



GV AMPP-Connected Solutions

Cloud-based live video production with a familiar professional workflow

What is an AMPP-connected Solution?

Part of the GV Media Universe, AMPP-connected solutions combine all the benefits of GV AMPP with control surfaces and workflows from Grass Valley and authorized partners that are already well known to production professionals. Creatives quickly transition to cloud-based production with no learning curve required to transfer their experience.

Benefits of AMPP

AMPP is Grass Valley's scalable SaaS platform of agile management tools, elastic platform services, and intelligent media technologies that are universally deployable. Designed specifically to meet the response and accuracy requirements of live streaming media and entertainment, AMPP provides a new level of freedom for cloud-based live video production.

Freedom to scale

Unlike traditional hardware systems, AMPP does not require a large up-front infrastructure buildout to begin experimenting with new agile media production models. Spin up as many operator instances as required where and when they are needed.

AMPP may be located on any combination of public and private cloud services. As a result, AMPP can quickly spin up solutions that integrate with an existing infrastructure. Any subset of network sources can be shared with other AMPP-enabled cloud production solutions. Each instance of an AMPP-enabled solution can select sources on-the-fly from any that are available on the AMPP fabric.

Freedom to move

Live event environments with reduced on-site production crews frequently want creatives to work remotely. AMPP solutions support remote production at any distance without compromising the user experience.

Key features

- Scalable to as many instances as required without upfront buildout
- Flexible, elastic I/O with access to any source on the AMPP fabric
- Cloud hosted workflows without sacrifice on responsiveness and accuracy
- Operator experience remains the same regardless of distance from the processing

When at-home production means literally working from home, AMPP is ready to support that work environment. Operators can connect to AMPP using typical residential Internet. The high-quality proxy workflow allows operators to make and act on decisions without requiring a high bandwidth connection.

Freedom to innovate

Unfettered by bundles of cables, operators continue to work in a familiar environment with Grass Valley's innovate software tools. AMPP's patented intelligent technologies to allow operators to work in a coherent timespace with confidence and speed. Regardless of the distance from the live event, system operations are instantly responsive. The system's fully aligned monitoring and communication capability makes it easy for operators to work without distracting timing delays.

Security

As a cloud native, AMPP is designed from the ground up with security in mind. Conforming to the best IT practices of a representational state transfer (REST) architecture:

- All REST operations are executed over HTTPS for secure communication.
- All REST operations rely on JSON Web Tokens (JWT) for authorization.

IP streaming in AMPP is encrypted when applicable (SRT (AES), RIST (AES), RTMPS (TLS/SSL), WebRTC (DTLS/SRTP), AMPP Streaming (DTLS/SRTP)).

To ensure strict security standards are maintained, Grass Valley also regularly conducts third-party penetration testing.



- Frame-accurate for live production
- Fully compatible with connected control surfaces and applications
- Intuitive software solutions

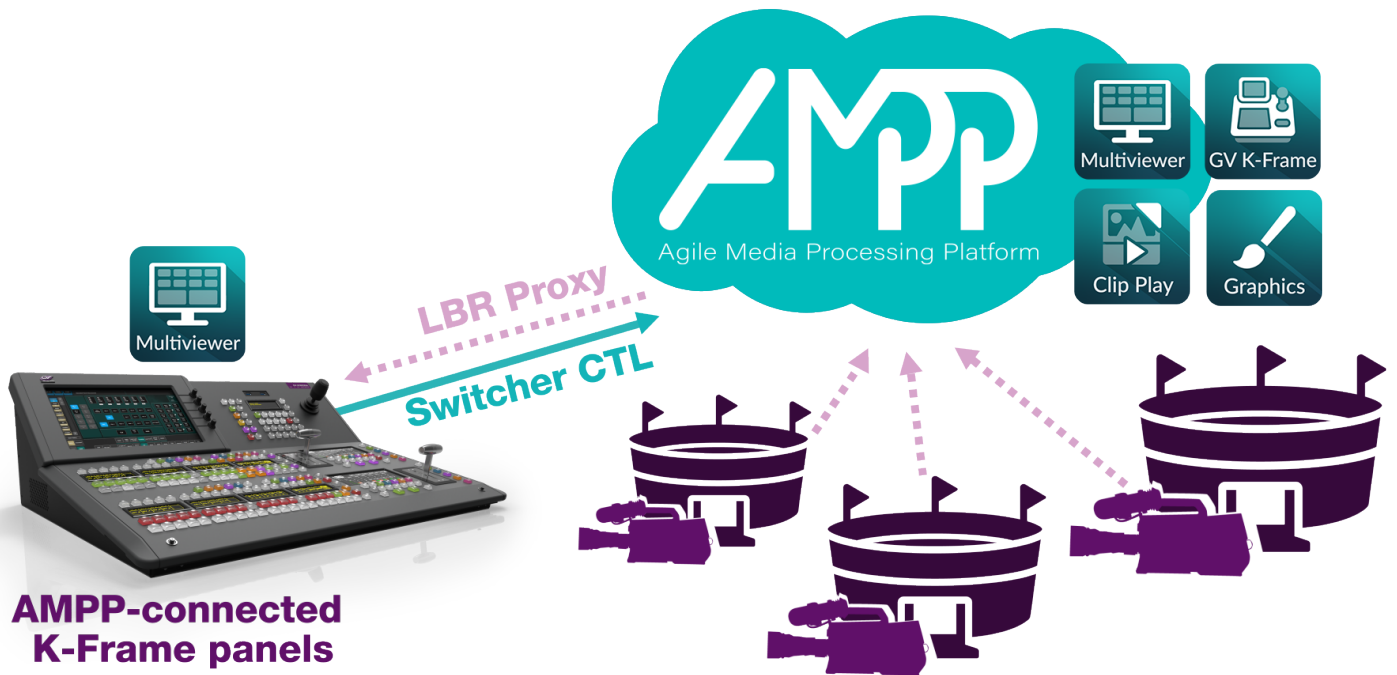
GV K-Frame on AMPP

Grass Valley continues to fulfill its commitment to provide any panel for any engine across its series of video production centers. Kayenne, Karrera, Korona, and KSP control surfaces connect with GV K-Frame on AMPP to provide a simple transition to cloud-based video production. Any panel from the series operates in the same way regardless of the production environment. TDs can get right to work — even transferring show files between AMPP and K-Frame engines.

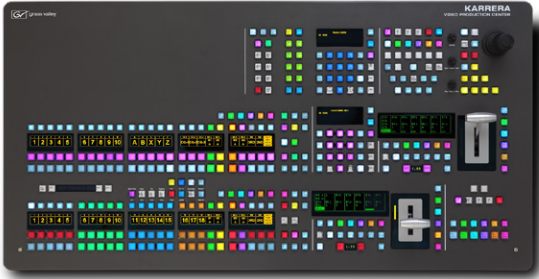
For many TDs, operating a production switcher is done by muscle memory, knowing a panel so well that it is an automatic extension of the hands while the conscious attention focuses on the incoming video

sources and cues to switch a show. AMPP Production Switcher allows TDs to immediately transfer that intuitive knowledge to cloud-based video production. Button presses and transitions respond without delay, providing the precise control TDs have come to expect from Grass Valley production switchers

With three M/Es and six keyers with 2D DPM per M/E, operators have the creative resources required for professional video production. Stills and animations with fill/key including transparency also provide a polished production look. Those looks are easy to create and store with hundreds of eMEMs and Macros available for recall at the touch of a button with the familiar Grass Valley feel.



AMPP-connected K-Frame panels



Initial configuration

I/O channels	Compute instance dependent. Consult your Grass Valley representative
Format support	720p, 1080i, and 1080p
Number of M/Es	3
Keys	Up to 18 (6 per M/E)
Key and fill	Linear/Luminance/Chroma
Wipes	Horizontal and Vertical
Animation playback with transparency	Yes
Still PNG/JPG support	Yes
ImageStore	10 channels
2D DPM (with border, edge/corner pinning)	Yes
eMEMs	1,000
Macros	999
Share show files between production engines	Yes
Source definition, labeling and mapping	Yes

Required Apps



Optional Apps



See Grass Valley website for detailed app information.



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