



VIDEO

# SOFIA BACKSTAGE® STUDIO

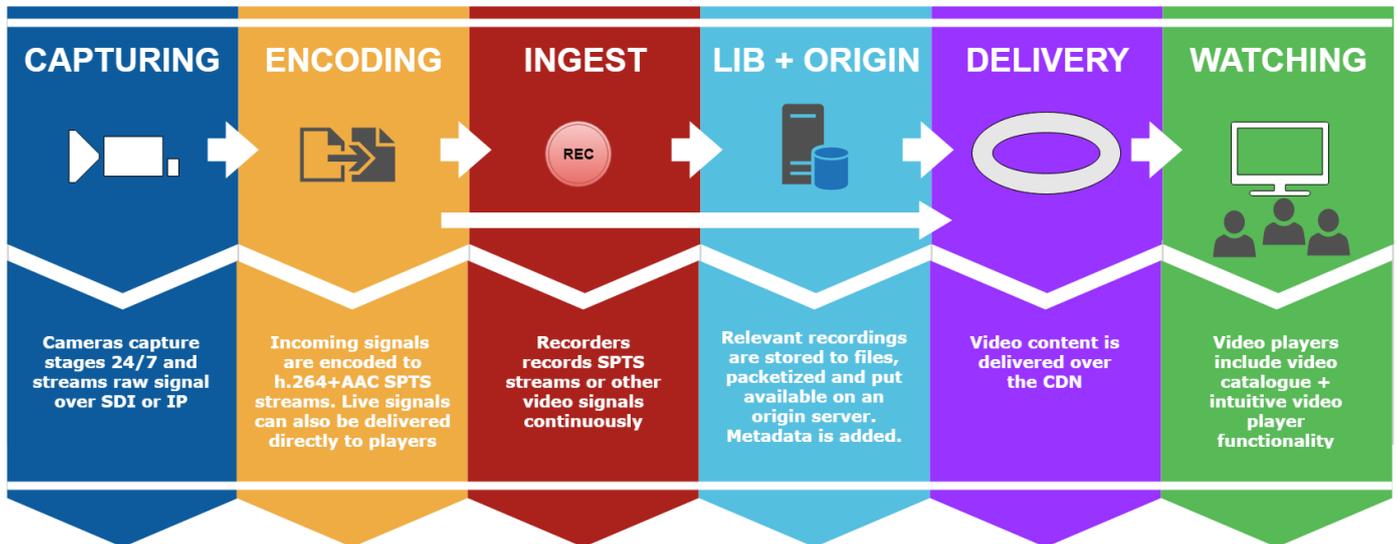
## Deploy Sofia Backstage® Studio to create your own video portals.

Sofia Digital has launched video services offering during 2017. This offering is based on and complements the company’s extensive experience in over-the-top (OTT) video portals. Sofia Digital has been developing the OTT portals for different customers since its beginning year 2000 on different technologies. Initially, the technology was MHP and later these portals have been implemented using different Smart TV platforms and HbbTV. Today the current video services offering includes also responsive web and mobile-based portals.

Sofia Digital’s Video Services include a full bouquet of services from ingest to transcoding and delivery to VOD portal deliveries. Sofia Digital is a one-stop-shop providing all the features of a full-fledged integrated video service offering. This is enabled by partnering with world-leading brands and local professionals in the different areas of the video capture and delivery process. The services can be provided as customer-specific hardware implementations or from cloud/SaaS, whichever is preferred by the customer.

In addition to partner solutions, Sofia Digital provides VOD catalog integrations, small-scale transcoding, VOD management and portals for almost any smart device. The company also provides professional services in all areas of the solution.

The solution is built on several components, which can be selected for the delivery. Many of the components are optional and their need for the services is agreed together with the customer.



The overall process flow of a typical implementation

Sofia Digital has implemented and delivered a number of video-on-demand applications for television and web-portals with hundreds of thousand users using TV applications. Maybe the most interesting deliveries are customer-specific implementations with some twist in them. Here below are two highlights from Finland: Finnish National Opera and Ballet (FNOB) video platform and Finnish public service broadcasting company Yle reference recording platform.

For FNOB Sofia Digital provided a software-based player-centered system with VOD management, live stream recording, and scheduled MP4 file generation. This system is integrated with the existing video source (SDI) environment with professional encoders. A specific easy-to-use video player device for TV environment was developed for supporting the performers in their rehearsals. The player solution is fully software-based and standard PC hardware is used as the platform for the player. In addition to PC player, a web portal-based solution is offered for FNOB office users. The solution is also suitable for offering remote access to the actors.

The other interesting solution is Yle reference recording platform, which is installed on dedicated servers at Digita premises. This guarantees the best possible QoS as Digita is the official deliverer of the Yle DVB signals. The users of

this service are Yle personnel, who want to review TV programs in all aspects what was actually broadcasted. The term reference recording refers to a legally mandatory service that must record all aired television programs sent on public networks by Yle and allow access to them if needed.

The reference recording platform records all Yle's national TV channels in SD and HD format and additionally, nine regional Yle's TV feeds. Recordings are made available for Yle personnel through a responsive web portal, which provides EPG and possibility to watch the TV programs. Additionally, it is possible to download video streams in the original TS format for a technical investigation to check e.g. that all components of the stream (video, audio, subtitles, teletext) are correct. YLE reference recording interface is depicted in the figure below.



## Solution components

### CAPTURING (PARTNER)

- Video productions
- Webcast
- Cameras

### ENCODING/TRANSCODING (SOFIA DIGITAL OR PARTNER)

- Transcoding from any to any format
- Adaptive bitrate
- SW or HW based encoding

### INGEST (SOFIA DIGITAL)

- Video file upload
- Live ingest + live to file recording
- Recording buffer length can be defined freely

### PACKETIZING (SOFIA DIGITAL OR PARTNER)

- HLS
- MPEG-DASH

### VOD STORAGE (SOFIA DIGITAL)

- Web-based management UI
- Metadata/EPG
- Scheduled recordings
- Optional interfaces to external CMS or EPG data source

### ORIGIN SERVER (SOFIA DIGITAL OR PARTNER)

- Video files in all formats for end-users
- Source for delivery over CDN

### CDN (PARTNER)

- Guaranteed video delivery over the Internet

### VIDEO PLAYERS & WEBPAGES (SOFIA DIGITAL)

- All web browser-enabled devices
- Modern web techniques with open-source video players
- Support for live events and on-demand video
- Possibility to synchronize additional data, e.g. proceedings with the video
- Typical web-features include for example search, moderation, and management functionalities
- Applications for different devices

### PROFESSIONAL SERVICES (SOFIA DIGITAL)

- Platform tailoring
- Customer-specific integrations
- Content preparation

Sofia Digital's partners with Amazon Web Services (AWS) / Elemental – (live) transcoding, origin server and CDN from the cloud.

