **Connection Type**.
- Tick the boxes of "Ping/ Tracert", "HTTP" and "HTTPS".
- Click **OK**.

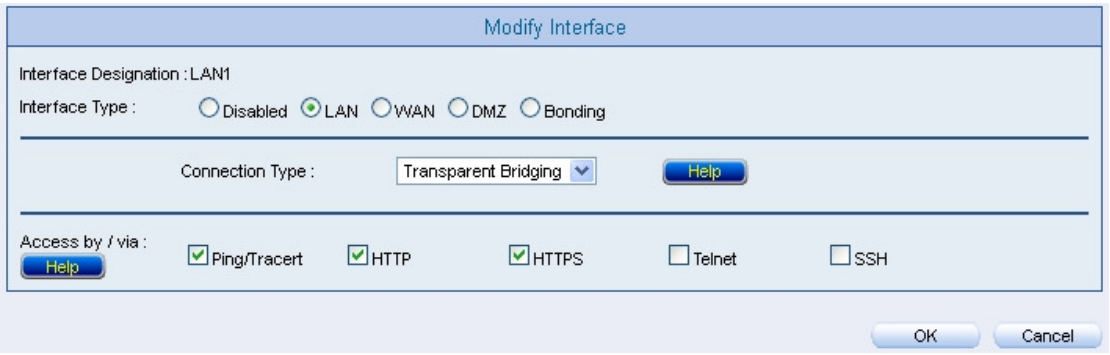
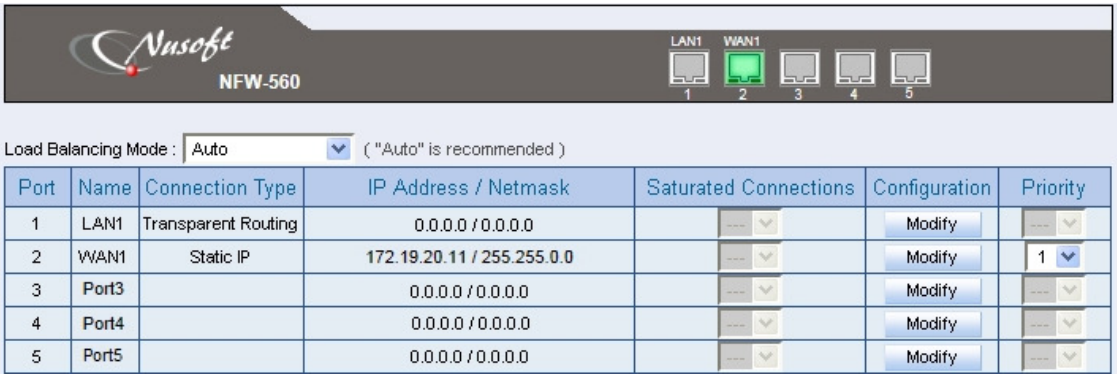


Figure S-18 Configuring the LAN 1 Interface Settings

Step 13. Connect NFW-560's Port 2 (WAN 1) to your LAN switch or hub and remove the connection on Port 1 (LAN 1). (**Figure S-19**)



Port	Name	Connection Type	IP Address / Netmask	Saturated Connections	Configuration	Priority
1	LAN1	Transparent Routing	0.0.0.0 / 0.0.0.0	---	Modify	---
2	WAN1	Static IP	172.19.20.11 / 255.255.0.0	---	Modify	1
3	Port3		0.0.0.0 / 0.0.0.0	---	Modify	---
4	Port4		0.0.0.0 / 0.0.0.0	---	Modify	---
5	Port5		0.0.0.0 / 0.0.0.0	---	Modify	---

Figure S-19 The Network Address Settings for Non-inline Mode

Important：

1. The access to NFW-560 is now available through the WAN 1 port only. Therefore, use the address specified for the WAN interface to access the management interface.

Step 14. Under **Network > Interface Group**, set as shown below：(**Figure S-20**)

- Select "Group 1" for **Port 1 (LAN 1)** and **Port 2 (WAN 1)**.
- Click **OK**.

Figure S-20 Grouping the Network Interfaces

Step 15. Under **AP Controller > Configuration > Settings**, configure the settings under the **AP Controller Settings** section. (**Figure S-21**)

- Select "**Port 1 (LAN 1)**" for **Connected Interface**.
- Click **OK**.

Figure S-21 Configuring the AP Controller Settings

Note：

1. After the completion of wizard, an outgoing network policy is created correspondingly under **Policy > Outgoing, Incoming, WAN to DMZ, LAN to DMZ, DMZ to WAN, DMZ to LAN, LAN to LAN, DMZ to DMZ**.
   - **Source Address** is defaulted to "Inside_Any".
   - **Destination Address** is defaulted to "Outside_Any".
   - **Service** is defaulted to "Any".
2. Wireless clients that are associated with a Nusoft AP may now access the Internet through NFW-560. To manage the wireless access, please create the needed **Policy Objects** and apply them to network policies.

Appendix: Product Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found 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.

PRODUCT USAGE RESTRICTIONS: This product is intended for indoor use only.