

TORNADO

Machine Learning Augmented Content Preparation Services

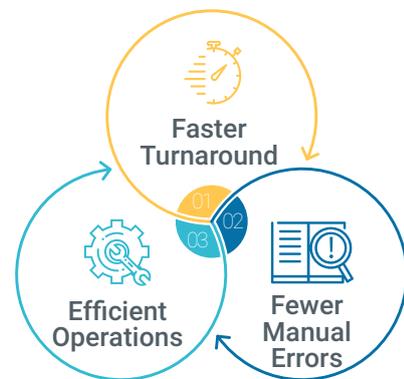


Process Long Form Content Faster, with Better Accuracy

Traditional human-driven approach to content preparation is time-consuming, expensive and prone to manual errors. When TV networks, OTT content creators and distributors want to scale up rapidly, and process large volumes of content, manual content preparation are a major bottleneck.

Amagi's TORNADO leverages a unique approach of combining machine-learning algorithms and minimal human intervention to process thousands of hours of content. With TORNADO, TV Networks and OTT content owners can achieve faster turnaround times, fewer manual errors, and more efficient operations for their content preparation needs.

The entire service is cloud-hosted within a virtual private network with secure permission-based access to content assets. The service minimizes the need for master content and most services are operated on low-resolution asset files.



Feature Highlights

Ad-break Point Recommendation:
Analyzes content frame-by-frame and decides Ad break points as per schedule requirements.

Automated Segmentation:
Detects Black Frames, Color Bars, Opening and Closing Credits.

Live-to-VOD Conversion:
EPG and Program-Bumper triggered VOD creation from live streams.

Sports Re-run Creation:
Automatically removes match analysis, and interruptions due to injury or bad weather etc. to create a clean VOD asset.

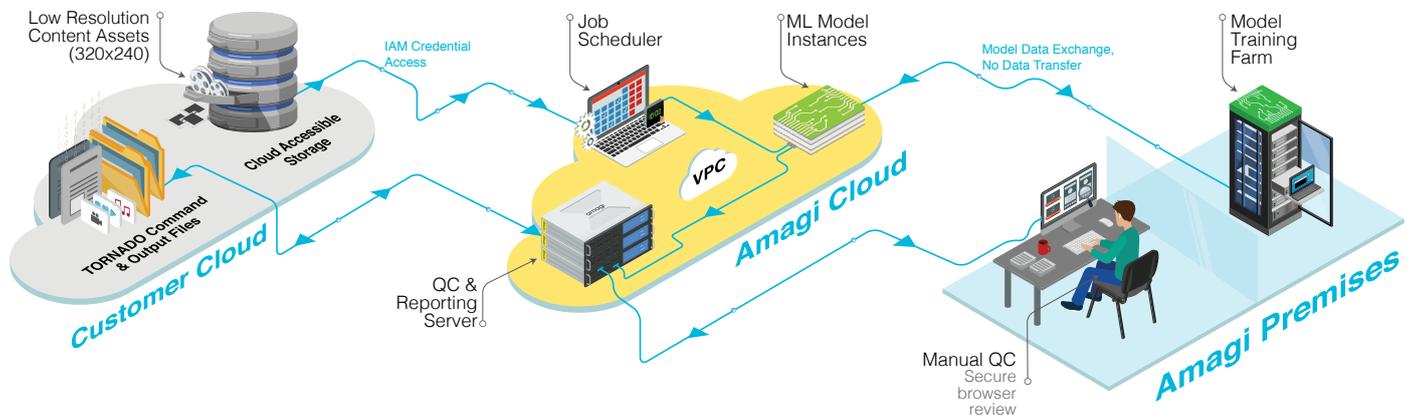
Sports Highlights Creation:
Identifies key events in live sports and creates highlight clips for replay or for VOD consumption.

Auto Ad-detection:
Identify Ads on recorded live streams.

How TORNADO Works

At the core of TORNADO service is a workflow encompassing neural-network trained models (ML Models) for the different services. These ML Models are trained extensively using thousands of hours of content across content genres and languages to best represent the real-world scenarios of content that these models have to process.

The ML Models process the content and generate high-confidence output. This output is QC'ed by humans prior to qualification. This hybrid approach ensures that the bulk of the heavy lifting is done in an automated manner while maintaining high degree of accuracy.



Use Cases



Factory-scale Content Segmentation – Rapid Turnaround time

TV networks and content owners with thousands of hours of content can now prepare content segments for playout and mid-roll Ad avails for OTT platforms in rapid turnaround time, thus enabling faster time-to-market and hence better monetization.



Near Real-time Live to VOD, Re-run Publish - on OTT Platforms

Fast and automated Live to VOD can change business economics for OTT platforms by bringing fresh off-the-air TV content in almost near real-time. This increases customer loyalty and reduces subscriber churn dramatically. Automation lends scale with ability to do Live to VOD from 100s of TV channels in near-live timelines, without large manual teams.



Linear TV OTT Ad Monetization – Targeted Mid-roll Ads

Live and linear TV vMVPDs and OTT operators can leverage auto Ad detection for replacing traditional TV Ads with targeted mid-roll Ads on their linear and VOD streams. This dramatically increases the monetization opportunities available for platforms and creates an entirely new revenue stream.

Key Benefits



Faster turnaround time as compared to traditional content preparation services.



On-demand, instantaneous scaling of operations with cloud-native model.



Greater accuracy and continuous improvements over time with evolution of ML models.



Complete transparency on job status with real time updates.