Transcoding Host API

Mustang-200

Version 1.04

Transcoding Host API
Version 1.04

Contents

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Version 1.04

Version History

Version	Date	Description
1.00	24-07-2017	Initial Release
1.01	27-07-2017	Change all url from /ca200/api/v1 to /mvt/api/v1
1.02	01-09-2017	Add five new API: 1. Add get job by time interval 2. Get memory usage 3. Get internet usage information 4. Get cpu temperature information 5. Update QTS name api
1.03	06-09-2017	Add cpuId in the response of usage related API
1.04	02-11-2017	Fix some typo and bugs in the document

Get Available Cards

Get all cards id in the machine

GET	http://host:port/mvt/api/v1/cards

Response

```
[

   "CARD1",

   "CARD2",

   "CARD3"

]
```

Get CPUsFor Card

Get all cpuids of specific card

GET	http://host:port/mvt/api/v1/cards/{cardid}/cpus

Response

```
[

   "CPUID1",

   "CPUID2"

]
```

VOD API

VOD includes File to live Streaming APIs.

VOD Attributes

Key	Type	Required	Default	Description
jobId	String	Yes	Read Only	Auto generated Unique job Id
description	String	No	-	Description about the job
starttime	String	No	Read Only	Time when job starts to transcode
endtime	String	No	Read Only	Time when job complete the transcoding.
cpercentage	String	No	Read Only	Percentage completed for ongoing job
status	Number	No	Read Only	status of job 0-Save 1-Running 2-Completed 3-Failed 4-Terminate
statusmessage	String	No	Read Only	Status Description of the Jobs
action	Number	yes	0	Action to perform over the job 0-Save 1-Transcode
input	Object	Yes		Complete input object structure
output	Object	Yes		Complete output object structure
outputs	Array	Yes	-	Array of outputs information
protocol	Number	Yes	0	Protocol in which transcoded output video streamed 0 - RTMP 1-HLS 2-MPEGDASH 3- ICECAST
cardid	String	Yes		Unique Card Id which is Displayed in LED
cpu	Object	Yes		Cpu Information where transcoding takeplace

Input Object

Key	Type	Required	Default	Description
filepath	String	Yes		Path of the file needed to be transcoded .
vresolution	String	No	-	Resolution of the input video
vbitrate	String	No	-	Bitrate of the input video
vcodec	String	No	-	Codec information of the input video
vprofile	String	No	-	Profile information of the input video
vlevel	String	No	-	Level information of the input video

vframerate	String	No	-	Framerate of the input video
vaspectratio	String	No	-	Aspect ratio of the input video
duration	String	No	-	Total time duration of the input video
acodec	String	No	-	Codec information of the input audio
abitrate	String	No	-	Bitrate of the input audio

Output Object

Key	Type	Required	Default	Description
vcodec	String	No	Read Only	Codec information of the output video
vcodecid	Number	Yes	1	1-H.264 2.H.265 3-VP8 4-VP9 5-MPEG2 (Reference to Appendix B)
profile	String	No	Read Only	Profile information of the output video
profileid	Number	Yes	1	1-Main 2-High
level	String	No	Read Only	Level information of the output video
levelid	Number	Yes	1	1-3.1, 2-3.2, 3-4,4-4.1,5-4.2,6-5,7-5.1, 8-5.2,9-6,10-6.1,11-6.2 main profile max - 6.2 ,high profile max -5.1
acodec	String	No	Read Only	Codec information of the output audio
acodecid	Number	Yes	1	1.AAC 2.MP3 3.Vorbis 4. Copy 5.Disable
abitrate	String	No	-	bitrate information of the output audio
abitrateid	Number	Yes	1	1-64kbps 2-96kpbs 3-128kps 4-192kpbs

Outputs Array

Key	Type	Required	Default	Description
url	String	No	Read Only	Output url to view the transcoded video
resolution	String	No	Read Only	Output resolution of the video
resolutionid	Number	Yes	3	1.3840×2160, 2.2560×1440, 3.1920x1080, 4.1280x720,5.854x480,6.640x360,7.426x240
framerate	String	Yes	30	Output framerate of the video.Range Varies from 24 - 60.
bitrateenable	Boolean	Yes	False	true -output video follow the bitrate specified. false- output video follow the quality attribute
vquality	String	Yes	Appendix H	Quality attribute of the video. Please check the appendix section.
vbitrate	String	Yes	3	Bitrate of the output video.Units in Mbps.i.e. 3Mbps. Range varies from 1Mpbs-25Mpbs

CPU Object

Key	Type	Required	Default	Description
autocpu	Boolean	Yes	False	True - CPU will be selected by SDK False –Selected by user
cpuid	String	Yes	-	Unique CPU Id.CPU Id can be retrieved by Get CPU Ids API
ipaddress	String	No	-	IP address of the CPU

Create VOD Job

POST	http://host:port/mvt/api/v1/vod/jobs

To initiate transcoding, the client must make an POST request to the SDK using a URI in the following format

Request

```
{
    "action": 0,
    "input": {
        "filepath": "/samplePath/sampleFile"
    },
    "output": {
        "vcodecid": 1,
        "profileid": 1,
        "levelid": 1,
        "acodecid": 1,
        "abitrateid": 1
    },
    "outputs": [{
            "resolutionid": 1,
            "framerate": 30,
            "bitrateenable": false,
            "vquality": "23"
        },
        {
            "resolutionid": 1,
            "framerate": "30",
            "bitrateenable": true,
            "vbitrate": "3"
        }
    ],
    "protocol": 0,
    "cardid": "CARD1",
    "cpu": {
        "autocpu": false,
        "cpuid": "CPUID1"
    }
}
```

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Response

When action = 0

```
{
    "jobId": "1300696332629",
    "success": true,
    "status": 0,
    "statusMessage": "Job Saved Successfully!"
}
```

When action = 1

```
{
    "jobId": "576086564344",
    "status": "1",
    "statusMessage": "Transcoding Started",
    "outputs": [{
        "url": "rtmp://10.10.70.145:1935/live/1068427441123"
      },
      {
        "url": "rtmp://10.10.70.145:1935/live/1734974264783"
      }
    ]
}
```

Get VOD Job

Get Vod Job Details by specifying the Job Id.

GET	http://host:port/mvt/api/v1/vod/jobs/{jobid}

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Response

```
{
    "jobId": "81277307462",
    "starttime": "2017-6-28 16:25:9.445",
    "status": 1,
    "statusmessage": "Running",
    "error": 0,
    "cpercentage": "0",
    "input": {
        "filepath": "/share/Public/MVT_video/fast.mp4",
        "vresolution": "1280x720",
        "vbitrate": "1.345985Mbps",
        "vcodec": "h264",
        "vprofile": "Main@L3.1",
        "vframerate": "25.000",
        "vaspectratio": "1.778",
        "duration": "3 min 17 s",
        "acode": "aac",
        "abitrate": "125.588kbps"
    },
    "output": {
        "vcodec": "h264",
        "vcodecid": 1,
        "profile": "main",
        "profileid": 1,
        "level": "3.1",
        "levelid": 1,
        "acodec": "aac",
        "acodecid": 1,
        "abitrateid": 1,
        "abitrate": "64k"
    },
    "protocol": 1,
    "cardid": "CARD1",
    "type": "vod",
    "cpu": {
        "autocpu": false,
        "cpuid": "CPUID1",
        "ipaddress": "192.168.12.2"
    },
```

```
        "outputs": [{
                "url": "http://10.10.70.145:8001/hls/85415017395.m3u8",
        "resolution": "3840x2160",
                "resolutionid": 1,
                "framerate": "30",
                "bitrateenable": false,
        "vquality": "23"
            },
        {
                "url": "http://10.10.70.145:8001/hls/70916828043.m3u8",
                "resolution": "3840x2160",
                "resolutionid": 1,
                "framerate": "30",
        "bitrateenable": true,
                "vbitrate": "3M"
            }
        ]
        }
```

Update VOD Job

Update VOD job details. This method is available for only saved jobs. Once transcoding started this method cannot be used. Fields motioned in request body can be updated.Other cannot be updated.

PUT	http://host:port/mvt/api/v1/vod/jobs/{jobid}

Request

```
    {
       "description": "transcoding job",
       "input": {
          "filepath": "/share/Public/MVT_video/Pirates.mkv"
       },
       "output": {
          "vcodecid": 1,
          "profileid": 1,
          "levelid": 1,
          "acodecid": 1,
          "abitrateid": 1
       },
       "outputs": [{
              "resolutionid": 1,
              "framerate": "30",
              "bitrateenable": false,
              "vquality": "23"
          },
```

```
        "protocol": 1,
        "cardid": "CARD1",
        "cpu": {
            "autocpu": false,
            "cpuid": "CPUID1"
        }
    }
```

Response

```
{
    "jobId": "801582858253",
    "description": "transcoding job",
    "status": 0,
    "statusmessage": "Save",
    "error": 0,
    "cpercentage": "0",
    "input": {
        "filepath": "/share/Public/mvt_video/Pirates.mkv",
        "vresolution": "1280x720",
        "vbitrate": "1.345985Mbps",
        "vcodec": "h264",
        "vprofile": "Main@L3.1",
        "vframerate": "25.000",
        "vaspectratio": "1.778",
        "duration": "3 min 17 s",
        "acode": "aac",
        "abitrate": "125.588kbps"
    },
    "output": {
        "vcodec": "h264",
        "vcodecid": 1,
        "profile": "main",
        "profileid": 1,
        "level": "3.1",
        "levelid": 1,
        "acodec": "aac",
        "acodecid": 1,
        "abitrateid": 1,
        "abitrate": "64k"
    },
```

```
        "protocol": 1,
         "cardid": "CARD1",
         "type": "vod",
         "cpu": {
            "autocpu": false,
            "cpuid": "CPUID1",
            "ipaddress": "192.168.11.2"
         },
         "outputs": [{
              "resolution": "3840x2160",
              "resolutionid": 1,
              "framerate": "30",
              "bitrateenable": false,
              "vquality": "23"
           },
           {
              "resolution": "1920x1080",
              "resolutionid": 3,
              "framerate": "30",
              "bitrateenable": false,
              "vquality": "23"
           }
         ]
       }
```

Get Vod Jobs by Status

Get Vob jobs based on its status. Status can be like Running,completed,failed,saved, terminated.

GET	http://host:port/mvt/api/v1/vod/jobs?status={status}

Response

```
   [{
        "jobId": "9390389268131472",
        "input": "/share/Public/mvt_video/20170712_Qnap_Mustang200.mp4",
        "starttime": "2017-07-18 18:04:25.548",
        "status": 1,
        "statusmessage": "Running",
      "type": "vod",
        "cardid": "CARD2",
        "cpuid": "CPUID2"
   }]
```

Delete Vod Job

DELETE	http://host:port/mvt/api/v1/vod/jobs/{jobid}

Response

```
{
  'success' : true
}
```

LIVE API

Live includes Live to live Streaming APIs.Live Input supports only RTMP Streaming.VP9 Does not support RTMP, supports RTSP.

Live Attributes

Key	Type	Required	Default	Description
jobId	String	Yes	Read Only	Auto generated Unique job Id
description	String	No	-	Description about the job
starttime	String	No	Read Only	Time when job starts to transcode
endtime	String	No	Read Only	Time when job complete the transcoding.
cpercentage	String	No	Read Only	Percentage completed for ongoing job
status	Number	No	Read Only	status of job 0-Save 1-Running 2-Completed 3-Failed 4-Terminate
statusmessage	String	No	Read Only	Status Description of the Jobs
action	Number	yes	0(Read Only)	Action to perform over the job 0-Save 1-Transcode
input	Object	Yes		Complete input object structure
output	Object	Yes		Complete output object structure
outputs	Array	Yes	-	Array of outputs information like url,resolution,bitrate etc.,
cpu	Object	Yes		Cpu Information where transcoding takeplace

Input Object

Key	Type	Required	Default	Description
streamname	String	Yes		Stream Key for RTMP stream , set by user.
streamurl	String	Yes	Read Only	URL for RTMP which will in the response body when jobs created..

Output Object

Key	Type	Required	Default	Description
vcodec	String	No	Read Only	Codec information of the output video
vcodecid	Number	Yes	2	1-H.264 2.H.265 3-VP8 4-VP9 5-MPEG2
profile	String	No	Read Only	Profile information of the output video
profileid	Number	Yes	1	1-Main 2-High
level	String	No	Read Only	Level information of the output video
levelid	Number	Yes	1	1-3.1, 2-3.2, 3-4,4-4.1,5-4.2,6-5,7-5.1, 8-5.2,9-6,10-6.1,11-6.2 main profile max - 6.2 ,high profile max -5.1
acodec	String	No	Read Only	Codec information of the output audio
acodecid	Number	Yes	1	1.AAC 2.MP3 3.Vorbis 4.Copy 5.Disable
abitrate	String	Yes	-	bitrate information of the output audio
abitrateid	Number	Yes	1	1-64kbps 2-96kpbs 3-128kps 4-192kpbs

Outputs Array

Key	Type	Required	Default	Description
url	String	No	Read Only	Output url to view the transcoded video
resolution	String	No	Read Only	Output resolution of the video
resolutionid	Number	Yes	3	1.3840×2160, 2.2560×1440, 3.1920x1080, 4.1280x720,5.854x480,6.640x360,7.426x240
framerate	String	Yes	30	Output framerate of the video.Range Varies from 24 - 60.
bitrateenable	Boolean	Yes	False	true -output video follow the bitrate specified. false- output video follow the quality attribute
vquality	String	Yes	Appendix H	Quality attribute of the video. Please check the appendix section.
vbitrate	String	Yes	3	Bitrate of the output video.Units in Mbps.i.e. 3Mbps. Range varies from 1Mpbs-25Mpbs

CPU Object

Key	Type	Required	Default	Description
autocpu	Boolean	Yes	False	True - CPU will be selected by SDK False – Selected by user
cpuid	String	Yes	-	Unique CPU Id.CPU Id can be retrieved by Get CPU Ids API
ipaddress	String	No	-	IP address of the CPU

Create Live Job

To initiate transcoding, the client must make an POST request to the SDK using a URI in the following format

POST	http://host:port/mvt/api/v1/live/jobs

Request

```
{
        "description" : "transcoding job 1",
        "action" : 1,
        "input" : {
                "streamname" : "111"
        },
        "output" : {
                "vcodecid" : 1,
                "profileid" : 1,
                "levelid" : 1,
                "acodecid" : 1,
                "abitrateid" : 3
        },
        "outputs" : [ {
                "resolutionid" : 3,
                "framerate" : "30",
                "bitrateenable" : false,
                "vquality" : "23"
        }],
        "protocol" : 1,
        "cardid" : "CARD1",
        "cpu" : {
                "autocpu" : false,
                "cpuid" : "CPUID2"
        }
}
```

Response

```
{
    "jobId": "16309056186499794",
    "status": "1",
    "statusMessage": "Transcoding Started",
    "input": {
        "streamname": "111",
        "streamurl": "rtmp://10.10.70.145:1936/live/"
    },
    "outputs": [
        {
            "url": "http://10.10.70.145:8001/hls/18974156995191076.m3u8"
        }
    ]
}
```

Get Live Job

Get Live Job Details by specifying the Job Id.

GET	http://host:port/mvt/api/v1/live/jobs/{jobid}

Response

```
{
'jobId' : '1223435',
'description' : 'transcoding job 1',
'starttime' : ',
'endtime' : ',
'status' : '0',
'statusmessage' : 'Job Saved Successfully',
'cpercentage' : '0',
'input' : {
            'streamname' : '1111',
            'streamurl' : 'rtmp://localhost/live/',
        }
        ,
'output' : {
            'vcodec' : 'H.264'
            'vcodecid' : 2,
            'profile' : 'High',
            'profileid' : 2,
            'level' : '5.1'
            'levelid' : 7,
            'acodec' : 'AAC'
            'acodecid' : 1,
            'abitrate' : '64kbs',

            'abitrateid' :1',
             },
'outputs' : [ {'url' : 'rtmp://localhost/live/stream1',
            'resolution' :'1920x1080',
            'resolutionid' : 1,
            'framerate' : '30',
            'bitrateenable' : false,
            'vquality' : '23' },
              {'url' : 'rtmp://localhost/live/stream1',
             'resolution' :'1280x720',
            'resolutionid' : 2,
            'framerate' : '30',
            'bitrateenable' : false,

            'vquality' : '23' }],
'protocol' : 0,
'cardid' : '1',

'cpu':        {
             'autocpu' : false,

             'cpuid' :
            'CPUID1',
             'ipaddress' : '192.168.0.10'
             }}
```

Update Live Job

Update Live job details. This method is available for only saved jobs. Once transcoding started this method cannot be used. Fields motioned in request body can be updated.Other cannot be updated.

PUT	http://host:port/mvt/api/v1/live/jobs/{jobid}

Request

```
{
 'jobId' : '1223435',
'description' : 'transcoding job 1',
'output' : {
            'vcodecid' : 2,
            'profileid' : 2,
            'levelid' : 7,
            'acodecid' : 1,
            'abitrateid' :1',
             },
 'outputs' : [{
            'resolutionid' : 1,
            'framerate' : '30',
            'bitrateenable' : false,
            'vquality' : '23'
             },
             {
            'resolution' :'1280x720',
            'resolutionid' : 2,
            'framerate' : '30',
            'bitrateenable' : false,
            'vquality' : '23'
             }
            ]
'cpu':      {
            'autocpu' : false,
            'cpuid' : 'CPUID1',
            'ipaddress' : '192.168.0.10'
             }
}
```

Response

```
{
'jobId' : '1223435',
'description' : 'transcoding job 1',
'starttime' : '',
'endtime' : '',
'status' : '0',
'statusmessage' : 'Job Saved Successfully',
'cpercentage' : '0',
'input' : {
          'streamname' : '1111',
          'streamurl' : 'rtmp://localhost/live/1111',
        }
        ,
'output' : {'vcodec' : 'H.264'
          'vcodecid' : 2,
          'profile' : 'High',
          'profileid' : 2,
          'level' : '5.1'
          'levelid' : 7,
          'acodec' : 'AAC'
          'acodecid' : 1,
          'abitrateid' :1',
          'abitrate' : '64kbs'   },
'outputs' : [ {'url' : 'rtmp://localhost/live/stream1',
          'resolution' :'1920x1080',
          'resolutionid' : 1,
          'framerate' : '30',
          'bitrateenable' : false,
          'vquality' : '23' },
            {'url' : 'rtmp://localhost/live/stream1',
          'resolution' :'1280x720',
          'resolutionid' : 2,
          'framerate' : '30',
          'bitrateenable' : false,
          'vquality' : '23' }],
'protocol' : 0,
'cardid' : '1'
'cpu':      {
          'autocpu' : false,
          'cpuid' : 'CPUID1',
          'ipaddress' : '192.168.0.10'
            }
}
```

Get Live Jobs

Get Vob jobs based on its status. Status can be like Running,completed,failed,saved, terminated.

GET	http://host:port/mvt/api/v1/live/jobs?status={status}

Response

```
[{
'jobId' : '1223435',
'input' : : 'rtmp://localhost/live/1111',
'starttime' : '2017-03-21 11:06:00',
'status' : '1',
'statusmessage' : 'Running',
'cpu' : "CPUID1"
},
{
'jobId' : '1111111',
'input' : : 'rtmp://localhost/live/1111',
'starttime' : '2017-03-21 11:06:00',
'status' : '1',
'statusmessage' : 'Running',
'cpu' : "CPUID2"
}]
```

File API

File includes File to file transcoding APIs.

File Attributes

Key	Type	Required	Default	Description
jobId	String	Yes	Read Only	Auto generated Unique job Id
description	String	No	-	Description about the job
starttime	String	No	Read Only	Time when job starts to transcode
endtime	String	No	Read Only	Time when job complete the transcoding.
cpercentage	String	No	Read Only	Percentage completed for ongoing job
status	Number	No	Read Only	status of job 0-Save 1-Running 2-Completed 3-Failed 4-Terminate
statusmessage	String	No	Read Only	Status Description of the Jobs
action	Number	yes	0(Read Only)	Action to perform over the job 0-Save 1-Transcode
input	Object	Yes		Complete input object structure
output	Object	Yes		Complete output object structure
outputs	Array	Yes	-	Array of outputs information.
fileextension	Number	Yes	1	extension of the File transcoded output video 0 - mkv 1-mp4 2-flv 3-f4v 4-avi 5-webm 6-mpeg,7-mov, 8- mpg, 9- ms, 10- mts (Please Reference Appendix K.)
quickTranscodeEnable	Boolean	Yes	False	Set true : quick transcode
cardid	String	Yes		Unique Card Id
cpu	Object	Yes		Cpu Information where transcoding

Input Object

Key	Type	Required	Default	Description
filepath	String	Yes		Path of the file needed to be transcoded .
vresolution	String	No	-	Resolution of the input video
vbitrate	String	No	-	Bitrate of the input video
vcodec	String	No	-	Codec information of the input video
vprofile	String	No	-	Profile information of the input video
vlevel	String	No	-	Level information of the input video
vframerate	String	No	-	Framerate of the input video
vaspectratio	String	No	-	Aspect ratio of the input video

duration	String	No	-	Total time duration of the input video
acodec	String	No	-	Codec information of the input audio
abitrate	String	No	-	Bitrate of the input audio

Output Object

Key	Type	Required	Default	Description
vcodec	String	No	Read Only	Codec information of the output video
vcodecid	Number	Yes	2	1-H.264 2.H.265 3-VP8 4-VP9 5-MPEG2
profile	String	No	Read Only	Profile information of the output video
profileid	Number	Yes	1	1-Main 2-High
level	String	No	Read Only	Level information of the output video
levelid	Number	Yes	1	1-3.1, 2-3.2, 3-4,4-4.1,5-4.2,6-5,7-5.1, 8-5.2,9-6,10-6.1,11-6.2 main profile max - 6.2 ,high profile max -5.1
acodec	String	No	Read Only	Codec information of the output audio
acodecid	Number	Yes	1	1.AAC 2.MP3 3.Vorbis 4.Copy 5.Disable
abitrate	String	Yes	-	bitrate information of the output audio
abitrateid	Number	Yes	1	1-64kbps 2-96kpbs 3-128kps 4-192kpbs

Outputs Array

Key	Type	Required	Default	Description
url	String	No	Read Only	file path to store the transcoded video
resolution	String	No	Read Only	Output resolution of the video
resolutionid	Number	Yes	1	1.3840×2160, 2.2560×1440, 3.1920x1080, 4.1280x720,5.854x480,6.640x360,7.426x240
framerate	String	Yes	30	Output framerate of the video. Range Varies from 24 - 60.
bitrateenable	Boolean	Yes	False	true -output video follow the bitrate specified. false- output video follow the quality attribute
vquality	String	Yes	Appendix H	Quality attribute of the video. Please check the appendix section.
vbitrate	String	Yes	3	Bitrate of the output video.Units in Mbps.i.e. 3Mpbs. Range varies from 1Mpbs-25Mpbs

CPU Object

Key	Type	Required	Default	Description
autocpu	Boolean	Yes	False	True - CPU will be selected by SDK False – Selected by user
cpuid	String	Yes	-	Unique CPU Id.CPU Id can be retrieved by Get CPU Ids API
ipaddress	String	No	-	IP address of the CPU

Create File Job

To initiate transcoding, the client must make an POST request to the SDK using a URI in the following format

POST	http://host:port/mvt/api/v1/file/jobs

Request

```
{
    "action": 1,
    "quickTranscodeEnable": false,
    "input": {
        "filepath": "/share/Public/wolf/Pirates.mkv"
    },
    "output": {
        "vcodecid": 1,
        "profileid": 1,
        "levelid": 1,
        "acodecid": 1,
        "abitrateid": 1
    },
    "outputs": [{
        "resolutionid": 2,
        "framerate": "60",
        "bitrateenable": false,
        "vquality": 23
    }],
    "fileextension": 1,
    "cardid": "CARD1",
    "cpu": {
        "autocpu": false,
        "cpuid": "CPUID1"
    }
}
```

Response

```
{
   "jobId": "302936636819",
   "status": "1",
   "statusMessage": "Transcoding Started",
   "outputs": [{
      "url": "/share/Public/C200_video/output/Pirates_1440p_20176301739350.mp4"
   }]
}
```

Get File Job

Get File Job Details by specifying the Job Id.

GET	http://host:port/mvt/api/v1/file/jobs/{jobid}

Response

```
{
'jobId' : '1223435',
'description' : 'transcoding job 1',
'starttime' : '',
'endtime' : '',
'status' : '0',
'statusmessage' : 'Job Saved Successfully',
'cpercentage' : '0',
'input' : { 'filepath' : '/tmp/video/sample.mp4',
          'vresolution' : '1280x720',
          'vbitrate' : '13000kbps',
          'vcodec' : 'H.264',
          'vprofile' : 'Main',
          'vlevel' : '3.1',
          'vframerate' : '30fps',
          'vaspectratio' : '16:9',
          'duration' : '100 mins',
```

```
                'acodec' : 'AAC',
                'abitrate' : '1440kbs' },
                'output' : {'vcodec' :
                'H.264' 'vcodecid' : 2,
                'profile' : 'High',
                'profileid' : 2,
                'level' : '5.1'
                'levelid' : 7,
                'acodec' : 'AAC'
                'acodecid' : 1,

                'abitrateid' :1',

                'abitrate' : 64kbs'},
'outputs' : [ { 'url' : '/tmp/output/videos/output_1920x1080.mp4',
                'resolution' :'1920x1080',
                'resolutionid' : 1,
                'framerate' : '30',
                'bitrateenable' : false,
                'vquality' : '23' },
                  { 'url' : '/tmp/output/videos/output_1280x720.mp4',
                'resolution' :'1280x720',
                'resolutionid' : 2,
                'framerate' : '30',
                'bitrateenable' : false,
                'vquality' : '23' }],
'fileextension': 1,
'quickTranscodeEnable' : false,
'cardid' : '1',
'cpu':        {
                'autocpu' : false,
                'cpuid' : 'CPUID1',
                'ipaddress' : '192.168.0.10'
                  }}
```

Update File Job

Update File job details. This method is available for only saved jobs. Once transcoding started this method cannot be used. Fields motioned in request body can be updated.Other cannot be updated.

PUT	http://host:port/mvt/api/v1/file/jobs/{jobid}

Request

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```
{
 'jobId' : '1223435',
'description' : 'transcoding job 1',
'output' : {
            'vcodecid' : 2,
            'profileid' : 2,
            'levelid' : 7,
            'acodecid' : 1,
            'abitrateid' :1'},
 'outputs' : [
            {
            'resolutionid' : 1,
            'framerate' : '30',
            'bitrateenable' : false,
            'vquality' : '23'
             },
             {
            'resolution' :'1280x720',
            'resolutionid' : 2,
            'framerate' : '30',
            'bitrateenable' : false,
            'vquality' : '23'
              }
             ]
'cpu':       {
            'autocpu' : false,
            'cpuid' : 'CPUID1',
            'ipaddress' : '192.168.0.10'
               }
}
```

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Response

```
{
'jobId' : '1223435',
'description' : 'transcoding job 1',
'starttime' : '',
'endtime' : '',
'status' : '0',
'statusmessage' : 'Job Saved Successfully',
'cpercentage' : '0',
'input' : { 'filepath' : '/tmp/video/sample.mp4',
            'vresolution' : '1280x720',
            'vbitrate' : '13000kbps',
            'vcodec' : 'H.264',
            'vprofile' : 'Main',
            'vlevel' : '3.1',
            'vframerate' : '30fps',
            'vaspectratio' : '16:9',
            'duration' : '100 mins',
            'acodec' : 'AAC',

            'abitrateid' :1',
            'abitrate' : '64kbs' },
'output' : {'vcodec' : 'H.264'
            'vcodecid' : 2,
            'profile' : 'High',
            'profileid' : 2,
            'level' : '5.1'
            'levelid' : 7,
            'acodec' : 'AAC'
            'acodecid' : 1,
            'abitrate' : '1440kbs'   },
'outputs' : [ {'url' : '/tmp/output/videos/output_1920x1080.mp4",
            'resolution' :'1920x1080',
            'resolutionid' : 1,
            'framerate' : '30',
            'bitrateenable' : false,
            'vquality' : '23' },
              {'url' : '/tmp/output/videos/output_1280x720.mp4',
            'resolution' :'1280x720',
            'resolutionid' : 2,
            'framerate' : '30',
            'bitrateenable' : false,
            'vquality' : '23' }],
```

```
'fileextension': 1,
'quickTranscodeEnable' : false,
'cardid' : '1',
 'cpu':      {
          'autocpu' : false,
          'cpuid' : 'CPUID1',
          'ipaddress' : '192.168.0.10'
             }
}
```

Get File Jobs

Get File jobs based on its status. Status can be like Running,completed,failed,saved, terminated.

GET	http://host:port/mvt/api/v1/file/jobs?status={status}

Response

```
[
{
'jobId' : '1223435',
'input' : '/tmp/video/sample.mp4',
'starttime' : '2017-03-21 11:06:00',
'status' : '1',
'statusmessage' : 'Running',
'cpu' : "CPUID1"
},
{
'jobId' : '1111111',
'input' :
'/tmp/video/sample1.mp4',
'starttime' : '2017-03-21 11:06:00',
'status' : '1',
'statusmessage' : 'Running',
'cpu' : "CPUID2"
}
]
```

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General API

Common used APIs

Transcode Job

POST	http://host:port/mvt/api/v1/jobs/transcode

Request

```
{
   'jobId' : '1223435'
}
```

Response

```
{
'jobId' : '1223435',
'status' : '1',
'statusmessage' : 'Transcoding started' ,
'outputs' : [
            {
              'url' : 'rtmp://localhost/live/stream1'
            },
            {
              'url' : 'rtmp://localhost/live/stream2'
            }
          ]
}
```

Get Job

Get Job Details by specifying the Job Id.

GET	http://host:port/mvt/api/v1/jobs/{jobid}

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Response

```
{
    "jobId": "4193060085477490",
    "starttime": "2017-07-18 14:53:32.337",
    "status": 1,
    "statusmessage": "Running",
    "error": 0,
    "cpercentage": "0",
    "input": {
        "filepath": "/share/Public/wolf/Pirates.mkv",
        "vresolution": "2560x1440",
        "vcodec": "h264",
        "vprofile": "High@L5",
        "vframerate": "25.000",
        "vaspectratio": "1.778",
        "duration": "3 min 9 s",
        "acode": "aac"
    },
    "output": {
        "vcodec": "h264",
        "vcodecid": 1,
        "profile": "main",
        "profileid": 1,
        "level": "3.1",
        "levelid": 1,
        "acodec": "aac",
        "acodecid": 1,
        "abitrateid": 1,
        "abitrate": "64k"
    },
    "protocol": 1,
    "cardid": "CARD3",
    "type": "vod",
    "cpu": {
        "autocpu": false,
        "cpuid": "CPUID2",
        "ipaddress": "192.168.18.2"
    },
```

```
"outputs": [{
        "url": "http://10.10.70.145:8007/hls/14127626219623584.m3u8",
        "resolution": "3840x2160",
        "resolutionid": 1,
        "framerate": "30",
        "bitrateenable": false,
        "vquality": "23"
    },
    {
        "url": "http://10.10.70.145:8007/hls/9098182294946940.m3u8",
    "resolution": "3840x2160",
        "resolutionid": 1,
        "framerate": "30",
        "bitrateenable": true,
        "vbitrate": "3M"
    }
    ]
}
```

GetJobs by Status

Get jobs based on their status. Status including Running,completed,failed,saved, Terminated.

GET	http://host:port/mvt/api/v1/jobs?status={status}

Response

```
[{
        "jobId": "9390389268131472",
        "input": "/share/Public/MVT_video/20170712_Qnap_Mustang200.mp4",
        "starttime": "2017-07-18 18:04:25.548",
        "status": 1,
        "statusmessage": "Running",
    "type": "vod",
        "cardid": "CARD2",
        "cpuid": "CPUID2"
    },
```

```json
        {
            "jobId": "3345376842210787",
            "input": "/share/Public/MVT_video/20170712_Qnap_Mustang200.mp4",
            "starttime": "2017-07-18 18:21:31.565",
            "status": 1,
            "statusmessage": "Running",
            "type": "vod",
            "cardid": "CARD2",
            "cpuid": "CPUID2"
        }
    ]
```

Delete Job

DELETE	http://host:port/mvt/api/v1/jobs/{jobid}

Response

```json
{
   'success' : true
}
```

Terminate Job

POST	http://host:port/mvt/api/v1/terminate

Only Running Jobs can be terminated

Request

```json
        {
            "jobId" : "1505202689979"
        }
```

Response

```
        {
        'success' : true

        }
```

Terminate Array of Jobs

POST	http://host:port/mvt/api/v1/terminatejobs

Only Running Jobs can be terminated

Request

```
        {
                "jobsArray" : [
                                "11930380006106442",
                                "711229505515016"
                        ]
        }
```

Response

```
        [{
                "jobId": "11930380006106442",
                "message": {
                    "success": true
                }
            },
            {
                "jobId": "711229505515016",
                "message": {
                    "success": true
                }
            }
        ]
```

Get Home directory path of host machine

GET	http://host:port/mvt/api/v1/homedir

This will return home directory path of the host machine

Response

```
{
    "homedir" : "/home/user/"
}
```

Get Content of specified path

GET	http://host:port/mvt/api/v1/listdir?path={dirpath}

This will return content in the specified folder including directory and video file.

Response

```
[
  {
    "type": "directory",
    "name": "testFolder"
  },
  {
    "type": "file",
    "name": "Mustang200.mp4"
  }
]
```

Select Jobs by time interval

This api will return the jobs by selected time interval, the time interval cannot exceed 7 days at ones and the count per page cannot exceed 100.

GET http://host:port/mvt/api/v1/jobs/timeinterval? pageIdx={index}&
countPerPage={cnt}&startDate={datetime}&endDate={datetime}&cardid={id}(optional)&cpuid={cpuid}(optional)
&type={jobtype}(optional)&status={status}(optional)

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Example :

http://host:port/mvt/api/v1/jobs/timeinterval?pageIdx=1&countPerPage=10&startDate=2017-07-25
15:15:00&endDate=2017-07-26 15:15:00&cardid=CARD1&cpuid=CPUID1&type={jobtype}&status={status}

note: The cardid, cupid, type, status are optional.

Response

```json
[
    {
        "jobId": "6637943146087100",
        "starttime": "2017-07-18 17:59:09.325",
        "status": 2,
        "input": {
            "filepath": "/share/Public/MVT_video/20170712_Qnap_Mustang200.mp4"
        },
        "cardid": "CARD2",
        "cpuid": "CPUID2",
        "type": "vod",
        "numofoutputs": 1
    }
]
```

Get Memory Usage Information from all cards

GET	http://host:port/mvt/api/v1/memoryusage

This will return the memory usage for all running cards

used : Used memory used in kB.

total : Total memory in kB,

usage: memory use percentage.

Response

```
[{
    "cardid": "CARD2",
    "usage": [{
        "used": "5297",
        "total": "7944",
        "usage": "66.68",
        "cpuId": "CPUID1"
    },
    {
        "used": "5297",
        "total": "7944",
        "usage": "66.68",
        "cpuId": "CPUID2"
    }
    ]
},
{
    "cardid": "CARD3",
    "usage": [{
        "used": "5297",
        "total": "7944",
        "usage": "66.68",
        "cpuId": "CPUID1"
    },
    {
        "used": "5297",
        "total": "7944",
        "usage": "66.68",
        "cpuId": "CPUID2"
    }
    ]
}
]
```

Get Memory Usage Information from specific card

GET	http://host:port/mvt/api/v1/memoryusage/{cardid}

This will return memory usage for selected card

Response

```
{
   "cardid": "CARD2",
   "usage": [{
        "used": "5295",
        "total": "7944",
        "usage": "66.65",
        "cpuId": "CPUID1"
      },
      {
        "used": "5295",
        "total": "7944",
        "usage": "66.65",
        "cpuId": "CPUID2"
      }
   ]
}
```

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Get CPU Temperature Information from all cards

GET	http://host:port/mvt/api/v1/cputempinfo

This will return the CPU temperature information for all running cards

Response

```json
[{
    "cardid": "CARD2",
    "usage": [{
        "temperature": 42,
        "cpuId": "CPUID1"
      },
      {
        "temperature": 45,
        "cpuId": "CPUID2"
      }
    ]
  },
  {
    "cardid": "CARD3",
    "usage": [{
        "temperature": 35,
        "cpuId": "CPUID1"
      },
      {
        "temperature": 39,
        "cpuId": "CPUID2"
      }
    ]
  }
]
```

Get CPU Temperature Information from specific card

GET	http://host:port/mvt/api/v1/cputempinfo/{cardid}

This will return CPU temperature information for selected card

Response

```json
{
  "cardid": "CARD3",
  "usage": [{
      "temperature": 35,
      "cpuId": "CPUID1"
    },
    {
      "temperature": 39,
      "cpuId": "CPUID2"
    }
  ]
}
```

Transcoding Host API
Version 1.04

Get Internet Traffic Information from all cards

GET	http://host:port/mvt/api/v1/trafficinfo

This will return the internet traffic information for all running cards

Response

```
[{
    "cardid": "CARD2",
    "usage": [{
        "RX": {
            "value": 14.7441,
            "unit": "KB/s"
        },
        "TX": {
            "value": 22.665,
            "unit": "KB/s"
        },
        "cpuId": "CPUID1"
    },
    {
        "RX": {
            "value": 14.7441,
            "unit": "KB/s"
        },
        "TX": {
            "value": 22.665,
            "unit": "KB/s"
        },
        "cpuId": "CPUID2"
    }
    ]
},
{
    "cardid": "CARD3",
    "usage": [{
        "RX": {
            "value": 14.7441,
            "unit": "KB/s"
        },
        "TX": {
            "value": 22.665,
            "unit": "KB/s"
        },
        "cpuId": "CPUID1"
    },
    {
        "RX": {
            "value": 14.7441,
            "unit": "KB/s"
        },
        "TX": {
            "value": 22.665,
            "unit": "KB/s"
        },
        "cpuId": "CPUID2"
    }
    ]
}
]
```

Transcoding Host API
Version 1.04

Get Internet Traffic Information from specific card

GET	http://host:port/mvt/api/v1/traffic/{cardid}

This will return internet traffic information for selected card

Response

```json
{
    "cardid": "CARD2",
    "usage": [{
        {
            "RX": {
                "value": 14.7441,
                "unit": "KB/s"
            },
            "TX": {
                "value": 22.665,
                "unit": "KB/s"
            },
            "cpuId": "CPUID1"
        },
        {
            "RX": {
                "value": 14.7441,
                "unit": "KB/s"
            },
            "TX": {
                "value": 22.665,
                "unit": "KB/s"
            },
            "cpuId": "CPUID2"
        }
    ]
}
```

Note :

RX : Receive traffic information

TX: Transmit traffic information

Update QTS Name

PUT	http://host:port/mvt/api/v1/updateqtsname

This will return internet traffic information for selected card

Request

```
{
    "cardid": "CARD1",
    "cpuid": "CPUID1",
    "name": "SampleName"

}
```

Response

```
{
    "success": true

}
```

Card Info API

Basic card information APIs

Card Info Attributes

Key	Type	Required	Default	Description
cardid	String	No	Read Only	Unique Card Id.
Cardname	String	No		User can set their own name of card
serialno	String	No	Read Only	serial no of card
model	String	No	Read Only	Model information
firmware	String	No	Read Only	Firmware information
manufacturer	String	No	Read Only	Manufacturer Information
cpu	Array(CPU Info)	No	Read Only	Card CPU information

CPU Info Attributes

Key	Type	Required	Default	Description
cpuid	String	No	Read Only	Auto generated Unique CPUID
processor	String	No	Read Only	Processor information
memory	String	No	Read Only	Memory information
ipaddress	String	No	Read Only	Ipaddress of the Card CPU
mac	String	No	Read Only	Mac address of the Card CPU
qtsPort	String	No	Read Only	Qts port Card CPU
rtmpPort	String	No	Read Only	RTPM port CPU
httpPort	String	No	Read Only	Http Port CPU
icecastPort	String	No	Read Only	Icecast Port CPU
qtsName	String	No	Read Only	Name for Qts

Get Card Information

GET	http://host:port/mvt/api/v1/cardinfo

Response

```
[{
    "cardid": "CARD1",
    "serialno": "Default string",
    "cardname": "Your Own Cardname",
    "model": "B452",
    "firmware": "V1.0",
    "manufacturer": "iEi",
    "cpu": [{
        "cpuId": "CPUID1",
        "processor": {
            "Version": "Intel(R) Core(TM) i5-7267U CPU @ 3.10GHz"
        },
        "memory": "8GB",
        "ipaddress": "192.168.11.2",
        "mac": "e0:18:7d:2e:ce:22",
        "qtsPort": "8081",
        "rtmpPort": "1935",
        "httpPort": "8000",
        "icecastPort": "8100"
    },
    {
        "cpuId": "CPUID2",
        "processor": {
            "Version": "Intel(R) Core(TM) i5-7267U CPU @ 3.10GHz"
        },
        "memory": "8GB",
        "ipaddress": "192.168.12.2",
        "mac": "e0:18:7d:2e:ce:23",
        "qtsPort": "8082",
        "rtmpPort": "1936",
        "httpPort": "8001",
        "icecastPort": "8101"
    }
    ]
  }
]
```

CGMonitor API

CPU and GPU Monitoring APIs

CG Attributes

Key	Type	Required	Default	Description
cardid	String	No	Read Only	Unique card id which is displayed in LED
cginfo	Array	No	Read Only	Array of Individual CG Info
cpuavg	String	No	Read Only	Average CPU usage of card
gpuavg	String	No	Read Only	Average GPU usage of card
usage	Array(usage)	No	Read Only	Individual CPU and GPU Information

Usage Attributes

Key	Type	Required	Default	Description
cpuId	String	No	Read Only	Unique CPUID
cpu	String	No	Read Only	CPU usage percentage
gpu	String	No	Read Only	GPU usage percentage

Get CG Information

GET	http://host:port/mvt/api/v1/cginfo

Response

```
[{
 'cardid' :  "CARD1",
'cginfo' : {
  'cpuavg' : '30',
  'gpuavg' : '48',
   'usage' : [
      { 'cpuId' :'CPUID1',
        'cpu' :'8' ,
        gpu : '18'},

      { 'cpuId' :'CPUID1',
        'cpu' :'18' ,
        gpu : '32'}]
 },
 },
```

```
{
 'cardid' :  'CARD2',
'cginfo' : {
  'cpuavg' : '30',
  'gpuavg' : '48',
   'usage' : [
       { 'cpuId' :'CPUID1',
          'cpu' :'8' ,
          gpu : '18'},

       { 'cpuId' :'CPUID1',
          'cpu' :'18' ,
          gpu : '32'}]
 }
}
]
```

Get CG Information

GET	http://host:port/mvt/api/v1/cginfo/{cardid}

Response

```
{
 'cardid' :  'CARD1',
'cginfo' : {
  'cpuavg' : '30',
  'gpuavg' : '48',
   'usage' : [
       { 'cpuId' :'CPUID1',
          'cpu' :'8' ,
          gpu : '18'},

       { 'cpuId' :'CPUID1',
          'cpu' :'18' ,
          gpu : '32'}]
},
}
```

CPU Jobs Attributes

Key	Type	Required	Default	Description
cardid	String	No	Read Only	Unique card id which is displayed in LED
cpujobinfo	Array	No	Read Only	Array of Individual CPU Information
cpuId	String	No	Read Only	Unique CPUID
numofjobs	Number	No	Read Only	Total no of transcoding jobs running
jobs	Array(job)	No	Read Only	Array of Individual Job Information
jobId	String	No	Read Only	Unique Job Id Information
type	String	No	Read Only	Type of Job like VOD,Live,File
input	String	No	Read Only	Input for the Job
starttime	String	No	Read Only	Start time of the Job
numofoutputs	Number	No	Read Only	Number Of Outputs
status	String	No	Read Only	Status of Job

Get All Job Information

Get all running job Information

GET	http://host:port/mvt/api/v1/cpujobinfo

Response

```
[{
    'cardid' : '1',
    'cpujobinfo' : [
    {'cpuId' :'CPUID1',
     'numofjobs' : 2
      'jobs' : [{
              'jobId' : "123",
              'type' : 'vod',
              'input': {
                 filepath: "path1"
              },
              'starttime':'2017-4-21 17:7:28.92',
              'numofoutputs' : 2,
              'status' : 1
          },
          {
           'jobId' : "456",
           'type' : 'vod',
           'input': {
              filepath: "path2"
           },
           'starttime':'2017-4-21 17:7:28.92',
           'numofoutputs' :4,
           'status' : 1
          }]
          },
```

```
    {
     'cpuId' :'CPUID2',
     'numofjobs' :1
      'jobs' : [
                {
                 'jobId' : "789",
                 'type' :' live',
                 'input' : 'stream1',
                 'starttime' : "2017-4-21 17:7:28.92",
                 'numofoutputs' : 1,
                 'status' : 'Running'


                }
            ]
    }
},
{
"cardid": "2",
    "cpujobinfo": [{
         "cpuId": "ccc",
         "numofjobs": 0,

      "jobs": [{
                'jobId' : "123",
                'type' : 'vod',
                'input':1.mp4',
                'starttime':'2017-4-21 17:7:28.92',
                'numofoutputs' : 2,
                'status' : 'Running'
            }]
        },
        {
           "cpuId": "ddd",
           "numofjobs": 0,
           "jobs": [{
                   'jobId' : "456",
                'type' : 'vod',
                'input':2.mp4',
                'starttime':'2017-4-21 17:7:28.92',
                'numofoutputs' :4,
                'status' : 'Running'}]
        }]
       }
    ]
```

Get Card Job Information

Get all running job Information of specified card

GET	http://host:port/mvt/api/v1/cpujobinfo/{cardid}

Response

```
{
   'cardid' : '1',
  'cpujobinfo' :[
  {'cpuId' :'CPUID1',
    'numofjobs' : 2
    'jobs' : [{
                'jobId' : "123",
                'type' : 'vod',
                'input':1.mp4',
                'starttime':'2017-4-21 17:7:28.92',
                'numofoutputs' : 2,
                'status' : 'Running'
             },
             {
              'jobId' : "456",
              'type' : 'vod',
              'input':2.mp4',
              'starttime':'2017-4-21 17:7:28.92',
              'numofoutputs' :4,
              'status' : 'Running'
             }]
             },
           {
            'cpuId' :'CPUID2',
            'numofjobs' :1,

           'jobs' : [
             {
             'jobId' : "789",
             'type' :' live',
             'input' : 'stream1',
             'starttime' : "2017-4-21 17:7:28.92",
             'numofoutputs' : 1,
             'status' : 'Running'
             }
           ]
           }]
    }
```

Appendix

A)Status codes

The following table describes the HTTP return codes that can be returned to the client by the Host Transcoding API.

Return Code	Return String	Description
200	OK	Get Request was successful
201	Created	POST Request resource created successfully
400	Bad Request	The JSON of the HTTP POST request was not formatted correctly
404	Not Found	The Service Name used in the URI was incorrect.
429	Limit exceeded	A limit has been exceeded, like Only 10 jobs supported when requested for 11th job
500	Internal Server Error	Server Encountered an error
503	Service Unavailable	Server is currently unable to handle the HTTP request due to a temporary overloading or maintenance of the server

B) Video Codec Index

Codec	Index
H.264(AVC)	1
H.265(HEVC)	2
VP8	3
VP9	4
MPEG-2	5

MPEG-2 Codec are supported only in File APIs

C) Audio Codec Index

Codec	Index
AAC	1
MP3	2
Vorbis	3
Copy	4
Disable	5

Vorbis format is supported by only VP8 & VP9 Codecs

D) Profile Index

Profiles are only applicable for H.264 & H.265.

Profile	Index
Main	1
High	2

E) Profile Level Index

Profile Levels are only applicable for H.264 & H.265s

Level	Index
3.1	1
3.2	2
4	3
4.1	4
4.2	5
5	6
5.1	7
5.2	8
6	9
6.1	10
6.2	11

H.264 Main Profile - 3.1, 3.2, 4, 4.1, 4.2, 5.0, 5.1, 5.2

H.264 High Profile - 3.1, 3.2, 4, 4.1, 4.2, 5, 5.1, 5.2

H.265(HEVC)Main Profile - 3.1, 4, 4.1, 5, **5.1**, 5.2, 6, 6.1, 6.2

F) Video Resolution Index

Resolution	Index
3840x2160(4K)	1
2560x1440(2K)	2
1920x1080(1080p)	3
1280x720(720p)	4
854x480(480p)	5
640x360(360p)	6
426x240(240p)	7

F) Video Bitrates

H.264 &H.265 VideoBitrates Varies from

Minimum - 1 Mbps

Maximum - 25 Mbps

VP8 , VP9 & MPEG-2 does not support bitrateparameter. It supports only quality attribute

G) Audio Bitrates Index

Bitrate	Index
64kbps	1
96kbps	2
128kbps	3
192kbps	4

H) Quality

Quality is High when lower value and Low when higher values.

Example : 0 - High Quality 51-Low Quality

H.264	H.265	VP8	VP9	MPEG-2
0-51	0-51	20-70	0-255	0-30
Default = 23	Default=23	Default=40	Default=60	Default=10

I) Frame rate

Video Frame rate Varies from

Transcoding Host API
Version 1.04

Minimum - 24 fps

Maximum - 60 fps

J) Protocol Index

Only applicable for VOD & Live APIs

Protocol	Index
RTMP	0
HLS	1
MPEGDASH	2
ICECAST	3

ICECAST is supported by only VP8 & VP9 Codecs.

K) File Extension Index

Only applicable for File API

Extension	Index
MKV	0
MP4	1
FLV	2
F4V	3
AVI	4
WEBM	5
MPEG	6
MOV	7
MPG	8
MS	9
MTS	10

WEBM is supported by only VP8 & VP9 Codecs

MPG, MS, MTS is supported by only VP9 Codec

H265 Codec is not supported file extension FLV and F4V

L) Features Matrix

Codec	VOD API	Live API	File API	O/P Audio Codec	Input File Ext	Output File Ext	Live I/p protocol	Live O/P protocol	Bit rate	quality	Profile & Level
H.264 (AVC)	Yes	Yes	Yes	AAC MP3	Mp4 Flv F4v Mkv Avi Mov Mpeg/ Mpg ts	Mp4 Flv F4v Mkv Avi mov	RTMP	RTMP HLS DASH	Yes	Yes	Yes
H.265 (HEVC)	No	No	Yes	AAC MP3	Mp4 Flv F4v Mkv Avi Mov Mpeg/ Mpg ts	Mp4 Mkv Avi mov	No	No	Yes	Yes	Yes
VP8	Yes	Yes	Yes	Vorbis	Mp4 Flv F4v Mkv Avi Mov Mpeg/ Mpg ts	WebM	RTMP	ICECAST	No	Yes	No
VP9	Yes	No	Yes	Vorbis	Mp4 Flv F4v Mkv Avi Mov Mpeg/ Mpg ts	WebM	No	ICECAST	No	Yes	No
MPEG2	No	No	Yes	Mp3	Mp4 Flv F4v Mkv Avi Mov Mpeg/ Mpg ts	Mpeg mpg	No	No	No	Yes	No

L) Features Matrix