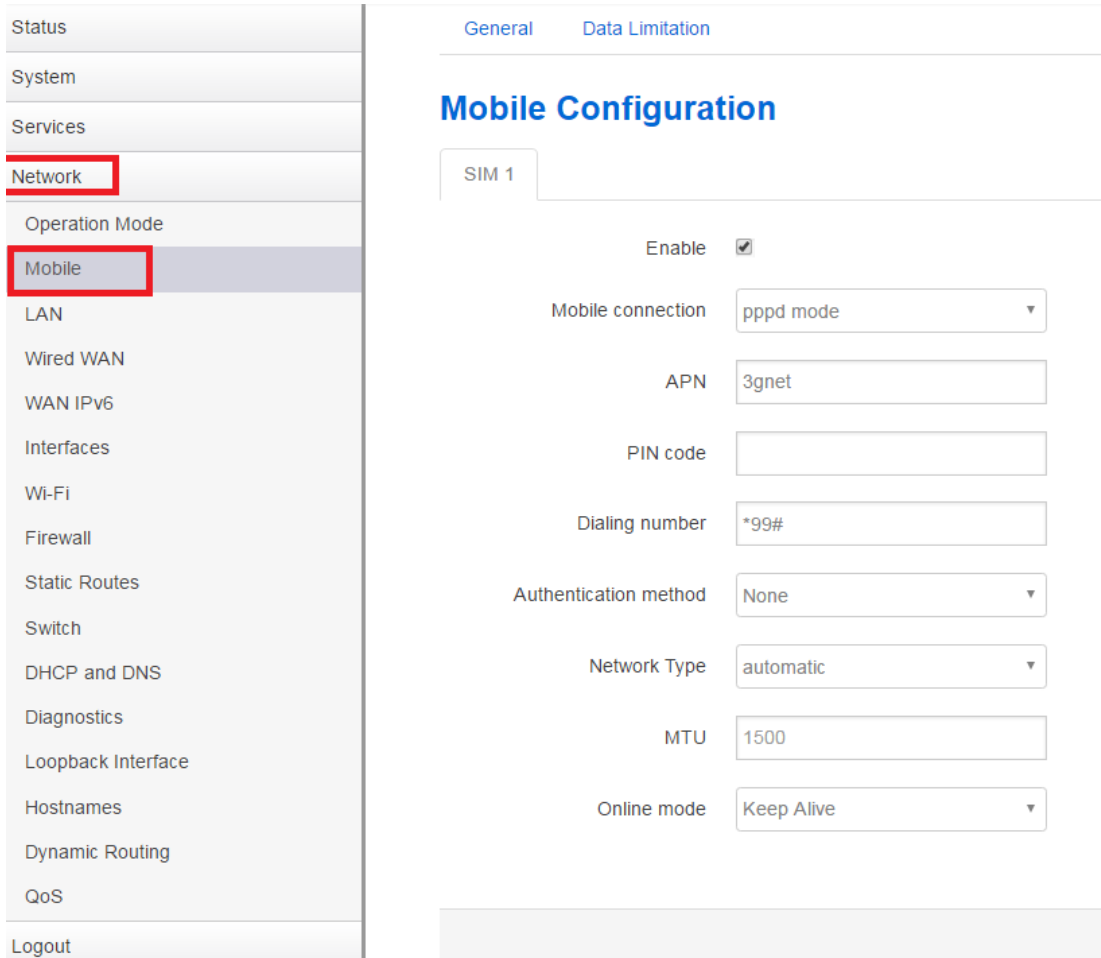


Failover Example – WiFi Client as Primary and Mobile as Secondary

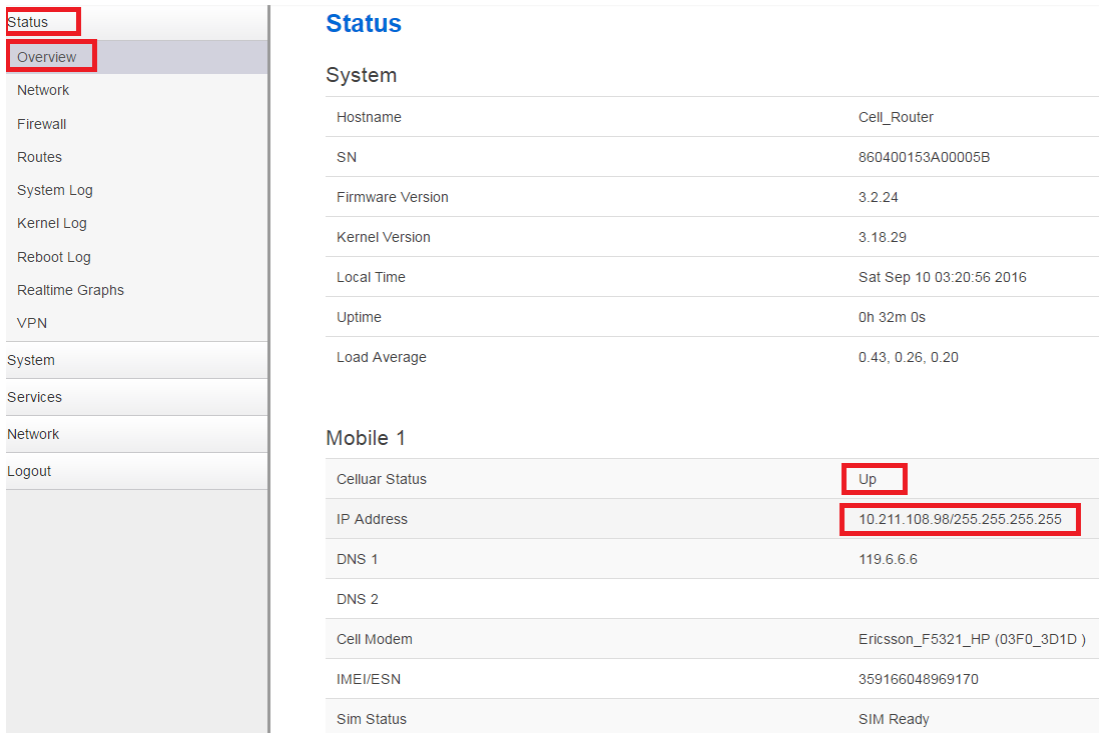
1. Set mobile connection.



The screenshot displays the configuration interface for a mobile connection. On the left is a navigation menu with 'Network' and 'Mobile' highlighted in red. The main content area shows the 'Mobile Configuration' page for 'SIM 1'. The 'General' tab is active, and the 'Enable' checkbox is checked. The configuration parameters are as follows:

Parameter	Value
Mobile connection	pppd mode
APN	3gnet
PIN code	
Dialing number	*99#
Authentication method	None
Network Type	automatic
MTU	1500
Online mode	Keep Alive

2. Check the mobile connection status at status page, make sure the status is up.



Status

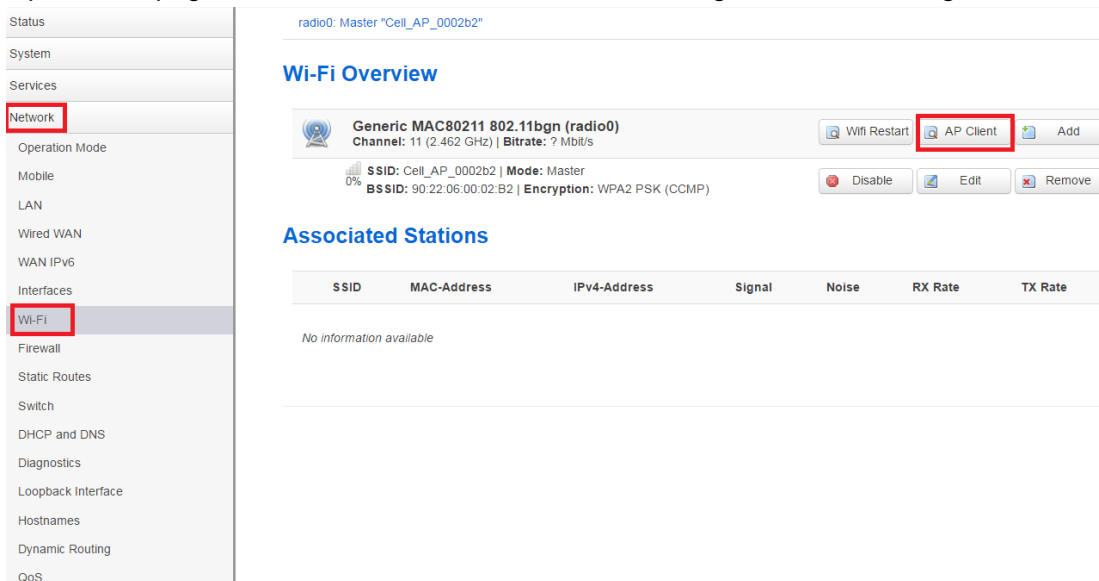
System

Hostname	Cell_Router
SN	860400153A00005B
Firmware Version	3.2.24
Kernel Version	3.18.29
Local Time	Sat Sep 10 03:20:56 2016
Uptime	0h 32m 0s
Load Average	0.43, 0.26, 0.20

Mobile 1

Cellular Status	Up
IP Address	10.211.108.98/255.255.255.255
DNS 1	119.6.6.6
DNS 2	
Cell Modem	Ericsson_F5321_HP (03F0_3D1D)
IMEI/ESN	359166048969170
Sim Status	SIM Ready

3. Open Wi-Fi page and click button “AP Client”, then waiting wireless scanning finish.



radio0: Master "Cell_AP_0002b2"

Wi-Fi Overview

Generic MAC80211 802.11bgn (radio0)
Channel: 11 (2.462 GHz) | Bitrate: ? Mbit/s

WiFi Restart AP Client Add

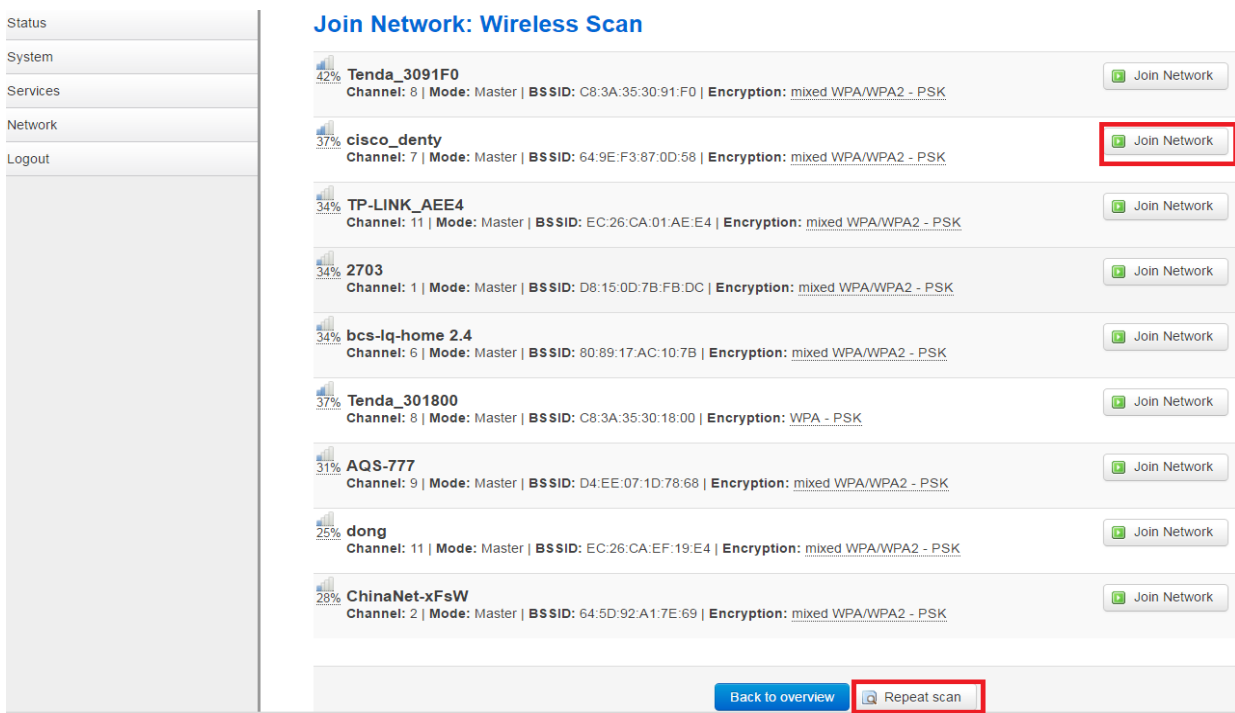
SSID: Cell_AP_0002b2 | Mode: Master
BSSID: 90:22:06:00:02:B2 | Encryption: WPA2 PSK (CCMP)

Disable Edit Remove

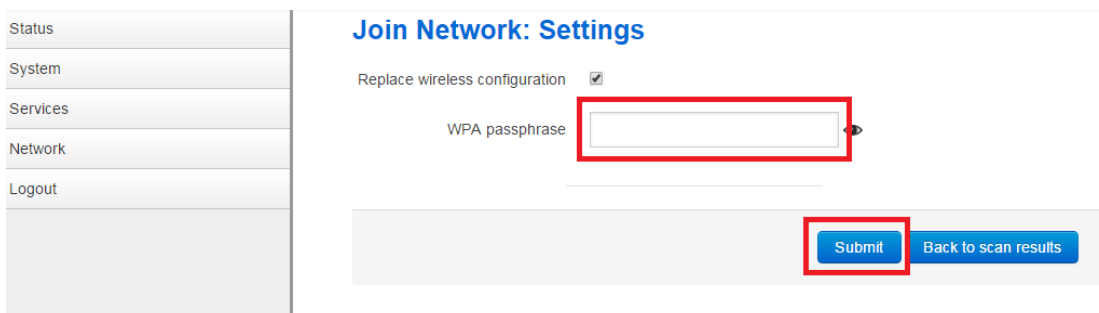
Associated Stations

SSID	MAC-Address	IPv4-Address	Signal	Noise	RX Rate	TX Rate
No information available						

4. If the Wi-Fi you want to join is not in the list, Click button “Repeat scan” to scan it again. If it is in the list, click button “Join Network” accordingly.



5. After click button “Join Network”, this settings page is shown. Input the password of the wireless device you selected, and click button “Submit”



6. Make sure the ESSID/BSSID are not empty, and the Mode shall be “Client”. Don’t change Operating frequency. Then click button “Save & Apply”.

The screenshot displays a network configuration page for a radio client named "cisco_denty". The left sidebar lists various system and network settings, with "Wi-Fi" selected. The main content area is divided into two sections: "Device Configuration" and "Interface Configuration".

Device Configuration: This section shows the status of the Wi-Fi network, which is currently disabled. It provides details such as Mode (Client), SSID (cisco_denty), BSSID (64:9E:F3:87:0D:58), Encryption (WPA2 PSK (CCMP)), Channel (11 (2.462 GHz)), Tx-Power (20 dBm), Signal (0 dBm), Noise (0 dBm), Bitrate (0.0 Mbit/s), and Country (00). Below this, there are controls to enable or disable the Wi-Fi network and settings for operating frequency (Mode: 11g/n mixed, Channel: 7 (2442 MHz), Width: 20 MHz) and transmit power (20 dBm (100 mW)).

Interface Configuration: This section shows the wireless security settings. The ESSID is set to "cisco_denty" and the Mode is set to "Client". The BSSID is "64:9E:F3:87:0D:58". Under the "Network" section, there are checkboxes for "lan:", "wan:", "wan6:", "wwan:", and "create:". The "wwan:" checkbox is checked.

At the bottom of the configuration page, there are buttons for "Back to Overview", "Save & Apply", "Save", and "Reset".

7. Then we can the Wi-Fi client is in the Wi-Fi Overview page.

Note: there is no Wi-Fi AP again, if you need a Wi-Fi AP, click button "Add" to add one.

8. Open “Failover” configuration page, click checkbox “Enable”, set Primary to Wifi_client, set Secondary to “Cell_mobile”, set Thrid to “None”. (Note: if the third one is real needed, we can set it to “Wired_wan”, it cannot be same as Primary or Secondary.). Click button “Save & Apply”.

Secondary Configuration

Secondary	<input type="text" value="Cell_mobile"/>
Host1 to ping	<input type="text" value="10.64.64.64"/>
Host2 to ping	<input type="text"/>
Ping timeout	<input type="text" value="1"/>
Max Retries	<input type="text" value="10"/>
Interval between ping	<input type="text" value="30"/>

Third Configuration

Third	<input type="text" value="None"/>
Host1 to ping	<input type="text"/>
Host2 to ping	<input type="text"/>
Ping timeout	<input type="text" value="1"/>
Max Retries	<input type="text" value="10"/>

9. If mobile connection is up, after enabling failover, mobile connection will be set to down automatically, and the Wi-Fi client acts as WAN port.

Manual Check If The Settings Is Working Or Not

1) Set Wi-Fi client to disable manually, router WAN port will switch to Mobile after $10 * 30$ (Max Retries * Interval Between ping) seconds.

radio0: Client "cisco_denty"

Wi-Fi Overview

Generic MAC80211 802.11bgn (radio0)
Channel: 7 (2.442 GHz) | Bitrate: 65 Mbit/s

45% SSID: cisco_denty | Mode: Client
BSSID: 64:9E:F3:87:0D:58 | Encryption: WPA2 PSK (NONE)

Buttons: Wifi Restart, AP Client, Add, Disable, Edit, Remove

Associated Stations

SSID	MAC-Address	IPv4-Address	Signal	Noise	RX Rate	TX Rate
cisco_denty	64:9E:F3:87:0D:58	?	-78 dBm	0 dBm	1.0 Mbit/s, MCS 0, 20MHz	65.0 Mbit/s, MCS 7, 20M

2) After mobile connected, set Wi-Fi client to enable, Wi-Fi client will acts as WAN port and mobile will be down in 30 seconds(Interval between ping).