Vertigo Suite
Graphics Automation and Asset Management

Promote your brand and efficiently deliver your channels.

Vertigo graphics automation and asset management tools from Grass Valley, a Belden Brand, are designed for easy and highly productive graphics generation.

For more complex graphics requirements, including dynamic rendering and large facility graphics management, there are a range of additional modules that deliver optimal workflows.
Vertigo Suite Graphics Automation and Asset Management

**KEY FEATURES**

**Delivering rich graphics without high operating costs**
- Simplifies the creation of sophisticated, multilayer graphics combining text crawls, animated graphics, DVEs and audio inserts. This allows a higher graphics output, without increasing operational costs.

**Highly adaptable workflows**
- A choice of highly productive workflows includes a choice of dynamic rendering models using graphics templates, including data push to the graphics template and ID/time-based data look-up options.

**Simplifying complex, data-driven graphics**
- Powerful tools for data-driven graphics, which suit even the most demanding applications, such as business news graphics.

**Improved creativity**
- By increasing graphics automation and reducing repetitive tasks, graphics personnel can spend more time on more rewarding and creative aspects of their work.

**Easier graphics automation**
- Simplified automation of even the most complex promotional sequences. Instead of managing multiple secondary events, a single automation recall can drive complex graphics sequences.

**Up-to-date and sustainable platform**
- Vertigo Xmedia Server (XMS) software qualified to run on Windows Server 2012 and SQL 2014.

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**Simple, High Productivity Graphics Tools**

This graphics automation is simple to adopt, and yet it can yield substantial cost savings compared to manual rendering.

**Vertigo Xplorer: asset management**
- Vertigo Xplorer is a media management interface for managing content on graphics workstations and the Vertigo Xmedia Server graphics archive.
- Used for ingest of content from external storage devices, and offers file import conversion.
- Vertigo Xplorer offers viewing, moving and deletion of content on a graphics workstation, on a Vertigo Xmedia Server, and on individual graphics devices, including Imagestore and Vertigo family processors.

**Vertigo Xpanel: customizable graphics control**
- Vertigo Xpanel is a “soft” control panel which supports the full breadth of graphics capabilities of the Grass Valley channel branding processors.
- Panels can be configured for single or use, with a channel-ganging capability.

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**Advanced, Highly Flexible Graphics Modules**

**Vertigo Xpreview: software based render engine**
- Allows for full preview of effect animation and font rendering within a PC desktop.
- Can be connected to Xbuilder for preview and approval of pages, or connected to a Vertigo XG or Intuition XG processor for an on-air-preset.
- Used with Xstudio to preview templates during the authoring stage (one seat is included with Xstudio Pro).

**Vertigo Xstudio: template authoring**
- Vertigo Xstudio is a drag-and-drop authoring system for creating and previewing television graphics, including templates for dynamic graphics rendering.
- Allows design of elaborate templates with advanced timeline features.
- During template creation, Vertigo Xstudio automatically produces an associated soft control panel plus data forms for business logic and data source reading.

**Vertigo Xbuilder: template population**
- Vertigo Xbuilder allows easy population of the variable fields within graphics templates to create channel branding pages, such as in-show promos and junction line-ups.
- Pages can be pre-prepared by pre-rendering (semi-automatically), using an export from the traffic or scheduling system.
- Pages can also be populated using dynamic rendering (fully automatically) at air time by directly reading and delivering data from the traffic and scheduling system.
Centralized Graphics Asset Management

Graphics are typically not managed by a station’s asset management system. This is because they come in many formats from different workstations, and they require complex file-flipping/conversions for every rendering device.

Hence, there is a need for dedicated graphics asset management which can automatically push/delete/manage content on rendering devices, with minimal operator intervention.

The Xmedia Server, in combination with the Vertigo Xplorer asset management application, allows all branding assets to be ingested once for central archiving. Files can be automatically converted, and subsequently directed to the right graphics processor.

This process allows more dynamic handling of content, and a more natural workflow. People creating graphics no longer need to worry about which devices their graphics will be played out from.

Centralized media asset management is especially valuable for the following types of facilities:

- Larger facilities with multiple channels
- Facilities where the workflow separates media creation from media management
- Facilities seeking to share assets between channels without having to duplicate the assets

The Xmedia Server system is ideal for rules-based publishing with automatic distribution and removal of assets based on pre-defined criteria.

The asset management process can also be made aware of schedules to provide a higher level of workflow integration.

Workflows: Dynamic Rendering Using Automation

With dynamic graphics rendering using an automation data-push, the workflow involves template population at air-time using traffic data provided by the playout automation system. This highly automated process results in a very streamlined workflow, and it simplifies the updating of graphics due to the use of objects within templates (graphics, text, clips), which can be readily substituted at a later time. The approach also creates smaller files than with pre-rendering, and hence it minimizes bandwidth requirements for media distribution.

The process is performed as follows:

1- Graphics elements are created using Adobe Photoshop, or another creation package, and the graphic template is prepared with the Vertigo Xstudio application.
2- The templates are ingested into the Xmedia Server, and can then be automatically moved to the correct channel branding processor, or an operator can manually move the content to the device.
3- Playout automation sends a command to the channel branding processor to Cue a specific template, using a single ID per promo type, and the template is then populated via the playout automation with the variable text such as on-air dates/times and show names.
4- The fully populated template is then played out to air by the channel branding processor.

Workflow compatible with following processors:

- Imagestore 750
- Imagestore-Modular
- Vertigo XG (hardware & virtualized)
- Intuition XG
- LGK-3901
Workflows: Dynamic Rendering Using ID/time-based Look-up

With dynamic graphics rendering using an ID or a time-based look-up, the workflow involves template population at air-time using traffic data supplied by a database, using a look-up triggered by the playout automation. This highly automated process results in a very streamlined workflow, which simplifies the updating of graphics due to the use of objects within templates (graphics, text, clips) that can be readily substituted at a later time. The approach also creates smaller files than with pre-rendering, and hence it minimizes bandwidth requirements for media distribution.

These processes are performed as follows:

1- Graphics elements are created using Adobe Photoshop, or another creation package, and the graphic template is prepared with the Vertigo Xstudio application.

2- The templates are ingested into the Xmedia Server, and they can then be automatically moved to the correct channel branding processor, or an operator can manually move the content to the device.

3- The playout automation sends a command to the channel branding processor to Cue a specific template.

4- With ID-based look-up, a single ID per promo type plus a specific promo ID is sent by playout automation to the channel branding processor. This specific promo ID triggers the template logic to query a traffic/promo database to obtain the data for template population, including the variable text such as on-air dates/times and show names.

With time-base look-up, the process is similar except that the template population is triggered by time/date data, rather than a specific promo ID.

5- The fully populated template is then played out to-air by the channel branding processor.

Workflow compatible with following processors:

- Vertigo XG (hardware & virtualized)
- Intuition XG
Workflows: Dynamic Rendering Using Traffic Data

The Vertigo Suite can also perform several variants of dynamic graphics rendering to best suit different facility workflows, including graphics template population via a traffic spreadsheet, an automation push and by an ID/time-based look-up. In this example, a traffic spreadsheet is used for template population. This process provides easier updating of the graphics due to the use of objects within templates (graphics, text, clips), which can be readily substituted at a later time. The approach also creates smaller files than with pre-rendering, and hence it minimizes bandwidth requirements for media distribution.

Dynamic rendering of in-show promos is performed as follows:
1- Graphics elements are created using Adobe Photoshop, or another creation package, and the graphic template is prepared with the Vertigo Xstudio application.
2- The operator opens an Excel spreadsheet from the traffic or promo department, which lists all the details for each branding event, including the template to be used, the variable text such as on-air dates/times and show names, as well as any associated images and the output file format. The file names are also provided for effective integration with the station’s playout automation.
3- Using the Vertigo Xbuilder software, a single page for each branding event is created, and ingested into the Xmedia Server. A page is an instance of a template containing the final text, image and clip info, as indicated the spreadsheet.
4- The pages can then be automatically moved to the correct channel branding processor, based on “target device” data in the spreadsheet, or an operator can manually move content to the device.
5- Playout automation sends a command to Cue and Take a secondary event by a Unique ID, and the pre-rendered clip with the matching name is then cued and taken to-air by the channel branding processor.

Workflow compatible with following processors:
- Vertigo XG (hardware & virtualized)
- Intuition XG

ORDERING

**Xmedia Servers**

- Vx-MS-PRO-e
- Vx-MS-Device-ENT-e

Includes 25 device licenses, default 4 TB RAID-1
Upgrade XMS to unlimited device licenses

**Software Suite**

- Vx-Studio LT-FX
- Vx-Studio Pro-FX
- Vx-Builder-FX
- Vx-Xplorer-FX
- Vx-Panel-FX
- Vx-AE-Plugin-FX
- Vx-Preview-FX

Basic scene / Template creation tool
Advanced scene / Template creation tool
Page creation and verification tool
Asset management tool
Software control panel
Plug-in for After Effects CS3, CS4 or CS5
Software-based render engine for preview

**SPECIFICATIONS (XMEDIA SERVER)**

**Chassis dimensions:**
- Form factor: 1 RU rack-mount chassis
- Height: 1.7” (27.8 mm)
- Width: 17.0” (432 mm)
- Depth: 25.6” (650 mm)
- Weight: 43 lbs. (19.5 kg)

**Processors:** Single Intel E5-2600 v3 series processor

**Memory:** 16 GB main memory (RAM)

**Media storage:** 4 TB of usable RAID-1 storage

**System disk storage:** 120 GB SSD RAID-1

**Operating system:** Microsoft Windows Server 2012 R2 for Embedded Systems Standard edition

**Factory-installed software:**
- Microsoft SQL Server 2014
- Xmedia Server Control Panel
- Vertigo Xmedia Data Server
- File Ingest Server
- Work Order Management (option)
- Xplorer – Vx-Xplorer (option)

**Onboard controllers/ports:**
- USB 2.0 ports (2); USB 3.0 ports (2)
- Dedicated IPMI LAN port; COM port
- VGA monitor port
- Gigabit Ethernet ports (2)