API Reference

APICore messages

APICore handles connecting clients and communication.

ApiCoreHeartbeat

Type: outcoming - sent each 5 seconds to all clients

Address: /heartbeat

ApiCoreGetStatus

Type: incoming
Address: /getStatus

ApiCoreReady - response for ApiCoreGetStatus

Type: outcoming Address: /ready

ApiCoreError

Type: outcoming Address: /error

ApiCoreMessageRejected - response for ApiCoreGetStatus

Type: outcoming

Address: /messageRejected

Arguments:

- 1. int32 (reason) [1001 invalid message, 1002 unauthorized user, 1003 parsing error]
- 2. int32 (rejectedMessageId) id of message (-1 if it has no id)
- 3. string (debug info)

ApiCoreGetServerInfo

Type: incoming query Address: /getServerInfo

ApiCoreServerInfo

Type: outcoming query Address: /serverInfo

Arguments:

- 1. string (deviceVersion)
- 2. string (deviceId)
- 3. string (processId)
- 4. int32 (anonymousLoginEnabled) bool value
- 5. int32 (userAuthenticated) bool value

ApiCoreLogin

Type: incoming query Address: /login Arguments:

1. string (password)

ApiCoreLoginResponse - response for ApiCoreLogin

Type: outcoming response

Address: /login Arguments:

1. int32 (responseCode) [1000 - Ok, 1001 - Wrong credentials]

2. string (logTag)

ApiCoreAuthenticate

Type: incoming query Address: /authenticate

Arguments:

1. string (logTag) Token got when logged in

 ${\tt ApiCoreAuthenticationResponse} \ {\tt -} \ {\tt response} \ {\tt for} \ {\tt ApiCoreAuthenticate}$

Type: outcoming response

Address: /authenticationResponse

Arguments:

1. int32 (responseCode) [1000 - Ok, 1001 - wrong logtag]

Audio Core messages

AudioCore is the root instance of the whole system. It owns all tracks, input/output proxies, handles callbacks, connections and more.

${\tt AudioCoreAddTrack}$

Type: incoming

Address: /audioCore/addTrack

Arguments:

- int32 (trackType) [1 AudioTrack, 2 FxTrack, 3 MixBusTrack, 4 OutputBusTrack]
- 2. int32 (trackPosition) [-1 for end of list]

AudioCoreTrackAdded

Type: outcoming

Address: /audioCore/trackAdded

Arguments:

- 1. string (trackId)
- 2. int32 (trackPosition) [-1 for end of list]

AudioCoreRemoveTrack

Type: incoming

Address: /audioCore/removeTrack

Arguments:

1. string (trackId)

AudioCoreTrackRemoved

Type: outcoming

Address: /audioCore/trackRemoved

Arguments:

1. string (trackId)

AudioCoreMoveTrack - moves track in list of tracks

Type: incoming

Address: /audioCore/moveTrack

Arguments:

- 1. string (trackId)
- 2. int32 (newTrackPosition) [-1 for end of list]

AudioCoreTrackMoved

Type: outcoming

Address: /audioCore/trackMoved

Arguments:

- 1. string (trackId)
- 2. int32 (oldTrackPosition)
- 3. int32 (newTrackPosition) [-1 for end of list]

AudioCoreConnectNodes - connects two mixer nodes (tracks, input/output proxies)

Type: incoming

Address: /audioCore/connectNodes

Arguments:

string (sourceNodeId)

2. string (receiverNodeId)

AudioCoreRemoveNodesConnection

Type: incoming

Address: /audioCore/removeNodesConnection

Arguments:

1. string (sourceNodeId)

2. string (receiverNodeId)

AudioCoreConnectionsChanged

Type: outcoming

Address: /audioCore/connectionsChanged

AudioCoreGetTracksList

Type: incoming query

Address: /audioCore/getTracksList

AudioCoreTracksList

Type: outcoming response

Address: /audioCore/tracksList

Arguments:

1. string (trackIds) JSON array of strings (array of track ids)

${\tt AudioCoreGetInputProxiesList}$

Type: incoming query

Address: /audioCore/getInputProxiesList

AudioCoreInputProxiesList

Type: outcoming response

Address: /audioCore/inputProxiesList

Arguments:

1. string (proxyIds) JSON array of strings (array of proxy ids)

AudioCoreInputProxyAdded

Type: outcoming

Address: /audioCore/inputProxyAdded

Arguments:

1. string (proxyId)

2. string (proxyName)

AudioCoreInputProxyRemoved

Type: outcoming

Address: /audioCore/inputProxyRemoved

Arguments:

1. string (proxyId)

${\tt AudioCoreGetOutputProxiesList}$

Type: incoming query

Address: /audioCore/getOutputProxiesList

AudioCoreOutputProxiesList

Type: outcoming response

Address: /audioCore/outputProxiesList

Arguments:

1. string (proxyIds) JSON array of strings (array of proxy ids)

AudioCoreOutputProxyAdded

Type: outcoming

Address: /audioCore/outputProxyAdded

Arguments:

- string (proxyId)
- 2. string (proxyName)

AudioCoreOutputProxyRemoved

Type: outcoming

Address: /audioCore/outputProxyRemoved

Arguments:

1. string (proxyId)

AudioCoreGetAvailableInputSourcesList

Type: incoming query

Address: /audioCore/getAvailableInputSourcesList

Arguments:

string (receiverNodeId)

 ${\bf AudioCoreAvailableInputSourcesList} \ {\tt -list} \ {\tt of} \ {\tt other} \ {\tt nodes} \ {\tt a} \ {\tt node} \ {\tt can} \ {\tt connect} \ {\tt to}$

Type: outcoming response

Address: /audioCore/availableInputSourcesList

Arguments:

1. string (sources) JSON array of nodes [UUID, name, color, active]

${\tt AudioCoreGetAvailableOutputReceiversList}$

Type: incoming query

Address: /audioCore/getAvailableOutputReceiversList

Arguments:

1. string (sourceNodeId)

AudioCoreAvailableOutputReceiversList - list of other nodes a node can connect to

Type: outcoming response

Address: /audioCore/availableOutputReceiversList

Arguments:

1. string (receivers) JSON array of nodes [UUID, name, color, active]

AudioCoreGetGlobalAudioLatency

Type: incoming query

Address: /audioCore/getGlobalAudioLatency

AudioCoreGlobalAudioLatency

Type: outcoming response

Address: /audioCore/globalAudioLatency

Arguments:

- int32 (latencySamples)
- 2. float (latencyMs)

AudioCoreGlobalAudioLatencyChanged

Type: outcoming

Address: /audioCore/globalAudioLatencyChanged

Arguments:

- int32 (latencySamples)
- 2. float (latencyMs)

AudioCoreSignalLevels

Type: outcoming

Address: /audioCore/signalLevels

Arguments:

- 1. int32 (numTracks)
- 2. blob (tracksSignalLevels) 16bit PCM data tracks one-by-one [leftChan, rightChan]
- 3. blob (soloBusSignalLevels) 16bit PCM data [leftChan, rightChan]
- 4. blob (trackClipData) bit mask, each track has one bit indicating clip

AudioCoreAddListener - registers a client to listen for events

Type: incoming

Address: /audioCore/addListener

Registers for:

- AudioCoreTrackAdded
- AudioCoreTrackRemoved
- AudioCoreTrackMoved
- AudioCoreConnectionsChanged
- AudioCoreInputProxyAdded
- AudioCoreInputProxyRemoved
- AudioCoreOutputProxyAdded
- AudioCoreOutputProxyRemoved
- AudioCoreGlobalAudioLatencyChanged

AudioCoreRemoveListener

Type: incoming

Address: /audioCore/removeListener

AudioCoreAddSignalLevelListener - registers a client to listen for streaming of

tracks signal levels

Type: incoming

Address: /audioCore/addSignalLevelListener

Arguments:

1. int32 (refreshIntervalHz) Interval in which stream data (from 1 to 30 Hz)

Registers for:

• AudioCoreSignalLevels

${\tt AudioCoreRemoveSignalLevelListener}$

Type: incoming

Address: /audioCore/removeSignalLevelListener

AudioCoreAudioData - message containing audio samples

Type: outcoming

Address: /audioCore/audioData

Arguments:

1. int32 (numSamples) number of samples in each channel

2. int32 (numChannels)

3. blob (audioSamples) 16bit PCM audio sample data - channels one after another

Track messages

TrackGetDetail

Type: incoming query

Address: /track/{trackId}/getDetail

TrackDetail

Type: outcoming response

Address: /track/{trackId}/detail

Arguments:

- int32 (trackType) [1 AudioTrack, 2 FxTrack, 3 MixBusTrack, 4 OutputBusTrack]
- 2. float32 (gain)
- 3. float32 (pan)
- 4. int32 (mute) bool value
- 5. int32 (solo) bool value
- 6. int32 (recordArm) bool value
- 7. string (name)
- 8. string (colour) hex value
- 9. string (pluginIds) JSON array of plugin IDs in the chain
- 10. string (sendIds) JSON array of send IDs

TrackSetGain

Type: incoming

Address: /track/{trackId}/setGain

Arguments:

1. float32 (gain)

TrackGainChanged

Type: outcoming

Address: /track/{trackId}/gainChanged

Arguments:

1. float32 (gain)

TrackSetPan

Type: incoming

Address: /track/{trackId}/setPan

Arguments:

1. float32 (pan)

TrackPanChanged

Type: outcoming

Address: /track/{trackId}/panChanged

Arguments:

1. float32 (pan)

TrackSetMute

Type: incoming

Address: /track/{trackId}/setMute

Arguments:

1. int32 (mute) bool value

${\tt TrackMuteChanged}$

Type: outcoming

Address: /track/{trackId}/muteChanged

Arguments:

1. int32 (mute) bool value

TrackSetSolo

Type: incoming

Address: /track/{trackId}/setSolo

Arguments:

1. int32 (solo) bool value

TrackSoloChanged

Type: outcoming

Address: /track/{trackId}/soloChanged

Arguments:

1. int32 (solo) bool value

TrackSetRecordArm

Type: incoming

Address: /track/{trackId}/setRecordArm

Arguments:

1. int32 (recordArm) bool value

TrackRecordArmChanged

Type: outcoming

Address: /track/{trackId}/recordArmChanged

Arguments:

1. int32 (recordArm) bool value

TrackSetName

Type: incoming

Address: /track/{trackId}/setName

Arguments:

1. string (name)

TrackNameChanged

Type: outcoming

Address: /track/{trackId}/nameChanged

Arguments:

1. string (name)

TrackSetColour

Type: incoming

Address: /track/{trackId}/setColour

Arguments:

1. string (colour) hex value

TrackColourChanged

Type: outcoming

Address: /track/{trackId}/colourChanged

Arguments:

1. string (colour) hex value

TrackAddSendNode

Type: incoming

Address: /track/{trackId}/addSendNode

Arguments:

- 1. int32 (audioSourcePosition) [0 before plugins, 1 999 after nth plugin, 1000 after plugins, 1001 after fader]
- 2. int32 (sendPosition) (-1 end of list)

TrackSendAdded

Type: outcoming

Address: /track/{trackId}/sendAdded

Arguments:

- 1. string (sendId)
- 2. int32 (sendPosition) (-1 end of list)

TrackRemoveSendNode

Type: incoming

Address: /track/{trackId}/removeSendNode

Arguments:

1. string (sendId)

TrackSendRemoved

Type: outcoming

Address: /track/{trackId}/sendRemoved

Arguments:

1. string (sendId)

TrackMoveSendNode - moves send in list

Type: incoming

Address: /track/{trackId}/moveSendNode

Arguments:

- 1. string (sendId)
- 2. int32 (sendPosition)

TrackSendMoved

Type: outcoming

Address: /track/{trackId}/sendMoved

Arguments:

- 1. string (sendId)
- 2. int32 (oldPosition)
- 3. int32 (newPosition)

TrackAddPlugin

Type: incoming

Address: /track/{trackId}/addPlugin

Arguments:

- 1. int32 (pluginTypeId)
- 2. int32 (pluginPosition) (-1 end of list)

TrackPluginAdded

Type: outcoming

Address: /track/{trackId}/pluginAdded

Arguments:

- 1. string (pluginId)
- 2. int32 (pluginPosition) (-1 end of list)

TrackRemovePlugin

Type: incoming

Address: /track/{trackId}/removePlugin

Arguments:

1. string (pluginId)

TrackPluginRemoved

Type: outcoming

Address: /track/{trackId}/pluginRemoved

Arguments:

1. string (pluginId)

TrackMovePlugin

Type: incoming

Address: /track/{trackId}/movePlugin

Arguments:

- 1. string (pluginId)
- 2. int32 (position) (-1 end of list)

TrackPluginMoved

Type: outcoming

Address: /track/{trackId}/pluginMoved

Arguments:

- 1. string (pluginId)
- 2. in32 (oldPosition)
- 3. in32 (newPosition) (-1 end of list)

TrackAddInfoListener

Type: incoming

Address: /track/{trackId}/addInfoListener

Registers for:

TrackNameChangedTrackColourChanged

TrackRemoveInfoListener

Type: incoming

Address: /track/{trackId}/removeInfoListener

TrackAddControlsListener

Type: incoming

Address: /track/{trackId}/addControlsListener

Registers for:

TrackGainChanged

- TrackPanChanged
- TrackMuteChanged
- TrackSoloChanged
- TrackRecordArmChanged

${\tt TrackRemoveControlsListener}$

Type: incoming

Address: /track/{trackId}/removeControlsListener

TrackAddPluginsListener

Type: incoming

Address: /track/{trackId}/addPluginsListener

Registers for:

- TrackPluginAdded
- TrackPluginRemoved
- TrackPluginMoved

${\tt TrackRemovePluginsListener}$

Type: incoming

Address: /track/{trackId}/removePluginsListener

TrackAddSendsListener

Type: incoming

Address: /track/{trackId}/addSendsListener

Registers for:

TrackSendAdded

- TrackSendRemoved
- TrackSendMoved

TrackRemoveSendsListener

Type: incoming

Address: /track/{trackId}/removeSendsListener

TrackSendNode messages

SendGetDetail

Type: incoming query

Address: /send/{sendId}/getDetail

SendDetail

Type: outcoming response
Address: /send/{sendId}/detail

Arguments:

- 1. float32 (gain)
- 2. float32 (pan)
- 3. string (name)
- 4. string (colour) hex value
- 5. int32 (audioSourcePosition)

SendSetGain

Type: incoming

Address: /send/{sendId}/setGain

Arguments:

1. float32 (gain)

${\tt SendGainChanged}$

Type: outcoming

Address: /send/{sendId}/gainChanged

Arguments:

1. float32 (gain)

SendSetPan

Type: incoming

Address: /send/{sendId}/setPan

Arguments:

1. float32 (pan)

SendPanChanged

Type: outcoming

Address: /send/{sendId}/panChanged

Arguments:

1. float32 (pan)

SendSetAudioSourcePosition

Type: incoming

Address: /send/{sendId}/setAudioSourcePosition

Arguments:

1. int32 (audioSourcePosition) [0 - before plugins, 1 - 999 after nth plugin, 1000 - after plugins, 1001 - after fader]

${\tt SendAudioSourcePositionChanged}$

Type: outcoming

Address: /send/{sendId}/audioSourcePositionChanged

Arguments:

int32 (audioSourcePosition) [0 - before plugins, 1 - 999 after nth plugin, 1000 - after plugins, 1001 - after fader]

SendSetName

Type: incoming

Address: /send/{sendId}/setName

Arguments:

1. string (name)

SendNameChanged

Type: outcoming

Address: /send/{sendId}/nameChanged

Arguments:

1. string (name)

${\tt SendColourChanged}$

Type: outcoming

Address: /send/{sendId}/colourChanged

Arguments:

1. string (colour) hex value

${\tt SendAddInfoListener}$

Type: incoming

Address: /send/{sendId}/addInfoListener

Registers for:

- SendNameChanged
- SendColourChanged

${\tt SendRemoveInfoListener}$

Type: incoming

Address: /send/{sendId}/removeInfoListener

SendAddControlsListener

Type: incoming

Address: /send/{sendId}/addControlsListener

Registers for:

- SendGainChanged
- SendPanChanged

SendRemoveControlsListener

Type: incoming

Address: /send/{sendId}/removeControlsListener

${\tt SendAddAudioSourcePositionListener}$

Type: incoming

Address: /send/{sendId}/addAudioSourcePositionListener

Registers for:

 ${\tt SendAudioSourcePositionChanged}$

${\tt SendRemoveAudioSourcePositionListener}$

Type: incoming
Address: /send/{sendId}/removeAudioSourcePositionListener

Plugin messages

PluginGetDetail

Type: incoming query

Address: /plugin/{pluginId}/getDetail

PluginDetail

Type: outcoming response

Address: /plugin/{pluginId}/detail

Arguments:

- 1. string (name)
- 2. string (type)
- 3. int32 (typeId)
- 4. int32 (bypased) bool value
- 5. int32 (active) bool value

PluginGetParameterValues

Type: incoming query

Address: /plugin/{pluginId}/getParameterValues

PluginParameterValues

Type: outcoming response

Address: /plugin/{pluginId}/parameterValues

Arguments:

1. string (values) JSON array of pairs [numericValue, textValue]

PluginGetParameters

Type: incoming query

Address: /plugin/{pluginId}/getParameters

PluginParameters

Type: outcoming response

Address: /plugin/{pluginId}/parameters

Arguments:

1. string (parameters) JSON array of tuples [index, ref, value, textValue]

PluginSetName

Type: incoming

Address: /plugin/{pluginId}/setName

Arguments:

1. string (name)

PluginNameChanged

Type: outcoming

Address: /plugin/{pluginId}/nameChanged

Arguments:

1. string (name)

PluginSetActive

Type: incoming

Address: /plugin/{pluginId}/setActive

Arguments:

1. int32 (active) bool value

PluginActiveChanged

Type: outcoming

Address: /plugin/{pluginId}/activeChanged

Arguments:

1. int32 (active) bool value

PluginSetBypass

Type: incoming

Address: /plugin/{pluginId}/setBypass

Arguments:

1. int32 (bypassed) bool value

PluginBypassChanged

Type: outcoming

Address: /plugin/{pluginId}/bypassChanged

Arguments:

1. int32 (bypassed) bool value

PluginSetParameterValue

Type: incoming

Address: /plugin/{pluginId}/setParameterValue

Arguments:

- 1. int32 (parameterIndex)
- 2. float (newValue)

PluginParameterValueChanged

Type: outcoming

Address: /plugin/{pluginId}/parameterValueChanged

Arguments:

- 1. int32 (parameterIndex)
- 2. float (newValue)
- 3. string (newValueText)

PluginAddListener

Type: incoming

Address: /plugin/{pluginId}/addListener

Registers for:

• PluginNameChanged

PluginRemoveListener

Type: incoming

Address: /plugin/{pluginId}/removeListener

PluginAddParameterListener

Type: incoming

Address: /plugin/{pluginId}/addParameterListener

Registers for:

• PluginParameterValueChanged

PluginRemoveParameterListener

Type: incoming

Address: /plugin/{pluginId}/removeParameterListener

PluginAddBypassListener

Type: incoming

Address: /plugin/{pluginId}/addBypassListener

Registers for:

• PluginBypassChanged

PluginRemoveBypassListener

Type: incoming

Address: /plugin/{pluginId}/removeBypassListener

${\tt PluginAddActiveListener}$

Type: incoming

Address: /plugin/{pluginId}/addActiveListener

Registers for:

• PluginActiveChanged

PluginRemoveActiveListener

Type: incoming

Address: /plugin/{pluginId}/removeActiveListener

Solo bus messages

${\tt SoloBusAddAudioDataListener}$

Type: incoming Address: /soloBus/addAudioDataListener

Arguments:

1. int32 (minNumSamples) Minimal number of samples in each message

Registers for:

AudioCoreAudioData

${\tt SoloBusRemoveAudioDataListener}$

Type: incoming

Address: /soloBus/removeAudioDataListener

PluginManager messages

PluginManagerGetPluginTypes

Type: incoming query

Address: /pluginManager/getPluginTypes

PluginManagerPluginTypes

Type: outcoming response

Address: /pluginManager/pluginTypes

Arguments:

1. string (pluginTypes) JSON array of tuples [pluginTypeId, name, manufacturerName]

${\tt PluginManagerScanPluginTypes}$

Type: incoming

Address: /pluginManager/scanPluginTypes

PluginManagerScanPluginTypesIfNeeded

Type: incoming

Address: /pluginManager/scanPluginTypesIfNeeded

PluginManagerPluginTypesScanStarted

Type: outcoming

Address: /pluginManager/pluginManagerPluginTypesScanStarted

${\tt PluginManagerPluginTypesScanned}$

Type: outcoming

Address: /pluginManager/pluginManagerPluginTypesScanned

Arguments:

1. int32 newNumPlugins

${\bf Plugin Manager Plugin Type Added} \ - \ {\bf Called} \ \ {\bf when} \ \ {\bf plugin} \ \ {\bf is} \ \ {\bf imported} \ \ {\bf by} \ \ {\bf user} \ \ ({\bf not} \ \ {\bf during}$

scan)

Type: outcoming

Address: /pluginManager/pluginTypeAdded

Arguments:

- 1. int32 pluginTypeId
- 2. string pluginName
- 3. string manufacturerName

PluginManagerAddListener

Type: incoming

Address: /pluginManager/addListener

Registers for:

- PluginManagerPluginTypesScanStarted
- PluginManagerPluginTypesScaned

PluginManagerRemoveListener

Type: incoming

Address: /pluginManager/removeListener

StateManager messages

${\tt StateManagerSaveState}$

Type: incoming query

Address: /stateManager/saveState

${\tt StateManagerLoadState}$

Type: incoming query

Address: /stateManager/loadState

${\tt StateManagerGetState}$

Type: incoming query

Address: /stateManager/getState

${\tt StateManagerState}$

Type: outcoming response - for save/set/load messages

Address: /stateManager/state

Arguments:

1. string (stateXML)

${\tt StateManagerSetState}$

Type: incoming query

Address: /stateManager/setState

Arguments:

string (stateXML)

StateManagerProcessResult

Type: outcoming response

Address: /stateManager/processResult

Arguments:

1. int32 (processOk) bool value