# **StraaS Specification**

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# Outline

| Outline       | 1 |
|---------------|---|
| Player        | 1 |
| Video Module  | 2 |
| Chat Room     | 3 |
| CirCall       | 4 |
| CMS           | 5 |
| Streaming SDK | 7 |

# Player

## Supported OS

- iOS: The two most recent major operating system versions.
- Android: The three most recent major operating system versions.
- Windows: Windows 7 and above.

#### Supported browsers

- Chrome
- Safari
- Firefox
- IE<sup>1</sup>

#### Streaming Protocol

- HLS
- RTMP (Low Latency)

#### Codec

Video: H.264Audio: AAC

### **Basic Functions**

- Play / Pause
- Seekbar
- Resolution menu
- Volume control
- Adaptive bitrate
- Subtitles [VOD only]
- Playback speed [VOD only]
- DVR [Additional purchase]

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<sup>&</sup>lt;sup>1</sup> Only support IE11.

# Video Module

#### Supported VIDEO format

- Upload
  - File size: 300GB per videoFile format: AVI, MOV, MP4
  - Codec: AVC(H.264), DV, MPEG4, MPEG2, MPEG1, VP8, MSMPEG4v3, MSMPEG4v2, MSMPEG4v1
- Download
  - o MP4
  - o Codec: H.264
- Streaming
  - o HLS
  - o Codec: H.264

#### Supported AUDIO format

- Upload
  - File format: MP3
  - Codec: AAC, AC3, MPEG 1, MP3, SPEEX, OPUS, PCM
- Download
  - MP3
  - o Codec: AAC
- Streaming
  - o HLS
  - o Codec: H.264

#### Output resolution

- Video to video
  - Maximum 1080p in terms of videos that being uploaded via CMS or API calls, depends on the resolution of uploaded video.
- Stream to video (VOD)
  - The resolution is set to which matches the output profile of the live event.

#### Adaptive bitrate

- 1080p@3500kbps
- 720p@ 2000kbps
- 360p@1000kbps
- 240p @600kbps
- Audio @128kbps

# **Chat Room**

# Supported OS

- iOS: The two most recent major operating system versions.
- Android: The three most recent major operating system versions.
- Windows: Windows 7 and above.

#### Supported browsers

- Chrome
- Safari
- Firefox
- IE<sup>2</sup>

#### Login Identity

- Registered member
- Guest

# Maximum concurrent user per room

• 100,000

#### Number of rooms

No limits

#### Life of messages

- 30 days for non-archived messages
- Life long for archived messages

#### Data channel

- Data format
  - o JSON

#### Chat cooldown

• 1 sec

<sup>2</sup> Only support IE11.

# CirCall

#### Supported OS

- iOS: The two most recent major operating system versions.
- Android: The three most recent major operating system versions.
- Windows: Windows 7 and above.

#### Supported OS

- Chrome (iOS Chrome not supported),
- Firefox (iOS Firefox not supported),
- Edge (win10 1804+),
- Safari 11

#### Supported VIDEO format

• Input: WebRTC / RTSP

• Output : WebRTC

#### Codec

Video Codec : H.264

• Audio Codec : Opus

## Encryption

WebRTC: Secure RTP / AES128

• HTTPS, WSS: SSL

#### Basic function

- Screen recording
- Screenshot

# Maximum attendees per room

- 4 presenters per conference room (4p)
- 2 presenters and 80 subscribers for interactive broadcasting (2p80v)

# **CMS**

#### Media upload

- Video
  - o MP4, AVI, MOV
- Audio
  - o MP3
- Subtitles
  - o VTT, SRT

#### **Statistics**

- Page views: Accumulated count of player loaded (updated daily)
- Visitors: Distinct accumulated count of playback (updated daily)
- Hours: Accumulated count of playing hours (updated daily)

#### Ad Insertion

Google DFP Ad Tag or others that follow VAST standard.

#### Live management

- Event: Event based live streaming lasts maximum 10 hours.
- Channel: Channel based live streaming is suitable for non-stop live broadcasting.
- Sync: Sync simply relays the stream to other RTMP supported platforms, e.g. Facebook or YouTube.

#### **DVR**

DVR allows users to jump back up to 10 minutes of the live stream while watching live. It is an optional feature which is set as off by default. Please contact us if you need this feature on.

#### **VOD Merge**

VOD Merge stitches multiple video clips into one complete video.

#### Administrators

Unlimited

#### **Applications**

Unlimited

# Streaming SDK

## Supported OS

- iOS: The two most recent major operating system versions.
- Android: The three most recent major operating system versions.

#### Supported browser

- Chrome (iOS Chrome excluded),
- Firefox (iOS Firefox excluded),
- Edge (win10 1804+),
- Safari 11

#### Input

RTMP

#### Output

- RTMP Low latency
- HLS Standard

#### Life cycle

• 10 hours by default

#### Encryption

• SSL

#### Codec

Video: H.264Audio: AAC

#### **Filters**

- IOS
  - o Built-in beauty filter
- Android
  - o A base image filter class left for customization,