grass valley

iControl

Customized, End-to-End Facility Monitoring

Stay in control with customizable monitoring and interfaces.

A highly adaptable broadcast signal and facility monitoring system, iControl from Grass Valley is compatible with multiple advanced electronic super-vision technologies, including Monitoring by Exception. Leveraging Grass Valley's Densité line of probes, it offers electronic probing with macroblock detection, lip sync error and content mismatch detection using video/audio fingerprints. With available SNMP monitoring of third-party devices, rich visual signal path representations and acoustic monitoring, it enables highly customized monitoring and control systems for broadcasters and pay TV operators, including advanced, end-to-end Network Management Systems.

Intelligent Alarm Management

iControl's Advanced Alarm Management enables operators to work together to identify and resolve facility faults to minimize the MTTR.

iControl offers Advanced Alarm Management to help operators deal effectively with the large volumes of alarms that can be generated in large facilities. Multiple users can work together in a co-ordinated manner to troubleshoot complex networks and multiple alarms.

Operators have access to more than just the overall status of their television facilities. Individual signals and device status can be isolated, including detailed video and audio parameters, router crosspoints, GPI contact closure and SNMP-enabled third-party systems. Each element can be monitored separately, or in combination with others.

Groups of alarms and events can be managed as "incidents", with related events automatically correlated and grouped under a single umbrella. For instance, a typical signal fault on an upstream satellite receiver will impact all downstream devices on the same signal path. However, rather than dealing with multiple alarms, such as IRD errors, video proc-amp errors, audio processor errors and signal probe errors, the operator can now respond and analyze the fault as a single entry in the Incident Manager.

Automated and Guided Response to Alarms

iControl allows for custom business logic such as automatic reaction to alarms, and can also guide an operator through complex diagnostics. It's based on Scripted Macros which can be easily created to control specific automated responses. For instance, in the event of failure of the transmission stream, a backup signal path can be instantly brought into effect. This minimizes disruption while essential maintenance work is undertaken.

Broadcast Facility Monitoring with iControl

The Grass Valley iControl system is ideal for monitoring broadcast facilities, including highly distributed multichannel operations. With its rich graphical interface, third-party control integration, and automated responses, the system enables operators to control multiple channels in a highly effective manner.

Customized Views with iControl

Monitoring of multiple signals across multiple locations is more effective using iControl.

Users have the ability to create custom views of complex video networks and signal paths, allowing operators to easily perform the following tasks:

- Easily identify when a channel goes into error
- Recognize the status of multiple signals and devices
- Understand the consequences of a fault
- React rapidly if their intervention is required

Access to either summary information or detailed levels is quick and efficient. Operators can click on key areas of iControl pages to "drill-down" to more detailed views of the network topology.

iControl can be used to create custom views of:

- A national or regional network with interactive geographical map views
- Summary views of multiple signals inside a station or facility
- Signal flow diagrams, depicting the detailed status of channels as they get processed and distributed across multiple devices
- Detailed schematics representing the interconnection of signal acquisition, processing, routing and transmission
- Physical views of equipment, such as rack elevations, representing the status of Grass Valley and SNMP-enabled third-party devices

Network Operations Center Monitoring with iControl

iControl represents the most advanced, end-to-end facility monitoring for television service providers (cable/satellite/IPTV). For large facilities, iControl offers the ability to monitor thousands of devices effectively using customized, self-building facility views and intelligent alarm management. Operators can monitor a large number of television channels highly effectively using Monitoring by Exception to focus their attention, and achieve a rapid MTTR in the event of a failure in the facility.

KEY FEATURES

End-to-end monitoring

- iControl is the most complete end-to-end, signal and facility monitoring system for broadcasters and television service providers
- All the elements involved in the production, processing and playout of television signals can be controlled from a single, integrated GUI

Top quality user interface

- Highly graphical views, with full motion and high quality streaming video, allow operators to quickly identify and respond to alarms, and thereby reduce the Mean Time to Repair (MTTR)
- System is geared towards simplifying operations so that a single user can control more channels or a broader range of monitoring tasks
- Interface can be configured with multiple levels appropriate to different tasks:
  – Geographic View provides multisite viewing
  – Operational View offers a closer view of a facility
  – Maintenance Views provide even closer device and signal level monitoring

Full scalability

- Easily scales from small projects, with a few signals in a single room, to the largest systems with hundreds of services across multiple locations.
- Monitoring by Exception allows operators to focus their attention on television channels with alarm conditions, without distraction from correctly functioning channels

SNMP monitoring plus embedded applications

- High level of control and monitoring of Grass Valley and third-party devices by combining SNMP control protocols with feedback from full motion and high-quality streaming video
- With its SNMP Manager functions, iControl interfaces to all SNMP-enabled devices, and users can establish their own SNMP interfaces
- A higher level of control of third-party devices is achieved by embedding their native applications in the GUI, and these can be automatically presented by device alarms to speed up response times

Network Management System (NMS)

- By correlating information from multiple signals and systems, iControl offers advanced alarm management which helps operators deal with the large volumes of alarms generated in large facilities
- Multiple events can be managed as a whole, with related alarms automatically grouped under a single "umbrella"
- Multiple users can work together in a coordinated manner to troubleshoot complex networks and multiple alarms
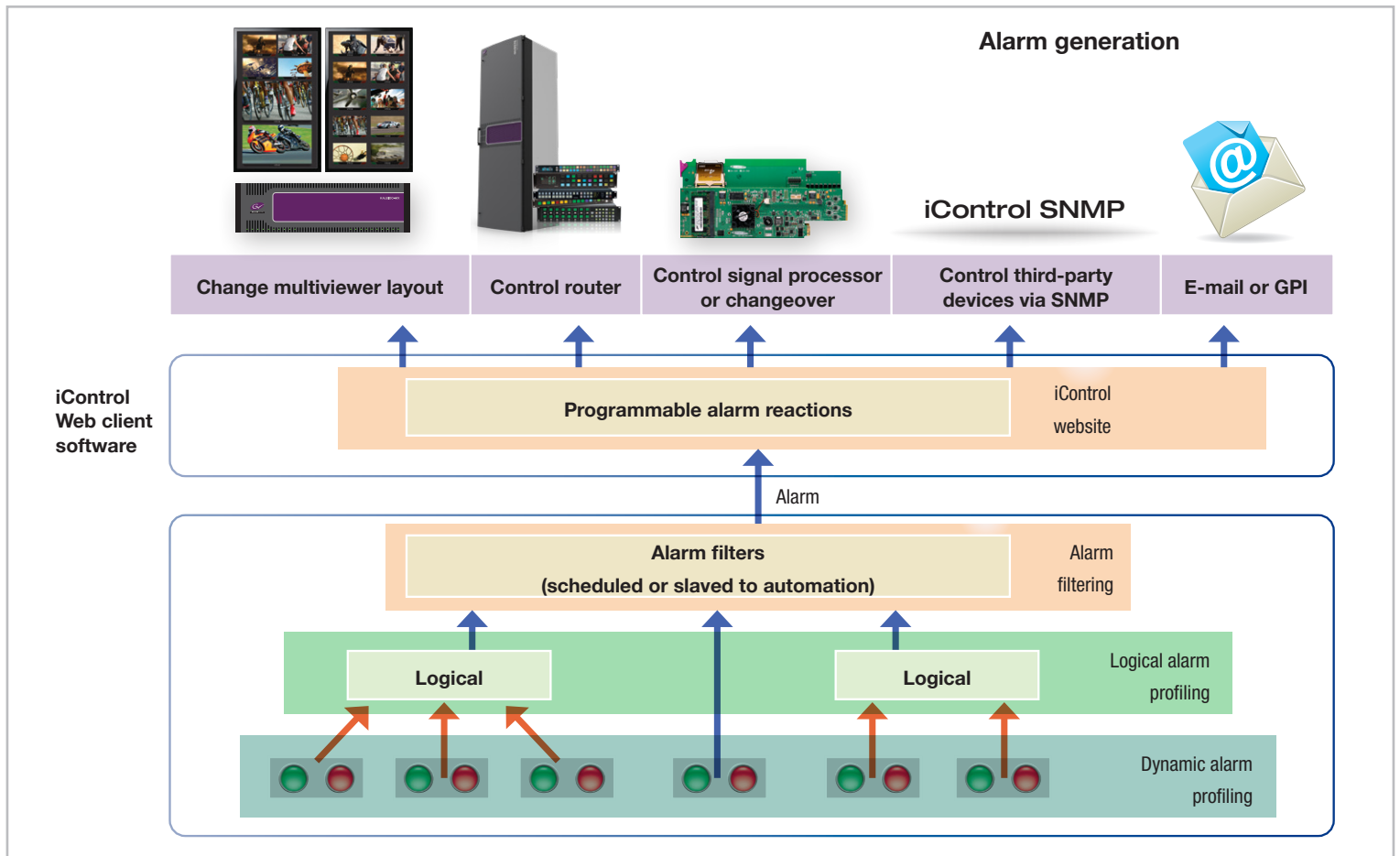
INTELLIGENT ALARM MANAGEMENT

iControl Navigator's Advanced Alarm Management enables operators to work together to identify and resolve facility faults to minimize the MTTR and deal effectively with the large volumes of alarms that can be generated in large facilities. Multiple users can work together in a co-ordinated manner to troubleshoot complex networks and multiple alarms.

Operators have access to more than just the overall status of their television facilities. Individual signals and device status can be isolated, including detailed video and audio parameters, router crosspoints, GPI contact closure and SNMP-enabled third-party systems. Each element can be monitored separately, or in combination with others.

Groups of alarms and events can be managed as "incidents", with related events automatically correlated and grouped under a single umbrella. For instance, a typical signal fault on an upstream satellite receiver will impact all downstream devices on the same signal path. However, rather than dealing with multiple alarms, such as IRD errors, video proc amp errors, audio processor errors and signal probe errors, the operator can now respond and analyze the fault as a single entry in the Incident Manager.
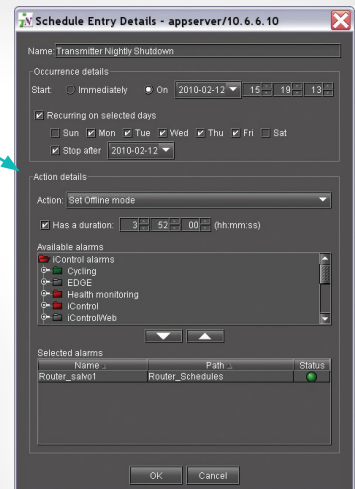
Prioritize
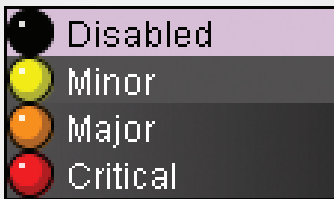
Expanded alarm priority: minor, major and critical. Alarms can also be disabled based on user's operational role.
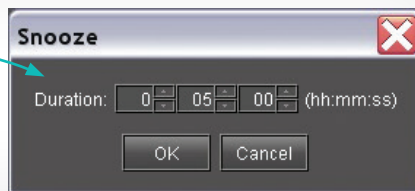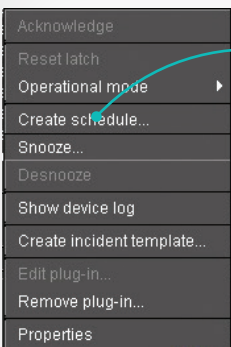
Schedule
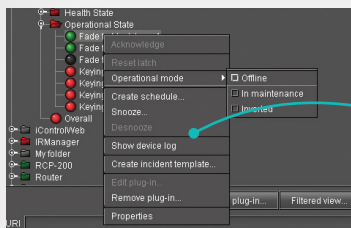
Allows alarms to be scheduled, to prevent generation of unnecessary alerts

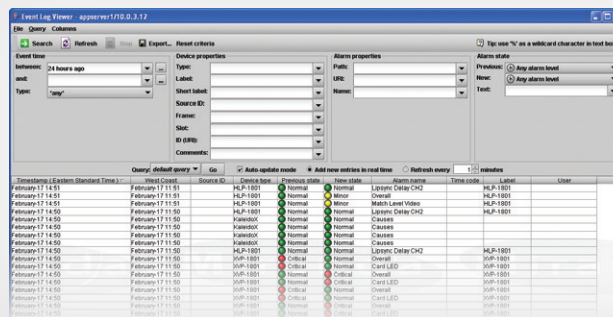Alarms can be scheduled as one-time events, or on a recurring mode

Snooze

Alarms can be manually snoozed for specific periods to time

Status of a snoozed alarm will automatically revert to its normal status after the specified interval

Review alarm log

Log viewer displays clear and concise description of alarms

Description now matches exactly with labels used in iControl navigation

BROADCAST FACILITY MONITORING WITH ICONTROL

The Grass Valley iControl system is ideal for monitoring broadcast facilities, including highly distributed multichannel operations. With its rich graphical interface, third-party control integration, and automated responses, the system enables operators to control multiple channels in a highly effective manner.

Multisite infrastructure monitoring

End-to-end facility signal path monitoring

Internal signal validity and external status reporting

Integrated Grass Valley and third-party control applications

Multiformat video monitoring

Multichannel audio monitoring

Device alarm management

Feed quality control

NETWORK OPERATIONS CENTER MONITORING WITH ICONTROL

iControl represents the most advanced, end-to-end facility monitoring for television service providers (cable/satellite/IPTV). For large facilities, iControl offers the ability to monitor thousands of devices effectively using customized, self-building facility views and intelligent alarm management. Operators can monitor a large number of television channels highly effectively using Monitoring by Exception to focus their attention, and achieve a rapid MTTR in the event of a failure in the facility.

CUSTOMIZED VIEWS WITH ICONTROL

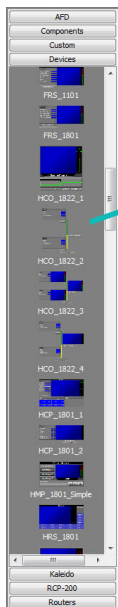### Monitoring of multiple signals across multiple locations is more effective using iControl

With iControl, monitoring of multiple signals is easier. Users have the ability to create custom views of complex video networks, allowing operators to easily perform the following tasks:

• Recognize the status of multiple signals and devices
• Understand the consequences of a fault
• React rapidly if their intervention is required

Access to either summary information or detailed levels is quick and efficient. Operators can click on key areas of iControl pages to "drill-down" to more detailed views of the network topology.

iControl can be used to create custom views of:

• A national or regional network with interactive geographical map views
• Summary views of multiple signals inside a station or facility
• Signal flow diagrams, depicting the detailed status of channels as they get processed and distributed across multiple devices
• Detailed schematics representing the interconnection of signal acquisition, processing, routing and transmission
• Physical views of equipment, such as rack elevations, representing the status of Grass Valley and SNMP-enabled third-party devices

Pick and choose from the ever expanding library of widgets, which drag-and-drop to the user interface to create accurate depictions of a TV network
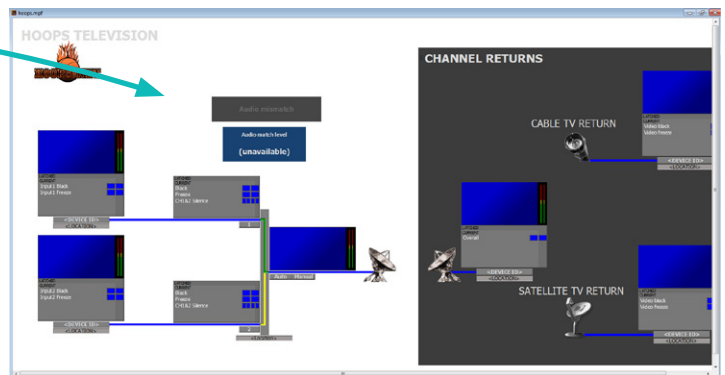
iControl Website Creator provides an extensive library of widgets to allow quick creation and editing of a high-quality user interface. Widgets are available for all key devices and functions.
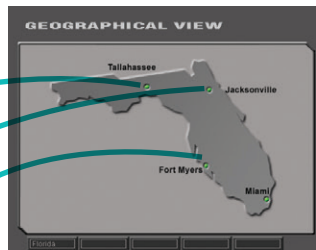
Geographic View provides instant access to distributed television infrastructures
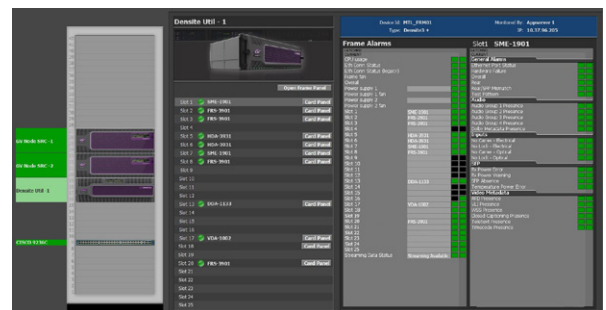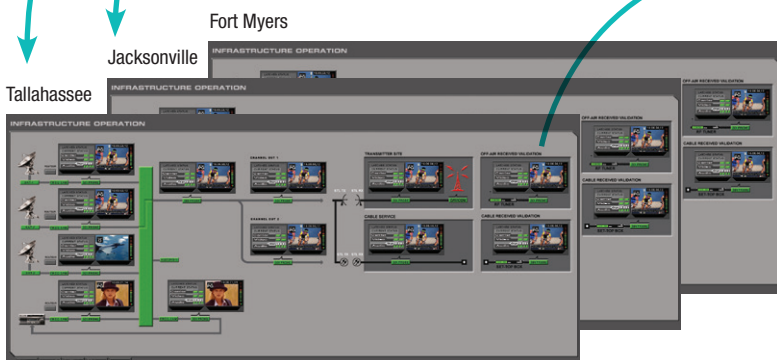
Operators can easily monitor a station or network at an overview level, and then "drill down" through Geographical, Operational and Maintenance Views to reach the appropriate control level, and quickly respond to any error conditions.

Customized Signal Path Monitoring with Penalty Box

Select a channel to drill down into detailed signal path view

iTX playout server monitoring

Monitoring and switch control of HCO 2x1 changeover with thumbnails
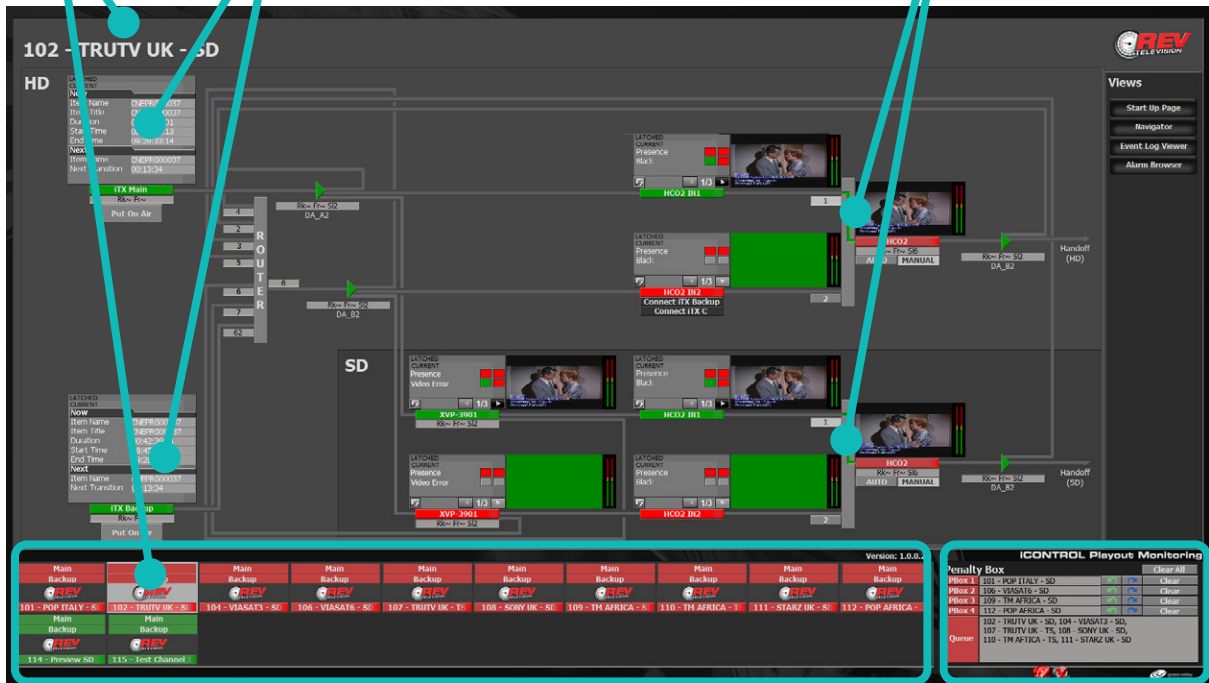
Channel source selector provides high level overview and status of all channels

Penalty box view quickly identifies channels in error displayed on the monitor wall

Increases number of channels monitored per operator while reducing mean time to repair by providing operators a high-level overview of all channels combined with Penalty Box's monitoring by exception to quickly flag channels in error by displaying the relevant sources on the monitor wall.

Allows drill down into specific channels to further analyze the complete signal path to identify the source of the error. Built-in changeover controls allows an operator to quickly switch to backup in case of outage, or switch back when the signal has recovered.

ORDERING

IC-SW-V8
iControl version 8 monitoring and control software application

IC-HW-R340XL
iControl 1 RU server with dual power supplies, 4-core Intel CPU, dual 480 GB SSD with RAID, and 64 GB RAM

IC-VM-V8
iControl version 8 monitoring and control application on a virtual machine

IC-WEB
iControl Web and Creator Software for creating and viewing custom monitoring and control pages. Requires at least one iControl 8 application server

IC-SNMP-MANAGER
Enables SNMP communications with third-party devices

IC-ROUTER-CLIENT
iControl router control software

Related Products

RCP-200
Advanced hardware remote control panel

EDGEVISION
Edge signal set-top box monitoring device

HCP-1801
HD/SD-SDI digital video control probe with embedded audio

IC-PLAYOUT
Multichannel signal path playout monitoring (requires custom development)

IC-PLAYOUT-CHANNEL
License per channel monitored

IC-CUSTOM
Custom development to design signal path representation

IC-PENALTY-BOX
Penalty box monitoring by exception integration with Kaleido multiviewers

DS-PUB-2-0058A-EN