

CYNAP MODULE HELP FILE

WolfVision Cynap, AV clients (Crestron)



CYNAP MODULE HELP

Module name	Cynap_Client.umc, Cynap_Client.usp, SSLInterface.clz
Version	2.00.2
Description	<p>This document defines the common Crestron module interface for the WolfVision Cynap.</p> <p>The Cynap may be controlled using the Cynap_Client.umc module included, along with the simpl+ Cynap_Client.usp, and the Simpl# file SSLInterface.clz. This module requires a single Ethernet port connection from the Crestron network to the Cynap being controlled. For installations containing more than one Cynap, multiple instances of the module may be used. The communication module implements the actual Cynap protocol for communicating to the unit but exposes a more simplified protocol to the programmer.</p>
Maintainer	WolfVision GmbH
Inputs	<p>Power_On, digital Pulse to power on the device.</p> <p>Power_Off, digital Pulse to power off the device.</p> <p>Power_Toggle, digital Pulse to toggle the power of the device.</p> <p>Presentation_Mode_Open, digital Pulse to put the device into Mirror Mode Open.</p> <p>Presentation_Mode_Protected, digital Pulse to put the device into Mirror Mode Protected..</p> <p>Presentation_Mode_Toggle, digital Pulse to toggle the device between modes.</p> <p>Presentation_Snapshots_Toggle, digital Pulse to toggle the snapshots save on/off.</p> <p>Presentation_Recordings_Toggle, digital Pulse to toggle the recordings save on/off.</p> <p>Presentation_New, digital Pulse to start a new presentation.</p> <p>Presentation_End, digital Pulse to end presentation, and power off the device.</p> <p>Source_Input1, digital Pulse to create a new window with the content from HDMI 1.</p> <p>Source_Input2, digital Pulse to create a new window with the content from HDMI 2.</p> <p>Source_Browser, digital Pulse to create a new window with a browser window..</p> <p>Source_Local Drives, digital Pulse to browse the local files located on the internal harddrive and usb connected drives..</p> <p>Source_Cloud Drives, digital Pulse to browse the available cloud drives.(Dropbox and GoogleDrive).</p> <p>Source_Mirror, digital Pulse to create a new window with content from any mobile mirrored device connected.</p> <p>Source_Whiteboard, digital Pulse to create a new window with whiteboard background.</p> <p>Source_WebRTC Pulse to create a new window for video conferencing.</p> <p>Browse_Close_Windows, digital Pulse to close windows associated with browsing.</p> <p>Drive_x_Select, digital Pulse to select the drive at x location. X= Internal, Dropbox, USB etc...</p> <p>Cloud_Drive_Disconnect, digital</p>

	<p>Pulse to disconnect the connected cloud drive(Either dropbox or google drive while browsing that drive).</p> <p>Box_Cancel, digital Pulse to cancel the login for Box cloud drive.</p> <p>Box_Login, digital Pulse to login for Box cloud drive.</p> <p>Box_Username, serial Serial string for the username/email address. Must have data before pulsing Box_Login</p> <p>Box_Password, serial Serial string for the password. Must have data before pulsing Box_Login</p> <p>Number_of_Browse_Lines, analog Set this to define how many lines will be used and updated during browsing.</p> <p>Scroll_Bar_In, analog This signal connectos the the analog join associated with the level bar for file browsing.</p> <p>Back_Button, digital Pulse to go back one level while browsing files.</p> <p>Select_Browse_Line, analog Direct select of line</p> <p>Browse_Line_x_Select, digital Pulse to select the file/dir located at x point in the list. X= 1 to 12.</p> <p>Browse_Options_x_Select, digital Pulse to select the options for a file at x point on the list. X=1 to 12.</p> <p>Browse_Line_x_Upload/Cancel, digital Pulse to cancel the upload for a file at x point on the list. X=1 to 12.</p> <p>Download_File_Button, digital Pulse to download the selected file.</p> <p>Open_File_Button, digital Pulse to open the selected file.</p> <p>Upload_Delete_Button, digital Pulse to delete the selected upload file.</p> <p>Upload_to_X_Button, digital Pulse to upload the selected file to X drive..</p> <p>Active_Window_Close, digital Pulse to close the active window.</p> <p>Active_Window_Mode_Fullscreen, digital Pulse to set the active window mode to fullscreen.</p> <p>Active_Window_Mode_Normal, digital Pulse to set the active window mode to normal.</p> <p>Active_Window_Mode_Toggle, digital Pulse to toggle the active window mode between fullscreen and normal.</p> <p>Active_Window_Volume_Button, digital Pulse to activate the window volume control page.</p> <p>Active_Window_Volume_In, analog Change level to change the volume level of the active window.</p> <p>Active_Window_Mute_On, digital Pulse to set the active window mute status to On.</p> <p>Active_Window_Mute_Off, digital Pulse to set the active window mute status to Off.</p> <p>Active_Window_Mute_Toggle, digital Pulse to toggle the active window mute status between On and Off.</p> <p>Active_Window_DualScreen_Mode_On Pulse to enable the dualscreen function.</p> <p>Active_Window_DualScreen_Mode_Off</p>
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	<p><i>Pulse to disable the dualscreen function.</i> Active_Window_DualScreen_Mode_Toggle <i>Toggles the the dualscreen function on or off.</i></p> <p>Window_x_Close, digital <i>Pulse to close x window</i> Window_x_Mode_Fullscreen, digital <i>Pulse to set the window mode to fullscreen</i> Window_x_Mode_Normal, digital <i>Pulse to set the window mode to normal</i> Window_x_Mode_Toggle, digital <i>Pulse to toggle the window mode between fullscreen and normal</i> Window_x_Volume_In, analog <i>Change level to change the volume level of the window.</i> Window_x_Mute_On, digital <i>Pulse to set the mute status to On</i> Window_x_Mute_Off, digital <i>Pulse to set the mute status to Off</i> Window_x_Mute_Toggle, digital <i>Pulse to toggle the window mute status between On and Off.</i> Window_x_DualScreen_Mode_On <i>Pulse to enable the dualscreen function for window x.</i> Window_x_DualScreen_Mode_Off <i>Pulse to disable the dualscreen function for window x.</i> Window_x_DualScreen_Mode_Toggle <i>Pulse to toggle the dualscreen function on/off for window x.</i></p> <p><i>Tools</i> Master_Volume_level_In, analog <i>Change level to change the volume level of the system.</i> Master_Volume_Mute_On, digital <i>Pulse to set the system mute status to On</i> Master_Volume_Mute_Off, digital <i>Pulse to set the system mute status to On</i> Master_Volume_Mute_Toggle, digital <i>Pulse to toggle the system mute status between On and Off</i></p> <p>Mic_Mute_On, digital <i>Pulse to set the mic status to On</i> Mic_Mute_Off, digital <i>Pulse to set the mic status to On</i> Mic_Mute_Toggle, digital <i>Pulse to toggle the mic status between On and Off</i></p> <p>Mirroring_Mode, digital <i>Pulse to set the system mute status to On</i> Content_Mode, digital <i>Pulse to set the system mute status to On</i> Mode_Toggle, digital <i>Pulse to toggle the system mute status between On and Off</i></p> <p>Recording_On, digital <i>Pulse to start recording.</i> Recording_Pause, digital <i>Pulse to pause recording.</i> Recording_Stop, digital <i>Pulse to stop recording.</i></p> <p>Streaming_On, digital <i>Pulse to start streaming.</i></p>
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	<p>Streaming_Off, digital Pulse to stop streaming.</p> <p>Streaming_Toggle, digital Pulse to toggle the streaming state.</p> <p>Link_to_Stream_On, digital Pulse to show the QR Code on the display.</p> <p>Link_to_Stream_Off, digital Pulse to hide the QR Code on the display.</p> <p>Link_to_Stream_Toggle, digital Pulse to toggle the QR Show state.</p> <p>Freeze_On, digital Pulse to freeze the main screen.</p> <p>Freeze_Off, digital Pulse to unfreeze the main screen.</p> <p>Freeze_Toggle, digital Pulse to toggle the freeze state.</p> <p>Take_Snapshot, digital Pulse to take a snapshot of the Cynap screen.</p> <p>Close_All_Windows, digital Pulse to close all open content windows.</p> <p>Get_Downloads, digital Pulse to get the available downloaded file list</p> <p>Get_Uploads, digital Pulse to get the available uploaded file list</p> <p><i>Edit Bar Buttons</i> Pulsing any of the Edit Bar buttons will send that command to the active window only.</p> <p>Power, digital Visualizer power on/off function.</p> <p>Light, digital Pulse to toggle the Visualizer lights on/off.</p> <p>Zoom_out, digital Visualizer, Browser, Doc, PDF, Calc, Pres</p> <p>Zoom_In, digital Visualizer, Browser, Doc, PDF, Calc, Pres</p> <p>Back, digital Browser</p> <p>Forward, digital Browser</p> <p>FullPage, digital Doc, PDF, Calc</p> <p>FullWidth, digital Doc, PDF, Calc</p> <p>FullHeight, digital PDF</p> <p>ArrowDown, digital Browser, Doc, PDF, Calc, Pres</p> <p>ArrowUp, digital Browser, Doc, PDF, Calc, Pres</p> <p>ArrowLeft, digital Browser, Doc, PDF, Calc, Pres</p> <p>ArrowRight, digital Browser, Doc, PDF, Calc, Pres</p> <p>Previous, digital Image, Doc, Calc, Pres</p> <p>Rewind, digital Video, Audio</p> <p>StepBack, digital Image, Doc, Calc, Pres</p> <p>Stop, digital</p>
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	<p>Video, Audio Play, digital Video, Audio Pause, digital Video, Audio StepForward, digital Image, Doc, Calc, Pres FastForward, digital Video, Audio Next, digital Doc, Calc, Pres, Image Reload, digital Browser WWW, digital Only used for displaying keyboard Focus_Near, digital Visualizer control Focus_Far, digital Visualizer control Auto_Focus, digital Visualizer control Freeze, digital Visualizer control Preset_Recall, digital Visualizer control Preset_Save, digital Visualizer control Loop, digital Video, Audio control</p> <p>Browser_URL_Text, serial String to be used when a keyboard is active. This string is used only with the browser window to input web addresses. BrowserURLEnter, digital Pulse, tied to the enter from the Keyboard to send the string SendCommand, serial A passthrough to send commands directly to the Cynap.</p>
Outputs	<p>Link_Established_Fb, digital Shows whether an Ethernet link is established to the Cynap or not. Valid_Login, digital Shows whether the admin password is correct or not. BoxName, serial Text used to display the name of the Cynap unit Show_PIN_code, digital Displays a popup page when a PIN Code is available. PIN_Code, serial Text used to display the PIN code.</p> <p>Show_Busy_Subpage This signal will go high is the system is processing a lot of information and slowing down.</p> <p>Power_On_Fb, digital Indicates that the power is on. Power_Off_Fb, digital Indicates that the power is off.</p> <p>Presentation_Mode_Open_Fb, digital Indicates that the mode is Open. Presentation_Mode_Protected_Fb, digital Indicates that the mode is Protected.</p> <p>Presentation_Snapshots_Fb, digital Indicates the state of the toggle.</p>

	<p>Presentation_Recordings_Fb, digital Indicates the state of the toggle.</p> <p>Input1/2_Type, analog Value of what input 1/2 icon type is.</p> <p>Input1/2_Name, serial Text of what input 1/2 has been set to.</p> <p>Input1/2_Enabled, digital This will be set to low if there is no connected source on the input. (Beta)</p> <p>Source_Cloud_Visible, digital This signal will go high when the system allows at least one cloud drive to be shown.</p> <p>Source_Mirror_Visible, digital This signal will go high when in the Protected Mode</p> <p>Source_Mirror_Waiting, digital This signal will go high when the mirror stream is open and allows for a mirror connection to be established.</p> <p>Browse_Local_Drives_Subpage_Fb, digital This signal will go high while browsing the local drives.</p> <p>Drive_x_Mounted X will go high if there is a valid drive to be displayed</p> <p>Drive_x_Name, serial Name assigned to drive at x location. X= Internal, Dropbox, USB etc...</p> <p>Browse_Cloud_Drives_Subpage_Fb, digital This signal will go high while browsing the cloud drives.</p> <p>Show_Disconnect_Button, digital This signal will go high while browsing the cloud drives.</p> <p>Show_Select_Dropbox, digital This signal will go high if dropbox is allowed to be shown for selection.</p> <p>Cloud_Drive_Dropbox_Status, analog Status of the dropbox connection. (0-disconnected, 1-Authentification, 2-Connected, 3-Failed, 4-Synced)</p> <p>Show_Select_GoogleDrive, digital This signal will go high if googledrive is allowed to be shown for selection.</p> <p>Cloud_Drive_GoogleDrive_Status, analog Status of the dropbox connection. (0-disconnected, 1-Authentification, 2-Connected, 3-Failed, 4-Synced)</p> <p>Show_Select_Box, digital This signal will go high if box is allowed to be shown for selection.</p> <p>Cloud_Drive_Box_Status, analog Status of the box connection. (0-disconnected, 1-Authentification, 2-Connected, 3-Failed, 4-Synced)</p> <p>Show_Box_Login, digital This signal will go high if the Box Login page should be shown.</p> <p>Browse_Files_Subpage_Fb, digital Will go high when browsing a drives file system</p> <p>Number_of_Total_Files, analog Number of files in a directory</p> <p>Scroll_Bar_Out, analog The output level of the scroll bar</p> <p>Browse_List_Drive_type, analog A value to know if we are browsing local or cloud drive</p> <p>Browse_List_Header_Text, serial Text displaying back 2 levels in the file structure</p> <p>Back_Button_Text, serial Text displaying the previous file structure</p> <p>Browse_Line_x_Enabled, digital</p>
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	<p><i>This signal will go high if the file/dir is valid</i></p> <p>Browse_Line_x_Text, serial Text string for the x number file/dir</p> <p>Browse_Line_x_Icon, analog Value for the Icon preview</p> <p>Browse_Line_x_Status, analog Value for the Icon status of uploaded and downloaded files only</p> <p>Browse_Options_X_Show, digital <i>This signal will go high if the Browse_Line_x_Select has additional options</i></p> <p>Browse_Line_x_Upload_Failed, digital <i>This signal will go high if the Browse_Line_x_Select has failed to upload the file</i></p> <p>Download_Options_Show, digital Will go high when browsing cloud drives and there are options available</p> <p>Download_File_Button_Show, digital Will go high when a file is not yet downloaded</p> <p>Open_File_Button_Show, digital Will go high when a file has been downloaded</p> <p>Upload_options_Show, digital Will go high when browsing an internal drives file system and there is a file that can be uploaded to another drive.</p> <p>Number_Of_Active_Windows, analog <i>Value of the current number of active windows in use</i></p> <p>Active_Window, analog <i>Value of the currently selected active window</i></p> <p>Active_Window_Mode_Fullscreen_Fb, digital <i>High if active window is fullscreen</i></p> <p>Active_Window_Mode_Normal_Fb, digital <i>High if active window is normal</i></p> <p>Active_Window_Volume_Subpage, digital <i>High if active window volume button was toggled on to display volume subpage</i></p> <p>Active_Window_Volume_Button_Show, digital <i>High if active window has volume controls associated with its type</i></p> <p>Active_Window_Mute_Button_Show, digital <i>High if active window has volume controls associated with its type</i></p> <p>Active_Window_Volume_Out, analog <i>Volume level of the current active window</i></p> <p>Active_Window_Mute_On_Fb, digital <i>High if active window mute is on</i></p> <p>Active_Window_Mute_Off_Fb, digital <i>High if active window mute is off</i></p> <p>Window_x_Selected_Fb, digital <i>High is the window x is the currently selected window</i></p> <p>Window_x_Visible_Fb, digital <i>High if the window has a valid source</i></p> <p>Window_x_Source_Text, serial <i>Text name of the valid source</i></p> <p>Window_x_Source_Type, analog <i>Value of the valid source</i></p> <p>Window_x_Mode_Fullscreen_Fb, digital <i>High if active window is fullscreen</i></p> <p>Window_x_Mode_Normal_Fb, digital <i>High if active window is normal</i></p> <p>Window_x_Volume_Out, analog <i>Volume level of the current active window</i></p> <p>Window_x_Mute_On_Fb, digital <i>High if active window mute is on</i></p>
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	<p>Window_x_Mute_Off_Fb, digital High if active window mute is off</p> <p>Window_x_DualScreen_Mode_On_Fb High if the dualscreen function is on for window x.</p> <p>Window_x_DualScreen_Mode_Off_Fb High if the dualscreen function is off for window x.</p> <p>Tools</p> <p>Master_Volume_Level_Out, analog Value of the system volume level</p> <p>Master_Mute_On_Fb, digital High if the system mute is on</p> <p>Master_Mute_Off_Fb, digital High if the system mute is off</p> <p>Mic_Mute_On_Fb, digital High if the mic mute is on</p> <p>Mic_Mute_Off_Fb, digital High if the mic mute is off</p> <p>Mic_Status_Level, Analog Reports back the level of the mic status, 0=disabled, 1=active, 2=on, not in use.</p> <p>Mirroring_Mode_Button_Show, digital High if the mirroring mode is active</p> <p>Mirroring_Mode, digital High if the system is in mirroring mode</p> <p>Content_Mode, digital High if the system is in content mode</p> <p>Recording_Enabled_Fb, digital Indicates that recording is enabled.</p> <p>Recording_Disabled_Fb, digital Indicates that recording is disabled.</p> <p>Recording_On_Fb, digital Indicates that recording is on.</p> <p>Recording_Pause_Fb, digital Indicates that recording is paused.</p> <p>Recording_Off_Fb, digital Indicates that recording is stopped.</p> <p>Streaming_Enabled_Fb, digital Indicates that streaming is enabled.</p> <p>Streaming_Disabled_Fb, digital Indicates that streaming is disabled.</p> <p>Streaming_Off, digital Indicates that streaming is off.</p> <p>Streaming_Auto, digital Indicates that streaming is on in Auto Mode.</p> <p>Streaming_Continuous, digital Indicates that streaming is on in Continuous Mode.</p> <p>Streaming_Unicast, digital Indicates that streaming is on in Unicast Mode.</p> <p>Link_To_Stream_On_Fb Indicates that the QR-code stream is being broadcast.</p> <p>Link_To_Stream_Off_Fb Indicates that the QR-code stream is not being broadcast.</p> <p>Freeze_On_Fb, digital Indicates that the main screen Freeze is active.</p> <p>Freeze_Off, digital</p>
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	<p><i>Indicates that the main screen Freeze is NOT active.</i></p> <p>Get_Downloads_available, digital <i>High if the download list is available</i></p> <p>Get_Uploads_available, digital <i>High if the upload list is available</i></p> <p>Edit bar buttons show</p> <p>EditBar_Active, digital <i>Display the EditBar popup.</i></p> <p>The following signals are used to define what functions are available, in the edit bar, pr. active window.</p> <p>Power_Available, digital Light_Available, digital Zoom_out_Available, digital Zoom_In_Available, digital Back_Available, digital Forward_Available, digital FullPage_Available, digital FullWidth_Available, digital FullHeight_Available, digital ArrowDown_Available, digital ArrowUp_Available, digital ArrowLeft_Available, digital ArrowRight_Available, digital Previous_Available, digital Rewind_Available, digital StepBack_Available, digital Stop_Available, digital Play_Available, digital Pause_Available, digital StepForward_Available, digital FastForward_Available, digital Next_Available, digital Reload_Available, digital WWW_Available, digital Focus_Near_Available, digital Focus_Far_Available, digital Auto_Focus_Available, digital Freeze_Available, digital Preset_Recall_Available, digital Preset_Save_Available, digital Loop_Available, digital</p> <p>Browser_Keyboard_Show, digital <i>High is the keyboard subpage should be shown</i></p> <p>Window_Data_Available, digital <i>High is the there is data to be shown in the edit bar window</i></p> <p>Window_Data, serial <i>Text for extra data for the EditBar.</i></p> <p>Loop_Active, digital <i>Indicates that the loop is enabled.</i></p>
Parameters	<p>Server_IP <i>IP Address of cynap unit</i></p> <p>Password <i>Admin password for cynap unit (default cynap password is :RMSPassword)</i></p> <p>MAC_Address</p>

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	<i>MAC Address for cynap unit, input in Crestrons hex formatting, (\x before each part of the mac address. No spaces, dashes or colons/)</i>		
Version History	Version	Date	Remarks
	1.00.00	010415	Initial structure.
	1.12.00	080716	Updates for firmware 1.06 release
	1.14.0	160916	Fixes and updates to new features
	1.15.0	251016	Fixes and uploads update
	1.16.0	301116	Added box cloud drive, airplay pin, looping for audio/video
	2.00.0	211216	Converted module to Secure connection
	2.00.1	020217	Bug fixes for file browsing, uploads and downloads.
	2.00.2	070217	Hotfix for WebSocket connection logic.
Advisories/remarks	<p>Please note this module has a limit of 600 total user files(Documents, Pictures, Movies, etc.) available in the list.</p> <p>Cynap streaming services can cause significant traffic which might interfere with the Crestron processor. It is highly advised to follow Crestron's Ethernet network guidelines in any setup.</p>		
Dependencies	Cynap_Client.umc, Cynap_client.usp, SSLInterface.clz		
Firmware	1.10i (Build 20161123145424)		
Processor support	<p>2-Series, not currently supported.</p> <p>3-Series, support.</p>		
Hardware setup/settings	N/A		