

Before you Start!

- Port forwarding works best when using Apple Safari, Microsoft Internet Explorer 8, or Mozilla Firefox.
 - Google Chrome and Microsoft Internet Explorer 9 have been identified to have problems completing port forwarding.
- Please be aware that if any settings are changed outside of the directions outlined below and it renders the modem non-functional, you may be required to purchase another device at full retail price plus any other associated costs (shipping costs, taxes, etc.).
- Complete all necessary tasks that require an Internet connection. This includes any calls made using a VoIP service (phone service that requires Internet connection). This is because there are several steps in the process which may require a reboot of the modem, which will in turn either disconnect a phone call or interrupt Internet connectivity.
- Please note that by default the ability to login to the modem across the internet from a remote location is disabled.

How to setup Port Forwarding

1. Open an Internet browser and browse to the web address 192.168.1.1.
2. The device will default to the "Summary" page when the User Interface opens.

Status Basic **WiMAX** Tools

Help

Status

- Summary**
- Statistics
- Log
- Device Info
- Firmware

WiMAX Signal
● ● ● ● ●

Battery Charge
Holding

Summary

Auto Refresh

Internet Connection (WAN)

Signal Strength	Excellent (RSSI:-41 , CINR:35)
Connection Status	CONNECTED Change
Connection Up Time	00:16:16
Show/Hide Advanced settings	Show Detail

Wireless (Wi-Fi) LAN

Network Name(SSID)	
SSID Broadcast	On Change
Current Users	 Show Detail
Wi-Fi Network Range	Short (best battery life) Change
Wi-Fi Security	WPA Change
Wi-Fi Channel	Auto (Ch. 4)

General

Battery Status	Holding
Software Version	
Firmware Version	
Device MAC Address	
Current Time/Date	10-11-2012 / 17:36:45

CLEAR Service

Suspend or resume CLEAR service: [Continue](#)

3. Hover over the "Basic" tab located at the top of the user interface and select "LAN" from the drop-down.

Navigation tabs: Status, Basic, WiMAX, Tools. A dropdown menu is open under 'Basic', with 'LAN' highlighted in green. Other options include Wizard, Wireless(Wi-Fi), NAT Setup, and MAC Address Filter.

Left sidebar menu: Summary (highlighted), Statistics, Log, Device Info, Firmware.

Bottom left status area: WiMAX Signal (5 green dots), Battery Charge (Holding).

Summary

Help Auto Refresh

Internet Connection (WAN)

Signal Strength	Excellent (RSSI:-42 , CINR:35)
Connection Status	CONNECTED Change
Connection Up Time	00:23:14
Show/Hide Advanced settings	Show Detail

Wireless (Wi-Fi) LAN

Network Name(SSID)	
SSID Broadcast	On Change
Current Users	 Show Detail
Wi-Fi Network Range	Short (best battery life) Change
Wi-Fi Security	WPA Change
Wi-Fi Channel	Auto (Ch. 4)

General

Battery Status	Holding
Software Version	
Firmware Version	
Device MAC Address	
Current Time/Date	10-11-2012 / 17:43:43

CLEAR Service

Suspend or resume CLEAR service:

4. The "Authentication Required" prompt will appear.
- The username and password is "admin" (without quotations).

Status Basic **WiMAX** Tools

Basic

Wizard

LAN

Summary Help

Auto Refresh

Internet Connection (WAN)

Signal Strength	Excellent (RSSI:-42 , CINR:35)
Connection Status	CONNECTED Change
Connection Up Time	00:23:14

Authentication Required

A username and password are being requested by http://192.168.1.1. The site says: "admin"

User Name:

Password:

General

Battery Status	Holding
Software Version	
Firmware Version	
Device MAC Address	
Current Time/Date	10-11-2012 / 17:43:43

CLEAR Service

Suspend or resume CLEAR service:

5. The "LAN Setting" screen will appear.

Status Basic **WiMAX** Tools

Help

Basic

Wizard

LAN

Wireless(Wi-Fi)

NAT Setup

MAC Address Filter

LAN Setting

Network Address Settings

IP Address : . . .

Subnet Mask : . . .

DHCP Range : 192.168.1. ~ 192.168.1.

Attached Devices

IP Address	MAC Address	IP TYPE
192.168.1.10	00:23:15:43:F7:24	DHCP

IP Reservation Settings

IP Address	MAC Address		Client List	
192.168.1. <input type="text"/>	<input type="text"/>	<<	Client MAC <input type="text"/>	Clear
192.168.1. <input type="text"/>	<input type="text"/>	<<	Client MAC <input type="text"/>	Clear
192.168.1. <input type="text"/>	<input type="text"/>	<<	Client MAC <input type="text"/>	Clear
192.168.1. <input type="text"/>	<input type="text"/>	<<	Client MAC <input type="text"/>	Clear
192.168.1. <input type="text"/>	<input type="text"/>	<<	Client MAC <input type="text"/>	Clear

Save Settings

6. Locate the MAC ID (Address) and IP Address of the device that the ports needed to be forwarded to.

Status Basic WiMAX Tools

Help

LAN Setting

Network Address Settings

IP Address : 192 . 168 . 1 . 1

Subnet Mask : 255 . 255 . 255 . 0

DHCP Range : 192.168.1. 10 ~ 192.168.1. 250

Attached Devices

IP Address	MAC Address	IP TYPE
192.168.1.10	00:23:15:43:F7:24	DHCP

IP Reservation Settings

IP Address	MAC Address		Client List	
192.168.1. <input type="text"/>	<input type="text"/>	<<	Client MAC <input type="text"/>	Clear
192.168.1. <input type="text"/>	<input type="text"/>	<<	Client MAC <input type="text"/>	Clear
192.168.1. <input type="text"/>	<input type="text"/>	<<	Client MAC <input type="text"/>	Clear
192.168.1. <input type="text"/>	<input type="text"/>	<<	Client MAC <input type="text"/>	Clear
192.168.1. <input type="text"/>	<input type="text"/>	<<	Client MAC <input type="text"/>	Clear

Save Settings

7. Enter the MAC ID (Address), IP Address from the "Attached Devices" list into the "IP Reservation Settings" and select "Save Settings".

Status Basic **WiMAX** Tools

Help

LAN Setting

Network Address Settings

IP Address : 192 . 168 . 1 . 1
Subnet Mask : 255 . 255 . 255 . 0
DHCP Range : 192.168.1. 10 ~ 192.168.1. 250

Attached Devices

IP Address	MAC Address	IP TYPE
192.168.1.10	00:23:15:43:F7:24	STATIC

IP Reservation Settings

IP Address	MAC Address		Client List	
192.168.1.10	00:23:15:43:F7:24	<<	Client MAC	Clear
192.168.1.		<<	Client MAC	Clear
192.168.1.		<<	Client MAC	Clear
192.168.1.		<<	Client MAC	Clear
192.168.1.		<<	Client MAC	Clear

Save Settings

8. Select "NAT Setup" located on the left side of the screen under "Basic".

Status Basic **WIMAX** Tools Help

Basic

- Wizard
- LAN
- Wireless(Wi-Fi)
- NAT Setup**
- MAC Address Filter

NAT Setting

Port Forwarding

Enabled	Name	Host IP	Service Port	Protocol
<input checked="" type="checkbox"/>	<input type="text"/>	192.168.1.	<input type="text"/>	BOTH ▾

Port Forwarding List

DMZ Host

Enabled	Host IP	<input type="button" value="Save Settings"/>
<input type="checkbox"/>	192.168.1.	<input type="text"/>

Remote Administration

Enabled	Remote Admin Port	<input type="button" value="Save Settings"/>
<input type="checkbox"/>	<input type="text" value="80"/>	

Application

Enabled	Applications	<input type="button" value="Save Settings"/>
<input checked="" type="checkbox"/>	FTP	
<input type="checkbox"/>	SIP	

VPN Passthrough

<input type="checkbox"/> Enabled	<input type="button" value="Save Settings"/>
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9. If you would like all ports forwarded (by placing the device's IP Address in the DMZ) then continue to Step 10. If you only needs certain ports to be forwarded, skip to Step 12.

- Check the box for "Enabled" under "DMZ Host" and enter the IP Address Information from Step 7. Once the information has been entered, select "Save Settings".

10. When the "Save Successful" screen appears, click "OK".

11. Skip to Step 15.

Status Basic **WiMAX** Tools

Help

Basic

Wizard

LAN

Wireless(Wi-Fi)

NAT Setup

MAC Address Filter

NAT Setting

Port Forwarding

Enabled Name Host IP 192.168.1. Service Port Protocol **BOTH** ▾

Add **Update** **Delete**

Port Forwarding List

DMZ Host	Enabled <input checked="" type="checkbox"/>	Host IP 192.168.1. <input type="text" value="10"/>	Save Settings
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Remote Administration

Enabled Remote Admin Port **Save Settings**

Application

Enabled Applications FTP SIP **Save Settings**

VPN Passthrough

Enabled **Save Settings**

12. To individually forward a port(s), input the following information:

- Name: Can be anything (i.e. RuleName)
- IP Address: The IP Address the ports need to be forwarded to
- Service Port: Individual Port that needs to be forwarded
- Protocol: Select "BOTH" unless you specifically require TCP or UDP

Status Basic WiMAX Tools

Basic

Wizard

LAN

Wireless(Wi-Fi)

NAT Setup

MAC Address Filter

Help

NAT Setting

Port Forwarding

Enabled	Name	Host IP	Service Port	Protocol
<input checked="" type="checkbox"/>	<input type="text" value="RuleName"/>	192.168.1.10	<input type="text" value="8080"/>	BOTH ▾

Port Forwarding List

DMZ Host

Enabled	Host IP	<input type="button" value="Save Settings"/>
<input type="checkbox"/>	192.168.1.10	

Remote Administration

Enabled	Remote Admin Port	<input type="button" value="Save Settings"/>
<input type="checkbox"/>	<input type="text"/>	

Application

Enabled	Applications	<input type="button" value="Save Settings"/>
<input type="checkbox"/>	FTP	
<input type="checkbox"/>	SIP	

VPN Passthrough

<input type="checkbox"/> Enabled	<input type="button" value="Save Settings"/>
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13. Select "Add" under the "Port Forwarding" section once the information has been input.

- When the "Save Successful" prompt appears, click "OK".

14. The individual forwarding rule is now listed in a new section called "Port Forwarding List"

Status Basic **WiMAX** Tools

Help

Basic

- Wizard
- LAN
- Wireless(Wi-Fi)
- NAT Setup**
- MAC Address Filter

NAT Setting

Port Forwarding

Enabled Name Host IP 192.168.1. Service Port Protocol BOTH ▾

Add **Update** **Delete**

Port Forwarding List

Enabled	RuleName	Host IP	Service Port	Protocol
<input type="checkbox"/>		192.168.1.10	8080	BOTH

DMZ Host

Enabled Host IP 192.168.1. **Save Settings**

Remote Administration

Enabled Remote Admin Port **Save Settings**

Application

Enabled Applications

- FTP
- SIP

Save Settings

VPN Passthrough

Enabled **Save Settings**

15. Hover over the "Tools" tab at the top of the screen.
16. Select "Power Off" from the drop-down list.
17. Select "Yes" when a prompt asks if "you would like to turn off the device".

Status Basic WiMAX Tools

Admin
Upgrade
USB Data Mode
Power Off

Basic

Wizard
LAN
Wireless(Wi-Fi)
NAT Setup
MAC Address Filter

NAT

Enabled Name: Host IP: 192.168.1. Service Port: Protocol: BOTH

Add Update Delete

Port Forwarding List

Enabled	RuleName	Host IP	Service Port	Protocol
<input checked="" type="checkbox"/>		192.168.1.10	8080	BOTH

DMZ Host

Enabled Host IP: 192.168.1.10 Save Settings

Remote Administration

Enabled Remote Admin Port: Save Settings

Application

Enabled Applications:

- FTP
- SIP

Save Settings

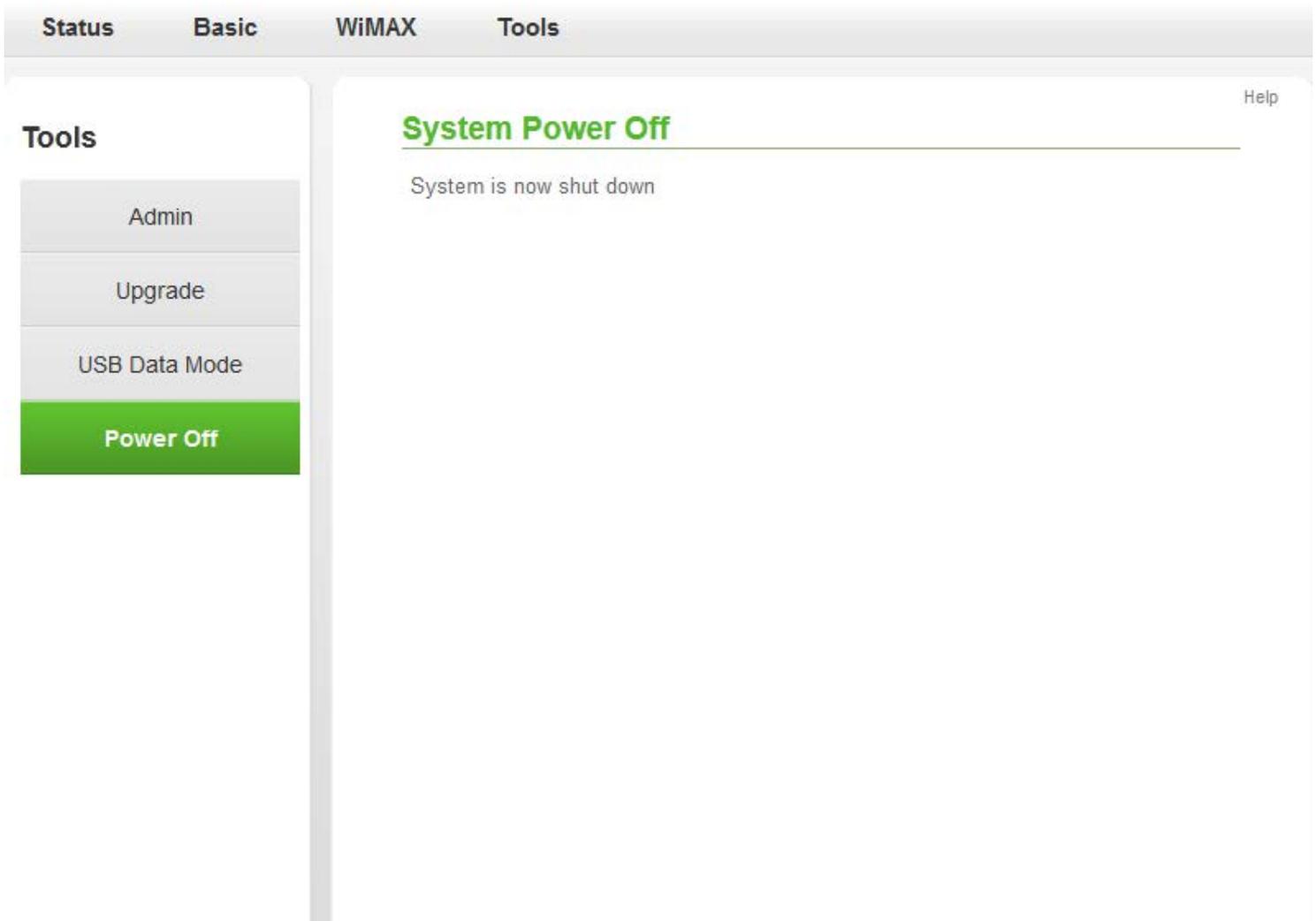
VPN Passthrough

Enabled Save Settings

18. The device's "System Power Off" screen will appear.

19. Wait approximately 15 seconds and use the power button located on the device itself to power the device back on.

- Make sure you do NOT factory reset the device (or all settings will be lost).



The modem is now “wide open” and all ports are forwarded to the first NAT capable device hooked up after the modem. Any further issues with port forwarding will need to be addressed with your 3rd party network equipment vendor, or 3rd party software vendor.