



Live Event Editing with Lightspeed Live Capture and Vantage Sub-Clip

Capture live and subclip & edit growing files while an event is still in progress

Telestream's Live Edit option for Live Capture massively reduces your production costs for live event catch-up, highlights preparation or any media subclipping workflows—with a very short turn-around time. Even when an event is on another continent, the finished content can be available within seconds.

Overview

There are two distinct Live Edit processes that can be accomplished using Live Capture alone and Live Capture/Vantage combination.

- Live Edit using Live Capture only: Capture creates a hiRes 'open' editable
 HiRes and an HLS proxy to be used in the Live Edit HTML5 edit page.
 Subclips are created using the Live Edit UI and those subclips are sent to
 the SubClip Action residing on the Capture server. The Subclip action
 creates an output based on the clips submitted. This output then can be
 processed with additional action to create and deliver media and metadata
 to the final destination.
- 2. The second way that Live events can be edited is to use a combination of Live Capture, Vantage and 3rd Party product. The prime example of this is the Fox Sports World Cup. Live Capture created the HiRes and an HLS proxy. The proxy was push to the cloud when a 3rd Party edit UI could be used to create subclips. The 3rd party solution could then send commands to a Vantage server that would take the clip list created by the 3rd party edit solution and clip out the pieces of media into a single output. The output was then sent to another location for final post production.

Live events are among the highest value content available to broadcasters and media companies. Whether it's elite sports, live TV shows, music events, political events, or news events published live (or "near-live")—they all com- mand the highest viewer attention and advertising values.

While the true "live" transmission has the highest value, there are a multitude of ways in which a rights owner can extract additional value from the live event—for example: VOD, catch-up, social media delivery, and any many other ways in which the content can be re-packaged and sold for other platforms and uses.



The commercial value of secondary uses is much greater if the content can be captured and made available quickly and in high quality. The audience, and therefore the commercial value, for any highlights or clips from a live event are diminished as the time taken to publish the highlights increases. The commercial value can also be increased if events are edited to remove dead time or inappropriate ads, or if SCTE35 ad markers are added for downstream DAI campaigns. Effective automation of these processes is essential for a commercially successful service.

Until now, the only ways to provide editing staff with immediate access to the highest quality recordings, was to send the edit staff (and equipment) to the event location, or to pre-book high quality live feeds to your production center using expensive satellite feeds or dedicated video circuits. Alternative solutions exist for remote editing and repurposing a live feed. They involve capturing the transmission from satellite or over IP, and they do work to some extent – but they also constrain the quality of the final output.

Telestream's new Vantage Live Service Sub-Clip solution, when used with Telestream Lightspeed Live Capture offers a new way to edit live events – local or remote – while capturing them in the highest possible quality. Plus, the selected master files can be delivered as growing files over the unmanaged public internet to your production center for immediate processing in Telestream Vantage. This solution is ideal for highlights creation, VOD package assembly, OTT social media distribution and other quick turn workflows.

This completely integrated solution massively reduces your production costs for live events catch-up or highlights preparation, while enabling an amazingly short turn-around time. Even when the event is on another continent, the finished content can be available within seconds.



In addition to creation of a complete output package, individual clip segments can also be sent immediately to downstream Vantage actions. This allows individual highlights to be selected, processed and delivered prior to the show or event being complete. Each of the highlight clips can even travel down a different workflow path based on decisions made according to metadata added by the operator.

The Telestream solution consists of 2 components:

 Telestream Lightspeed Live Capture with SubClip Action:

Lightspeed Live Capture is located at the event site to capture SDI signals (or ST2110) direct from cameras or switchers. It captures high-quality mezzanine files in any format you need, and streams a time-code accurate proxy version, with metadata included links to the master quality file locations.

The master quality files can be recorded locally and copied while capturing to any available network or cloud storage.

2. Telestream Vantage with subcliping functionalities:

Vantage with the Sub-Clipping can be located at the production center. It has an option that provides a browser-based LiveEdit Portal that allows a user to view the proxy resolution stream from Lightspeed Live Capture. From the LiveEdit portal, the user can select in and out points to create a frame-accurate clip list that links to the corresponding high-res mezzanine files for further processing in Vantage.

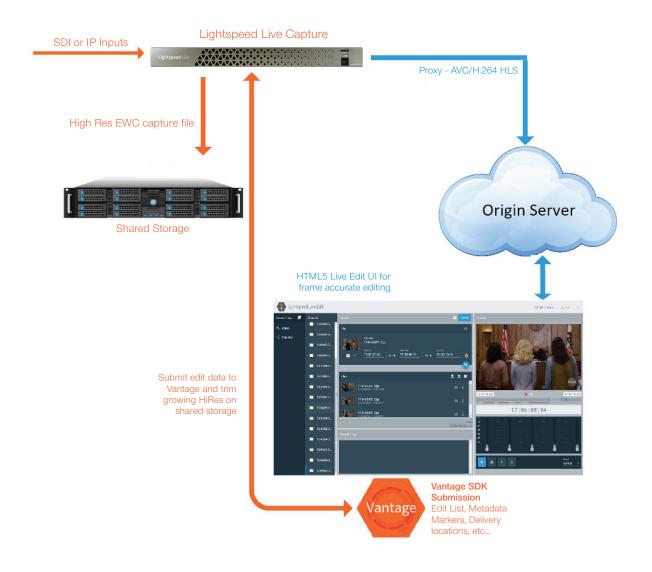
Users can quickly create catch-up TV packages, sports game compression, quick turn highlights for social media and highlight reel creation—all of which can then be delivered through Vantage to create deliverable assets for IPTV, Cable VOD, ABR for multiscreen, embedded web, social media etc., or delivered to a craft editing system for further sweetening or enhancement— and all as a growing file workflow.

Unmanaged public internet is used for the back-haul of both the proxy and high-res versions content if the event site is distant from the production staff. If the network distance is not great (e.g. across a city), the solution can work without any network acceleration tools. If the network distance is across a country or even across continents, network acceleration tools such as IBM Aspera FASP-Stream, or the open-source SRT protocol, make this work just like a local connection.



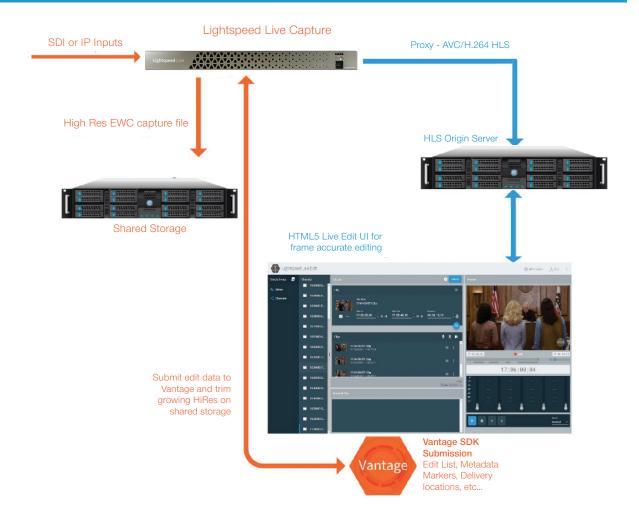
Live Edit example use cases and solution architectures

Proxy editing on local network and storage



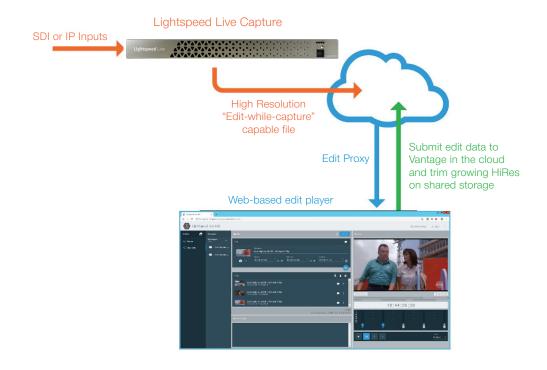


Proxy editing on local network and storage





Remote proxy editing over public internet



Customer Example: Fox Sports for 2018 FIFA World Cup

