ClearOne

WORKSHEET

PRODUCTS SUPPORTED:

CONVERGE® Pro 2 128V, 128VD

CLEARONE DOCUMENT FRM-0009-001
REVISION 1.0, APRIL 2017

CONVERGE PRO 2 VoIP/SIP WORKSHEET

OVERVIEW

A/V Integrators and IT Admins can use this form to streamline the VoIP/SIP setup process for ClearOne CONVERGE Pro 2 128V/128VD.

NOTE: Such products require the use of a standard SIP connection to use a VoIP-enabled system, which may require the purchase of additional SIP software and licenses from a third-party vendor.

Configuring a ClearOne CONVERGE Pro 2 (CP2) requires the information asked in this worksheet. Please coordinate with your IT admin to obtain the necessary information prior to installation.

DEVICE SETTINGS

Will the CP2 device use DHCP? ◯ Yes ◯ No

Device static IP address _____

Device subnet mask _____

Device gateway address _____

Device primary DNS _____

Device secondary DNS _____

VLAN SETTINGS

Using a VLAN for VoIP traffic? ◯ Yes ◯ No (If no, you can skip this section.)

VLAN priority _____

VLAN ID (1-4094) _____

VLAN using DHCP? ◯ Yes ◯ No

VLAN static IP _____

VLAN subnet mask _____

VLAN gateway _____

VLAN primary DNS _____

VLAN secondary DNS _____

VOIP STACK SETTINGS

Packet Tagging

SIP packet tagging QoS priority level _____

RTP packet tagging QoS priority level _____

Timers

Registration expiration (seconds) _____

Dial tone duration (ms) _____

Refresh by update (vs. by invite) ◯ Yes ◯ No

Minimum session timer (seconds) _____

Session expiration (seconds) _____

Digit map short timer (seconds) _____

Digit map long timer (seconds) _____

Digit map timeout (seconds) _____

Audio Settings

DTMF Relay ◯ SIP Info ◯ Inband ◯ Out of Band

Dynamic payload type _____

RTP starting point _____

RTP range _____

Proxy 1 Settings

Proxy 1 TCP port _____

Proxy 1 UDP port _____

Proxy 1 User domain _____

Proxy 1 Registrar address _____

Proxy 1 Registrar port _____

Proxy 1 Outbound proxy IP address/URL _____

Proxy 1 Outbound port _____

Proxy 1 Outbound listen port _____

Proxy 2 Settings

Proxy 2 TCP port _____

Proxy 2 UDP port _____

Proxy 2 User domain _____

Proxy 2 Registrar address _____

Proxy 2 Registrar port _____

Proxy 2 Outbound proxy IP address/URL _____

Proxy 2 Outbound port _____

Proxy 2 Outbound listen port _____

VOIP PHONE SETTINGS

How many VoIP phones? ◯ 1 ◯ 2

Phone 1 phone number _____

Proxy 1 username _____

Proxy 1 password _____

Proxy 1 transport protocol: ◯ UDP ◯ TCP

Phone 2 phone number _____

Proxy 2 username _____

Proxy 2 password _____

Proxy 2 transport protocol: ◯ UDP ◯ TCP

DIAL PLAN

Ask IT admin to provide extension length and outside dialing requirements to be checked against the CONVERGE Pro 2 dial plan and adjusted as needed.

Dial Plan Syntax

The following table describes the possible elements of a dial plan:

Type	Description	Result
Digit	A digit (0-9) or an asterisk (*)	Indicates a specific digit (do not use #)
Range	[n1-n2] (where n1 and n2 represent digits)	A range of digits from n1 to n2
List	[n1 n2 n3] (where n1, n2, and n2 represent digits)	A list of digits (it must be the specific digits listed)
Wild Card (single)	x	x matches any single digit
Wild Card (multiple)	. (period)	. matches an arbitrary number of digits
S	short timer	A timed waiting period that corresponds to the value designated for a short timer (default is 10 seconds)
L	long timer	A timed waiting period that corresponds to the value designated for a long timer (default is 50 seconds)
| (pipes character)	delimiter	Place this character, surrounded by spaces, between dial plan options if you want to use more than one option.

Dial Plan Examples

The following table provides some dial plan examples and their meaning:

Example	Description
xxxxxxx	Any 7-digit number
[49]11	Either 411 or 911
[3-8]11	Any of the following numbers: 311, 411, 511, 611, 711, or 811
9[2-9]xxxxxx	A 9 followed by a digit in the range 2-9, followed by any six other digits. This is an example of a call from an internal network that uses a 9 to get an outside line, followed by a 7-digit local phone number (in North America, local numbers cannot begin with 0 or 1).
911 | [3-7]xxx |8[2-9]xxxxxxxxS | 8011.L	This dial plan permits four possible sequence types: • dialing 911 • dialing an in-office extension, in this case a 4-digit number that begins with 3, 4, 5, 6, or 7 • dialing an 8 (to get an outside line) followed by a valid North American 10-digit sequence (a number and an area code), followed by a short timer • dialing an 8 (to get an outside line) followed by a 011, to initiate an international call, followed by an arbitrary number of digits (since international numbers can vary in length), followed by a long timer

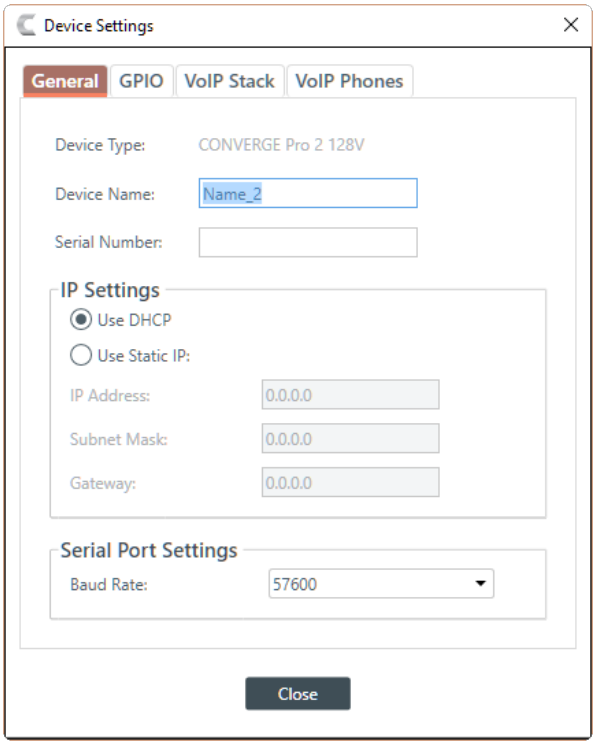
CONVERGE Pro 2 Dial Plan

CONFIGURE CONVERGE PRO 2 DEVICE

Enter the above configuration information in the Device Settings in the CONVERGE Pro 2 CONSOLE.

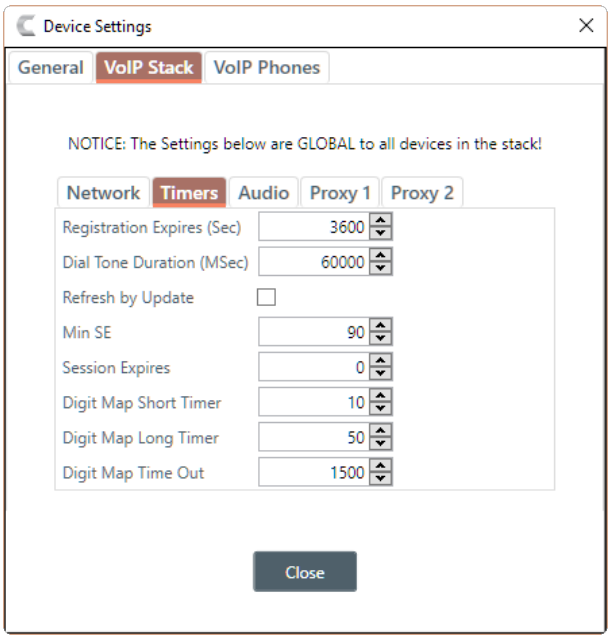
Device Settings are found by clicking Devices under Stack in the CONSOLE Navigation Panel. All devices you have added to the project are shown. Click Settings next to the device you want to configure.

Device IP settings are found on the General tab:

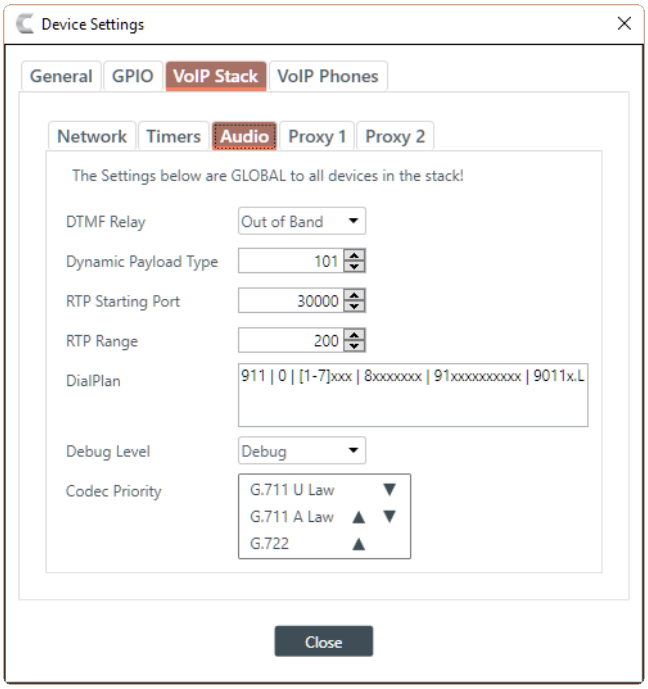


SIP, RTP, and VLAN settings are found on the VoIP Stack - Network tab.

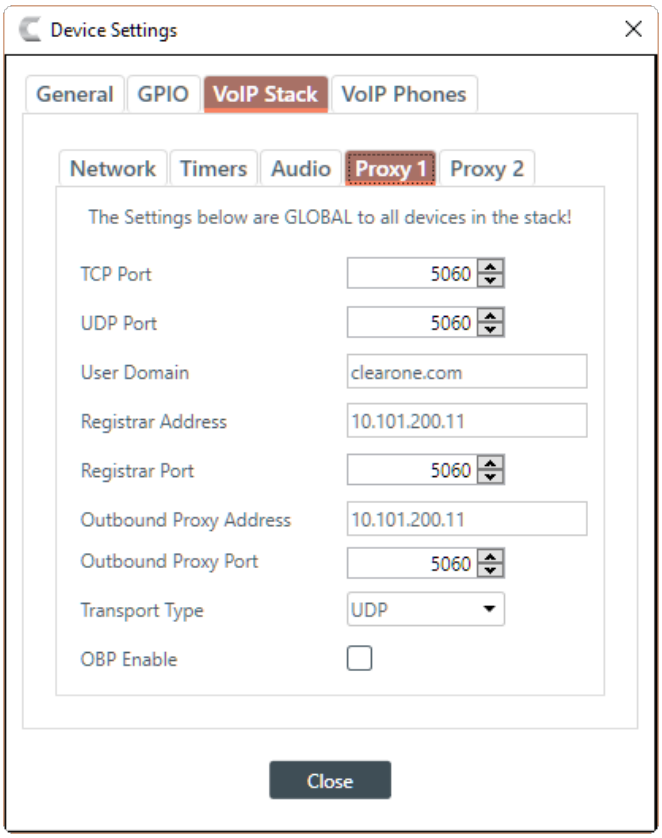
VoIP Timers settings are found on the VoIP Stack - Timers tab.



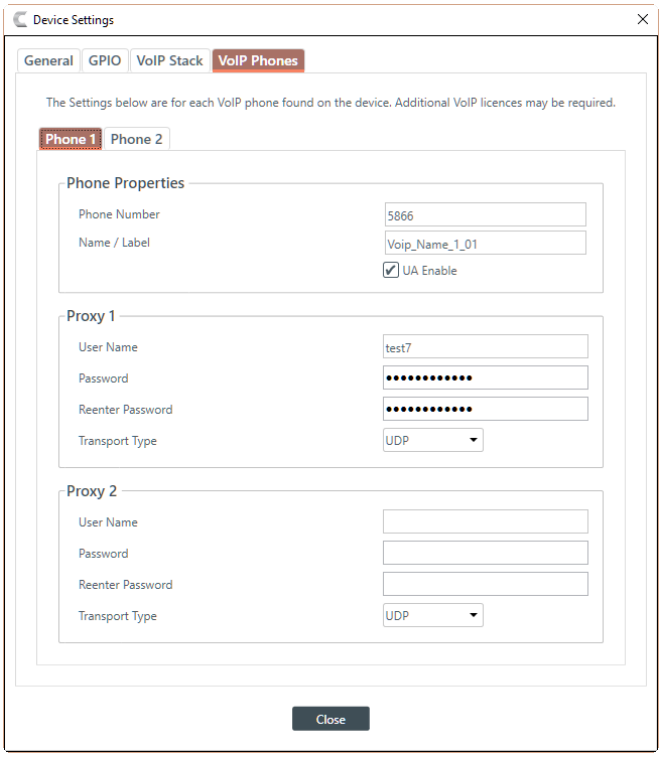
VoIP Audio settings are found on the VoIP Stack - Audio tab.



SIP Proxy 1 settings are found on the VoIP Stack - Proxy 1 tab (Proxy 2 settings, which are the same, appear on the Proxy 2 tab).



VoIP Phone settings appear on the VoIP Phones - Phone and Phone 2 tabs (which are identical).



Important: After you have configured the settings in the project, you must load the project to the device. Refer to the *CONVERGE Pro 2 User Manual* for information.

CLEARONE CONTACTS

Headquarters
5225 Wiley Post Way, Suite 500
Salt Lake City, UT 84116

U.S. & Canada
Tel: 801.975.7200
Toll Free: 800.945.7730
Fax: 801.303.5711

International
Tel: +1.801.975.7200
Email: global@clearone.com

Sales
Tel: 801.975.7200
Email: sales@clearone.com

TechSupport
Tel: 801.974.3760
Email: tech.support@clearone.com