Intelligent Security API (Display and Control)

Developer Guide

Legal Information

Contents

Chapter 1 Overview

1.1 Introduction

This document provides multiple integration applications of display and control devices based on ISAPI (Intelligent Security Application Programming Interface, hereafter referred as to "ISAPI"), such as LED screen, video wall controller, decoder, remote control, and so on. The APIs (in request URL format) used in the applications are also listed here for reference.

1.2 Update History

Summary of Changes in Version 2.6_July, 2020

Related Product: Decoder with Model DS-6901UDI, DS-6904UDI, DS-6908UDI, DS-6910UDI, DS-6912UDI, DS-6916UDI in Software Version 2.6.0

1. Extended the message about configuration capability of sub window ***XML_SubWindowParamCap*** (related URI: ***/ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/param/capabilities***):
   added 9 nodes, i.e., <**rotateAngle**> (rotate angle), <**borderEnabled**> (whether to enable border light), <**borderWidth**> (border width), <**borderColor**> (border color), <**flashEnabled**> (whether to enable flash of the border light), <**flashDurationTime**> (duration time of the border flash), <**flashOnTime**> (duration time of the light keeping bright in one flash), <**flashOffTime**> (duration time of the light keeping dark in one flash), and <**rolateOSD**> (whether to relate to OSD overlay).
2. Extended the message about sub window parameters ***XML_SubWindowParam*** (related URI: ***/ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/param***):
   added 9 nodes, i.e., <**rotateAngle**> (rotate angle), <**borderEnabled**> (whether to enable border light), <**borderWidth**> (border width), <**borderColor**> (border color), <**flashEnabled**> (whether to enable flash of the border light), <**flashDurationTime**> (duration time of the border flash), <**flashOnTime**> (duration time of the light keeping bright in one flash), <**flashOffTime**> (duration time of the light keeping dark in one flash), and <**rolateOSD**> (whether to relate to OSD overlay).

Summary of Changes in Version 2.6_Nov, 2019

New document.

Chapter 2 Typical Applications

2.1 Open Window and Display on Video Wall

Before displaying stream on video wall, you should configure video wall, set video output resolution, link decoding outputs to video wall, open window, set sub window, and so on.

Steps

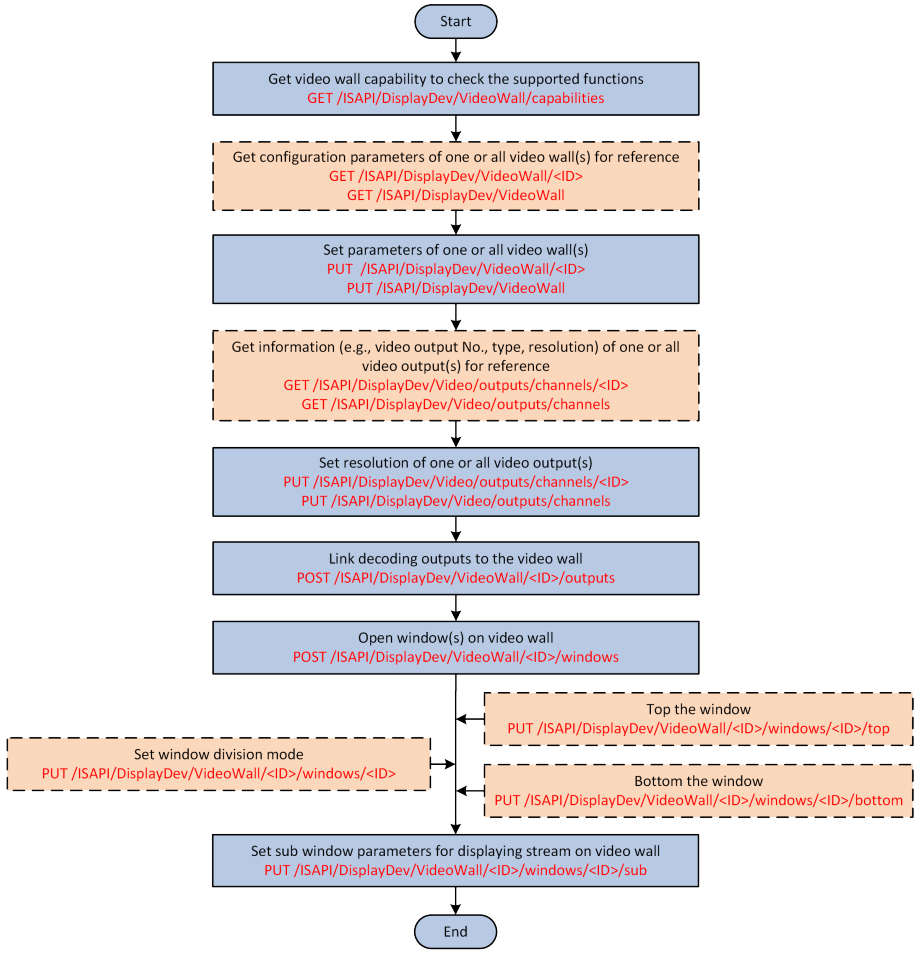

Figure 2-1 API Calling Flow of Opening Window and Displaying on Video Wall

1. Call ***/ISAPI/DisplayDev/VideoWall/capabilities*** by GET method to get video wall capability to check the supported maximum number of video walls and the supported functions.
2. **Optional:** Call ***/ISAPI/DisplayDev/VideoWall/<ID>*** or ***/ISAPI/DisplayDev/VideoWall*** by GET method to get the configuration parameters (e.g., video wall No., video wall name, background color) of one or all video wall(s) for reference.
3. Call ***/ISAPI/DisplayDev/VideoWall/<ID>*** or ***/ISAPI/DisplayDev/VideoWall*** by PUT method to set parameters of one or all video wall(s).

4. **Optional:** Call ***/ISAPI/DisplayDev/Video/outputs/channels/<ID>*** or ***/ISAPI/DisplayDev/Video/outputs/channels*** by GET method to get information (e.g., video output No., type, resolution) of one or all video output(s) for reference.
5. Call ***/ISAPI/DisplayDev/Video/outputs/channels/<ID>*** or ***/ISAPI/DisplayDev/Video/outputs/channels*** by PUT method to set the resolution of one or all video output(s).
6. Call ***/ISAPI/DisplayDev/VideoWall/<ID>/outputs*** by POST method to link decoding outputs to the video wall.
7. Call ***/ISAPI/DisplayDev/VideoWall/<ID>/windows*** by POST method to open a window on video wall.

   The window ID will be returned for further operations, such as moving window, setting window division mode, and so on.
8. **Optional:** Perform the following operation(s) after opening a window.

Set window division mode	PUT ***/ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>***
	Note After setting window division, the sub window will exist. The default window division is 1 × 1, and the sub window No. is 1.
Top the window	PUT ***/ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/top***
Bottom the window	PUT ***/ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/bottom***

9. Call ***/ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub*** by PUT method to set sub window parameters for decoding and displaying stream on video wall.

Note

The stream to be decoded can be from the local signal sources, cameras added to devices, or network cameras.

2.2 Switch Scenes on Video Wall

A scene contains the configuration information of video wall, such as window size, position, window division mode, decoding sources, and so on. You can add different scenes or save the views displayed on video wall as scenes, and then, you call the configured scenes and switch scenes to easily view the required videos on the video wall.

Before You Start

Make sure you have configuring video wall, linking decoding outputs to the video wall, opening window, and so on, refer to ***Open Window and Display on Video Wall*** for details.

Steps

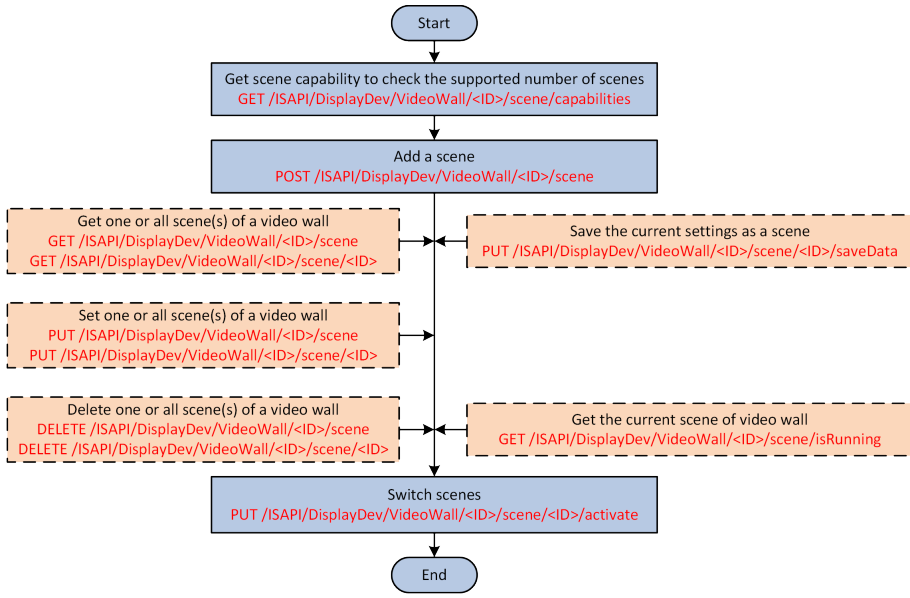

Figure 2-2 API Calling Flow of Switching Scenes on Video Wall

1. Call ***/ISAPI/DisplayDev/VideoWall/<ID>/scene/capabilities*** by GET method to get the scene capability to check the number of scenes supported by the specific video wall.
2. Call ***/ISAPI/DisplayDev/VideoWall/<ID>/scene*** by POST method to add a scene.

   The added scene ID will be returned.
3. **Optional:** Perform the following operation(s) after adding a scene.

Get a scene's information of a video wall	GET ***/ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>***
Get all scenes' information of a video wall	GET ***/ISAPI/DisplayDev/VideoWall/<ID>/scene***
Set a scene of a video wall	PUT ***/ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>***
Set all scenes of a video wall	PUT ***/ISAPI/DisplayDev/VideoWall/<ID>/scene***
Delete a scene of a video wall	DELETE ***/ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>***
Delete all scene of a video wall	DELETE ***/ISAPI/DisplayDev/VideoWall/<ID>/scene***
Save the current settings as a scene	PUT ***/ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>/saveData***
Get the current scene information of the video wall	GET ***/ISAPI/DisplayDev/VideoWall/<ID>/scene/isRunning***

4. Call ***/ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>/activate*** by PUT method to switch the scenes.

2.3 Remote Control

The remote control is used to control and operate on the GUI (Graphical User Interface), including moving up/down/left/right, going to home page, exiting, power off, playback, editing, auto-switch, digital button, playback and reverse playback switch. You can call the corresponding request URLs with method s of ISAPI to implement the above functions.

2.3.1 Start Live View and Recording

Live view helps to remotely get the real-time video or audio of the monitoring area and know the status of humans, vehicles, objects, and so on. For some remarkable views in the live view, you can manually record the video segments using the remote control and save the videos to the configured storage medium.

Steps

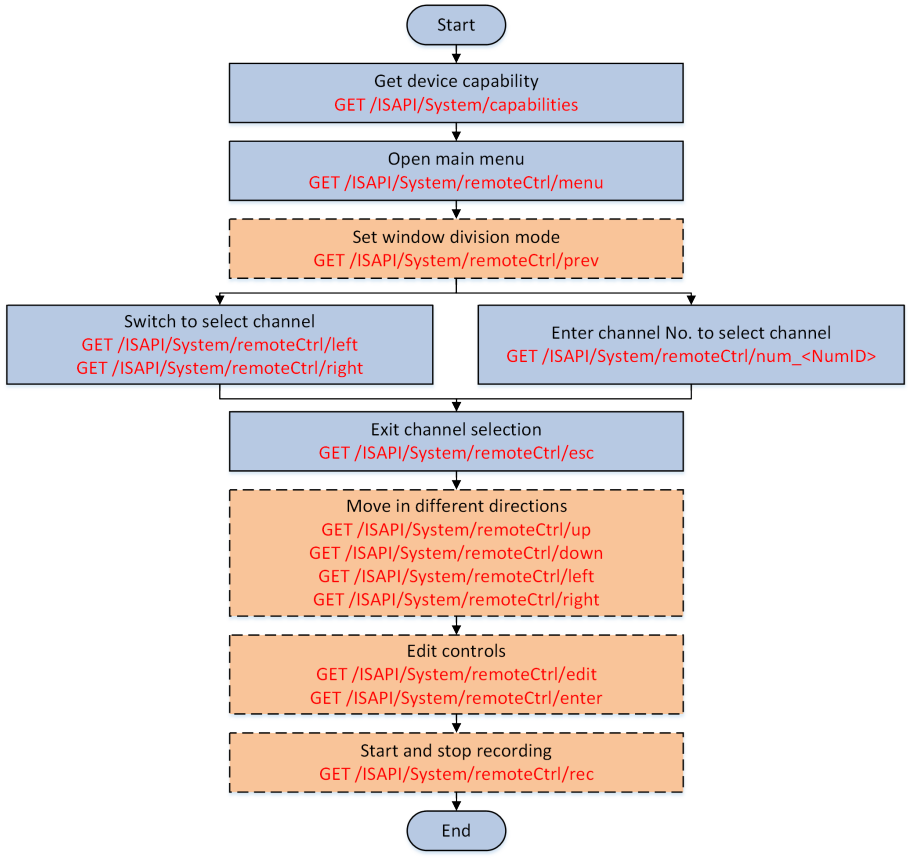

Figure 2-3 Programming Flow of Starting Live View and Recording

1. Call ***/ISAPI/System/capabilities*** by GET method for getting the device capability to check whether the device supports remote control.

   If the device supports remote control, the node <**supportRemoteCtrl**> will be returned, and you can continue to perform this task. Otherwise, please end this task.
2. Call ***/ISAPI/System/remoteCtrl/menu*** by GET method to open the main menu.
3. **Optional:** Call ***/ISAPI/System/remoteCtrl/prev*** by GET method to set the window division mode.
4. Select the channel to start live view.
   - Call ***/ISAPI/System/remoteCtrl/left*** or ***/ISAPI/System/remoteCtrl/right*** by GET method for switching to select the channel.
   - Call ***/ISAPI/System/remoteCtrl/num_<NumID>*** by GET method for entering the channel No. to select the channel.

   Note

   The default channel for live view is channel No. 1.
5. Call ***/ISAPI/System/remoteCtrl/esc*** by GET method to exit channel selection.
6. **Optional:** Move in different directions during live view.

Move Up	Call ***/ISAPI/System/remoteCtrl/up*** by GET method
Move Down	Call ***/ISAPI/System/remoteCtrl/down*** by GET method
Move Left	Call ***/ISAPI/System/remoteCtrl/left*** by GET method
Move Right	Call ***/ISAPI/System/remoteCtrl/right*** by GET method
7. **Optional:** Edit the controls.
   1) Call ***/ISAPI/System/remoteCtrl/edit*** by GET method to edit the controls.
   2) Call ***/ISAPI/System/remoteCtrl/enter*** by GET method to confirm the operation.
8. **Optional:** Call ***/ISAPI/System/remoteCtrl/rec*** by GET method to start recording of all channels.

   Note

   After the video is recorded, you can call ***/ISAPI/System/remoteCtrl/rec*** by GET method again to stop recording of all channels.

2.3.2 Start Playback

If there are videos recorded manually or according to the schedule, you can play the video files stored in the device using the remote control to view the previously occurred events as needed. You can also perform operations (such as controlling playing speed, switching between playback and reverse playback, etc.) using the remote control during playback.

Steps

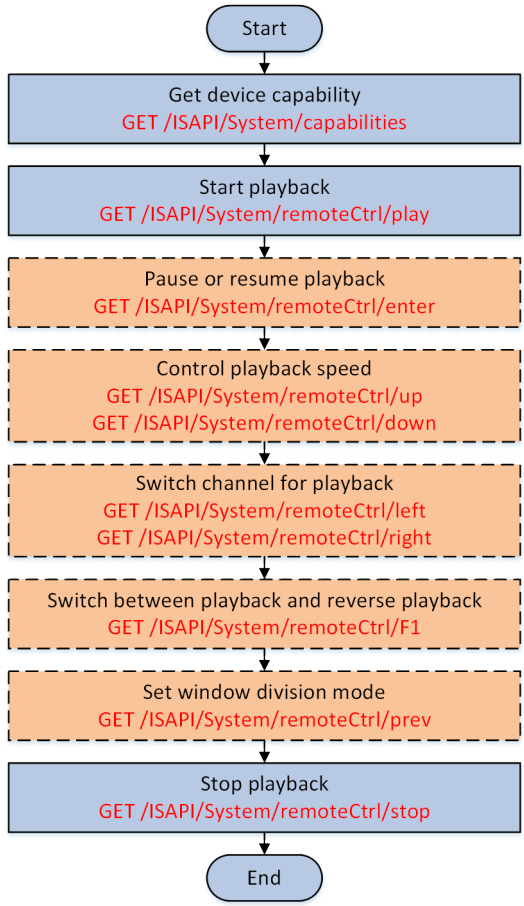

Figure 2-4 Programming Flow of Starting Playback

1. Call ***/ISAPI/System/capabilities*** by GET method for getting the device capability to check whether the device supports remote control.

   If the device supports remote control, the node <**supportRemoteCtrl**> will be returned, and you can continue to perform this task. Otherwise, please end this task.
2. Call ***/ISAPI/System/remoteCtrl/play*** by GET method to start playback.
3. **Optional:** Call ***/ISAPI/System/remoteCtrl/enter*** by GET method to pause or resume playback.
4. **Optional:** Call ***/ISAPI/System/remoteCtrl/up*** or ***/ISAPI/System/remoteCtrl/down*** by GET method to control the playback speed.
5. **Optional:** Call ***/ISAPI/System/remoteCtrl/left*** or ***/ISAPI/System/remoteCtrl/right*** by GET method to switch the channel for playback.
6. **Optional:** Call ***/ISAPI/System/remoteCtrl/F1*** by GET method to switch between playback and reverse playback.
7. **Optional:** Call ***/ISAPI/System/remoteCtrl/prev*** by GET method to set the window division mode.
8. Call ***/ISAPI/System/remoteCtrl/stop*** by GET method to stop playback.

Appendix A. Request URIs

A.1 Video Related

A.1.1 /ISAPI/DisplayDev/Video/capabilities

Get video capabilities.

Table A-1 GET /ISAPI/DisplayDev/Video/capabilities

Method	GET
Description	Get video capabilities.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoCap*** Failed: ***XML_ResponseStatus***

A.1.2 /ISAPI/DisplayDev/Video/inputs/channels

Get or set parameters of all video input channels.

Request URI Definition

Table A-2 GET /ISAPI/DisplayDev/Video/inputs/channels

Method	GET
Description	Get parameters of all video input channels.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoInputChannelList*** Failed: ***XML_ResponseStatus***

Table A-3 PUT /ISAPI/DisplayDev/Video/inputs/channels

Method	PUT
Description	Set parameters of all video input channels.
Query	None.

Request	***XML_VideoInputChannelList***
Response	***XML_ResponseStatus***

A.1.3 /ISAPI/DisplayDev/Video/inputs/channels/<ID>

Get or set parameters of a specific signal source.

Request URI Definition

Table A-4 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>

Method	GET
Description	Get parameters of a specific signal source.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoInputChannel*** Failed: ***XML_ResponseStatus***

Table A-5 PUT /ISAPI/DisplayDev/Video/inputs/channels/<ID>

Method	PUT
Description	Set parameters of a specific signal source.
Query	None.
Request	***XML_VideoInputChannel***
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video ID, and the second refers to the channel ID.

A.1.4 /ISAPI/DisplayDev/Video/inputs/channels/<ID>/color

Get or set color parameters of a specific signal source.

Request URI Definition

Table A-6 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>/color

Method	GET
Description	Get color parameters of a specific signal source.
Query	None.

Request	None.
Response	Succeeded: ***XML_Color*** Failed: ***XML_ResponseStatus***

Table A-7 PUT /ISAPI/DisplayDev/Video/inputs/channels/<ID>/color

Method	PUT
Description	Set color parameters of a specific signal source.
Query	None.
Request	***XML_Color***
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video input channel ID.

A.1.5 /ISAPI/DisplayDev/Video/inputs/channels/<ID>/color/capablities

Get the configuration capability of source color.

Request URI Definition

Table A-8 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>/color/capablities

Method	GET
Description	Get the configuration capability of source color.
Query	None.
Request	None.
Response	Succeeded: ***XML_Cap_Color*** Failed: ***XML_ResponseStatus***

A.1.6 /ISAPI/DisplayDev/Video/inputs/channels/<ID>/cutOff

Get or set picture cropping parameters of a specific signal source.

Request URI Definition

Table A-9 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>/cutOff

Method	GET
Description	Get picture cropping parameters of a specific signal source.

Query	None.
Request	None.
Response	Succeeded: ***XML_InputCutOff*** Failed: ***XML_ResponseStatus***

Table A-10 PUT /ISAPI/DisplayDev/Video/inputs/channels/<ID>/cutOff

Method	PUT
Description	Set picture cropping parameters of a specific signal source.
Query	None.
Request	***XML_InputCutOff***
Response	***XML_ResponseStatus***

Remarks

- Video signal can be cut off in all directions with the maximum pixel limit when analog signals such as VGA and BNC are input. The default value is zero and the unit is pixel.
- The <**ID**> in the request URI refers to the video input channel ID.

A.1.7 /ISAPI/DisplayDev/Video/inputs/channels/<ID>/cutOff/capabilities

Get the picture cropping capability of a specific signal source.

Request URI Definition

Table A-11 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>/cutOff/capabilities

Method	GET
Description	Get the picture cropping capability of a specific signal source.
Query	None.
Request	None.
Response	Succeeded: ***XML_Cap_InputCutOff*** Failed: ***XML_ResponseStatus***

Remarks

- Video signal can be cut off in all directions with the maximum pixel limit when analog signals such as VGA and BNC are input. The default value is zero and the unit is pixel.
- The <**ID**> in the request URI refers to the video input channel ID.

A.1.8 /ISAPI/DisplayDev/Video/inputs/channels/<ID>/picture

Get captured pictures.

Request URI Definition

Table A-12 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>/picture

Method	GET
Description	Get captured pictures.
Query	None.
Request	None.
Response	Succeeded: Picture data Failed: ***XML_ResponseStatus***

Remarks

- The captured pictures are in JPEG format.
- The <**ID**> in the request URI refers to the video input channel ID.

A.1.9 /ISAPI/DisplayDev/Video/inputs/channels/<ID>/position

Get or set image position parameters of a specific signal source.

Request URI Definition

Table A-13 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>/position

Method	GET
Description	Get image position parameters of a specific signal source.
Query	None.
Request	None.
Response	Succeeded: ***XML_InputPosition*** Failed: ***XML_ResponseStatus***

Table A-14 PUT /ISAPI/DisplayDev/Video/inputs/channels/<ID>/position

Method	PUT
Description	Set image position parameters of a specific signal source.
Query	None.

Request	***XML_InputPosition***
Response	***XML_ResponseStatus***

Remarks

- Positions can be adjusted within certain range when analog signals such as VGA and BNC are input. The default value is zero and the unit is pixel.
- The <**ID**> in the request URI refers to the video input channel ID.

A.1.10 /ISAPI/DisplayDev/Video/inputs/channels/<ID>/position/capabilities

Get the image fine-tuning capability of the signal source.

Request URI Definition

Table A-15 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>/position/capabilities

Method	GET
Description	Get the image fine-tuning capability of the signal source.
Query	None.
Request	None.
Response	Succeeded: ***XML_Cap_InputPosition*** Failed: ***XML_ResponseStatus***

Remarks

- Positions can be adjusted within certain range when analog signals such as VGA and BNC are input. The default value is zero and the unit is pixel.
- The <**ID**> in the request URI refers to the video wall ID.

A.1.11 /ISAPI/DisplayDev/Video/inputs/channels /<ID>/resolution

Get, set, or delete the custom resolution parameters of a specific signal source.

Request URI Definition

Table A-16 GET /ISAPI/DisplayDev/Video/inputs/channels /<ID>/resolution

Method	GET
Description	Get the custom resolution parameters of a specific signal source.
Query	None.

Request	None.
Response	Succeeded: ***XML_Resolution*** Failed: ***XML_ResponseStatus***

Table A-17 PUT /ISAPI/DisplayDev/Video/inputs/channels /<ID>/resolution

Method	PUT
Description	Set the custom resolution parameters of a specific signal source.
Query	None.
Request	***XML_Resolution***
Response	***XML_ResponseStatus***

Table A-18 DELETE /ISAPI/DisplayDev/Video/inputs/channels /<ID>/resolution

Method	DELETE
Description	Delete the custom resolution parameters of a specific signal source.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to channel ID.

A.1.12 /ISAPI/DisplayDev/Video/inputs/channels/<ID>/text

Get or set OSD parameters of all signal sources.

Request URI Definition

Table A-19 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>/text

Method	GET
Description	Get OSD parameters of all signal sources.
Query	None.
Request	None.
Response	Succeeded: ***XML_SignalSourceTextList*** Failed: ***XML_ResponseStatus***

Table A-20 PUT /ISAPI/DisplayDev/Video/inputs/channels/<ID>/text

Method	PUT
Description	Set OSD parameters of all signal sources.
Query	None.
Request	***XML_SignalSourceTextList***
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video input channel ID.

A.1.13 /ISAPI/DisplayDev/Video/inputs/channels/<ID>/text/<ID>

Get or set a specific OSD parameter of a specific signal source.

Request URI Definition

Table A-21 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>/text/<ID>

Method	GET
Description	Get a specific OSD parameter of a specific signal source.
Query	None.
Request	None.
Response	Succeeded: ***XML_SignalSourceText*** Failed: ***XML_ResponseStatus***

Table A-22 PUT /ISAPI/DisplayDev/Video/inputs/channels/<ID>/text/<ID>

Method	PUT
Description	Set a specific OSD parameter of a specific signal source.
Query	None.
Request	***XML_SignalSourceText***
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video input channel ID, the second refers to the text ID of OSD.

A.1.14 /ISAPI/DisplayDev/Video/inputs/channels/<ID>/text/capabilities

Get OSD configuration capability of a specific signal source.

Request URI Definition

Table A-23 GET /ISAPI/DisplayDev/Video/inputs/channels/<ID>/text/capabilities

Method	GET
Description	Get OSD configuration capability of a specific signal source.
Query	None.
Request	None.
Response	Succeeded: ***XML_Cap_SignalSourceTextList*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video input channel ID.

A.1.15 /ISAPI/DisplayDev/Video/inputs/channels/capabilities

Get the capability of video input.

Table A-24 GET /ISAPI/DisplayDev/Video/inputs/channels/capabilities

Method	GET
Description	Get the capability of video input.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoInputsCap*** Failed: ***XML_ResponseStatus***

A.1.16 /ISAPI/DisplayDev/Video/inputs/channels/resolution

Get or set resolution parameters of all signal sources, or add resolution parameters.

Request URI Definition

Table A-25 GET /ISAPI/DisplayDev/Video/inputs/channels/resolution

Method	GET
Description	Get resolution parameters of all signal sources.
Query	None.
Request	None.
Response	Succeeded: ***XML_ResolutionList*** Failed: ***XML_ResponseStatus***

Table A-26 PUT /ISAPI/DisplayDev/Video/inputs/channels/resolution

Method	PUT
Description	Set resolution parameters of all signal sources.
Query	None.
Request	***XML_ResolutionList***
Response	***XML_ResponseStatus***

Table A-27 POST /ISAPI/DisplayDev/Video/inputs/channels/resolution

Method	POST
Description	Add resolution parameters of signal source.
Query	None.
Request	***XML_Resolution***
Response	***XML_ResponseStatus***

Remarks

When posting a command, resolution ID is allocated by devices and returns through ResponseStatus.

A.1.17 /ISAPI/DisplayDev/Video/inputs/channels/resolution/<ID>

Get, set, or delete resolution parameters of a specific signal source.

Request URI Definition

Table A-28 GET /ISAPI/DisplayDev/Video/inputs/channels/resolution/<ID>

Method	GET
Description	Get resolution parameters of a specific signal source.
Query	None.
Request	None.
Response	Succeeded: ***XML_Resolution*** Failed: ***XML_ResponseStatus***

Table A-29 PUT /ISAPI/DisplayDev/Video/inputs/channels/resolution/<ID>

Method	PUT
Description	Set resolution parameters of a specific signal source.
Query	None.
Request	***XML_Resolution***
Response	***XML_ResponseStatus***

Table A-30 DELETE /ISAPI/DisplayDev/Video/inputs/channels/resolution/<ID>

Method	DELETE
Description	Delete resolution parameters of a specific signal source.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.1.18 /ISAPI/DisplayDev/Video/inputs/channels/resolution/capabilities

Get configuration capability of signal sources' custom resolutions.

Request URI Definition

Table A-31 GET /ISAPI/DisplayDev/Video/inputs/channels/resolution/capabilities

Method	GET
Description	Get configuration capability of signal sources' custom resolutions.
Query	None.

Request	None.
Response	Succeeded: ***XML_Cap_ResolutionList*** Failed: ***XML_ResponseStatus***

A.1.19 /ISAPI/DisplayDev/Video/outputs/channels

Get or set parameters of all video outputs.

Request URI Definition

Table A-32 GET /ISAPI/DisplayDev/Video/outputs/channels

Method	GET
Description	Get parameters of all video outputs.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoOutputChannelList*** Failed: ***XML_ResponseStatus***

Table A-33 PUT /ISAPI/DisplayDev/Video/outputs/channels

Method	PUT
Description	Set parameters of all video outputs.
Query	None.
Request	***XML_VideoOutputChannelList***
Response	***XML_ResponseStatus***

A.1.20 /ISAPI/DisplayDev/Video/outputs/channels/<ID>

Get or set parameters of a specific video output.

Request URI Definition

Table A-34 GET /ISAPI/DisplayDev/Video/outputs/channels/<ID>

Method	GET
Description	Get parameters of a specific video output.
Query	None.

Request	None.
Response	Succeeded: ***XML_VideoOutputChannel*** Failed: ***XML_ResponseStatus***

Table A-35 PUT /ISAPI/DisplayDev/Video/outputs/channels/<ID>

Method	PUT
Description	Set parameters of a specific video output.
Query	None.
Request	***XML_VideoInputChannel***
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the URI refers to the video output channel ID.

A.1.21 /ISAPI/DisplayDev/Video/outputs/channels/<ID>/capabilities

Get the capability of a specific video output.

Request URI Definition

Table A-36 GET /ISAPI/DisplayDev/Video/outputs/channels/<ID>/capabilities

Method	GET
Description	Get the capability of a specific video output.
Query	None.
Request	None.
Response	Succeeded: ***XML_Cap_VideoOutputChannel*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the URI refers to the video output channel ID.

A.1.22 /ISAPI/DisplayDev/Video/outputs/channels/<ID>/color

Get or set color parameters of a specific video output.

Request URI Definition

Table A-37 GET /ISAPI/DisplayDev/Video/outputs/channels/<ID>/color

Method	GET
Description	Get color parameters of a specific video output.
Query	None.
Request	None.
Response	Succeeded: ***XML_Color*** Failed: ***XML_ResponseStatus***

Table A-38 PUT /ISAPI/DisplayDev/Video/outputs/channels/<ID>/color

Method	PUT
Description	Set color parameters of a specific video output.
Query	None.
Request	***XML_Color***
Response	***XML_ResponseStatus***

Remarks

- Colors can be adjusted when analog signals including VGA and BNC are input.
- The <**ID**> in the URI refers to the video output channel ID.

A.1.23 /ISAPI/DisplayDev/Video/outputs/channels/<ID>/color/capabilities

Get color configuration capability of a specific video output.

Request URI Definition

Table A-39 GET /ISAPI/DisplayDev/Video/outputs/channels/<ID>/color/capabilities

Method	GET
Description	Get color configuration capability of a specific video output.
Query	None.
Request	None.
Response	Succeeded: ***XML_Cap_Color*** Failed: ***XML_ResponseStatus***

Remarks

- Color can be adjusted when analog signals including VGA and BNC are output.
- The <**ID**> in the URI refers to the video output channel ID.

A.1.24 /ISAPI/DisplayDev/Video/outputs/channels/all

Set parameters of all video output channels.

Request URI Definition

Table A-40 PUT /ISAPI/DisplayDev/Video/outputs/channels/all

Method	PUT
Description	Set parameters of all video output channels.
Query	None.
Request	***XML_VideoInputChannel***
Response	***XML_ResponseStatus***

A.1.25 /ISAPI/DisplayDev/Video/outputs/channels/capabilities

Get the capability of all video outputs.

Table A-41 GET /ISAPI/DisplayDev/Video/outputs/channels/capabilities

Method	GET
Description	Get capability of all video outputs.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoOutputsCap*** Failed: ***XML_ResponseStatus***

A.1.26 /ISAPI/DisplayDev/Video/outputs/identify

Get or set parameters of the output identification.

Request URI Definition

Table A-42 GET /ISAPI/DisplayDev/Video/outputs/identify

Method	GET
Description	Get parameters of the output identification.
Query	None.
Request	None.
Response	Succeeded: ***XML_OutputIdentify*** Failed: ***XML_ResponseStatus***

Table A-43 PUT /ISAPI/DisplayDev/Video/outputs/identify

Method	PUT
Description	Get parameters of the output identification.
Query	None.
Request	***XML_OutputIdentify***
Response	***XML_ResponseStatus***

A.1.27 /ISAPI/DisplayDev/Video/streaming/channels

Get, set, or delete all video stream parameters, or add a video stream parameter.

Request URI Definition

Table A-44 GET /ISAPI/DisplayDev/Video/streaming/channels

Method	GET
Description	Get all video stream parameters.
Query	None.
Request	None.
Response	Succeeded: ***XML_StreamInputChannelList*** Failed: ***XML_ResponseStatus***

Table A-45 PUT /ISAPI/DisplayDev/Video/streaming/channels

Method	PUT
Description	Set all video stream parameters.
Query	None.

Request	***XML_StreamInputChannelList***
Response	***XML_ResponseStatus***

Table A-46 POST /ISAPI/DisplayDev/Video/streaming/channels

Method	POST
Description	Add a video stream parameter.
Query	None.
Request	***XML_StreamInputChannel***
Response	***XML_ResponseStatus***

Table A-47 DELETE /ISAPI/DisplayDev/Video/streaming/channels

Method	DELETE
Description	Delete all video stream parameters.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.1.28 /ISAPI/DisplayDev/Video/streaming/channels/<ID>

Get, set, or delete parameters of a specific video stream.

Request URI Definition

Table A-48 GET /ISAPI/DisplayDev/Video/streaming/channels/<ID>

Method	GET
Description	Get parameters of a specific video stream.
Query	None
Request	None
Response	Succeeded: ***XML_StreamInputChannel*** Failed: ***XML_ResponseStatus***

Table A-49 PUT /ISAPI/DisplayDev/Video/streaming/channels/<ID>

Method	PUT
Description	Set parameters of a specific video stream.
Query	None

Request	***XML_StreamInputChannel***
Response	***XML_ResponseStatus***

Table A-50 DELETE /ISAPI/DisplayDev/Video/streaming/channels/<ID>

Method	DELETE
Description	Delete parameters of a specific video stream.
Query	None
Request	None
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video channel ID.

A.1.29 /ISAPI/DisplayDev/Video/streaming/channels/capabilities

Get video stream capability.

Request URI Definition

Table A-51 GET /ISAPI/DisplayDev/Video/streaming/channels/capabilities

Method	GET
Description	Get video stream capability.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoStreamingCap*** Failed: ***XML_ResponseStatus***

A.2 Audio Related

A.2.1 /ISAPI/DisplayDev/Audio/capabilities

Get audio capability.

Request URi Definition

Table A-52 GET /ISAPI/DisplayDev/Audio/capabilities

Method	GET
Description	Get audio capability.
Query	None.
Request	None.
Response	Succeeded: ***XML_AudioCap*** Failed: ***XML_ResponseStatus***

A.2.2 /ISAPI/DisplayDev/Audio/outputs/channels

Get or set parameters of all audio output channels.

Request URI Definition

Table A-53 GET /ISAPI/DisplayDev/Audio/outputs/channels

Method	GET
Description	Get parameters of all audio output channels.
Query	None.
Request	None.
Response	Succeeded: ***XML_AudioOutputChannelList*** Failed: ***XML_ResponseStatus***

Table A-54 PUT /ISAPI/DisplayDev/Audio/outputs/channels

Method	PUT
Description	Set parameters of all audio output channels.
Query	None.
Request	***XML_AudioOutputChannelList***
Response	***XML_ResponseStatus***

A.2.3 /ISAPI/DisplayDev/Audio/outputs/channels/<ID>

Get or set parameters of a specific audio output channel.

Request URI Definition

Table A-55 GET /ISAPI/DisplayDev/Audio/outputs/channels/<ID>

Method	GET
Description	Get parameters of a specific audio output channel.
Query	None.
Request	None.
Response	Succeeded: ***XML_AudioOutputChannel*** Failed: ***XML_ResponseStatus***

Table A-56 PUT /ISAPI/DisplayDev/Audio/outputs/channels/<ID>

Method	PUT
Description	Set parameters of a specific audio output channel.
Query	None.
Request	***XML_AudioOutputChannel***
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the URI refers to the audio output channel ID.

A.2.4 /ISAPI/DisplayDev/Audio/outputs/channels/<ID>/capabilities

Get the capability of a specific audio output channel.

Request URI Definition

Table A-57 GET /ISAPI/DisplayDev/Audio/outputs/channels/<ID>/capabilities

Method	GET
Description	Get the capability of a specific audio output channel.
Query	None.
Request	None.
Response	Succeeded: ***XML_AudioOutputChannel*** Failed: ***XML_ResponseStatus***

A.3 Screen Control Related

A.3.1 /ISAPI/DisplayDev/ScreenCtrl/closeAll

Close all screens.

Request URI Definition

Table A-58 PUT /ISAPI/DisplayDev/ScreenCtrl/closeAll

Method	PUT
Description	Close all screens.
Query	None.
Request	***XML_ScreenCtrl***
Response	***XML_ResponseStatus***

A.3.2 /ISAPI/DisplayDev/ScreenCtrl/openAll

Open all screens.

Request URI Definition

Table A-59 PUT /ISAPI/DisplayDev/ScreenCtrl/openAll

Method	PUT
Description	Open all screens.
Query	None.
Request	***XML_ScreenCtrl***
Response	***XML_ResponseStatus***

A.4 Video Wall Related

A.4.1 /ISAPI/DisplayDev/VideoWall

Get, or set parameters of all video walls; delete all video walls; add a video wall.

Request URI Definition

Table A-60 GET /ISAPI/DisplayDev/VideoWall

Method	GET
Description	Get parameters of all video walls.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoWallList*** Failed: ***XML_ResponseStatus***

Table A-61 PUT /ISAPI/DisplayDev/VideoWall

Method	PUT
Description	Set parameters of all video walls.
Query	None.
Request	***XML_VideoWallList***
Response	***XML_ResponseStatus***

Table A-62 POST /ISAPI/DisplayDev/VideoWall

Method	POST
Description	Add a video wall.
Query	None.
Request	***XML_VideoWall***
Response	***XML_ResponseStatus***

Table A-63 DELETE /ISAPI/DisplayDev/VideoWall

Method	DELETE
Description	Delete all video walls.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.4.2 /ISAPI/DisplayDev/VideoWall/<ID>

Get or set parameters of a specific video wall.

Request URI Definition

Table A-64 GET /ISAPI/DisplayDev/VideoWall/<ID>

Method	GET
Description	Get parameters of a specific video wall.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoWall*** Failed: ***XML_ResponseStatus***

Table A-65 PUT /ISAPI/DisplayDev/VideoWall/<ID>

Method	PUT
Description	Set parameters of a specific video wall.
Query	None.
Request	***XML_VideoWall***
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.3 /ISAPI/DisplayDev/VideoWall/capabilities

Get video wall capabilities.

Request URI Definition

Table A-66 GET /ISAPI/DisplayDev/VideoWall/capabilities

Method	GET
Description	Get video wall capabilities.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoWallCap*** Failed: ***XML_ResponseStatus***

A.4.4 /ISAPI/DisplayDev/VideoWall/baseMap

Get, set parameters of all background pictures; delete all background pictures; add a background picture.

Request URI Definition

Table A-67 GET /ISAPI/DisplayDev/VideoWall/baseMap

Method	GET
Description	Get parameters of all background pictures.
Query	None.
Request	None.
Response	Succeeded: ***XML_BaseMapList*** Failed: ***XML_ResponseStatus***

Table A-68 PUT /ISAPI/DisplayDev/VideoWall/baseMap

Method	PUT
Description	Set parameters of all background pictures.
Query	None.
Request	***XML_BaseMapList***
Response	***XML_ResponseStatus***

Table A-69 POST /ISAPI/DisplayDev/VideoWall/baseMap

Method	POST
Description	Add a background picture.
Query	None.
Request	***XML_BaseMap***
Response	***XML_ResponseStatus***

Table A-70 DELETE /ISAPI/DisplayDev/VideoWall/baseMap

Method	DELETE
Description	Delete all background pictures.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.4.5 /ISAPI/DisplayDev/VideoWall/baseMap/<ID>

Get or set parameters of a specific background picture; delete a specific background picture.

Request URI Definition

Table A-71 GET /ISAPI/DisplayDev/VideoWall/baseMap/<ID>

Method	GET
Description	Get parameters of a specific background picture.
Query	None.
Request	None.
Response	Succeeded: ***XML_BaseMap*** Failed: ***XML_ResponseStatus***

Table A-72 PUT /ISAPI/DisplayDev/VideoWall/baseMap/<ID>

Method	PUT
Description	Set parameters of a specific background picture.
Query	None.
Request	***XML_BaseMap***
Response	***XML_ResponseStatus***

Table A-73 DELETE /ISAPI/DisplayDev/VideoWall/baseMap/<ID>

Method	DELETE
Description	Delete a specific background picture.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the background picture ID.

A.4.6 /ISAPI/DisplayDev/VideoWall/baseMap/<ID>/data

Upload a specific background picture.

Request URI Definition

Table A-74 PUT /ISAPI/DisplayDev/VideoWall/baseMap/<ID>/data

Method	PUT
Description	Upload a specific background picture.
Query	None.
Request	Opaque data
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to background picture ID.

A.4.7 /ISAPI/DisplayDev/VideoWall/baseMap/capabilities

Get configuration capabilities of background pictures.

Request URI Definition

Table A-75 GET /ISAPI/DisplayDev/VideoWall/baseMap/capabilities

Method	GET
Description	Get configuration capabilities of background pictures.
Query	None.
Request	None.
Response	Succeeded: ***XML_BaseMapCap*** Failed: ***XML_ResponseStatus***

A.4.8 /ISAPI/DisplayDev/VideoWall/<ID>/baseMap/

Get, set parameters of all base map windows; delete all base map windows; add a new base map window.

Request URI Definition

Table A-76 GET /ISAPI/DisplayDev/VideoWall/<ID>/baseMap

Method	GET
Description	Get parameters of all base map windows.
Query	None.

Request	None.
Response	Succeeded: ***XML_BaseMapOnWallList*** Failed: ***XML_ResponseStatus***

Table A-77 PUT /ISAPI/DisplayDev/VideoWall/<ID>/baseMap

Method	PUT
Description	Set parameters of all base map windows.
Query	None.
Request	***XML_BaseMapOnWallList***
Response	***XML_ResponseStatus***

Table A-78 POST /ISAPI/DisplayDev/VideoWall/<ID>/baseMap

Method	POST
Description	Add a base map window.
Query	None.
Request	***XML_BaseMapOnWall***
Response	***XML_ResponseStatus***

Table A-79 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/baseMap

Method	DELETE
Description	Delete all base map windows.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.9 /ISAPI/DisplayDev/VideoWall/<ID>/baseMap/<ID>

Operations about configuration of a specific base map.

Request URI Definition

Table A-80 GET /ISAPI/DisplayDev/VideoWall/<ID>/baseMap/<ID>

Method	GET
Description	Get configuration of a specific base map.
Query	None.
Request	None.
Response	Succeeded: ***XML_BaseMapOnWall*** Failed: ***XML_ResponseStatus***

Table A-81 PUT /ISAPI/DisplayDev/VideoWall/<ID>/baseMap/<ID>

Method	PUT
Description	Set configuration of a specific base map.
Query	None.
Request	***XML_BaseMapOnWall***
Response	***XML_ResponseStatus***

Table A-82 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/baseMap/<ID>

Method	DELETE
Description	Delete configuration of a specific base map.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URL refers to the video wall ID, and the second refers to the base map ID.

A.4.10 /ISAPI/DisplayDev/VideoWall/<ID>/baseMap/<ID>/capabilities

Get capability of a specific base map.

Request URI Definition

Table A-83 GET /ISAPI/DisplayDev/VideoWall/<ID>/baseMap/<ID>/capabilities

Method	GET
Description	Get capability of a specific base map.
Query	None.
Request	None.
Response	Succeeded: ***XML_BaseMapOnWall*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the base map ID.

A.4.11 /ISAPI/DisplayDev/VideoWall/<ID>/baseMap/capabilities

Get the capability of all background pictures.

Request URI Definition

Table A-84 GET /ISAPI/DisplayDev/VideoWall/<ID>/baseMap/capabilities

Method	GET
Description	Get the capability of all background pictures.
Query	None.
Request	None.
Response	Succeeded: ***XML_BaseMapOnWallCap*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.12 /ISAPI/DisplayDev/VideoWall/<ID>/ledArea

Get LED or LCD areas.

Request URI Definition

Table A-85 GET /ISAPI/DisplayDev/VideoWall/<ID>/ledArea

Method	GET
Description	Get LED or LCD areas.
Query	None.
Request	None.
Response	Succeeded: ***XML_LedAreaList*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.13 /ISAPI/DisplayDev/VideoWall/<ID>/ledArea/<ID>

Get a specific LED or LCD area.

Request URI Definition

Table A-86 GET /ISAPI/DisplayDev/VideoWall/<ID>/ledArea/<ID>

Method	GET
Description	Get a specific LED or LCD area.
Query	None.
Request	None.
Response	Succeeded: ***XML_LedAreaList*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the LED/LCD area ID.

A.4.14 /ISAPI/DisplayDev/VideoWall/<ID>/outputs

Get or set screen binding parameters of all outputs; unbind all outputs.

Request URI Definition

Table A-87 GET /ISAPI/DisplayDev/VideoWall/<ID>/outputs

Method	GET
Description	Get screen binding parameters of all outputs.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallOutputList*** Failed: ***XML_ResponseStatus***

Table A-88 PUT /ISAPI/DisplayDev/VideoWall/<ID>/outputs

Method	PUT
Description	Set screen binding parameters of all outputs.
Query	None.
Request	***XML_WallOutputList***
Response	***XML_ResponseStatus***

Table A-89 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/outputs

Method	DELETE
Description	Unbind all outputs
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.15 /ISAPI/DisplayDev/VideoWall/<ID>/outputs/<ID>

Get or set parameters of a specific output; unbind the output and screen.

Request URI Definition

Table A-90 GET /ISAPI/DisplayDev/VideoWall/<ID>/outputs/<ID>

Method	GET
Description	Get parameters of a specific output.

Query	None.
Request	None.
Response	Succeeded: ***XML_WallOutput*** Failed: ***XML_ResponseStatus***

Table A-91 PUT /ISAPI/DisplayDev/VideoWall/<ID>/outputs/<ID>

Method	PUT
Description	Set parameters of a specific output.
Query	None.
Request	***XML_WallOutput***
Response	***XML_ResponseStatus***

Table A-92 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/outputs/<ID>

Method	DELETE
Description	Unbind the output and screen.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the output ID.

A.4.16 /ISAPI/DisplayDev/VideoWall/<ID>/outputs/<ID>/capabilities

Get screen binding capability of a specific output.

Request URI Definition

Table A-93 GET /ISAPI/DisplayDev/VideoWall/<ID>/outputs/<ID>/capabilities

Method	GET
Description	Get screen binding capability of a specific output.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallOutput*** Failed: ***XML_ResponseStatus***

A.4.17 /ISAPI/DisplayDev/VideoWall/<ID>/outputs/capabilities

Get the screen binding capability of all outputs.

Request URI Definition

Table A-94 GET /ISAPI/DisplayDev/VideoWall/<ID>/outputs/capabilities

Method	GET
Description	Get the screen binding capability of all outputs.
Query	None.
Request	None.
Response	Succeeded: ***XML_VideoWallList*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the URI refers to the video wall ID.

A.4.18 /ISAPI/DisplayDev/VideoWall/<ID>/outputs/reset

Unbind all outputs to the screen.

Request URI Definition

Table A-95 PUT /ISAPI/DisplayDev/VideoWall/<ID>/outputs/reset

Method	GET
Description	Unbind all outputs to the screen.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the URI refers to the video wall ID.

A.4.19 /ISAPI/DisplayDev/VideoWall/<ID>/plan

Get or set parameters of all plans; add a plan, or delete all plans.

Request URI Definition

Table A-96 GET /ISAPI/DisplayDev/VideoWall/<ID>/plan

Method	GET
Description	Get parameters of all plans.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallPlanList*** Failed: ***XML_ResponseStatus***

Table A-97 PUT /ISAPI/DisplayDev/VideoWall/<ID>/plan

Method	PUT
Description	Set parameters of all plans.
Query	None.
Request	***XML_WallPlanList***
Response	***XML_ResponseStatus***

Table A-98 POST /ISAPI/DisplayDev/VideoWall/<ID>/plan

Method	POST
Description	Add a plan.
Query	None.
Request	***XML_WallPlan***
Response	***XML_ResponseStatus***

Table A-99 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/plan

Method	DELETE
Description	Delete all plans.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.20 /ISAPI/DisplayDev/VideoWall/<ID>/plan/<ID>

Get, set parameters of a specific plan, or delete a specific plan.

Request URI Definition

Table A-100 GET /ISAPI/DisplayDev/VideoWall/<ID>/plan/<ID>

Method	GET
Description	Get parameters of a specific plan.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallPlan*** Failed: ***XML_ResponseStatus***

Table A-101 PUT /ISAPI/DisplayDev/VideoWall/<ID>/plan/<ID>

Method	PUT
Description	Set parameters of a specific plan.
Query	None.
Request	***XML_WallPlan***
Response	***XML_ResponseStatus***

Table A-102 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/plan/<ID>

Method	DELETE
Description	Delete a specific plan.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to plan ID.

A.4.21 /ISAPI/DisplayDev/VideoWall/<ID>/plan/<ID>/capabilities

Get configuration capability of a specific plan.

Request URI Definition

Table A-103 GET /ISAPI/DisplayDev/VideoWall/<ID>/plan/<ID>/capabilities

Method	GET
Description	Get configuration capability of a specific plan.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallPlan*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the plan ID.

A.4.22 /ISAPI/DisplayDev/VideoWall/<ID>/plan/<ID>/start

Enable a specific plan.

Request URI Definition

Table A-104 GET /ISAPI/DisplayDev/VideoWall/<ID>/plan/<ID>/start

Method	GET
Description	Enable a specific plan.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the plan ID..

A.4.23 /ISAPI/DisplayDev/VideoWall/<ID>/plan/<ID>/stop

Disable a specific plan.

Request URI Definition

Table A-105 GET /ISAPI/DisplayDev/VideoWall/<ID>/plan/<ID>/stop

Method	GET
Description	Disable a specific plan.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the plan ID.

A.4.24 /ISAPI/DisplayDev/VideoWall/<ID>/plan/capabilities

Get plan configuration capability.

Request URI Definition

Table A-106 GET /ISAPI/DisplayDev/VideoWall/<ID>/plan/capabilities

Method	GET
Description	Get plan configuration capability.
Query	None.
Request	None.
Response	Succeeded: ***XML_PlanCap*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.25 /ISAPI/DisplayDev/VideoWall/<ID>/plan/isRunning

Get the current plan.

Request URI Definition

Table A-107 PUT /ISAPI/DisplayDev/VideoWall/<ID>/plan/isRunning

Method	PUT
Description	Get the current plan.
Query	None.
Request	None.
Response	Succeeded: ***XML_RunningPlan*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.26 /ISAPI/DisplayDev/VideoWall/<ID>/scene

Get, set parameters of all scenes, or delete all scenes; add a scene.

Request URI Definition

Table A-108 GET /ISAPI/DisplayDev/VideoWall/<ID>/scene

Method	GET
Description	Get parameters of all scenes.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallSceneList*** Failed: ***XML_ResponseStatus***

Table A-109 PUT /ISAPI/DisplayDev/VideoWall/<ID>/scene

Method	PUT
Description	Set parameters of all scenes.
Query	None.
Request	***XML_WallSceneList***
Response	***XML_ResponseStatus***

Table A-110 POST /ISAPI/DisplayDev/VideoWall/<ID>/scene

Method	POST
Description	Add a scene.
Query	None.
Request	***XML_WallScene***
Response	***XML_ResponseStatus***

Table A-111 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/scene

Method	DELETE
Description	Delete all scenes.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.27 /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>

Get, set parameters of a specific scene, or delete a specific scene.

Request URI Definition

Table A-112 GET /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>

Method	GET
Description	Get parameters of a specific scene.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallScene*** Failed: ***XML_ResponseStatus***

Table A-113 PUT /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>

Method	PUT
Description	Set parameters of a specific scene.
Query	None.

Request	***XML_WallScene***
Response	***XML_ResponseStatus***

Table A-114 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>

Method	DELETE
Description	Delete a specific scene.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to scene ID.

A.4.28 /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>/activate

Switch to a specific scene.

Request URI Definition

Table A-115 PUT /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>/activate

Method	PUT
Description	Switch to a specific scene.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the scene ID.

A.4.29 /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>/saveData

Save the current scene.

Request URI Definition

Table A-116 PUT /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>/saveData

Method	PUT
Description	Save the current scene.
Query	None.
Request	***XML_WallScene***
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the scene ID.

A.4.30 /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>/sceneData

Import or export the configuration file of a specific scene.

Request URI Definition

Table A-117 GET /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>/sceneData

Method	GET
Description	Export the configuration file of a specific scene.
Query	None.
Request	None.
Response	Succeeded: Opaque Data Failed: ***XML_ResponseStatus***

Table A-118 PUT /ISAPI/DisplayDev/VideoWall/<ID>/scene/<ID>/sceneData

Method	PUT
Description	Import the configuration file of a specific scene.
Query	None.
Request	Opaque Data
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the scene ID.

A.4.31 /ISAPI/DisplayDev/VideoWall/<ID>/scene/capabilities

Get scene configuration capability.

Request URI Definition

Table A-119 GET /ISAPI/DisplayDev/VideoWall/<ID>/scene/capabilities

Method	GET
Description	Get scene configuration capability.
Query	None.
Request	None.
Response	Succeeded: ***XML_SceneCap*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.32 /ISAPI/DisplayDev/VideoWall/<ID>/scene/isRunning

Get the current scene.

Request URI Definition

Table A-120 GET /ISAPI/DisplayDev/VideoWall/<ID>/scene/isRunning

Method	GET
Description	Get the current scene.
Query	None.
Request	None.
Response	Succeeded: ***XML_RunningScene*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URL refers to the video wall ID.

A.4.33 /ISAPI/DisplayDev/VideoWall/<ID>/virtualLED

Get, set parameters of all virtual LEDs, or delete all virtual LEDs; add a virtual LED.

Request URI Definition

Table A-121 GET /ISAPI/DisplayDev/VideoWall/<ID>/virtualLED

Method	GET
Description	Get parameters of all virtual LEDs.
Query	None.
Request	None.
Response	Succeeded: ***XML_VirtualLEDOnWallList*** Failed: ***XML_ResponseStatus***

Table A-122 PUT /ISAPI/DisplayDev/VideoWall/<ID>/virtualLED

Method	PUT
Description	Set parameters of all virtual LEDs.
Query	None.
Request	***XML_VirtualLEDOnWallList***
Response	***XML_ResponseStatus***

Table A-123 POST /ISAPI/DisplayDev/VideoWall/<ID>/virtualLED

Method	POST
Description	Add a virtual LED.
Query	None.
Request	***XML_VirtualLEDOnWall***
Response	***XML_ResponseStatus***

Table A-124 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/virtualLED

Method	DELETE
Description	Delete all virtual LEDs.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.34 /ISAPI/DisplayDev/VideoWall/<ID>/virtualLED/<ID>

Get, set parameters of a specific virtual LED, or delete a specific virtual LED.

Request URI Definition

Table A-125 GET ISAPI/DisplayDev/VideoWall/<ID>/virtualLED/<ID>

Method	GET
Description	Get parameters of a specific virtual LED.
Query	None.
Request	None.
Response	Succeeded: ***XML_VirtualLEDOnWall*** Failed: ***XML_ResponseStatus***

Table A-126 PUT ISAPI/DisplayDev/VideoWall/<ID>/virtualLED/<ID>

Method	PUT
Description	Set parameters of a specific virtual LED.
Query	None.
Request	***XML_VirtualLEDOnWall***
Response	***XML_ResponseStatus***

Table A-127 DELETE ISAPI/DisplayDev/VideoWall/<ID>/virtualLED/<ID>

Method	DELETE
Description	Delete a specific virtual LED.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the virtual LED ID.

A.4.35 /ISAPI/DisplayDev/VideoWall/<ID>/virtualLED/<ID>/capabilities

Get configuration capability of a specific virtual LED.

Request URI Definition

Table A-128 GET /ISAPI/DisplayDev/VideoWall/<ID>/virtualLED/<ID>/capabilities

Method	GET
Description	Get capability of a specific virtual LED.
Query	None.
Request	None.
Response	Succeeded: ***XML_VirtualLEDOnWall*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the virtual LED ID.

A.4.36 /ISAPI/DisplayDev/VideoWall/<ID>/virtualLED/capabilities

Get configuration capability of all virtual LEDs.

Request URI Definition

Table A-129 GET /ISAPI/DisplayDev/VideoWall/<ID>/virtualLED/capabilities

Method	GET
Description	Get configuration capability of all virtual LEDs.
Query	None.
Request	None.
Response	Succeeded: ***XML_VirtualLEDCap*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.37 /ISAPI/DisplayDev/VideoWall/<ID>/windows

Get or set parameters of all windows; delete all windows; add a window.

Table A-130 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows

Method	GET
Description	Get parameters of all windows.

Query	None.
Request	None.
Response	Succeeded: ***XML_WallWindowList*** Failed: ***XML_ResponseStatus***

Table A-131 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows

Method	PUT
Description	Set parameters of all windows.
Query	None.
Request	***XML_WallWindowList***
Response	***XML_ResponseStatus***

Table A-132 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/windows

Method	DELETE
Description	Delete all windows.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Table A-133 POST /ISAPI/DisplayDev/VideoWall/<ID>/windows

Method	POST
Description	Add a window.
Query	None.
Request	***XML_WallWindow***
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.38 /ISAPI/DisplayDev/VideoWall/<ID>/windows/capabilities

Get video wall window capabilities.

Request URI Definition

Table A-134 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/capabilities

Method	GET
Description	Get video wall window capabilities.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallWindowCap*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the video wall ID.

A.4.39 /ISAPI/DisplayDev/VideoWall/<ID>/windows/status

Get decoding status of all sub-windows of all windows.

Request URI Definition

Table A-135 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/status

Method	GET
Description	Get decoding status of all sub-windows of all windows.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallWindowStatusList*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID.

A.4.40 /ISAPI/DisplayDev/VideoWall/<ID>/windows/subSteam/capabilities?format=json

Get the configuration capability of the stream type of the windows.

Request URI Definition

Table A-136 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/subSteam/capabilities?format=json

Method	GET
Description	Get the configuration capability of the stream type of the windows.
Query	**format**: determine the format of request or response message.
Request	None.
Response	Succeeded: ***JSON_MutiScreenSubStreamCap*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to video wall ID.

A.4.41 /ISAPI/DisplayDev/VideoWall/<ID>/windows/subSteam?format=json

Operations about the configuration of the stream type for streaming when the number of windows exceeds the limit.

Request URI Definition

Table A-137 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/subSteam?format=json

Method	GET
Description	Get the configuration parameters of the stream type for streaming when the number of windows exceeds the limit.
Query	**format**: determine the format of request or response message.
Request	None.
Response	Succeeded: ***JSON_MutiScreenSubStream*** Failed: ***JSON_ResponseStatus***

A.4.42 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>

Get or set parameters of a specific window; delete a specific window.

Request URI Definition

Table A-138 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>

Method	GET
Description	Get parameters of a specific window.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallWindow*** Failed: ***XML_ResponseStatus***

Table A-139 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>

Method	PUT
Description	Set parameters of a specific window.
Query	None.
Request	***XML_WallWindow***
Response	***XML_ResponseStatus***

Table A-140 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>

Method	DELETE
Description	Delete a specific window.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the window ID.

A.4.43 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/top

Top the window.

Request URI Definition

Table A-141 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/top

Method	PUT
Description	Top the window.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the window ID.

A.4.44 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/bottom

Bottom the window.

Request URI Definition

Table A-142 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/bottom

Method	PUT
Description	Bottom the window.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the window ID.

A.4.45 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>capabilities

Get configuration capability of a specific window.

Request URI Definition

Table A-143 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>capabilities

Method	GET
Description	Get configuration capability of a specific window .
Query	None.
Request	None.
Response	Succeeded: ***XML_Cap_WallWindow*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the window ID.

A.4.46 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/status

Get decoding status of all sub windows of a specific window.

Request URI Definition

Table A-144 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/status

Method	GET
Description	Get decoding status of all sub windows of a specific window.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallWindowStatus*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the window ID.

A.4.47 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub

Get or set parameters of all sub-windows of a specific window.

Request URI Definition

Table A-145 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub

Method	GET
Description	Get parameters of all sub-windows of a specific window.
Query	None.
Request	None.
Response	Succeeded: ***XML_SubWindowList*** Failed: ***XML_ResponseStatus***

Table A-146 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub

Method	PUT
Description	Set parameters of all sub-windows of a specific window.
Query	None.
Request	***XML_SubWindowList***
Response	***XML_ResponseStatus***

Table A-147 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub

Method	DELETE
Description	Delete all sub-windows of a specific window.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, and the second refers to the window ID.

A.4.48 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>

Get or set parameters of a specific sub-window; delete a specific sub-window.

Request URI Definition

Table A-148 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>

Method	GET
Description	Get parameters of a specified sub-window.
Query	None.
Request	None.
Response	Succeeded: ***XML_SubWindow*** Failed: ***XML_ResponseStatus***

Table A-149 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>

Method	PUT
Description	Set parameters of a specified sub-window.
Query	None.
Request	***XML_SubWindow***
Response	***XML_ResponseStatus***

Table A-150 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>

Method	DELETE
Description	Delete a specified sub-window.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.49 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/capabilities

Get configuration capability of a specific sub-window.

Request URI Definition

Table A-151 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/capabilities

Method	GET
Description	Get configuration capability of a specific sub-window.
Query	None.
Request	None.
Response	Succeeded: ***XML_Cap_SubWindow*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.50 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/cycle

Get, set, or delete parameters of auto-switch decoding.

Request URI Definition

Table A-152 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/cycle

Method	GET
Description	Get parameters of auto-switch decoding.
Query	None.
Request	None.
Response	Succeeded: ***XML_CycleModeParam*** Failed: ***XML_ResponseStatus***

Table A-153 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/cycle

Method	PUT
Description	Set parameters of auto-switch decoding.
Query	None.
Request	***XML_CycleModeParam***
Response	***XML_ResponseStatus***

Table A-154 DELETE /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/cycle

Method	DELETE
Description	Delete parameters of auto-switch decoding.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.51 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/cycle/wallConference

Get or set parameters about auto-switch conference of sub-windows.

Request URI Definition

Table A-155 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/cycle/wallConference

Method	GET
Description	Get parameters about auto-switch conference of sub-windows.
Query	None.
Request	None.
Response	Succeeded: ***XML_SubWndConferenceCycle*** Failed: ***XML_ResponseStatus***

Table A-156 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/cycle/wallConference

Method	PUT
Description	Set parameters about auto-switch conference of sub-windows.
Query	None.
Request	***XML_SubWndConferenceCycle***
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.52 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/decodeDelay

Get or set parameters of decoding delay.

Request URI Definition

Table A-157 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/decodeDelay

Method	GET
Description	Get parameters of decoding delay.
Query	None.
Request	None.
Response	Succeeded: ***XML_DecodeDelayParam*** Failed: ***XML_ResponseStatus***

Table A-158 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/decodeDelay

Method	PUT
Description	Set parameters of decoding delay.
Query	None.
Request	***XML_DecodeDelayParam***
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.53 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/decodeDelay/capabilities

Get decoding delay capability.

Request URI Definition

Table A-159 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/decodeDelay/capabilities

Method	GET
Description	Get decoding delay capability.
Query	None.
Request	None.
Response	Succeeded: ***XML_DecodeDelayParam*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.54 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/osd

Get or set OSD parameters of a specific sub-window.

Request URI Definition

Table A-160 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/osd

Method	GET
Description	Get OSD parameters of a specific sub-window.
Query	None.
Request	None.
Response	Succeeded: ***XML_DecodeOSD*** Failed: ***XML_ResponseStatus***

Table A-161 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/osd

Method	PUT
Description	Set OSD parameters of a specific sub-window.
Query	None.
Request	***XML_DecodeOSD***
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.55 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/osd/capabilities

Get OSD configuration capability of a specific sub-window.

Request URI Definition

Table A-162 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/osd/capabilities

Method	GET
Description	Get OSD configuration capability of a specific sub-window.
Query	None.
Request	None.
Response	Succeeded: ***XML_DecodeOSD*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.56 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/param

Get or set sub window parameters.

Request URI Definition

Table A-163 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/param

Method	GET
Description	Get sub window parameters.
Query	None
Request	None
Response	Succeeded: ***XML_SubWindowParam*** Failed: ***XML_ResponseStatus***

Table A-164 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/param

Method	PUT
Description	Set sub window parameters.
Query	None
Request	***XML_SubWindowParam***
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second <**ID**> represents the window ID, and the third <**ID**> is the sub window ID.

A.4.57 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/param/capabilities

Get sub window configuration capability to check the supported parameters and parameter value range.

Request URI Definition

Table A-165 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/param/capabilities

Method	GET
Description	Get sub window configuration capability to check the supported parameters and parameter value range.
Query	None
Request	None
Response	Succeeded: ***XML_SubWindowParamCap*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second <**ID**> represents the window ID, and the third <**ID**> is the sub window ID.

A.4.58 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/picture

Capture the current image of a specific sub-window.

Request URI Definition

Table A-166 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/picture

Method	GET
Description	Capture the current image of a specific sub-window.
Query	videoResolutionWidth videoResolutionHeight
Request	None.
Response	Captured picture (over HTTP)

Remarks

- The captured picture can only be saved in JPEG format.
- The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.59 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/playback

Set playback parameters.

Request URI Definition

Table A-167 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/playback

Method	PUT
Description	Set playback parameters.
Query	None.
Request	***XML_PlaybackCtrl***
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.60 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/playback/status

Get playback status.

Request URI Definition

Table A-168 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/playback/status

Method	GET
Description	Get playback status.
Query	None.
Request	None.
Response	Succeeded: ***XML_PlaybackStatus*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.61 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/start

Start dynamic decoding.

Request URI Definition

Table A-169 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/start

Method	PUT
Description	Start dynamic decoding.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.62 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/stop

Stop dynamic decoding.

Request URI Definition

Table A-170 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/stop

Method	PUT
Description	Stop dynamic decoding.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.63 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/vcaDec

Get or set intelligent decoding parameters of a specific sub-window.

Request URI Definition

Table A-171 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/vcaDec

Method	GET
Description	Get intelligent decoding parameters of a specific sub-window.
Query	None.
Request	None.
Response	Succeeded: ***XML_VcaDec*** Failed: ***XML_ResponseStatus***

Table A-172 PUT /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/vcaDec

Method	PUT
Description	Set intelligent decoding parameters of a specific sub-window.
Query	None.
Request	***XML_VcaDec***
Response	***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.64 /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/status

Get decoding status of a specific sub-window.

Request URI Definition

Table A-173 GET /ISAPI/DisplayDev/VideoWall/<ID>/windows/<ID>/sub/<ID>/status

Method	GET
Description	Get decoding status of a specific sub-window.
Query	None.
Request	None.
Response	Succeeded: ***XML_SubWinStatus*** Failed: ***XML_ResponseStatus***

Remarks

The first <**ID**> in the request URI refers to the video wall ID, the second refers to the window ID, and the third refers to the sub-window ID.

A.4.65 /ISAPI/DisplayDev/VideoWall/baseMap/circle

Get, set, or delete all auto-switch configuration parameters, or add auto-switch configuration parameters.

Request URI Definition

Table A-174 GET /ISAPI/DisplayDev/VideoWall/baseMap/circle

Method	GET
Description	Get all auto-switch configuration parameters.
Query	None.
Request	None.
Response	Succeeded: ***XML_BaseMapCircleList*** Failed: ***XML_ResponseStatus***

Table A-175 PUT /ISAPI/DisplayDev/VideoWall/baseMap/circle

Method	PUT
Description	Set all auto-switch configuration parameters.
Query	None.

Request	***XML_BaseMapCircleList***
Response	***XML_ResponseStatus***

Table A-176 POST /ISAPI/DisplayDev/VideoWall/baseMap/circle

Method	POST
Description	Add auto-switch configuration parameters.
Query	None.
Request	***XML_BaseMapCircle***
Response	***XML_ResponseStatus***

Table A-177 DELETE /ISAPI/DisplayDev/VideoWall/baseMap/circle

Method	DELETE
Description	Delete all auto-switch configuration parameters.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.4.66 /ISAPI/DisplayDev/VideoWall/baseMap/circle/<ID>

Get, set, or delete auto-switch configuration parameters.

Request URI Definition

Table A-178 GET /ISAPI/DisplayDev/VideoWall/baseMap/circle/<ID>

Method	GET
Description	Get auto-switch configuration parameters.
Query	None
Request	None
Response	Succeeded: ***XML_BaseMapCircle*** Failed: ***XML_ResponseStatus***

Table A-179 PUT /ISAPI/DisplayDev/VideoWall/baseMap/circle/<ID>

Method	PUT
Description	Set auto-switch configuration parameters.
Query	None

Request	***XML_BaseMapCircle***
Response	***XML_ResponseStatus***

Table A-180 DELETE /ISAPI/DisplayDev/VideoWall/baseMap/circle/<ID>

Method	DELETE
Description	Delete auto-switch configuration parameters.
Query	None
Request	None
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the URI refers to auto-switch ID.

A.4.67 /ISAPI/DisplayDev/VideoWall/baseMap/circle/capabilities

Get the auto-switch parameters configuration capability.

Request URI Definition

Table A-181 GET /ISAPI/DisplayDev/VideoWall/baseMap/circle/capabilities

Method	GET
Description	Get the auto-switch parameters configuration capability.
Query	None
Request	None
Response	Succeeded: ***XML_BaseMapCircleListCap*** Failed: ***XML_ResponseStatus***

A.5 Remote Control Related

A.5.1 /ISAPI/System/remoteCtrl/down

Press the down button to move down or reduce the playback speed.

Request URL Definition

Table A-182 GET /ISAPI/System/remoteCtrl/down

Method	GET
Description	Press the down button to move down or reduce the playback speed.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.2 /ISAPI/System/remoteCtrl/edit

Press the EDIT button to edit the controls.

Request URL Definition

Table A-183 GET /ISAPI/System/remoteCtrl/edit

Method	GET
Description	Press the EDIT button to edit the controls.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.3 /ISAPI/System/remoteCtrl/enter

Press the ENTER button to confirm.

Request URL Definition

Table A-184 GET /ISAPI/System/remoteCtrl/enter

Method	GET
Description	Press the ENTER button to confirm.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.4 /ISAPI/System/remoteCtrl/esc

Press the ESC button to exit.

Request URL Definition

Table A-185 GET /ISAPI/System/remoteCtrl/esc

Method	GET
Description	Press the ESC button to exit.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.5 /ISAPI/System/remoteCtrl/F1

Switch between playback and reverse playback.

Request URL Definition

Table A-186 GET /ISAPI/System/remoteCtrl/F1

Method	GET
Description	Switch between playback and reverse playback.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.6 /ISAPI/System/remoteCtrl/left

Press the left button to move left.

Request URL Definition

Table A-187 GET /ISAPI/System/remoteCtrl/left

Method	GET
Description	Press the left button to move left.
Query	None.

Request	None.
Response	***XML_ResponseStatus***

A.5.7 /ISAPI/System/remoteCtrl/menu

Press the MENU button to go to the main menu.

Request URL Definition

Table A-188 GET /ISAPI/System/remoteCtrl/menu

Method	GET
Description	Press the MENU button to go to the main menu.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.8 /ISAPI/System/remoteCtrl/notSupport

Display the prompt information that the pressed button is not supported by the device.

Request URL Definition

Table A-189 GET /ISAPI/System/remoteCtrl/notSupport

Method	GET
Description	Display the prompt information that the pressed button is not supported by the device.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.9 /ISAPI/System/remoteCtrl/num_<NumID>

Press the digit button to start live view or playback of the corresponding digital channel.

Request URL Definition

Table A-190 GET /ISAPI/System/remoteCtrl/num_<NumID>

Method	GET
Description	Press the digit button to start live view or playback of the corresponding digital channel.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

- The <**NumID**> in the request URL refers to the digital channel No. which is between 0 and 9. For digital channel No. larger than 9, you should press the corresponding digit buttons continuously in one second.
- For interfaces except live view and playback, the digit buttons are used for inputting.

A.5.10 /ISAPI/System/remoteCtrl/play

Press the PLAY button to start playback.

Request URL Definition

Table A-191 GET /ISAPI/System/remoteCtrl/play

Method	GET
Description	Press the PLAY button to start playback.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.11 /ISAPI/System/remoteCtrl/power

Press the power button to power on or power off the device.

Request URL Definition

Table A-192 GET /ISAPI/System/remoteCtrl/power

Method	GET
Description	Press the power button to power on or power off the device.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.12 /ISAPI/System/remoteCtrl/prev

Press the PREV button to control window division during live view or playback.

Request URL Definition

Table A-193 GET /ISAPI/System/remoteCtrl/prev

Method	GET
Description	Press the PREV button to control window division during live view or playback.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The maximum number of divided windows depends on the device capability.

A.5.13 /ISAPI/System/remoteCtrl/rec

Press the REC button to start or stop recording.

Request URL Definition

Table A-194 GET /ISAPI/System/remoteCtrl/rec

Method	GET
Description	Press the REC button to start or stop recording.
Query	None.

Request	None.
Response	***XML_ResponseStatus***

A.5.14 /ISAPI/System/remoteCtrl/right

Press the right button to move right.

Request URL Definition

Table A-195 GET /ISAPI/System/remoteCtrl/right

Method	GET
Description	Press the right button to move right.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.15 /ISAPI/System/remoteCtrl/stop

Press the stop button to stop playing.

Request URL Definition

Table A-196 GET /ISAPI/System/remoteCtrl/stop

Method	GET
Description	Press the stop button to stop playing.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.5.16 /ISAPI/System/remoteCtrl/up

Press the up button to move up or increase the playback speed.

Request URL Definition

Table A-197 GET /ISAPI/System/remoteCtrl/up

Method	GET
Description	Press the up button to move up or increase the playback speed.
Query	None.
Request	None.
Response	***XML_ResponseStatus***

A.6 Auxiliary Screen Related

A.6.1 /ISAPI/DisplayDev/Auxiliary/ScreenServer/<ID>/loginCfg

Get, set, or delete login parameters of a specific screen sever.

Request URL Definition

Table A-198 GET /ISAPI/DisplayDev/Auxiliary/ScreenServer/<ID>/loginCfg

Method	GET
Description	Get login parameters of a specific screen sever.
Query	None.
Request	None.
Response	Succeeded: ***XML_ServerLoginCfg*** Failed: ***XML_ResponseStatus***

Table A-199 PUT /ISAPI/DisplayDev/Auxiliary/ScreenServer/<ID>/loginCfg

Method	PUT
Description	Set login parameters of a specific screen sever.
Query	None.
Request	***XML_ServerLoginCfg***
Response	***XML_ResponseStatus***

Table A-200 DELETE /ISAPI/DisplayDev/Auxiliary/ScreenServer/<ID>/loginCfg

Method	DELETE
Description	Delete login parameters of a specific screen sever.

Query	None.
Request	None.
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the screen server ID.

A.6.2 /ISAPI/DisplayDev/Auxiliary/ScreenServer/<ID>/loginCfg/capabilities

Get the login configuration capability of a specific screen server.

Request URI Definition

Table A-201 GET /ISAPI/DisplayDev/Auxiliary/ScreenServer/<ID>/loginCfg/capabilities

Method	GET
Description	Get the login configuration capability of a specific screen server.
Query	None.
Request	None.
Response	Succeeded: ***XML_ServerLoginCfg*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the screen server ID.

A.6.3 /ISAPI/DisplayDev/Auxiliary/ScreenServer/loginCfg

Get login parameters of all screen servers, or add a screen server.

Request URI Definition

Table A-202 GET /ISAPI/DisplayDev/Auxiliary/ScreenServer/loginCfg

Method	GET
Description	Get login parameters of all screen servers.
Query	None.
Request	None.
Response	Succeeded: ***XML_ServerLoginCfgList*** Failed: ***XML_ResponseStatus***

Table A-203 POST /ISAPI/DisplayDev/Auxiliary/ScreenServer/loginCfg

Method	POST
Description	Add a screen server.
Query	None.
Request	***XML_ServerLoginCfg***
Response	***XML_ResponseStatus***

A.6.4 /ISAPI/DisplayDev/Auxiliary/WallMCU/<ID>/wallConference

Get information of a specific MCU conference.

Request URI Definition

Table A-204 GET /ISAPI/DisplayDev/Auxiliary/WallMCU/<ID>/wallConference

Method	GET
Description	Get information of a specific MCU conference.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallMCU*** Failed: ***XML_ResponseStatus***

A.6.5 /ISAPI/DisplayDev/Auxiliary/WallMCU/<ID>/wallConference/<ID>/cycle

Get or set parameters of conference auto-switch.

Table A-205 GET /ISAPI/DisplayDev/Auxiliary/WallMCU/<ID>/wallConference/<ID>/cycle

Method	GET
Description	Get parameters of conference auto-switch.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallConferenceCycle*** Failed: ***XML_ResponseStatus***

Table A-206 PUT /ISAPI/DisplayDev/Auxiliary/WallMCU/<ID>/wallConference/<ID>/cycle

Method	PUT
Description	Set parameters of conference auto-switch.
Query	None.
Request	***XML_WallConferenceCycle***
Response	***XML_ResponseStatus***

A.6.6 /ISAPI/DisplayDev/Auxiliary/WallMCU/<ID>/wallConference/<ID>/cycle/capabilities

Get the configuration capability of conference auto-switch.

Table A-207 GET /ISAPI/DisplayDev/Auxiliary/WallMCU/<ID>/wallConference/<ID>/cycle/capabilities

Method	GET
Description	Get the configuration capability of conference auto-switch.
Query	None.
Request	None.
Response	Succeeded: ***XML_Cap_WallConferenceCycle*** Failed: ***XML_ResponseStatus***

A.6.7 /ISAPI/DisplayDev/Auxiliary/WallMCU/wallConference

Get all MCU conference information.

Request URI Definition

Table A-208 GET /ISAPI/DisplayDev/Auxiliary/WallMCU/wallConference

Method	GET
Description	Get all MCU conference information.
Query	None.
Request	None.
Response	Succeeded: ***XML_WallMCUList*** Failed: ***XML_ResponseStatus***

A.7 General Capabilities Related

A.7.1 /ISAPI/DisplayDev/capabilities

Get the capability of screens.

Request URI Definition

Table A-209 GET /ISAPI/DisplayDev/capabilities

Method	GET
Description	Get the capability of screens.
Query	None.
Request	None.
Response	Succeeded: ***XML_DisplayCap*** Failed: ***XML_ResponseStatus***

A.7.2 /ISAPI/System/capabilities

Get device capability.

Request URI Definition

Table A-210 GET /ISAPI/System/capabilities

Method	GET
Description	Get device capability.
Query	None
Request	None.
Response	Succeeded: ***XML_DeviceCap*** Failed: ***XML_ResponseStatus***

A.8 Sub-board Related

A.8.1 /ISAPI/System/Board/<ID>/config

Get or set parameters of a specific sub-board.

Request URI Definition

Table A-211 GET /ISAPI/System/Board/<ID>/config

Method	GET
Description	Get parameters of a specific sub-board.
Query	None.
Request	None.
Response	Succeeded: ***XML_InputBoardCfg*** Failed: ***XML_ResponseStatus***

Table A-212 PUT /ISAPI/System/Board/<ID>/config

Method	PUT
Description	Set parameters of a specific sub-board.
Query	None.
Request	***XML_InputBoardCfg***
Response	***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the sub-board ID.

A.8.2 /ISAPI/System/Board/<ID>/status

Get status of a specific sub-board.

Request URI Definition

Table A-213 GET /ISAPI/System/Board/<ID>/status

Method	GET
Description	Get status of a specific sub-board.
Query	None.
Request	None.
Response	Succeeded: ***XML_BoardStatus*** Failed: ***XML_ResponseStatus***

Remarks

The <**ID**> in the request URI refers to the sub-board ID.

A.8.3 /ISAPI/System/Board/capabilities

Get sub-board capability.

Table A-214 GET /ISAPI/System/Board/capabilities

Method	GET
Description	Get sub-board capability.
Query	None.
Request	None.
Response	Succeeded: ***XML_AllBoardCap*** Failed: ***XML_ResponseStatus***

A.8.4 /ISAPI/System/Board/config

Get or set parameters of all sub-boards.

Request URI Definition

Table A-215 GET /ISAPI/System/Board/config

Method	GET
Description	Get parameters of all sub-boards.
Query	None.
Request	None.
Response	Succeeded: ***XML_InputBoardCfgList*** Failed: ***XML_ResponseStatus***

Table A-216 PUT /ISAPI/System/Board/config

Method	PUT
Description	Set parameters of all sub-boards.
Query	None.
Request	***XML_InputBoardCfgList***
Response	***XML_ResponseStatus***

A.8.5 /ISAPI/System/Board/status

Get status of all sub-boards.

Request URI Definition

Table A-217 GET /ISAPI/System/Board/status

Method	GET
Description	Get status of all sub-boards.
Query	None.
Request	None.
Response	Succeeded: ***XML_BoardStatusList*** Failed: ***XML_ResponseStatus***

A.8.6 /ISAPI/System/Board/status/capabilities

Get capability of the status of all sub-boards.

Request URI Definition

Table A-218 GET /ISAPI/System/Board/status/capabilities

Method	GET
Description	Get capability of the status of all sub-boards.
Query	None.
Request	None.
Response	Succeeded: ***XML_BoardStatusCapList*** Failed: ***XML_ResponseStatus***

Appendix B. Request and Response Messages

B.1 JSON_MutiScreenSubStream

MutiScreenSubStream message in JSON format

```
{
  "MutiScreenSubStream":{
    "enabled": ,
/*optional, boolean type, whether to enable the function*/
    "winConutLimit":"",
/*required, string type, threshold number of divided windows. When the number of divided windows exceeds the threshold, streams of low performance will be used*/
  }
}
```

B.2 JSON_MutiScreenSubStreamCap

JSON message about configuration capability of sub stream of the windows

```
{
  "MutiScreenSubStreamCap":{
    "enabled":{
/*optional, boolean*/
      "@opt":[true,false]
    },
    "winConutLimit":{
/*required, string,   threshold number of divided windows. When the number of divided windows exceeds the threshold, streams of low performance will be used*/
      "@opt":["1","4","6","8","9","16","32","64"]
    }
  }
}
```

B.3 JSON_ResponseStatus

JSON message about response status

```
{
  "requestURL":"",
/*optional, string, request URL*/
  "statusCode": ,
/*required, int, status code*/
  "statusString":"",
/*required, string, status description*/
  "subStatusCode":"",
```

```
/*required, string, sub status code*/
  "errorCode": ,
/*optional, int, error code, which corresponds to subStatusCode, this field is required when statusCode is not 1. The returned value is the transformed decimal number*/
  "errorMsg":"",
/*optional, string, error details, this field is required when statusCode is not 1*/
}
```

Note

See ***Response Codes of Text Protocol*** for details about the status codes, sub status codes, error codes, and error descriptions.

B.4 XML_AllBoardCap

XML message about sub-board capability

```
<AllBoardCap xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
 <BoardCapList>
  <!--required-->
  <BoardCap>
   <id>
    <!--required, xs:string-->
   </id>
   <isSupportBasicParam opt="ture,false" >
    <!--optional, xs:boolean, whether it supports basic parameter configuration-->
   </isSupportBasicParam>
   <isSupportSvrParam opt="ture,false" >
    <!--optional, xs:boolean-->
   </isSupportSvrParam>
   <isSupportNetwork opt="ture,false" >
    <!--optional, xs:boolean, whether it supports network parameter configuration-->
   </isSupportNetwork>
   <isSupportNetAddrTrans opt="true,false" >
    <!--optional, xs:boolean, whether it supports NAT configuration-->
   </isSupportNetAddrTrans>
   <isSupportStatus opt="true,false" >
    <!--optional, xs:boolean, whether it supports getting status-->
   </isSupportStatus>
   <isSupportNetworkArea opt="true,false" >
    <!--optional, xs:boolean, whether it supports network area configuration-->
   </isSupportNetworkArea>
  </BoardCap>
 </BoardCapList>
</AllBoardCap>
```

B.5 XML_AudioCap

XML message about audio capability

```
<AudioCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <audioInputsPortNums><!--optional, xs:integer--></audioInputsPortNums>
 <audioOutputsPortNums><!--optional, xs:integer--></audioOutputsPortNums>
</AudioCap>
```

B.6 XML_AudioOutputChannel

XML message about capability of a specific audio output channel

```
<AudioOutputChannel version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--required, xs:integer--></id>
 <enabled><!--required, xs:boolean--></enabled>
 <channelName><!--optional, xs:string--></channelName>
 <sourceType><!—required, xs:string, signal source type: "audioInput, subWin"--></sourceType>
 <AudioWithInput><!--dependent, sourceType is "audioInput"-->
 <AudioInputBindID><!--optional, xs:integer--></AudioInputBindID>
 </AudioWithInput>
 <AudioWithSubWin><!—dependent, sourceType is "subWin"-->
  <wallID><!--optional, xs:integer--></wallID>
  <windowID><!--optional, xs:integer--></windowID>
  <subWinID><!--optional, xs:integer--></subWinID>
 </AudioWithSubWin>
</AudioOutputChannel>
```

B.7 XML_AudioOutputChannelList

XML message about parameters of all audio output channels

```
<AudioOutputChannelList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <AudioOutputChannel/><!--optional-->
</AudioOutputChannelList>
```

B.8 XML_BaseMap

XML message about background picture parameters

```
< BaseMap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--optional, xs:string, background picture ID--> </id>
 <name><!--optional, xs:string, background picture name--></name>
 <fileType><!—read-only, optional, xs:string,background picture format--></fileType>
 <imageWidth><!—read-only, optional, xs:integer, background picture width--></imageWidth>
```

```
 <imageHeight><!—read-only, optional, xs:integer, background picture height--></imageHeight>
</BaseMap>
```

B.9 XML_BaseMapCap

XML message about configuration capabilities of background pictures

```
<BaseMapCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <baseMapNums><!--read-only, optional, xs:integer--></baseMapNums>
 <supportFileType>
  <!--read-only, optional, xs:string, "JPEG"-->
 </supportFileType>
 <maxFileSize><!—read-only, optional, xs:integer--></maxFileSize>
 <maxImageWidth><!—read-only, optional, xs:integer--></maxImageWidth>
 <maxImageHeight><!—read-only, optional, xs:integer--></maxImageWidth>
 <BaseMapAlignUnit><!--optioanl-->
  <width opt="0,2,4,8,…"><!--required, xs:integer--></width>
  <height opt="0,2,4,8…"><!--required, xs:integer--></height>
 </BaseMapAlignUnit>
 <isSupportBaseMapCircle opt="true"><!--optional, xs:boolean--></isSupportBaseMapCircle>
</BaseMapCap>
```

B.10 XML_BaseMapCircle

XML message about auto-switch configuration parameters

```
<?xml version="1.0" encoding="utf-8"?>
<BaseMapCircle version="2.0"><!--optional-->
 <id><!--required, read-only, xs:integer--></id>
 <name><!--required, xs:string--></name>
 <BaseMapList><!--required, background picture list-->
  <BaseMap><!--required, background picture information-->
   <baseMapType opt="picture,ultraHD"><!--required, xs:string, background picture type: "picture", "ultraHD"--></
baseMapType>
   <baseMapNo><!--required, xs:integer, No. of background picture--></baseMapNo>
   <displayTime><!--required, xs:integer, unit:s--></displayTime>
  </BaseMap>
 </BaseMapList>
</BaseMapCircle>
```

B.11 XML_BaseMapCircleList

XML message about list of auto-switch configuration parameters

```
<?xml version="1.0" encoding="utf-8"?>
<BaseMapCircleList version="2.0">
 <BaseMapCircle><!--optional-->
```

```
   <id><!--required, read-only, xs:integer--></id>
   <name><!--required, xs:string--></name>
   <BaseMapList><!--required, background picture list-->
    <BaseMap><!--required, background picture information-->
     <baseMapType opt="picture,ultraHD"><!--required, xs:string, background picture type: "picture", "ultraHD"--></
baseMapType>
     <baseMapNo><!--required, xs:integer, No. of background picture--></baseMapNo>
     <displayTime><!--required, xs:integer, unit:s--></displayTime>
    </BaseMap>
   </BaseMapList>
  </BaseMapCircle>
</BaseMapCircleList>
```

B.12 XML_BaseMapCircleListCap

XML message about the auto-switch parameters configuration capability

```
<?xml version="1.0" encoding="utf-8"?>
<BaseMapCircleListCap size="" version="2.0">
 <BaseMapCircle><!--required-->
  <id min="" max=""><!--required, read-only, xs:integer--></id>
  <enabled opt="true,false"><!--required, xs:boolean--></enabled>
  <name min="" max=""><!--required, xs:string--></name>
  <BaseMapList size=""><!--required-->
   <BaseMap><!--required-->
    <baseMapType opt="picture,ultraHD"><!--required, xs:string--></baseMapType>
    <baseMapNo min="" max=""><!--required, xs:integer--></baseMapNo>
    <displayTime min="" max=""><!--required, xs:integer, unit:s--></displayTime>
   </BaseMap>
  </BaseMapList>
 </BaseMapCircle>
</BaseMapCircleListCap>
```

B.13 XML_BaseMapList

XML message about parameters of all background pictures

```
<BaseMapList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <BaseMap/><!--optional-->
</BaseMapList>
```

B.14 XML_BaseMapOnWall

XML message about base map parameters

```
<BaseMapOnWall xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
 <id>
```

```
  <!--optional, xs:integer-->
 </id>
 <enabled>
  <!--optional, xs:boolean-->
 </enabled>
 <baseMapType opt="picture,video" >
  <!--optional, xs:string-->
 </baseMapType>
 <baseMapID>
  <!--dependent, xs:integer, it is valid only when baseMapType is "picture"-->
 </baseMapID>
 <wndOperateMode opt="uniformCoordinate,resolutionCoordinate" >
  <!--optional, xs:string, window operation mode: uniform coordinate, resolution coordinate-->
 </wndOperateMode>
 <Rect>
  <Coordinate><!--required-->
   <x><!--required, xs:integer--></x>
   <y><!--required, xs:integer--></y>
  </Coordinate>
  <width>
  </width>
  <height>
  </height>
 </Rect>
 <Coordinate><!--required-->
  <x><!--required, xs:integer--></x>
  <y><!--required, xs:integer--></y>
 </Coordinate>
 <ResolutionRect>
  <!--dependent, resolution coordinate-->
 </ResolutionRect>
</BaseMapOnWall>
```

See Also

XML_Rect

B.15 XML_BaseMapOnWallCap

XML message about capabilities of background pictures.

```
<BaseMapOnWallCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <baseMapOnWallNums><!--read-only, optional, xs:integer--></baseMapOnWallNums>
</BaseMapOnWallCap>
```

B.16 XML_BaseMapOnWallList

XML message about parameters of all base maps

```
<BaseMapOnWallList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <BaseMapOnWall/><!--optional-->
</BaseMapOnWallList>
```

B.17 XML_BoardStatus

XML message about status of a specific sub-board

```
<BoardStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--required, xs:string--></id>
 <isOnline><!--required, xs:boolean--></isOnline>
 <deviceUpTime><!--optional, ional, xs:integer, seconds--></deviceUpTime>
 <TemperatureList><!--optional, ional-->
  <Temperature>
   <tempSensorDescription><!--required, xs:string--></tempSensorDescription>
   <temperature><!--required, xs:float--></temperature>
  </Temperature>
 </TemperatureList>
 <FanList><!--optional, -->
  <Fan>
   <fanDescription><!--req, xs:string--></fanDescription>
   <speed><!--required, xs:integer--></speed>
  </Fan>
 </FanList>
 <CPUList><!--optional, -->
  <CPU>
   <cpuDescription><!--required, xs:string--></cpuDescription>
   <cpuUtilization><!--required, xs:integer, percentage 0..100--></cpuUtilization>
  </CPU>
 </CPUList>
 <MemoryList><!--optional, -->
  <Memory>
   <memoryDescription><!--required, xs:string--></memoryDescription>
   <memoryUsage><!--required, xs:float, in MB--></memoryUsage>
   <memoryAvailable><!--required, xs:float, in MB--></memoryAvailable>
  </Memory>
 </MemoryList>
 <openFileHandles><!--optional, , xs:integer --></openFileHandles>
</BoardStatus>
```

B.18 XML_BoardStatusCapList

XML message about capability of the status of all sub-boards

```
<?xml version="1.0" encoding="utf-8"?>
<BoardStatusCapList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <BoardStatusCap><!--optional-->
  <id><!--required, xs:integer--></id>
```

```
  <SubSysStatusList><!--required-->
   <SubSysStatus><!--required-->
    <id><!--required, xs:integer--></id>
    <type opt="DI2,DO2,UHDI,YI2"/><!--required, xs:string-->
    <isOnline opt="true,false"/><!--required, xs:boolean-->
    <syncStatus opt="normal,abnormal"/><!--optional, xs:string-->
    <ModuleList><!--required-->
     <Module><!--required-->
     <id><!--required, xs:integer--></id>
     <modDescription opt="CPU1,CPU2,CPU3"/><!--required, xs:string-->
     <MCU><!--optional-->
      <mcuUtilization min="" max=""/><!--required, xs:integer,unit:percentage-->
     </MCU>
     <PhysiMem><!--optional-->
      <physiMemUsage min="" max=""/><!--required, xs:integer,unit:MB-->
      <physiMemAvailable min="" max=""/><!--required, xs:integer,unit:MB-->
     </PhysiMem>
     <DispMem><!--optional-->
      <dispMemUsage min="" max=""/><!--required, xs:integer,unit:MB-->
      <dispMemAvailable min="" max=""/><!--required, xs:integer,unit:MB-->
     </DispMem>
     <CacheMem><!--optional-->
      <cacheMemUsage min="" max=""/><!--required, xs:integer,unit:MB-->
      <cacheMemAvailable min="" max=""/><!--required, xs:integer,unit:MB-->
     </CacheMem>
     <temperature min="" max=""/><!--optional, xs:float-->
     </Module>
    </ModuleList>
    <NetPortStatusList size=""><!--optional-->
     <NetPortStatus><!--required-->
      <id min="" max=""/><!--required, xs:integer-->
      <netPortDescription opt="ctrl,data1,data2"/><!--required, xs:string-->
      <linkStatus opt="connected,disconnected"/><!--optional, xs:string-->
      <upSpeed min="" max=""/><!--optional, xs:integer, unit:Bps-->
      <downSpeed min="" max=""/><!--optional, xs:integer, unit:Bps-->
     </NetPortStatus>
    </NetPortStatusList>
   </SubSysStatus>
  </SubSysStatusList>
 </BoardStatusCap>
</BoardStatusCapList>
```

B.19 XML_BoardStatusList

XML message about status of all sub-boards

```
<BoardStatusList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <BoardStatus/><!--optional-->
</BoardStatusList>
```

See Also

XML_BoardStatus

B.20 XML_Cap_Color

XML message about color configuration capability

```
<Color version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <brightnessLevel min="0" max="100"><!--optional, xs:integer--></brightnessLevel>
 <contrastLevel min="0" max="100"><!--optional, xs:integer--></contrastLevel>
 <saturationLevel min="0" max="100"><!--optional, xs:integer--></saturationLevel>
 <hueLevel min="0" max="100"><!--optional, xs:integer--></hueLevel>
</Color>
```

B.21 XML_Cap_InputCutOff

XML message about picture cropping capability of a specific signal source

```
<InputCutOff version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <leftCutOff min="0" max="30"><!--optional, xs:integer--></leftCutOff>
 <rightCutOff min="0" max="30"><!--optional, xs:integer--></rightCutOff>
 <topCutOff min="0" max="30"><!--optional, xs:integer--></topCutOff>
 <bottomCutOff min="0" max="30"><!--optional, xs:integer--></bottomCutOff>
</InputCutOff>
```

B.22 XML_Cap_InputPosition

XML message about image fine-tuning capability of the signal source

```
<InputPosition version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <horizontal min="-30" max="30"><!--optional, xs:integer--></horizontal>
 <vertical min="-30" max="30"><!--optional, xs:integer--></vertical>
</InputPosition>
```

B.23 XML_Cap_Resolution

XML message about resolution capability

```
<Resolution version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--required, integer--></id>
 <resolutionName max=""><!--optional, xs:string--></resolutionName>
 <imageWidth min="" max=""><!--required, xs:integer--></imageWidth>
 <imageHeight min="" max=""><!--required, xs:integer--></imageHeight>
 <refreshRate><!--opt,xs:integer--></refreshRate>
```

```
 <colorDepth opt="32, 16, 8"><!--required, xs:byte--></colorDepth>
 <scanType opt="progressiveScan, intervalScan"><!--required, xs:string--></scanType>
</Resolution>
```

B.24 XML_Cap_ResolutionList

Cap_ResolutionList capability message in XML format.

```
<ResolutionList size="" version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <Resolution/><!--required-->
</ResolutionList>
```

See Also

XML_Cap_Resolution

B.25 XML_Cap_SignalSourceText

XML message about a specific OSD parameter of a specific signal source

```
<SignalSourceText version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--required, xs:integer--></id>
 <enable><!--required, xs:boolean--></enable>
 <fontSize><!--required, xs:integer--></fontSize>
 <backgroudMode opt="transparent,coverage"><!--required,xs:string--></backgroudMode>
 <positionX max=""><!--required, xs:integer--></positionX>
 <positionY max=""><!--required, xs:integer--></positionY>
 <ForegroudColor><!--req-->
  <RGB><!--required, xs:integer--></RGB>
 </ForegroudColor>
 <BackgroudColor><!--required-->
  <RGB><!--required, xs:integer--></RGB>
 </BackgroudColor>
 <textContent max=""><!--required, xs:string--></textContent>
</SignalSourceText>
```

B.26 XML_Cap_SignalSourceTextList

XML format OSD parameters of all signal sources

```
<SignalSourceTextList size="" version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <SignalSourceText/>
</SignalSourceTextList>
```

See Also

XML_Cap_SignalSourceText

B.27 XML_Cap_SubWindow

XML message about sub-window capability

```
<SubWindow xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
 <id min="" max="" >
  <!--optioanl, integer-->
 </id>
 <SubWindowParam>
  <signalMode opt="video input, stream id, stream setting, alarm linkage" >
   <!--optional, xs:string-->
  </signalMode>
  <videoInputChannelID min="" max="" >
   <!--dependent, signalMode is "video input" , xs:string-->
  </videoInputChannelID>
  <streamingChannelID min="" max="" >
   <!--dependent, signalMode is "stream id",xs:string -->
  </streamingChannelID>
  <StreamInput>
   <streamInputMode opt="realtime,playback" >
    <!--required, xs:string,"realtime,playback" , stream types: real time stream, palyback stream-->
   </streamInputMode>
   <StreamInputRealtime>
    <!--optional, real time stream information-->
    <durationInUnit min="" max="" >
     <!--optional, xs:interger,in seconds, decoding interval of real time stream, unit: second-->
    </durationInUnit>
    <StreamRealtimeUnitList>
     <!--real time stream list-->
     <StreamRealtimeUnit>
      <!--single real time stream-->
      <streamType opt="in URL,by ddns,by domain" >
       <!--required, xs:string,"in URL,by ddns,by domain"-->
      </streamType>
      <StreamInURL>
       <!--dependent,streamType is "in URL"-->
       <URL min="" max="" >
        <!--required, xs:string-->
       </URL>
      </StreamInURL>
      <StreamByDdns>
       <!--dependent,streamType is "by ddns"-->
       <DdnsServerInfo>
        <domain opt="ipv4,ipv6,domain" >
         <!--required, xs:string,ipv4 or ipv6 or domain-->
        </domain>
        <port min="" max="" >
         <!--required, xs:integer-->
        </port>
        <ddnsType opt="hiDdns,noIp,..." >
```

```
    <!--required, xs:string-->
   </ddnsType>
   <username min="" max="" >
    <!--write-only, required, xs:string-->
   </username>
   <password min="" max="" >
    <!--write-only, required, xs:string-->
   </password>
  </DdnsServerInfo>
  <EncodeDevInfo>
   <domain opt="ipv4,ipv6,domain" >
    <!--required, xs:string,ipv4 or ipv6 or domain-->
   </domain>
   <port min="" max="" >
    <!--required, xs:integer-->
   </port>
   <transmitProtocol opt="tcp,udp,mcast" >
    <!--required, xs:string-->
   </transmitProtocol>
   <protocol opt="HIKVISION,DAHUA,..." >
    <!--required, xs:string-->
   </protocol>
   <username min="" max="" >
    <!--write-only, required, xs:string-->
   </username>
   <password min="" max="" >
    <!--write-only, required, xs:string-->
   </password>
   <channelMode opt="normal,zero,streaming,distributed" >
    <!--required, xs:string-->
   </channelMode>
   <channelType opt="main,sub,third" >
    <!--required, xs:string-->
   </channelType>
   <channelZero min="" max="" >
    <!--dependent,channelMode is "zero",xs:integer-->
   </channelZero>
   <channelNormal min="" max="" >
    <!--dependent,channelMode is "normal",xs:integer-->
   </channelNormal>
   <channelStreaming min="" max="" >
    <!--dependent,channelMode is "streaming",xs:string-->
   </channelStreaming>
   <channelDistributed min="" max="" >
    <!--dependent,channelMode is "distributed",xs:integer-->
   </channelDistributed>
  </EncodeDevInfo>
  <MediaGatewayInfo>
   <enabled opt="true,false" >
    <!--required, xs:boolean-->
   </enabled>
   <domain opt="ipv4,ipv6,domain" >
```

```
      <!--required, xs:string,ipv4 or ipv6 or domain-->
    </domain>
    <port min="" max="" >
      <!--required, xs:integer-->
    </port>
    <transmitProtocol opt="tcp,udp,mcast" >
      <!--required, xs:string-->
    </transmitProtocol>
  </MediaGatewayInfo>
</StreamByDdns>
<StreamByDomain>
  <!--dependent,streamType is "by domain"-->
  <EncodeDevInfo>
    <domain opt="ipv4,ipv6,domain" >
      <!--required, xs:string,ipv4 or ipv6 or domain-->
    </domain>
    <port min="" max="" >
      <!--required, xs:integer-->
    </port>
    <transmitProtocol opt="tcp,udp,mcast" >
      <!--required, xs:string-->
    </transmitProtocol>
    <protocol opt="HIKVISION,DAHUA,..." >
      <!--required, xs:string-->
    </protocol>
    <username min="" max="" >
      <!--write-only, required, xs:string-->
    </username>
    <password min="" max="" >
      <!--write-only, required, xs:string-->
    </password>
    <channelMode opt="normal,zero,streaming,distributed" >
      <!--required, xs:string-->
    </channelMode>
    <channelType opt="main,sub,third" >
      <!--required, xs:string-->
    </channelType>
    <channelZero min="" max="" >
      <!--dependent,channelMode is "zero",xs:integer-->
    </channelZero>
    <channelNormal min="" max="" >
      <!--dependent,channelMode is "normal",xs:integer-->
    </channelNormal>
    <channelStreaming min="" max="" >
      <!--dependent,channelMode is "streaming",xs:string-->
    </channelStreaming>
    <channelDistributed min="" max="" >
      <!--dependent,channelMode is "distributed",xs:integer-->
    </channelDistributed>
  </EncodeDevInfo>
  <MediaGatewayInfo>
    <enabled opt="true,false" >
```

```
            <!--required, xs:boolean-->
           </enabled>
           <domain opt="ipv4,ipv6,domain" >
            <!--required, xs:string,ipv4 or ipv6 or domain-->
           </domain>
           <port min="" max="" >
            <!--required, xs:integer-->
           </port>
           <transmitProtocol opt="tcp,udp,mcast" >
            <!--required, xs:string-->
           </transmitProtocol>
          </MediaGatewayInfo>
         </StreamByDomain>
        </StreamRealtimeUnit>
       </StreamRealtimeUnitList>
      </StreamInputRealtime>
      <StreamInputPlayback>
       <!-optional, play back stream information-->
       <playbackMode>
        <!--optional, xs:string,"file name,time range" , playback mode, which including playback by file name and
playback by time-->
       </playbackMode>
       <EncodeDevInfo>
        <!--information about the device to palyback-->
        <domain opt="ipv4,ipv6,domain" >
         <!--required, xs:string,ipv4 ipv6 or domain-->
        </domain>
        <port min="" max="" >
         <!--required, xs:integer-->
        </port>
        <transmitProtocol opt="tcp,udp,mcast" >
         <!--optional, xs:string,"tcp,udp,mcast"-->
        </transmitProtocol>
        <protocol opt="HIKVISION,DAHUA,..." >
         <!--optional, xs:string,"HIKVISION,DAHUA,..."-->
        </protocol>
        <username min="" max="" >
         <!--wo,optional, xs:string-->
        </username>
        <password min="" max="" >
         <!--wo,optional, xs:string-->
        </password>
        <channelMode opt="normal,zero,streaming,distributed" >
         <!--required, xs:string-->
        </channelMode>
        <channelType>
         <!--optional, xs:string,"main,sub,third"-->
        </channelType>
        <channelZero min="" max="" >
         <!--optional, xs:integer-->
        </channelZero>
        <channelNormal min="" max="" >
```

```
        <!--optional, xs:integer-->
       </channelNormal>
       <channelStreaming min="" max="" >
        <!--optional, xs:string-->
       </channelStreaming>
       <channelDistributed min="" max="" >
        <!--dependent,xs:integer-->
       </channelDistributed>
      </EncodeDevInfo>
      <fileName min="" max="" >
       <!--optional, xs:string, file name-->
      </fileName>
      <TimeRange>
       <!-optional, time range-->
       <beginTime>
        <!--optional, xs:time,ISO8601 time, start time with ISO8601-->
       </beginTime>
       <endTime>
        <!--optional, xs:time,ISO8601 time end time with ISO8601-->
       </endTime>
      </TimeRange>
     </StreamInputPlayback>
     <streamEncryptEnable opt="" >
      <!-optional, xs:boolean, whether to enable stream encryption or not-->
     </streamEncryptEnable>
     <streamPassword min="" max="" >
      <!--dependent, xs:string,  stream encryption key, it is valid only when streamEncryptEnable is "true"-->
     </streamPassword>
    </StreamInput>
    <AlarmLinkageInfoList size="" >
     <!--dependent,signalMode is "alarm linkage"-->
     <AlarmLinkageInfo>
      <!--required-->
      <alarmLinkageID min="" max="" >
       <!--required, xs:integer-->
      </alarmLinkageID>
     </AlarmLinkageInfo>
    </AlarmLinkageInfoList>
   </SubWindowParam>
</SubWindow>
```

B.28 XML_Cap_VideoOutputChannel

XML message about capabilities of video output

```
<VideoOutputChannel xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
 <id>
  <!--required, xs:integer-->
 </id>
```

```
 <portType opt=" VGA,CVBS,HDMI,Spot,SDI,DVI" >
  <!--optional, xs:string-->
 </portType>
 <needRebot>
  <!--optional, xs:boolean, "true,false"-->
 </needRebot>
 <OutputResolution>
  <resolution opt="1920*1080@60HZ,1280*720@50HZ" >
   <!--optional, xs:string-->
  </resolution>
  <imageWidth min="" max="" >
   <!--optional, xs:integer-->
  </imageWidth>
  <imageHeight min="" max="" >
   <!--optional, xs:integer-->
  </imageHeight>
 </OutputResolution>
 <!--optional,-->
</VideoOutputChannel>
```

B.29 XML_Cap_WallConferenceCycle

XML message about configuration capability of conference auto-switch

```
<WallConferenceCycle version="2.0">
 <duration min="" max=""><!--required, xs:integer--></duration>
</WallConferenceCycle>
```

B.30 XML_Cap_WallWindow

XML message about capability of a specific window

```
<WallWindow version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--optional, xs:integer--></id>
 <wndOperateMode opt="uniformCoordinate, resolutionCoordinate"><!--opt,xs:string--></wndOperateMode>
 <Rect/><!--optional-->
 <ResolutionRect><!--optional-->
 <windowMode opt="1,4,9,16"><!--ooptional, xs:integer--></windowMode>
 <wndShowMode opt="subWndMode,fullScreenMode"><!--optional, xs:string--></wndShowMode>
</WallWindow>
```

See Also

XML_Rect
XML_ResolutionRect

B.31 XML_Color

XML message about color adjustment parameters

```
<Color version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <brightnessLevel><!--optional, xs:integer, range: [0,100]--></brightnessLevel>
 <contrastLevel><!--optional, xs:integer, range: [0,100]-></contrastLevel>
 <saturationLevel><!--optional, xs:integer, range: [0,100]--></saturationLevel>
 <hueLevel><!--optional, xs:integer, range: [0,100]--></hueLevel>
</Color>
```

B.32 XML_CycleModeParam

XML message about parameters of auto-switch decoding

```
<CycleModeParam version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <duration><!--required, xs:interger, time duration, unit: second--></duration>
 <SubWindowParamList>
  <SubWindowParam/>
 </SubWindowParamList
</CycleModeParam>
```

B.33 XML_DdnsServerInfo

XML message about DNS server information

```
<DdnsServerInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <domain><!—required, xs:string, IPv4, IPv6 or domain--></domain>
  <port><!--required, xs:integer--></port>
 <ddnsType><!--required, xs:string, "hiDdns, noIp..."--></ddnsType>
 <username><!--write-only, required, xs:string--></username>
 <password><!--write-only, required, xs:string--></password>
</DdnsServerInfo>
```

B.34 XML_DecodeDelayParam

XML message about decoding delay parameters

```
<DecodeDelayParam version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
   <param><!--xs:string,"default,mostRealTime,moreRealTime,balance,moreFluency,mostFluency,auto"--></param>
</DecodeDelayParam>
```

B.35 XML_DecodeOSD

XML message about OSD parameters

```
<DecodeOSD xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
 <id>
  <!--required, xs:integer, sub-window ID, which starts from 1-->
 </id>
 <OSDInfoList size="" version="2.0" >
  <OSDInfo version="2.0" >
   <id>
    <!--required, integer, OSD ID-->
   </id>
   <enabled opt="true,false" >
    <!--required, xs:boolean,"true,false"-->
   </enabled>
   <flashEnabled opt="true,false" >
    <!--required, xs:boolean,"true,false"-->
   </flashEnabled>
   <fontSize opt="large,middle,small" >
    <!--required, xs:string, font size: large,middle,small-->
   </fontSize>
   <Color>
    <!--required, font color -->
    <RGB>
    </RGB>
    <!--required, RGB value-->
   </Color>
   <transparent min="" max="" >
    <!--required, xs:integer, transparent-->
   </transparent>
   <positionX min="" max="" >
    <!--required, xs:integer, X-coordinate of OSD-->
   </positionX>
   <positionY min="" max="" >
    <!--required, xs:integer, Y-coordinate of OSD-->
   </positionY>
   <content max="" >
    <!--required, xs:string, OSD contend-->
   </content>
  </OSDInfo>
 </OSDInfoList>
</DecodeOSD>
```

B.36 XML_DeviceCap

XML message about device capability

```
<DeviceCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <SysCap><!--optional-->
  <isSupportDst><!--optional, xs: boolean, whether it supports daylight saving time--></isSupportDst>
  <NetworkCap/><!--optional, xs: boolean, network capability-->
  <IOCap/><!--optional, IO capability-->
  <SerialCap/><!--optional, serial port capability-->
  <VideoCap/><!--optional, video capability, see details in the message of XML_VideoCap-->
  <AudioCap/><!--optional, audio capability-->
  <isSupportHolidy><!--optional, xs:boolean--></isSupportHolidy>
  <RebootConfigurationCap>
   <Genetec><!--optional, xs:boolean--></Genetec>
   <ONVIF><!--optional, xs:boolean--></ONVIF>
   <RTSP><!--optional, xs:boolean--></RTSP>
   <HTTP><!--optional, xs:boolean--></HTTP>
   <SADP>
    <ISDiscoveryMode><!--optional, xs:boolean--></ISDiscoveryMode>
    <PcapMode><!--optional, xs:boolean--></PcapMode>
   </SADP>
   <IPCAddStatus><!--optional, xs:boolean--></IPCAddStatus>
  </RebootConfigurationCap>
  <isSupportExternalDevice><!--optional, xs:boolean--></isSupportExternalDevice>
  <isSupportChangedUpload>
   <!--optional, xs: boolean, whether it supports uploading status changes-->
  </isSupportChangedUpload>
  <isSupportGettingWorkingStatus>
   <!--optional, xs:boolean, whether it supports getting device status-->
  </isSupportGettingWorkingStatus>
  <isSupportGettingChannelInfoByCondition>
   <!--optional, xs:boolean-->
  </isSupportGettingChannelInfoByCondition>
  <isSupportDiagnosedDataParameter>
   <!--optional, xs:boolean-->
  </isSupportDiagnosedDataParameter>
  <isSupportSimpleDevStatus>
   <!--optional, xs: boolean, whether it supports getting device working status-->
  </isSupportSimpleDevStatus>
  <isSupportFlexible>
   <!--optional, xs: boolean, whether it supports getting channel status by condition-->
  </isSupportFlexible>
  <isSupportPTZChannels>
   <!--optional, xs:boolean, whether it supports returning PTZ channel (which is different from the video channel)-->
  </isSupportPTZChannels>
  <isSupportSubscribeEvent>
   <!--optional, xs:boolean, whether it supports alarm or event subscription: "true,false"-->
  </isSupportSubscribeEvent>
  <isSupportDiagnosedData>
   <!--optional, xs:boolean, "true,false", whether it supports diagnosis data-->
  </isSupportDiagnosedData>
  <isSupportTimeCap>
   <!--optional, xs:boolean, whether it supports time capability-->
  </isSupportTimeCap>
  <isSupportThermalStreamData>
```

```
    <!--optional, xs:boolean, whether it supports uploading thermal stream data in real-time. If it is supported, the returned value is "true"; otherwise, this node will not be returned-->
   </isSupportThermalStreamData>
   <isSupportPostUpdateFirmware>
    <!--optional,xs:boolean,"true,false", whether it supports upgrading the firmware-->
   </isSupportPostUpdateFirmware>
   <isSupportPostConfigData>
    <!--optional, xs:boolean,"true,false", whether it supports importing or exporting the configuration file-->
   </isSupportPostConfigData>
   <isSupportUserLock>
    <!--optional, xs:boolean,"true,false", whether it supports locking user-->
   </isSupportUserLock>
   <isSupportModuleLock><!--optional, xs:boolean, whether it supports locking the module: "true,false"--></isSupportModuleLock>
   <isSupportSoundCfg><!--optional, xs:boolean--></isSupportSoundCfg>
   <isSupportMetadata>
    <!--optional, xs:boolean, if it is supported, return "true", otherwise, this node will not be returned-->
   </isSupportMetadata>
   <isSupportShutdown><!--optional, xs:boolean, whether it supports shutdown configuration--></isSupportShutdown>
   <supportSmartOverlapChannles opt="1"/><!--optional, xs:boolean, whether it supports stream configuration of smart events. If this function is supported, this node and the corresponding channel ID will be returned; otherwise, this node will not be returned-->
   <isSupportConsumptionMode><!--optional, xs:boolean, whether it supports switching power consumption mode:true (yes), this node is not returned (no). Related URI: /ISAPI/System/consumptionMode/capabilities?format=json--></isSupportConsumptionMode>
   <isSupportManualPowerConsumption><!--optional, xs:boolean, whether it supports control the power consumption mode manually: true (yes), this node is not returned (no)--></isSupportManualPowerConsumption>
  </SysCap>
  <voicetalkNums><!--optional, xs:integer, the number of two-way audio channels--></voicetalkNums>
  <isSupportSnapshot><!--optional, xs:boolean, whether it supports capture: "true, false"--></isSupportSnapshot>
  <SecurityCap/><!--optional, security capability-->
  <EventCap/><!--optional, event capability-->
  <ITCCap><!--optional--></ITCCap>
  <ImageCap/><!--optional, image capability-->
  <RacmCap/><!--optional, storage capability-->
  <PTZCtrlCap>
   <isSupportPatrols><!--optional, xs:boolean--></isSupportPatrols>
  </PTZCtrlCap>
  <SmartCap/><!--optional, intelligent capability-->
  <isSupportEhome><!--optional, xs:boolean--></isSupportEhome>
  <isSupportStreamingEncrypt><!--optional, xs:boolean--></isSupportStreamingEncrypt>
  <TestCap>
   <isSupportEmailTest><!--optional, xs:boolean--></isSupportEmailTest>
  </TestCap>
  <ThermalCap/><!--optional, temperature measurement capability-->
  <WLAlarmCap/><!--optional, wireless alarm capability-->
  <SecurityCPCapabilities/><!--optional, security control panel capability-->
  <isSupportGIS>
   <!--optional, xs:boolean, whether it supports GIS capability-->
  </isSupportGIS>
  <isSupportCompass>
```

```
  <!--optional, xs:boolean-->
</isSupportCompass>
<isSupportRoadInfoOverlays>
  <!--optional, xs:boolean-->
</isSupportRoadInfoOverlays>
<isSupportFaceCaptureStatistics>
  <!--optional, xs:boolean-->
</isSupportFaceCaptureStatistics>
<isSupportExternalDevice>
  <!--optional, xs:boolean-->
</isSupportExternalDevice>
<isSupportElectronicsEnlarge>
  <!--optional, xs:boolean, whether it supports digital zoom-->
</isSupportElectronicsEnlarge>
<isSupportRemoveStorage>
  <!--optional, xs:boolean-->
</isSupportRemoveStorage>
<isSupportCloud>
  <!--optional, xs:boolean-->
</isSupportCloud>
<isSupportRecordHost>
  <!--optional, xs:boolean-->
</isSupportRecordHost>
<isSupportEagleEye>
  <!--optional, xs:boolean, whether it supports PanoVu series camera-->
</isSupportEagleEye>
<isSupportPanorama>
  <!--optional, xs:boolean, whether it supports panorama-->
</isSupportPanorama>
<isSupportFirmwareVersionInfo>
  <!--optional, xs:boolean, whether it supports displaying firmware version information-->
</isSupportFirmwareVersionInfo>
<isSupportExternalWirelessServer>
  <!--optional, xs: boolean-->
</isSupportExternalWirelessServer>
<isSupportSetupCalibration>
  <!--optional, xs:boolean, whether it supports setting calibration-->
</isSupportSetupCalibration>
<isSupportGetmutexFuncErrMsg>
  <!--optional, xs:boolean, whether it supports getting mutex information-->
</isSupportGetmutexFuncErrMsg>
<isSupportTokenAuthenticate><!--optional, xs:boolean--></isSupportTokenAuthenticate>
<isSupportStreamDualVCA><!--optional, xs:boolean--></isSupportStreamDualVCA>
<isSupportlaserSpotManual>
  <!--optional, boolean, whether it supports laser spot configuration-->
</isSupportlaserSpotManual>
<isSupportRTMP><!--optional, xs:boolean--></isSupportRTMP>
<isSupportTraffic><!--optional, xs:boolean--></isSupportTraffic>
<isSupportLaserSpotAdjustment>
  <!--optional, boolean, whether it supports adjusting laser spot size-->
</isSupportLaserSpotAdjustment>
<VideoIntercomCap/><!--optional, video intercom capability-->
```

```
<isSupportSafetyCabin>
  <!--optional, xs:boolean-->
</isSupportSafetyCabin>
<isSupportPEA>
  <!--optional, xs:boolean, whether it supports one-touch security control panel capability-->
</isSupportPEA>
<isSupportCurrentLock>
  <!--optional, xs:boolean, whether it supports locking current configuration-->
</isSupportCurrentLock>
<isSupportGuardAgainstTheft>
  <!--optional, xs:boolean, whether it supports device anti-theft configuration-->
</isSupportGuardAgainstTheft>
<isSupportPicInfoOverlap>
  <!--optional, xs:boolean, whether it supports picture information overlay-->
</isSupportPicInfoOverlap>
<isSupportPlay>
  <!--optional, xs: boolean, whether it supports live view: "true,false"-->
</isSupportPlay>
<isSupportPlayback>
  <!--optional, xs: boolean, whether it supports playback: "true,false"-->
</isSupportPlayback>
<UHFRFIDReader>
  <!--optional, supported capability of UHF RFID card reader-->
  <isSupportBasicInformation>
    <!--optional, xs:boolean, whether it supports basic parameters of UHF RFID card reader-->
  </isSupportBasicInformation>
  <isSupportHardDiskStorageTest>
    <!--optional, xs:boolean, whether it supports hard disk storage test of UHF RFID card reader-->
  </isSupportHardDiskStorageTest>
</UHFRFIDReader>
<isSupportIntelligentStructureAnalysis>
  <!--optional, xs:boolean, whether it supports structured VCA-->
</isSupportIntelligentStructureAnalysis>
<isSupportIntelligentAnalysisEngines>
  <!--optional, xs:boolean, whether it supports VCA engine configuration-->
</isSupportIntelligentAnalysisEngines>
<PreviewDisplayNum>
  <!--optional, xs:integer, the number of live view windows, which is the number of simultaneous live view windows
controlled by the device. Limited by the performance of DeepinMind series network video recorder, currently only live
view of a network camera is supported, and playback is not supported-->
</PreviewDisplayNum>
<isSupportBoard opt="true,false">
  <!--optional, xs:boolean, whether it supports protocol related to sub-board-->
</isSupportBoard>
<ResourceSwitch>
  <workMode opt="4KPreview,educationRecord">
    <!--req, xs:string, device working mode : "4KPreview"-4K live view mode, "educationRecord"-education recording
mode-->
  </workMode>
</ResourceSwitch>
<isSupportCustomStream><!--optional, xs:boolean--></isSupportCustomStream>
<isSupportTriggerCapCheck>
```

```
  <!--optional, xs:boolean, whether it supports verifying capability of alarm linkage actions-->
 </isSupportTriggerCapCheck>
 <isSupportActiveMulticast>
  <!--optional, xs: boolean, whether it supports active multicast-->
 </isSupportActiveMulticast>
 <isSupportChannelEventCap>
  <!--optional, xs:boolean, whether it supports getting event capability by channel-->
 </isSupportChannelEventCap>
 <isSupportPictureServer>
  <!-- opt, xs:boolean, whether it supports picture storage server-->
 </isSupportPictureServer>
 <isSupportVideoCompositeAlarm>
  <!--optional, xs:boolean, whether it supports video double check alarm-->
 </isSupportVideoCompositeAlarm>
 <isSupportSensorCalibrating>
  <!--optional, xs:boolean, whether it supports double sensor calibration-->
 </isSupportSensorCalibrating>
 <isSupportChannelEventListCap>
  <!--optional, xs:boolean, whether it supports getting event capability of all channels-->
 </isSupportChannelEventListCap>
 <VCAResourceChannelsCap>
  <!--optional, whether it supports independently switching to another VCA resource by channel-->
  <ChannelsList>
   <channelsID>
    <!--req, xs:integer, channel No. supported by the device-->
   </channelsID>
  </ChannelsList>
 </VCAResourceChannelsCap>
 <SensorCap/><!--optional, intelligent cabinet capability-->
 <isSupportSecurityCP/>
  <!--optional, xs:boolean, whether it supports the applications of security control panel: "true, false"-->
 </isSupportSecurityCP>
 <isSupportClientProxyWEB>
  <!--optional, xs:boolean, whether it supports the function that the client proxy passes through the remote web
configuration: "true"-->
 </isSupportClientProxyWEB>
 <WEBLocation>
  <!--optional, string type, web page location: "local"-local device, "remote"-remote location. If this node is not
returned, the web page will be in the local device by default-->
 </WEBLocation>
 <isSupportTime/>
  <!--optional, xs:boolean, "true, false", whether it supports time configuration-->
 </isSupportTime>
 <isSupportTimeZone/>
  <!--optional, xs:boolean, "true, false", whether it supports daylight saving time (DST) configuration-->
 </isSupportTimeZone>
 <isSupportMixedTargetDetection>
  <!--optional, xs:boolean, "true, false", whether it supports multi-target-type detection-->
 </isSupportMixedTargetDetection>
 <isSupportFaceContrastMode>
  <!--optional, xs:boolean, whether it supports face picture comparison mode-->
 </isSupportFaceContrastMode>
```

```
<isSupportPictureCaptureComparision>
<!--optional, xs:boolean, whether it supports face picture N:1 comparison between face pictures captured by the camera and imported face pictures-->
</isSupportPictureCaptureComparision>
<isSupportGPSCalibratation>
<!--optional, xs:boolean, whether it supports GPS calibration capability-->
</isSupportGPSCalibratation>
<isSupportChannelFullEventListCap>
<!--optional, xs:boolean, whether it supports getting event list capability of all channels-->
</isSupportChannelFullEventListCap>
<isSupportAUXInfoCap>
<!--optional, xs:boolean, whether it supports getting property capability of all channels-->
</isSupportAUXInfoCap>
<isSupportCalibrationFile>
<!--optional, xs:boolean, whether it supports importing calibration file-->
</isSupportCalibrationFile>
<isSupportDisplayTrajectory>
<!--optional, xs:boolean, whether it supports displaying trajectory-->
</isSupportDisplayTrajectory>
<maximumSuperPositionTime opt="5,10,20,30">
<!--dep,xs:integer, the maximum time of trajectory displaying, unit: second, it is valid only when displaying trajectory is supported-->
</maximumSuperPositionTime>
<isSupportUnitConfig>
<!--optional, xs:boolean, whether it supports unit configuration-->
</isSupportUnitConfig>
<isSupportAutoMaintenance>
<!--optional, xs:boolean, whether it supports automatic maintenance. When this node exists and values "true", it indicates support-->
</isSupportAutoMaintenance>
<isSupportGetLinkSocketIP>
<!--optional, xs: boolean, "true,false", whether it supports getting the SocketIP of current connection-->
</isSupportGetLinkSocketIP>
<isSupportIntelligentSearch>
<!--optional, xs:boolean, whether it supports intelligent search-->
</isSupportIntelligentSearch>
<IOTCap><!--optional, xs:boolean, IoT device access capability-->
<supportChannelNum>
<!--req, xs:integer, number of supported channels of IoT device-->
</supportChannelNum>
<startChannelNo>
<!--optional, xs:integer, initial channel ID, if this node is not inputted, it indicates that the initial channel ID is 1-->
</startChannelNo>
<isSupportlinkageChannelsSearch>
<!--optional, boolean, returns "true" if support, returns "false" if not support-->
</isSupportlinkageChannelsSearch>
</IOTCap>
<isSupportEncryption>
<!--optional, xs: boolean, stream encryption capability-->
</isSupportEncryption>
<AIDEventSupport opt="abandonedObject, pedestrian, congestion, roadBlock, construction, trafficAccident, fogDetection, wrongDirection, illegalParking, SSharpDriving, lowSpeed, dragRacing">
```

```
   <!--optional, xs:string, supported traffic incident type: "abandonedObject"-objects dropped down, "pedestrian"-pedestrian, "congestion"-congestion, "roadBlock"-roadblock, "construction"-construction, "trafficAccident"-traffic accident, "fogDetection"-fog, "wrongDirection"-wrong-way driving, "illegalParking"-illegal parking, "SSharpDriving"-slalom driving, "lowSpeed"-driving in low speed, "dragRacing"-street racing-->
  </AIDEventSupport>
  <TFSEventSupport opt="illegalParking ,wrongDirection,crossLane,laneChange,vehicleExist,turnRound,parallelParking,notKeepDistance,notSlowZebraCrossing,overtakeRightSide,lowSpeed,dragRacing,changeLaneContinuously,SSharpDriving,largeVehicleOccupyLine,jamCrossLine">
   <!--optional, xs:string, supported enforcement event type: "illegalParking"-illegal parking, "wrongDirection"-wrong-way driving, "crossLane"-driving on the lane line, "laneChange"-illegal lane change, "vehicleExist"-motor vehicle on non-motor vehicle lane, "turnRound"-illegal U-turn, "parallelParking"-parallel parking, "notKeepDistance"-not keeping vehicle distance, "notSlowZebraCrossing"-not slowing down at zebra corssing, "overtakeRightSide"-overtaking on the right, "lowSpeed"-driving in low speed, "dragRacing"-street racing, "changeLaneContinuously"-continuous lane change, "SSharpDriving"-slalom driving, "largeVehicleOccupyLine"-lane occupation by large-sized vehicle, "jamCrossLine"-queue jumping-->
  </TFSEventSupport>
  <isVehicleStatisticsSupport>
   <!--optional, xs: boolean, whether it supports setting parameters for traffic data collection-->
  </isVehicleStatisticsSupport>
  <isSupportIntersectionAnalysis>
   <!--optional, xs: boolean, whether it supports intersection analysis-->
  </isSupportIntersectionAnalysis>
  <supportRemoteCtrl opt="up,down,left,right,enter,menu,num,power,esc,edit,F1,.prev,rec,play,stop,notSupport"/><!--whether it supports remote control-->
  <isSptDiagnosis>
   <!--optional, xs:boolean, whether it supports device diagnosis: "true", "false"-->
  </isSptDiagnosis>
  <isSptSerialLogCfg>
   <!--optional, xs:boolean, whether it supports configuring serial port log redirection: "true", "false"-->
  </isSptSerialLogCfg>
  <isSptFileExport>
   <!--optional, xs:boolean, whether it supports exporting files from the device: "true", "false"-->
  </isSptFileExport>
  <isSptCertificationStandard>
   <!--optional, xs:boolean, whether it supports configuring authentication standard for security control panel: "true", "false"-->
  </isSptCertificationStandard>
  <isSptKeypadLock>
   <!--optional, xs:boolean, whether it supports locking keypad: "true", "false"-->
  </isSptKeypadLock>
  <MixedTargetDetection><!--optional, whether the device supports recognizing specific target among mixed targets-->
   <isSupportFaceRecognition><!--optional, xs:boolean, whether it supports face recognition--></isSupportFaceRecognition>
   <isSupportHumanRecognition><!--optional, xs:boolean, whether it supports human body recognition--></isSupportHumanRecognition>
   <isSupportVehicleRecognition><!--optional, xs:boolean, whether it supports vehicle recognition--></isSupportVehicleRecognition>
  </MixedTargetDetection>
  <isSupportDiscoveryMode><!--optional, xs:boolean--></isSupportDiscoveryMode>
  <streamEncryptionType>
   <!--dep, xs:string, stream encryption type: "RTP/TLS", "SRTP/UDP", "SRTP/MULTICAST". This node is valid when
```

<**isSupportEncryption**> is "true", and the device can support one or more stream encryption types-->
</streamEncryptionType>
<isSupportLms><!--optional, xs:boolean, whether it supports laser--></isSupportLms>
<isSupportLCDScreen><!--optional, xs:boolean, whether it supports LCD screen--></isSupportLCDScreen>
<isSupportBluetooth><!--optional, xs:boolean, whether it supports bluetooth--></isSupportBluetooth>
<isSupportAcsUpdate>
<!--optional, whether it supports upgrading slave access control devices or peripheral modules: "true"-yes, this node is not returned-no-->
</isSupportAcsUpdate>
<isSupportAccessControlCap>
<!--optional, whether it supports access control capability: "true"-yes, this node is not returned-no-->
</isSupportAccessControlCap>
<isSupportIDCardInfoEvent><!--optional, whether it supports ID card swiping event: "true"-yes. This node will not be returned if this function is not supported--></isSupportIDCardInfoEvent>
<OpenPlatformCap><!--optional, embedded open platform capability, refer to the message XML_OpenPlatformCap for details-->
<isSupportInstallationAngleCalibration>
<!--optional, xs:boolean, whether it supports installation angle calibration-->
</isSupportInstallationAngleCalibration>
<isSupportZeroBiasCalibration>
<!--optional, xs:boolean, whether it supports zero bias calibration-->
</isSupportZeroBiasCalibration>
<isSupportDevStatus><!--optional, xs:boolean, whether device supports getting device status--></isSupportDevStatus>
<isSupportRadar><!--optional, xs:boolean, whether it supports the security radar--></isSupportRadar>
<isSupportRadarChannels><!--optional, xs:boolean, whether it supports getting radar channels--></isSupportRadarChannels>
<radarIPDForm><!--optional, xs:string, radar form: "single"-single radar, "double_diagonal"-two radars forming an 180° diagonal, "double_vertical"-two radars forming a 90° vertical angle--></radarIPDForm>
<isSupportRadarFieldDetection><!--optional, xs:boolean, whether it supports intrusion detection (radar)--></isSupportRadarFieldDetection>
<isSupportRadarLineDetection><!--optional, xs:boolean, whether it supports line crossing detection (radar)--></isSupportRadarLineDetection>
<mixedTargetDetectionWebNoDisplay><!--optional, xs:boolean, whether to enable not displaying multi-target-type recognition--></mixedTargetDetectionWebNoDisplay>
<SHMCap><!--opt-->
<isSupportHighHDTemperature><!--optional, xs:boolean, whether it supports HDD high temperature detection--></isSupportHighHDTemperature>
<isSupportLowHDTemperature><!--optional, xs:boolean, whether it supports HDD low temperature detection--></isSupportLowHDTemperature>
<isSupportHDImpact><!--optional, xs:boolean, whether it supports HDD impact detection--></isSupportHDImpact>
<isSupportHDBadBlock><!--optional, xs:boolean, whether it supports HDD bad sector detection--></isSupportHDBadBlock>
<isSupportSevereHDFailure><!--optional, xs:boolean, whether it supports HDD severe fault detection--></isSupportSevereHDFailure>
</SHMCap>
<isSupportBVCorrect><!--optional, xs:boolean, whether it supports configuring camera correction parameters--></isSupportBVCorrect>
<guideEventSupport opt="linkageCapture">
<!--optional,xs:string, events which support quick setup by instruction, "linkageCapture"-capture by linkage-->
</guideEventSupport>
<isSupportAutoSwitch><!--optional, xs:boolean, whether it supports auto switch--> true</isSupportAutoSwitch>

```
<isSupportDataPrealarm><!--optional,xs:boolean, whether it supports traffic pre-alarm event--></
isSupportDataPrealarm>
<supportGISEvent opt="AID,TPS,ANPR,mixedTargetDetection">
<!--optional, xs:string, event types that support GIS information access: AID (corresponding SDK event:
COMM_ALARM_AID_V41), TPS (corresponding SDK event: COMM_ALARM_TPS_REAL_TIME), ANPR (corresponding
SDK event: COMM_ITS_PLATE_RESULT), mixedTargetDetection-mixed targets detection-->
</supportGISEvent>
<isSupportIntelligentMode><!--optional, xs:boolean, whether it supports intelligent scene switch (related URI:/ISAPI/
System/IntelligentSceneSwitch?format=json)--></isSupportIntelligentMode>
<isSupportCertificateCaptureEvent><!--optional, xs:boolean, whether it supports certificate capture and comparison
events: true-yes. If this function is not supported, this node will not be returned--></
isSupportCertificateCaptureEvent>
<isSupportAlgorithmsInfo><!--optional, xs:boolean, whether it supports getting the algorithm library version
information: true-yes. If this function is not supported, this node will not be returned--></isSupportAlgorithmsInfo>
<isSupportVibrationDetection><!--optional, xs:boolean, whether it supports vibration detection--></
isSupportVibrationDetection>
<isSupportFaceTemperatureMeasurementEvent><!--optional, xs:boolean, whether it supports uploading face
thermography events (eventType: "FaceTemperatureMeasurementEvent")--></
isSupportFaceTemperatureMeasurementEvent>
<isSupportQRCodeEvent><!--optional, xs:boolean, whether it supports uploading QR code events (eventType:
"QRCodeEvent")--></isSupportQRCodeEvent>
<isSupportPersonArmingTrack><!--optional, xs:boolean, whether device supports person arming (related URI: /ISAPI/
Intelligent/channels/<ID>/personArmingTrack/capabilities?format=json)--></isSupportPersonArmingTrack>
<isSupportManualPersonArmingTrack><!--optional, xs:boolean, whether device supports manual person arming
(related URI: /ISAPI/Intelligent/channels/<ID>/manualPersonArmingTrack?format=json)--></
isSupportManualPersonArmingTrack>
<isSupportGPSCalibrationMode><!--optional, xs:boolean, whether device supports GPS calibration (related URI: /
ISAPI/System/GPSCalibration/channels/<ID>/mode?format=json)--></isSupportGPSCalibrationMode>
<isSupportGPSVerification><!--optional, xs:boolean, whether device supports GPS verification (related URI: /ISAPI/
System/GPSVerification/channels/<ID>/points?format=json)--></isSupportGPSVerification>
<isSupportHBDLib><!--optional, xs:boolean, whether device supports human body picture library (related URI: /ISAPI/
Intelligent/HBDLib/capabilities?format=json)--></isSupportHBDLib>
<isSupportFireEscapeDetection><!--optional, xs:boolean, whether the device supports fire engine access detection
(related URI: /ISAPI/Intelligent/channels/<ID>/fireEscapeDetection/capabilities?format=json)--></
isSupportFireEscapeDetection>
<isSupportTakingElevatorDetection><!--optional, xs:boolean, whether the device supports elevator detection
(related URI: /ISAPI/Intelligent/channels/<ID>/takingElevatorDetection/capabilities?format=json)--></
isSupportTakingElevatorDetection>
<isSupportSSDFileSystemUpgrade><!--optional, xs:boolean, whether the device supports SSD file system upgrade
(related URI: /ISAPI/System/SSDFileSystem/upgrade?format=json)--></isSupportSSDFileSystemUpgrade>
<isSupportSSDFileSystemFormat><!--optional, xs:boolean, whether the device supports SSD file system formatting
(related URI: /ISAPI/System/SSDFileSystem/format?format=json)--></isSupportSSDFileSystemFormat>
<isSupportSSDFileSystemCapacity><!--optional, xs:boolean, whether the device supports getting space distribution
information of SSD file system (related URI: /ISAPI/System/SSDFileSystem/capacity?format=json)--></
isSupportSSDFileSystemCapacity>
<isSupportAIOpenPlatform><!--optional, xs:boolean, whether the device supports AI open platform capabilities; if
supports, this node will be returned and its value is true; if not, this node will not be returned--></
isSupportAIOpenPlatform>
<isSupportPictureDownloadError><!--optional, xs:boolean,  whether the device supports reporting picture download
failure--></isSupportPictureDownloadError>
<characteristicCode min="1" max="128"><!--optional, xs:string, device attribute code (related URI: /ISAPI/System/
```

```
deviceInfo/characteristicCode?format=json)--></characteristicCode>
</DeviceCap>
```

B.37 XML_DisplayCap

XML message about screen capability

```
<DisplayCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <isSupportScreenCtrl>
  <!--optional, xs:boolean-->
 </isSupportScreenCtrl>
 <VideoCap/><!--optional-->
 <AudioCap/><!--optional-->
 <VideoWallCap/><!--optional-->
 <SIPServerCap>
  <!--optional-->
  <isSupportEnDecodeSeparateCfg>
   <!--optional, xs:boolean, "true"-->
  </isSupportEnDecodeSeparateCfg>
 </SIPServerCap>
 <AlarmCap>
  <!--optioanl-->
  <isSupportAlarmLinkage opt="true">
   <!--required, If support alarm linkage, xs:boolean-->
  </isSupportAlarmLinkage>
 </AlarmCap>
</DisplayCap>
```

See Also

XML_AudioCap
XML_VideoCap
XML_VideoWallCap

B.38 XML_EncodeDevInfo

XML message about encoding information

```
<EncodeDevInfo version="2.0">
 <domain><!--required, xs:string, ipv4 or ipv6 or domain--></domain>
 <port><!--required, xs:integer--></port>
 <transmitProtocol opt="tcp, udp, mcast"><!--required, xs:string--></transmitProtocol>
 <protocol opt="HIKVISION, DAHUA, ..."><!--required, xs:string--></protocol>
 <username><!--write-only, required, xs:string--></username>
 <password><!--write-only, required, xs:string--></password>
 <channelMode opt="normal, zero, streaming, distributed"><!--required, xs:string--></channelMode>
 <channelType opt="main, sub, third"><!--required, xs:string--></channelType>
 <channelZero><!--dependent, xs:integer, it is required only when channelMode is "zero"--></channelZero>
 <channelNormal><!--dependent, xs:integer, it is required only when channelMode is "normal", --></channelNormal>
```

```
 <channelStreaming><!--dependent, xs:integer, it is required only when channelMode is "streaming"--></
channelStreaming>
 <channelDistributed><!--dependent, xs:integer, it is required only when channelMode is "distributed"--></
channelDistributed>
</EncodeDevInfo>
```

B.39 XML_InputBoardCfg

XML message about parameters of a specific sub-board

```
<InputBoardCfg version="2.0">
 <slotNo><!--required, xs:integer--></slotNo>
 <fullFrameEnable><!--required, xs:boolean--></fullFrameEnable>
</InputBoardCfg>
```

B.40 XML_InputBoardCfgList

XML message about parameters of all sub-board

```
<InputBoardCfgList version="2.0">
 <InputBoardCfg/><!-->
</InputBoardCfgList>
```

See Also

XML_InputBoardCfg

B.41 XML_InputCutOff

XML message about picture cropping parameters of a specific signal source

```
<InputCutOff version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <leftCutOff><!--optional, xs:integer,range: [0,30]--></leftCutOff>
 <rightCutOff><!--optional, xs:integer, range: [0,30]--></rightCutOff>
 <topCutOff><!--optional, xs:integer, range: [0,30]--></topCutOff>
 <bottomCutOff><!--optional, xs:integer, range: [0,30]--></bottomCutOff>
</InputCutOff>
```

B.42 XML_InputPosition

XML message about image position parameters of a specific signal source

```
<InputPosition version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <horizontal><!--optional, xs:integer, -30...30--></horizontal>
```

```
  <vertical><!--optional, xs:integer, -30…30--></vertical>
</InputPosition>
```

B.43 XML_LedAreaList

XML message about information of a specific LED or LCD area.

```
<LedArea version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--required, xs:integer--></id>
 <Rect/><!--optional-->
 <OutputChanList><!--required-->
  <id><!--required,xs:integer--></id>
 </OutputChanList>
</LedArea>
```

B.44 XML_LedAreaList

XML message about LED or LCD areas.

```
<LedAreaList xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
 <LedArea>
  <id>
   <!--required, xs:integer,LED area ID-->
  </id>
  <areaType>
   <!--optional, xs:string, area type: LED, LCD-->
  </areaType>
  <Rect><!--LED area-->
   <Coordinate><!--required-->
    <x><!--required, xs:integer--></x>
    <y><!--required, xs:integer--></y>
   </Coordinate>
   <width>
    <!--required, xs:integer-->
   </width>
   <height>
    <!--required, xs:integer-->
   </height>
  </Rect>
  <OutputChanList>
   <!--required, output port list-->
   <id>
    <!--required, xs:integer, output No.-->
   </id>
  </OutputChanList>
 </LedArea>
</LedAreaList>
```

B.45 XML_MediaGatewayInfo

XML message about streaming server information

```
<MediaGatewayInfo version="2.0">
  <enabled><!--required, xs:boolean--></enabled>
  <domain><!--required, xs:string--></domain>
  <port><!--required, xs:integer--></port>
  <transmitProtocol opt="tcp, udp, mcast"><!--required, xs:string--></transmitProtocol>
</MediaGatewayInfo>
```

B.46 XML_OutputIdentify

XML message about parameters of the output identifier

```
<OutputIdentify version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <enabled><!--required, xs:boolean--></enabled>
</OutputIdentify>
```

B.47 XML_OutputResolution

XML message about output resolution

```
<OutputResolution version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <resolution><!--optional, xs:string, "1920*1080@60HZ,1280*720@50HZ"--></resolution>
  <imageWidth><!--optional, xs:integer--></imageWidth>
  <imageHeight><!--optional, xs:integer--></imageHeight>
</OutputResolution>
```

B.48 XML_PlanCap

XML message about plan configuration capability.

```
<PlanCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <maxPlanNums><!--read-only, optional, xs:integer, the maximum number of plans--></maxPlanNums>
  <isSupportBaseMapCycleSwitch><!--opt,xs:boolean--></isSupportBaseMapCycleSwitch>
</PlanCap>
```

B.49 XML_PlaybackCtrl

XML message about playback parameters

```
<PlaybackCtrl version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <command>
  <!—required, xs:string, "audio on, audio off, faster, slower, pause, resume, play, stop"-->
 </command>
</PlaybackCtrl>
```

B.50 XML_PlaybackStatus

XML message about playback status

```
<PlaybackStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <isConnectLinked><!--optional, xs:boolean, the network is streaming normally--></isConnectLinked>
 <isDecoding><!--optional, xs:boolean, start decoding or is decoding--></isDecoding>
 <isPlaying><!--optional, xs:boolean,in playback, and you can pause it--></isPlaying>
 <isAudioOn><!--optional, xs:boolean--></isAudioOn>
 <percentInProgress><!--optional, xs:integer, percentage: from 0 to 100--></percentInProgress>
 <playSpeed><!--optional, xs:string, "1/8,1/4,1/2,1,2,4,8"--></playSpeed>
</PlaybackStatus>
```

B.51 XML_Rect

XML message about position

```
<Rect version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <Coordinate><!--required-->
  <x><!--required, xs:integer--></x>
  <y><!--required, xs:integer--></y>
 </Coordinate>
 <width min=" max="><!--required, xs:integer--> </width>
 <height min=" max="><!--required, xs:integer--> </height>
</Rect>
```

Remarks

When roaming is not supported, and **Coordinate**, **width** and **height** must be multiples of 1920.

B.52 XML_Resolution

XML message about resolution parameters

```
<Resolution version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--required, xs:integer--></id>
 <resolutionName><!--optional, xs:string--></resolutionName>
 <imageWidth><!--required, xs:integer--></imageWidth>
 <imageHeight><!--required, xs:integer--></imageHeight>
 <refreshRate><!--optional, xs:integer--></refreshRate>
 <colorDepth><!--optional, xs:string, opt="32, 16, 8"--></colorDepth>
```

```
 <scanType><!--optional, xs:string, opt="progressiveScan, intervalScan"--></scanType>
</Resolution>
```

B.53 XML_ResolutionList

XML message about resolution capabilities of all signal sources

```
<ResolutionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <Resolution/><!--required-->
</ResolutionList>
```

See Also

XML_Resolution

B.54 XML_ResolutionRect

XML message about resolution

```
<ResolutionRect version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <Coordinate/><!--optional-->
 <width min="" max=""><!--optional, xs:integer--></width>
 <height min="" max=""><!--optional, xs:integer--></height>
</ResolutionRect>
```

B.55 XML_ResponseStatus

XML message about response status

```
<ResponseStatus version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
 <requestURL>
  <!--required, read-only, xs:string, request URL-->
 </requestURL>
 <statusCode>
  <!--required, read-only, xs:integer, status code: 0,1-OK, 2-Device Busy, 3-Device Error, 4-Invalid Operation, 5-Invalid XML Format, 6-Invalid XML Content, 7-Reboot Required, 9-Additional Error-->
 </statusCode>
 <statusString>
  <!--required, read-only, xs:string, status description: OK, Device Busy, Device Error, Invalid Operation, Invalid XML Format, Invalid XML Content, Reboot, Additional Error-->
 </statusString>
 <subStatusCode>
  <!--required, read-only, xs:string, describe the error reason in detail-->
 </subStatusCode>
</ResponseStatus>
```

Note

See ***Response Codes of Text Protocol*** for details about sub status codes and corresponding error codes.

B.56 XML_RunningScene

XML message about information of the current scene

```
<RunningScene version="2.0"xmlns="http://www.isapi.org/ver20/XMLSchema">
  <sceneID><!--required, xs:integer--></sceneID>
</RunningScene>
```

B.57 XML_RunningPlan

XML message about the current plan

```
<RunningPlan version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
    <planID><!--required, xs:integer--></planID>
</RunningPlan>
```

B.58 XML_SceneCap

XML message about scene configuration capability

```
<SceneCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <maxSceneNums><!--read-only, optional, xs:integer--></maxSceneNums>
  <isSupportSceneCopy><!--optional, xs:boolean, whether it supports scene copy--></isSupportSceneCopy>
  <isSupportSceneImport><!--optional, xs:boolean, whether it supports scene import--></isSupportSceneImport>
  <isSupportSceneExport><!--optional, xs:boolean, whether it supports scene export--></isSupportSceneExport>
</SceneCap>
```

B.59 XML_ScreenCtrl

XML Message about screen control

```
<ScreenCtrl version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <VideoWallID><!--optional, xs:integer--></VideoWallID>
  <OutputID><!--optional, xs:integer--></OutputID>
</ScreenCtrl>
```

B.60 XML_ServerLoginCfg

XML message about login parameters of a specific screen sever

```
<ServerLoginCfg xmlns="http://www.std-cgi.org/ver20/XMLSchema" version="2.0" >
 <id>
  <!--required, xs:integer, screen sever ID-->
 </id>
 <IpAddress>
  <!--req-->
  <ipVersion opt="v4,v6" >
   <!--required, xs:string-->
  </ipVersion>
  <ipAddress>
   <!--dependent, xs:string-->
  </ipAddress>
  <ipv6Address>
   <!--dependent, xs:string-->
  </ipv6Address>
 </IpAddress>
 <portNo>
  <!--required, xs:integer-->
 </portNo>
 <userName>
  <!--required, xs:string-->
 </userName>
 <password>
  <!--required, xs:string-->
 </password>
 <inputNo>
  <!--optional, input port No.-->
 </inputNo>
</ServerLoginCfg>
```

B.61 XML_ServerLoginCfgList

XML message about login parameters of all screen severs

```
<ServerLoginCfgList version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
 <ServerLoginCfg>
  <id>
   <!--required, xs:integer, screen sever ID-->
  </id>
  <IpAddress>
   <!--req-->
   <ipVersion opt="v4,v6" >
    <!--required, xs:string-->
   </ipVersion>
   <ipAddress>
```

```
      <!--dependent, xs:string-->
     </ipAddress>
     <ipv6Address>
      <!--dependent, xs:string-->
     </ipv6Address>
    </IpAddress>
    <portNo>
     <!--required, xs:integer-->
    </portNo>
    <userName>
     <!--required, xs:string-->
    </userName>
    <password>
     <!--required, xs:string-->
    </password>
    <inputNo>
     <!--optional, input port No.-->
    </inputNo>
   </ServerLoginCfg>
</ServerLoginCfgList>
```

B.62 XML_SignalSourceText

XML message about OSD content

```
<SignalSourceText version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--required, xs:integer--></id>
 <enable><!--required, xs:boolean--></enable>
 <fontSize><!--required, xs:integer--></fontSize>
 <backgroudMode><!--required, xs:string,"transparent,coverage"--></backgroudMode>
 <positionX><!--required, xs:integer--></positionX>
 <positionY><!--required, xs:integer--></positionY>
 <ForegroudColor><!--required-->
  <RGB><!--required, xs:integer--></RGB>
 </ForegroudColor>
 <BackgroudColor><!--required-->
  <RGB><!--required, xs:integer--></RGB>
 </BackgroudColor>
 <textContent><!--required, xs:string--></textContent>
</SignalSourceText>
```

B.63 XML_SignalSourceTextList

XML message OSD configuration capability of a specific signal source

```
<SignalSourceTextList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <SignalSourceText/><!---->
</SignalSourceTextList>
```

See Also

XML_SignalSourceText

B.64 XML_StreamInput

XML message about network stream

```
<StreamInput version="2.0">
 <streamInputMode opt="realtime, playback">
  <!--required, xs:string-->
 </streamInputMode>
 <StreamInputRealtime>
  <!--dependent, it is require only when streamInputMode is "realtime"-->
  <durationInUnit>
   <!--optional, xs:interger, unit: seconds-->
  </durationInUnit>
  <StreamRealtimeUnitList>
   <!--req-->
   <StreamRealtimeUnit/><!--optional-->
  </StreamRealtimeUnitList>
 </StreamInputRealtime>
 <StreamInputPlayback>
  <!--dependent, streamInputMode is "playback"-->
  <playbackMode opt="file name, time range">
   <!--required, xs:string-->
  </playbackMode>
  <EncodeDevInfo/><!--required-->
  <fileName>
   <!--dependent, xs:string, it is required only when playbackMode is "file name"-->
  </fileName>
  <TimeRange>
   <!--dependent, it is required only when playbackMode is "time range"-->
   <beginTime>
    <!--required, xs:time, start time in ISO 8601 format-->
   </beginTime>
   <endTime>
    <!--required, xs:time, end time in ISO 8601 format-->
   </endTime>
  </TimeRange>
 </StreamInputPlayback>
 <streamEncryptEnable><!--optional, xs:boolean,--></streamEncryptEnable>
 <streamPassword>
  <!--dependent, write-only, xs:string, it is required only when streamEncryptEnable is "true"-->
 </streamPassword>
</StreamInput>
```

See Also

XML_EncodeDevInfo

XML_StreamRealtimeUnit

B.65 XML_StreamInputChannel

XML message about parameters of a specific video stream

```
<StreamInputChannel version="2.0">
  <id><!--required, xs:string--></id>
  <name><!--optional, xs:string--></name>
  <group><!--optioanl, xs:string--></group>
  <startDecoding opt="true, false">
    <!--required, xs:boolean-->
  </startDecoding>
  <StreamInput/><!--required-->
</StreamInputChannel>
```

See Also

XML_StreamInput

B.66 XML_StreamInputChannelList

XML format about all video stream parameters

```
<StreamInputChannelList version="2.0">
  <StreamInputChannel/><!--optional-->
</StreamInputChannelList>
```

See Also

XML_StreamInputChannel

B.67 XML_StreamRealtimeUnit

XML message about real-time stream unit

```
<StreamRealtimeUnit version="2.0">
  <streamType optional,="in URL,by ddns, by domain"><!--required, xs:string--></streamType>
  <StreamInURL>
    <!--dependent, it is required only when  streamType is "in URL"-->
    <URL><!--required, xs:string--></URL>
  </StreamInURL>
  <StreamByDdns>
    <!--dependent, it is required only when streamType is "by ddns"-->
    <DdnsServerInfo/><!--required-->
    <EncodeDevInfo/><!--required-->
    <MediaGatewayInfo/><!--optional-->
  </StreamByDdns>
```

```
 <StreamByDomain>
  <!--dependent,streamType is "by domain"-->
  <EncodeDevInfo/><!--required-->
  <MediaGatewayInfo/><!--optional-->
 </StreamByDomain>
</StreamRealtimeUnit>
```

See Also

XML_EncodeDevInfo
XML_DdnsServerInfo
XML_MediaGatewayInfo

B.68 XML_SubWindow

XML message about sub window parameters

```
<SubWindow version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--optional--></id>
 <SubWindowParam>
  <signalMode>
   <!--optional, xs:string, "video input, stream id, stream setting"-->
  </signalMode>
  <videoInputChannelID>
   <!--dependent, xs:string, it is valid when signalMode is "video input"-->
  </inputChannelID>
  <streamingChannelID>
   <!--dependent, xs:string, it is valid when signalMode is "stream id"-->
  </streamingChannelID>
  <StreamInput/><!--dependent, xs:string, it is valid when signalMode is "stream setting"-->
 </SubWindowParam>
</SubWindow>
```

See Also

XML_StreamInput

B.69 XML_SubWindowList

XML message about parameters of all sub windows

```
<SubWindowList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <SubWindow/>
</SubWindowList>
```

B.70 XML_SubWindowParam

XML message about sub window parameters

```
<?xml version="1.0" encoding="utf-8"?>
<SubWindowParam version="2.0">
 <enabledAudio><!--optional, xs:boolean, whether to turn on the audio of sub window: true, false--></enabledAudio>
 <rotateAngle><!--optional, xs:integer, rotate angle--></rotateAngle>
 <borderEnabled><!--optional, xs:boolean, whether to enable border light--></borderEnabled>
 <borderWidth><!--optional, xs:integer, border width--></borderWidth>
 <borderColor><!--optional, xs:string, border color, by default it is red--></borderColor>
 <flashEnabled><!--optional, xs:boolean, whether to enable flash of the border light: true-yes, false-no (the light will always be bright); this node is valid only when the value of borderEnabled is "true"--></flashEnabled>
 <flashDurationTime><!--optional, xs:integer, duration time of the border flash, unit:s; "-1"-keep flashing--></flashDurationTime>
 <flashOnTime><!--optional, xs:integer, duration time of the light keeping bright in one flash, unit:s--></flashOnTime>
 <flashOffTime><!--optional, xs:integer, duration time of the light keeping dark in one flash, unit:s--></flashOffTime>
 <rolateOSD><!--optional, xs:boolean, whether to relate to OSD overlay--></rolateOSD>
</SubWindowParam>
```

B.71 XML_SubWindowParamCap

XML message about configuration capability of sub window

```
<?xml version="1.0" encoding="utf-8"?>
<SubWindowParamCap version="2.0">
 <enabledAudio opt="true,fasle"><!--optional, xs:boolean, whether to turn on the audio of sub window--></enabledAudio>
 <rotateAngle min="0" max="270"><!--optional, xs:integer, rotate angle--></rotateAngle>
 <borderEnabled opt="true,fasle"><!--optional, xs:boolean, whether to enable border light--></borderEnabled>
 <borderWidth min="0" max="100"><!--optional, xs:integer, border width--></borderWidth>
 <borderColor opt= "red"><!--optional, xs:string, border color, by default it is red--></borderColor>
 <flashEnabled opt="true,fasle"><!--optional, xs:boolean, whether to enable flash of the border light: true-yes, false-no (the light will always be bright); this node is valid only when the value of borderEnabled is "true"--></flashEnabled>
 <flashDurationTime min="0" max="100"><!--optional, xs:integer, duration time of the border flash, unit:s--></flashDurationTime>
 <flashOnTime min="0" max="100"><!--optional, xs:integer, duration time of the light keeping bright in one flash, unit:s--></flashOnTime>
 <flashOffTime min="0" max="100"><!--optional, xs:integer, duration time of the light keeping dark in one flash, unit:s--></flashOffTime>
 <rolateOSD opt="true,fasle"><!--optional, xs:boolean, whether to relate to OSD overlay--></rolateOSD>
</SubWindowParamCap>
```

B.72 XML_SubWinStatus

XML message about decoding status of a specific sub-window

```
<SubWinStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--required, xs:integer, ID--> </id>
 <isLinked><!--optional, xs:boolean, connection Status--></isLinked>
 <isDecoding><!--optional, xs:boolean, decoding status--></isDecoding>
 <isDecodingEnabled><!--optional, xs:boolean, whether to enable decoding--></isDecodingEnabled>
 <imageWidth><!--optional, xs:integer, image width--></imageWidth>
 <imageHeight><!--optional, xs:integer, image height--></imageHeight>
 <videoFPS><!--optional, xs:integer, video frame rate--><videoFPS>
 <audioFPS><!--optional, xs:integer, audio frame rate--><audioFPS>
 <videoTotal><!--optional, xs:integer--><videoTotal>
 <streamRate><!--optional, xs:integer, stream transmitting rate--></streamRate>
 <videoType><!--optional, xs:string, coding type--></videoType>
 <packetType><!--optional, xs:string, packet type --></packetType>
 <wndDecodeType optional="dynamic,cycle"><!--optional,xs:string, window decoding types, which including dynamic
decoding and cycle decoding--><wndDecodeType>
 <SubWindowParam/><!--optional-->
</SubWinStatus>
```

See Also

XML_SubWindow

B.73 XML_SubWndConferenceCycle

XML message about parameters of auto-switch conference of sub-windows

```
<SubWndConferenceCycle version="2.0">
 <mcuID><!--required,xs:integer, MCU server ID--></mcuID>
 <conferenceID><!--required,xs:string, conference ID--></conferenceID>
</SubWndConferenceCycle>
```

B.74 XML_VcaDec

XML message about intelligent decoding parameters

```
<VcaDec version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <enabled><!--required, xs:boolean, whether to enable intelligent decoding： "true"-enable, "false"-disable--
><enabled>
</VcaDec>
```

B.75 XML_VideoCap

VideoCap capability message in XML format.

```
<VideoCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <VideoInputsCap/><!--video input capability-->
 <VideoOutputsCap/><!--video output capability-->
```

```
 <VideoStreamingCap/><!--video stream capability-->
 <isSupportClarityConfig>
  <!--optioanl, xs:boolean, whether it supports definition configuration when displaying videos on the wall-->
 </isSupportClarityConfig>
</VideoCap>
```

See Also

XML_VideoInputsCap
XML_VideoOutputsCap
XML_VideoStreamingCap

B.76 XML_VideoInputChannel

XML message about parameters of a specific signal source

```
<VideoInputChannel xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
 <id>
  <!--required, xs:integer, local signal source ID-->
 </id>
 <name>
  <!--optional, xs:string, signal source name-->
 </name>
 <portType>
  <!--read-only, optional, signal source type, xs:string, "SDI,OPT,VGA,HDMI,YpbPr,Matrix,Joint..."-->
 </portType>
 <useSelfdefineResolution>
  <!--optional, xs:boolean, custom resolution-->
 </useSelfdefineResolution>
 <selfdefineResolutionNo>
  <!--dependent, xs:integer, custom resolution ID-->
 </selfdefineResolutionNo>
 <imageWidth>
  <!--read-only, optional, xs:integer-->
 </imageWidth>
 <imageHeight>
  <!--read-only, optional, xs:integer-->
 </imageHeight>
 <FPS>
  <!--read-only, optional, xs:integer-->
 </FPS>
 <PortInBoard>
  <!--read-only, optional-->
  <boardID>
   <!--read-only, optional, xs: integer, sub-board ID, which starts from 1-->
  </boardID>
  <portID>
   <!--read-only, optional, xs:integer, Slot ID of the sub-board, which starts from 1-->
  </portID>
 </PortInBoard>
```

```
 <deviceID>
  <!--read-only, optional, xs:integer, device ID-->
 </deviceID>
 <JointPort>
  <!--read-only, dependent, it is required only when portType is "Joint"-->
  <horizontalCount>
   <!--read-only, xs:interger, the number of horizontal signal sources-->
  </horizontalCount>
  <verticalCount>
   <!--read-only, xs:interger, the number of vertical signal sources-->
  </verticalCount>
 </JointPort>
 <RelateScreenServer>
  <!--required, xs:boolean, whether the input related a screen server-->
 </RelateScreenServer>
</VideoInputChannel>
```

B.77 XML_VideoInputChannelList

XML message about parameters of all video input channels

```
<VideoInputChannelList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <VideoInputChannel/><!--optional-->
</VideoInputChannelList>
```

See Also

XML_VideoInputChannel

B.78 XML_VideoInputsCap

XML message about video input capability

```
<VideoInputsCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <videoInputPortNums><!--optional, xs:integer--></videoInputPortNums>
 <isSupportColorSetting><!—optional, xs:boolean--></isSupportColorSetting>
 <isSupportPositionSetting><!—optional, xs:boolean--></isSupportPositionSetting>
 <isSupportCutOffSetting><!—optional, xs:boolean--></isSupportCutOffSetting>
 <isSupportPictureCapture><!—optional, xs:boolean--></isSupportPictureCapture>
 <isSupportText><!--optional, xs:boolean--></isSupportText>
 <SupportSelfdefineResolution>
  <!--optional-->
  <signalType opt="DVI, VGA, HDMI, DP"><!--req, xs:string--></signalType>
 </SupportSelfdefineResolution>
 <isSupportEDIDResolution><!--optional, xs:boolean--></isSupportEDIDResolution>
 <isSupportJoinSignalCfg><!--optional, xs:boolean, "true"--></isSupportJoinSignalCfg>
 <SupportAudioCfg>
  <!--optional, whether it supports audio configuration-->
  <signalType opt="DP">
```

```
    <!--required, xs:string-->
   </signalType>
  </SupportAudioCfg>
</VideoInputsCap>
```

B.79 XML_VideoOutputChannel

XML message about parameters of a specific video output

```
<VideoOutputChannel version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--required, xs:string, output ID--></id>
 <portType><!--required, xs:string, "VGA, CVBS, HDMI, Spot, SDI, DVI, TVI, etc."--></portType>
 <OutputResolution><!--output resolution-->
  <resolution><!--optional, xs:string; "1920*1080@60HZ,1280*720@50HZ...", resolution name--></resolution>
  <imageWidth><!--optional, xs:integer, resolution width--></imageWidth>
  <imageHeight><!--optional, xs:integer, resolution height--></imageHeight>
 </OutputResolution>
 <PortInBoard><!--read-only, optional-->
  <boardID><!--read-only, optional, xs:integer--></boardID>
  <portID><!--read-only, optional, xs:integer--></portID>
 </PortInBoard>
 <useEDIDResolution><!--optional, xs:boolean--></useEDIDResolution>
 <outputMode><!--optional, string, output mode: "HDMI,DVI"--></outputMode>
</VideoOutputChannel>
```

B.80 XML_VideoOutputChannelList

XML message about parameters of all video outputs

```
<VideoOutputChannelList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <VideoOutputChannel/><!--optional-->
</VideoOutputChannelList>
```

See Also

XML_VideoInputChannel

B.81 XML_VideoOutputsCap

XML message about video output capability

```
<VideoOutputsCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <videoOutputPortNums><!--optional, xs:integer, the number of outputs--></videoOutputPortNums>
 <isSupportMultiOutputType><!--optional, xs:boolean--></isSupportMultiOutputType>
 <isSupportMultiResolution><!--optional, xs:boolean--></isSupportMultiResolution>
 <isSupportColorSetting><!—ro, optional, xs:boolean--></isSupportColorSetting>
 <isSupportWidthHeightSetting><!—read-only, optional, xs:boolean--></isSupportWidthHeightSetting>
```

```
 <isSupportOutputIdentity><!—read-only, optional, xs:boolean--></isSupportOutputIdentity>
 <OutputResolutionCapList>
  <OutputResolutionCap>
   <resolution><!--optional, xs:string, resolution name--></resolution>
   <imageWidth min="" max=""><!--optional, xs:integer--></imageWidth>
   <imageHeight min="" max=""><!--optional, xs:integer--></imageHeight>
  </OutputResolutionCap>
 </OutputResolutionCapList>
 <isSupportEDIDResolution><!--optional, xs:boolean--></isSupportEDIDResolution>
</VideoOutputsCap>
```

B.82 XML_VideoStreamingCap

XML message about video stream capability

```
<VideoStreamingCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <streamingNums><!--optional, xs:integer, the number of video streams--></streamingNums>
 <isSupportURL><!--optional, xs:boolean, whether it supports URLs--></isSupportURL>
 <isSupportDDNS><!--optional, xs:boolean, whether it supports DDNS address--></isSupportDDNS>
 <isSupportIPAddress><!--optional, xs:boolean, whether it supports IP address--></isSupportIPAddress>
 <isSupportDistributedIPSignal opt="true, false">
  <!--optional, xs:boolean, whether it supports adding distributed network sources-->
 </isSupportDistributedIPSignal>
 <isSupportAddBatch><!--optional, xs:boolean, whether it supports batch addition of network signal sources--></
isSupportAddBatch>
 <isSupportEncryptStream><!--optional, xs:boolean, whether it supports encryption of channel stream; when the
node exists and its value is "true", you should decide whether to configure encryption of the channel stream--></
isSupportEncryptStream>
 <isSupportLoopEncryptStream><!--optional, xs:boolean, whether it supports encryption configuration for auto-
switch of decoded stream--></isSupportLoopEncryptStream>
</VideoStreamingCap>
```

B.83 XML_VideoWall

XML message about video wall parameters

```
<VideoWall version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--optional, xs:integer--></id>
 <name><!--optional, xs:string--></name>
 <backgroudColor><!--optional, xs:string,"black,blue, white"--></backgroudColor>
 <autoSwitchMainSub>
  <!--optional, xs:boolean, whether to enable auto switching main/sub-stream for divided windows; if enabled, no
matter the decoding device is configured with main-stream or sub-stream when dynamic decoding, divided windows
take sub-stream to decode and display live view on video wall-->
 </autoSwitchMainSub>
 <WallOutputList/><!--optional-->
 <WallWindowList/><!--optional-->
 <SubStreamAutoSwitch><!--dep-->
  <subWndWidth><!--required, xs:integer--></subWndWidth>
```

```
   <subWndHeight><!--required, xs:integer--></subWndHeight>
  </SubStreamAutoSwitch>
  <streamFailedMode><!--optional, xs:string,opt="noSignal,lastFrame", display mode when window streamed failed:
"noSignal"-no network video signal, "lastFrame"-last frame image ---></streamFailedMode>
  <enabledOverlayLogo opt="true,false"><!--optional,xs:boolean, whether to enable logo overlay: "true"-enable,
"false"-disable---></enabledOverlayLogo>
  <alarmFilterTime><!--optional,xs:integer, alarm filter time, uint:ms--></alarmFilterTime>
</VideoWall>
```

B.84 XML_VideoWallCap

XML message about video wall capability

```
<VideoWallCap xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
  <maxWallNums>
    <!--optional, xs:integer, the maximum number of video walls-->
  </maxWallNums>
  <maxWindowNums>
    <!--optional, xs:integer, the maximum number of windows -->
  </maxWindowNums>
  <baseOutputSize>
    <!--optional, xs:integer, output port coordinates (fixed at 1920 and cannot be changed), on which the array
calculations of window and output port are based-->
  </baseOutputSize>
  <isSupportBaseMap>
    <!--optional, xs:boolean, whether it supports base map-->
  </isSupportBaseMap>
  <isSupportVirtualLED>
    <!--optional, xs:boolean, whether it supports virtual LED-->
  </isSupportVirtualLED>
  <isSupportPlan>
    <!--optional, xs:boolean, whether it supports plan-->
  </isSupportPlan>
  <isSupportScene>
    <!--optional, xs:boolean, whether it supports scene-->
  </isSupportScene>
  <isSupportRoam>
    <!--optional, xs:boolean, whether it supports roaming; "false"-roaming is not supported for window coordinates can
only be multiples of 1920-->
  </isSupportRoam>
  <isSupportAutoSwitchMainSub>
    <!--optional, xs:boolean, , whether it supports auto-switching main/sub-stream-->
  </isSupportAutoSwitchMainSub>
  <BaseMapCap/><!-- optional, base map capability->
  <VirtualLEDCap/><!--optional, virtual LED capability-->
  <PlanCap/><!--optional, plan capability-->
  <SceneCap/><!--optional, scene capability-->
  <InputBoardCfgList>
    <!--optional, output board configuration information-->
    <InputBoardCfg>
```

```
    <slotNo>
      <!--required, xs:integer-->
    </slotNo>
    <fullFrameEnable>
      <!--required, xs:boolean, slot ID-->
    </fullFrameEnable>
   </InputBoardCfg>
  </InputBoardCfgList>
  <supportLEDResolutionVoutType opt="hdmi,dvi,sdi" >
  </supportLEDResolutionVoutType>
  <!--optional, output port types that support LED resolution; if the node does not exist, all types support LED
resolution by default.-->
  <SupportSubStreamAutoSwitch>
   <!--optional-->
   <subWndWidth min="" max="" >
    <!--required, xs:integer-->
   </subWndWidth>
   <subWndHeight min="" max="" >
    <!--required, xs:integer-->
   </subWndHeight>
  </SupportSubStreamAutoSwitch>
  <isSupportDisplayWinNo>
   <!--optional, xs:boolean, whether it supports window No. configuration-->
  </isSupportDisplayWinNo>
  <streamFailedMode opt="noSignal,lastFrame" >
   <!--optional, xs:string-->
  </streamFailedMode>
  <isSupportOverlayLogo opt="true" >
   <!--optional, xs:boolean, whether to enable logo overlay: "true"-enable, "false"-disable-->
  </isSupportOverlayLogo>
  <isSupportWallNPreMonitor opt="true" >
   <!--optional, xs:boolean, whether it supports network echo-->
  </isSupportWallNPreMonitor>
  <isSptWallCapture>
   <!--optional, xs:boolean, whether it supports capturing images from video wall-->
  </isSptWallCapture>
</VideoWallCap>
```

B.85 XML_VideoWallList

XML message about parameters of all video walls

```
<VideoWallList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <VideoWall/>
</VideoWallList>
```

B.86 XML_VirtualLEDCap

XML message about configuration capability of all virtual LEDs.

```
<VirtualLEDCap xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
 <virualLEDNums>
  <!--read-only, optional, xs:integer, the number of virtual LEDs-->
 </virualLEDNums>
 <virtualLEDFirstHeightList>
  <!--read-only, optional-->
  <virtualLEDFirstHeight>
   <resolution>
    <!--optional, xs:string-->
   </resolution>
   <virtualLEDHeight>
    <!--optional, xs:integer-->
   </virtualLEDHeight>
  </virtualLEDFirstHeight>
 </virtualLEDFirstHeightList>
</VirtualLEDCap>
```

B.87 XML_VirtualLEDOnWall

XML message about virtual LED.

```
<VirtualLEDOnWall xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
 <id>
  <!--optional, xs:integer -->
 </id>
 <enabled>
  <!--optional, xs:boolean -->
 </enabled>
 <Rect>
 </Rect>
 <!--optional -->
 <text max="" >
  <!--optional, xs:string -->
 </text>
 <foregroundColor>
  <!--optional -->
  <RGB>
  </RGB>
 </foregroundColor>
 <backgroundColor>
  <!--optional -->
  <RGB>
  </RGB>
 </backgroundColor>
 <transparencyMode optional="opaque, half-transparent, transparent" >
```

```
  <!--optional, xs:string -->
 </transparencyMode>
 <moveDirection optional="left to right, right to left, top to bottom, bottom to top" >
  <!--optional, xs:string, -->
 </moveDirection>
 <moveSpeed min="1" max="5" >
  <!--optional, xs:integer -->
 </moveSpeed>
</VirtualLEDOnWall>
```

B.88 XML_VirtualLEDOnWallList

XML message about virtual LED

```
<VirtualLEDOnWallList version="2.0"xmlns="http://www.isapi.org/ver20/XMLSchema">
 <VirtualLEDOnWall/><!--optional-->
</VirtualLEDOnWallList>
```

B.89 XML_WallConferenceCycle

XML message about parameters of conference auto-switch

```
<WallConferenceCycle version="2.0">
 <duration><!--required, xs:integer--></duration>
</WallConferenceCycle>
```

B.90 XML_WallMCU

XML message about information of a specific held MCU conference

```
<WallMCU>
 <id>
  <!--required, xs:integer, MCU ID-->
 </id>
 <MCUAddress>
  <!--MCU address-->
  <addrFormatType>
   <!--required, xs:string, IP address type: "ipAddress,hostname"-->
  </addrFormatType>
  <hostName>
   <!--dependent, xs:string, host name-->
  </hostName>
  <IPAddress>
   <!--dependent, IP address-->
   <ipVersion>
    <!--required, xs:string, IP address version: "v4,v6,dual"-->
   </ipVersion>
```

```
    <ipAddress>
      <!--dependent, xs:string, IPv4 address-->
    </ipAddress>
    <ipv6Address>
      <!--dependent, xs:string, IPv6 address-->
    </ipv6Address>
  </IPAddress>
</MCUAddress>
<WallConferenceList>
  <!--required, held conference list-->
  <WallConference>
    <id>
      <!--required, xs:string, conference ID-->
    </id>
    <conferenceName>
      <!--required, xs:string, conference name-->
    </conferenceName>
    <conferenceStreamUrl>
      <!--required, xs:string-->
    </conferenceStreamUrl>
    <conferenceEndTime>
      <!--required, xs:string, conference end time, "GB8601" -->
    </conferenceEndTime>
    <WallTerminalList>
      <!--required, conference terminal list-->
      <WallTerminal>
        <id>
          <!--required, xs:integer, terminal-->
        </id>
        <terminalName>
          <!--required, xs:string, terminal name-->
        </terminalName>
        <isChairman>
          <!--required, xs:boolean, whether it is chairman-->
        </isChairman>
        <camStreamUrl>
          <!--required, xs:string-->
        </camStreamUrl>
        <isMultiStream>
          <!--required, xs:boolean, whether the terminal supports dual stream: "true"-yes, "false"-no-->
        </isMultiStream>
        <otherStreamUrl>
          <!--dependent, xs:string-->
        </otherStreamUrl>
      </WallTerminal>
    </WallTerminalList>
    <mcuID>
      <!--optional, xs:integer, MCU ID-->
    </mcuID>
    <MCUAddress>
    </MCUAddress>
    <!--opt MCU address-->
```

```
   </WallConference>
  </WallConferenceList>
</WallMCU>
```

B.91 XML_WallMCUList

XML message about information of all held MCU conferences

```
<WallMCUList version="2.0">
 <WallMCU>
  <id>
   <!--required, xs:integer, MCU ID-->
  </id>
  <MCUAddress>
   <!--MCU address-->
   <addrFormatType>
    <!--required, xs:string, IP address type: "ipAddress,hostname"-->
   </addrFormatType>
   <hostName>
    <!--dependent, xs:string, host name-->
   </hostName>
   <IPAddress>
    <!--dependent, IP address-->
    <ipVersion>
     <!--required, xs:string, IP address version: "v4,v6,dual"-->
    </ipVersion>
    <ipAddress>
     <!--dependent, xs:string, IPv4 address-->
    </ipAddress>
    <ipv6Address>
     <!--dependent, xs:string, IPv6 address-->
    </ipv6Address>
   </IPAddress>
  </MCUAddress>
  <WallConferenceList>
   <!--required, held conference list-->
   <WallConference>
    <id>
     <!--required, xs:string, conference ID-->
    </id>
    <conferenceName>
     <!--required, xs:string, conference name-->
    </conferenceName>
    <conferenceStreamUrl>
     <!--required, xs:string-->
    </conferenceStreamUrl>
    <conferenceEndTime>
     <!--required, xs:string, conference end time, "GB8601" -->
    </conferenceEndTime>
    <WallTerminalList>
```

```
      <!--required, conference terminal list-->
      <WallTerminal>
       <id>
        <!--required, xs:integer, terminal-->
       </id>
       <terminalName>
        <!--required, xs:string, terminal name-->
       </terminalName>
       <isChairman>
        <!--required, xs:boolean, whether it is chairman-->
       </isChairman>
       <camStreamUrl>
        <!--required, xs:string-->
       </camStreamUrl>
       <isMultiStream>
        <!--required, xs:boolean, whether the terminal supports dual stream: "true"-yes, "false"-no-->
       </isMultiStream>
       <otherStreamUrl>
        <!--dependent, xs:string-->
       </otherStreamUrl>
      </WallTerminal>
     </WallTerminalList>
     <mcuID>
      <!--optional, xs:integer, MCU ID-->
     </mcuID>
     <MCUAddress>
     </MCUAddress>
     <!--opt MCU address-->
    </WallConference>
   </WallConferenceList>
  </WallMCU>
</WallMCUList>
```

B.92 XML_WallOutput

XML message about screen binding parameters of a specific output

```
< WallOutput version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--optional, xs:integer--></id>
 <outputID><!--required, xs:integer--></outputID>
 <Rect>
  <Coordinate><!--required-->
    <x><!--required, xs:integer--></x>
    <y><!--required, xs:integer--></y>
  </Coordinate>
  <width><!--required, xs:integer--></width>
  <height><!--required, xs:integer--></height>
 </Rect>
</WallOutput>
```

See Also

XML_Rect

B.93 XML_WallOutputList

XML message about screen binding capability of all outputs

```
<WallOutputList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <WallOutput/>
</WallOutputList>
```

B.94 XML_WallPlan

XML message about parameters of a specific plan.

```
<WallPlan xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" >
 <id>
  <!--required, xs:integer-->
 </id>
 <name>
  <!--optional, xs:string-->
 </name>
 <ActTimeDetail>
  <actTimeMode>
   <!--optional, xs:string,"at once,on day,weekly"-->
  </actTimeMode>
  <OnDayTime>
   <!--dependent, actTimeMode is "on day"-->
   <datetime>
    <!--optional, xs:datetime,ISO 8601 time-->
   </datetime>
  </OnDayTime>
  <WeeklyTime>
   <!--dependent, actTimeMode is "weekly"-->
   <TimeBlockList>
    <!--req-->
    <TimeBlock>
     <dayOfWeek>
      <!--optional, xs:integer,ISO 8601 weekday number,1=Monday,...-->
     </dayOfWeek>
     <beginTime>
      <!--required, xs:time,ISO 8601 time-->
     </beginTime>
    </TimeBlock>
   </TimeBlockList>
  </WeeklyTime>
 </ActTimeDetail>
 <PlanDetailList>
```

```
   <!--opt-->
   <PlanDetail>
    <operationType>
     <!--required, xs:string, operations about plan: "activateScene"-switch scenes, "closeScreen"-close screens,
"openScreen"-open screens, "switchBaseMap"-switch background pictures-->
    </operationType>
    <sceneID>
     <!--dependent, xs:integer, scene ID-->
    </sceneID>
    <duration>
     <!--required, xs:interger, time interval between two plans, unit: seconds-->
    </duration>
    <baseMapType>
     <!--dependent, xs:string, background picture type: baseMap, UHD-->
    </baseMapType>
    <baseMapWndNo>
     <!--dependent, xs:integer, ID of the background picture window-->
    </baseMapWndNo>
    <baseMapNo>
     <!--dependent, xs:integer, background picture ID->
    </baseMapNo>
   </PlanDetail>
  </PlanDetailList>
  <actCount>
   <!--optional, xs:integer-->
  </actCount>
</WallPlan>
```

B.95 XML_WallPlanList

XML message about parameters of all plans.

```
<WallPlanList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <WallPlan/><!--optional-->
</WallPlanList>
```

B.96 XML_WallScene

XML message about parameters of a specific scene.

```
<WallScene version="2.0"xmlns="http://www.isapi.org/ver20/XMLSchema">
  <id><!--optional, xs:string--></id>
  <name><!--optional, xs:string--></name>
</WallScene>
```

B.97 XML_WallSceneList

XML message about parameters of all scenes

```
<WallSceneList version="2.0"xmlns="http://www.isapi.org/ver20/XMLSchema">
 <WallScene/><!--optional-->
</WallSceneList>
```

B.98 XML_WallWindow

XML message about parameters of a specific window

```
<WallWindow version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--optional, xs:string--></id>
 <wndOperateMode><!--optional, xs:string, "uniformCoordinate,resolutionCoordinate"--></wndOperateMode>
 <Rect><!--optional-->
  <Coordinate><!--required-->
   <x><!--required, xs:integer--></x>
   <y><!--required, xs:integer--></y>
  </Coordinate>
  <width min="" max=""><!--optional, xs:integer--></width>
  <height min="" max=""><!--optional, xs:integer--></height>
 </Rect>
 <Coordinate/><!--dependent-->
 <ResolutionRect><!--dependent, coordinates of physical resolution-->
  <Coordinate/><!--optioanl-->
   <width min="" max=""><!--optional, xs:integer--></width>
   <height min="" max=""><!--optional, xs:integer--></height>
 </ResolutionRect>
 <layerIdx><!--read-only, optional, xs:integer--></layerIdx>
 <windowMode><!--optional, xs:integer, "1,4,9,16"--></windowMode>
 <wndShowMode><!--optional, xs:string, opt="subWndMode,fullScreenMode"--></wndShowMode>
 <amplifyingSubWndNo><!--dependent, xs:integer--></amplifyingSubWndNo>
 <wndTopKeep><!--optional, xs:boolean,"true,false"--></wndTopKeep>
 <wndOpenKeep><!--optional, xs:boolean,"true,false"--></wndOpenKeep>
 <SubWindowList/><!--optional-->
</WallWindow>
```

See Also

XML_Rect
XML_ResolutionRect

B.99 XML_WallWindowCap

XML message about video wall window capability

```
<WallWindowCap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <windowMode optional="1,4,9,16,25,36">  <!--optional, xs:integer--></windowMode>
 <CycleCap/><!--optional-->
 <isSupportWinTopBottom><!--optional, xs:boolean--></isSupportWinTopBottom>
 <isSupportPlayBack><!--optional, xs:boolean--></isSupportPlayBack>
 <isSupportPicCapture><!--optional, xs:boolean--></isSupportPicCapture>
 <isSupportDecodeDelay><!--optional, xs:boolean--></isSupportDecodeDelay>
 <isSupportSubWndAmplify><!--optional, xs:boolean--></isSupportSubWndAmplify>
 <isSupportFullFrame><!--optional, xs:boolean--></isSupportFullFrame>
 <isSptMutiScreenGetSubStream><!--optional, xs:boolean, whether it supports auto switching to sub-stream in multi-screen mode--></isSptMutiScreenGetSubStream>
 <isSptCatchStreamAlarmHint><!--optional, xs:boolean, whether it supports configuring parameters for streaming alarm notification--></isSptCatchStreamAlarmHint>
</WallWindowCap>
```

B.100 XML_WallWindowList

XML message about parameters of all windows

```
<WallWindowList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <WallWindow/><!--optional-->
</WallWindowList>
```

B.101 XML_WallWindowStatus

XML message about decoding status of all sub windows of a specific window

```
<WallWindowStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <id><!--required, xs:string, window ID--></id>
 <windowMode><!--required, xs:integer,"1,4,9,16" --></windowMode>
 <SubWinStatusList><!--optional-->
  <SubWinStatus/>
 </SubWinStatusList>
</WallWindowStatus>
```

B.102 XML_WallWindowStatusList

XML message about decoding status of all sub-windows of all windows.

```
<WallWindowStatusList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
 <WallWindowStatus/><!--read-only, optional-->
</WallWindowStatusList>
```

Appendix C. Response Codes of Text Protocol

The response codes returned during the text protocol integration is based on the status codes of HTTP. 7 kinds of status codes are predefined, including 1 (OK), 2 (Device Busy), 3 (Device Error), 4 (Invalid Operation), 5 (Invalid Message Format), 6 (Invalid Message Content), and 7 (Reboot Required). Each kind of status code contains multiple sub status codes, and the response codes are in a one-to-one correspondence with the sub status codes.

StatusCode=1

SubStatusCode	Error Code	Description
ok	0x1	Operation completed.
riskPassword	0x10000002	Risky password.
armProcess	0x10000005	Arming process.

StatusCode=2

Sub Status Code	Error Code	Description
noMemory	0x20000001	Insufficient memory.
serviceUnavailable	0x20000002	The service is not available.
upgrading	0x20000003	Upgrading.
deviceBusy	0x20000004	The device is busy or no response.
reConnectIpc	0x20000005	The video server is reconnected.
transferUpgradePackageFailed	0x20000006	Transmitting device upgrade data failed.
startUpgradeFailed	0x20000007	Starting upgrading device failed.
getUpgradeProcessfailed.	0x20000008	Getting upgrade status failed.
certificateExist	0x2000000B	The Authentication certificate already exists.

StatusCode=3

Sub Status Code	Error Code	Description
deviceError	0x30000001	Hardware error.
badFlash	0x30000002	Flash operation error.
28181Uninitialized	0x30000003	The 28181 configuration is not initialized.
socketConnectError	0x30000005	Connecting to socket failed.
receiveError	0x30000007	Receive response message failed.
deletePictureError	0x3000000A	Deleting picture failed.
pictureSizeExceedLimit	0x3000000C	Too large picture size.
clearCacheError	0x3000000D	Clearing cache failed.
updateDatabasError	0x3000000F	Updating database failed.
searchDatabaseError	0x30000010	Searching in the database failed.
writeDatabaseError	0x30000011	Writing to database failed.
deleteDatabaseError	0x30000012	Deleting database element failed.
searchDatabaseElementError	0x30000013	Getting number of database elements failed.
cloudAutoUpgradeException	0x30000016	Downloading upgrade packet from cloud and upgrading failed.
HBPException	0x30001000	HBP exception.
UDEPException	0x30001001	UDEP exception
elasticSearchException	0x30001002	Elastic exception.
kafkaException	0x30001003	Kafka exception.
HBaseException	0x30001004	Hbase exception.
sparkException	0x30001005	Spark exception.
yarnException	0x30001006	Yarn exception.
cacheException	0x30001007	Cache exception.

Sub Status Code	Error Code	Description
trafficException	0x30001008	Monitoring point big data server exception.
faceException	0x30001009	Human face big data server exception.
SSDFileSystemIsError	0x30001013	SSD file system error (Error occurs when it is non-Ext4 file system)
insufficientSSDCapacityForFPD	0x30001014	Insufficient SSD space for person frequency detection
wifiException	0x3000100A	Wi-Fi big data server exception
structException	0x3000100D	Video parameters structure server exception.
calibrationTimeout	0x30002051	Calibration timed out.
captureTimeout	0x30006000	Data collection timed out.
lowScore	0x30006001	Low quality of collected data.
uploadingFailed	0x30007004	Uploading failed.

StatusCode=4

Sub Status Code	Error Code	Description
notSupport	0x40000001	Not supported.
lowPrivilege	0x40000002	No permission.
badAuthorization	0x40000003	Authentication failed.
methodNotAllowed	0x40000004	Invalid HTTP method.
notSetHdiskRedund	0x40000005	Setting spare HDD failed.
invalidOperation	0x40000006	Invalid operation.
notActivated	0x40000007	Inactivated.
hasActivated	0x40000008	Activated.
certificateAlreadyExist	0x40000009	The certificate already exists.
operateFailed	0x4000000F	Operation failed.
USBNotExist	0x40000010	USB device is not connected.

Sub Status Code	Error Code	Description
upgradePackageMorethan2GB	0x40001000	Up to 2GB upgrade package is allowed to be uploaded.
IDNotexist	0x40001001	The ID does not exist.
synchronizationError	0x40001003	Synchronization failed.
synchronizing	0x40001004	Synchronizing.
importError	0x40001005	Importing failed.
importing	0x40001006	Importing.
fileAlreadyExists	0x40001007	The file already exists.
invalidID	0x40001008	Invalid ID.
backupnodeNotAlloweLog	0x40001009	Accessing to backup node is not allowed.
exportingError	0x4000100A	Exporting failed.
exporting	0x4000100B	Exporting.
exportEnded	0x4000100C	Exporting stopped.
exported	0x4000100D	Exported.
IPOccupied	0x4000100E	The IP address is already occupied.
IDAlreadyExists	0x4000100F	The ID already exists.
exportItemsExceedLimit	0x40001010	No more items can be exported.
noFiles	0x40001011	The file does not exist.
beingExportedByAnotherUser	0x40001012	Being exported by others.
needReAuthentication	0x40001013	Authentication is needed after upgrade.
unitAddNotOnline	0x40001015	The added data analysis server is offline.
unitControl	0x40001016	The data analysis server is already added.
analysis unitFull	0x40001017	No more data analysis server can be added.
unitIDError	0x40001018	The data analysis server ID does not exist.
unitExit	0x40001019	The data analysis server already exists in the list.
unitSearch	0x4000101A	Searching data analysis server in the list failed.

Sub Status Code	Error Code	Description
unitNotOnline	0x4000101B	The data analysis server is offline.
unitInfoEror	0x4000101C	Getting data analysis server information failed.
unitGetNodeInfoError	0x4000101D	Getting node information failed.
unitGetNetworkInfoError	0x4000101E	Getting the network information of data analysis server failed
unitSetNetworkInfoError	0x4000101F	Setting the network information of data analysis server failed
setSmartNodeInfoError	0x40001020	Setting node information failed.
setUnitNetworkInfoError	0x40001021	Setting data analysis server network information failed.
unitRestartCloseError	0x40001022	Rebooting or shutting down data analysis server failed.
virtualIPnotAllowed	0x40001023	Adding virtual IP address is not allowed.
unitInstalled	0x40001024	The data analysis server is already installed.
badSubnetMask	0x40001025	Invalid subnet mask.
uintVersionMismatched	0x40001026	Data analysis server version mismatches.
deviceMOdelMismatched	0x40001027	Adding failed. Device model mismatches.
unitAddNotSelf	0x40001028	Adding peripherals is not allowed.
noValidUnit	0x40001029	No valid data analysis server.
unitNameDuplicate	0x4000102A	Duplicated data analysis server name.
deleteUnitFirst	0x4000102B	Delete the added data analysis server of the node first.
getLocalInfoFailed	0x4000102C	Getting the server information failed.
getClientAddedNodeFailed	0x4000102D	Getting the added node information of data analysis server failed.
taskExit	0x4000102E	The task already exists.
taskInitError	0x4000102F	Initializing task failed.
taskSubmitError	0x40001030	Submiting task failed.
taskDelError	0x40001031	Deleting task failed.

Sub Status Code	Error Code	Description
taskPauseError	0x40001032	Pausing task failed.
taskContinueError	0x40001033	Starting task failed.
taskSeverNoCfg	0x40001035	Full-text search server is not configured.
taskPicSeverNoCfg	0x40001036	The picture server is not configured.
taskStreamError	0x40001037	Streaming information exception.
taskRecSDK	0x40001038	History recording is not supported.
taskCasaError	0x4000103A	Cascading is not supported.
taskVCARuleError	0x4000103B	Invalid VCA rule.
taskNoRun	0x4000103C	The task is not executed.
unitLinksNoStorageNode	0x4000103D	No node is linked with the data analysis server. Configure the node first.
searchFailed	0x4000103E	Searching video files failed.
searchNull	0x4000103F	No video clip.
userScheOffline	0x40001040	The task scheduler service is offline.
updateTypeUnmatched	0x40001041	The upgrade package type mismatches.
userExist	0x40001043	The user already exists.
userCannotDelAdmin	0x40001044	The administrator cannot be deleted.
userInexistence	0x40001045	The user name does not exist.
userCannotCreatAdmin	0x40001046	The administrator cannot be created.
monitorCamExceed	0x40001048	Up to 3000 cameras can be added.
monitorCunitOverLimit	0x40001049	Adding failed. Up to 5 lower-levels are supported by the control center.
monitorReginOverLimit	0x4000104A	Adding failed. Up to 5 lower-levels are supported by the area.
monitorArming	0x4000104B	The camera is already armed. Disarm the camera and try again.
monitorSyncCfgNotSet	0x4000104C	The system parameters are not configured.
monitorFdSyncing	0x4000104E	Synchronizing. Try again after completing the synchronization.

Sub Status Code	Error Code	Description
monitorParseFailed	0x4000104F	Parsing camera information failed.
monitorCreatRootFailed	0x40001050	Creating resource node failed.
deleteArmingInfo	0x40001051	The camera is already . Disarm the camera and try again.
cannotModify	0x40001052	Editing is not allowed. Select again.
cannotDel	0x40001053	Deletion is not allowed. Select again.
deviceExist	0x40001054	The device already exists.
IPErrorConnectFailed	0x40001056	Connection failed. Check the network port.
cannotAdd	0x40001057	Only the capture cameras can be added.
serverExist	0x40001058	The server already exists.
fullTextParamError	0x40001059	Incorrect full-text search parameters.
storParamError	0x4000105A	Incorrect storage server parameters.
picServerFull	0x4000105B	The storage space of picture storage server is full.
NTPUnconnect	0x4000105C	Connecting to NTP server failed. Check the parameters.
storSerConnectFailed	0x4000105D	Connecting to storage server failed. Check the network port.
storSerLoginFailed	0x4000105E	Logging in to storage server failed. Check the user name and password.
searchSerConnectFailed	0x4000105F	Connecting to full-text search server failed. Check the network port.
searchSerLoginFailed	0x40001060	Logging in to full-text search server failed. Check the user name and password.
kafkaConnectFailed	0x40001061	Connecting to Kafka failed. Check the network port.
mgmtConnectFailed	0x40001062	Connecting to system failed. Check the network port.
mgmtLoginFailed	0x40001063	Logging in to system failed. Check the user name and password.

Sub Status Code	Error Code	Description
TDAConnectFailed	0x40001064	Connecting to traffic data access server failed. Checking the server status.
86sdkConnectFailed	0x40001065	Connecting to listening port of iVMS-8600 System failed. Check the parameters.
nameExist	0x40001066	Duplicated server name.
batchProcessFailed	0x40001067	Processing in batch failed.
IDNotExist	0x40001068	The server ID does not exist.
serviceNumberReachesLimit	0x40001069	No more service can be added.
invalidServiceType.	0x4000106A	Invalid service type.
clusterGetInfo	0x4000106B	Getting cluster group information failed.
clusterDelNode	0x4000106C	Deletion node failed.
clusterAddNode	0x4000106D	Adding node failed.
clusterInstalling	0x4000106E	Creating cluster…Do not operate.
clusterUninstall	0x4000106F	Reseting cluster…Do not operate.
clusterInstall	0x40001070	Creating cluster failed.
clusterIpError	0x40001071	Invalid IP address of task scheduler server.
clusterNotSameSeg	0x40001072	The master node and slave node must be in the same network segment.
clusterVirIpError	0x40001073	Automatically getting virtual IP address failed. Enter manually.
clusterNodeUnadd	0x40001074	The specified master(slave) node is not added.
clusterNodeOffline	0x40001075	The task scheduler server is offline.
nodeNotCurrentIP	0x40001076	The analysis node of the current IP address is required when adding master and slave nodes.
addNodeNetFailed	0x40001077	Adding node failed. The network disconnected.
needTwoMgmtNode	0x40001078	Two management nodes are required when adding master and slave nodes.
ipConflict	0x40001079	The virtual IP address and data analysis server's IP address conflicted.
ipUsed	0x4000107A	The virtual IP address has been occupied.

Sub Status Code	Error Code	Description
cloudAlalyseOnline	0x4000107B	The cloud analytic server is online.
virIP&mainIPnotSameNetSegment	0x4000107C	The virtual IP address is not in the same network segment with the IP address of master/slave node.
getNodeDispatchInfoFailed	0x4000107D	Getting node scheduler information failed.
unableModifyManagementNetworkIP	0x4000107E	Editing management network interface failed. The analysis board is in the cluster.
notSpecifyVirtualIP	0x4000107F	Virtual IP address should be specified for master and slave cluster.
armingFull	0x40001080	No more device can be armed.
armingNoFind	0x40001081	The arming information does not exist.
disArming	0x40001082	Disarming failed.
getArmingError	0x40001084	Getting arming information failed.
refreshArmingError	0x40001085	Refreshing arming information failed.
ArmingPlateSame	0x40001086	The license plate number is repeatedly armed.
ArmingParseXLSError	0x40001087	Parsing arming information file failed.
ArmingTimeError	0x40001088	Invalid arming time period.
ArmingSearchTimeError	0x40001089	Invalid search time period.
armingRelationshipReachesLimit	0x4000108A	No more relation can be created.
duplicateAarmingName	0x4000108B	The relation name already exists.
noMoreArmingListAdded	0x4000108C	No more blacklist library can be armed.
noMoreCamerasAdded	0x4000108D	No more camera can be armed.
noMoreArmingListAddedWithCamera	0x4000108E	No more library can be linked to the camera.
noMoreArmingPeriodAdded	0x4000108F	No more time period can be added to the arming schedule.

Sub Status Code	Error Code	Description
armingPeriodsOverlapped	0x40001090	The time periods in the arming schedule are overlapped.
noArmingAlarmInfo	0x40001091	The alarm information does not exist.
armingAlarmUnRead	0x40001092	Getting number of unread alarms failed.
getArmingAlarmError	0x40001093	Getting alarm information failed.
searchByPictureTimedOut	0x40001094	Searching picture by picture timeout. Search again.
comparisonTimeRangeError	0x40001095	Comparison time period error.
selectMonitorNumberUpperLimit	0x40001096	No more monitoring point ID can be filtered.
noMoreComparisonTasksAdded	0x40001097	No more comparison task can be executed at the same time.
GetComparisonResultFailed	0x40001098	Getting comparison result failed.
comparisonTypeError	0x40001099	Comparison type error.
comparisonUnfinished	0x4000109A	The comparison is not completed.
facePictureModelInvalid	0x4000109B	Invalid face model.
duplicateLibraryName.	0x4000109C	The library name already exists.
noRecord	0x4000109D	No record found.
countingRecordsFailed.	0x4000109E	Calculate the number of records failed.
getHumanFaceFrameFailed	0x4000109F	Getting face thumbnail from the picture failed.
modelingFailed.	0x400010A0	Modeling face according to picture URL failed.
1V1FacePictureComparisonFailed	0x400010A1	Comparison 1 VS 1 face picture failed.
libraryArmed	0x400010A2	The blacklist library is armed.
licenseExeedLimit	0x400010A3	Dongle limited.
licenseExpired	0x400010A4	Dongle expired.
licenseDisabled	0x400010A5	Unavailable dongle.

Sub Status Code	Error Code	Description
licenseNotExist	0x400010A6	The dongle does not exist.
SessionExpired	0x400010A7	Session expired .
beyondConcurrentLimit	0x400010A8	Out of concurrent limit.
stopSync	0x400010A9	Synchronization stopped.
getProgressFaild	0x400010AA	Getting progress failed.
uploadExtraCaps	0x400010AB	No more files can be uploaded.
timeRangeError	0x400010AC	Time period error.
dataPortNotConnected	0x400010AD	The data port is not connected.
addClusterNodeFailed	0x400010AE	Adding to the cluster failed. The device is already added to other cluster.
taskNotExist	0x400010AF	The task does not exist.
taskQueryFailed	0x400010B0	Searching task failed.
modifyTimeRuleFailed	0x400010B2	The task already exists. Editing time rule is not allowed.
modifySmartRuleFailed	0x400010B3	The task already exists. Editing VAC rule is not allowed.
queryHistoryVideoFaile d	0x400010B4	Searching history video failed.
addDeviceFailed	0x400010B5	Adding device failed.
addVideoFailed	0x400010B6	Adding video files failed.
deleteAllVideoFailed	0x400010B7	Deleting all video files failed.
createVideoIndexFailed	0x400010B8	Indexing video files failed.
videoCheckTypeFailed	0x400010B9	Verifying video files types failed.
configStructuredAddressFailed	0x400010BA	Configuring IP address of structured server failed.
configPictureServerAddressFailed	0x400010BB	Configuring IP address of picture storaged server failed.
storageServiceIPNotExist	0x400010BD	The storage server IP address does not exist.

Sub Status Code	Error Code	Description
syncBackupDatabaseFailed	0x400010BE	Synchronizing slave database failed. Try again.
syncBackupNTPTimeFailed	0x400010BF	Synchronizing NTP time of slave server failed.
clusterNotSelectLoopbackAddress	0x400010C0	Loopbacl address is not supported by the master or slave cluster.
addFaceRecordFailed	0x400010C1	Adding face record failed.
deleteFaceRecordFailed	0x400010C2	Deleting face record failed.
modifyFaceRecordFailed	0x400010C3	Editing face record failed.
queryFaceRecordFailed	0x400010C4	Searching face record failed.
faceDetectFailed	0x400010C5	Detecting face failed.
libraryNotExist	0x400010C6	The library does not exist.
blackListQueryExporting	0x400010C7	Exporting matched blacklists.
blackListQueryExported	0x400010C8	The matched blacklists are exported.
blackListQueryStopExporting	0x400010C9	Exporting matched blacklists is stopped.
blackListAlarmQueryExporting	0x400010CA	Exporting matched blacklist alarms.
blackListAlarmQueryExported	0x400010CB	The matched blacklists alarms are exported.
blackListAlarmQueryStopExporting	0x400010CC	Exporting matched blacklist alarms is stopped.
getBigDataCloudAnalysisFailed	0x400010CD	Getting big data cloud analytic information failed.
setBigDataCloudAnalysisFailed	0x400010CE	Configuring big data cloud analytic failed.
submitMapSearchFailed	0x400010CF	Submitting search by picture task failed.

Sub Status Code	Error Code	Description
controlRelationshipNotExist	0x400010D0	The relation does not exist.
getHistoryAlarmInfoFailed	0x400010D1	Getting history alarm information failed.
getFlowReportFailed	0x400010D2	Getting people counting report failed.
addGuardFailed	0x400010D3	Adding arming configuration failed.
deleteGuardFailed	0x400010D4	Deleting arming configuration failed.
modifyGuardFailed	0x400010D5	Editing arming configuration failed.
queryGuardFailed	0x400010D6	Searching arming configurations failed.
uploadUserSuperCaps	0x400010D7	No more user information can be uploaded.
bigDataServerConnectFailed	0x400010D8	Connecting to big data server failed.
microVideoCloudRequestInfoBuildFailed	0x400010D9	Adding response information of micro video cloud failed.
microVideoCloudResponseInfoBuildFailed	0x400010DA	Parsing response information of micro video cloud failed.
transcodingServerRequestInfoBuildFailed	0x400010DB	Adding response information of transcoding server failed.
transcodingServerResponseInfoParseFailed	0x400010DC	Parsing response information of transcoding server failed.
transcodingServerOffline	0x400010DD	Transcoding server is offline.
microVideoCloudOffline	0x400010DE	Micro video cloud is offline.
UPSServerOffline	0x400010DF	UPS monitor server is offline.
statisticReportRequestInfoBuildFailed	0x400010E0	Adding response information of statistics report failed.
statisticReportResponseInfoParseFailed	0x400010E1	Parsing response information of statistics report failed.
DisplayConfigInfoBuildFailed	0x400010E2	Adding display configuration information failed.
DisplayConfigInfoParseFailed	0x400010E3	Parsing display configuration information failed.

Sub Status Code	Error Code	Description
DisplayConfigInfoSaveFailed	0x400010E4	Saving display configuration information failed.
notSupportDisplayConfigType	0x400010E5	The display configuration type is not supported.
passError	0x400010E7	Incorrect password.
upgradePackageLarge	0x400010EB	Too large upgrade package.
sesssionUserReachesLimit	0x400010EC	No more user can log in via session.
ISO 8601TimeFormatError	0x400010ED	Invalid ISO8601 time format.
clusterDissolutionFailed	0x400010EE	Deleting cluster failed.
getServiceNodeInfoFailed	0x400010EF	Getting service node information failed.
getUPSInfoFailed	0x400010F0	Getting UPS configuration information failed.
getDataStatisticsReportFailed	0x400010F1	Getting data statistic report failed.
getDisplayConfigInfoFailed	0x400010F2	Getting display configuration failed.
namingAnalysisBoardNotAllowed	0x400010F3	Renaming analysis board is not allowed.
onlyDrawRegionsOfConvexPolygon	0x400010F4	Only drawing convex polygon area is supported.
bigDataServerResponseInfoParseFailed	0x400010F5	Parsing response message of big data service failed.
bigDataServerReturnFailed	0x400010F6	No response is returned by big data service.
microVideoReturnFailed	0x400010F7	No response is returned by micro video cloud service.
transcodingServerReturnFailed	0x400010F8	No response is returned by transcoding service.
UPSServerReturnFailed	0x400010F9	No response is returned by UPS monitoring service.

Sub Status Code	Error Code	Description
forwardingServer ReturnFailed	0x400010FA	No response is returned by forwarding service.
storageServer ReturnFailed	0x400010FB	No response is returned by storage service.
cloudAnalysisServerRet urnFailed	0x400010FC	No response is returned by cloud analytic service.
modelEmpty	0x400010FD	No model is obtained.
mainAndBackupNodeC annotModifyManagem entNetworkInterfaceIP	0x400010FE	Editing the management interface IP address of master node and backup node is not allowed.
IDTooLong	0x400010FF	The ID is too long.
pictureCheckFailed	0x40001100	Detecting picture failed.
pictureModelingFailed	0x40001101	Modeling picture failed.
setCloudAnalsisDefault ProvinceFailed	0x40001102	Setting default province of cloud analytic service failed.
InspectionAreasNumbe rExceedLimit	0x40001103	No more detection regions can be added.
picturePixelsTooLarge	0x40001105	The picture resolution is too high.
picturePixelsTooSmall	0x40001106	The picture resolution is too low.
storageServiceIPEmpty	0x40001107	The storage server IP address is required.
bigDataServerRequestI nfoBuildFail	0x40001108	Creating request message of big data service failed.
analysiTimedOut	0x40001109	Analysis time out.
high-performanceModeDisa bled.	0x4000110A	Please enable high-performance mode.
configuringUPSMonito ringServerTimedOut	0x4000110B	Configurating the UPS monitoring server time out. Check IP address.
cloudAnalysisRequestI nformationBuildFailed	0x4000110C	Creating request message of cloud analytic service failed.
cloudAnalysisResponse InformationParseFailed	0x4000110D	Parsing response message of cloud analytic service failed.

Sub Status Code	Error Code	Description
allCloudAnalysisInterfaceFailed	0x4000110E	Calling API for cloud analytic service failed.
cloudAnalysisModelCompareFailed	0x4000110F	Model comparison of cloud analytic service failed.
cloudAnalysisFacePictureQualityRatingFailed	0x40001110	Getting face quality grading of cloud analytic service failed.
cloudAnalysisExtractFeaturePointsFailed	0x40001111	Extracting feature of cloud analytic service failed.
cloudAnalysisExtractPropertyFailed	0x40001112	Extracting property of cloud analytic service failed.
getAddedNodeInformationFailed	0x40001113	Getting the added nodes information of data analysis server failed.
noMoreAnalysisUnitsAdded	0x40001114	No more data analysis servers can be added.
detectionAreaInvalid	0x40001115	Invalid detection region.
shieldAreaInvalid	0x40001116	Invalid shield region.
noMoreShieldAreasAdded	0x40001117	No more shield region can be drawn.
onlyAreaOfRectangleShapeAllowed	0x40001118	Only drawing rectangle is allowed in detection area.
numberReachedLlimit	0x40001119	Number reached the limit.
wait1~3MinutesGetIPAfterSetupDHCP	0x4000111A	Wait 1 to 3 minutes to get IP address after configuring DHCP.
plannedTimeMustbeHalfAnHour	0x4000111B	Schedule must be half an hour.
oneDeviceCannotBuildCluster	0x4000111C	Creating master and backup cluster requires at least two devices.
updatePackageFileNotUploaded	0x4000111E	Upgrade package is not uploaded.
highPerformanceTasksNotSupportDrawingDetectionRegions	0x4000111F	Drawing detection area is not allowed under high-performance mode.

Sub Status Code	Error Code	Description
controlCenterIDDoesNotExist	0x40001120	The control center ID does not exist.
regionIDDoesNotExist	0x40001121	The area ID does not exist.
licensePlateFormatError	0x40001122	Invalid license plate format.
managementNodeDoesNotSupportThisOperation	0x40001123	The operation is not supported.
searchByPictureResourceNotConfiged	0x40001124	The conditions for searching picture by picture are not configured.
videoFileEncapsulationFormatNotSupported	0x40001125	The video container format is not supported.
videoPackageFailure	0x40001126	Converting video container format failed.
videoCodingFormatNotSupported	0x40001127	Video coding format is not supported.
monitorOfDeviceArmingdeleteArmingInfo	0x40001129	The camera is armed. Disarm it and try again.
getVideoSourceTypeFailed	0x4000112A	Getting video source type failed.
smartRulesBuildFailed	0x4000112B	Creating VAC rule failed.
smartRulesParseFailed	0x4000112C	Parsing VAC rule failed.
timeRulesBuildFailed	0x4000112D	Creating time rule failed.
timeRulesParseFailed	0x4000112E	Parsing time rule failed.
monitoInfoInvalid	0x4000112F	Invalid camera information.
addingFailedVersionMismatches	0x40001130	Adding failed. The device version mismatches.
theInformationReturnedAfterCloudAnalysisIsEmpty	0x40001131	No response is returned by the cloud analytic service.
selectingIpAddressOfHostAndSpareNodeFailedCheckTheStatus	0x40001132	Setting IP address for master node and backup node failed. Check the node status.

Sub Status Code	Error Code	Description
theSearchIdDoesNotExist	0x40001133	The search ID does not exist.
theSynchronizationIdDoesNotExist	0x40001134	The synchronization ID does not exist.
theUserIdDoesNotExist	0x40001136	The user ID does not exist.
theIndexCodeDoesNotExist	0x40001138	The index code does not exist.
theControlCenterIdDoesNotExist	0x40001139	The control center ID does not exist.
theAreaIdDoesNotExist	0x4000113A	The area ID does not exist.
theArmingLinkageIdDoesNotExist	0x4000113C	The arming relationship ID does not exist.
theListLibraryIdDoesNotExist	0x4000113D	The list library ID does not exist.
invalidCityCode	0x4000113E	Invalid city code.
synchronizingThePasswordOfSpareServerFailed	0x4000113F	Synchronizing backup system password failed.
editingStreamingTypeIsNotSupported	0x40001140	Editing streaming type is not supported.
switchingScheduledTaskToTemporaryTaskIsNotSupported	0x40001141	Switching scheduled task to temporary task is not supported.
switchingTemporaryTaskToScheduledTaskIsNotSupported	0x40001142	Switching temporary task to scheduled task is not supported.
theTaskIsNotDispatchedOrItIsUpdating	0x40001143	The task is not dispatched or is updating.
thisTaskDoesNotExist	0x40001144	This task does not exist in the cloud analytic serice.
duplicatedSchedule	0x40001145	Schedule period cannot be overlapped.
continuousScheduleWithSameAlgorithmTypeShouldBeMerged	0x40001146	The continuous schedule periods with same algorithm type should be merged.

Sub Status Code	Error Code	Description
invalidStreamingTimeRange	0x40001147	Invalid streaming time period.
invalidListLibraryType	0x40001148	Invalid list library type.
theNumberOfMatchedResultsShouldBeLargerThan0	0x40001149	The number of search results should be larger than 0.
invalidValueRangeOfSimilarity	0x4000114A	Invalid similarity range.
invalidSortingType	0x4000114B	Invalid sorting type.
noMoreListLibraryCanBeLinkedToTheDevice	0x4000114C	No more lists can be added to one device.
InvalidRecipientAddressFormat	0x4000114D	Invalid address format of result receiver.
creatingClusterFailedTheDongleIsNotPluggedIn	0x4000114E	Insert the dongle before creating cluster.
theURLIsTooLong	0x4000114F	No schedule configured for the task.
noScheduleIsConfiguredForTheTask	0x40001150	No schedule configured for the task.
theDongleIsExpiried	0x40001151	Dongle has expired.
dongleException	0x40001152	Dongle exception.
invalidKey	0x40001153	Invalid authorization service key.
decryptionFailed	0x40001154	Decrypting authorization service failed.
encryptionFailed	0x40001155	Encrypting authorization service failed.
AuthorizeServiceResponseError	0x40001156	Authorization service response exception.
incorrectParameter	0x40001157	Authorization service parameters error.
operationFailed	0x40001158	Operating authorization service error.
noAnalysisResourceOrNoDataInTheListLibrary	0x40001159	No cloud analytic resources or no data in the list library.
calculationException	0x4000115A	Calculation exception.
allocatingList	0x4000115B	Allocating list.

Sub Status Code	Error Code	Description
thisOperationIsNotSupportedByTheCloudAnalytics	0x4000115C	This operation is not supported by the cloud analytic serice.
theCloudAnalyticsIsInterrupted	0x4000115D	The operation of cloud analytic serice is interrupted.
theServiceIsNotReady	0x4000115E	The service is not ready.
searchingForExternalApiFailed	0x4000115F	Searching external interfaces failed.
noOnlineNode	0x40001160	No node is online.
noNodeAllocated	0x40001161	No allocated node.
noMatchedList	0x40001162	No matched list.
allocatingFailedTooManyFacePictureLists	0x40001163	Allocation failed. Too many lists of big data service.
searchIsNotCompletedSearchAgain	0x40001164	Current searching is not completed. Search again.
allocatingListIsNotCompleted	0x40001165	Allocating list is not completed.
searchingForCloudAnalyticsResultsFailed	0x40001166	Searching cloud analytic serice overtime.
noDataOfTheCurrentLibraryFound	0x40001167	No data in the current library. Make sure there is data in the Hbase.
noFacePictureLibraryIsArmed	0x40001168	No face picture library is armed for big data service.
noAvailableDataSlicingVersionInformationArmFirstAndSliceTheData	0x40001169	Invalid standard version information.
duplicatedOperationDataSlicingIsExecuting	0x4000116A	Slicing failed. Duplicated operation.
slicinDataFailedNoArmedFacePictureLibrary	0x4000116B	Slicing failed. No arming information in the face big data.
GenerateBenchmarkFileFailedSlicingAgain	0x4000116C	Generating sliced file failed. Slice again.

Sub Status Code	Error Code	Description
NonprimaryNodeIsProhibitedFromSlcingData	0x4000116D	Slicing is not allowed by the backup node.
NoReadyNodeToClusterServers	0x4000116E	Creating the cluster failed. No ready node.
NodeManagementServiceIsOffline	0x4000116F	The node management server is offline.
theCamera(s)OfTheControlCenterAreAlreadyArmed.DisarmThemFirst	0x40001170	Some cameras in control center are already armed. Disarm them and try again.
theCamera(s)OfTheAreaAreAlreadyArmed.DisarmThemFirst	0x40001171	Some cameras in this area are already armed. Disarm them and try again.
configuringHigh-frequencyPeopleDetectionFailed	0x40001172	Configuring high frequency people detection failed.
searchingForHigh-frequencyPeopleDetectionLogsFailed.	0x40001173	Searching detection event logs of high-frequency people detection failed.
gettingDetailsOfSearchedHigh-frequencyPeopleDetectionLogsFailed.	0x40001174	Getting the search result details of high frequency alarms failed.
theArmedCamerasAlreadyExistInTheControlCenter	0x40001175	Some cameras in control center are already armed.
disarmingFailedTheCameraIsNotArmed	0x40001177	Disarming failed. The camera is not armed.
noDataReturned	0x40001178	No response is returned by the big data service.
preallocFailure	0x40001179	Pre-allocating algorithm resource failed.
overDogLimit	0x4000117A	Configuration failed. No more resources can be pre-allocated.
analysisServicesDoNotSupport	0x4000117B	Not supported.

Sub Status Code	Error Code	Description
commandAndDispatchServiceError	0x4000117C	Scheduling service of cloud analytic serice error.
engineModuleError	0x4000117D	Engine module of cloud analytic serice error.
streamingServiceError	0x4000117E	Streaming component of cloud analytic serice error.
faceAnalysisModuleError	0x4000117F	Face analysis module of cloud analytic serice error.
vehicleAnalysisModuleError	0x40001180	Vehicle pictures analytic module of cloud analytic serice error.
videoStructuralAnalysisModuleError	0x40001181	Video structuring module of cloud analytic serice error.
postprocessingModuleError	0x40001182	Post-processing module of cloud analytic serice error.
frequentlyAppearedPersonAlarmIsAlreadyConfiguredForListLibrary	0x40001183	High frequency alarm is already armed for blacklist library.
creatingListLibraryFailed	0x40001184	Creating list library failed.
invalidIdentiryKeyOfListLibrary	0x40001185	Invalid identity key of list library.
noMoreDevicesCanBeArmed	0x40001186	No more camera can be added.
settingAlgorithmTypeForDeviceFailed	0x40001187	Allocating task resource failed.
gettingHighFrequencyPersonDetectionAlarmInformationFailed	0x40001188	Setting high frequency alarm failed.
invalidSearchConfition	0x40001189	Invalid result.
theTaskIsNotCompleted	0x4000118B	The task is not completed.
resourceOverRemainLimit	0x4000118C	No more resource can be pre-allocated.

Sub Status Code	Error Code	Description
frequentlyAppearedPersonAlarmIsAlreadyConfiguredForTheCameraDisarmFirstAndTryAgain	0x4000118D	The high frequency alarm of this camera is configured. Delete the arming information and try again.
switchtimedifflesslimit	0x4000123b	Time difference between power on and off should be less than 10 minutes.
associatedFaceLibNumOverLimit	0x40001279	Maximum number of linked face picture libraries reached.
noMorePeopleNumChangeRulesAdded	0x4000128A	Maximum number of people number changing rules reached.
noMoreViolentMotionRulesAdded	0x4000128D	Maximum number of violent motion rules reached.
noMoreLeavePositionRulesAdded	0x4000128E	Maximum number of leaving position rules reached.
SMRDiskNotSupportRaid	0x40001291	SMR disk does not support RAID.
OnlySupportHikAndCustomProtocol	0x400012A3	IPv6 camera can only be added via Device Network SDK or custom protocols.
vehicleEnginesNoResource	0x400012A6	Insufficient vehicle engine resources.
noMoreRunningRulesAdded	0x400012A9	Maximum number of running rules reached.
noMoreGroupRulesAdded	0x400012AA	Maximum number of people gathering rules reached.
noMoreFailDownRulesAdded	0x400012AB	Maximum number of people falling down rules reached.
noMorePlayCellphoneRulesAdded	0x400012AC	Maximum number of playing cellphone rules reached.
ruleEventTypeDuplicate	0x400012C8	Event type duplicated.
noMoreRetentionRulesAdded	0x400015AD	Maximum number of people retention rules reached.

Sub Status Code	Error Code	Description
noMoreSleepOnDutyRulesAdded	0x400015AE	Maximum number of sleeping on duty rules reached.
polygonNotAllowCrossing	0x400015C2	Polygons are not allowed to cross.
AITargetBPCaptureFail	0x400019C5	Capturing reference picture for AI target comparison failed.
AITargetBPToDSPFail	0x400019C6	Sending reference picture to DSP for AI target comparison failed.
AITargetBPDuplicateName	0x400019C7	Duplicated name of reference picture for AI target comparison.
audioFileNameWrong	0x400019D0	Incorrect audio file name.
audioFileImportFail	0x400019D1	Importing audio file failed.
alreadyRunning	0x40002026	The application program is running.
notRunning	0x40002027	The application program is stopped.
packNotFound	0x40002028	The software packet does not exist.
alreadyExist	0x40002029	The application program already exists.
noMemory	0x4000202A	Insufficient memory.
invalLicense	0x4000202B	Invalid License.
noClientCertificate	0x40002036	The client certificate is not installed.
noCACertificate	0x40002037	The CA certificate is not installed.
authenticationFailed	0x40002038	Authenticating certificate failed. Check the certificate.
clientCertificateExpired	0x40002039	The client certificate is expired.
clientCertificateRevocation	0x4000203A	The client certificate is revoked.
CACertificateExpired	0x4000203B	The CA certificate is expired.
CACertificateRevocation	0x4000203C	The CA certificate is revoked.
connectFail	0x4000203D	Connection failed.
loginNumExceedLimit	0x4000203F	No more user can log in.

Sub Status Code	Error Code	Description
HDMIResolutionIllegal	0x40002040	The HDMI video resolution cannot be larger than that of main and sub stream.
hdFormatFail	0x40002049	Formatting HDD failed.
formattingFailed	0x40002056	Formatting HDD failed.
encryptedFormattingFailed	0x40002057	Formatting encrypted HDD failed.
wrongPassword	0x40002058	Verifying password of SD card failed. Incorrect password.
audioIsPlayingPleaseWait	0x40002067	Audio is playing. Please wait.
twoWayAudioInProgressPleaseWait	0x40002068	Two-way audio in progress. Please wait.
calibrationPointNumFull	0x40002069	The maximum number of calibration points reached.
completeTheLevelCalibrationFirst	0x4000206A	The level calibration is not set.
completeTheRadarCameraCalibrationFirst	0x4000206B	The radar-camera calibration is not set.
pointsOnStraightLine	0x4000209C	Calibrating failed. The calibration points cannot be one the same line.
TValueLessThanOrEqualZero	0x4000209D	Calibration failed. The T value of the calibration points should be larger than 0.
HBDLibNumOverLimit	0x40002092	The number of human body picture libraries reaches the upper limit
theShieldRegionError	0x40002093	Saving failed. The shielded area should be the ground area where the shielded object is located.
theDetectionAreaError	0x40002094	Saving failed. The detection area should only cover the ground area.
invalidLaneLine	0x40002096	Saving failed. Invalid lane line.
enableITSFunctionOfThisChannelFirst	0x400020A2	Enable ITS function of this channel first.
noCloudStorageServer	0x400020C5	No cloud storage server

Sub Status Code	Error Code	Description
NotSupportWithVideoTask	0x400020F3	This function is not supported.
incorrectConsolePassword	0x40002106	Saving failed. Incorrect console command.
noDetectionArea	0x400050df	No detection area
armingFailed	0x40008000	Arming failed.
disarmingFailed	0x40008001	Disarming failed.
clearAlarmFailed	0x40008002	Clearing alarm failed.
bypassFailed	0x40008003	Bypass failed.
bypassRecoverFailed	0x40008004	Bypass recovery failed.
outputsOpenFailed	0x40008005	Opening relay failed.
outputsCloseFailed	0x40008006	Closing relay failed.
registerTimeOut	0x40008007	Registering timed out.
registerFailed	0x40008008	Registering failed.
addedByOtherHost	0x40008009	The peripheral is already added by other security control panel.
alreadyAdded	0x4000800A	The peripheral is already added.
armedStatus	0x4000800B	The partition is armed.
bypassStatus	0x4000800C	Bypassed.
zoneNotSupport	0x4000800D	This operation is not supported by the zone.
zoneFault	0x4000800E	The zone is in fault status.
pwdConflict	0x4000800F	Password conflicted.
audioTestEntryFailed	0x40008010	Enabling audio test mode failed.
audioTestRecoveryFailed	0x40008011	Disabling audio test mode failed.
addCardMode	0x40008012	Adding card mode.
searchMode	0x40008013	Search mode.
addRemoterMode	0x40008014	Adding keyfob mode.
registerMode	0x40008015	Registration mode.
exDevNotExist	0x40008016	The peripheral does not exist.

Sub Status Code	Error Code	Description
theNumberOfExDevLimited	0x40008017	No peripheral can be added.
sirenConfigFailed	0x40008018	Setting siren failed.
chanCannotRepeatedBinded	0x40008019	This channel is already linked by the zone.
inProgramMode	0x4000801B	The keypad is in programming mode.
inPaceTest	0x4000801C	In pacing mode.
arming	0x4000801D	Arming.
masterSlaveIsEnable	0x4000802c	The master-slave relationship has taken effect, the slave radar does not support this operation.
forceTrackNotEnabled	0x4000802d	Mandatory tracking is disabled.
isNotSupportZoneConfigByLocalArea	0x4000802e	This area does not support the zone type.
alarmLineCross	0x4000802f	Trigger lines are overlapped.
zoneDrawingOutOfRange	0x40008030	The drawn zone is out of detection range.
alarmLineDrawingOutOfRange	0x40008031	The drawn alarm trigger line is out of detection range.
hasTargetInWarningArea	0x40008032	The warning zone already contains targets. Whether to enable mandatory arming?
radarMoudleConnectFail	0x40008033	Radar module communication failed.
importCfgFilePasswordErr	0x40008034	Incorrect password for importing configuration files.
overAudioFileNumLimit	0x40008038	The number of audio files exceeds the limit.
audioFileNameIsLong	0x40008039	The audio file name is too long.
audioFormatIsWrong	0x4000803a	The audio file format is invalid.
audioFileIsLarge	0x4000803b	The size of the audio file exceeds the limit.
pircamCapTimeOut	0x4000803c	Capturing of pircam timed out.
pircamCapFail	0x4000803d	Capturing of pircam failed.
pircamIsCaping	0x4000803e	The pircam is capturing.

Sub Status Code	Error Code	Description
audioFileHasExisted	0x4000803f	The audio file already exists.
subscribeTypeErr	0x4000a016	This metadata type is not supported to be subscribed.
startAppFail	/	Starting running application program failed.
yuvconflict	/	The raw video stream conflicted.
overMaxAppNum	/	No more application program can be uploaded.
noFlash	/	Insufficient flash.
noFlash	/	The platform mismatches.

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Sub Status Code	Error Code	Description
badXmlFormat	0x50000001	Invalid XML format.

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Sub Status Code	Error Code	Description
badParameters	0x60000001	Invalid parameter.
badHostAddress	0x60000002	Invalid host IP address.
badXmlContent	0x60000003	Invalid XML content.
badIPv4Address	0x60000004	Invalid IPv4 address.
badIPv6Address	0x60000005	Invalid IPv6 address.
conflictIPv4Address	0x60000006	IPv4 address conflicted.
conflictIPv6Address	0x60000007	IPv6 address conflicted.
badDomainName	0x60000008	Invalid domain name.
connectSreverFail	0x60000009	Connecting to server failed.
conflictDomainName	0x6000000A	Domain name conflicted.
badPort	0x6000000B	Port number conflicted.
portError	0x6000000C	Port error.
exportErrorData	0x6000000D	Importing data failed.
badNetMask	0x6000000E	Invalid sub-net mask.
badVersion	0x6000000F	Version mismatches.

Sub Status Code	Error Code	Description
badDevType	0x60000010	Device type mismatches.
badLanguage	0x60000011	Language mismatches.
incorrentUserNameOrPassword	0x600000012	Incorrect user name or password.
invalidStoragePoolOfCloudServer	0x600000013	Invalid storage pool. The storage pool is not configured or incorrect ID.
noFreeSpaceOfStoragePool	0x600000014	Storage pool is full.
riskPassword	0x600000015	Risky password.
UnSupportCapture	0x600000016	Capturing in 4096*2160 or 3072*2048 resolution is not supported when H.264+ is enabled.
userPwdLenUnder8	0x60000023	At least two kinds of characters, including digits, letters, and symbols, should be contained in the password.
userPwdNameSame	0x60000025	Duplicated password.
userPwdNameMirror	0x60000026	The password cannot be the reverse order of user name.
beyondARGSRangeLimit	0x60000027	The parameter value is out of limit.
DetectionLineOutofDetectionRegion	0x60000085	The rule line is out of region.
DetectionRegionError	0x60000086	Rule region error. Make sure the rule region is convex polygon.
DetectionRegionOutOfCountingRegion	0x60000087	The rule region must be marked as red frame.
PedalAreaError	0x60000088	The pedal area must be in the rule region.
DetectionAreaABError	0x60000089	The detection region A and B must be in the a rule frame.

Sub Status Code	Error Code	Description
ABRegionCannotIntersect	0x6000008a	Region A and B cannot be overlapped.
customHBPIDError	0x6000008b	Incorrect ID of custom human body picture library
customHBPIDRepeat	0x6000008c	Duplicated ID of custom human body picture library
dataVersionsInHBDLibMismatches	0x6000008d	Database versions mismatches of human body picture library
invalidHBPID	0x6000008e	Invalid human body picture PID
invalidHBDID	0x6000008f	Invalid ID of human body picture library
humanLibraryError	0x60000090	Error of human body picture library
humanLibraryNumError	0x60000091	No more human body picture library can be added
humanImagesNumError	0x60000092	No more human body picture can be added
noHumanInThePicture	0x60000093	Modeling failed, no human body in the picture
analysisEnginesNoResourceError	0x60001000	No analysis engine.
analysisEnginesUsageExcced	0x60001001	The engine usage is overloaded.
PicAnalysisNoResourceError	0x60001002	No analysis engine provided for picture secondary recognition.
analysisEnginesLoadingError	0x60001003	Initializing analysis engine.
analysisEnginesAbnormaError	0x60001004	Analysis engine exception.
analysisEnginesFacelibImporting	0x60001005	Importing pictures to face picture library. Failed to edit analysis engine parameters.
analysisEnginesAssociatedChannel	0x60001006	The analysis engine is linked to channel.

Sub Status Code	Error Code	Description
smdEncodingNoResource	0x60001007	Insufficient motion detection encoding resources.
smdDecodingNoResource	0x60001008	Insufficient motion detection decoding resources.
diskError	0x60001009	HDD error.
diskFull	0x6000100a	HDD full.
facelibDataProcessing	0x6000100b	Handling face picture library data.
capturePackageFailed	0x6000100c	Capturing packet failed.
capturePackageProcessing	0x6000100d	Capturing packet.
noSupportWithPlaybackAbstract	0x6000100e	This function is not supported. Playback by video synopsis is enabled.
insufficientNetworkBandwidth	0x6000100f	Insufficient network bandwidth.
tapeLibNeedStopArchive	0x60001010	Stop the filing operation of tape library first.
identityKeyError	0x60001011	Incorrect interaction command.
identityKeyMissing	0x60001012	The interaction command is lost.
noSupportWithPersonDensityDetect	0x60001013	This function is not supported. The people density detection is enabled.
ipcResolutionOverflow	0x60001014	The configured resolution of network camera is invalid.
ipcBitrateOverflow	0x60001015	The configured bit rate of network camera is invalid.
tooGreatTimeDifference	0x60001016	Too large time difference between device and server.
noSupportWithPlayback	0x60001017	This function is not supported. Playback is enabled.
channelNoSupportWithSMD	0x60001018	This function is not supported. Motion detection is enabled.

Sub Status Code	Error Code	Description
channelNoSupportWithFD	0x60001019	This function is not supported. Face capture is enabled.
illegalPhoneNumber	0x6000101a	Invalid phone number.
illegalCertificateNumber	0x6000101b	Invalid certificate No.
linkedCameraOutLimit	0x6000101c	Connecting camera timed out.
achieveMaxChannelLimit	0x6000101e	No more channels are allowed.
humanMisInfoFilterEnabledChannNumError	0x6000101f	No more channels are allowed to enable preventing false alarm.
humanEnginesNoResource	0x60001020	Insufficient human body analysis engine resources.
taskNumberOverflow	0x60001021	No more tasks can be added.
collisionTimeOverflow	0x60001022	No more comparison duration can be configured.
invalidTaskID	0x60001023	Invalid task ID.
eventNotSupport	0x60001024	Event subscription is not supported.
invalidEZVIZSecretKey	0x60001034	Invalid verification code for Hik-Connect.
needDoubleVerification	0x60001042	Double verification required
noDoubleVerificationUser	0x60001043	No double verification user
timeSpanNumOverLimit	0x60001044	Max. number of time buckets reached
channelNumOverLimit	0x60001045	Max. number of channels reached
noSearchIDResource	0x60001046	Insufficient searchID resources
noSupportDeleteStrangerLib	0x60001051	Deleting stranger library is not supported
noSupportCreateStrangerLib	0x60001052	Creating stranger library is not supported
behaviorAnalysisRuleInfoError	0x60001053	Behavior analysis rule parameters error.

Sub Status Code	Error Code	Description
safetyHelmetParamError	0x60001054	Hard hat parameters error.
OneChannelOnlyCanBindOneEngine	0x60001077	No more engines can be bound.
engineTypeMismatch	0x60001079	Engine type mismatched.
badUpgradePackage	0x6000107A	Invalid upgrade package.
AudioFileNameDuplicate	0x60001135	Duplicated audio file name.
CurrentAudioFileAIRuleInUseAlreadyDelete	0x60001136	The AI rule linkage related to current audio file has been deleted.
TransitionUseEmmc	0x60002000	Starting device failed. The EMMC is overused.
AdaptiveStreamNotEnabled	0x60002001	The stream self-adaptive function is not enabled.
AdaptiveStreamAndVariableBitrateEnabled	0x60002002	Stream self-adptive and variable bitrate function cannot be enabled at the same time.
noSafetyHelmetRegion	0x60002023	The hard hat detection area is not configured (if users save their settings without configuring the arming area, they should be prompted to configure one).
unclosedSafetyHelmet	0x60002024	The hard hat detection is enabled (If users save their settings after deleting the arming area, they should be prompted to disable hard hat detection first and then delete the arming area).
width/heightRatioOfPictureError	0x6000202C	The width/height ratio of the uploaded picture should be in the range from 1:2 to 2:1.
PTZNotInitialized	0x6000202E	PTZ is not initialized.
PTZSelfChecking	0x6000202F	PTZ is self-checking.
PTZLocked	0x60002030	PTZ is locked.

Sub Status Code	Error Code	Description
advancedParametersError	0x60002031	Auto-switch interval in advanced parameters cannot be shorter than parking tolerance for illegal parking detection in speed dome rule settings.
resolutionError	0x60005003	Invalid resolution
deployExceedMax	0x60006018	The arming connections exceed the maximum number.
detectorTypeMismatch	0x60008000	The detector type mismatched.
nameExist	0x60008001	The name already exists.
uploadImageSizeError	0x60008016	The size of the uploaded picture is larger than 5 MB.
laneAndRegionOverlap	/	The lanes are overlapped.
unitConfigurationNotInEffect	/	Invalid unit parameter.
ruleAndShieldingMaskConflict	/	The line-rule region overlaps with the shielded area.
wholeRuleInShieldingMask	/	There are complete temperature measurement rules in the shielded area.
LogDiskNotSetReadOnlyInGroupMode	0x60001100	The log HDD in the HDD group cannot be set to read-only.
LogDiskNotSetReDundancyInGroupMode	0x60001101	The log HDD in the HDD group cannot be set to redundancy.

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SubStatusCode	Error Code	Description
rebootRequired	0x70000001	Reboot to take effect.