



K2 Media Server and Medway Third-Party Transcoding and Transfer
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APPLICATION NOTE

marquis

www.marquisbroadcast.com

Marquis Medway is a sophisticated file-based media transfer and format conversion tool, delivering a transparent and cost-effective connection between content production systems including: nonlinear editors, video servers, asset management systems, archive/generic storage systems and automation.

Introduction

Marquis Medway is a sophisticated file-based media transfer and format conversion tool, delivering a transparent and cost-effective connection between content production systems including: nonlinear editors, video servers, asset management systems, archive/generic storage systems and automation.

Medway supports K2 media servers to enable file-based integration with a wide range of other production systems and particularly with Avid and Apple Final Cut Pro NLEs.

Medway transfers video and audio with metadata at faster than real-time speeds, with transcoding if required. This enables the content production process to be maintained in a tapeless environment.

Key Benefits

- Interoperability between best-of-breed content production systems
- Improved performance from file-based broadcast workflows
- Metadata integration with MAM and third-party systems
- Improved system design, delivery and future integration
- Financial and time savings through reduction in manual operations
- Enhanced production quality
- More effective management of customer assets
- Avid and Apple Final Cut Pro integration
- Migration proof with support for SD and HD

Product Usage

Digital file-based content production workflows are hampered by expensive and repetitive operations brought on by file incompatibilities between systems. Medway from Marquis provides a transparent and cost-efficient route to removing these bottlenecks.

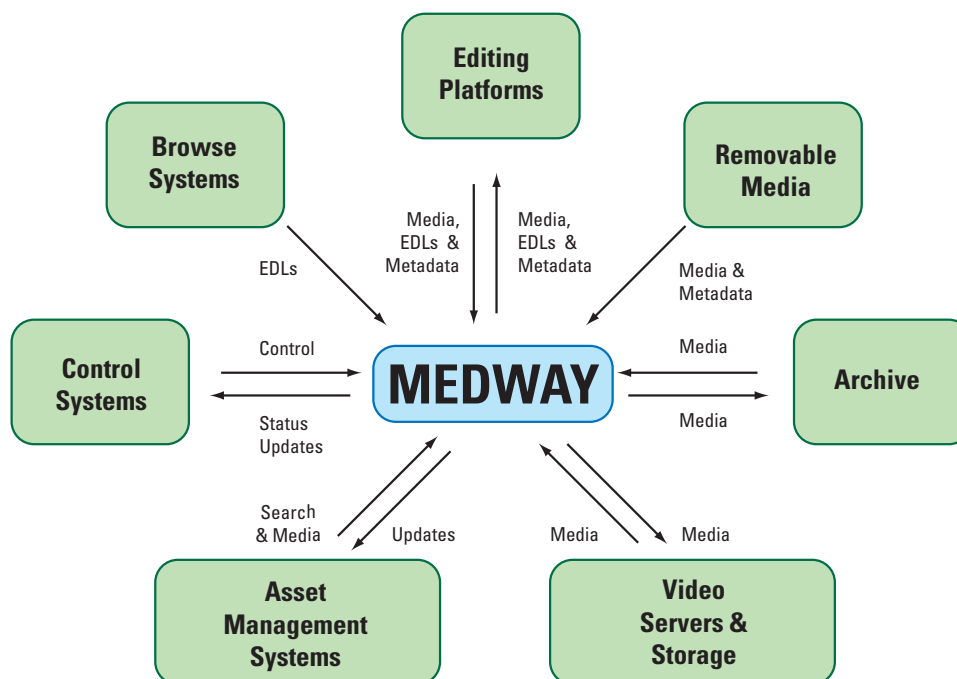
Medway creates a unified working environment for broadcast ingest and transmission servers, as well as post-production editing systems. Acting as a central hub to the facility, Medway transfers media and associated metadata at faster than real-time speeds over standard data networks, transcoding if required.

Medway is either driven under control of third-party systems or via an intuitive drag-and-drop interface that allows for the exchange of media between a wide range of best-of-breed broadcast systems in a transparent and user-friendly way. Medway can be described as an “interoperability engine” that enables a complete digital workflow,

ensuring products such as edit platforms (either standalone or using shared storage, such as Unity, ISIS, Lanshare, Interplay or XSAN and third-party video servers) can work seamlessly together.

However, Medway offers much more power and flexibility and can be connected to media asset management systems. It can source reference edits from browse systems, integrate with archive management systems and can supply file registration to, or be directly controlled by, automation systems. All these features can be customized to suit the requirements for specific workflow or business solutions.

Medway integrates a wide range of content production systems including Grass Valley K2 media servers. The following is a high-level overview of the systems that can be integrated into a K2 workflow solution:



Product Usage

Sales opportunities will most likely be derived from customers:

- Who have a workflow bottleneck due to file incompatibilities
- Need to use video formats that are not supported
- Require faster transfers
- Require metadata support

Broadcasters currently using Medway include:

- RTL/TVI, Belgium
- BBC, UK
- Bayerischer Rundfunk, Munich, Germany

- Network TEN, Sydney, Australia
- France TV, Paris, France
- Deutsche Welle, Berlin, Germany
- TV4, Stockholm, Sweden
- YLE, Helsinki, Finland
- Turner Broadcasting, USA
- Ascent Media, USA
- PBS, USA
- Disney, Japan

Product Information

Medway is licensed to the specific PC server hardware that the Medway Control Server runs on. A system is then scaled and priced on a per-connection basis and can be designed to meet any sized customer requirement.

Medway is available in three standard systems packages that meet many customer requirements (or at least form the starting point for a quotation). Additionally the connection licenses can be configured on an à la carte basis.

The three standard packages are the Standalone Avid NLE, Edit Pack and Transmission Pack:

Standalone Avid NLE

Medway runs on the Avid workstation and connects to a single server/storage location.

This is suitable for standalone Avid workstations with local storage only. The configuration allows the editor to send sequences to the K2 media server as well as browse and retrieve material already stored there. This includes a Medway control server, transfer engine and Medway client GUI, all running on the Avid workstation.

Edit Pack

Medway runs on a separate PC server and integrates between the NLE shared storage and a single server/storage location. Additional Medway connection licenses can be added to the Edit Pack.

The Medway Edit Pack allows for 1-20 editing workstations connected to single edit shared storage and a single K2 media server. A Medway client GUI on each edit workstation provides the ability to move material between the edit shared storage and the K2 media server. Each Medway client GUI displays all Medway initiated transfers and their progress and status for the total system. This includes one combined Medway control server and transfer engine.

Transmission Pack

Medway runs on a separate PC server and integrates multiple production systems. Additional Medway connection licenses can be added.

For a more complex system, the Medway Transmission Pack builds on the Edit Solution with additional connection licenses to media asset management with browse EDL for sequencing and sourcing from shot lists or EDLs. Configurable metadata criteria can be read from and written to the MAM system allowing metadata sourcing from EDLs and databases. Similarly, metadata captured at the edit workstation can be passed to external systems.

External automation is shown providing API driven control and display information of Medway transfers. This includes a main control server and a redundant control server as well as one transfer engine (within the control server).

Medway Licenses

The full list of Medway licenses are shown as follows (please refer to the Medway Sales Guide for a full description of each):

MEDWAY STANDARD CONNECTION LICENSES

- MMW-ESS NLE Shared Storage Connection License
- MMW-LES Local Edit Storage Connection License
- MMW-SRV Media Server Storage Connection License

MEDWAY ADDITIONAL CONNECTION LICENSES

- MMW-ARC Archive Management Connection License
- MMW-AUT Automation System Connection License
- MMW-MAM Media Asset Management Connection License

MEDWAY ADDITIONAL FUNCTIONALITY

- MMW-SCG Medway Simple Client GUI
- MMW-RED Redundant Controller
- MMW-ENG Additional Transfer Engines
- MMW-TRN Transcoding Processor (per transfer engine)

MEDWAY PROFESSIONAL SERVICES

- MMW-CST Medway Installation and Configuration
- MMW-SVC Medway Operational Training
- MMW-CDV Custom Software Development

MEDWAY SUPPORT CONTRACT

- MMW-2SP Annual 2nd Line Support Contract

Supported Standards/Formats

Video Standards

- 625/25 or 525/29.97
- 1080i/25, 1080i/29.97, 720p/50 and 720p/59.94

Video Formats

- DV25 (4:1:1 or 4:2:0)
- DVCPRO
- DVCPRO 50
- IMX 30/40/50
- MPEG-2 Long GOP
- DNxHD 120/145/180/220/180x/220x
- DVCPRO 100
- XDCAM HD 50
- AVC-Intra

Editing Formats

- MXF OP-Atom
- Apple ProRes

Available Collateral

Medway Configuration & Sales Guide

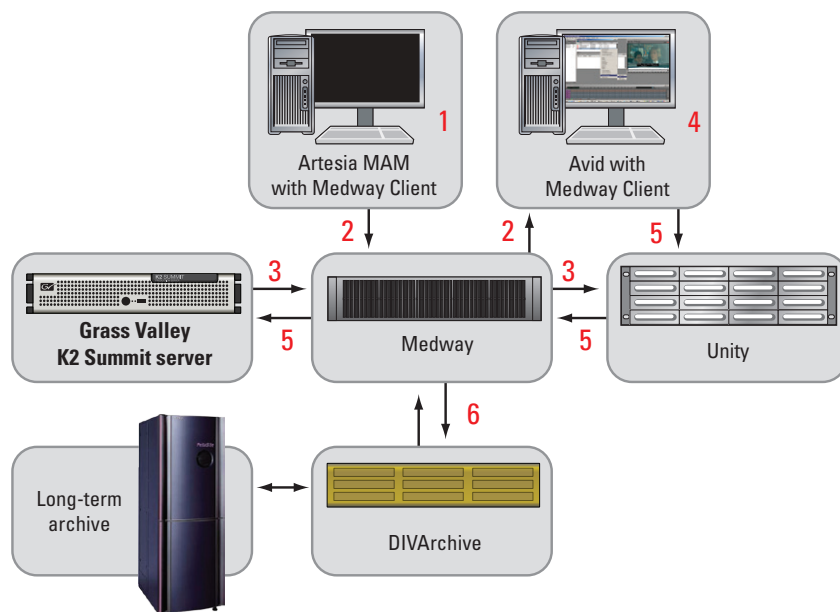
Medway Supported Workflows Guide

Medway Summary In Brief

Medway Supported Video Standards & Formats

Case Study – Disney Japan

1. Operators select shots and create sequences using the Artesia MAM tool
2. Sequence EDLs are sent through Medway, converted to Avid AAF sequences and placed in the Avid edit environment
3. At the same time, Medway collects all the high-resolution clips needed for that sequence from the Grass Valley K2 media server, rewraps them to MXF OP-Atom and transfers them to the Avid edit environment
4. The Avid editor finishes editing and drops the Avid sequence onto the Medway icon that floats over the Avid Media Composer GUI
5. Medway then conforms the edit sequence into one flattened file, converts that file to an MXF OP-1a file which is compatible with the Grass Valley K2 media server and transfers the file to the K2 media server for playout
6. Medway can also transfer the file to Front Porch Digital systems for placement into long-term tape archive



Company Information

Marquis Broadcast provides a range of file-based media integration products designed for the data-intensive requirements of today's fast-paced broadcasting and content production environments.

Marquis has an indirect sales model and will work with Grass Valley sales teams and their resale/distribution channels to promote, sell and integrate the Grass Valley K2/Medway solution. The Marquis offering to the channel includes the Medway software licenses, software support contract and professional services (installation, commissioning and training).

Medway is also available through its network of resellers.

Sales: Americas – Jason Danielson, Vice President
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