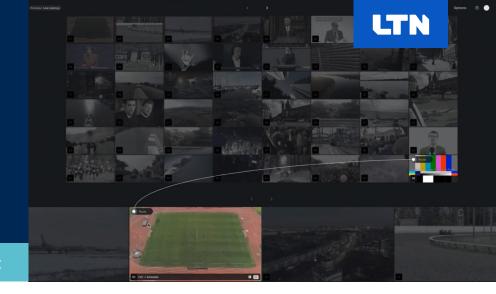
LTN Live Video Cloud datasheet



Infinite-capacity live video management

Technical overview

LTN® Live Video Cloud is a software service providing our customers better scale, agility, reliability, and revenue leverage for ingesting, managing, and distributing live video feeds. Live Video Cloud utilizes the latest cloud technology, a highly experienced team, and an always on technical support center (TOC) to ensure that our customers have reliable, agile, and profitable content aggregation and distribution experiences.

The Live Video Cloud service is also designed to be compatible and expandable with other industry-standard workflows and hardware. Live Video Cloud is complemented by LTN's full range of IP-powered services and solutions. Please **reach out** to our team for any questions about Live Video Cloud or other LTN services.

Live Video Cloud specifications

This service combines ingesting an infinite number of live video feeds, managing the broadcasting, and distributing the final program to linear and digital destinations.

| Ingest live video feeds globally | Live Video Cloud leverages the multi-geographical live source ingest, ensuring low-latency and reliable content delivery. |
|----------------------------------|--|
| Live ingest formats | SRT (caller/listener), RTMP (push/pull), HLS pull, RTSP pull, WebRTC. |
| Monitor live feeds | Multi-view with live, low latency, and thumbnail mode view. Monitor up to 48 feeds at once. Possibility to monitor connection health. |
| Automatic recording | Automatic recording of all ingested signals, access on-going recordings, and trim the content for transfer and download. |
| Distribute assets | Connect live signals to unlimited outputs with low-latency passthrough. Multi-bitrate transcoding and fixed buffer option for all outputs. |
| Output formats | SRT (caller/listener), RTMP (push/pull), MPEG-TS over TCP (pull), HLS (pull). |
| Manage teams | Role-based access control for users. System usage provides information on the platform's usage related to a certain customer or team. |



Live Video Cloud overall specifications

LTN Live Video Cloud operates on a highly secure ingest network, allowing a seamless live video workflow from ingestion to monitoring, and distribution.

- Globally spread ingest network for reliable content acquisition
- Browser-based control accessible from anywhere
- Receive live signals from mobile apps/browsers, cameras, encoders, or drones
- Monitor any amount of signals in a continuous playback multi-view with up to 48 inputs on one page
- Route ingested signals via passthrough or multi-bitrate transcoding

Ingest methods

Core methods available for ingesting an unlimited number of concurrent live signals from cameras/encoders, mobiles, and online sources around the globe.

| SRT | SRT caller and SRT listener, optional encryption (AES-128, AES-192, AES-265). |
|------------|--|
| RTMP push | Push and pull, supporting H.264/AAC, via port 1935. |
| WebRTC | Via capable mobile and desktop browsers (IFB/Return channel to connected WebRTC clients via UDP). |
| H.264, AAC | AAC level 3.x to 4.0 (higher levels are experimental); H.264 up to 1080p60; decoding, passthrough, in-browser live preview support: MP2, AC2, MP3, PIR video (only when using SRT or MPEGTS over TCP). |

Recording, curation, and control

Automatic recordings of ingested live signals. Visual and metadata supported content curation for easy and fast decision-making.

| Recording of live signals | Automatic recording of all ingested signals. Contain the assets as MPEG-TS (.ts) using ingest format. Filter recordings/assets by user, date, and format. Unlimited concurrent recordings, new asset every 8h. |
|---------------------------------------|--|
| Access on-going recordings | Recordings (growing files) are accessible for screening, transfer, and download from the first minute. |
| Trim assets for transfer and download | Cut based on video segments, actual in- and out-points may differ up to 10s from selection, download via HTTPS, transfer via FTP. |
| Continuous playback multi-view | Up to 48 live signals per page and unlimited pages, zoom levels for 1, 4, 12, 24, 36 and 48 signals, decoding limit for continuous playback: 12 x 720p60 per tile. Filter live signals by production, user, and input. |



| Connection health | Monitor stream health metrics and encoding parameters for all sources and targets individually in real-time. |
|--------------------|--|
| Thumbnail previews | Thumbnail previews are updated in ~10s intervals. |
| Geo-location | Explore content on a map view. |

Output formats

Distribute live signals simultaneously to unlimited destinations online and to broadcast systems.

| Multi-bitrate transcoding | Up to 3 qualities per transcoded output, H.264, 0.1 to 20Mbit/s, 240p, 240i, 360p, 360i, 480p, 480i, 720p, 720i, 1080p, 1080i with 25, 29.97, 30, 50, 59.94, 60 fps, AAC, 32 to 320 kbit/s (interlacing support for top-field-first). |
|---------------------------|---|
| Output protocols | Up to 10 destinations for each output using RTMP push/pull, SRT caller/listener, MPEG-TS via TCP, HLS pull. |
| Stream mapping | Select audio or video elementary streams via PID or enumeration (order in PMT); preserve, drop or remap streams for the whole output, override for individual destinations and resource locations; transcoded outputs can carry 1 video stream and up to 8 audio streams. |
| Static overlay | Configurable per transcoding quality via image upload. |

Access and management

Use the system wherever you are and manage productions, users, and accounts.

| User roles | Divide your team into manager, editor, and contributor. |
|------------------------------|---|
| System usage | A view accessible for team managers providing close to real-time information on the platform's usage related to a certain customer or team. |
| OAuth connections for social | Manage accounts on Facebook, YouTube/Google, Twitch, and Mixer via OAuth connections without sharing credentials. |
| Transfer targets | Configure asset transfer destinations while keeping your credentials secure and avoiding complicated workflows. |
| Access from anywhere | Recommended: Google Chrome, 10Mbit/s, via HTTPS, viewport of 1440 x 600 px or higher. |

About LTN: LTN is a global leader in IP media technology and managed video services. We operate the world's fastest and most reliable video network and have integrated live production, digital streaming and linear channel metadata solutions that simplify and enrich the content value chain.