H5S VIDEO PLATFORM

LINKINGVISION

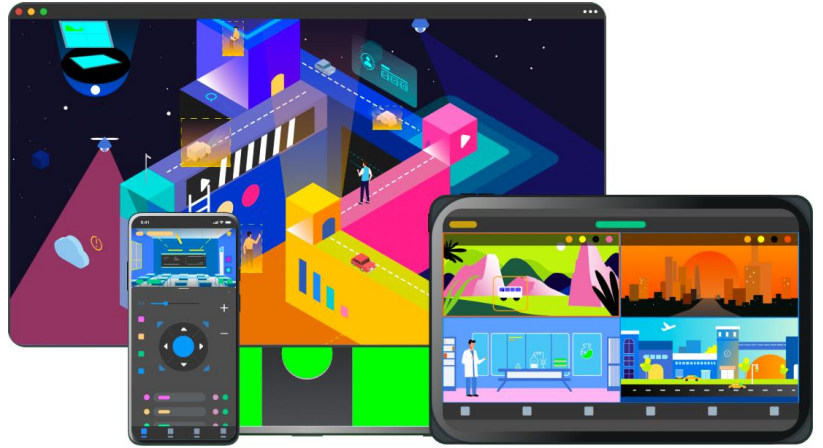## H5S Video Platform

**HTML5 Native Video
Video Storage
GPU/CPU Transcoding
Device Compatibility
GIS Map
Mobile support
H264/H265 browser GPU
decoding**

H5S video platform is equipped with a powerful device integration framework, can support most video surveillance manufacturer's device SDK and industry standard; The system use an auto detection-transcoding technology and leading WEBRTC technology, then can improve operator efficiency; The system use cross OS/CPU platform technology and then provide flexibility to deploy on x64/Arm architecture.
Support WEBRTC platform with low latency without transcoding, with on-premises environment, user can access the WEBRTC video stream by TURN.
Support ONVIF camera integration with Profile S, also support NVR with Profile G/T, support H264/H265 encoding and G711/AAC audio.
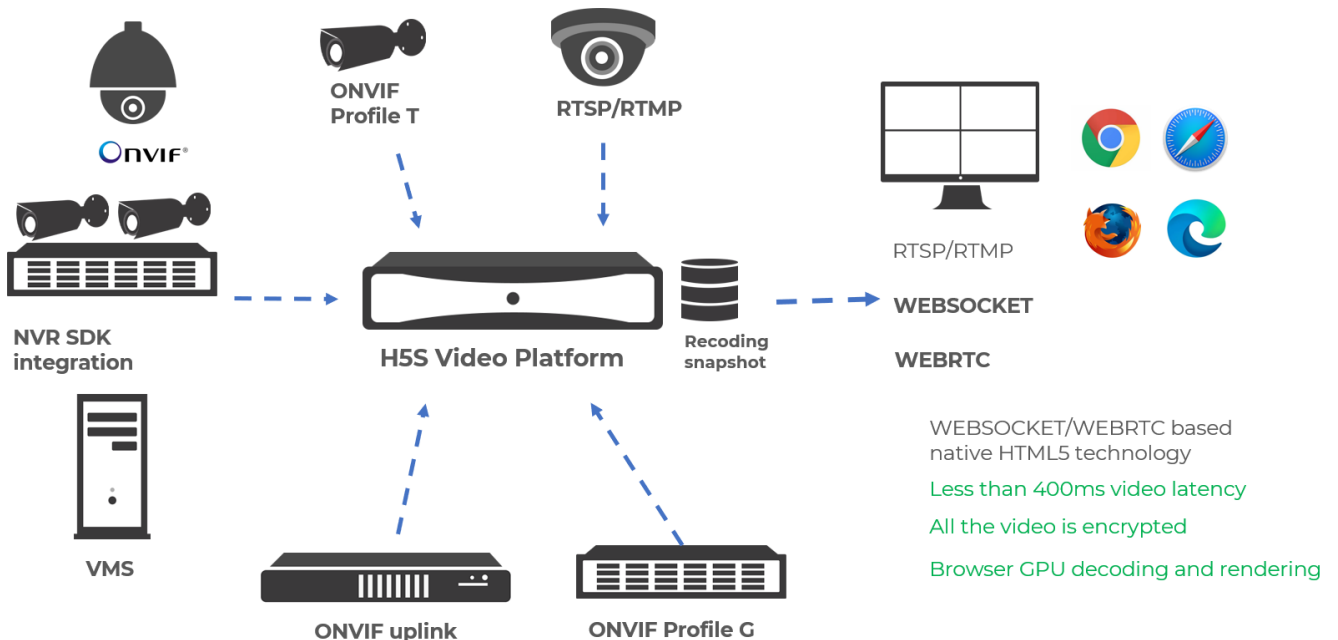Support most NVR/IPC manufacturer's device SDK such as Hikvision DAHUA UNVIEW Tiandy with live view/playback/PTZ.
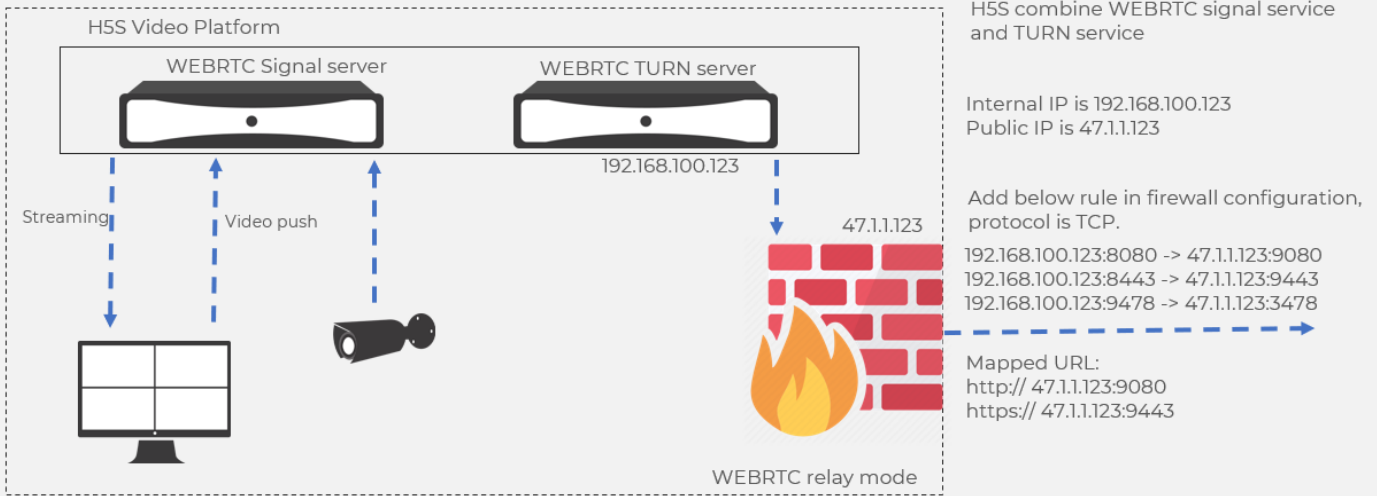Support most VMS integration such as ISC DSS and IVS with live view/playback/PTZ.
Support REST API for recording operation with WEBRTC and WS mode.
Support token base API authorization, support HTTP/HTTPS. Video streaming encrypted with HTTPS.
The user-friendly Web UI and mobile source code are open, easy to customize UI, Expand the capabilities of your system to fit your organization's needs.

ONVIF Profile T

RTSP/RTMP

ONVIF

NVR SDK integration

VMS

ONVIF uplink

H5S Video Platform

Recoding snapshot

ONVIF Profile G

RTSP/RTMP

WEBSOCKET

WEBRTC

WEBSOCKET/WEBRTC based native HTML5 technology
Less than 400ms video latency
All the video is encrypted
Browser GPU decoding and rendering

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WEBRTC TURN mode

H5S Video Platform

WEBRTC Signal server   WEBRTC TURN server

192.168.100.123

Streaming   Video push

47.1.1.123

WEBRTC relay mode

H5S combine WEBRTC signal service and TURN service

Internal IP is 192.168.100.123
Public IP is 47.1.1.123

Add below rule in firewall configuration, protocol is TCP.

192.168.100.123:8080 -> 47.1.1.123:9080
192.168.100.123:8443 -> 47.1.1.123:9443
192.168.100.123:9478 -> 47.1.1.123:3478

Mapped URL:
http:// 47.1.1.123:9080
https:// 47.1.1.123:9443

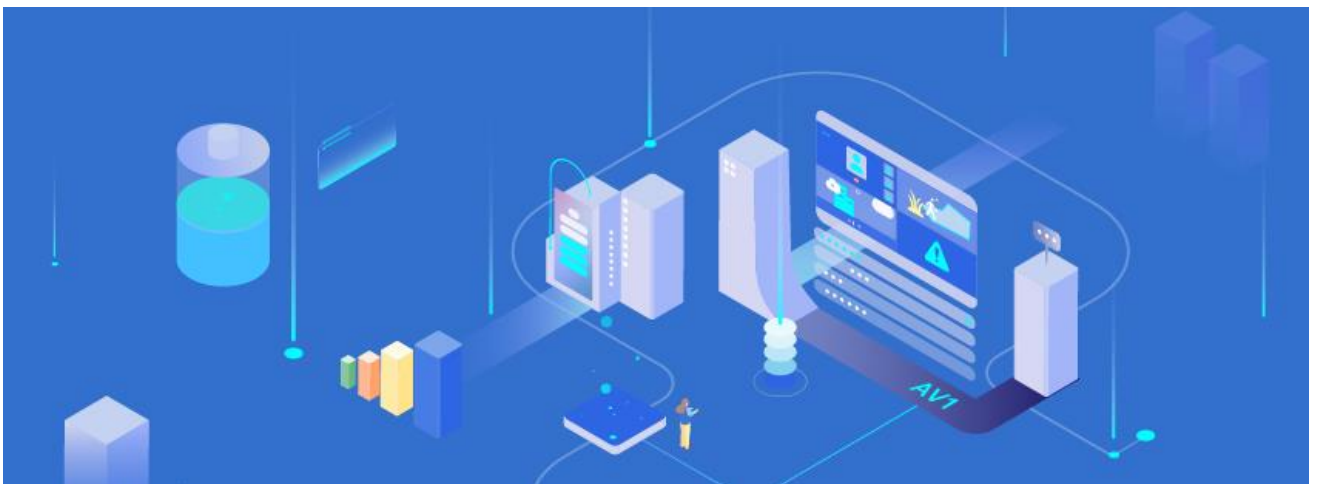## AV1 transcoding

AOMedia Video 1 (AV1) is an open, royalty-free video coding format initially designed for video transmissions over the Internet，more and more PC and phone support AV1 decoding，WEBRTC stack also support AV1 hardware decoding, so we support TAV1 transcoding PCIE card to support H265 to AV1 transcoding, and the hardware latency less than 8ms.

Highlight Features

Compatibility with most browser
Based on HTML5 technology, web client support Chrome/Edge etc. browser, support video and audio live view and playback, and support GPU H264/H265 video decoding. Can reach new heights in video
management with actionable insights to save time.

Video proxy mode
Platform use HTTP and HTTP or TURN to transmit video stream. Build-in IT compatibilities make it easy to deploy in NGNIX proxy, then reduce compliance costs and everyday operational costs.

Support most NVR/IPC/VMS integration
Platform has a powerful device integration framework Support most NVR/IPC manufacturer's device SDK such as Hikvision DAHUA UNVIEW Tiandy with live view/playback/PTZ. Support most VMS integration such as ISC DSS and IVS with live view and playback and PTZ.

ONVIF Profile S/Profile G /Profile T
Combine ONVIF Profile S/T/G to one powerful device driver, so it is easy to integrate to most IP Camera and NVR/DVR。

GIS Map
Platform support Google GAODE GIS map. User can change the map URL, make it easy to leverage existing map infrastructure.

Audio intercom
Platform leverage HTML5 technology, allow user intercom with camera in browser.

Cross CPU and OS platform support
The system support Linux OS (CentOS /RockyLinux /Ubuntu Debian/SUSE/Redhat)and Windows OS(Windows 7/8/10/11, Windows Server 2012/2016/2019).

Video Stream encryption
Reinforce your system's resilience to cyber security threats by using HTTPS video stream encryption.

CPU base AI inference
The system leverage Intel OpenVINO, support person / vehicle /face inference, auto generate suspicious alarm.

Event subscription
The system support subscribe event form device, end user can real time check the event from device.

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System specifications

	Functions	ENTERPRISE	ULTIMATE	CORPORATE
System	OS	Windows 7/10 2008/2012/2016 Ubuntu 16.04 Centos7	Windows 7/10 2008/2012/2016 Ubuntu 16.04 Centos7	Windows 7/10 2008/2012/2016 Ubuntu 16.04 Centos
	CPU	Intel/Arm	Intel/Arm	Intel/Arm
	Browser	Chrome Firefox	Chrome Firefox	Chrome Firefox
	Browser OS	Windows Linux macOS Android iOS	Windows Linux macOS Android iOS	Windows Linux macOS Android iOS
	Cluster			Support
	Cascade		Support	Support
	Stream encryption	https	https	https
	Token authorization	Support	Support	Support
Streaming	RTMP		Support	Support
	RTSP		Support	Support
	FLV	Support	Support	Support
	WebSocket	Support	Support	Support
	WebRTC	Support	Support	Support
	Video Encoding	H264	H264	H264
	Video Encoding			H265
	Audio Encoding	G711 AAC	G711 AAC	G711 AAC
	Audio transcoding	G711 AAC	G711 AAC	G711 AAC
	Video HW transcoding			Support
	Video SW transcoding			Support
	Browser HW video rendering	Support	Support	Support
	Browser HW decoding	Support	Support	Support
	No plugin	Support	Support	Support
	Video poster image	Support	Support	Support
	Poster customization			Support
Recording	Format	mp4	mp4	mp4
	Snapshot	Support	Support	Support
	Recording retention	Support	Support	Support
	Snapshot format	jpg	jpg	jpg
	Recording search	Support	Support	Support
Integration	RTSP	Support	Support	Support
	RTMP	Support	Support	Support
	ONVIF ProfileS	Support	Support	Support
	GB28181			Support
	HIKVISION SDK		Support	Support
	DAHUA SDK		Support	Support
	UNIVIEW SDK		Support	Support
	TIANDY SDK		Support	Support
	HIKVISION SDK Playback			Support
	DAHUA SDK playback			Support
	UNIVIEW SDK playback			Support
	TIANDY SDK playback			Support
	HIKVISION ISC			Support
	DAHUA DSS			Support
	RTMP push			Support
Third party integration	JavaScript integration	Support	Support	Support
	HTML5 2D map video projection	Support	Support	Support
	HTML5 3D map video projection	Support	Support	Support
	REST API	Support	Support	Support
Support	Support method	Mail	Phone mail	Phone mail Remote Assistance

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Ordering information

Part number		Description
Base license	H5S-BAS	Include basic user management, region, map and view etc.
Video channel license	H5S-CAM-10	10 channel license
	H5S-CAM-50	50 channel license
	H5S-CAM-200	200 channel license
	H5S-CAM-500	500 channel license
	H5S-DSDK	Device SDK integration license, include HIKSDK/DHSDK/UNVSDK/TIANDYSDK/HWIVS
	H5S-PSDK	Platform integration license, include HIK ISC/INFOVISION/DHDSS
GB license	H5S-GB28181	GB28181 service license
AI license	H5S-AIBAS-1	1 Channel person vehicle face detection license
	H5S-AIADV-1	1 Channel PPE helmet detection license

Hardware recommendations

H5S Browser Client	
CPU	Intel Core i3 (3.2 GHz or higher)
Hard drives	Minimum 500 GB, SSD recommended, 7200RPM or higher
RAM	Minimum 8GB
Network	1 Gigabit/s network interface card
Display resolution	Minimum: 1280 x 1024
	Maximum: 3840 x 2160
Graphic card	Integration or Standalone
Operating System	Windows 10 Professional or Enterprise (64-bit) Windows 11 Professional or Enterprise (64-bit)

H5S service	
CPU	Intel Xeon (4 core or higher)
Hard drives	Minimum 500 GB, SSD recommended, 7200RPM or higher Refer this link for calculate recording size: https://linkingvision.cn/download/application/storcalc/record.html
RAM	Minimum 8GB More camera channel need more memory: 1~200 Channels, 16G memory 200~1000 Channels, 32G memory(10 core CPU or higher recommended) 1000~2000 Channels, 64G memory(10 core CPU or higher recommended)
Network	1 Gigabit/s network interface card
Graphic card	NVIDIA RTX A2000 NVIDIA RTX A4000 SFF or other NVIDIA graphic card
Operating System	Linux OS (CentOS /RockyLinux /Ubuntu Debian/SUSE/Redhat)and Windows OS(Windows 7/8/10/11, Windows Server 2012/2016/2019). 64-bit