



# vyopta

## vControl<sup>®</sup> PRO User Guide

Release 1.2

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# 1. Overview

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## 1.1 Introduction



vControl<sup>®</sup> PRO is a unique software application developed by Vyopta to operate on the Windows PC and Windows tablet platforms to improve and simplify the user experience with video conference systems. vControl<sup>®</sup> PRO provides a universal interactive interface for video conferencing and telepresence systems and eliminates the need for traditional complex video conference controls. The vControl<sup>®</sup> PRO application features include the following:

- A flexible dialing system for point-to-point and multipoint video and voice calls
  - Support for IP address, E.164, and URI dialing
  - Alerts for incoming and outgoing calls
  - Support for voice telephony (requires integration of video conference system with a voice system/service)
- Ability to join conferences on any video or audio conference bridge that supports dual-tone multi-frequency (DTMF) signaling
- An intuitive interface with near-end and far-end PTZ cameras, speaker volume, microphone and viewing layouts
- Address book and call history with automated synchronization to endpoints

vControl<sup>®</sup> PRO provides additional features for the video conferencing administrator. Remote connections to the endpoint allow the administrator to support their end users without leaving their desk.

### **Challenge**

An integrated video conference systems can support video, voice and data communication. However, the control devices purchased to operate the system tend to be overly complex to program and use and are often expensive. Additionally, these control solution may not provide an easy intuitive method to call via different dialing protocols (i.e. IP and URI dialing). This complexity reduces user adoption, requires more effort to maintain and decreases user experience.

### **The Solution**

Vyopta's vControl<sup>®</sup> PRO software application provides video and voice call control for your video conference systems. Using vControl<sup>®</sup> PRO can eliminate the need for audio conferencing tabletop phones and room controls in offices and meeting rooms. vControl<sup>®</sup> PRO significantly simplifies dialing of URI and IP addresses through use of a full keyboard as opposed to a numeric keypad. Making your integrated video conference systems easier to use increases adoption and utilization of your technology investment.

### **Benefits**

- Simplifies the solution implemented
- Lowers the total cost of ownership for video conference room system
- Delivers a universal intuitive touch-screen interface for video and voice calls
- Eliminates need for audio conferencing phone and complex programmed video conference room control
- Enhances video conferencing support by allowing remote access to video endpoints through the network
- Add additional control functionality to your video conferencing endpoints



## **Requirements**

- Connection to the IP network that the video endpoints are registered.
- Connection via wireless internet requires reliable high-quality connectivity.

## **1.2 Using this Guide**

### **General**

This User Guide is provided to help you make the best use of your Vyopta vControl® PRO. Your approach to this documentation depends on what you want to do and the level of your product knowledge.

The User Guide has been divided into several sections, each providing different information. In some instances, information is duplicated across different sections to provide relevant information in a cohesive manner for better understanding.

Note that the User Guide describes a fully licensed version of vControl® PRO. Your vControl® PRO may not have all of the features installed and implemented.

## **1.3 Supported Systems**

Vyopta's vControl® PRO is supported for installation and operation on PCs with Windows operation system (XP, Vista or 7 in 32 and 64-bit installations).

This application was designed for use with video conferencing systems. Currently supported systems include:

- Cisco TelePresence MXP series endpoints
- Cisco TelePresence C-series endpoints
- Cisco TelePresence EX-series endpoints
- Cisco TelePresence MCUs (limited support through far end control and DTMF commands) endpoints

## 2. Installation

### 2.1 Download and Installation

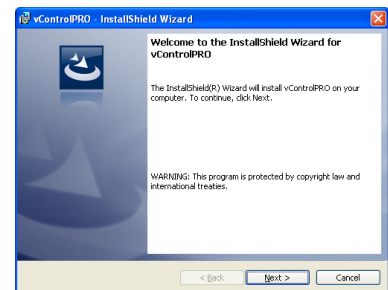
The latest version of Vyopta's vControl<sup>®</sup> PRO is available for download off Vyopta's website at [www.vyopta.com](http://www.vyopta.com) or by request to [sales@vyopta.com](mailto:sales@vyopta.com). A license key will be required to register and activate your copy of vControl<sup>®</sup> PRO.



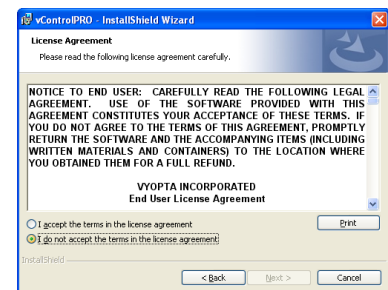
**NOTE:** You should disable your software firewall or anti-virus programs before installing this program to avoid potential conflicts. If you do not, you may need to accept or approve certain parts of the install operation for vControl<sup>®</sup> PRO to be properly implemented.

Once the latest version of Vyopta's vControl<sup>®</sup> PRO is downloaded to your PC. Find the directory where vControl<sup>®</sup> PRO was downloaded and double-click the program to begin the installation.

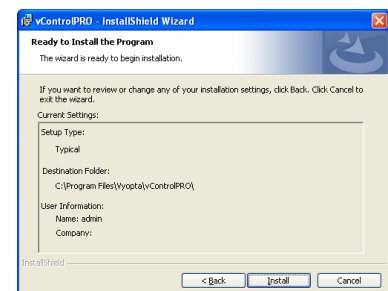
When you run the install file, you will be prompted with the pop-up message to the right. Click "Next" to continue with the installation.



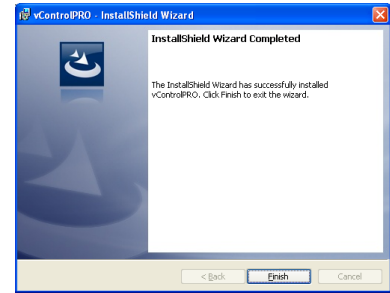
You will then be presented with the Vyopta End User License Agreement. Please review carefully and if you accept the terms, click the acceptance radial selection button and "Next" to continue.



After all the files are uncompressed for installation, you will be presented with a confirmation screen. Click "Install" to continue the installation.



When you receive a message box confirming successful installation, click “*Finish*” to complete the installation process. Continue to Section 2.2 below for initial configuration.



## 2.2 Configuring your vControl® PRO



After installing your vControl® PRO or at any other time, you can configure the application through the vControl® PRO configuration utility. To access the configuration utility, navigate through your Start menu as follows:

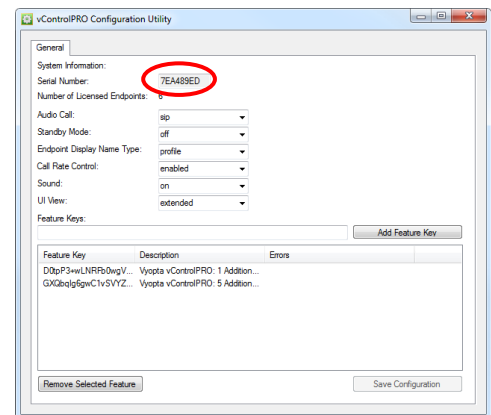
**Start > All Programs > Vyopta > vControlPRO**



**NOTE:** Upon initial installation, you must run this configuration utility to enter at least one (1) license key for vControl® PRO to function properly.

From that directory, run the **vControlPROConfig** utility, and the program should bring up the configuration box displayed to the right.

The *System Information* section at the top of the utility provides the **Serial Number** for your vControl® PRO (*location circled in red*). This serial number is required to generate the initial license key as well as license keys that add additional vControl® PRO features. Also displayed in this section is the number of licensed endpoints that can be registered concurrently to your copy of vControl® PRO. Additional licenses can be purchased to expand the number of endpoints that may be registered.



In the main configuration section, **vControlPROConfig** has a series of options that can be modified via the drop down menu boxes. Here is a summary of those options:

### Vyopta vControlPROConfig – Main Configuration Options

<b>Audio Call</b>	Configuration for telephony settings
	<i>Off</i> Use if your system is not integrated with a telephony system or you do not want to use the system for voice telephony
	<i>SIP</i> Used if your system supports telephony through a SIP connection
	<i>H.323</i> Used if your system supports telephony through the H.323 connection
<b>Standby Mode</b>	Configuration sets the amount of time (in minutes) before vControl® PRO enters Standby Mode. (Options: 1, 10, 20, 30, 50, 60)

<b>Endpoint Display Name Type</b>	Display name for registered endpoints <i>Profile</i> Uses user-defined name from Settings tab <i>System</i> Uses name specified on the actual endpoint
<b>Call Rate Control</b>	Toggle control to enable/disable ability to control call rate when initiating a call. <i>Enable</i> Provides a drop down menu next to the address bar in the Dial tab to allow user to choose call rate for calls <i>Disable</i> Hides the drop down call rate menu on the Dial tab
<b>Sound</b>	Toggles application feedback sounds
<b>UI View</b>	Setting for the operational mode for vControl <i>Extended</i> Default mode for vControl® PRO allows application to be run in either compact or extended modes <i>Compact</i> This mode locks vControl® PRO to run only in the compact mode

The *Feature Keys* part at the bottom of the utility is the last section where license keys can be entered into configuration. To enter a Feature Key, simply cut and paste or type the entire key into the entry box and click the “*Add Feature Key*” button. Doing this will populate the key in the box below along with a description of the key. If there are any problems with importation of the key, an error message will be displayed to the right. For any errors or problems, please contact [support@vyopta.com](mailto:support@vyopta.com) to resolve the problem.

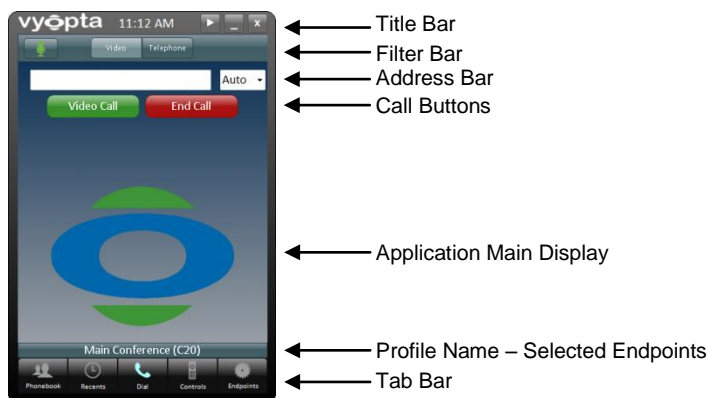
After making any changes to these configurations, you must save the changes by clicking the “*Save Configuration*” button. Failure to save the changes will result in no changes being made.



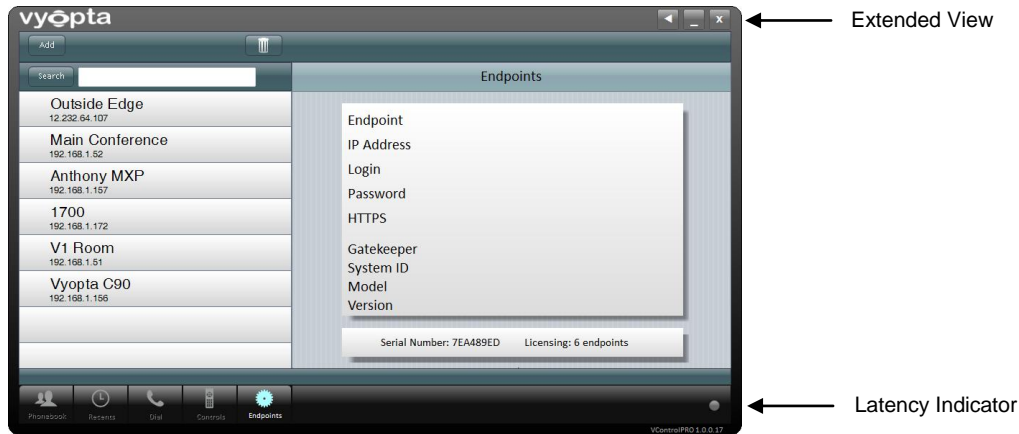
**NOTE:** To have the changes made in the configuration utility take effect, you must exit out of and restart the vControl® PRO application.

### 2.3 Compact and Extended View

vControl® PRO can operate in either the compact or the extended modes. Extended mode is only available if it is enabled through the vControl configuration utility. In the compact mode, vControl looks like this:



To display the extended mode, click on the icon at the right of the title bar to expand your view. vControl should now look like this:



To return to the compact mode, simply click the and extended view will collapse.

## 2.4 Latency Indicator

In the extended mode, the bottom right corner of vControl has a latency indicator to let you know how the network is performing for that endpoint.

The latency indicator will show in four separate colors:

- Grey            vControl is not connected to a network
- Green           vControl is connected and operating well
- Yellow          vControl is connected is experiencing some network latency
- Red             vControl is connected and experiencing severe network latency

## 2.5 Volume Slider

In certain tabs of vControl, a volume slider will appear at the top right portion of the application.




To control the volume, simple tap and slide your finger back and forth if you are using a touch screen or, if you are using a PC, use your mouse to click and drag the levels back and forth until you choose your desired volume.

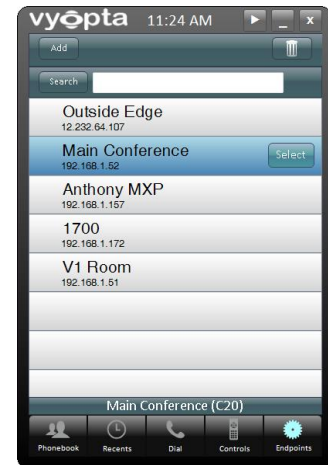
A mute button also appears towards the upper center of the vControl application. This button allows you to toggle mute on and off.

### 3. Application Features and Functions

#### 3.1 Endpoints Tab

##### 3.1.1 Endpoints: General



Upon starting the application, vControl<sup>®</sup> PRO directs you to the Endpoints tab. The Endpoints tab controls the selection of video conference endpoint systems (or endpoints). Using the scrolling list, the user can select an endpoint profile by clicking to highlight that system. Once a system is highlighted, vControl<sup>®</sup> PRO will visually indicate its attempt to communicate with that endpoint. If vControl<sup>®</sup> PRO does not receive a response from the endpoint after 10 seconds, a “Not responding” message will displayed. If the endpoint responds, a “Select” button will be displayed to the right of the endpoint name. Additionally, operating vControl<sup>®</sup> PRO in extended mode will also provide additional information, such as the GateKeeper IP address, System ID name, Model Number, and Version Number. The highlighted endpoint may then be activated by pressing the  button. Once selected, vControl<sup>®</sup> PRO will automatically switch to the Dial tab.

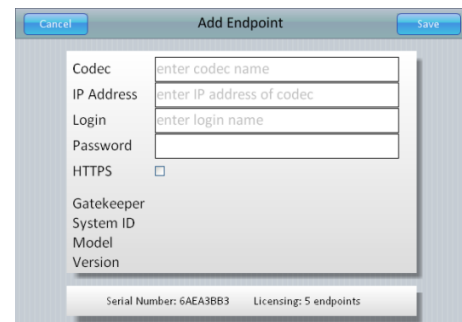


##### 3.1.2 Endpoints: Adding

Upon initial installation, vControl<sup>®</sup> PRO will have no endpoint profiles and at least one profile will need to be added. Endpoint profiles can also be added at any other time using the same steps.

To add an endpoint profile:

- Press the  button at the top left of the Endpoints tab. Pressing the add button activates the “Add Endpoint” window (as pictured to the right).
- **Codec:** Enter the user-defined profile name for that endpoint.
- **IP Address:** Enter the IP address of the endpoint.
- **Login:** Enter the login name for the endpoint.
- **Password:** Enter the password to access the endpoint.
- **HTTPS:** Check the box if the endpoint uses HTTPS.
- Press  in the upper right corner of the window.



If you do not know the IP address, password and/or HTTPS information for the endpoint, please contact your network administrator. Once saved, the new profile will be appended to the list of endpoints under the Endpoints tab. If you have reached the limits of your license for registered endpoints, attempts to add additional endpoints will display an informative message box with that message.



**NOTE:** Duplicate names for profiles are allowed, but users are encouraged to use distinctive names to differentiate between endpoints and avoid confusion.





**NOTE:** While the Endpoints tab is selected and active, vControl® PRO does not poll the endpoint for call status, nor does it provide notification of incoming calls.




**NOTE:** Adding endpoints is not possible if vControl® PRO is configured to function only in the compact mode.

### 3.1.3 Endpoints: Editing


If you have a need to edit any of the registered endpoints, you can select the Endpoints tab and highlight the profile that you wish to edit.

Once highlighted, you can click the  button and make the appropriate revisions in the fields as you would with adding a new system. Press  to save those changes.

### 3.1.4 Endpoints: Deleting

If needed, profiles on the Endpoints tab can be deleted. To delete a profile, click on the profile to highlight. Then, press the  button and confirm the deleting on the popup warning window.

### 3.1.5 Endpoints: Searching

You can search the list of registered endpoints for a particular endpoint. Enter the profile name or the first portion of the profile name in the search blank above the list and click  to find the right endpoint.



## 3.2 Dial Tab


### 3.2.1 Dial: General

Video or voice call management is performed under the Dial tab, which displays all current video and/or voice telephony calls or conferences. Under each connected call, some basic information including call type, call quality and call rate are displayed.

### 3.2.2 Dial: Video

To make a video call:

- Press the  button above the address bar to set dialing to Video mode.
- Touch or click the white text box underneath that button to enter the number to be dialed using the onscreen keyboard. vControl® PRO supports IP address, e164 and URI numbers.
- Press the  button to dial the number and connect the call.

Additional participants may be added to the video conference call. To add additional participants to the call perform the same steps above with the exception of pressing the  button to call the new participant. They will automatically be added to the conference when they accept the call.








**NOTE:** If you have Call Rate Control enabled, it defaults to the Auto mode and selects the best call rate. You can also click the drop down menu and choose the call rate prior to making your call. Call rate cannot be manually changed once you have connected your call.


### 3.2.3 Dial: Voice

To perform an audio call:


- Press the  button at the top of the screen to set dialing to Telephone mode.
- Touch or click the white text box underneath that button to enter the phone number to be dialed using the onscreen keyboard. Do not enter dashes or any other symbols when entering the number.
- Press the  button to dial the number and complete the call.


Additional participants may be added to the conference call. To add additional participants to the call perform the same steps above with the exception of pressing the  button to call the new participant. They will automatically be added to the conference when they accept the call.



**NOTE:** If your video conferencing system is not integrated with a voice telephony, system, voice dialing will be disabled and the  button will be grayed out and cannot be selected.

### 3.2.4 Dial: Disconnecting

Any call or conference can be terminated completely by pressing the  button and all callers will be disconnected.

Callers can be disconnected individually from the call or conference by pressing the  button located to the right of his or her name.

vControl<sup>®</sup> PRO allows the user the ability to add and drop participants on a call.

### 3.2.5 Dial: Extended View

In the extended view for the Dial tab, vControl<sup>®</sup> PRO displays additional site information. If the selected endpoint supports video snapshots and that feature is enabled, three video snapshot views will be displayed:

Dial Tab – Extended View	
<b>Main Video</b>	The main video channel, which may include a combination of local source and far end source depending on displayed layout (point to point and multi-site). A video snapshot may display video feed image, if available.
<b>Dual/H.239 Video</b>	This video snapshot displays images of the video or other image displayed by the second video channel (dual stream or H.239 feed). Usually displays presentation material.
<b>Local Video</b>	This video snapshot displays images of the video feed from the selected local source (i.e. a local camera, PC or document camera). This is also the video feed being sent to all other participants in the video call.



Each of the video feed boxes in the extended view can be selected by tapping or clicking on that particular box. By selecting a box, the extended view for vControl<sup>®</sup> PRO will switch to a more detailed view of the video feed selected.



**NOTE:** Snapshots are currently only supported by the MXP platform, and are visible only when engaged in a video conference.

## Participant View

When in the extended view and connected into a call, you can tap or click on any of the participants listed on the left side of vControl<sup>®</sup> PRO. Tapping or clicking on an active participant will bring up additional statistics for the call with that particular participant.

Media Info	Audio In	Audio Out	Video In	Video Out	Dual In	Dual Out
Rate	128	64	384	448	–	–
Protocol	AAC-LD	AAC-LD	H264	H264	–	–
Resolution	–	–	w448p	w448p	–	–
DynamicRate	127	64	381	42	–	–
PacketLoss	0	0	0	0	–	–
PacketsDropped	0	–	0	–	–	–
Jitter	0	0	4	1	–	–

This view provides detailed information for both incoming and outgoing video and audio streams, including: call rate, audio protocol, video resolution, dynamic call rate, packet loss, packets dropped and jitter rates.

To exit the detailed Participant Video extended view and return to the Dial tab standard view, the user can click on the button located at the top right of the extended view.

## Main Video

The Main Video extended view allows the user or administrator to change the layout of the selected endpoint.

Tapping or clicking on the Main Video snapshot from the Dial tab will bring up the Main Video extended view (example below):



### Multi-site layout options:

Generally, the multi-site layout on the left portion of the view will be populated based upon the multi-site options for the selected endpoint. Selecting one of the multi-site layout options on the left of the screen will change the layout of the selected endpoint.

To exit the detailed Main Video extended view and return to the Dial tab standard view, the user can click on the [Back](#) button located at the top right of the extended view.

## Dual / H.239 Video

The Dual / H.239 extended view allows the user or administrator to change the source displayed in the presentation mode.



**NOTE:** The presentation button must be selected from the Control Tab before the snapshot can be seen (see Section 3.5.1 Controls: Basic Operations).

Tapping or clicking on the Dual / H.239 snapshot from the Dial tab will bring up the Dual / H.239 extended view (example below):



In a video conference call utilizing additional content, the user can click on the boxes to the left to choose the source of the additional content connected to the selected endpoint controlled by vControl<sup>®</sup> PRO. This video will be displayed in addition to the main video. The number and type of sources available will be determined by the options available on the selected endpoint.


To disable the Dual / H.239 view, you can click on “None” to remove the second channel of video feed.



**NOTE:** Selection buttons are only functional if the required devices are connected to and available as a feature on the selected endpoint.



**NOTE:** Additional sources can be added and the names of the sources modified from the Local Video view and will be displayed as modified in the Dual / H.239 view. (See next subsection below)

To exit the detailed Dual / H.239 extended view and return to the Dial tab standard view, the user can click on the  button located at the top right of the extended view.

## Local Video

The Local Video extended view allows the user or administrator the following options:

- Changing the source of the main channel of the selected endpoint
- Renaming the source titles for the selected endpoint (only available for certain endpoints that have the capability for source expansion)
- Using camera presets (if available) of the selected endpoint
- Controlling the camera of the selected endpoint manually



**NOTE:** The main channel defaults to the main video camera input. Changing the source on the Local Video extended view will replace the video feed displayed. To add the presentation mode to the video conference, see the above Dual / H.239 Video section.

Tapping or clicking on the Local Video window from the Dial tab will bring up the Local Video extended view (example below):



## Source Selection

The user of the selected endpoint can use the menu located on the left side to select the content source (each a “Source”) for the main channel he or she wishes to display to the other participants in the video conference. The Sources available will be determined by the options available on the selected endpoint. The selected source will be highlighted in blue and will begin transmitting a video feed from the selected device.



**NOTE:** Choosing one of these Sources will only display video or content from that Source. This is not the same as a dual stream of data.



**NOTE:** Tapping or clicking on a Source will immediately select the Source and the Connector for that Source (see next section for Connector Selection).

### Expanded Connector Selection

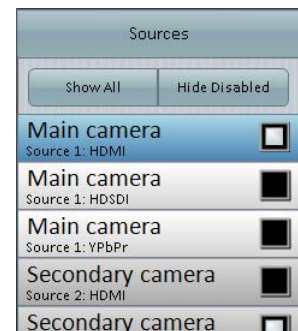
Generally, each endpoint has a limited number of Sources available for selection and use. Each of these Sources may take a variety of input types (i.e. HDMI, HDSDI, YPbPr), which we will refer to as “Connectors.” With some Cisco TelePresence endpoints, vControl® PRO gives you the ability to switch between the input Connectors for each Source without the need for additional switching hardware. In the screenshot above, vControl® PRO is controlling a Cisco TelePresence System Codec C90 endpoint which shows an expanded list of Connectors for the Sources beyond the OEM specifications by allowing the switching of Connectors within the Sources (i.e. OEM allows for switching between 5 Sources, vControl® PRO expands usable Sources to 15 through Connector switching).

#### Selecting a Connector for Each Source

To select a Connector for any of the Sources, simply click on the box to the right of the Connector. When a Connector is chosen, the click box should be filled to indicate the active Connector for that Source.

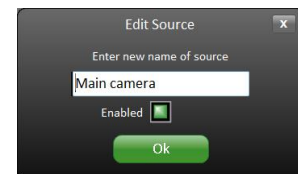



**NOTE:** If no active device is connected to a Connector, that Source will send or display a blank or black screen when selected to output video.



#### Renaming a Connector

When vControl® PRO connects to the selected endpoint, it automatically detects the number of Sources and Connector types. The initial Source list will have the default names provided to each Source and Connector by the endpoint. To rename or customize a Connector to reflect the device connected, right click on the Connector you wish to rename.



Enter the new name and click the “Ok” box to complete. This box also lets you enable (as indicated by a green square in the selection box) or disable a particular Connector. Disabling a source removes it from selection (grays the choice out) and enables vControl to hide those sources if desired by clicking the  button at the top of the selection list.



**NOTE:** Custom names for the Sources are saved locally on the PC running vControl® PRO and will not affect the custom names used by other users on their own copy of vControl® PRO.



**NOTE:** Disabled Connectors cannot be selected as a Source and must be re-enabled before they can be chosen.


### Camera Presets

Additionally, camera preset selection buttons are located on the right side of the Local Video extended view. If the selected endpoint has preset locations for the camera (i.e. different focus points around a conference table), these selection buttons can be tapped or clicked to change the camera focus location to the selected preset location.




**NOTE:** Only displayed when available on endpoints which support preset camera positions.

Alternatively, manual camera control of the selected endpoint is also available. The Local Video extended view displays a video snapshot of the video being sent by the selected endpoint. The user can click on the arrows and zoom buttons that are superimposed on the image to move the camera or zoom in and out.


To exit the detailed Local Video extended view and return to the Dial tab standard view, the user can click on the  button located at the top right of the extended view.

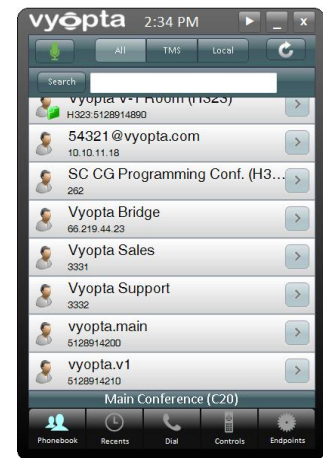
### 3.3 Phonebook Tab



#### 3.3.1 Phonebook: Basic Operations


vControl<sup>®</sup> PRO allows the user to access the phonebook located on the registered endpoint currently connected to vControl. The phonebook may contain global corporate entries populated by the system administrators (those located on TMS) and local entries that are created on that endpoint by the users. The user can filter the list of addresses by choosing either global or local entries on the top selector bar  to display only those numbers in each particular category.

When the endpoint is selected under the Endpoints tab, vControl<sup>®</sup> PRO will automatically synchronize to the endpoint's phonebook entries from for viewing in the Phonebook tab view.

If needed, the user can manually refresh the phone book by pressing the  button at the top right.



For phonebooks with a large number of entries, the user can use the search bar to find an entry by profile name. By typing alphanumeric characters in the search bar and pressing , all phonebook profile entries that contain the string of alphanumeric characters will appear in the Phonebook view. To clear the search and show all entries again, press the cancel button .

Any entry in the phonebook may be selected by tapping or clicking the  button on that entry. Selecting the entry will take you to the Dial tab and populate the dialing information in the text box from your selected entry.

### 3.3.2 Phonebook: Extended View

The extended view for the Phonebook tab provides an information summary for the selected phonebook entry. It provides the following:

Phonebook – Extended View	
<b>Name</b>	Displays the name given to the selected phonebook entry.
<b>Number</b>	Displays the address for the selected phonebook entry. This can be a phone number, IP address, URI address etc.
<b>Call Speed</b>	Displays the call speed used when dialing the selected phonebook entry. (MXP only)
<b>Secondary</b>	Secondary address/number (generally used in ISDN systems) (MXP only)
<b>Subaddress</b>	ISDN setting (generally not used in IP systems) (MXP only)
<b>Net Profile</b>	Only used when prefix dialing is set up for the various types of networks (generally not used with IP systems) (MXP only)
<b>Restrict (56k)</b>	Displays whether the selected phonebook address is restricted to a 56k call. (MXP only)

Additionally, local phone book entries can be added or deleted from the extended view by clicking or accordingly.

When adding a local phonebook entry, simply filling all the blanks and then click to save the address to your local phonebook. Otherwise click on to cancel your addition.

When deleting, you will be prompted with a confirmation dialogue box. Choose ok to continue your deletion or cancel to keep the phonebook entry and return to the phonebook list.

## 3.4

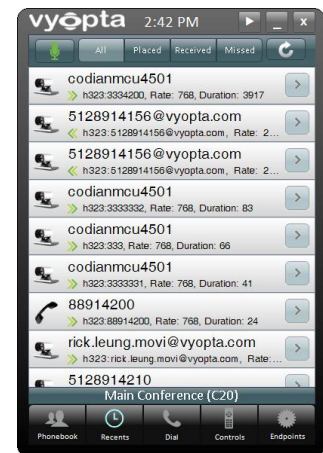


### Recents Tab

#### 3.4.1 Recents: Basic Operation

After connecting successfully to a video or voice endpoint, vControl<sup>®</sup> PRO will download the current call history of the selected endpoint. The data is displayed and the user can filter the list of calls by choosing a filter from the top selector bar to display only the calls in the category they wish to see.

If subsequent calls are placed, received or missed after the vControl<sup>®</sup> PRO application is started, the user will need to manually refresh the call history by pressing the button at the top right.



Any entry in the call history may be selected by tapping on the button of that entry. Selecting the entry will take you to the Dial tab and populate the dialing information in the text box with your selected entry.

### 3.4.2 Recents: Extended View

The extended view for the Recents tab displays available information about the endpoint or number selected from the recent call list. If desired, this number can be added to the local phonebook by clicking the **Add to Local** button. Additional information can be entered in the difference fields. Once complete, either **Save to Local** can be selected to save the number or **Cancel Add** can be selected to cancel the addition and return to the Recents list.






## 3.5 Control Tab

### 3.5.1 Controls: Basic Operations









vControl<sup>®</sup> PRO allows the user to control camera functions remotely. It emulates the functions of the Cisco TelePresence TRC remote control. When the user selects a video endpoint to control, vControl<sup>®</sup> PRO will detect the model of the endpoint and display either a MXP remote control interface or a C-series remote control interface. There are three main groups of functionality: (1) near end endpoint control; (2) far end endpoint control; and (3) bridge control. These unique functions can be selected by using the **Near End** **Far End** **Bridge** selector.

#### **Cisco TelePresence MXP Series Endpoint**

If a Cisco TelePresence MXP endpoint (i.e., Cisco TelePresence Edge MXP, Cisco TelePresence System 1700 MXP) is detected, vControl<sup>®</sup> PRO will display the MXP remote interface as illustrated to the right. This interface will be available in both the compact and extended view. There are five different input selectors that a user can choose from at the top of the remote interface:

-  will set the main input to the camera.
-  will set the endpoint input content.
-  will set the current input to document camera.
-  will set the current input to DVD.
-  will set the current input to AUX.

Additionally there are other inputs:

-  mutes the near end microphone.
-  activates presentation mode for the endpoint.
-  controls volume level (hold down on the key for continuous input).
-  controls camera zoom (hold down on the key for continuous input).
-  allows the user to switch between various layouts to display conference participants.
-  toggles onscreen local camera view on and off.
-  used to respond affirmatively for commands.
-  used to dismiss any system interactions.



MXP Interface (near end)

Moving around in menus and on the screen is done with the arrows left, right, up, and down. These arrows are also used to pan the camera up, down, left, and right.

Selecting **Far End** will switch to the far end controls for the MXP endpoint and only the available functions will be displayed. In most cases, far end controls will be limited to controlling far end camera panning, tilt and zoom.



MXP Interface (far end)

### **Cisco TelePresence C-Series Endpoint**

If a Cisco TelePresence C-Series endpoint (C20, C60, C90) has been selected in the Endpoints tab, vControl<sup>®</sup> PRO will recognize the C-Series endpoint and display the appropriate remote interface. This interface is similar to that of the MXP interface, with one major difference: all five buttons at the top of the remote are now soft keys. The functions of these soft keys will vary depending on which menu or mode of the endpoint is active. On the bottom of the display, a series of buttons that correlate to the five buttons are shown with the assigned function. Pressing on the soft key will execute the assigned function.



C-Series (near end)

Selecting Far End will switch to the far end controls for the C-Series and only the available functions will be displayed. In most cases, far end controls will be limited to controlling far end camera panning, tilt and zoom.



C-Series (far end)

### Cisco TelePresence MCU

The Bridge control provides the user the ability to join and control certain aspects of a multiparty conference call.

Upon connecting to an MCU (or video conference bridge), the user can change the vControl® PRO control interface to the bridge mode by selecting **Bridge**. vControl defaults to the Auto Attendant mode displayed to the right.

In this Auto Attendant mode, the user may then join a conference by using the **▲** and **▼** arrows to scroll up and down the list of conferences using the navigation bar and pressing the **Select** button to enter the desired conference. If prompted for a security pin code, enter the PIN number with the number pad. Press **\*.** if needed to clear the box and re-enter the code. Press **# a/A** when ready to submit the code and join the conference.



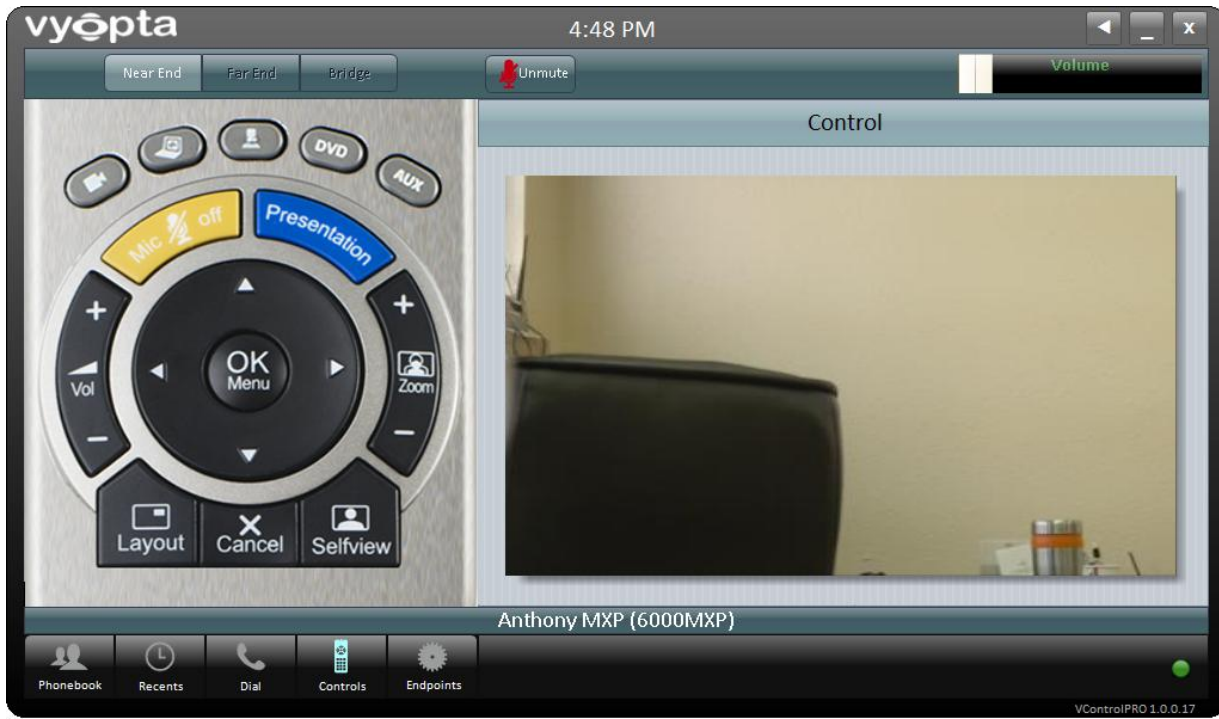
After joining a conference of at least three endpoints, the user can select the **Codian Layout** button to control the near end participant layout. This mode allows the user to change how the participants are organized on screen and switch among the different speakers.

By using the **▲** and **▼** controls, the user can scroll through the various options until he or she finds the one desired.



### 3.5.2 Controls: Extended View

In the extended view for the Controls tab, vControl® PRO provides a video snapshots of the video feed captured by the selected endpoint.



### 3.6 Call Alerts

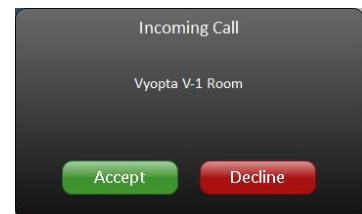
When connected to an endpoint, vControl® PRO notifies the user of any incoming or outgoing calls from that endpoint.

#### Incoming Calls

If the user receives an incoming call, an alert will pop up at the bottom of the screen. The user can press **Accept** to accept the call or **Decline** to reject the call.

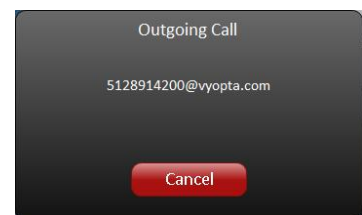


**NOTE:** While in the Endpoints tab, vControl® PRO does not poll the endpoint for call status and thus there will be no notification of incoming calls while in that tab is selected.



#### Outgoing Calls

If the user makes an outgoing call, an alert will appear at the bottom of the screen notifying them that an outgoing call has been attempted. The user can select **Cancel** at any time to cancel the call.



### 3.7 Sleep Mode

When vControl® PRO is running on a Windows PC or Windows tablet, but the video conferencing system and/or vControl® PRO is not active, the application will go into a sleep



mode. In this mode, vControl® PRO will not poll the endpoint for call status. vControl® PRO exits the sleep mode when the application registers any user interaction.

The length of inactivity required prior to entering sleep mode can be specified using the vControl® PRO Configuration utility.


## 4. Video Compositing


### 4.1 Composite Tab

If you have purchased a license key to add compositing features, your version of vControl® PRO will have a compositing tab visible on the tab bar. The compositing interface allows users to access the powerful compositing and source switching features of the Cisco TelePresence Systems: C90, EX90, and C60. With it, you will have the ability to take video input sources and composite them to a local video display or an outgoing video stream.

### 4.2 Setting Up Compositing Resources

Before you can use the Compositing interface, you will need to designate the video source inputs for use. To do so, refer back to *Section 3.2.5 Dial: Extended View* above under the Local Source subsection.

 **NOTE:** Selecting a connector also changes the codecs current main source to that connector.

 **NOTE:** Any changes made to a source's connector will also change that source in the compositor.


Once you have selected the video source inputs for compositing, they will be displayed in the Compositor interface.


### 4.3 The Compositor Interface

The compositor interface is designed to intuitively show all the input sources and output displays available on the codec.




#### 4.3.1 Sources

The table on the left shows the available video input sources selected for use with compositing. There are two types of sources: local and far end. Local sources are listed when the  button is pressed. These are video input sources that are connected to the back of the local codec, and correspond to the connector selections that were made in the Dial View, Local Video interface.

The  button will switch the table view to list video sources that are available to you when the codec is in a call. If the codec is not in a call, the far end selector button will be grayed out and disabled. When the codec is in a point-to-point or in a multisite conference, the far end button is selectable and the table will list and identify the participants on the call by their number.


### 4.3.2 Output

The table on the right side of the Compositor interface shows all the displays available for you to send composited video images. Similar to the Sources table, the outputs table shows local and far end output displays.

The  selector button will provide you with access to a list of displays that correspond with local outputs connected to the actual physical output connectors on the back of the local codec.



**NOTE:** Unless you have a display or monitor connected to these output connections, you will not see the output of any composited display you create.

The  output selector will display any far end output displays that are associated with calls connected in a call with the local codec.



Also available as an output source, is the far end content channel. When the far end content channel display is selected, a content video stream will automatically be started. This output streamed content is shared among all calls that are connected to the local codec.

You can switch between the output displays at any time by simply clicking on the display that you want to see. Each display can be formatted with its own layout.

### 4.3.3 Creating an Output Display

#### **Basic Usage:**

The following are basic steps to creating an output display:

1. Select  or  on the output side of the interface. This will initialize the codec's display and populate the video compositor display with the current local codec layout.
2. Once the output display has been selected, the source selection table on the left side will be enabled. You can choose any available video source and drag it into the video compositor desktop. Additional frames can be added at any time by dragging the source onto the video compositor desktop.

#### **Basic Operation:**

Resizing and reorganizing the frames can be done with simple tap or click commands.

1. Moving. Each frame can be moved by left clicking/tapping the frame then dragging it to the desired location
2. Resizing. Each frame can be resized by left clicking/tapping the bottom right corner of frame and then moving the cursor until the desired frame size is reached. Releasing the left mouse button or lifting your finger will lock the frame size in place
3. Maximizing/Minimizing. Each individual frame can be maximized to full screen by double clicking/tapping on the frame. To minimize, simply double click/tap again.
4. Closing. To close out a frame, simply click or tap the "X" at the top right of the frame.





**NOTE:** Once you have activated compositing for an output display, vControl® PRO will not allow you to reduce the number of sources below one.

**Configurations:**

vControl® PRO’s compositing tool allows you to send unique composited video streams to each enabled display output. In a multisite call, this means that each participant may receive different video content.



A maximum of 5 frames for local displays can be composited into each video stream and a maximum of 4 frames can be composited for far end streams.

You can reset the video compositing layout for the active display by pressing the  button above the video compositor desktop. This will reinitialize the active display to a default state and will have no effect on the video compositing layouts of any other output displays. To clear all video compositing layouts for all displays simultaneously, you can press the  button.


**4.4 Managing Layouts**

Video compositing layouts that you have created and defined can be saved for future use.


**4.4.1 Saving Layouts**

To save the active video compositing layouts, you can press the  button above the video compositor desktop. Doing so opens the Composite Layouts management box (see figure to the right). The entry box at the top allows you to specify a name for the active layout. By pressing  the active layout is stored under the entry box name.



**NOTE:** Clicking on an existing entry and entering a new layout name will over right the existing entry when you pressing .



**NOTE:** You can overwrite an existing entry with the existing active layout by selecting that entry and pressing .

**4.4.2 Loading Layouts**

**Loading in the Composite Layout Menu**

To load a previously saved layout, select the layout and then press .



**NOTE:** Loading a layout will load all local and far end layouts saved under that entry.


**Loading from the Video Compositor Interface**



A drop down menu is located at the top left of the video compositor desktop. This drop menu allows for quick selection of saved layouts.

If no layout is active, the drop menu will display “Select Layout...” otherwise the active layout name will be displayed in this box.

#### 4.4.3 Deleting Layouts

To delete a layout, select the layout and then press .

#### 4.4.4 Setting a Default Layout

A default layout entry can be specified to load when vControl<sup>®</sup> PRO is started.

##### Set a Default

To set an entry as a default layout, right click or tap and hold any entry until you get a pop-up menu to “Set as Default.” Click on “Set as Default” to set that particular entry as your default layout. The name of the layout will be preceded by “(default)” to indicate that it has been set as the default. If a default layout has been specified, that layout will be auto loaded the next time vControlPRO is started and populate video frames for that layout in the video compositor desktop.

##### Clear a Default

To clear the default setting, repeat these steps and choose “Clear Default.”



**NOTE:** A layouts and default settings are set for the active codec being controlled by vControl<sup>®</sup> PRO. Each individual codec capable of video compositing and registered to vControl<sup>®</sup> PRO will have its own layout lists and default layout.

#### 4.4.5 Far End Compositing

Some layouts may be saved that include far end compositing settings. When running vControl<sup>®</sup> PRO and selecting one of these saved layouts, an attempt will be made to restore far end sources and displays.



**NOTE:** Far end restoration is required because each of those far end sources and displays were part of a video conference when saved as a layout.

##### Restoration of Far End Sources

When a video compositing layout includes far end video sources participating on a video conference, that layout will be saved identifying certain video frames as far end sources. When a layout with far end compositing settings is selected, vControl<sup>®</sup> PRO will automatically attempt to restore all far end sources.

Generally, video from these far end sources will not be available when the layout is used but a call is not in session. In such cases, all far end sources will show a blank or black screen on the display, but the location of those sources will continue to be represented as video frames in the video compositor desktop.

If an active call is in session and the far end sources have joined as participants on the call, vControl<sup>®</sup> PRO will restore the video feed from the far end sources in the order they connect to a far end video frame in the video compositor desktop. Thus the first far end call would become far end source 1, the second call would be 2 and so forth. In the image below the far end video

frames are stacked on the right side from 1-3, top to bottom. You can see that they correspond to the calls that joined as depicted in the figure below at the left.



**NOTE:** Though the initial ordering of the far end sources is sequentially determined based upon when the codecs join the video conference, any dropping and addition of calls will only affect the source feeding the video frame in question.



**NOTE:** The video frame in the video compositor will show “Far End Source” when the far end source is not connected. When the far end source is connected, the video frame will show call id.

#### 4.4.6 Restored Far End Displays

If a layout is active and there are far end displays saved as part of that layout, vControl<sup>®</sup> PRO will restore those displays that are connected and active in the video conference.

If other codecs are connected in a video conference, the far end display will be restored when that codec is connected. If a “Content Channel” display is present in the layout, the content stream on the codec will be turned on and that content layout will also be restored.

#### 4.4.7 Copying/Pasting Composited Layouts

The composited layout for any of the output displays can be copied and pasted into another output display so that the output layout is reproduced or cloned. To copy a composited layout, you can choose the output display with the layout you want to copy, then right click on that output display from the menu list on the right side of vControl<sup>®</sup> PRO. This will bring up a pop-up menu allowing you to choose “copy.” To paste the copied composited layout, choose the output display to paste into and right click that output display on the menu list. Then select “paste” and that output display will show the new composited layout.





## 5. Contact Customer Support

For any customer support questions, please contact Vyopta's customer support at the following addresses:

E-mail:	<a href="mailto:support@vyopta.com">support@vyopta.com</a>
Phone:	512.891.4200 Monday – Friday 8am – 5pm (US central time)
Video:	<a href="http://www.vyopta.com/videos">www.vyopta.com/videos</a>



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