

Tempo Time Adjustment

Adjust the running time of media assets while maintaining program quality

Tempo runs on the Vantage media processing platform, providing unparalleled quality of media assets with no noticeable visual or audible artifacts. Tempo can be installed on Lightspeed Server, or your own server (meeting Vantage requirements)

Tempo™ is a high-quality solution for re-timing file-based content and intelligently decreasing or increasing the running time of shows and segments. Tempo utilizes comprehensive time compression algorithms that deliver superior quality and faster turn-around times. Running on the Vantage media processing platform, Tempo offers all of the benefits of the world's best workflow management and transcoding system.

Tempo is designed to leverage new methods of media analysis. It does not throw frames away; rather it intelligently interpolates the desired time change over the duration of the content in a way that produces no noticeable visual or audible artifacts.

Unlike some other re-timing products – which complete the re-timing as early as possible in the program – Tempo can apply selective re-timing throughout the program. The result is much better and consistent quality.

Technology that delivers a strong ROI while maintaining source quality

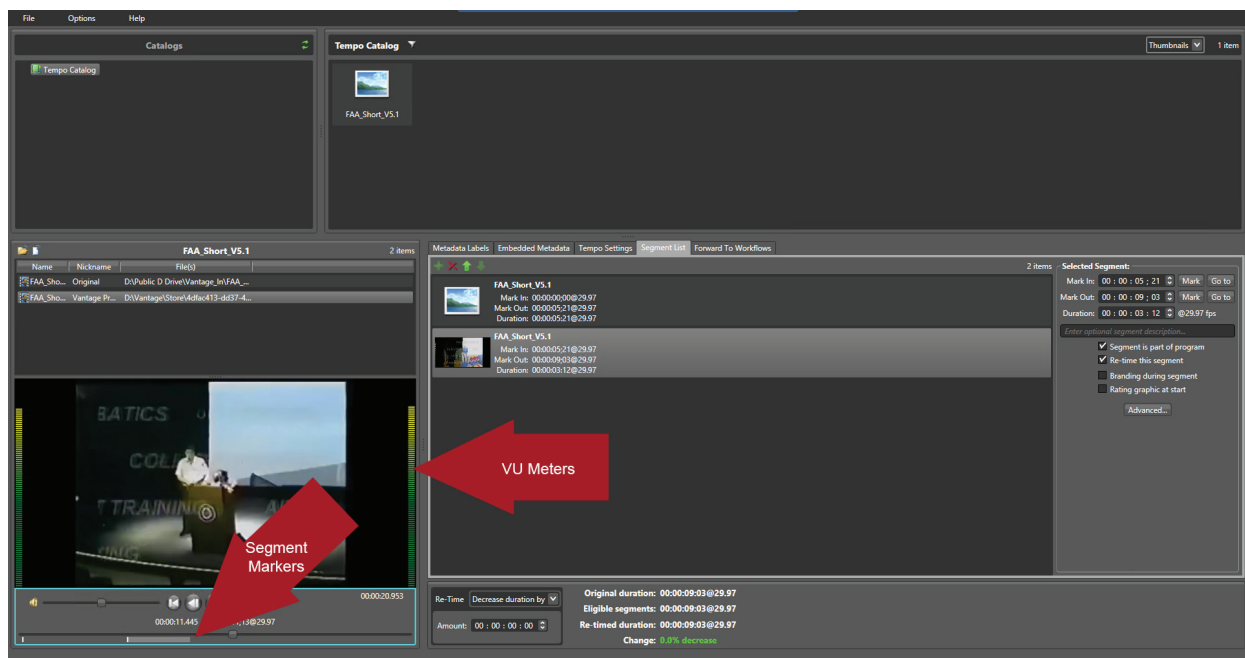
Telestream developed Tempo with three key goals in mind:

- Efficiently alter the running time of an entire asset, or segments within an existing asset
- Make the resultant file's picture and audio quality as close to the original asset's quality as possible
- Make the product easy to use

Tempo delivers on all counts by providing unmatched ROI capabilities while maintaining standards of quality consistent with broadcast and network-level requirements.

Tempo Features

- Tempo runs on the Vantage media processing platform and leverages the speed of Lightspeed hardware, and also runs on Vantage-capable CPU hardware
- Since it is built on the flexible Vantage service-oriented architecture, made up of discrete services and connectors, Tempo can be seamlessly connected to other Vantage or third-party systems to create a powerful automated workflow – all under unified system control
- Tempo can shorten or lengthen an existing asset's running time from 1% to 10% without noticeable loss of video or audio quality
- Tempo can be controlled through a special Vantage Portal that provides the ability to:
 - Drag Vantage clips into a clip palette and view them in a built-in video player that provides for quick marking of segments to be re-timed.
 - Segment long-form clips to set “no-touch” segments that will not be re-timed
 - Set an overall content new run time, or time to subtract from an existing asset
 - Add a graphic overlay to one or more clips
 - Preserve and re-time captions
 - Preserve or add Content Rating to the re-timed asset (.SCC files) and subtitle (.STL files)
- Tempo can also be controlled in an automated fashion, as it utilizes Telestream's Post Producer command language which includes new commands that control the re-timing process. Command language files can be activated with a Vantage Workorder (Excel CSV file) to quickly and efficiently perform batch operations on multiple source files.
- Implement a Two-Pass retiming workflow in which retiming quality can be previewed prior to creating final output.



Tempo Portal

Technical Information:

New: Tempo is now available as a stand-alone license for adding to existing Vantage 7.0 UP2-based systems

Video – Tempo re-times content by analyzing each interpolated frame and predicting which elements can be adjusted for time compensation, and then applying the re-timing over the duration of the content, or to the sections identified by the user to be re-timed. Since the entire file (or section) is analyzed for the best candidate frames for adjustment, the desired time compression is applied longitudinally rather than at random intervals.

Audio – Tempo performs compression operations on audio with equivalent timing for the video, implementing pitch correction, which uses a special synchronous technique that preserves the original sound's pitch. Tempo supports secondary Dolby E audio programs via decompression and re-timing.

Captions – Caption data (608 and 708) is redistributed to maintain the original presentation times without exceeding bandwidth limitations.

Subtitles - Subtitle (.STL) files are retimed along with the media, and a new .STL file is created.

Formats

Built on Telestream's award winning Vantage media processing platform, Tempo supports an extensive range of input and output formats and wrappers. For a list of supported formats and wrappers, consult the Vantage Transcode format [encode](#) and [decode](#) format sheets.

