

APPLICATION NOTES

PRODUCTS SUPPORTED:
ClearOne CONVERGE® Pro VH20
and Cisco® Unified Communications Manager (CallManager)

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CONFIGURING THE CONVERGE PRO VH20
WITH A CISCO CALLMANAGER SYSTEM

Overview

This application note defines the required configuration parameters for configuring the CONVERGE Pro VH20 to register with a Cisco CallManager (CCM). It identifies the necessary information needed to correctly configure a CONVERGE Pro VH20 to register and operate on CCM. The examples used in this document are from CCM 8.6 and CONVERGE versions 3.0.13.3. and 4.X.

Cisco CallManager Setup

Create a Third Party SIP Device (Basic) endpoint for the CONVERGE Pro VH20 with an assigned User and Extension in CCM. Ensure the User has Digest Credentials set. If needed refer to Cisco documentation on how to set up this type of extension. Cisco has a very helpful checklist here:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/6_1_1/ccmcfg/611-cmcf/b09sip3p.pdf

CONVERGE Pro VH20 SIP Settings Using CONVERGE Pro VH20 CCM Information

There are three pieces of user information you used in the Cisco SIP endpoint configuration to setup the CONVERGE Pro VH20 that will also be entered into the CONVERGE Pro VH20 SIP Settings to register it to the CCM. This information is created in the CCM End User Configuration screen.

1. **User ID** and **Digest Credentials** as entered in the User Information Section. (See Figure 1)
2. **Primary Extension** number as entered in the Directory Number Associations Section. (See Figure 2)
3. **Proxy IP address** or **Fully Qualified Domain Name (FQDN)**. (Typically this is the address used to log in to the CCM).

User Information

NOTE: The add and delete function are disabled because the user directory is sync with LDAP.
(i.e. The Enable Synchronization From LDAP Server flag on the LDAP System Configuration is checked).

LDAP Sync Status	Active
User ID*	VH20
Password
Confirm Password
PIN
Confirm PIN
Last name*	SIP
Middle name	
First name	VH20
Telephone Number	
Mail ID	VH20@test.local
Manager User ID	
Department	
User Locale	English, United States
Associated PC	
Digest Credentials
Confirm Digest Credentials

Edit Credential

Edit Credential

Figure 1. User ID and Digest Credentials

Directory Number Associations

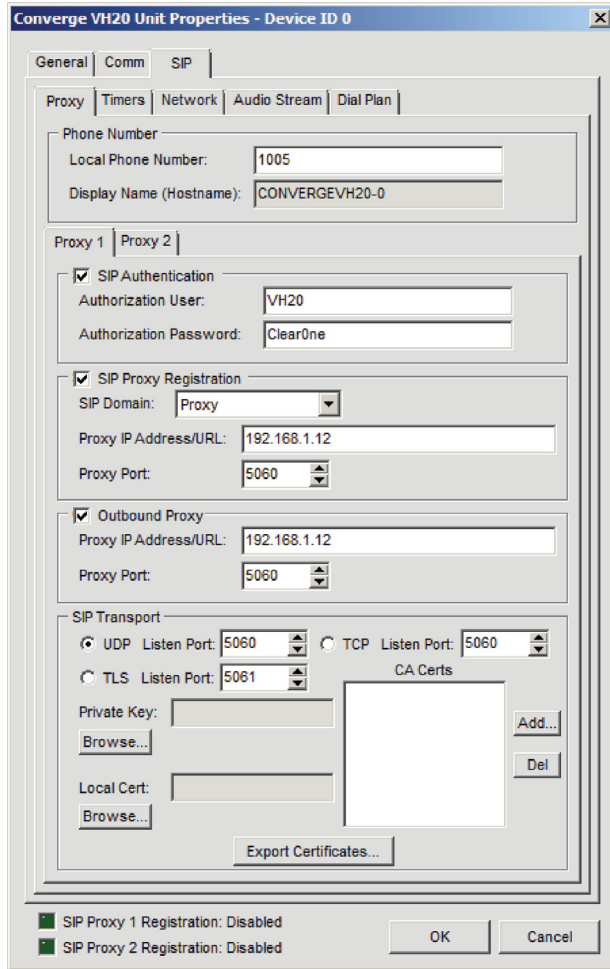
Primary Extension 1005 in Everyone

Figure 2. Directory Number Associations

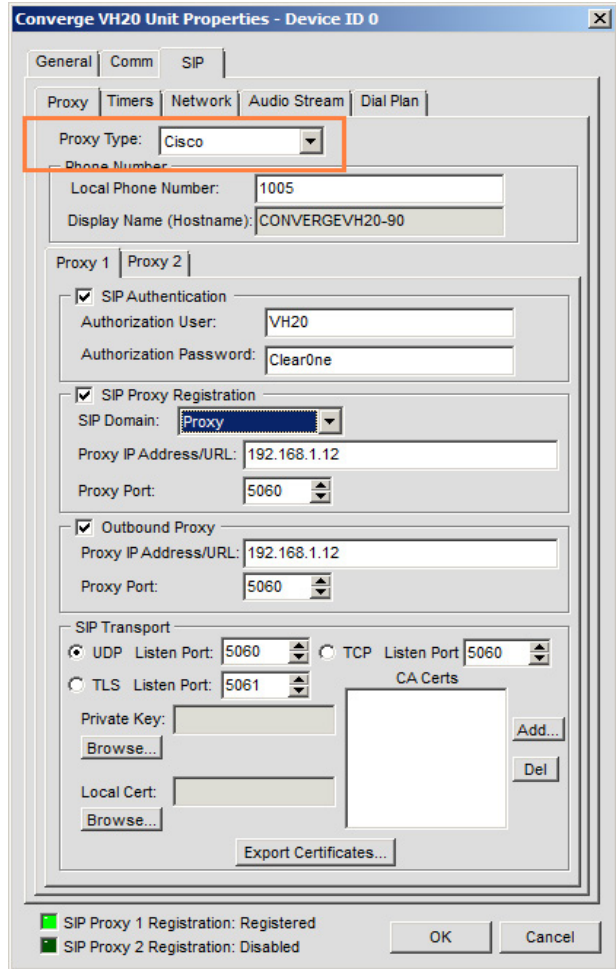
Log into the CONVERGE Pro VH20 with CONVERGE Console. For information on how to use the CONVERGE Console and the VH20, consult the CONVERGE Pro manual found at: http://www.clearone.com/resources#professional_audio.

In the **VH20 SIP Proxy** tab (See Figure 3):

- Enter the **Local Phone Number** in the dialog box using the Primary Extension from the CCM configuration.
Local Phone Number = Primary Extension from CCM
- Enter the **Authorization User** and **Authorization Password** in the SIP Credentials dialog boxes using the User ID and Digest Credentials from the CCM configuration.
Authorization User = User ID from CCM
Authorization Password = Digest Credentials from CCM
- Set **Proxy type**:
 - On **CONVERGE 4.X systems**, set the **SIP Proxy type** drop-down to **Cisco**. (See CONVERGE 4.X Settings in Figure 3.)
 - » If the proxy address is an IP address, set **SIP Domain** drop down to **Proxy** and enter the IP address.
 - » If the proxy address is a Domain name, set to **Domain** and enter the **FQDN** of the CCM into the SIP.
 - For **CONVERGE 3.X systems**, using the application of your choice, manually set up a telnet connection to the VH20 and then send the command "#.. proxytype 1" to setup the VH20 to work with CCM.
 - » If the proxy address is an IP address, set **SIP Domain** drop down to **Proxy** and enter the IP address.
 - » If the proxy address is a Domain name, set to **Domain** and enter the **FQDN** of the CCM into the SIP.



CONVERGE 3.X Settings



CONVERGE 4.X Settings

Figure 3. SIP Settings

In the **Dial Plan** tab, confirm that extension dialing is set correctly for the extension length setup in the CallManager. If the extension length in CallManager is "4" then setting **Extension Dialing** to "4" will dial any "4" digit extension entered (See Figure 4). Select "**OK**" to confirm changes

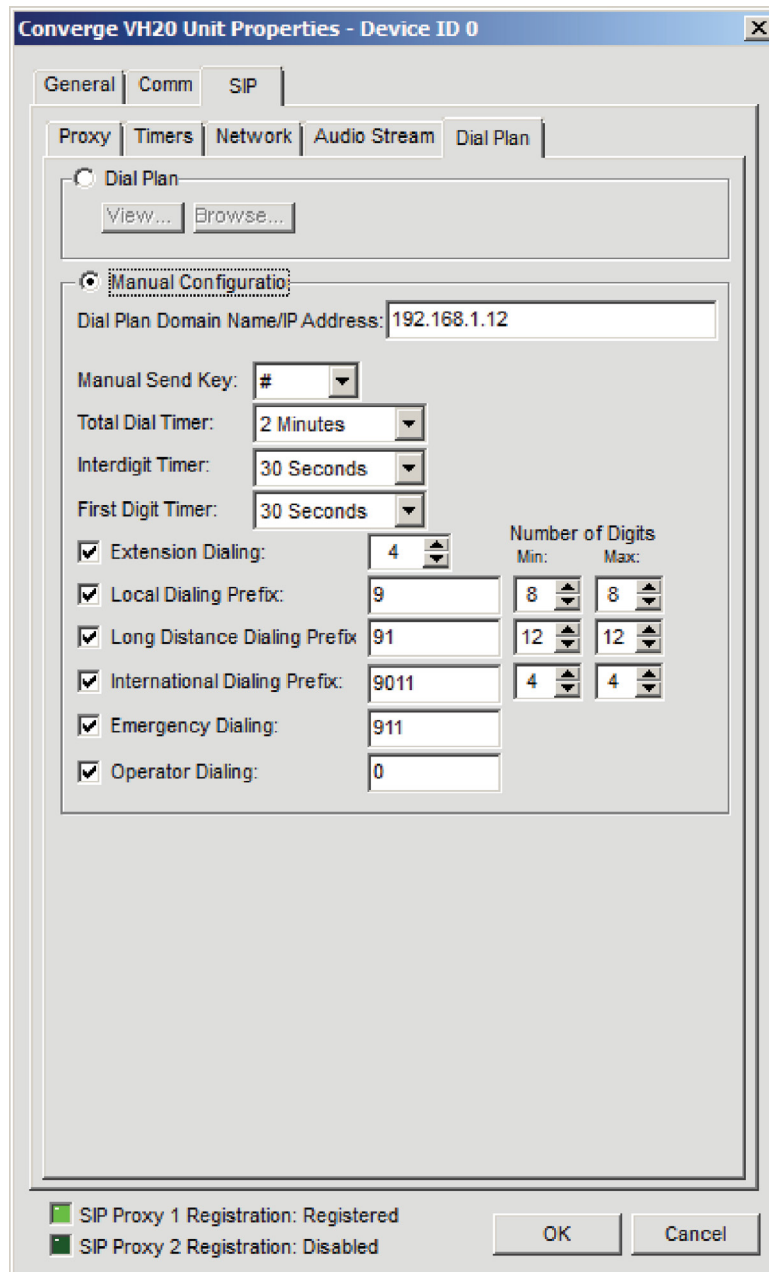


Figure 4. Dial Plan Settings

VoIP Worksheet

The ClearOne VoIP/SIP Network Settings Worksheet can be downloaded from here:

http://www.clearone.com/uploads/resource/voip_worksheet.pdf

Have the IT representative that will be provisioning the SIP extension fill out the Basic Settings section. The necessary elements are: Phone number, Authorization User/Password and Proxy/Outbound Proxy IP or FQDN. A completed form would be similar to this:

Phone Number/Extension	1005
Authorization User	VH20
Authorization Password	ClearOne
Proxy IP Address/FDQN	192.168.1.12
Outbound Proxy IP/FDQN	192.168.1.12

Port numbers and SIP Transport can usually be left as default.

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