



Newbridge WaveStation 3812

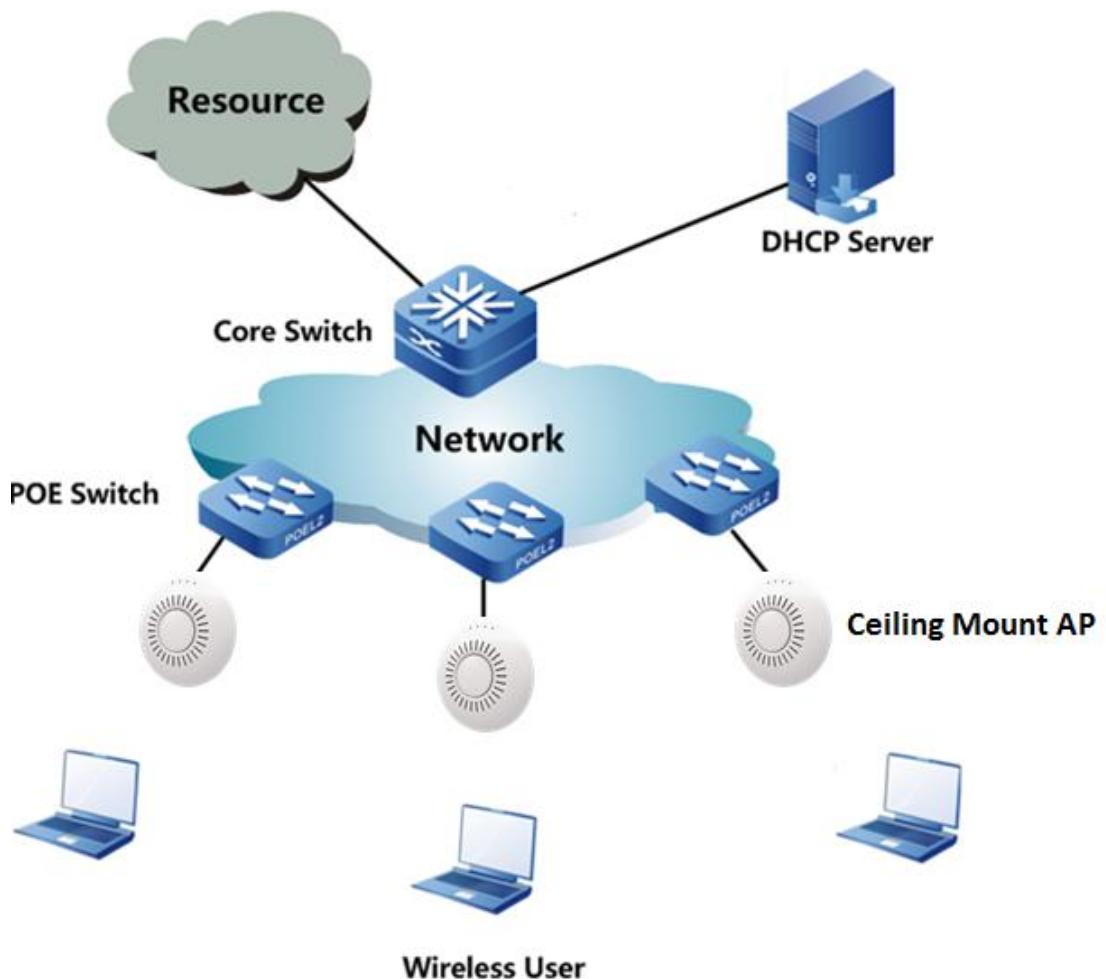
Operational Manual

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Typical Deployment Guide

1 Typical Diagram



2 Components

DHCP Server: To allocate IP address for each wireless user

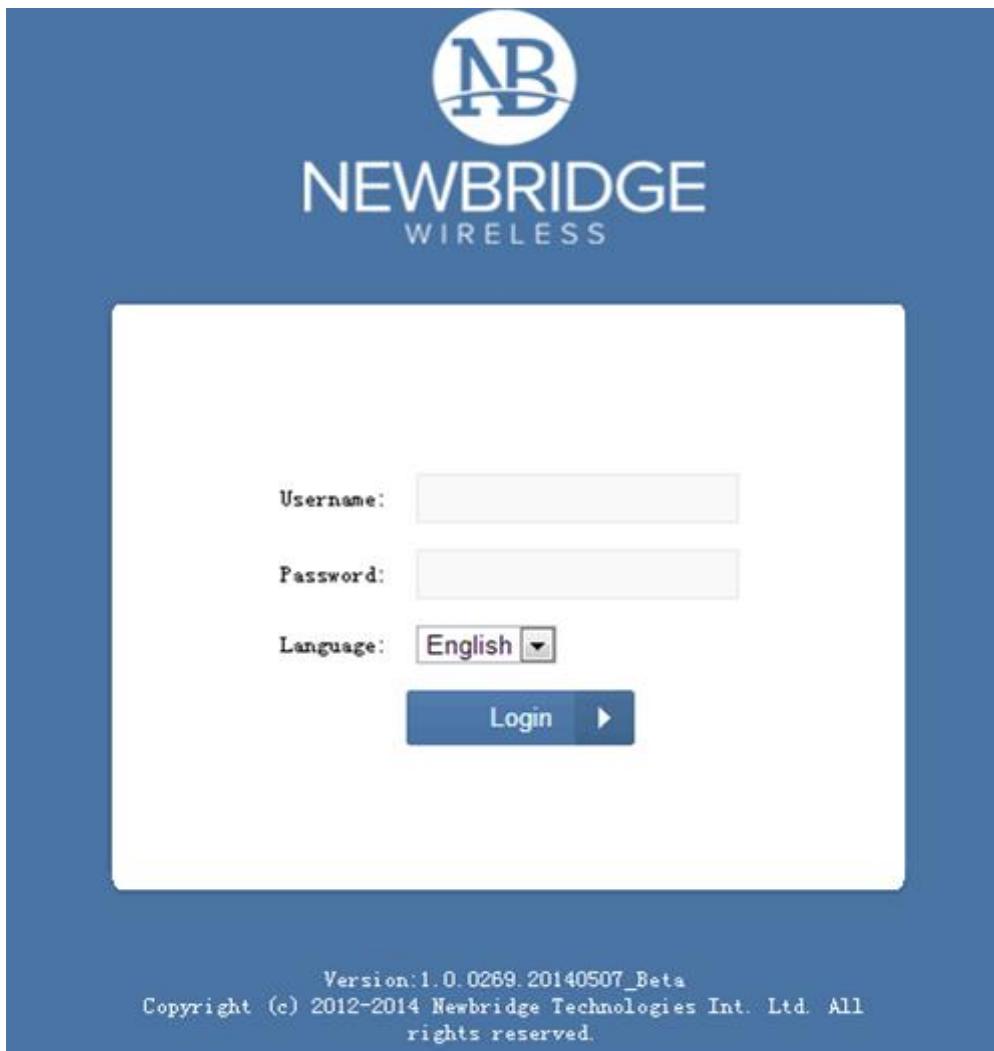
Core Switch: To forward traffic

POE Switch: To forward traffic and provide power supply to AP

Ceiling Mount AP: To bridge wired and wireless network

3 Deployment Procedure

- a. Login to AP web GUI,
Default IP address of AP is 192.168.1.2/24
Default user name and password are admin



- b. The default IP address of AP is 192.168.1.2/24, to click the notepad icon under Edit column to change it

192.168.1.2/edit_interface.html?id=1

Edit VLAN Interface

IP :	<input checked="" type="radio"/> Static <input type="radio"/> DHCP <input type="radio"/> None		
IP Address :	192.168.1.2	Primary DNS :	
Netmask :	255.255.255.0	Secondary DNS :	
Gateway IP :			
MTU:	1500		
DHCP Server:	<input type="checkbox"/>		

Apply **Reset**

c. AP default running on 802.11 g/n modes, change the desire mode else let it default. Set the Region Code to the respective country. For example, Malaysia

Basic Settings

Wireless Mode :	Access Point
Region Code :	Malaysia
IEEE 802.11 Mode :	802.11gn
Channel Width :	20 MHz
Channel Shifting :	Disable
Channel :	auto
Tx Power :	24
Max TX Rate :	MCS 15 - 130 [300]

Advanced Settings

WMM Settings

Apply

d. Go to SSID menu

Wireless Settings

Wireless1	Wireless2	Wireless3	Wireless4
Wireless Availability : <input checked="" type="radio"/> Enable <input type="radio"/> Disabled Hide SSID : <input checked="" type="radio"/> Enable <input type="radio"/> Disabled SSID : Newbridge VLAN : 1 Mac Filter : Disable			

e. There's a default SSID "Newbridge" always there, you can just modify the "Newbridge" or choose to add a new SSID.

f. Override the default SSID to edit the SSID

g. Edit WLAN settings

Wireless Settings

Wireless1	Wireless2	Wireless3	Wireless4
<p>Wireless Availability : <input checked="" type="radio"/> Enable <input type="radio"/> Disabled</p> <p>Hide SSID : <input checked="" type="radio"/> Enable <input type="radio"/> Disabled</p> <p>SSID : Newbridge</p> <p>VLAN : 1</p> <p>Mac Filter : Disable</p>			

Wireless Availability: Enable or disable SSID

Hide SSID: Broadcast or not broadcast the SSID

SSID: SSID name

VLAN: VLAN ID that the SSID binded

Mac Filter: Enable or disable Mac Filter

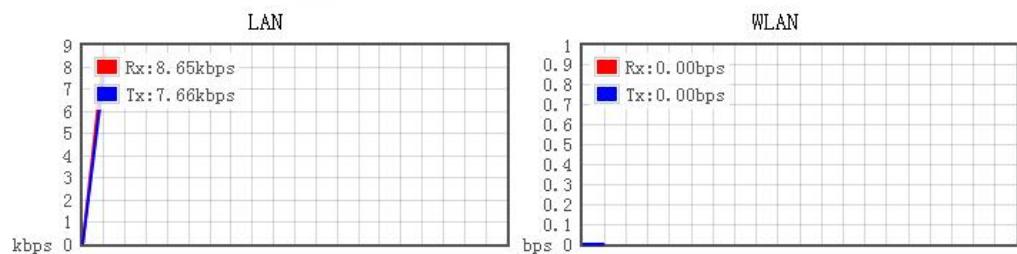
- h. To support multiple SSID, the port of POE switch connected to in wall AP required to allow all vlangs that binded to different SSID, as well as the port connected to DHCP server
- i. Ensure the layer 2 connectivity between AP and switch
- j. AP is plug and play so that just ensure it's powered by POE switch
- k. Go to WLAN Status and WLAN Clients menu to check their status

Status

WIRELESS	NETWORK	SYSTEM	
Radio			
Wireless Mode :	Access Point	Radio Mode :	11gn
Channel/Frequency :	6 / 2437	Tx Power :	24 dBm
Channel Width :	20 MHz	Tx Busy :	2
Region Code :	Malaysia	Rx Busy :	21
Max Rate :	144.4 Mbps	Total Busy :	24
TDCA :	Disable	Spectral Mode :	Disable
Wireless1  [Up]			
SSID :	Newbridge	BSSID :	FC:AD:0F:00:80:88
Security :	NONE	Assoc Number :	0
Wireless2  [Down]			
Wireless3  [Down]			
Wireless4  [Down]			

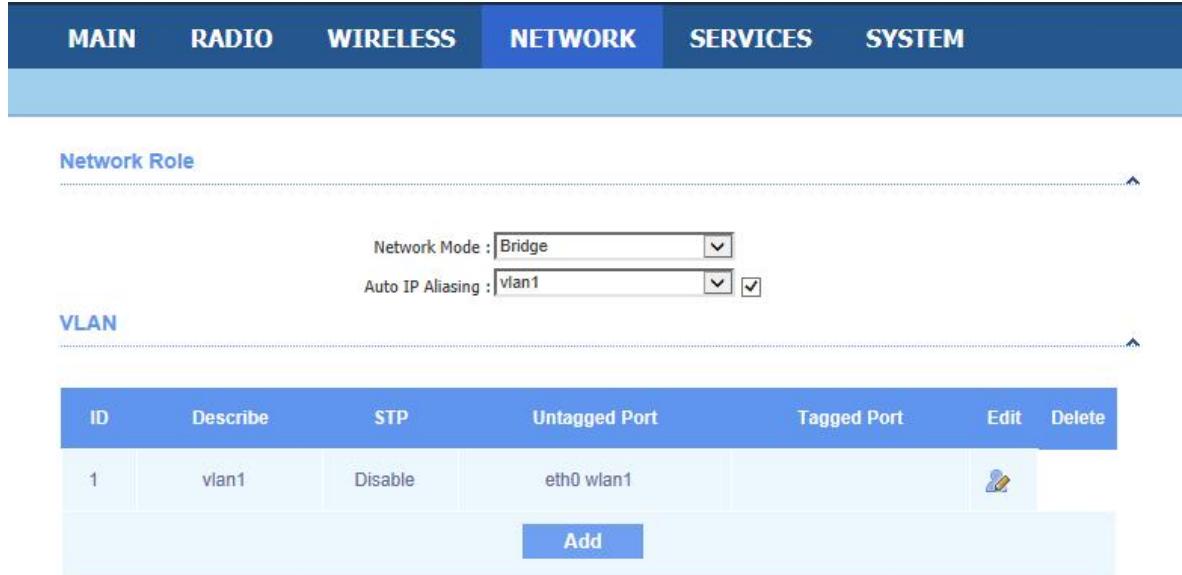
Monitor

[Throughput](#) | [Interfaces](#) | [ARP](#) | [STA Stats](#) | [Routes](#) | [Log](#)



4 VLAN Configuration

a. Go to Network and VLAN Menu and Click Add Button



The screenshot shows the 'Network Role' configuration page. At the top, there are tabs: MAIN, RADIO, WIRELESS, NETWORK (which is selected and highlighted in blue), SERVICES, and SYSTEM. Below the tabs, there is a 'Network Mode' dropdown set to 'Bridge' and an 'Auto IP Aliasing' dropdown set to 'vian1' with a checked checkbox. The main area is titled 'VLAN' and contains a table with the following data:

ID	Describe	STP	Untagged Port	Tagged Port	Edit	Delete
1	vian1	Disable	eth0 wlan1			

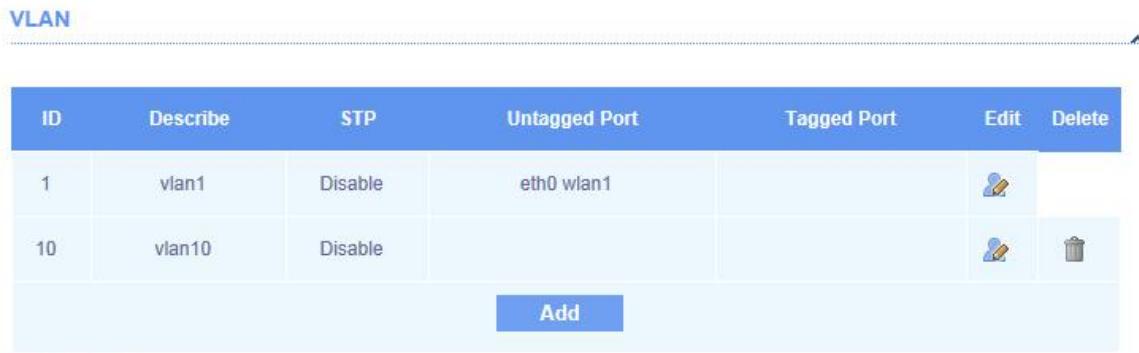
At the bottom of the table is a blue 'Add' button.

b. Define the VLAN ID and click Apply button



The screenshot shows a 'New VLAN' dialog box. It has a 'VLAN ID' input field containing '10' and a note '(Range:1-4094)'. Below the input field is a blue 'Apply' button.

c. Click Edit on the VLAN ID 10



The screenshot shows the 'VLAN' configuration table again. The 'Untagged Port' for VLAN 10 is now listed as 'eth0 wlan1'. The table data is as follows:

ID	Describe	STP	Untagged Port	Tagged Port	Edit	Delete
1	vian1	Disable	eth0 wlan1			
10	vlan10	Disable				

At the bottom of the table is a blue 'Add' button.

d. Assign port eth0 VLAN 10 and click Apply button

Edit VLAN

VLAN ID :	10		
VLAN Description :	vian10		
STP :	<input type="checkbox"/>		
Port :	Untagged Port	Tagged Port	No Member
eth0 :	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
wlan1 :	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<input type="button" value="Apply"/> <input type="button" value="Reset"/>			

e. Click Apply button

VLAN

ID	Describe	STP	Untagged Port	Tagged Port	Edit	Delete
1	vlan1	Disable	eth0 wlan1			
10	vian10	Disable		eth0		
<input type="button" value="Add"/>						

VLAN Interface

Static Routes

Traffic Shaping

f. Click Save button to activate the changes

Configuration contains changes. Save these changes?

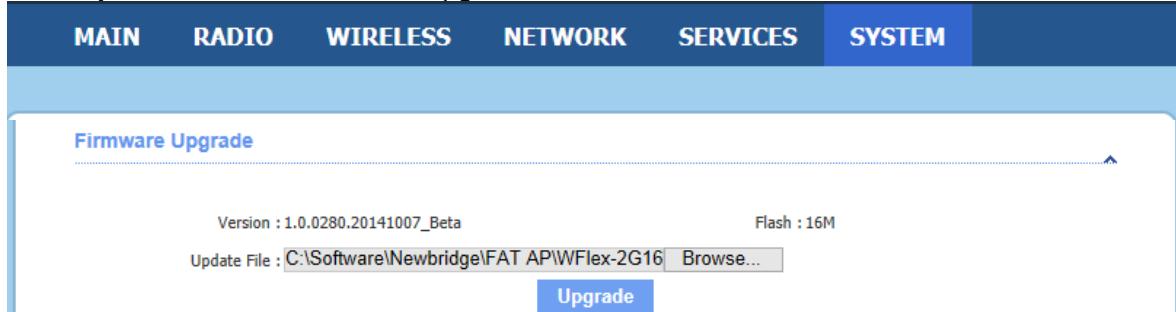
g. From the VLAN table, port eth0 belongs to VLAN 10

VLAN

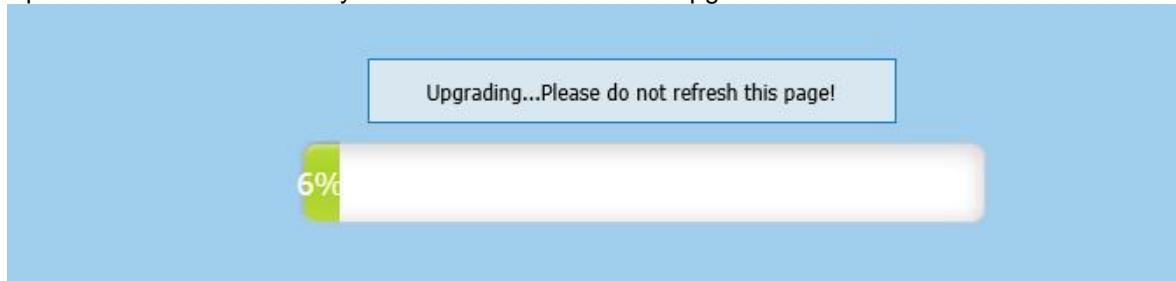
ID	Describe	STP	Untagged Port	Tagged Port	Edit	Delete
1	vlan1	Disable	eth0 wlan1			
10	vian10	Disable		eth0		
<input type="button" value="Add"/>						

5 Firmware Upgrade

- Go to System and select Firmware Upgrade



- Upload the latest firmware by click Browse button. Click Upgrade Button after than



- Wait for the progress until 100%. It will auto back to the default login page. Please notice firmware version highlighted inside the Red box.



FCC Caution:

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.

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

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.

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 & your body.