



T1V External Command API

API Overview

API CONNECTION

Once the API service has been enabled by T1V on your ThinkHub unit, you can connect to the T1V API via telnet on port 8023, and issue a valid command string, followed by a newline character.

STANDARD API COMMANDS

The T1V Standard External Command API allows you to use your external control devices to communicate with ThinkHub and perform the following set of supported commands.

AUTHENTICATION

The T1V API service can be configured with an optional username and password. Please contact T1V Support to enable this if desired.

SYNTAX

In the commands listed below, < > indicates a required argument, and [] indicates an optional argument. Do not include < > or [] when issuing actual command strings. In the following example, session name is a required argument, and password is optional:

```
wakeAndRestore <session name> [password]
```

Examples of actual command strings that follows this syntax:

```
wakeAndRestore Session1.thinkhub
```

```
wakeAndRestore Session1.thinkhub password123
```

If any of the arguments include a space, enclose the argument in quotes:

```
wakeAndRestore "Session 1.thinkhub" password123
```



ThinkHub Application Commands

Command String	Resulting Action	Note
enableVCMODE	activate hardware VC layout	Moves codec output feeds to video conference panel view. This requires hardware VC integration.
disableVCMODE	deactivate hardware VC layout	This requires hardware VC integration.
beginSession	start a new blank session	
endSession	end current session	
wakeAndRestore <session name> [password]	load specified saved session	.thinkhub must be appended to all session name arguments. Example: wakeAndRestore "Sess 1.thinkhub" 12345
enableFullscreen <window label>	bring specified device feed (hardline/camera/T1V App window) to canvas and fullscreen it	Example: enableFullscreen "Hardline Input 1"
disableFullscreen <window label>	exit fullscreen for specified device feed	Example: disableFullscreen "Hardline Input 2"
positionDevice <x position> <y position> <width in pixels> <height in pixels>	place device feed where specified - all arguments are required	Example: positionDevice "Cam 1" 300 600 1920 1080
closeObject <window label>	close specified device feed	Example: closeObject "Hardline Input 3"
muteObject <window label>	mute volume of mute-capable object (hardlines, web browser, media file)	Example: muteObject "New Browser"
unmuteObject <window label>	unmute volume of mute-capable object	Example: unmuteObject "Browser 2"
loadURL <url> [label] [x position] [y position] [width in pixels] [height in pixels]	open browser window and load a url - optional arguments for label, size, position	Example: loadURL "https://google.com" "Browser 1" 500 500 1280 720
hideTray	hide the ThinkHub tray	
showTray	show the ThinkHub tray	
startMultiSite	starts a MultiSite auto-join session	This requires the MultiSite addon, as well as completion of the MultiSite auto-join configuration by T1V Support.
endMultiSite	ends the MultiSite session if one is active	This requires the MultiSite addon



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dockCanvas <dock index> <action>	dock/undock the entire canvas	This requires one or more Dock addons. dock index - starts at 0 for first dock, 1 for second dock, etc. action - use 1 to dock, 0 to undock
dockWindow <window label> <dock index> <action>	dock/undock specified app window	This requires one or more Dock addons. Window label typically refers to a Hardline Input or camera, but can refer to any app window on canvas. dock index - starts at 0 for first dock, 1 for second dock, etc. action - use 1 to dock, 0 to undock
freezeCanvas	freezes canvas	when frozen, canvas/content cannot be moved
unfreezeCanvas	unfreezes canvas	
isIdle	determine if ThinkHub is in use	A response of "true" indicates ThinkHub is at the idle/start screen, "false" indicates ThinkHub is in a session.
inactiveTime	determine how long it has been since someone interacted with ThinkHub	Response is in seconds. A value of 0.000000 means someone is currently interacting with ThinkHub.
restartApp	restart the ThinkHub application	
switchToStory	switches to T1V Story as the active foreground application	Requires T1V Story addon
switchToThinkHub	switches to ThinkHub as the active foreground application	Only applicable if also using T1V Story addon

Hardware Control Commands		
Command String	Resulting Action	Note
volumeUp	increment global volume up	This requires the 3.5mm audio output be used on the ThinkHub appliance.
volumeDown	increment global volume down	This requires the 3.5mm audio output be used on the ThinkHub appliance.
volumeMute	global output volume mute	This requires the 3.5mm audio output be used on the ThinkHub appliance.
volumeUnmute	global output volume unmute	This requires the 3.5mm audio output be used on the ThinkHub appliance.
displaysOff	power display(s) off	This requires the ThinkHub appliance to be configured with RS232 cabling and control of the displays.



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displaysOn	power display(s) on	This requires the ThinkHub appliance to be configured with RS232 cabling and control of the displays.
display <command>	send custom display command	This requires the ThinkHub appliance to be configured with RS232 cabling and control of the displays. Depending on the action desired, custom programming cost may be required.
rebootAppliance	reboot the ThinkHub appliance	

API Service Commands		
Command String	Resulting Action	Note
status	check status of the API service	A response of "1" means the API service is running as expected

API MESSAGE SERVICE

The T1V API includes a message service that allows an external control system to "listen" in real time for messages when certain actions occur in ThinkHub. Note that although the API Message Service is included with the T1V External Command API the API Message Service is inactive by default. Requests to activate it can be submitted to support@t1v.com, or the T1V Application Engineer you have been working with.

API Message Service Commands		
Command String	Resulting Action	Note
subscribe	begin listening to the API message service	

API Message Service Messages		
Message String	Significance	Note
BeginSession	a ThinkHub session was started	
EndSession	a ThinkHub session was ended	
ClearCanvas	the ThinkHub canvas was cleared of content	This message will be triggered when a user selects "Clear Canvas" in the the ThinkHub menu, or when a user ends a session.



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The following subscription messages only occur when the action mentioned is carried out on a video source. This includes HDMI sources, USB video sources, and devices casted via T1V App.

add <device name>	a video source was added to canvas	Example: add USB Camera
remove <device name>	a video source was removed from canvas	Example: remove HDMI Input 4
BeginEdit <device name>	a video source was put into edit state	Example: BeginEdit Company Laptop
EndEdit <device name>	a video source was taken out of edit state	
FullScreen <device name>	a video source was put into full screen view	
UnFullScreen <device name>	a video source was taken out of full screen view	
dockOn <object name> <Dock number>	an object was docked	Example: dockOn Canvas 2
dockOff <object name> <Dock number>	an object was undocked	"object name" could be the entire canvas, or any window on the canvas. "Dock number" indicates which Dock was used (starts at 0).

CUSTOM API

At T1V, we're always looking for ways to streamline and simplify products for our customers. With this focus in mind, custom configurations can provide a more flexible way to perform the tasks that you need. Custom configurations will require information from the customer for T1V to develop the commands for that particular setup. For pricing and additional detail, please contact your T1V Dealer or Sales Rep.