

## Before you Start!

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- 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

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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.

StatusBasicWiMAXTools

Status

Summary

Statistics

Log

Device Info

Firmware

WiMAX Signal

Battery Charge

Holding

Summary

Auto Refresh

Internet Connection (WAN)

Signal Strength

Connection Status

Connection Up Time

Show/Hide Advanced settings

Excellent ( RSSI:-41 , CINR:35 )

CONNECTED

00:16:16

Show Detail

Wireless (Wi-Fi) LAN

Network Name(SSID)

SSID Broadcast

Current Users

Wi-Fi Network Range

Wi-Fi Security

Wi-Fi Channel

On

Change

Show Detail

Short (best battery life)

Change

WPA

Change

Auto ( Ch. 4 )

General

Battery Status

Software Version

Firmware Version

Device MAC Address

Current Time/Date

Holding

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.

Status

Basic

WiMAX

Tools

Wizard

LAN

Wireless(Wi-Fi)

NAT Setup

MAC Address Filter

Statistics

Log

Device Info

Firmware

WiMAX Signal

Battery Charge

Holding

Summary

Auto Refresh

Internet Connection (WAN)

Signal Strength

Connection Status

Connection Up Time

Show/Hide Advanced settings

Excellent ( RSSI:-42 , CINR:35 )

CONNECTED

00:23:14

Change

Show Detail

Wireless (Wi-Fi) LAN

Network Name(SSID)

SSID Broadcast

Current Users

Wi-Fi Network Range

Wi-Fi Security

Wi-Fi Channel

On

Change

Show Detail

Short (best battery life)

WPA

Auto ( Ch. 4 )

Change

General

Battery Status

Software Version

Firmware Version

Device MAC Address

Current Time/Date

Holding

10-11-2012 / 17:43:43

CLEAR Service

Suspend or resume CLEAR service:

Continue

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

StatusBasicWiMAXTools

Basic

Wizard

LAN

Summary

Auto Refresh

Internet Connection (WAN)

Signal Strength

Connection Status

Connection Up Time

Excellent ( RSSI:-42 , CINR:35 )

CONNECTED

00:23:14

Change

General

Battery Status

Software Version

Firmware Version

Device MAC Address

Current Time/Date

Holding

10-11-2012 / 17:43:43

CLEAR Service

Suspend or resume CLEAR service:

Continue

Authentication Required

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

User Name:

admin

Password:

•••••

OK

Cancel

5. The "LAN Setting" screen will appear.

Status

Basic

WiMAX

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Basic

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LAN

Wireless(Wi-Fi)

NAT Setup

MAC Address Filter

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.		<<	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

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

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Wireless(Wi-Fi)

NAT Setup

MAC Address Filter

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.		<<	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

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

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NAT Setup

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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

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Basic

Wizard

LAN

Wireless(Wi-Fi)

**NAT Setup**

MAC Address Filter

Help

NAT Setting

Port Forwarding

Enabled

Name

Host IP

Service Port

Protocol

☒

192.168.1.

BOTH

Add

Update

Delete

Port Forwarding List

DMZ Host

Enabled

Host IP

☐

192.168.1.

Save Settings

Remote Administration

Enabled

Remote Admin Port

☐

80

Save Settings

Application

Enabled

Applications

☒

FTP

☐

SIP

Save Settings

VPN Passthrough

☐ Enabled

Save Settings

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.



StatusBasicWiMAXTools

Basic

Wizard

LAN

Wireless(Wi-Fi)

NAT Setup

MAC Address Filter

NAT Setting

Port Forwarding

Enabled☒NameHost IP192.168.1.Service PortProtocolBOTH

AddUpdateDelete

Port Forwarding List

DMZ Host

Enabled☒Host IP192.168.1.10Save Settings

Remote Administration

Enabled☐Remote Admin Port80Save Settings

Application

Enabled☒ApplicationsFTP☒SIP☐Save Settings

VPN Passthrough

☐ EnabledSave 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

StatusBasicWiMAXTools

Basic

Wizard

LAN

Wireless(Wi-Fi)

NAT Setup

MAC Address Filter

NAT Setting

Port Forwarding

Enabled

Name

Host IP

Service Port

Protocol

☒

RuleName

192.168.1.10

8080

BOTH

Add

Update

Delete

Port Forwarding List

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

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"

StatusBasicWiMAXTools

Basic

Wizard

LAN

Wireless(Wi-Fi)

NAT Setup

MAC Address Filter

NAT Setting

Port Forwarding

Enabled☒NameHost IP192.168.1.Service PortProtocolBOTH

AddUpdateDelete

Port Forwarding List

Enabled	RuleName	192.168.1.10	8080	BOTH
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DMZ Host

Enabled☐Host IP192.168.1.10Save Settings

Remote Administration

Enabled☐Remote Admin PortSave Settings

Application

Enabled☐ApplicationsFTP☐SIPSave Settings

VPN Passthrough

☐ EnabledSave 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".

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WiMAX

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Wireless(Wi-Fi)

NAT Setup

MAC Address Filter

Admin

Upgrade

USB Data Mode

Power Off

NAT

Port Forwarding

Enabled

Name

Host IP

Service Port

Protocol

192.168.1.

BOTH

Add

Update

Delete

Port Forwarding List

Enabled	RuleName	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

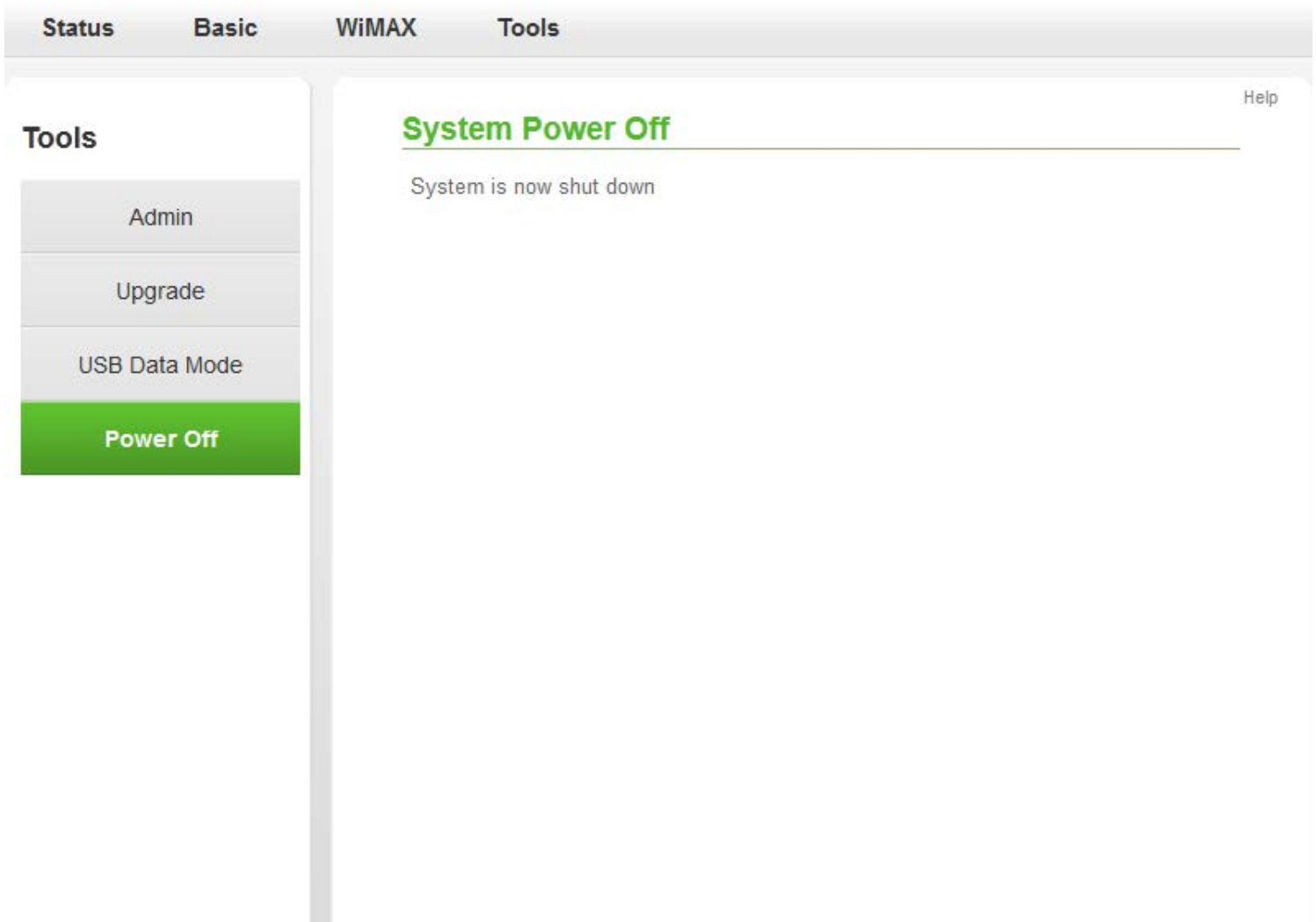
Save Settings

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.