Blackmagic design

REST API for
HyperDeck

HyperDeck Extreme
HyperDeck Shuttle
HyperDeck Studio

HyperDeck Control REST API

If you are a software developer you can build custom applications or leverage ready to use tools such as REST client or Postman to seamlessly control and interact with HyperDeck disk recorders using HyperDeck Control REST API. This API enables you to perform a wide range of operations, such as starting or stopping recordings, managing playback, accessing disk information and much more. Whether you're developing a custom application tailored to your specific needs or utilizing existing tools, this API empowers you to unlock the full potential of HyperDeck disk recorders with ease. We look forward to seeing what you come up with!

Transport Control API

API for controlling Transport on Blackmagic Design products.

GET /transports/0

Get device's basic transport status.

Response

200 - Transport status.
The response is a JSON object.

Name	Type	Description
mode	string	Transport mode. Possible values are: InputPreview, InputRecord, Output.

PUT /transports/0

Set device's basic transport status.

Parameters

Name	Type	Description
mode	string	Transport mode. Possible values are: InputPreview, Output.

Response

204 - Transport mode was set.

GET /transports/0/stop

Determine if transport is stopped.

Response

200 - Transport stop response.
The response is a JSON object.

PUT /transports/0/stop

Stop transport. Deprecated, use POST /tranports/0/stop instead.

Response

204 - Transport stopped.

POST /transports/0/stop

Stop transport.

Response

204 - Transport stopped.

GET /transports/0/play

Determine if transport is playing.

Response

200 - Transport play response.
The response is a JSON object.

PUT /transports/0/play

Start playing on transport. Deprecated, use POST /tranports/0/play instead.

Response

204 - Transport playing.

POST /transports/0/play

Start playing on transport.

Response

204 - Transport playing.

GET /transports/0/playback

Get playback state.

Response

200 - OK
The response is a JSON object.

Name	Type	Description
type	string	Possible values are: Play, Jog, Shuttle, Var.
loop	boolean	When true playback loops from the end of the timeline to the beginning of the timeline
singleClip	boolean	When true playback loops from the end of the current clip to the beginning of the current clip
speed	number	Playback Speed, 1.0 for normal forward playback
position	integer	Playback position on the timeline in units of video frames

PUT /transports/0/playback

Set playback state.

Parameters

Name	Type	Description
type	string	Possible values are: Play, Jog, Shuttle, Var.
loop	boolean	When true playback loops from the end of the timeline to the beginning of the timeline
singleClip	boolean	When true playback loops from the end of the current clip to the beginning of the current clip
speed	number	Playback Speed, 1.0 for normal forward playback
position	integer	Playback position on the timeline in units of video frames

Response

204 - No Content

GET /transports/0/record

Get record state.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
recording	boolean	Is transport in Input Record mode

PUT /transports/0/record

Set record state. Deprecated, use POST /transports/0/record instead.

Parameters

Name	Type	Description
recording	boolean	Is transport in Input Record mode
clipName	string	Used to set the requested clipName to record to, when specifying "recording" attribute to True

Response

204 - Recording started.

POST /transports/0/record

Start recording.

Parameters

Name	Type	Description
clipName	string	Specific name of clip to record to.

Response

204 - Recording started.

GET /transports/0/clipIndex

Get the clip index of the currently playing clip on the timeline.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
clipIndex	number	The 0-based index of the clip being played on the timeline. null when there is no timeline or an empty timeline.

GET /transports/0/timecode

Get device's timecode.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
display	string	The display timecode serialised as a string.
timeline	string	The timeline timecode serialised as a string.

GET /transports/0/timecode/source

Get timecode source selected on device

Response

200 - OK

The response is a JSON object.

Name	Type	Description
timecode	string	Possible values are: Timeline, Clip.

GET /transports/0/clip

Get clip information about the currently recording (or transferring) clip, if it exists

Response

200 - Information about the clip currently being recorded.

The response is a JSON object.

Name	Type	Description
clip	object	
clip.clipUniqueId	integer	Unique ID used to identify this clip
clip.filePath	string	Path to the file relative to the root of a mount
clip.fileSize	integer	Size of file on disk in bytes
clip.codecFormat	object	
clip.codecFormat.codec	string	Currently selected codec.
clip.codecFormat.container	string	Multimedia container format.
clip.videoFormat (required)	object	Video format configuration.
clip.videoFormat.name	string	Video format serialised as a string.
clip.videoFormat.frameRate	string	Frame rate. Possible values are: 23.98, 24.00, 24, 25.00, 25, 29.97, 30.00, 30, 47.95, 48.00, 48, 50.00, 50, 59.94, 60.00, 60, 119.88, 120.00, 120.
clip.videoFormat.height	number	Height dimension of video format.
clip.videoFormat.width	number	Width dimension of video format.
clip.videoFormat.interlaced	boolean	Is the display format interlaced?
clip.startTimecode	string	Start timecode of the clip serialised as string
clip.durationTimecode	string	Duration of the clip in timecode format serialised as string
clip.frameCount	integer	Number of frames in clip; duration of the clip in frames

System Control API

API for controlling the System Modes on Blackmagic Design products.

GET /system

Get device system information.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
codecFormat	object	
codecFormat.codec	string	Currently selected codec.
codecFormat.container	string	Multimedia container format.
videoFormat (required)	object	Video format configuration.
videoFormat.name	string	Video format serialised as a string.
videoFormat.frameRate	string	Frame rate. Possible values are: 23.98, 24.00, 24, 25.00, 25, 29.97, 30.00, 30, 47.95, 48.00, 48, 50.00, 50, 59.94, 60.00, 60, 119.88, 120.00, 120.
videoFormat.height	number	Height dimension of video format.
videoFormat.width	number	Width dimension of video format.
videoFormat.interlaced	boolean	Is the display format interlaced?

GET /system/product

Get device product information.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
deviceName	string	Name of device as displayed in Setup
productName	string	Device's product name
softwareVersion	string	Software version running on device

GET /system/supportedCodecFormats

Get the list of supported codecs.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
codecs	array	
codecs[i]	object	
codecs[i].codec	string	Currently selected codec.
codecs[i].container	string	Multimedia container format.

GET /system/codecFormat

Get the currently selected codec.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
codec	string	Currently selected codec.
container	string	Multimedia container format.

PUT /system/codecFormat

Set the codec.

Parameters

Name	Type	Description
codec	string	Currently selected codec.
container	string	Multimedia container format.

Response

204 - The codec updated successfully.

GET /system/videoFormat

Get the currently selected video format.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
name	string	Video format serialised as a string.
frameRate	string	Frame rate. Possible values are: 23.98, 24.00, 24, 25.00, 25, 29.97, 30.00, 30, 47.95, 48.00, 48, 50.00, 50, 59.94, 60.00, 60, 119.88, 120.00, 120.
height	number	Height dimension of video format.
width	number	Width dimension of video format.
interlaced	boolean	Is the display format interlaced?

PUT /system/videoFormat

Set the timeline video format. Deprecated, use PUT /timelines/0/videoFormat instead.

Parameters

This parameter can be one of the following types:

Name	Type	Description
name	string	Video format serialised as a string.

Name	Type	Description
frameRate	string	Frame rate. Possible values are: 23.98, 24.00, 24, 25.00, 25, 29.97, 30.00, 30, 47.95, 48.00, 48, 50.00, 50, 59.94, 60.00, 60, 119.88, 120.00, 120.
height	number	Height dimension of video format.
width	number	Width dimension of video format.
interlaced	boolean	Is the display format interlaced?

Response

204 - The video format updated successfully.

400 - Invalid request.

409 - Operation unsupported in the current state.

Media Control API

API for controlling media devices in Blackmagic Design products.

GET /media/workingset

Get the list of media devices currently in the working set.

Response

200 - The list of media devices in the working set. Entries are null if there is no media device in that slot.

The response is a JSON object.

Name	Type	Description
size	integer	The fixed size of this device's working set
workingset (required)	array	
workingset[i]	object	
workingset[i].index	integer	Index of this media in the working set
workingset[i].activeDisk	boolean	Is this current item the active disk
workingset[i].volume	string	Volume name
workingset[i].deviceName	string	Internal device name of this media device
workingset[i].remainingRecordTime	integer	Remaining record time using current codec and video format in seconds
workingset[i].totalSpace	integer	Total space on media device in bytes
workingset[i].remainingSpace	integer	Remaining space on media device in bytes
workingset[i].clipCount	integer	Number of clips currently on the device

GET /media/active

Get the currently active media device.

Response

200 - The current active media device.

The response is a JSON object.

Name	Type	Description
workingsetIndex	integer	Working set index of the active media device
deviceName	string	Internal device name of this media device

204 - No media is currently active

PUT /media/active

Set the currently active media device.

Parameters

Name	Type	Description
workingsetIndex	integer	Working set index of the media to become active

Response

204 - The active media device was set successfully.

400 - Setting the currently active media device is not possible in the current state.

GET /media/devices/doformatSupportedFilesystems

Get the list of filesystems available to format the device.

Response

200 - The list of filesystems permitted for formatting.

The response is a JSON object.

GET /media/devices/{deviceName}

Get information about a requested device.

Parameters

Name	Type	Description
{deviceName}	string	

Response

200 - Information about the requested device.

The response is a JSON object.

Name	Type	Description
state	string	The current state of the media device. Possible values are: None, Scanning, Mounted, Uninitialised, Formatting, RaidComponent.

400 - Invalid device name

404 - Device not found

GET /media/devices/{deviceName}/doformat

Get a format key, used to format the device with a PUT request.

Parameters

Name	Type	Description
{deviceName}	string	

Response

200 - Format prepared

The response is a JSON object.

Name	Type	Description
deviceName	string	Internal device name of this media device
key	string	The key used to format this device, it must be fetched with the GET request and then provided back with a PUT request

400 - Cannot format the device

404 - Device not found

PUT /media/devices/{deviceName}/doformat

Perform a format of the media device.

Parameters

Name	Type	Description
{deviceName}	string	

Name	Type	Description
key	string	The key used to format this device, it must be fetched with the GET request and then provided back with a PUT request
filesystem	string	Filesystem to format to. GET doFormatSupportedFilesystems returns list of supported filesystems.
volume	string	Volume name to set for the disk after format

Response

204 - Format successful

400 - Cannot format the device, invalid filesystem or key

404 - Device not found

Timeline Control API

API for controlling playback timeline.

GET /timelines/0

Get the playback timeline.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
clips	array	
clips[i]	object	
clips[i].clipUniqueId	integer	Unique identifier used to identify this media clip. If the same media clip is added to the timeline multiple times, each timeline clip has the same clipUniqueId
clips[i].frameCount	integer	Duration of timeline clip in frames, the number of frames in this clip on the timeline
clips[i].durationTimecode	string	Duration of the timeline clip in timecode format serialised as string. This will differ to durationTimecode reported in /clips for this clipUniqueId if clipIn or frameCount was specified when adding this clip to the timeline.
clips[i].clipIn	string	In frame offset for the clip on the timeline, where 0 is the first frame of the on-disk clip
clips[i].inTimecode	string	Clip timecode of the first frame of this timeline clip serialised as string (clip startTimecode + clipIn frames)
clips[i].timelineIn	string	Timeline position of the first frame of this clip, where 0 is the first frame of the timeline
clips[i].timelineInTimecode	string	Timeline timecode of the first frame of this timeline clip serialised as string

Response

404 - No timeline / disk available.

DELETE /timelines/0

Clear the current playback timeline. Deprecated, prefer to use POST /timelines/0/clear

Response

204 - The timeline was cleared.

POST /timelines/0

Add a clip to the timeline.

Parameters

Name	Type	Description
insertBefore	integer	Clip(s) will be inserted before this timeline clip index. If omitted, inserts to the end of the timeline. 0 inserts to the beginning of the timeline.
clips		

Response

204 - The clip was added to the timeline as specified.

POST /timelines/0/add

Add a clip to the end of the timeline. Deprecated, use POST /timelines/0 to add clips within the timeline.

Parameters

This parameter can be one of the following types:

Name	Type	Description
clips	integer	Unique ID (clipUniqueId) of the clip to add to the timeline

Name	Type	Description
clips	array	
clips[i]	integer	Unique ID (clipUniqueId) of the clip to add to the timeline

Response

204 - The clip was added to the end of the timeline.

DELETE /timelines/0/clear

Clear the playback timeline.

Response

204 - The timeline was cleared.

DELETE /timelines/0/clips/{timelineClipIndex}

Remove the specified clip from the timeline.

Parameters

Name	Type	Description
{timelineClipIndex}	integer	

Response

204 - The specified clip was removed from the timeline.

Event Control API

API For working with built-in websocket.

GET /event/list

Get the list of events that can be subscribed to using the websocket API.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
events	array	
events[i]	string	List of events that can be subscribed to using the websocket API

Clips Control API

API for listing clips on disk.

GET /clips

Get the list of clips on the active disk.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
clips	array	
clips[i]	object	
clips[i].clipUniqueId	integer	Unique ID used to identify this clip
clips[i].filePath	string	Path to the file relative to the root of a mount
clips[i].fileSize	integer	Size of file on disk in bytes
clips[i].codecFormat	object	
clips[i].codecFormat.codec	string	Currently selected codec.
clips[i].codecFormat.container	string	Multimedia container format.
clips[i].videoFormat (required)	object	Video format configuration.
clips[i].videoFormat.name	string	Video format serialised as a string.
clips[i].videoFormat.frameRate	string	Frame rate. Possible values are: 23.98, 24.00, 24, 25.00, 25, 29.97, 30.00, 30, 47.95, 48.00, 48, 50.00, 50, 59.94, 60.00, 60, 119.88, 120.00, 120.
clips[i].videoFormat.height	number	Height dimension of video format.
clips[i].videoFormat.width	number	Width dimension of video format.
clips[i].videoFormat.interlaced	boolean	Is the display format interlaced?
clips[i].startTimecode	string	Start timecode of the clip serialised as string
clips[i].durationTimecode	string	Duration of the clip in timecode format serialised as string
clips[i].frameCount	integer	Number of frames in clip; duration of the clip in frames

Response

404 - There is no active disk

HyperDeck Control API

API for controlling HyperDecks.

POST /system/reboot

Reboots the device.

Response

204 - The device will reboot immediately.

409 - Rebooting is not possible in the current state.

GET /system/uptime

Gets the current system uptime.

Response

200 - The current system uptime

The response is a JSON object.

Name	Type	Description
uptimeSeconds	integer	The system uptime in seconds

PUT /system/identify

Sets the identify mode. If set to true, will exit identify mode after 10 seconds.

Parameters

Name	Type	Description
enabled	boolean	Is the device identifying itself?

Response

204 - Identify updated successfully.

GET /transports/0/recordCache

Gets information about the recording cache.

Response

200 - Current information about the recording cache

The response is a JSON object.

Name	Type	Description
status	string	The current status of the cache. "none" means no cache is detected by the device. Possible values are: undetected, unformatted, idle, transferring, queued, recording, disabled.
remainingRecordingTime	integer	The remaining recording time in seconds.
transferringDevice	string	The device name of the disk the cache is currently transferring to.

GET /transports/0/recordCache/enabled

Checks if the record cache is enabled.

Response

200 - OK

The response is a JSON object.

Name	Type	Description
enabled	boolean	Is the record cache enabled?

PUT /transports/0/recordCache/enabled

Enables or disables the record cache. Has no effect if cache is not supported / installed / formatted.

Parameters

Name	Type	Description
enabled	boolean	Is the record cache enabled?

Response

204 - Record cache enabled / disabled was changed.

GET /transports/0/record/spillOrder

Gets media devices in order of which will next be spilled to.

Response

200 - The media device spill order

The response is a JSON object.

Name	Type	Description
devices	array	
devices[i]	object	
devices[i].deviceName	string	Internal device name of the drive.

POST /transports/0/record/spillToNewFile

Spills to a new file.

Response

204 - Spilled to a new file.

POST /transports/0/record/spillToNextDevice

Spills to the next media device

Response

204 - Spilled to the specified drive.

GET /transports/0/inputVideoFormat

Gets the video format of the input video signal.

Response

200 - The video format of the input video signal. "inputVideoFormat" is null when there is no timeline.

The response is a JSON object.

Name	Type	Description
inputVideoFormat (required)	object	Video format configuration.
inputVideoFormat.name	string	Video format serialised as a string.
inputVideoFormat.frameRate	string	Frame rate. Possible values are: 23.98, 24.00, 24, 25.00, 25, 29.97, 30.00, 30, 47.95, 48.00, 48, 50.00, 50, 59.94, 60.00, 60, 119.88, 120.00, 120.
inputVideoFormat.height	number	Height dimension of video format.
inputVideoFormat.width	number	Width dimension of video format.
inputVideoFormat.interlaced	boolean	Is the display format interlaced?

GET /transports/0/supportedInputVideoSources

Gets the currently supported input video signal sources.

Response

200 - The supported input video signal sources.

The response is a JSON object.

Name	Type	Description
supportedInputVideoSources	array	
supportedInputVideoSources[i]	string	Source of video input, use GET /transports/0/supportedInputVideoSources to obtain currently supported options. Possible values are: SDI, HDMI, Component, Composite.

GET /transports/0/inputVideoSource

Gets the source of the input video signal.

Response

200 - The input video signal source. The source will be one in the list from GET /transports/0/supportedInputVideoSources.

The response is a JSON object.

Name	Type	Description
inputVideoSource	string	Source of video input, use GET /transports/0/supportedInputVideoSources to obtain currently supported options. Possible values are: SDI, HDMI, Component, Composite.

PUT /transports/0/inputVideoSource

Sets the source of the input video signal.

Parameters

Name	Type	Description
inputVideoSource	string	Source of video input, use GET /transports/0/supportedInputVideoSources to obtain currently supported options. Possible values are: SDI, HDMI, Component, Composite.

Response

204 - The source of the input video signal was set successfully.

400 - The source specified was invalid or unsupported.

GET /timelines/0/playRange

Gets the current timeline play range. playRange is null if playing the whole timeline, or there is no play range.

Response

200 - The current timeline play range.

The response is a JSON object.

Name	Type	Description
playRange		

PUT /timelines/0/playRange

Sets the timeline play range.

Parameters

Name	Type	Description
playRange		

Response

204 - The timeline play range was set successfully.

POST /timelines/0/playRange/clear

Clears the timeline play range, sets the play range to be the whole timeline.

Response

204 - The timeline play range was cleared successfully.

GET /timelines/0/videoFormat

Gets the video format of the timeline.

Response

200 - The video format of the timeline. "videoFormat" is null when there is no timeline.

The response is a JSON object.

Name	Type	Description
videoFormat (required)	object	Video format configuration.
videoFormat.name	string	Video format serialised as a string.
videoFormat.frameRate	string	Frame rate. Possible values are: 23.98, 24.00, 24, 25.00, 25, 29.97, 30.00, 30, 47.95, 48.00, 48, 50.00, 50, 59.94, 60.00, 60, 119.88, 120.00, 120.
videoFormat.height	number	Height dimension of video format.
videoFormat.width	number	Width dimension of video format.
videoFormat.interlaced	boolean	Is the display format interlaced?

PUT /timelines/0/videoFormat

Sets the video format of the timeline.

Parameters

This parameter can be one of the following types:

Name	Type	Description
name	string	Video format serialised as a string.

Name	Type	Description
frameRate	string	Frame rate. Possible values are: 23.98, 24.00, 24, 25.00, 25, 29.97, 30.00, 30, 47.95, 48.00, 48, 50.00, 50, 59.94, 60.00, 60, 119.88, 120.00, 120.
height	number	Height dimension of video format.
width	number	Width dimension of video format.
interlaced	boolean	Is the display format interlaced?

Response

204 - The timeline video format was set successfully.

400 - The requested video format was invalid.

409 - The video format cannot be changed at this time.

POST /timelines/0/rebuild

Rebuilds the timeline with default rules in the current timeline format.

Response

204 - The timeline was rebuilt with default rules.

GET /media/external

Gets the list of present external media devices.

Response

200 - The list of present external media devices

The response is a JSON object.

Name	Type	Description
devices	array	
devices[i] (required)	object	
devices[i].volume	string	Volume name
devices[i].deviceName	string	Internal device name of this media device
devices[i].remainingRecordTime	integer	Remaining record time using current codec and video format in seconds
devices[i].totalSpace	integer	Total space on media device in bytes
devices[i].remainingSpace	integer	Remaining space on media device in bytes
devices[i].clipCount	integer	Number of clips currently on the device

GET /media/external/selected

Gets the current selected external media device.

Response

200 - The selected external media device

The response is a JSON object.

Name	Type	Description
selected	object	
selected.deviceName	string	Internal device name of the drive.

404 - No selected external media has been selected

PUT /media/external/selected

Sets the current selected external media device.

Parameters

Name	Type	Description
selected	object	
selected.deviceName	string	Internal device name of the drive.

Response

204 - The selected external media device was set successfully.

GET /media/nas/discovered

Gets the NAS hosts discoverable by the device.

Response

200 - The list of discovered NAS hosts

The response is a JSON object.

Name	Type	Description
hosts	array	
hosts[i]	object	
hosts[i].hostName	string	The hostname of the NAS host
hosts[i].friendlyName	string	The friendly name of the NAS host
hosts[i].ip	string	The IP address of the NAS host

GET /media/nas/bookmarks

Gets all NAS share bookmarks.

Response

200 - The list of NAS share bookmarks

The response is a JSON object.

Name	Type	Description
hosts	array	
hosts[i] (required)	object	
hosts[i].url	string	URL of the NAS share

POST /media/nas/bookmarks

Add a new NAS share bookmarks.

Parameters

Response

204 - The NAS bookmark was added successfully.

400 - The NAS bookmark could not be added.

GET /media/nas/bookmarks/{url}

Get information about a requested network share bookmark.

Parameters

Name	Type	Description
{url}	string	

Response

200 - Information about the requested network share bookmark.

The response is a JSON object.

Name	Type	Description
url	string	URL of the NAS share

404 - Network share bookmark not found

PUT /media/nas/bookmarks/{url}

Adds a bookmark with the requested URL.

Parameters

Name	Type	Description
{url}	string	

Name	Type	Description
username	string	Default value is: guest.
password	string	

Response

204 - The NAS bookmark has been created.

400 - The NAS bookmark could not be created.

DELETE /media/nas/bookmarks/{url}

Deletes a bookmark with the requested URL.

Parameters

Name	Type	Description
{url}	string	

Response

204 - The NAS bookmark has been deleted.

GET /media/nas/selected

Gets the currently selected share bookmark.

Response

200 - Information about the selected network share bookmark.

The response is a JSON object.

Name	Type	Description
selected	object	
selected.url	string	URL of the NAS share

404 - No NAS drive has been selected.

PUT /media/nas/selected

Sets the selected share bookmark to the requested bookmark, or clears the bookmark.

Parameters

Name	Type	Description
selected	object	
selected.url	string	URL of the NAS share

Response

204 - The selected NAS bookmark was set.

400 - The selected NAS bookmark could not be set.

Notification websocket - 1.0.0

Service that notifies subscribers of device state changes.

messages

Subscribe (The messages from the server/device)

Response Message (JSON)

Name	Type	Description
.data	object	
.data.action	string	Possible values are: subscribe, unsubscribe, listSubscriptions, listProperties, websocketOpened .
.data.properties	array	
.data.properties[i]	string	Device property that the user can subscribe to. The user can either choose a value from the predefined enum, or provide a wildcard string. Possible values are: /media/workingset, /media/active, /system, /system/codecFormat, /system/videoFormat, /timelines/0, /transports/0, /transports/0/stop, /transports/0/play, /transports/0/playback, /transports/0/record, /transports/0/timecode, /transports/0/timecode/source, /transports/0/clipIndex, /media/external, /media/external/selected, /transports/0/inputVideoSource, /transports/0/inputVideoFormat, /timelines/0/videoFormat, /media/nas/discovered, /media/nas/bookmarks .
.data.values	object	An object with property names as the key and a property value as json. Check the next section for a the device properties and their return values.
.data.success	boolean	
.type	string	Possible values are: response .
.id	number	Optional parameter that repeats the id in the output for tracking messages

Event Message (JSON)

Name	Type	Description
.data	object	
.data.action	string	Possible values are: propertyValueChanged .
.data.property	string	Device property that the user can subscribe to. The user can either choose a value from the predefined enum, or provide a wildcard string. Possible values are: /media/workingset, /media/active, /system, /system/codecFormat, /system/videoFormat, /timelines/0, /transports/0, /transports/0/stop, /transports/0/play, /transports/0/playback, /transports/0/record, /transports/0/timecode, /transports/0/timecode/source, /transports/0/clipIndex, /media/external, /media/external/selected, /transports/0/inputVideoSource, /transports/0/inputVideoFormat, /timelines/0/videoFormat, /media/nas/discovered, /media/nas/bookmarks .
.data.value	object	An object with property names as the key and a property value as json. Check the next section for a the device properties and their return values.
.type	string	Possible values are: event .

Publish (The messages that user can send to the server/device)

Response Message (JSON)

Name	Type	Description
.data	object	
.data.action	string	Possible values are: subscribe, unsubscribe, listSubscriptions, listProperties, websocketOpened .
.data.properties	array	
.data.properties[i]	string	Device property that the user can subscribe to. The user can either choose a value from the predefined enum, or provide a wildcard string. Possible values are: /media/workingset, /media/active, /system, /system/codecFormat, /system/videoFormat, /timelines/0, /transports/0, /transports/0/stop, /transports/0/play, /transports/0/playback, /transports/0/record, /transports/0/timecode, /transports/0/timecode/source, /transports/0/clipIndex, /media/external, /media/external/selected, /transports/0/inputVideoSource, /transports/0/inputVideoFormat, /timelines/0/videoFormat, /media/nas/discovered, /media/nas/bookmarks .
.data.values	object	An object with property names as the key and a property value as json. Check the next section for a the device properties and their return values.
.data.success	boolean	
.type	string	Possible values are: response .
.id	number	Optional parameter that repeats the id in the output for tracking messages

Device Properties

/media/workingset

The value JSON returned via the eventResponse when the /media/workingset property changes on the device:

Name	Type	Description
size	integer	The fixed size of this device's working set
workingset (required)	array	
workingset[i]	object	
workingset[i].index	integer	Index of this media in the working set
workingset[i].activeDisk	boolean	Is this current item the active disk
workingset[i].volume	string	Volume name
workingset[i].deviceName	string	Internal device name of this media device
workingset[i].remainingRecordTime	integer	Remaining record time using current codec and video format in seconds
workingset[i].totalSpace	integer	Total space on media device in bytes
workingset[i].remainingSpace	integer	Remaining space on media device in bytes
workingset[i].clipCount	integer	Number of clips currently on the device

/media/active

The value JSON returned via the eventResponse when the /media/active property changes on the device:

Name	Type	Description
.workingsetIndex	integer	Working set index of the active media device
.deviceName	string	Internal device name of this media device

/system

The value JSON returned via the eventResponse when the /system property changes on the device:

Name	Type	Description
.codecFormat	object	Currently selected codec
.codecFormat.codec	string	Currently selected codec
.codecFormat.container	string	Multimedia container format
.videoFormat	string	Name of the video format

/system/codecFormat

Currently selected codec

The value JSON returned via the eventResponse when the /system/codecFormat property changes on the device:

Name	Type	Description
.codec	string	Currently selected codec
.container	string	Multimedia container format

/system/videoFormat

Name of the video format

The value JSON returned via the eventResponse when the /system/videoFormat property changes on the device:

Name	Type	Description

/timelines/0

The value JSON returned via the eventResponse when the /timelines/0 property changes on the device:

Name	Type	Description
.clips	array	
.clips[i]	object	
.clips[i].clipUniqueId	integer	Unique identifier used to identify this media clip. If the same media clip is added to the timeline multiple times, each timeline clip has the same clipUniqueId
.clips[i].frameCount	integer	Duration of timeline clip in frames, the number of frames in this clip on the timeline
.clips[i].durationTimecode	string	Duration of the timeline clip in timecode format serialised as string. This will differ to durationTimecode reported in /clips for this clipUniqueId if clipIn or frameCount was specified when adding this clip to the timeline.
.clips[i].clipIn	string	In frame offset for the clip on the timeline, where 0 is the first frame of the on-disk clip
.clips[i].inTimecode	string	Clip timecode of the first frame of this timeline clip serialised as string (clip startTimecode + clipIn frames)
.clips[i].timelineIn	string	Timeline position of the first frame of this clip, where 0 is the first frame of the timeline
.clips[i].timelineInTimecode	string	Timeline timecode of the first frame of this timeline clip serialised as string

/transports/0

The value JSON returned via the eventResponse when the /transports/0 property changes on the device:

Name	Type	Description
.mode	string	Transport mode Possible values are: InputPreview, InputRecord, Output .

/transports/0/stop

true when transport mode is InputPreview or when in Output mode and speed is 0

The value JSON returned via the eventResponse when the /transports/0/stop property changes on the device:

Name	Type	Description

/transports/0/play

True when transport is in Output mode and speed is non-zero

The value JSON returned via the eventResponse when the /transports/0/play property changes on the device:

Name	Type	Description

/transports/0/playback

The value JSON returned via the eventResponse when the /transports/0/playback property changes on the device:

Name	Type	Description
.type	string	Possible values are: Play, Jog, Shuttle, Var .
.loop	boolean	When true playback loops from the end of the timeline to the beginning of the timeline
.singleClip	boolean	When true playback loops from the end of the current clip to the beginning of the current clip
.speed	number	Playback speed, 1.0 for normal forward playback
.position	integer	Playback position on the timeline in units of video frames

/transports/0/record

The value JSON returned via the eventResponse when the /transports/0/record property changes on the device:

Name	Type	Description
.recording	boolean	Is transport in Input Record mode

/transports/0/timecode

The value JSON returned via the eventResponse when the /transports/0/timecode property changes on the device:

Name	Type	Description
display	string	The display timecode serialised as a string.
timeline	string	The timeline timecode serialised as a string.

/transports/0/timecode/source

The value JSON returned via the eventResponse when the /transports/0/timecode/source property changes on the device:

Name	Type	Description
.timecode	string	Possible values are: Timeline, Clip .

/transports/0/clipIndex

The value JSON returned via the eventResponse when the /transports/0/clipIndex property changes on the device:

Name	Type	Description
.clipIndex	number	The 0-based index of the clip being played on the timeline. null when there is no timeline or an empty timeline.

/media/external

The value JSON returned via the eventResponse when the /media/external property changes on the device:

Name	Type	Description
.volume	string	Volume name
.deviceName	string	Name of media device
.remainingRecordTime	integer	Remaining record time using current codec and video format in seconds
.totalSpace	integer	Total space on media device in bytes
.remainingSpace	integer	Remaining space on media device in bytes
.clipCount	integer	Number of clips currently on the device

/media/external/selected

The value JSON returned via the eventResponse when the /media/external/selected property changes on the device:

Name	Type	Description
.deviceName	string	Internal device name of this media device

/transports/0/inputVideoSource

The value JSON returned via the eventResponse when the /transports/0/inputVideoSource property changes on the device:

Name	Type	Description
.inputVideoSource	string	Source of video input, use GET /transports/0/supportedInputVideoSources to obtain currently supported options. Possible values are: SDI, HDMI, Component, Composite .

/transports/0/inputVideoFormat

The value JSON returned via the eventResponse when the /transports/0/inputVideoFormat property changes on the device:

Name	Type	Description
.inputVideoFormat	string	Name of the video format

/timelines/0/videoFormat

The value JSON returned via the eventResponse when the /timelines/0/videoFormat property changes on the device:

Name	Type	Description
.videoFormat	string	Name of the video format

/media/nas/discovered

The value JSON returned via the eventResponse when the /media/nas/discovered property changes on the device:

Name	Type	Description
.hostName	string	Hostname of external network drive
.friendlyName	string	Name of external network drive
.ip	string	IP Address of external network drive

/media/nas/bookmarks

The value JSON returned via the eventResponse when the /media/nas/bookmarks property changes on the device:

Name	Type	Description
.hosts	array	
.hosts[i]	object	
.hosts[i].url	string	URL associated with bookmark