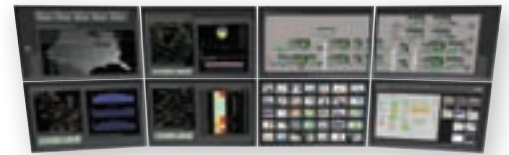




iControl Web

Customized, end-to-end facility monitoring



iControl Web is a highly adaptable television signal and network monitoring system, with multiple advanced electronic supervision technologies, including Monitoring by Exception, and sophisticated electronic probing with macro-block detection, lip sync error and content mismatch detection

using video/audio fingerprints. Based on SNMP with rich visual and acoustic monitoring, it can be used to create highly customized monitoring systems for broadcasters and pay TV operators, including advanced, end-to-end Network Management Systems.

KEY FEATURES AND BENEFITS

End-to-end monitoring

- › iControl Web 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 multi-site 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

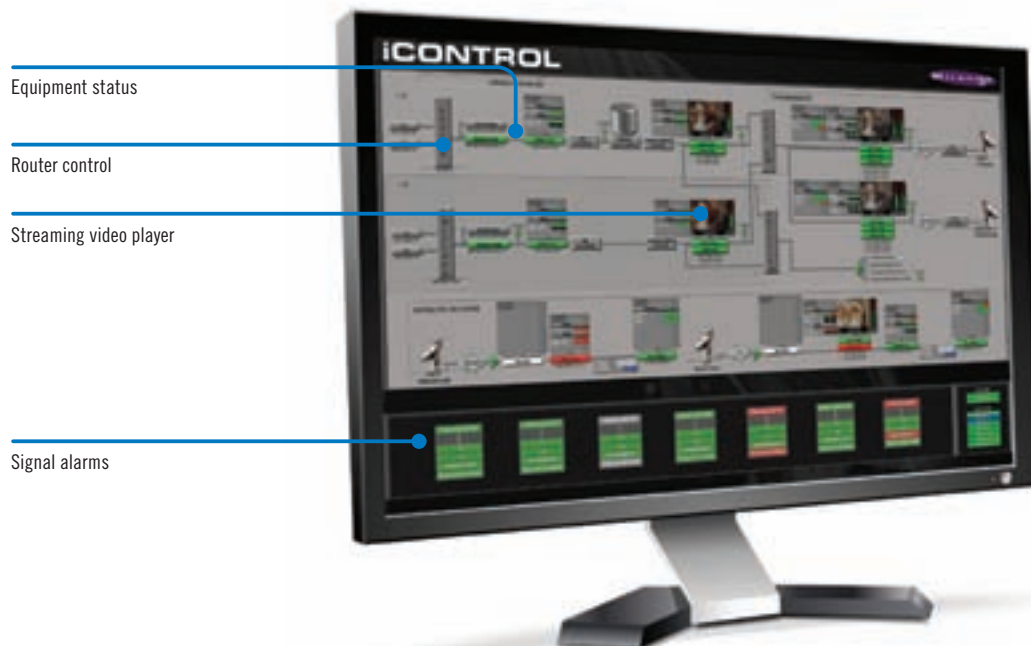
- › High level of control and monitoring of Miranda and third party devices by combining SNMP control protocols with feedback from full motion and high quality streaming video
- › With its SNMP Manager functions, iControl Web interfaces to all SNMP-enabled devices, and users can establish their own SNMP 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 Web 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 co-ordinated manner to troubleshoot complex networks and multiple alarms

Auto-pilot capability

- › Auto-pilot capability, driven by Scripted Macros, can guide operators through complex diagnostics, and can provide automatic reaction to failures. For instance, in the event of a failure of the transmission stream, a backup signal path can be activated



Broadcast facility monitoring with iControl Web

Miranda's iControl Web system is ideal for monitoring broadcast facilities, including highly distributed multi-channel 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 Web

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

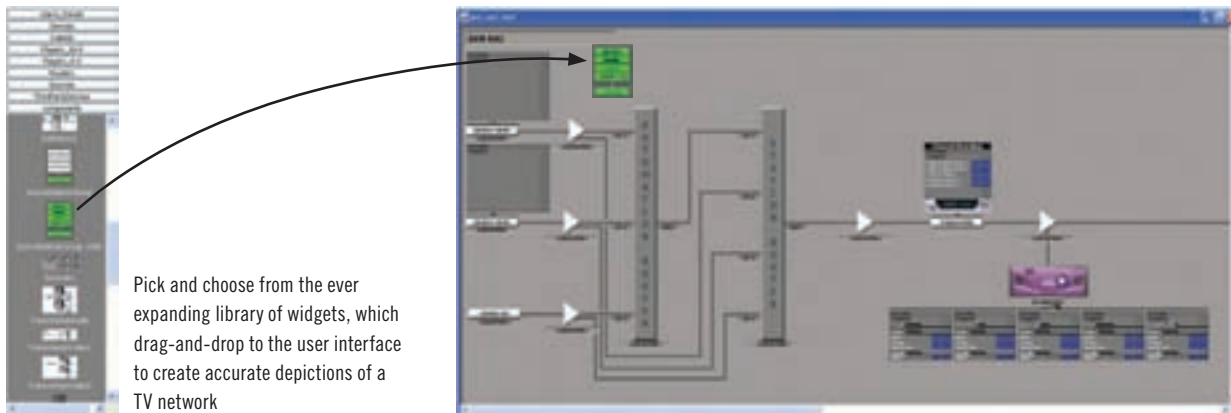
With iControl Web, monitoring of multiple signals is easier. Users have the ability to create custom views of complex video networks, allowing operators to easily perform the following tasks:

- 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 Web pages to “drill-down” to more detailed views of the network topology.

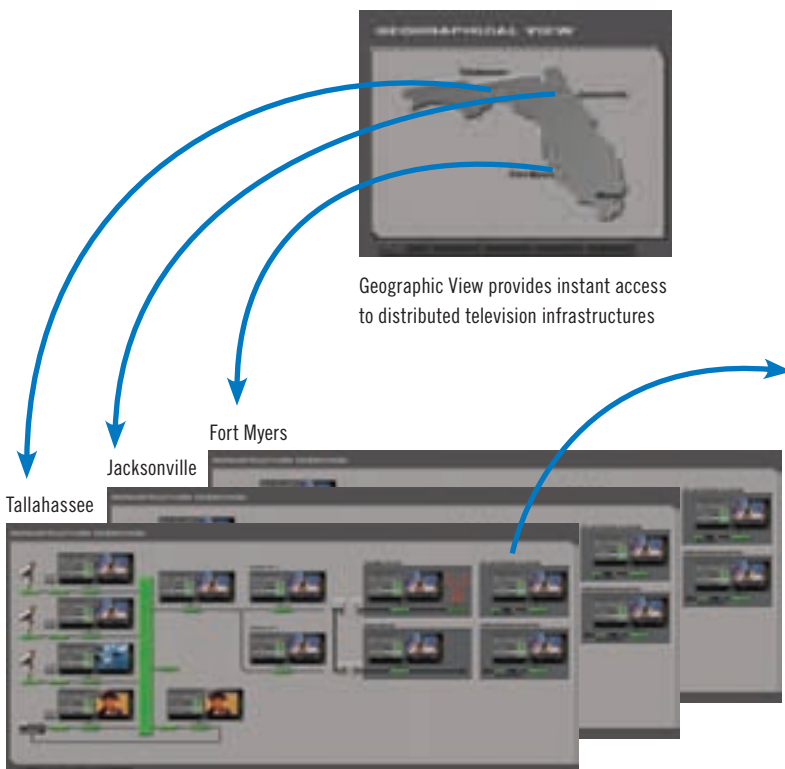
iControl Web can be used to create custom views of:

- 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 Miranda 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.

iControl performance reporting and analysis

Signal and system performance reports for multi-channel television systems

Miranda's iControl keeps operators of multi-channel television systems aware of channel performance over time. Providing a variety of powerful reports and using multiple forms of visual graphs, iControl helps operators assess the performance of complex signal distribution networks by

highlighting which channels perform best - and which ones require their attention. For added convenience, iControl performance reports can be embedded in iControl's top quality user interface or be automatically e-mailed to selected recipients.

KEY FEATURES AND BENEFITS

- Selectable video and audio and other quality metrics
- Users can easily define which criteria contribute to reports, allowing them to focus on the most relevant channel performance information
- Selection can be made among the wide list of video and audio metrics supported by iControl, including video freeze, video black, audio loss and silence. Also supported are macro-block detection and lip sync errors, as well as transport stream and IP video errors
- With iControl SNMP, performance reporting can be achieved on device and infrastructure performance

Reporting on trends to help improve service quality

- iControl performance reporting helps reduce the Mean Time to Repair by clearly distinguishing valid signals from the ones that continuously contribute to fault and invalid service quality
- Reports can focus on error counts or fault durations
- Charts can display trend over different time intervals: minutes, hours, days and weeks, etc.
- Performance ranking can be based on a selectable quantity of entries
- Helps operators focus on issues and trends before they become critical situations

Advanced and flexible report generation and distribution

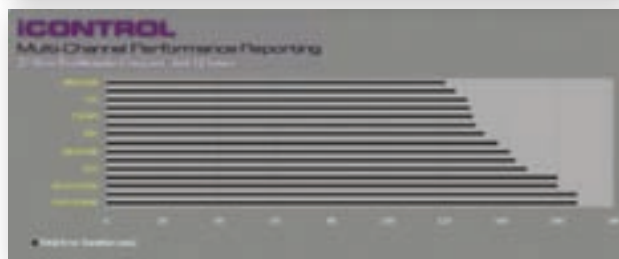
- Reports can be viewed in iControl - or can be forwarded via e-mail to user-defined lists of recipients
- Automatic report generation can be set for daily, weekly or monthly basis

Comprehensive graphs using visual forms

- Direct access to charts from iControl Navigator or iControl Web
- Context specific report can be embedded directly in iControl's powerful user interface
- Choice of bar, line, column, pie and other forms of charts for effective representation



iControl performance reports can be embedded directly in iControl's rich, context-specific user interface



Reports can summarize performance based on a wide range of metrics, using multiple forms of graphs for effective representation

ORDERING INFORMATION

- | | |
|---------------------|---|
| IC-REPORT-001 | iControl Interactive Report Generator - Includes data formatting, summarization and chart builder |
| IC-BASE-EDITION-V2 | iControl system including 1RU Application Server (see page 644) |
| IC-BASE-EDITION-ENT | iControl system including 1RU enterprise - grade Application Server (see page 644) |

iControl Web: intelligent alarm management

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

iControl Web 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.

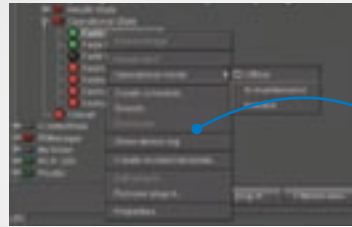
Groups of alarms and events can be managed as "incidents", with related events automatically correlated and grouped under a single umbrella. For instance, a typical signal fault on an upstream satellite receiver will impact all downstream devices on the same signal path. However, rather than dealing 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.

Prioritize



Expanded alarm priority: minor, major and critical. Alarms can also be disabled based on user's operational role.

Schedule

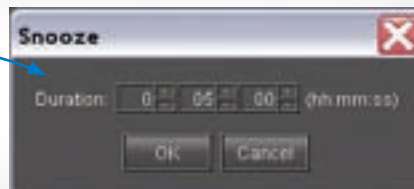
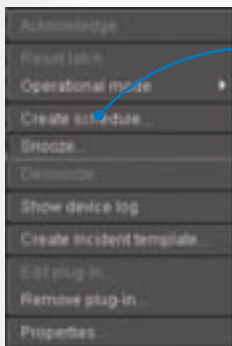


Allows alarms to be scheduled, to prevent generation of un-necessary alerts



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

Snooze



Alarms can be manually snoozed for specific periods of 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 navigator

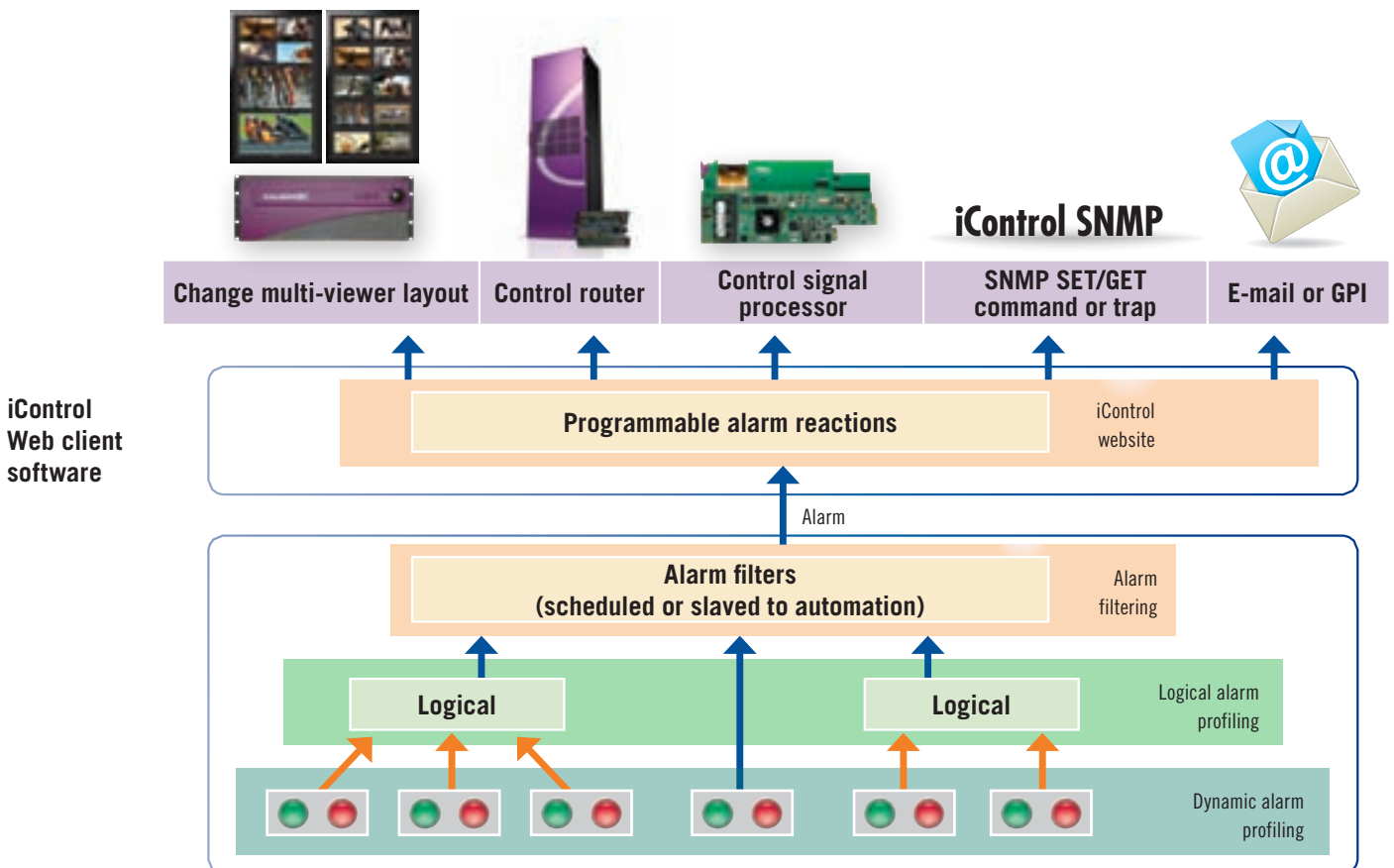
Automated and guided response to alarms

iControl Web's auto-pilot capability provides 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.



Automated response to alarms is provided by the scripted macros 'auto-pilot' function

Alarm generation



ORDERING INFORMATION

- IC-WEB iControl Web software, (requires IC-BASE-Edition)
Includes: ability to script autopilot functions, ability to embed third-party Windows
- IC-WEB-BASIC Entry level iControl Web software (requires IC-BASE-Edition)
Provides ability to interface to up to 100 devices