



# VidyoClient API for the VidyoWeb Extension Reference Guide

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# VidyoClient API for the VidyoWeb Extension Reference Guide

The VidyoClient API for the VidyoWeb Extension is the interface for third-party web applications to integrate with the VidyoClient library to build custom web client applications. It allows video rendering and control using JavaScript from inside the browser. A rich set of APIs manage the overall configuration and control of the pre-call and in-call state machine of the VidyoClient library.

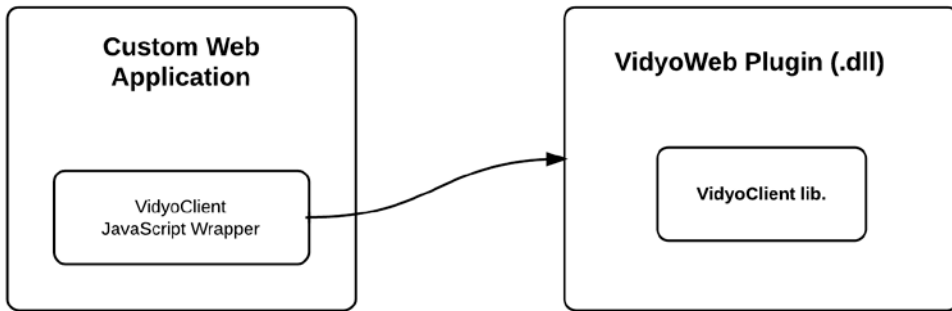
## API Package

The API package includes the following building blocks needed to kick-start your custom Vidyo conferencing web application development:

- ◆ JavaScript Wrapper
  - `vidyo.client.messagesjs`
  - `vidyo.client.private.messages.js`
  - `vidyo.app.strings-.js`
  - `vidyo.client.js`
  - `vidyo.client.parameters.js`
- ◆ Plugin Installer
  - \*.MSI (for Windows OS)
  - \*.PKG (for Mac OS X)
- ◆ Sample Application

## Plug-in Software Architecture

This diagram shows a custom web application using the VidyoClient API for the VidyoWeb Extension integration.



## Send and Receive Event API Messages Inside VidyoClient Parameters

### In Events

In Events are sent to the VidyoClient from the application.

Message Type String	Parameters	Description	Notes
InEventLicense	None	Event used to initiate licensing activation with VidyoPortal.	
InEventLogin	<ul style="list-style-type: none"> <li>portalUri</li> <li>userName</li> <li>userPass</li> </ul>	Event used to log user in to VidyoPortal.	
InEventLogin-Cancel	None	Event used to cancel login of user to VidyoPortal.	
InEventSignIn	<ul style="list-style-type: none"> <li>serverAddress</li> <li>serverPort</li> <li>userName</li> <li>portalAccessKey</li> <li>portalAddress</li> <li>portalVersion</li> <li>vmIdentity</li> <li>locationTag</li> <li>vidyoProxy-Address</li> <li>vidyoProxyPort</li> <li>emcpSecured</li> <li>guestLogin</li> <li>showDialpad</li> <li>showStartmeeting</li> </ul>	Creates a VidyoClient sign-in In Event object. Event used to perform endpoint registration.	

Message Type String	Parameters	Description	Notes
InEventSignoff	None	Event used to end connection with VidyoManager.	
EventPreview	<ul style="list-style-type: none"> <li>inEventMutepreviewMode ("None", "PIP", "Dock")</li> </ul>	Event used to change or acknowledge how own video is shown in video layout.	Message type string same as VIDYO_CLIENT_OUT_EVENT_PREVIEW
InEventCancel	None	Event used to cancel entering a conference.	
InEventLayout	<ul style="list-style-type: none"> <li>numPreferred</li> </ul>	Event used to create a VidyoClient layout In Event object. Event used to change number of preferred participants displayed in the video layout. Preferred participants appear in larger tiles than and in different positions from participants that are not preferred. Participants are usually selected to be preferred based on whether they are in the loudest speaker history, according to speech energy. The current capability allows for either 0 or 1 preferred participants.	
InEventLeave	None	Event used to leave a conference, already entered.	
InEventMute-AudioIn	<ul style="list-style-type: none"> <li>willMute</li> </ul>	Event used to change mute state of audio input (capture/microphone) device.	
InEventMute-AudioOut	<ul style="list-style-type: none"> <li>willMute</li> </ul>	Event used to change mute state of audio output (playback/speaker) device.	
InEventMute-Video	<ul style="list-style-type: none"> <li>willMute</li> </ul>	Event used to change privacy state of video (capture/ camera) device.	
InEventParticipantsLimit	<ul style="list-style-type: none"> <li>maxNumParticipants</li> </ul>	Event used to change the maximum number of participants to display in video layout.	

Message Type String	Parameters	Description	Notes
InEventShare	■ window	Event used to share an application window or the system desktop during a conference.	
InEventToggleShare	None	Event used to toggle the displayed application window share.	
InEventUnshare	None	Event used to stop sharing an application window or the system desktop during a conference.	
InEventGet-WindowsExt	■ requestId	Event used to get a full list of windows in the system.	This Event is only currently implemented and returned under windows
InEventAnswer	None	Event used to answer an incoming call.	
InEventDecline	None	Event used to decline an incoming call.	
InEventPrivate-Chat	■ uri ■ message	Event used to send a private chat text to a specified remote participant.	
InEventGroup-Chat	■ message	Event used to send a group chat text to all remote participants.	
InEventSetDisplay-Name	■ uri ■ displayName	Used to set the display name of the specified remote participant.	
InEventReset-DisplayName	■ uri	Event used to reset the display name of the remote participant to the default name.	
InEventSetEchoCancellation	■ enable	Event used to change the state of acoustic echo cancellation.	enable (true, false)
InEventSetEchoDetection	■ enable	Event used to enable or disable echo detection notifications.	enable (true, false)
InEventSet-AGC	■ enable	Event used to change the state of audio AGC (Automat-	enable (true, false)

Message Type String	Parameters	Description	Notes
		ic Gain Control).	
InEventSet-Offline	<ul style="list-style-type: none"> <li>offline</li> </ul>	Event used to control the connection with the conference manager.	
InEventSetFreezeImage	<ul style="list-style-type: none"> <li>freeze</li> </ul>	Event used to freeze/unfreeze the image from the video capture.	freeze (true - freeze, false - unfreeze)
InEventRoomLink	<ul style="list-style-type: none"> <li>portalUri</li> <li>roomKey</li> <li>displayName</li> <li>pin</li> </ul>	Event used to join the participant to the conference via the room link.	
InEventControlCamera	<ul style="list-style-type: none"> <li>uri</li> <li>camera-Command</li> <li>commandId</li> <li>commandData</li> <li>preset</li> </ul>	Event used to send a camera control request over FECC (Far End Camera Control) for the participant with the specified URI.	cameraCommand ("PanRight", "PanLeft", "TiltUp", "TiltDown", "ZoomIn", "ZoomOut", "Position", "ViscaCommand", "ViscaResponse")
InEventSetSend-BandwidthLimit	<ul style="list-style-type: none"> <li>sendBandwidth</li> <li>layers</li> </ul>	<p>Event used to limit outgoing bandwidth.</p> <p>The passed in parameter object can store the following properties:</p> <p>-sendBandwidth(7 - 768Kbps, 1 - 1Mbps, 2 - 2Mbps, 3 - 3Mbps, 4 - 4Mbps, 6 - 6Mbps)</p> <p>-layers (1, 2, 3)</p>	
InEventPinParticipant	<ul style="list-style-type: none"> <li>uri</li> <li>pinMode</li> </ul>	Event used to pin a participant in the conference to a layout.	pinMode ("None", "PinHigh", "PinLow")
InEventParticipantsLimit	<ul style="list-style-type: none"> <li>maxNumParticipants</li> </ul>	Set maximum number of viewable remote participants in video layout to specified value.	
InEventStartPre-callTestSpeaker	<ul style="list-style-type: none"> <li>soundFileName</li> </ul>	Used to start testing selected speaker when not joined in a call or conference (pre-call	

Message Type String	Parameters	Description	Notes
		speaker test).  The sound data given in VidyoClientInEventStartPre-callTestSpeaker will be played until requested to stop using interface VIDYO_CLIENT_IN_EVENT_STOP_PRECALL_TEST_SPEAKER.	
InEventStopPre-callTestSpeaker	■ Empty structure	Used to stop testing selected speaker when not joined in a call or conference (pre-call speaker test).	
InEventPrecallTest-Microphone	■ action (object)	Used to control selected microphone when not joined in a call or conference (pre-call microphone test).  This is used to start or stop microphone.	For action object please refer to VidyoClientPre-callDeviceTestAction_
InEventPrecallTest-Camera	■ action (object)	Used to test self-view using selected camera when not joined in a call or conference (pre-call self-view).  This is used to start or stop self-view.	For action object please refer to VidyoClientPre-callDeviceTestAction_
InEventControlConferenceRoomSettings	■ requestId ■ roomType ■ roomSettingId ■ moderatorPin	Used to control conference room settings.	
InEventPlayDtmfTone	■ tone (object)	Event used to send or play a DTMF tone to conference.	Range of allowed values 0~9, *, #, A, B, C, D. */
PrivateIn-EventStartMy-Meeting		Event used to join your own meeting room.	
privateInEventVcsoap	■ typeRequest ■ requestId	Event used to communicate with the VidyoPortal via the VCSOAP protocol.	
PrivateInEvent-VcsoapGuest-Link	■ portalUri	Event used to link the guest user via the VCSOAP proto-	



Message Type String	Parameters	Description	Notes
	<ul style="list-style-type: none"><li>■ roomKey</li><li>■ guestName</li><li>■ pin</li></ul>	col.	

## Out Events

Out Events sent from the VidyoClient to the application.

Message Type String	Parameters	Description	Notes
OutEventLicense	<ul style="list-style-type: none"> <li>■ error</li> <li>■ vmConnectionPath</li> <li>■ outOfLicenses</li> <li>■ result: ("Failure", "Success", "Not-Licensed", "Seat-License Expired", "WronPin", "Conference Locked", "Room Disabled", "General-Fault", "InvalidArgument Fault", "MemberNot Online", "Not OwnerOfRoom", "User NotFound", "Unexpected Subelement InMessage", "EndPointNotFound", "FailedPlaceDirectCall", "Ipc- Join-Failure", "All-LinesInUse")</li> <li>■ fault: ("None", "InvalidArgument", "Not-Licensed", "General", "Conference Locked", "LicenseExpired", "WrongPin")</li> </ul>	Event used to report success or failure of licensing activation with VidyoPortal.	
OutEventLinked	<ul style="list-style-type: none"> <li>■ error</li> </ul>	Event used to report success or failure of linking of user via VidyoPortal.	
OutEventLogic-Started	None	Event used to signal completion of VidyoClient startup.	
OutEventLogin	<ul style="list-style-type: none"> <li>■ error</li> <li>■ portalUri</li> <li>■ userName</li> </ul>	Event used to report success or failure of login of user to VidyoPortal.	

Message Type String	Parameters	Description	Notes
OutEventSigned-In	None	Event used to signal connection to VidyoManager with a user identity.	
OutEventSigned-Out	<ul style="list-style-type: none"> <li>■ cause ("User-SignedIn", "User-SignedOut", "ServerSignedOut")</li> <li>■ error</li> </ul>	Event used to signal disconnection from VidyoManager with a user identity, or any failure to connect with such an identity in the first place.	
OutEventSignIn	<ul style="list-style-type: none"> <li>■ activeEid</li> <li>■ guestLogin</li> <li>■ showDialpad</li> <li>■ showStartmeeting</li> <li>■ signInType ("Internal", "External", "Application")</li> <li>■ signInSecured</li> </ul>	Event used to signal that sign-in to server has been initiated. Reports if the endpoint ID is activated or not.	
OutEventSign-Out	None	Event used to signal that sign-out from server has been completed.	
EventPreview	None		Message type string same as VIDYO_CLIENT_IN_EVENT_PREVIEW
OutEventAdd-Share	<ul style="list-style-type: none"> <li>■ URI</li> </ul>	Event used to indicate remote application window share added.	
OutEventConferenceActive	None	Event used to signal that operation to join a conference is complete.	
OutEventConferenceEnded	None	Event used to signal that operation to leave a conference is complete.	

Message Type String	Parameters	Description	Notes
OutEventEnd-Processing	None	Event used to indicate completion or cancellation of certain operations relating to state of entering and leaving conferences. Also used to dismiss dialog box with progress bar for certain pending operations.	
OutEventJoining	<ul style="list-style-type: none"> <li>■ numProgress-Steps</li> <li>■ caption</li> </ul>	Event used to display dialog box with progress bar for pending join operation.	
OutEventJoin-Progress	None	Event used to advance progress bar for pending join operation.	
OutEventKey-down	<ul style="list-style-type: none"> <li>■ key</li> <li>■ count</li> </ul>	Event used to indicate beginning of a keypress on the video layout while in a conference.	
OutEventKeyup	<ul style="list-style-type: none"> <li>■ key</li> <li>■ count</li> </ul>	Event used to indicate ending of a keypress on the video layout while in a conference.	
OutEventMouse- Down	<ul style="list-style-type: none"> <li>■ button</li> <li>■ count</li> <li>■ xPos</li> <li>■ yPos</li> <li>■ shift</li> <li>■ ctrl</li> <li>■ alt</li> <li>■ command</li> <li>■ scrollDeltaX</li> <li>■ scrollDeltaY</li> <li>■ scrollDeltaZ</li> </ul>	Event used to indicate beginning of a click on a mouse input device on the video layout while in a conference.	

Message Type String	Parameters	Description	Notes
OutEventMouse-Move	<ul style="list-style-type: none"> <li>■ button</li> <li>■ count</li> <li>■ xPos</li> <li>■ yPos</li> <li>■ shift</li> <li>■ ctrl</li> <li>■ alt</li> <li>■ command</li> <li>■ scrollDeltaX</li> <li>■ scrollDeltaY</li> <li>■ scrollDeltaZ</li> </ul>	Event used to indicate movement of a mouse input device, independent of click state, which would move the pointer on the video layout while in a conference.	
OutEventMouse-Up	<ul style="list-style-type: none"> <li>■ button</li> <li>■ count</li> <li>■ xPos</li> <li>■ yPos</li> <li>■ shift</li> <li>■ ctrl</li> <li>■ alt</li> <li>■ command</li> <li>■ scrollDeltaX</li> <li>■ scrollDeltaY</li> <li>■ scrollDeltaZ</li> </ul>	Event used to indicate ending of a click on a mouse input device, on the video layout while in a conference.	
OutEventMuted-AudioIn	<ul style="list-style-type: none"> <li>■ isMuted</li> <li>■ errorCode</li> </ul>	Event used to acknowledge change of mute state of audio input (capture/ microphone) device.	
OutEventMuted-AudioOut	<ul style="list-style-type: none"> <li>■ isMuted</li> <li>■ errorCode</li> </ul>	Event used to acknowledge change of mute state of audio output (playback/ speaker) device.	
OutEventMuted-ServerAudioIn	<ul style="list-style-type: none"> <li>■ isMuted</li> <li>■ errorCode</li> </ul>	Event used to indicate change of mute state of audio input (capture/ microphone) device, due to server.	

Message Type String	Parameters	Description	Notes
OutEventMuted-ServerVideo	<ul style="list-style-type: none"> <li>isMuted</li> <li>errorCode</li> </ul>	Event used to indicate change of privacy state of video (capture/camera) device, due to server.	
OutEventMuted-Video	<ul style="list-style-type: none"> <li>isMuted</li> <li>errorCode</li> </ul>	Event used to acknowledge change of privacy state of video (capture/camera) device.	
OutEvent-RemoveShare	<ul style="list-style-type: none"> <li>URI</li> </ul>	Event used to indicate remote application window share removed.	
OutEventPluginConnectionFailure	None	Event used to detect whether a user tries to open a VidyoClient API for the VidyoWeb Extension browser tab while an existing one is already open. Failure indicates that the Plug-in did not connect because it is already in use.	
OutEventPluginConnectionSuccess	None	Event used to detect whether a user tries to open a VidyoClient API for the VidyoWeb Extension browser tab while an existing one is already open. Success indicates that it is safe to move ahead with any messaging.	
OutEvenGet-WindowsExt	None	Event is used to find special windows to share that are not listed by the regular API	Windows environments only
OutEventIncomingCall	<ul style="list-style-type: none"> <li>invitingUser</li> <li>isDirectCall</li> </ul>	Event used to display dialog box for an incoming call, allowing the user to accept or decline the call.	

Message Type String	Parameters	Description	Notes
OutEventIncoming-CallEnded		Dismiss dialog box for an incoming call, as call has timed out or has been canceled.	
OutEventPrivateChat	<ul style="list-style-type: none"> <li>uri</li> <li>displayName</li> <li>message</li> </ul>	Event used to send the text message received as part of a private chat from a remote participant.	
OutEventGroupChat	<ul style="list-style-type: none"> <li>uri</li> <li>displayName</li> <li>message</li> </ul>	Event used to send the text message received as part of a group chat from a remote participant.	
OutEventConferenceInfoUpdate	<ul style="list-style-type: none"> <li>event</li> <li>eventStatus</li> </ul>	Event used to report conference information.	
OutEventCallState	callState	<p>Event used to provide an update of the current call state.</p> <p>callState ("Idle", "Ringing", "Calling", "Joining", "InConference", "Disconnecting")</p>	
OutEventRinging	<ul style="list-style-type: none"> <li>numProgress-Steps</li> <li>caption</li> </ul>	Event used to display a dialog box with progress bar for pending ring operation.	
OutEventRingingProgress	None	Event used to advance the progress bar for pending ring operation.	
OutEventRingingEnded	None	Event used to dismiss the dialog box with progress bar for pending ring operation.	
OutEventCalling	<ul style="list-style-type: none"> <li>numProgress-Steps</li> <li>caption</li> </ul>	Event used to display the dialog box with progress bar for pending call operation.	

Message Type String	Parameters	Description	Notes
OutEventCallingProgress	None	Event used to advance the progress bar for pending call operation.	
OutEventCallingEnded	None	Event used to dismiss the dialog box with progress bar for pending call operation.	
OutEventRetrying	<ul style="list-style-type: none"> <li>■ numProgress-Steps</li> <li>■ caption</li> </ul>	Event used to display the dialog box with progress bar for pending retry operation.	
OutEventRetryingProgress	None	Event used to advance the progress bar for pending retry operation.	
OutEventParticipantLimit	<ul style="list-style-type: none"> <li>■ bandwidthLimited</li> <li>■ cpuLimited</li> </ul>	Event used to impose a limit on the number of remote participants that can be rendered.	
OutEventEcho-Detected	None	Event used to indicate that echo in the audio path has been detected.	
OutEventFloatingWindow	<ul style="list-style-type: none"> <li>■ windowId</li> </ul>	Event used to indicate that a floating Share window has been created or destroyed.	
OutEventFecc-ListUpdated	<ul style="list-style-type: none"> <li>■ numberParticipants</li> </ul>	Event used to indicate the updated list of participants in the conference that have a controllable camera.	



Message Type String	Parameters	Description	Notes
OutEventControlCamera	<ul style="list-style-type: none"> <li>uricameraCommand</li> <li>commandId</li> <li>commandData</li> </ul>	<p>Event used to indicate that a camera control request over FECC has been received.</p> <p>cameraCommand ("PanRight", "PanLeft", "TiltUp", "TiltDown", "ZoomIn", "ZoomOut", "Position", "ViscaCommand", "ViscaResponse")</p>	
OutEventFecc-StatusUpdate	<ul style="list-style-type: none"> <li>statusCode</li> <li>curFeccUri</li> </ul>	<p>Event used to report the status of remote participants whose cameras are being controlled.</p> <p>statusCode ("UserLost", "UserInPrivacy")</p>	
OutEventMedia-Control	<ul style="list-style-type: none"> <li>mediaCommand</li> <li>mediaType</li> <li>mediaSource</li> </ul>	<p>Event used to provide server-based media control command details against a media device type.</p> <p>mediaCommand ("Mute", "Unmute", "Silence")</p> <p>mediaType ("Video", "Application", "Audio", "Unknown")</p> <p>mediaSource ("Local", "Remote", "Calling", "Unknown")</p>	
OutEventGuestLink	<ul style="list-style-type: none"> <li>error</li> <li>state</li> <li></li> </ul>	<p>Event used to report the state of Guest login &amp; joined-conference, possibly with an error.</p> <p>state ("Init", "Logged", "Linked", "Joined")</p>	

Message Type String	Parameters	Description	Notes
OutEventPinParticipant-Done	<ul style="list-style-type: none"> <li>uri</li> <li>pinMode</li> <li>isSet</li> </ul>	Returns type of a Vidyo-Client pin participant done out event object. Event used to signal status on participant pin.	pinMode ("None", "Pin-High", "PinLow")
OutEventEnd-pointStatus	<ul style="list-style-type: none"> <li>endPointStatus</li> </ul>	Event used to signal status of connectivity with server. endPointStatus ("Inactive", "Registered", "Active")	
OutEventParticipantsChanged	<ul style="list-style-type: none"> <li>participantCount</li> </ul>	Event used to signal that a participant has joined or left the current conference.	Will trigger VIDYO_CLIENT_REQUEST_STATISTICS_ENABLE
OutEventUser-Message	<ul style="list-style-type: none"> <li>messageType</li> <li>messageCode</li> <li>messageString</li> </ul>	Event used to display notification message in dialog box.	
OutEventDeviceChanged	deviceType ("AudioOut", "AudioIn", "Video", "RingTone")	Event used to notify change in list of attached devices for specified kind of media device.	
OutEventDeviceSelect	None	Event used to signal the need to select a media device.	
OutEventDeviceSelection-Changed	<ul style="list-style-type: none"> <li>deviceType ("AudioOut", "AudioIn", "Video", "RingTone")</li> <li>changeType ("DeviceLost", "DeviceSelection-Changed")</li> <li>prevDeviceName</li> <li>newDeviceName</li> </ul>	Event used to report newly selected media device when there is an automatic change in the selection.	
OutEventControlConferenceRoomSettings	<ul style="list-style-type: none"> <li>requestId</li> <li>roomSettingId</li> <li>result</li> </ul>	Used to send response to control conference room settings event.	

Message Type String	Parameters	Description	Notes
OutEventPrecallTestDevice	<ul style="list-style-type: none"> <li>deviceType</li> <li>action</li> <li>result</li> </ul>	Event used to report the status of test device test using selected device when not joined in a call or conference.	
PrivateOutEventLog	<ul style="list-style-type: none"> <li>message</li> </ul>	Event used to send logs to the application.	
PrivateOutEventVcsoapGuestLink	<ul style="list-style-type: none"> <li>typeRequest</li> <li>Error</li> <li>httpStatusCode</li> <li>requestId</li> <li>guestID</li> <li>isLocked</li> <li>hasPin</li> <li>vmaddress</li> <li>proxyaddress</li> <li>loctag</li> <li>un</li> <li>pak</li> <li>portal</li> <li>portalVersion</li> <li>proxyType</li> <li>reverseProxy-Address</li> <li>clientExternalIPAd- dress</li> <li>result</li> <li>fault</li> </ul>	<p>Event used to link guest user via the VCSOAP protocol.</p> <p>requestId (should be unique for each request)</p> <p>typeRequest (will always be set to "GuestLink")</p>	
PrivateOutEventLog	<ul style="list-style-type: none"> <li>message</li> </ul>	Event used to send logs to application.	

## Requests

Requests are made by the application to the VidyoClient.

Message Type String	Parameters	Description
RequestSetLogLevel- sAndCategories	<ul style="list-style-type: none"> <li>levelsAndCategories</li> </ul>	New setting for log levels and categories
RequestGetConfiguration	requestConfiguration object : <ul style="list-style-type: none"> <li>Microphones</li> <li>microphonePhyDeviceName</li> <li>microphoneVoiceProcessing-Support</li> <li>numberMicrophones</li> <li>currentMicrophone</li> <li>speakers</li> <li>speakerPhyDeviceName</li> <li>numberSpeakers</li> <li>currentSpeaker</li> <li>cameras</li> <li>numberCameras</li> <li>currentCamera</li> <li>enableFeccEndpoint</li> <li>enableFeccController</li> <li>vidyoProxies</li> <li>numberVidyoProxies</li> <li>currentVidyoProxy</li> <li>userID</li> <li>password</li> <li>serverAddress</li> <li>serverPort</li> <li>vidyoProxyAddress</li> <li>vidyoProxyPort</li> <li>webProxyAddress</li> <li>webProxyPort</li> <li>webProxyUsername</li> <li>webProxyPassword</li> <li>webProxyleAddress</li> <li>webProxylePort</li> <li>portalAddress</li> <li>ringtoneDeviceName</li> <li>verifyCertPortalAcct</li> </ul>	Request used to get various configuration parameters.  videoPreferences ("BestQuality", "BestFramerate", "Best-Resolution", "LimitedBandwidth", "Advanced450p30", "Advanced720p15", "Advanced720p30")

Message Type String	Parameters	Description
	<ul style="list-style-type: none"> <li>■ webProxyScriptUrl</li> <li>■ webProxyleScriptUrl</li> <li>■ mediaLowPort</li> <li>■ mediaHighPort</li> <li>■ proxySettings</li> <li>■ videoPreferences</li> <li>■ enableLogging</li> <li>■ enableAutoAnswer</li> <li>■ enableForceProxy</li> <li>■ enableLogWindow</li> <li>■ enableEntryTone</li> <li>■ enableEchoDetection</li> <li>■ enableEchoCancellation</li> <li>■ enableFullScreenVideo</li> <li>■ showToolbarInFullScreenVideo</li> <li>■ enableAudioAGC</li> <li>■ enableAutoStart</li> <li>■ enableShowConfParticipant-Name</li> <li>■ enableMuteMicrophone-OnJoin</li> <li>■ enableHideCameraOnJoin</li> <li>■ enableMuteSpeakerOnJoin</li> <li>■ enableEulaAgreed</li> <li>■ enableRendering</li> <li>■ enableBackgrounding</li> <li>■ enableFullDisplaySharing</li> <li>■ selfViewLoopbackPolicy</li> </ul>	
RequestGetCurrent-SessionDisplayInfo	<ul style="list-style-type: none"> <li>■ sessionDisplayContext</li> <li>■ sessionDisplayText</li> </ul>	<p>Request used to get information that could be displayed to the user, relating to current conference state.</p> <p>sessionDisplayContext ("Conf", "Out-Call", "InCall", "Idle")</p> <p>sessionDisplayText:</p> <p>If client is in a conference, current text which could be displayed in a windowcaption, to identify the conference to the user. Encoded as UTF-8.</p>
RequestGetNumParticipants	<ul style="list-style-type: none"> <li>■ numParticipants</li> </ul>	Request used to get number of participants in current conference.

Message Type String	Parameters	Description
RequestGetParticipants	<ul style="list-style-type: none"> <li>name</li> <li>URI</li> </ul>	Request used to get list of participants in current conference.
RequestGetParticipant-NameAt	<ul style="list-style-type: none"> <li>index</li> <li>result</li> <li>name</li> </ul>	<p>Retrieve the conference participant's name at a given index in the list of participants.</p> <p>Index(index of conference participant whose name to be retrieved.)</p> <p>Result(Success (VIDYO_TRUE) or failure (VIDYO_FALSE)).</p> <p>Name is valid only when result is VIDYO_TRUE. If value of result is VIDYO_FALSE, it means there is no participant at the given location/index.</p>
RequestGetParticipantStatisticsAt	<ul style="list-style-type: none"> <li>index</li> <li>Result</li> <li>uri</li> <li>name</li> <li>videoResolution</li> <li>videoKBitsPerSecRecv</li> <li>audioKBitsPerSecRecv</li> <li>firs</li> <li>nacks</li> <li>videoFrameRate</li> <li>videoDecodedFrameRate</li> <li>videoDisplayedFrameRate</li> </ul>	<p>Retrieve the conference participant's statistics at a given index in the list of participants.</p> <p>videoResolution (containing following properties): xPos, yPos, width, height</p>
RequestGetVolume-AudioIn	<p>requestVolumeAudio structure :</p> <ul style="list-style-type: none"> <li>volume</li> </ul>	Request used to get volume of audio input (capture/microphone) device.
RequestGetVolume-AudioOut	<p>requestVolumeAudio structure :</p> <ul style="list-style-type: none"> <li>volume</li> </ul>	Request used to get volume of audio output (playback/speaker) device.

Message Type String	Parameters	Description
RequestGetWindows AndDesktops	<ul style="list-style-type: none"> <li>■ numApplicationWindows</li> <li>■ appWindowName</li> <li>■ appWindowAppName</li> <li>■ appWindowId</li> <li>■ numSystemDesktops</li> <li>■ sysDesktopName</li> <li>■ sysDesktopId</li> </ul>	<p>Get list of open application windows and list of available system desktops.</p> <ul style="list-style-type: none"> <li>■ appWindowName - List of open application window names (UTF-8) (Localized) - MacOS only</li> <li>■ appWindowAppName- List of open application window application names (UTF-8)</li> <li>■ appWindowId- List of open application window handles</li> <li>■ appWindowRect- List of open application window geometries - MacOS only</li> <li>■ sysDesktopName- List of available system desktop names (UTF-8)</li> <li>■ sysDesktopId - List of available system desktop handles</li> <li>■ sysDesktopRect- List of available system desktop geometries - MacOS only.</li> </ul>
RequestGetWindowShares	<p>requestWindowShares object has the following parameters:</p> <ul style="list-style-type: none"> <li>■ requestType</li> <li>■ remoteAppUri</li> <li>■ remoteAppName</li> <li>■ numApp</li> <li>■ currApp</li> <li>■ eventUri</li> <li>■ newApp</li> </ul>	<p>Request used to get list of remote window shares.</p> <p>requestType ("ListSharingWindows", "ChangeSharingWindow", "ToggleSharingWindow", "StopSharingWindow")</p>
RequestSetConfiguration	<p>requestConfiguration object:</p> <ul style="list-style-type: none"> <li>■ microphones</li> <li>■ microphonePhyDeviceName</li> <li>■ microphoneVoiceProcessing-Support</li> <li>■ numberMicrophones</li> <li>■ currentMicrophone</li> <li>■ speakers</li> </ul>	<p>Request used to set various configuration parameters.</p> <p>videoPreferences ("BestQuality", "BestFramerate", "Best-Resolution", "LimitedBandwidth", "Advanced450p30", "Advanced720p15",</p>

Message Type String	Parameters	Description
	<ul style="list-style-type: none"> <li>■ speakerPhyDeviceName</li> <li>■ numberSpeakers</li> <li>■ currentSpeaker</li> <li>■ cameras</li> <li>■ numberCameras</li> <li>■ currentCamera</li> <li>■ enableFeccEndpoint</li> <li>■ enableFeccController</li> <li>■ vidyoProxies</li> <li>■ numberVidyoProxies</li> <li>■ currentVidyoProxy</li> <li>■ userID</li> <li>■ password</li> <li>■ serverAddress</li> <li>■ serverPort</li> <li>■ vidyoProxyAddress</li> <li>■ vidyoProxyPort</li> <li>■ webProxyAddress</li> <li>■ webProxyPort</li> <li>■ webProxyUsername</li> <li>■ webProxyPassword</li> <li>■ webProxyleAddress</li> <li>■ webProxylePort</li> <li>■ portalAddress</li> <li>■ ringtoneDeviceName</li> <li>■ verifyCertPortalAcct</li> <li>■ webProxyScriptUrl</li> <li>■ webProxyleScriptUrl</li> <li>■ mediaLowPort</li> <li>■ mediaHighPort</li> <li>■ proxySettings</li> <li>■ videoPreferences</li> <li>■ enableLogging</li> <li>■ enableAutoAnswer</li> <li>■ enableForceProxy</li> <li>■ enableLogWindow</li> <li>■ enableEntryTone</li> <li>■ enableEchoDetection</li> <li>■ enableEchoCancellation</li> </ul>	"Advanced720p30")



Message Type String	Parameters	Description
	<ul style="list-style-type: none"> <li>enableFullScreenVideo</li> <li>showToolBarInFullScreenVideo</li> <li>enableAudioAGC</li> <li>enableAutoStart</li> <li>enableShowConfParticipant-Name</li> <li>enableMuteMicrophone-OnJoin</li> <li>enableHideCameraOnJoin</li> <li>enableMuteSpeakerOnJoin</li> <li>enableEulaAgreed</li> <li>enableRendering</li> <li>enableBackgrounding</li> <li>enableFullDisplaySharing</li> <li>selfViewLoopbackPolicy</li> </ul>	
RequestSetVolume-AudioIn	requestVolumeAudio structure: <ul style="list-style-type: none"> <li>volume</li> </ul>	Request used to set volume of audio input (capture/microphone) device. Use requests to control gain level of microphone device. Range of allowed values 0~65535.
RequestSetVolume-AudioOut	requestVolumeAudio structure has the following parameters: <ul style="list-style-type: none"> <li>volume</li> </ul>	Request used to set volume of audio output (playback/speaker) device. Range of allowed values 0~65535.
RequestSetWindowShares	requestWindowShares structure has the following parameter: <ul style="list-style-type: none"> <li>requestType</li> <li>remoteAppUri</li> <li>remoteAppName</li> <li>numApp</li> <li>currApp</li> <li>eventUri</li> <li>newApp</li> </ul>	Request used to Set list of remote window shares. requestType ("ListSharingWindows", "ChangeSharingWindow", "ToggleSharingWindow", "StopSharingWindow")
RequestGetEID	<ul style="list-style-type: none"> <li>EID</li> </ul>	Request used to get endpoint's unique identifier.
RequestGetConnectivityInfo	<ul style="list-style-type: none"> <li>serverAddress</li> <li>serverPort</li> <li>serverSecured</li> <li>vmIdentity</li> <li>userName</li> </ul>	Request used to return the currently used sign-in information and parameters.

Message Type String	Parameters	Description
	<ul style="list-style-type: none"> <li>portalAddress</li> <li>portalVersion</li> <li>locationTag</li> <li>vidyoProxyAddress</li> <li>vidyoProxyPort</li> <li>guestLogin</li> <li>clientExternalIPAddress</li> <li>proxyType</li> <li>reverseProxyAddress</li> <li>reverseProxyPort</li> </ul>	
RequestGetSendMax-Kbps	<ul style="list-style-type: none"> <li>value</li> </ul>	Request used to inquire maximum aggregate bandwidth of all types of media to send.
RequestSetSendMax-Kbps	<ul style="list-style-type: none"> <li>value</li> </ul>	Request used to change maximum aggregate bandwidth of all types of media to send.
RequestGetReceiveMax-Kbps	<ul style="list-style-type: none"> <li>value</li> </ul>	Request used to inquire maximum aggregate bandwidth of all types of media to receive.
RequestSetReceiveMax-Kbps	<ul style="list-style-type: none"> <li>value</li> </ul>	Request used to change maximum aggregate bandwidth of all types of media to receive.
RequestGetPreviewMode	<ul style="list-style-type: none"> <li>previewMode</li> <li>primaryDisplay</li> </ul>	Request used to inquire how own video is shown in video layout.
RequestGetMuted-AudioIn	isMuted	<p>Request used to inquire mute state of audio input (capture/microphone) device.</p> <p>isMuted (true, false)</p>
RequestGetMuted-AudioOut	isMuted	<p>Request used to inquire mute state of audio output (playback/speaker) device.</p> <p>isMuted (true, false)</p>
RequestGetMuted-Video	isMuted	<p>Request used to inquire privacy state of video (capture/camera) device.</p> <p>isMuted (true, false)</p>

Message Type String	Parameters	Description
RequestGetMuted-ServerAudioIn	isMuted	Request used to inquire mute state of audio input (capture/microphone) device, as controlled by server.  isMuted (true, false)
RequestGetMuted-ServerVideo	isMuted	Request used to inquire mute state of video (capture/camera) device, as controlled by server.  isMuted (true, false)
RequestGetEcho-Recommendation	<ul style="list-style-type: none"> <li>■ speakerIndex</li> <li>■ micIndex</li> <li>■ disableEcho</li> </ul>	Request used to check whether both audio devices (mic and speaker) are on same device and whether the device is a recommended audio device.  If both audio devices are one single recommended device, echo cancellation is recommended to be kept disabled.  disableEcho (true - do not enable echo cancellation, false - enable)
RequestCheckRecommended	<ul style="list-style-type: none"> <li>■ deviceType</li> <li>■ deviceIndex</li> <li>■ isRecommended</li> </ul>	Request used to check whether given audio devices (mic and speaker) are a recommended device.  deviceType ("AudioOut", "AudioIn", "Video", "RingTone")  isRecommended (true - recommended, false - unknown/not recommended)
RequestGetWebProxySettingsValid	<ul style="list-style-type: none"> <li>■ isValid</li> </ul>	Request used to check validity of web proxy configurations.  isValid (true - valid, false - not valid)

Message Type String	Parameters	Description
RequestSetWebProxyCredentials	<ul style="list-style-type: none"> <li>■ persistusernamepassword</li> </ul>	Request used to set proxy credentials with possibility to persist data  persist (true - persist, false - use ) VIDYO_TRUE if the values are to be saved in Configuration, VIDYO_FALSE if volatile
RequestGetCurrent-User	<ul style="list-style-type: none"> <li>■ currentUserID</li> <li>■ currentUserDisplay</li> </ul>	Request used to return current user ID.
RequestGetParticipantsLimit	<ul style="list-style-type: none"> <li>■ bandwidthLimitedcpuLimited</li> <li>■ userLimited</li> </ul>	Request used to return remote participants number limit for rendering due to bandwidth, CPU or user settings. <ul style="list-style-type: none"> <li>■ BandwidthLimit -Maximum number of viewable remote participants in video layout, due to current network bandwidth. Range of values 0~16.</li> <li>■ cpuLimited- Maximum number of viewable remote participants in video layout, due to current CPU utilization. Range of values 0~16.</li> <li>■ userLimited -Maximum number of viewable remote participants in video layout. Range of values 0~16.</li> </ul>
RequestGetInviting-User	<ul style="list-style-type: none"> <li>■ invitingUser</li> </ul>	Request used to get display name of the inviting user in the case of incoming call.
RequestGetCurrent-SessionVidyoRouter	<ul style="list-style-type: none"> <li>■ routerAddress</li> </ul>	Request used to get VidyoRouter address while in the conference.
RequestGetFecclList	<ul style="list-style-type: none"> <li>■ uri</li> <li>■ name</li> <li>■ privacyMode</li> <li>■ numberParticipants</li> <li>■ fecclParticipantIndex</li> </ul>	Request used to get the list of controllable far end cameras available in conference call.
RequestGetConferenceInfo	<ul style="list-style-type: none"> <li>■ recording</li> <li>■ webcasting</li> </ul>	Request used to get the list of general conference information reported by the VidyoRouter in conference call.

Message Type String	Parameters	Description
RequestGetCallState	<ul style="list-style-type: none"> <li>callState</li> </ul>	Request used to get the current call state callState ("Idle", "Ringing", "Calling", "Joining", "InConference", "Disconnecting")
RequestGetBandwidth-Info	<ul style="list-style-type: none"> <li>AvailSendBwVideo</li> <li>AvailSendBwAudio</li> <li>AvailSendBwApplication</li> <li>AvailSendBwMax</li> <li>ActualSendBwVideo</li> <li>ActualSendBwAudio</li> <li>ActualSendBwApplication</li> <li>ActualSendBwMax</li> <li>AvailRecvBwVideo</li> <li>AvailRecvBwAudio</li> <li>AvailRecvBwApplication</li> <li>AvailRecvBwMax</li> <li>ActualRecvBwVideo</li> <li>ActualRecvBwAudio</li> <li>ActualRecvBwApplication</li> <li>ActualRecvBwMax</li> </ul>	<p>Request used to inquire current conference bandwidth statistics.</p> <p>The format of received returned data are in units of kilobits per second.</p> <p>Range of values 0~UINT_MAX.</p>
RequestGetVideo-FramerateInfo	<ul style="list-style-type: none"> <li>captureFrameRate</li> <li>encodeFrameRate</li> <li>sendFrameRate</li> </ul>	Request used to inquire current conference video frame rate that is captured, encoded, and sent.
RequestGetMediaInfo	<ul style="list-style-type: none"> <li>numIFrames</li> <li>numFirs</li> <li>numNacks</li> <li>mediaRTT</li> </ul>	Request used to inquire current conference number of IFrames, FIRs, NACKs, and media-RTT relating to media sent to network.
RequestGetRateShaperInfo	<ul style="list-style-type: none"> <li>delayVideoPriorityNormal</li> <li>numPacketsVideoPriorityNormal</li> <li>numFramesVideoPriorityNormal</li> <li>numDroppedVideoPriorityNormal</li> <li>delayVideoPriorityRetransmit</li> <li>numPacketsVideoPriorityRetransmit</li> </ul>	Request used to inquire current conference statistics relating to rate shaper.

Message Type String	Parameters	Description
	<ul style="list-style-type: none"> <li>■ numFramesVideoPriorityRetransmit</li> <li>■ numDroppedVideoPriorityRetransmit</li> <li>■ delayAppPriorityNormal</li> <li>■ numFramesAppPriorityNormal</li> <li>■ numDroppedAppPriorityNormal</li> <li>■ delayAppPriorityRetransmit</li> <li>■ numPacketsAppPriorityRetransmit</li> <li>■ numFramesAppPriorityRetransmit</li> <li>■ numDroppedAppPriorityRetransmit</li> </ul>	
RequestGetCurrentCpuUtilization	<ul style="list-style-type: none"> <li>■ value</li> </ul>	Request used to inquire current CPU utilization.
RequestGetEndpointStatus	<ul style="list-style-type: none"> <li>■ endPointStatus</li> </ul>	Request used to get status of endpoint. The endpoint status can be ("Inactive", "Registered", "Active")
RequestGetEncodeResolution	<ul style="list-style-type: none"> <li>■ rect (Object)</li> </ul>	Request used to inquire current conference video resolution that is encoded. The passed in parameter object can store the following Properties: xPos:0,yPos:0,width:0,height:0
requestGetAudioEnergyInfo	<ul style="list-style-type: none"> <li>■ rendererEnergy</li> <li>■ capturerEnergy</li> </ul>	Request used to get audio energy level of audio devices.
RequestActivateEID	<ul style="list-style-type: none"> <li>■ lacKey</li> </ul>	Request used to activate installation license of an endpoint. Perform endpoint registration
RequestSetSharableWindowWhiteList	<ul style="list-style-type: none"> <li>■ numWindows</li> <li>■ windowName</li> </ul>	Get the list of application windows that are in white list of sharable window.

Message Type String	Parameters	Description
RequestSetSharableWindowWhiteList	<ul style="list-style-type: none"> <li>■ numWindows</li> <li>■ windowName</li> </ul>	<p>Set the list of application windows that are in white list of sharable window.</p> <p>If an open application window whose name contain one of the white listed window name,that windows property (e.g. is visible, is transparent toolbar window etc) will not be verified and it will be included in the list if sharable window list when using API</p> <p>#VIDYO_CLIENT_REQUEST_GET_WINDOWS_AND_DESKTOPS</p>
Request-GetLicensedStatus	<ul style="list-style-type: none"> <li>■ isLicensed</li> </ul>	Request used to get endpoint's installation license status.
RequestGetLID	<ul style="list-style-type: none"> <li>■ LID</li> </ul>	Request used to get endpoint's unique long identifier.