

Monitoring traditional and IT-based payout

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

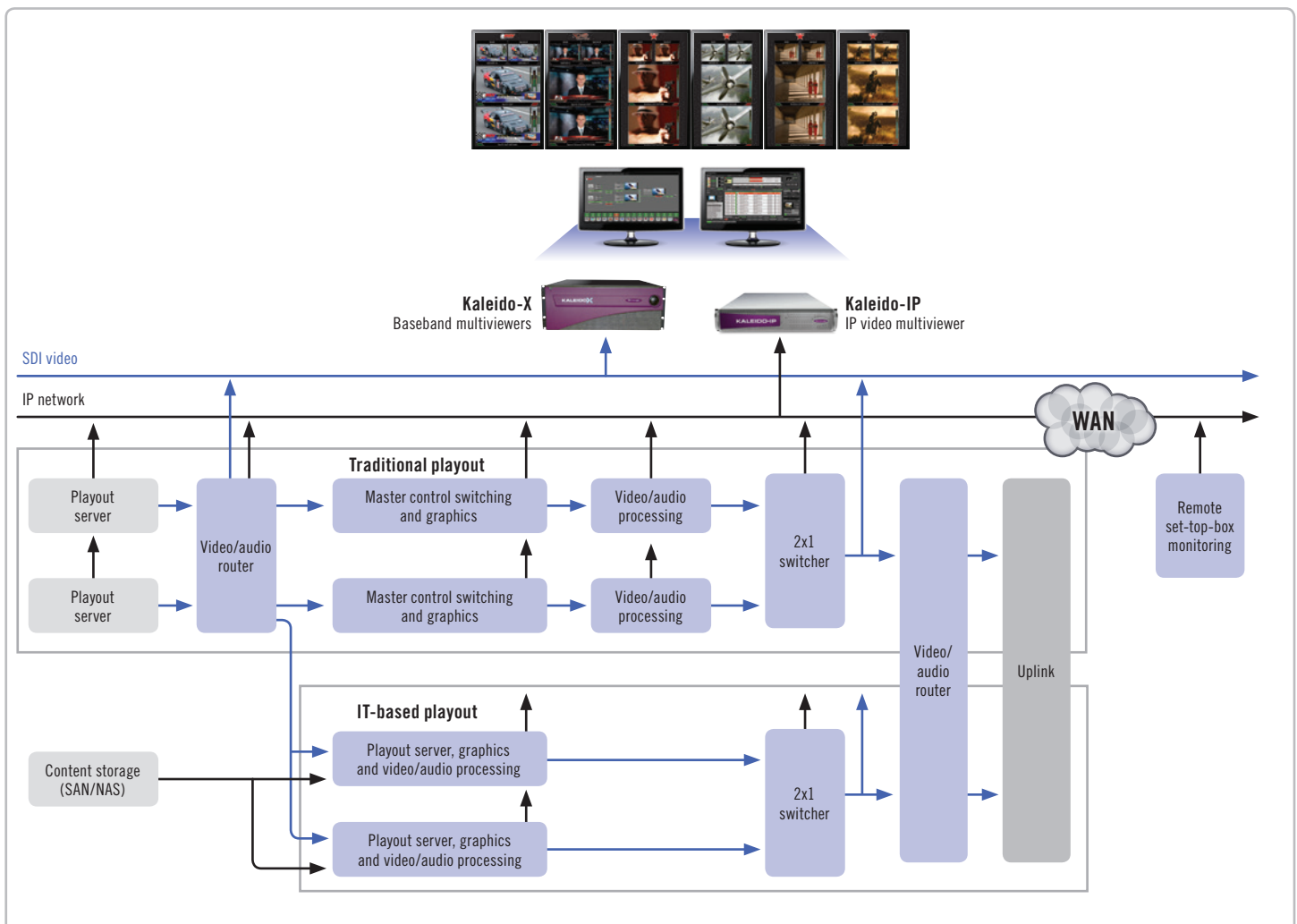
- **Playout servers:** IT grade servers for iTX, and proprietary SNMP-enabled servers
- **Routers:** NVISION range plus all leading third-party routers
- **Interfacing modules:** Densité Series - a wide range of interfaces are controlled, including the HMP-1801, HRS-1801, LGK-3901, DSK-3901, and IRD-3802/3811
- **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 Payout 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 Payout.

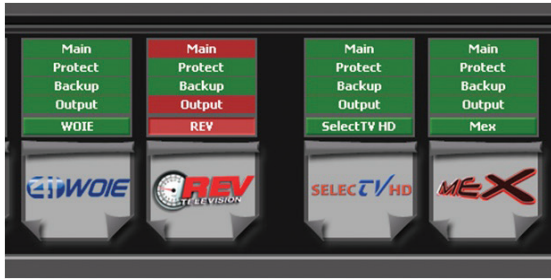
Multichannel monitoring

iControl Payout 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 Payout can also be used to perform Quality of Experience monitoring. As channels get distributed by television service providers, iControl Payout can aggregate the signal fault alarms and audio/video streams generated by EdgeVision units.



Detailed device control with iControl Payout

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



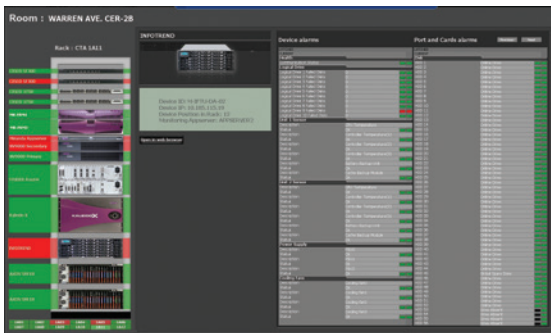
All-channel summary

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



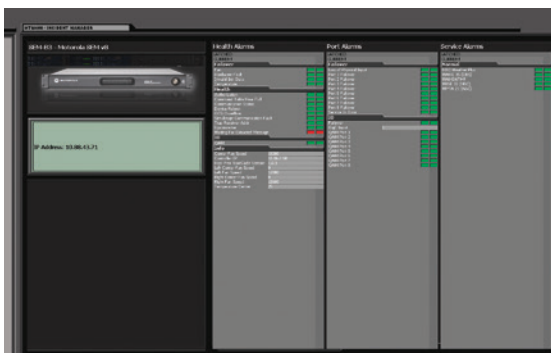
Intermediate level view

- 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



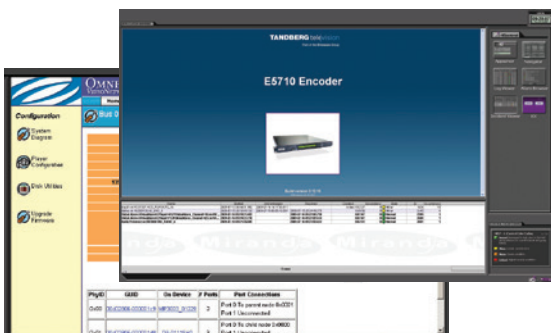
Detailed, interactive equipment monitoring and control

- 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 an client computer
- iControl Payout 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 Payout's SNMP manager
- SNMP is used for control of servers, routers and MPEG encoders and receivers, and other devices typically found in channel payout chains
- Support third-party devices can be added using iControl's convenient SNMP Driver Creator option

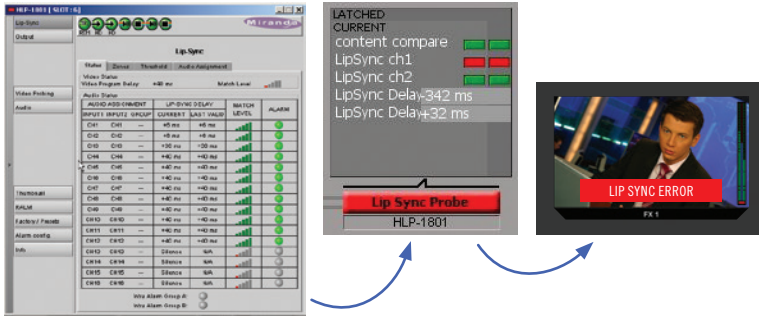


Third-party device control by embedded applications

- By embedding control applications within iControl Payout, 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 Payout embedded interfaces for Omneon server and Tandberg encoders

Advanced signal probing

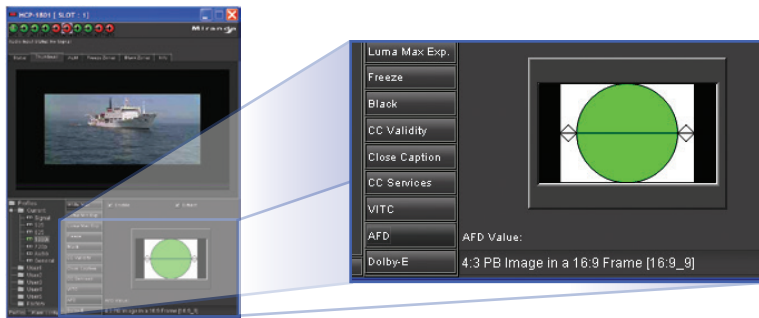
By integrating with Densité interfaces and signal probes, Kaleido-X and Kaleido-IP multiviewers as well as with the EdgeVision STB signal probe and streaming encoder, iControl Playout provides streaming video and audio metering from across an installation, along with detailed telemetry information, and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



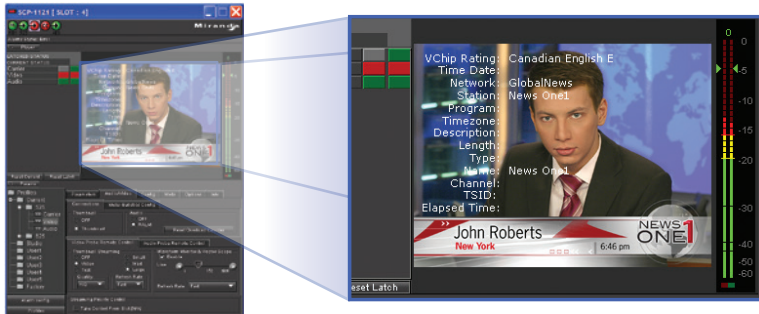
- Lip sync error detection and alarming on multiple audio channels
- Accurate measurement of audio delays
- Forwarding of conditions to Kaleido multiviewers



- 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