



Time Sensitive Information!

These Configuration Changes Must Be Applied
Ten Days Prior to Absolute VOICE Cut-Over

Cisco Meraki Router Configuration
For Absolute VOICE Cloud Telephony Deployment
Document Version 1.2

July 5th, 2017

www.callabsolute.com

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Read Me!

1. These changes must be applied before client implements their Absolute VOICE hosted telephony solution.
2. If you are experienced with business class firewalls and routers, please have your IT staff/contractor perform these changes for you.
3. Please read this entire document before attempting to make any changes.
4. If you have questions about this document, you can call 800-955-6703 to schedule an appointment with one of our firewall support specialists. We will attempt schedule your appointment within 24- 48 hours of your call to us so please allow adequate time.
5. After changes are completed please let your client or Absolute VOICE Customer Support specialist know.
6. Once completed, a Absolute VOICE technician will be requesting access or a collaborative web session to verify settings prior to customer cut over.

Introduction

This document is for IT administrators and illustrates configuration changes required on Cisco Meraki firewall & router appliances to support Absolute VOICE's cloud communications telecommunications platform. This document assumes a basic network deployment consisting of one internal LAN network containing the IP phones and one WAN network connected to the Internet. While we strongly recommend a dedicated network for VoIP traffic, the instructions below can be used for a “converged” network whereby both VoIP and non-VoIP traffic share one physical WAN network. With basic modifications (such as adding access rules for additional interfaces); this configuration can be extrapolated for other network layouts. The screenshots below may vary slightly from what is displayed while configuring the device depending on model. Setting values not mentioned may be left at default or changed as required for specific purposes.



Please call Absolute VOICE Customer Support at 800-955-6703 if you need any further information. Firewall changes can be in depth and you will need to schedule time with one of our specialists if you need assistance.

Screenshots and instructions are based on Cisco Meraki web GUI.

We recommend loading the latest Meraki OS (firmware).

Firewall Checklist

After applying the GUI configurations in this document, please take the appropriate screen shots to provide the firewall “verification” to Absolute.

Screen Shot #:	Configuration:	Completed:
1	Security Appliance → “Traffic Shaping” section	
2	Security Appliance → “Traffic Shaping Rules” section for Absolute VOICE traffic	

Traffic Shaping – WAN Interface

Security Appliance -> Traffic Shaping

The screenshot shows the Cisco Meraki management interface. On the left is a navigation menu with 'Network-wide', 'Security appliance' (highlighted), 'Organization', and 'Help'. The main content area is titled 'Traffic shaping' and 'Uplink configuration'. It lists three WAN interfaces: WAN 1, WAN 2, and Cellular. For WAN 1, the 'down (Mb/s)' is set to 100 and 'up (Mb/s)' is set to 50. A 'simple' link is visible. For WAN 2, the speed is 250 Mbps with a 'details' link. For Cellular, the speed is unlimited with a 'details' link.



Interface	Down Speed (Mb/s)	Up Speed (Mb/s)	Notes
WAN 1	100	50	Simple configuration
WAN 2	250 Mbps		Details available
Cellular	unlimited		Details available

1. Choose the WAN interface that is active and set the contracted download and upload speeds.
 - a. Click the “details” link for the internet interface.
 - b. Enter the contracted download speed for the circuit.
 - c. Enter the contracted upload speed for the circuit.
2. Click Save





Traffic Shaping – Ports & Network

Security Appliance -> Traffic Shaping

Traffic shaping rules

Rule #1  

Definition
This rule will be enforced on traffic matching any of these expressions.

SIP (Voice)  port 16000-16999  port 11780-11800  net 184.178.213.0/24  [Add +](#)

Bandwidth limit
Ignore network per-client limit (unlimited) ▼

Priority
High ▼

DSCP tagging
46 (EF - Expedited Forwarding, Voice) ▼

[Add a new shaping rule](#)

4. Edit a Rule Definition to setup the QoS and Traffic shaping for the Absolute VOICE traffic.
 - a. Enter the following ports and network address in the Definition field:
 - SIP – 5060
 - RTP – 16000-16999, 11780-11800
 - Absolute VOICE network - 184.178.213.0/24
 - b. Bandwidth Limit: "Ignore network per client limit"
 - c. Priority: High
 - d. DSCP tagging: 46 (EF – Expedited Forwarding Voice)
5. Click Save

Document Revision History

Version	Reason for Change	Date
1.0 Draft	Initial Draft Document	July 25th, 2016
1.1	Check list added	March 17 th , 2017
1.2	Updated DSCP tagging reflective of firmware updates from Meraki (46 EF)	July 5 th , 2017