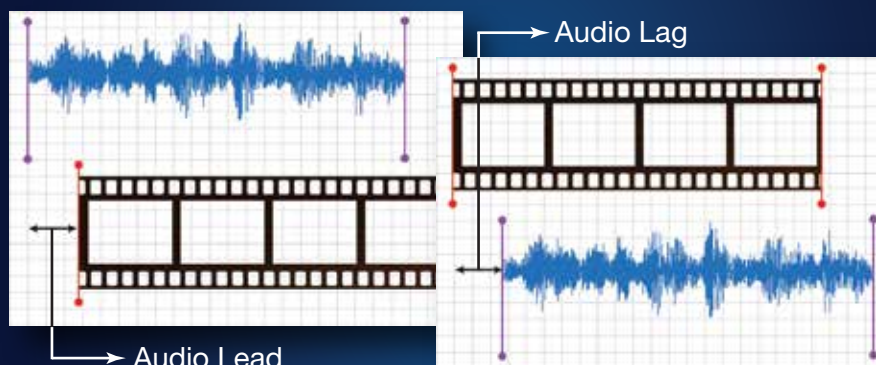


# BATON LipSync

## Automatic Audio-Video Sync Detection



LipSync is a powerful audio-video synchronization tool to detect audio-video synchronization errors in content. Using the deep neural networks LipSync automatically detects audio-video sync errors to identify if the audio is leading the video or vice-versa.

### Key Features

- Uses AI/ML based algorithms to accurately detect lip-sync issues
- Designed keeping in mind scalability and high availability
- Intuitive and easy-to-use web-interface for detecting sync errors
- Accurate Detections
  - Provides accurate results, using machine learning driven approach
  - Accurately reports the audio lead and lag in units of video frames
- Language Independent
  - Checks content available in any language independently of the region and area
- Multiple Format Support
  - Support available for all industry supported formats
- Rich BMP interface to plot audio-video sync errors on lead/lag timeline
  - Plays original and adjusted video side by side
  - Takes manual input for lead-lag for experimentation
  - Views exact location of error on timeline
- Support for role based access
- Rich Interface for Debugging
  - Using BMP, the sync errors can be easily debugged
  - Timing mismatch, or the skew in audio-video is plotted on skew timeline
- Seamless Integration
  - Integrates seamlessly in any existing content processing workflow, or can be used as a stand-alone application
- Available on-premises and in the cloud

### What are LipSync Errors?

When media content is rendered on consumer devices, the video of a person speaking might not match up with his sound. This happens due to the difference in relative timing of audio and video of the content. This difference is often referred as lip sync error. Audio-video synchronization errors are quite annoying and distracting and may reduce the overall consumer experience.

### Possible Reasons for Lipsync Errors

- Video editing, especially during mixing of video clips
- Video processing, such as frame synchronization, addition of video effects, video noise reduction
- Errors encountered during content transcoding and transmission
- Converting content from one format to another
- Wiring issues - Videos stream may corrupt during transmission

BATON LipSync answers a critical industry need by replacing a time-consuming, expensive manual process with faster and more accurate machine-assisted detection.

BATON LipSync application is capable of performing facial detection, facial tracking, lip detection, lip activity detection and speech identification. Sync errors can be debugged further in the BATON Media Player (BMP) through a feature-rich interface that plots out-of-sync audio and video errors on a skew timeline for better visualization. After errors are detected, BATON LipSync provides a comprehensive report of all the LipSync issues.

