

Display Subsystem

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Overview

The Display subsystem manages operations relating to connected Vendors. Display subsystem is a part of Device Settings library to control the Aspect ratio, Resolution, EDID data etc.

HDMI

HDMI Connection Status

Provides an API to search for device HDMI connection summary based on Mac address .

Authentication

The service uses Code Big credential (key) to authenticate: The service has a stateless nature, so the Code Big credentials should be present in each request Authorization header

Request Parameters/Headers

All parameters should be passed as in **HTTP POST** request body

Request Parameters

Parameter Name	Type	Description	Value Example
requestId	String	A GUID used to match requests with responses. For every request, the client supplies a requestId that it can be used to track internal and external processes from request to response.	984305439853453
requester	String	The name of the request, or command, it will vary for the operations.	tester123
version	String	Not required. A future feature to let request to specific implementation or data original path.	
query	String	Embedded Cable Modem/Embedded Set top box MAC Address	70:B1:4E:5D:2B:A8

Note:

Include only one of the above parameters in a request. Otherwise, a Bad Request error occurs.

Supported Request Headers

Header Name	Required	Description	Valid Expected Values
Content-Type	Yes	Tells the the service: The format of the request document	application/json, application/xml
Accept	Yes	Tells the the service: The format of the media type of the response content it is expecting	application/json, application/xml

Sample JSON Request Documents

JSON

```
{
  "requestId": "984305439853453",
  "requester": "tester",
  "version": "",
  "query": "14:D4:FE:7C:54:AD"
}
```

Response Objects Structure

JSON object with HTTP 200 response but no device found response:

```
{
  "requester": "tester",
  "requestId": "984305439853453",
  "version": "",
  "statuses":
  [
    {
      "code": 5004,
      "name": "NO_DEVICE_FOUND",
      "description": "No Devices Found"
    }
  ],
  "message": "Cannot find device based on query input: 14:D4:FE:A4:F6:00",
  "rawMessage": null,
  "moreInfoUrl": null,
  "result": null
}
```

JSON object with HTTP 200 response with HDMI data:

```
{
  "requester": "tester",
  "requestId": "984305439853453",
  "version": "",
  "statuses":
  [
    {
      "code": 1000,
      "name": "SUCCESS",
      "description": "Success"
    }
  ],
  "message": "Device HDMI search process complete, for any possible minor issues, please check response statuses",
  "rawMessage": null,
  "moreInfoUrl": null,
  "result":
  {
    "hdmiConnectionStatus": true,
    "repeaterPresent": false,
    "hdcpEnabledStatus": true,
    "connectionDeviceHdcpStatus": "compliantHDCPdevice",
    "videoTransmissionStatus": false,
    "videoMuteStatus": false,
    "videoResolution": "720p",
    "videoAspectRatio": "16x9",
    "audioMuteStatus": false,
    "audioFormat": "lpcm"
  }
}
```

JSON object with HTTP 200 response but missing required parameters:

```
{
  "requester": " ",
  "requestId": " ",
  "version": "",
  "statuses":
  [
    {
      "code": 4002,
      "name": "NO_REQUEST_USER_IDENTITY",
      "description": "Request User Identity (requester) is Empty"
    }
  ]
}
```

```

    },
    {
      "code": 4003,
      "name": "NO_REQUEST_TRACKING_ID",
      "description": "Request Tracking ID (requestId) is Empty"
    }
  ],
  "message": null,
  "rawMessage": null,
  "moreInfoUrl": null,
  "result": null
}

```

Response Messages

The following list includes all possible response messages (In HTTP response message body OR result object of the action):

HTTP Code	Phrase	Message
200	OK	Device/Account Search successful
1000	SUCCESS	Success
1004	UNKNOWN_STATAUS	System runtime unknown error, please check with system administrator
2002	INTERNAL_SERVICE_UNREACHABLE_NOTFOUND	Internal Service Unreachable or Not Found
2004	METHOD_NOT_IMPLEMENTATED	Method Not Implemented
3000	EXTERNAL_SERVICE_ERROR	External Service Error
4002	NO_REQUEST_USER_IDENTITY	Request User Identity (requester) is Empty
4003	NO_REQUEST_TRACKING_ID	Request Tracking ID (requestId) is Empty
4011	INVALID_SEARCH_PARAMETER	Invalid Search Or Query Parameters
4012	INVALID_MAC_ADDRESS	Mac Address is invalid
5000	NO_DATA_FOUND	No Data Found
5004	NO_DEVICES_FOUND	No Devices Found

Response Parameters

Parameter	Type	Possible Values
hdmiConnectionStatus	Boolean	true/false/null
repeaterPresent	Boolean	true/false/null
hdcpEnabledStatus	Boolean	true/false/null
connectionDeviceHdcpStatus	String	nonHDCPdevice compliantHDCPdevice revokedHDCPdevice
videoTransmissionStatus	Boolean	true/false/null
videoMuteStatus	Boolean	true/false/null
videoResolution	String	288p/288*/480i/480p/480*/576p/576i/576*/720p/720*/1080p/1080i/1080* ** means could be i or p
videoAspectRatio	String	other/4x3/16x9

audioMuteStatus	Boolean	true/false/null
audioFormat	String	other lpcm ----- Linear PCM ac3 ----- Dolby Digital eac3 ----- Dolby Digital Plus mpeg1L1L2 ----- MPEG-1 Layer 1/2 mpeg1L3 ----- MPEG-1 Layer 3 mpeg2 ----- Advanced Audio Coding-Low Complexity mpeg4 ----- High Efficiency Advanced Audio Coding dts ----- Digital Theater Sound atrac ----- Adaptive Transform Acoustic Coding mpeg2L1L2 ----- MPEG-2 Layer 1/2 mpeg2L3 ----- MPEG-2 Layer 3 mpeg2.5 ----- MPEG2.5 mp3Pro ----- MP3-PRO mp3Surround ----- MP3-Surround Advanced dtsHd ----- Digital Theater Sound - High Definition mpegSurround ----- MPEG-Surround

Composite