



Technical Bulletin

Using a VoIP Phone Line with the ARC Plus RSI

Scope

This document explains how to configure a VoIP phone line to work with the Burk ARC Plus RSI interface using a Cisco ATA191 Analog Telephone Adapter (ATA).

Overview

An Analog Telephone Adapter allows you to connect analog devices such as the ARC Plus RSI over your VoIP network as though they were connected via a traditional analog POTS line. The Cisco ATA191 can be configured to ring the ARC Plus when the VoIP telephone extension is called and will allow the ARC Plus to dial out to deliver alarm notifications.



Cisco ATA191

Before purchasing an ATA, check with your VoIP provider, also known as an Internet Telephone Service Provider (ITSP), to confirm that the brand and model ATA you plan to buy is supported. The ITSP used in this example is Zoom Phone. However, your company may use any of a large number of available VoIP providers such as RingCentral, Vonage, Nextiva, GoTo Connect, Webex Calling, and many more.

The ATA used as an example in this Technical Bulletin is the Cisco ATA191.

Registering the ATA with your VoIP provider

Before you can use your new ATA, your telephone system administrator or IT department will need to register the device with your VoIP provider. Registration requires the unit's MAC address. In the case of the Cisco ATA191, the MAC address can be found on a sticker on the bottom of the device. Registration will also associate the ATA with a telephone number or extension.

Quick Start with the Cisco ATA191

Connect the "PHONE 1" or "PHONE 2" port on the rear of the ATA191 to the RSI "LINE" port on the ARC Plus rear panel using a standard telephone cord. Connect the ATA191 "NETWORK" port your Local Area Network. If your network supports Dynamic Host Configuration Protocol (DHCP), the ATA191 will automatically obtain an IP address when it powers on. The unit will then connect to the IP network and, based on the registration completed above, will automatically download its required configuration data from your VoIP provider.

The default settings for the ATA191 are compatible with the ARC Plus RSI as detailed below. After power-on and initialization, the ATA191 should be operational, allowing the RSI to receive and initiate phone calls.

Setting the ATA191 IP Address

If your network has DHCP you can scan the network with an IP scanner to find the device's DHCP assigned IP address. If DHCP is not supported in your network, or if you cannot determine the IP address that has been assigned by DHCP, the network settings can be manually configured using DTMF control via the touchtone keypad on an analog telephone. The use of the ATA191 Interactive Voice Response interface is described in Appendix B of the following Cisco document:

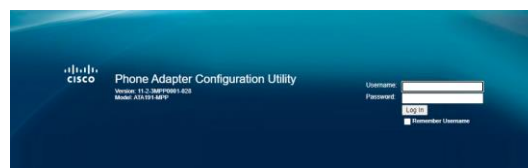
[Cisco ATA 190 Analog Telephone Adapter Administration Guide for Sip](#)

Additional information on the ATA191 can be found in:

[Cisco ATA 191 Analog Telephone Adapter User Guide](#)

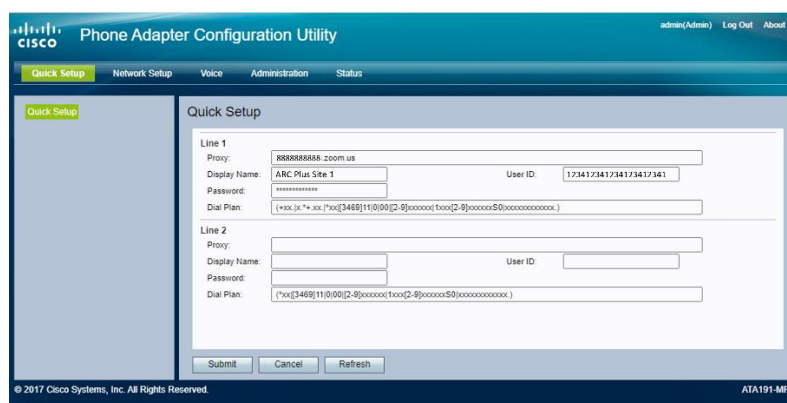
Modifying the ATA191 Configuration

Enter the IP address of the ATA191 in a web browser. The login screen shown below will be displayed. Log in as administrator using the default username: admin and password: admin.

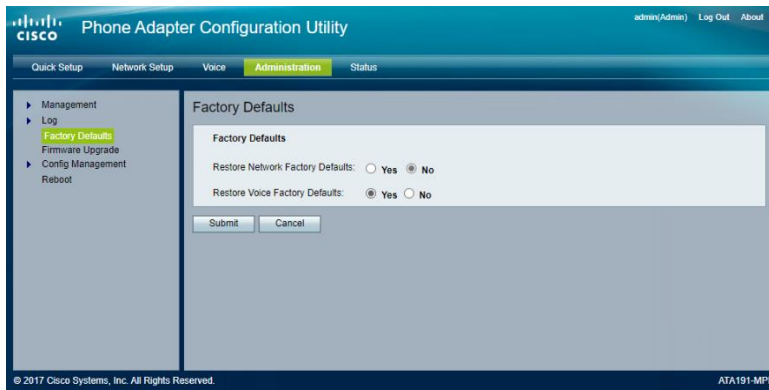


It is recommended that you change the password after logging in by selecting Administration>User List in the web interface menu.

The quick setup page shown below will load by default after you log in. Once your network administrator has completed the registration process described above, the Line 1 and Line 2 settings should populate automatically.



If the ATA device has been used previously and contains old configuration data, or if you want to switch the device to a different VoIP phone number, you can initiate a refresh of the Line settings as follows: navigate to Administration>Factory Defaults as shown below.

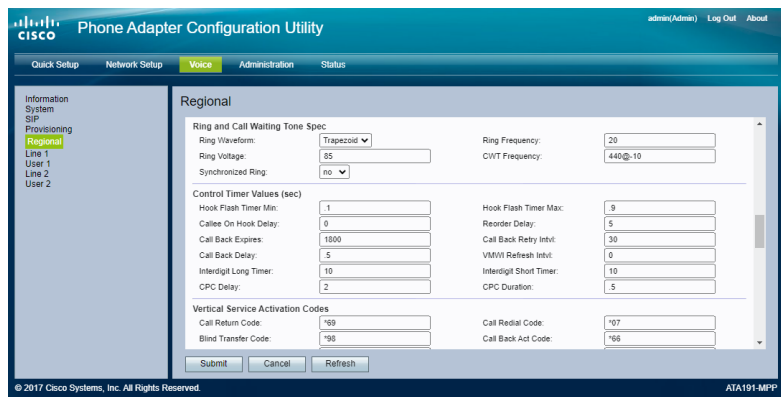


Make sure that “Restore Network Factory Defaults” is set to “No”. Change “Restart Voice Factory Defaults” to “Yes” and click submit. Now power-cycle the ATA191. The ATA191 will restart, connect to the network and automatically pick up the new VoIP settings as registered by the system administrator.

If desired, you can confirm the characteristics of the ring signal that is sent to the ARC Plus. The settings shown below are the default settings for the ATA-191 and should not need to be changed unless the unit has been used previously in a different application. Navigate to Voice>Regional and scroll down to the section called Ring and Call Waiting Tone Spec.

Confirm the settings are configured as follows:

- Ring Waveform** : Trapezoid
- Ring voltage** : 85
- Synchronized Ring** : No
- Ring Frequency** : 20
- CWT Frequency** : 440@-10



Then click submit to save the changes to the device.

Connect the ARC Plus to the PHONE 1 or PHONE 2 jack on the back of the ATA device depending on which line was configured above.



Connections on the Cisco ATA191

The system will now allow you call the ARC Plus over a VoIP phone line by calling the phone number and or extension provisioned to the ATA device and will allow the ARC Plus to dial out with alarm notifications.

We are committed to providing you with the best possible service and support for your Burk Technology product. If you should have any concerns or questions, please call us at 978-486-3711.

Thank you,

Burk Technology Technical Support Team

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