Recommended Router: Sonicwall TZ215

Sonicwall devices running SonicOS Enhanced 5.8.1.1-35o and up work best with the FreedomIQ service. This router employs advanced QoS, bandwidth management and traffic shaping that has proven to be far superior to many other comparable solutions that we have tested. This solution works out of the box and requires no specific configuration to work, although VoIP QoS is highly recommended and very easy to configure

Sonicwall TZ215

The Sonicwall TZ215 is a Fixed-port Access Router that is ideal for medium sized business Internet access and/or IP Telephony broadband access. The TZ215 includes one ADSL WAN port, integrated four port switch, built in firewall, QoS, DHCP, NAT, and an IPSec VPN.

Recommended Router: AdTran Netvanta 3120 / 3130

AdTran Netvanta 3120/3130

In our testing, the AdTran Netvanta 3120 and 3130 have proven to be ideal routers for FreedomIQ service. These are Fixed-port Access Routers that are ideal for business-grade Internet access and VoIP phone service. The 3120 model is designed for broadband access, such as DSL or cable, while the 3130 works with ADSL, ADSL2, or ADSL2+.

Other Compatible Routers & Modems

Although we strongly recommend the AdTran routers, we understand that often customers will want to provide their own existing equipment. Please double-check any such routers and modems against the list below. This list contains devices that have been tested and found to be compatible with FreedomIQ service with some simple modification to their out-of-the-box settings.

If a customer's device is not on this list, it is either untested or may be incompatible and in need of being replaced. See further sections in this document for known untested or incompatible devices.

AdTran Netvanta 3448

Change from Basic NAT to NAPT and disable SIP ALG.

Actiontec M1000

Compatible as of most recent firmware revision.

Actiontec M1424WR

Set port triggering to open ports 5060 through 5070 UDP and disable SIP ALG.

Apple Airport

Compatible as of most recent firmware revision.

Cisco (In General)

Configure Static NAT to prevent translation issues. Make sure the following commands are entered into the router to ensure proper connectivity:

PERMIT UDP NET 69.43.131.224/27 PORTRANGE ANY
PERMIT UDP HOST 69.43.168.93 PORT 5060
hostname(config)# policy-map global_policy
hostname(config-pmap)# class-map inspection_default
hostname(config-pmap)# no inspect sip
hostname(config-pmap)#exit

Cisco Pix

Disable the SIP inspect feature by setting "inspect SIP" to NO.

Cradlepoint MBR-1000

Disable SIP ALG

D-Link DIR-615 (Hardware Revision B Only)

Disable SIP ALG

D-Link DIR-655 (Hardware Revision A Only)

Disable SIP ALG

D-Link EBR-2310 (Hardware Revision B Only)

Disable SIP ALG

Fortinet (In General)

Compatible as of most recent firmware revision, but strongly recommended to use 60B model.

Juniper - Netscreen

Disable SIP ALG.

Linksys RV082, RV016, RV042

Compatible as of most recent firmware revision.

Linksys WRV210

Compatible as of most recent firmware revision. Intended for 1-2 phone environment. If using two phones and notice problems the addition of the second phone, disable Block Multicasting.

Linksys WRT160N

Compatible as of most recent firmware revision.

Netgear Commercial Modems

Disable "Smart Packet Detection" and disable SIP ALG, if possible. Not recommended if you cannot disable SIP ALG for these devices.

Netgear FVG318

Disable SIP ALG. Not recommended for use with Aastra phones, due to issues with storing configuration and failed firmware downloads.

Siemens Speedstream

Compatible as of most recent firmware revision, though this router is has no QoS component (Quality of Service). This can cause issues in an environment where there are computers or other non-VoIP equipment sharing the router.

Sonicwall NSA240

Disable SIP ALG. Compatible with Firmware: SonicOS Enhanced 5.8.1.1-35o & up.

Sonicwall TZ210

Disable SIP ALG. Compatible with Firmware: SonicOS Enhanced 5.8.1.1-35o & up.

ZyXEL (In General)

These devices are compatible with VoIP services with some modification. Either the device needs to be bridged to another compatible router, or you must disable the SIP ALG feature. To do so is a bit more complex than with other router configurations. To do so, you must first telnet into the device. Choose (24) System Maintenance and (8) Command Interpreter Mode. From the command line type:

ip nat service sip active 0
You will receive the message, "SIP ALG Disable"

Incompatible Routers & Modems

Below is a list of routers that have been tested with FreedomIQ service and been determined to be incompatible. These routers have known, largely uncorrectable issues that will prevent VoIP services from working properly. In nearly all cases, these devices must be replaced.

2Wire (In General) Incompatible

These routers and modems are not compatible with VoIP services. We recommend attempting to bridge the modem or router to an alternative compatible router so that it acts as a modem only, or replacing the device entirely.

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Buffalo AirStation WHR-HP-54 Incompatible

This router is not compatible with VoIP as it lacks the option to disable the internal SIP ALG. This device will need to be avoided or replaced.

Belkin (In General) Incompatible

These routers are not compatible with VoIP services. This device will need to be avoided or replaced.

D-Link DIR-655 (Hardware Revision B Only) Incompatible

This router is not compatible with VoIP as it lacks the option to disable the internal SIP ALG. This device will need to be avoided or replaced.

D-Link WBR-1310 Incompatible

This router is not compatible with VoIP as it lacks the option to disable the internal SIP ALG. This device will need to be avoided or replaced.

Linksys BEFSR41 Incompatible

This router is not compatible with VoIP as it lacks the option to disable the internal SIP ALG. This device will need to be avoided or replaced.

Linksys WRT54G (includes G2, GX, GL, and GS) Incompatible

This router is not recommended for use with VoIP services while using the stock firmware from Linksys, as it is known to damage and modify SIP packets in such a way that it prevents voice packets from being formatted correctly. You may be able to install custom firmware such as DD-WRT (http://www.dd-wrt.com) as a replacement. The DD-WRT firmware allows you to disable SIP ALG and enable

QoS (Quality of Service), but doing so has not yet been tested thoroughly.

Netgear (In General) Incompatible

Most Netgear routers will not work with VoIP services and have been blacklisted on our network to prevent QoS (Quality of Service) issues. These routers typically lack the ability to disable the internal SIP ALG, a feature that causes intermittent issues with phone service. One notable exception is the FVG318 model, which allows for the disabling of SIP ALG.

SMC (In General) Incompatible

Most SMC modems and routers will not work with VoIP services. Some may be able to be bridged to a compatible router, but in general these devices will need to be avoided or replaced.

Westel (In General) Incompatible

Most Westel modems and routers will not work with VoIP services. Some may be able to be bridged to a compatible router, but in general these devices will need to be avoided or replaced.

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