Stay in control with customizable monitoring and interfaces.

A highly adapted, efficient playout monitoring package for broadcasters and specialty channel providers, iControl Playout from Grass Valley, a Belden Brand, enables operators to manage more channels while saving on operating costs.

It works with a wide array of advanced electronic supervision technologies, including Monitoring by Exception, and provides sophisticated electronic probing with macroblock detection, lip sync error and content mismatch detection using video/audio fingerprints.

**Monitoring Traditional and IT-based Playout**

iControl Playout can monitor television playout at all the key stages during television playout, using traditional or IT-based playout. It can monitor Grass Valley and third-party devices, including the following:

- **Playout servers**: IT grade servers for iTX, and proprietary SNMP-enabled servers
- **Routers**: NVISION range plus all leading third-party routers
- **Interfacing modules**: Densité Series - a wide range of interfaces are controlled, including the HMP-1801, HRS-1801, LGK-3901, DSK-3901 and IRD-3802/3811
- **Master control/channel branding processors**: Imagestore 750, Imagestore-Modular, and Densité LGK-3901 / DSK-3901
- **Encoders**: All leading third-party MPEG encoders

Grass Valley devices are monitored and controlled with a high level of detail. For instance, the monitoring of the Imagestore 750 and Densité LGK-3901 channel branding processors includes the input selection, and the keying and DVE controls from a highly graphical control interface. This monitoring also covers physical parameters, such as health monitoring of the device for power supplies, and the internal temperature. Third-party devices can be monitored by SNMP, and by the use of embedded applications to achieve a high level of control.

By integrating iControl Playout with Densité interfaces and signal probes, the system can provide streaming video and audio metering across an installation from key monitoring points, with detection of detailed telemetry information using the advanced probes. In the event of a signal fault being detected by the probes, the system instantly generates highly visible alarms which are automatically logged for reports. Remote signals can be monitored by integrating the EdgeVision set-top box probe with iControl Playout.

**Multichannel monitoring**

iControl Playout can simultaneously monitor multiple channels, using traditional or IT-based technology. iControl fully integrates with all Kaleido multi viewers to provide several layers of alarms and status indication on the control room monitor walls. With its integration of the EdgeVision set-top-box signal probe and streaming encoder, iControl Playout can also be used to perform Quality of Experience monitoring. As channels get distributed by television service providers, iControl Playout can aggregate the signal fault alarms and audio/video streams generated by EdgeVision units.

**Detailed Device Control with iControl Playout**

Multiple, highly graphical views are provided by iControl Playout, with easy drilling-down between the levels to access more detailed device information.

**All-channel summary**

- At a glance status summary for all channels
- More detailed, single channel view is presented by clicking channel logo

**Intermediate level view**

- Detailed view of one channel showing the main and backup paths
- Routing and change-over status appears on path views
- User-friendly interface with easy to understand facility view graphics
iControl Playout Multichannel Television Playout Monitoring

Detailed, interactive equipment monitoring and control
- Maintenance and troubleshooting is accelerated using interactive elevation views of all platforms
- Technical personnel can quickly resolve platform issues by directly accessing key equipment from an client computer
- iControl Playout clearly depicts status and health of Grass Valley equipment, as well as third-party platforms using optional drivers

Detailed control of third-party device by SNMP
- Third-party devices can be controlled by SNMP using iControl Playout’s SNMP manager
- SNMP is used for control of servers, routers and MPEG encoders and receivers, and other devices typically found in channel playout chains
- Support third-party devices can be added using iControl’s convenient SNMP Driver Creator option

Third-party device control by embedded applications
- By embedding control applications within iControl Playout, operators gain full access to third-party devices
- Embedded applications can be automatically presented to the operator to help with the response to specific device alarms
- Example shows iControl Playout embedded interfaces for Omneon server and Tandberg encoders

Advanced Signal Probing
By integrating with Densité interfaces and signal probes, Kaleido-X and Kaleido-IP multiviewers as well as with the EdgeVision STB signal probe and streaming encoder, iControl Playout provides streaming video and audio metering from across an installation, along with detailed telemetry information, and full control over signal processing.
- Lip sync error detection and alarming on multiple audio channels
- Accurate measurement of audio delays
- Forwarding of conditions to Kaleido multiviewers
- Multizone freeze and black detection; ideal for the playout of rich graphical content
- Aspect ratio monitoring, including AFD flag monitoring and display
- Audio level and quality monitoring on multiple channels
- Extraction of V-Chip network, channel and TSID data
- Closed Captioning can be detected, validated and displayed

Detailed device status and control
- With its SNMP Manager functions, iControl Playout Manager can interface to all SNMP-enabled devices to obtain detailed status information
- Devices can be controlled more extensively by embedding native control applications
- Easy installation and maintenance
- Configuration is quick and simple, allowing easy deployment and robust performance
- Signal paths can be enhanced or modified using the drag-and-drop functions of the iControl Web user interface editor

KEY FEATURES

Lowering operating costs
- With iControl Playout, operators can manage more channels efficiently, creating substantial savings in operating costs

Monitoring by Exception
- Operator effectiveness is improved with Monitoring by Exception, which provides automated monitoring of signal parameters across all channels to see if they are within predetermined limits

Advanced monitoring technologies
- Multiple advanced monitoring technologies can be incorporated, including macroblock and lip sync error detection
- Full integration with Kaleido multiviewers, allowing operators to immediately respond to any signal faults reported by the Kaleido

Signal probing
- By integrating Densité control probes, the system presents streaming video and audio metering from across the installation, as well as detailed telemetry information
- Alarming for key video and audio parameters and thresholds
- Error logging with time stamped event and error entries
- Highly graphical views
- To simplify monitoring, iControl Playout uses highly graphical views which present status information at a glance, along with streaming video, including those from Densité SME-1901 streaming DAs
- Rapid drilling-down from facility to channel to device level views

Detailed device status and control
- With its SNMP Manager functions, iControl Playout Manager can interface to all SNMP-enabled devices to obtain detailed status information
- Devices can be controlled more extensively by embedding native control applications
- Easy installation and maintenance
- Configuration is quick and simple, allowing easy deployment and robust performance
- Signal paths can be enhanced or modified using the drag-and-drop functions of the iControl Web user interface editor

www.grassvalley.com
**Monitoring traditional and IT-based playout**

iControl Playout can monitor television playout at all the key stages during television playout, using traditional or IT-based playout. It can monitor Grass Valley and third-party devices, including the following:

- **Playout servers:** IT grade servers for iTX, and proprietary SNMP-enabled servers
- **Routers:** NVISION range plus all leading third-party routers
- **Interfacing modules:** Densité Series - a wide range of interfaces are controlled, including the HMP-1801, HRS-1801, LGK-3901, DSK-3901, and IRD-3802/3811
- **Master control / channel branding processors:** Imagestore 750, Imagestore-Modular, and Densité LGK-3901 / DSK-3901
- **Encoders:** All leading third-party MPEG encoders

Grass Valley devices are monitored and controlled with a high level of detail. For instance, the monitoring of the Imagestore 750 and Densité LGK-3901 channel branding processors includes the input selection, and the keying and DVE controls from a highly graphical control interface. This monitoring also covers physical parameters, such as health monitoring of the device for power supplies, and the internal temperature. Third-party devices can be monitored by SNMP, and by the use of embedded applications to achieve a high level of control.

By integrating iControl Playout with Densité interfaces and signal probes, the system can provide streaming video and audio metering across an installation from key monitoring points, with detection of detailed telemetry information using the advanced probes. In the event of a signal fault being detected by the probes, the system instantly generates highly visible alarms which are automatically logged for reports. Remote signals can be monitored by integrating the EdgeVision set-top-box probe with iControl Playout.

**Multichannel monitoring**

iControl Playout can simultaneously monitor multiple channels, using traditional or IT-based technology. iControl fully integrates with all Kaleido multiviewers to provide several layers of alarms and status indication on the control room monitor walls. With its integration of the EdgeVision set-top-box signal probe and streaming encoder, iControl Playout can also be used to perform Quality of Experience monitoring. As channels get distributed by television service providers, iControl Playout can aggregate the signal fault alarms and audio/video streams generated by EdgeVision units.
Detailed device control with iControl Playout

Multiple, highly graphical views are provided by iControl Playout, with easy drilling-down between the levels to access more detailed device information. A sample of the views are shown here:

- **All-channel summary**
  - At a glance status summary for all channels
  - More detailed, single channel view is presented by clicking channel logo

- **Intermediate level view**
  - Detailed view of one channel showing the main and backup paths
  - Routing and change-over status appears on path views
  - User-friendly interface with easy to understand facility view graphics

- **Detailed, interactive equipment monitoring and control**
  - Maintenance and troubleshooting is accelerated using interactive elevation views of all platforms
  - Technical personnel can quickly resolve platform issues by directly accessing key equipment from a client computer
  - iControl Playout clearly depicts status and health of Grass Valley equipment, as well as third-party platforms using optional drivers

- **Detailed control of third-party device by SNMP**
  - Third-party devices can be controlled by SNMP using iControl Playout’s SNMP manager
  - SNMP is used for control of servers, routers and MPEG encoders and receivers, and other devices typically found in channel playout chains
  - Support third-party devices can be added using iControl’s convenient SNMP Driver Creator option

- **Third-party device control by embedded applications**
  - By embedding control applications within iControl Playout, operators gain full access to third-party devices
  - Embedded applications can be automatically presented to the operator to help with the response to specific device alarms
  - Example shows iControl Playout embedded interfaces for Omneon server and Tandberg encoders
**Advanced signal probing**

By integrating with Densité interfaces and signal probes, Kaleido-X and Kaleido-IP multiviewers as well as with the EdgeVision STB signal probe and streaming encoder, iControl Playout provides streaming video and audio metering from across an installation, along with detailed telemetry information, and full control over signal processing.

- Lip sync error detection and alarming on multiple audio channels
- Accurate measurement of audio delays
- Forwarding of conditions to Kaleido multiviewers
- Multi-zone freeze and black detection; ideal for the playout of rich graphical content
- Aspect ratio monitoring, including AFD flag monitoring and display
- Audio level and quality monitoring on multiple channels
- Extraction of V-Chip network, channel and TSID data
- Closed Captioning can be detected, validated, and displayed

**ORDERING**

- **IC-PLAYOUT**
  Multichannel television playout monitoring system featuring multichannel summary status and detailed interactive signal path views with embedded audio/video players. Includes 4-channel signal chain monitoring licenses.
  Requires: iControl base edition with Application Server

- **IC-PLAYOUT-CHANNEL**
  Option for additional channel signal chain monitoring license. Includes monitoring of redundant path.