

# **ICONTROL**

VERSION 7.20

# **Release Notes**

M446-2203-368

2016-05-26

www.grassvalley.com

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# **Warranty Policies**

Warranty information is available from the Legal Terms and Conditions section of Grass Valley's website (www.grassvalley.com).

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# Installation and Network Requirements

This section details the requirements that must be met prior to installing or upgrading a system with the current version of iControl. It also provides upgrading and configuration guidelines, as well as tips to improve performance.

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# **Hardware Requirements**

#### **IMPORTANT: Requirement for Achieving Optimal Video-Decoding Performance**

The streaming video decoder library used in iControl Navigator and iC Web is optimized for the Intel CPU Core, Core2 and iCore architectures. For optimal video decoding performance, use a client PC equipped with an Intel CPU.

## iControl Clients

Grass Valley recommends your client platform meets the following system specifications for optimal performance:

#### IMPORTANT: Client PCs do not require any version of the Java JRE installed

iControl does not require any version of the Java JRE to be installed on your client PC for iControl to function properly. If you have a Java JRE installed already, there is no impact on iControl's ability to function nor any degradation of performance.

## IMPORTANT: iControl supports Windows 10, Windows 8, and Windows 7 client platforms

Client PCs running iControl version 7.20 *must have Windows 10, Windows 8, or Windows 7 installed*. Windows XP is no longer supported.

iControl Client Platform	Memory	Processor	Operating System
Minimum requirements for general usage (excluding iC Web)	4 GB RAM	Intel Core i3 or better	Windows 10, Windows 8, or Windows 7
Minimum requirement for streaming video and using iC Web	8 GB RAM		

#### **Graphics Card**

Optimized for nVidia or ATI GeForce or Radeon family with 1 GHz clock speed or faster, and minimum 128 MB memory.

# **Supported Servers**

iControl version 7.20 is **ONLY** supported on the following Application Servers: Dell PowerEdge R200/R210/R310/R320. iControl version 7.20 **IS NOT** supported on the Dell PowerEdge 750, 850, and 860 models.

For optimal performance, Grass Valley recommends that your Application Servers meet the following system requirements:

Typical Usage of Application Server	Memory
General usage such as the hosting of small web sites, streaming support and an overall limited number of services	2 GB RAM
Large configurations (e.g. 8 ports used for multiple Densité frames, RCP-200, Router Control, and extensive iC Web sites)	8 GB RAM

## Notes

- The Dell PowerEdge R200 is limited to 4 GB RAM.
- The Dell PowerEdge R320 ships with 8 GB RAM.

## iControl Virtual Machine

iControl VM is a complete version of iControl Base Edition packaged as a virtual image (OVA file). iControl VM does not require a dedicated application server. Instead, a single server can run multiple instances of the iControl VM software, as well as other virtual image software. Please refer to the *iControl Installation on a Virtual Machine Quick Start Guide* (available from the Documentation Library section of Grass Valley's website), for detailed system requirements.

# **Software Requirements**

Connect to the iControl Application Server from any client PC on their network. The first step is to obtain the host name or IP address of the iControl Application Server. Once you connect to an Application Server IP address, you can download iControl applications to your client PC. Once launched, the software will continue to run on your PC, communicating with distributed network applications that may or may not reside on the Application Server where the initial connection was made.

To run any application in the iControl suite, Grass Valley recommends you have a Web browser (Chrome, or Internet Explorer version 10.0, or Mozilla Firefox 3.6) installed on your PC.

In order to be able to modify the Configuration Spreadsheet used to define the iControl monitoring layout, you will need a PC with Microsoft® Excel®.

# **Installation and Network Requirements**

Users can access the iControl Application Server from a client PC using a standard Web browser (Microsoft Internet Explorer or Mozilla Firefox). When a client logs in and launches an iControl module, the software is automatically downloaded from the Application Server. Consequently, no other application software is needed, which greatly simplifies installation and system maintenance.

It is recommended that the iControl Application Server (as well as the associated equipment it controls) be installed on a dedicated LAN, using the existing security infrastructure. A qualified system administrator should verify that the setup follows your organization's security standards.

#### See also

For more information, see "Installing iControl on an Application Server" on page 6.

# Key things to consider when installing iControl

## **Decommissioning of Rollback Support as of iControl Version 6.00**

As of iControl version 6.00, iControl does not support the Rollback function.

## **Changes to Licensing Model as of iControl Version 6.00**

As of iControl version 6.00, an important change was made to the licensing model that affects:

- new systems that ship with iControl software factory-installed
- · systems you manually install iControl on

Either upon installation of iControl version 6.00 (or later) on an existing system, or after first powering up a new Application Server that ships with version 6.00 (or later), the trial clocks for all currently unlicensed options will begin their 30-day countdown. The change as of version 6.00, is that there is now a new licensed option (order code: IC-BASE-SOFTWARE) that licenses the use of the following basic iControl functionality:

- General Status Manager (GSM)
- · Virtual services

- · Image Store
- iC Navigator
- Densité

If you do not license the IC-BASE-SOFTWARE option within the 30-day trial period, you will lose access to the basic iControl functionality described above.

## **Changes to Licensing Model as of iControl Version 6.03**

As of iControl version 6.03, a change was made to the licensing model that affects:

- new systems that ship with iControl software factory-installed
- · systems you manually install iControl on

Either upon installation of iControl version 6.03 (or later) on an existing system, or after first powering up a new Application Server that ships with version 6.03 (or later), the trial clocks for the following previously unlicensed options will begin their 30-day countdown. The change as of version 6.03, is that there are now licensed options that enable the following iControl features:

- GSM Remote connector plug-in (order code: IC-GSM-HTTP)
- iControl Services Gateway (order code: IC-GATEWAY)

If you do not license these options within the 30-day trial period, you will lose access to the features listed above.

## Requirement to Upgrade Firmware of Some Densité Cards

### iC 5.00 to iC 6.00 or Later (FRS-3901/AMX-3981/EAP-3×01/ADX-3981)

If you are upgrading from iControl version 5.00 to version 6.00 or later, and your Application Server monitors any of the following Densité cards, then, after the server upgrade, you **must** then upgrade the firmware/software packages of these Densité cards with Upgrade Package 3.0.1-RC1 or later.

The Densité cards in question are:

- FRS-3901
- AMX-3981
- EAP-3101, and EAP-3901
- ADX-3981

#### iC 5.00 to iC 6.00 or Later (HLP-1801)

If you are upgrading from iControl version 5.00 to version 6.00 or later, and your Application Server monitors one or more HLP-1801 Densité cards, then, after the server upgrade, you **must** then upgrade the firmware/software packages of these cards with Upgrade Package 2.0.1-RC1 or later.

## Requirement for JRE if Installing Version 5.xx or Earlier of iControl

If you are **downgrading** the software of your Application Server from iControl version  $6.x \times to$  iControl version  $5.x \times to$  or earlier, make sure you first have installed the Java Runtime

Environment (JRE) version 6.0 update 20 on your machine (see the "Installing Java" section of the "Getting Started" chapter in the *iControl Quick Start Guide* of the version of iControl you are downgrading to).

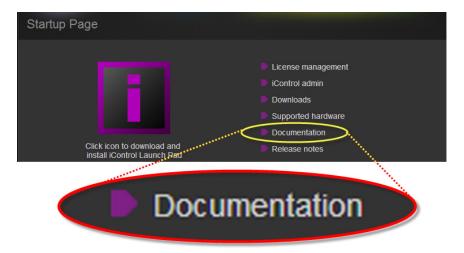
# **Software Component Compatibility**

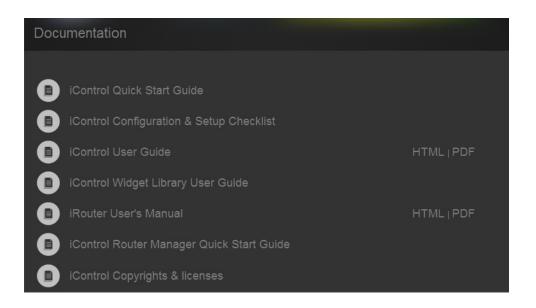
Grass Valley recommends you use the following software components and the stated versions for optimal performance and compatibility with iControl version 7.20:

- RCP-200 Remote Control Panel version 1.7 or later
- Kaleido-X version 7.60 or later
- Densité 3+ frame controller (CPU-ETH3) version 1.0.3 or later
- GV Node frame controller (CPU-ETH3) version 1.0.3 or later
- Densité CPU-ETH2 version 2.0.4 or later
- EdgeVision version 1.21 or later
- NV9000 version 6.3.0 build 1873 or later
- SEUtilities version 6.3.0 build 136 or later

## **Documentation**

The user documentation for iControl version 7.20 is available from the **Documentation** link on the Application Server's Startup page:





# **Installing iControl on an Application Server**

#### **IMPORTANT:**

- If you intend to upgrade your Application Server to the current version from versions 1.xx, 2.xx, or 3.xx, please contact Grass Valley Technical Support for assistance (see "Contact Us", on page 57).
- If you intend to upgrade an Application Server to version 7.20 from an older version, Grass Valley strongly recommends also upgrading all other Application Servers in your network to version 7.20.
  - If—from the client of a version of iControl older than 7.20—you attempt to launch a service hosted on an Application Server running version 7.20, you may receive an error message.
- iControl version 7.20 is shipped with all new systems. If you are planning to install version 7.20 onto an Application Server already running another version of iControl, your hardware must comply with the minimum hardware requirements of the new software (see "Hardware Requirements", on page 1). Additionally, you must contact *Grass Valley Technical Support* to request an upgrade package (see "Contact Us", on page 57).
- After you upgrade an Application Server, *from iControl version 6.01 or earlier,* to 6.02 or later, *iControl Admin* user-modified passwords are lost.

To install iControl version 7.20, perform one of the following two procedures, depending upon the version of iControl *currently* installed on your system:

- "Installing iControl Version 7.20 (Current Version is 5.xx or earlier)" on page 7
- "Installing iControl Version 7.20 (Current Version is 6.00 or later)" on page 13

## Installing iControl Version 7.20 (Current Version is 5.×× or earlier)

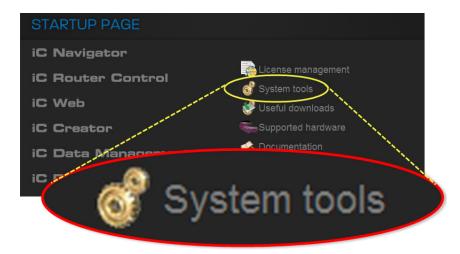
#### **REQUIREMENTS**

Make sure you meet the following conditions before beginning this procedure:

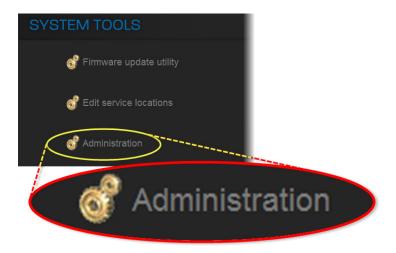
- Your Application Server meets the minimum hardware requirements (see "Hardware Requirements", on page 1).
- Your Application Server is one of the following hardware models:
  - Dell PowerEdge 200
  - Dell PowerEdge 210
  - · Dell PowerEdge 310
  - Dell PowerEdge 320
- At the beginning of this procedure, your Application Server is running version 5.xx of iControl or below.
- You have performed a backup operation on the configuration data of your Application Server (see the "Backing Up an Application Server" section of the "Backup and Redundancy" chapter of the *iControl User Guide*.
- You have disabled the Autofailover function (recommended).
- You have available an iControl version 7.20 upgrade package (see "Contact Us", on page 57).
- You have logged onto the Application Server's iControl page.
- You have read and understood the IMPORTANT notes listed just prior to this procedure (see page 6).
- You have read and understood the documented key considerations and system behaviors regarding iControl software installation (see "Key things to consider when installing iControl", on page 3)

#### Installing iControl version 7.20 on your Application Server

1. On the Startup page, click **System tools**.



2. Click Administration.



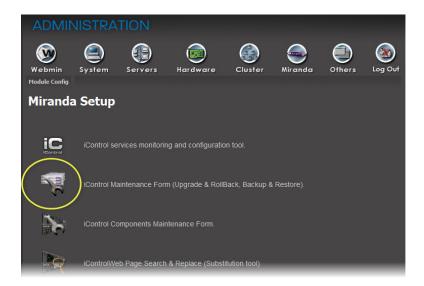
3. On the Login to Webmin page, enter your credentials.



4. Click Miranda iControl Management Tool.



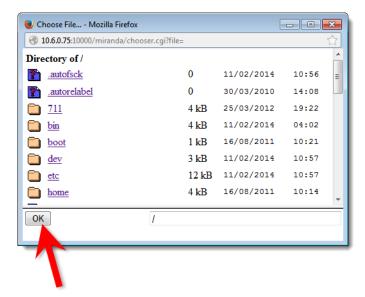
5. Click the icon beside iControl Maintenance Form.



- 6. If your iControl upgrade package is on the Application Server, perform the following substeps:
  - a) In the **iControl Upgrade Form** area, next to the **From a Local File on the Server** field, click **Browse**.



b) Navigate to and select the desired upgrade package, and then click **OK**.

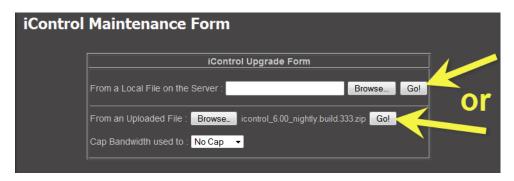


- 7. If your iControl upgrade package is on your local file system, perform the following substeps:
  - a) In the iControl Upgrade Form area, next to the From an Uploaded File field, click Browse.

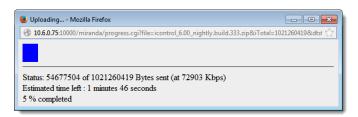


- b) Navigate to and select the desired upgrade package in the **File Upload** window, and then click **Open**.
- 8. Once the upgrade package is selected, click Go.

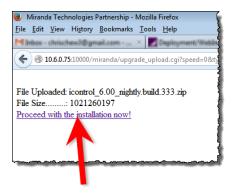
**Note:** If you selected an upgrade package on your Application Server, click **Go** next to the **From a Local File on the Server** field. If you selected an upgrade package on your local file system (e.g. on your PC), click **Go** next to the **From an Uploaded File** field.



System Response: If you selected an upgrade package on your local file system, a progress window appears, indicating the status of the upload.

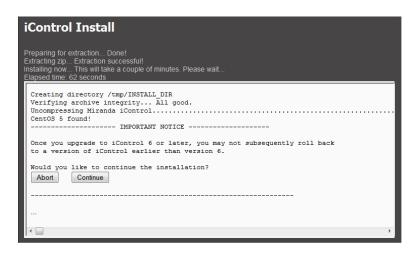


9. Click Proceed with the installation now.



**SYSTEM RESPONSE:** A warning message appears informing you that after upgrading to iControl version 7.20 you cannot roll back to a version earlier than version 7.20.

10. Below the message, click **Continue** if you would like to go forward with the installation. If not, click **Abort**.



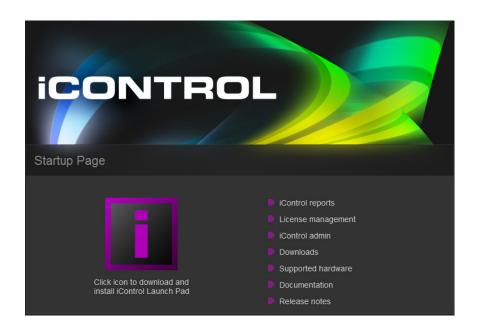
SYSTEM RESPONSE: The installation continues (if you clicked **Continue**). After the installation is complete, the system warns you that it must reboot. Click the link to reboot.

**Note:** Your Web browser will not refresh on its own.

11. Click the *iControl* logo at the top of the page to refresh.



SYSTEM RESPONSE: The Web page of your newly updated Application Server appears on your browser.



## Installing iControl Version 7.20 (Current Version is 6.00 or later)

#### **REQUIREMENTS**

Make sure you meet the following conditions before beginning this procedure:

- Your Application Server meets the minimum hardware requirements (see "Hardware Requirements", on page 1).
- Your Application Server is one of the following hardware models:
  - Dell PowerEdge 200
  - Dell PowerEdge 210
  - Dell PowerEdge 310
  - Dell PowerEdge 320
- At the beginning of this procedure, your Application Server is running version 6.00 of iControl or above.
- You have performed a backup operation on the configuration data of your Application Server (see the "Backing Up an Application Server" section of the "Backup and Redundancy" chapter of the *iControl User Guide*.
- You have disabled the Autofailover function (recommended).
- You have available to your local file system, an iControl version 7.20 upgrade package (see "Contact Us", on page 57).

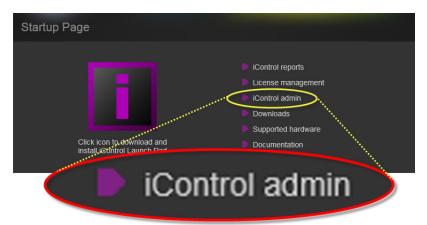
#### **REQUIREMENTS** (Continued)

Make sure you meet the following conditions before beginning this procedure:

- You have logged onto the Application Server's iControl page.
- You have read and understood the **IMPORTANT** notes listed just prior to this procedure (see page 6).
- You have read and understood the documented key considerations and system behaviors regarding iControl software installation (see "Key things to consider when installing iControl", on page 3)

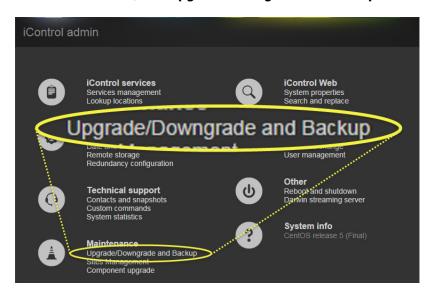
## Installing iControl version 7.20 on your Application Server

1. On the *Startup* page, click **iControl admin**.



SYSTEM RESPONSE: The iControl admin page appears.

2. Under Maintenance, click Upgrade/Downgrade and Backup.



**SYSTEM RESPONSE:** If, during this session using iControl, you have not yet performed any functions involving the *iControl admin* page, then you will see the *iControl admin login* page appear.

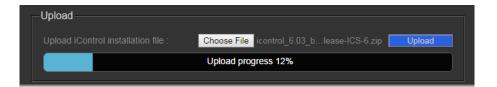


- 3. If prompted, enter your iControl login credentials, and then click **Log In**.

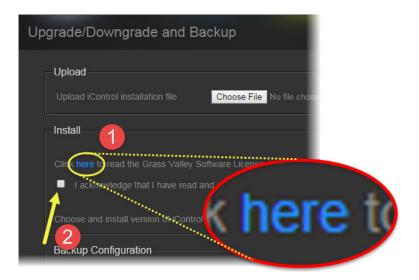
  SYSTEM RESPONSE: The Upgrade/Downgrade and Backup page appears.
- 4. Upload the iControl upgrade package to the Application Server, by performing the following sub-steps:
  - a) In the **Upload** area, click **Choose File** to locate and select the iControl upgrade package you would like to install.
  - b) Click Upload.



System Response: The upgrade package is uploaded to the Application Server. A progress bar displays the upload progress.



- 5. When the upload is complete, read the *Grass Valley Software License Agreement* by performing the following sub-steps:
  - a) Click on the indicated link.
  - b) After you have read the license agreement—and if you agree with the terms therein—select the check box indicating you acknowledge the terms and conditions.

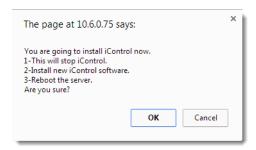


6. Select the newly uploaded package from the list in the **Install** area, and then click **Install**.



**SYSTEM RESPONSE:** A confirmation message appears.

7. If you agree with the details of the iControl installation process, as explained in the confirmation message, click **OK**. If not, click **Cancel**.



SYSTEM RESPONSE: If you clicked **OK**, a progress bar appears. After the system reboots, the Startup page appears, indicating that the Application Server is now at version 7.20.

# **Upgrade Compatibility Issues**

## IMPORTANT: Previous replication configuration data does not survive upgrade

For upgrades from an iControl version prior to 3.41 to version 7.20, you will need to reconfigure and enable replication after performing the upgrade. Do this on the **Redundancy Configuration Form** using the Manual Takeover mode.

This applies to any upgrade from a version prior to iControl version 3.41 to either version 3.41 or later. It does not apply to an upgrade from iControl version 3.41 to a later version.

- The iC Navigator Error/Warning configuration will be lost during the upgrade procedure.
   These settings configure the overall status of each item in the iC Navigator list. The settings have to be noted prior to the upgrade, and then re-applied using the Alarm Configuration feature of iControl later.
- SNMP trap listeners that use the enterprise OID are not compatible with traps sent from iControl version 3.30 and later if they were configured in a system that had a version of iControl between 3.00 and 3.22. If you wish the previous behavior to remain in effect, please contact Grass Valley Technical Support for more information (see "Contact Us", on page 57).
- Clients using ASI services must migrate to CDMP services when upgrading to iControl version 3.11 or later. This requires some manual configuration, due to the nature of the ASI setup.
- Please contact Grass Valley Technical Support for more information (see "Contact Us", on page 57).
- In situations where you are running iControl version 3.40 (or earlier) and are upgrading to iControl version 7.20, replication data will not survive the upgrade.
  - After an upgrade to iControl version 7.20, you must re-enter replication data including the addition of Application Servers in the Redundancy Group(s), the desired replication frequencies, and the desired extra IP address.
- When upgrading from iControl version 3.20 (and later) to a newer version, the existing WidgetLibrary is renamed WidgetLibraryOld, and a new, upgraded WidgetLibrary is installed. Custom widgets that had been saved in the old WidgetLibrary become unavailable in iC Creator.
  - Workaround: Import custom widgets from WidgetLibraryOld, and save them in a location other than the new WidgetLibrary.
- The **iControl Maintenance Form** of the Application Server web administration tool (Webmin) cannot be used to update from 2.xx to 7.20. The update has to be performed through an SSH command line interface.
- After upgrading from iControl version 3.2x (or earlier) to version 3.30 or later, it will not be possible to view the existing log database content by using the Log Viewer. If you wish to be able to access these past records, use the Log Viewer's export feature to export the data to a CSV file before upgrading your system.

- iControl version 3.30 (and later) offers a more robust GSM configuration database.
   However, if the database became corrupted in version 3.2x or earlier, upgrading to version 3.41 could result in the loss of some configuration data. Make sure to perform a backup of your iControl system configuration (by using Webmin's iControl Maintenance Form) before upgrading.
- The RMON driver is not backward compatible between versions 3.00 (and later) and 2.7:
  - Typical alarm URI in iControl 2.7 = //snmp:RMON/10.4.0.2/ifOperStatus101
  - Equivalent alarm URI in iControl 3.X = snmp://RMON:10.4.0.2/ifOperStatus101
  - iC Web sites using these alarms may need to be updated accordingly.
- iControl Web sites that were created with iC Creator versions 2.0 or 2.2 can only be used with version 4.10 if each individual page is opened and re-saved with iC Creator.
- As of iControl version 3.30, Imagestore alarm URIs consistently include a slash (/), whereas in the past some would have an at sign (@) in their URI. iC Web sites using alarms such as the following may need to be updated accordingly:
  - Mot\_EMS.ImageStore.ImageStore\_10.6.0.37@overall\_status
  - Mot\_EMS.ImageStore.ImageStore\_10.6.0.37/overall\_status
  - Mot EMS.ImageStore.ImageStore 10.6.0.38@commStatus
  - Mot EMS.ImageStore.ImageStore 10.6.0.38/commStatus
  - Mot\_EMS.ImageStore.ImageStore\_10.6.0.38@Temperature\_status
  - Mot\_EMS.ImageStore.ImageStore\_10.6.0.38/Temperature\_status
  - Mot\_EMS.ImageStore.ImageStore\_10.6.0.38@Version\_not\_compatible
  - Mot\_EMS.ImageStore.ImageStore\_10.6.0.38/Version\_not\_compatible
  - Mot EMS.ImageStore.ImageStore\_10.6.0.38@Voltage\_status
  - Mot\_EMS.ImageStore.ImageStore\_10.6.0.38/Voltage\_status
- As of version 3.30, router configuration changes made in Router Manager Configurator are not compatible with earlier versions of the software. Downgrading is supported but any change to the router configuration made in version 3.30 or later will be lost during the downgrade. After downgrading, any router configuration will have reverted to what it was before the last upgrade.

# **Configuration Guidelines**

# Large Kaleido-X System

- When iControl is connected to a large Kaleido system, using the Kaleido-X SNMP plug-in to retrieve alarms may cause system performance issues as well as an *Out of Memory* error.
  - Workaround: When attempting to retrieve multiviewer alarms, you should use the remote multiviewer GSM logging functionality on the Kaleido-X.

# Multiple Application Servers and Kaleido-K2

• When iControl and Kaleido-K2 run on the same subnet, the Kaleido-K2 lookup servers must be disabled. The Kaleido-K2 will use the iControl Application Server lookups. Refer to the iControl User Guide and the Kaleido-K2 User Guide for further details.

# Multiple Router Manager Services

 If multiple Router Manager services must run on multiple Application Servers within the same subnet, make sure all Router Manager service names are different. To change a Router Manager service name, open the associated control panel from iControl Navigator.

## Grass Valley Imaging Frames (Symphonie or Quartet)

- A maximum of four frames should be connected per RS-422 communication port.
- When critical on-air equipment is controlled (e.g. incoming feeds), proc amp adjustments use a maximum of two frames per RS-422 communication port.
- When using Symphonie frames that are fully loaded with XVP-801/811 and/or DAP-781, use a maximum of one frame per RS-422 communication port.
- Do not mix Symphonie and Quartet 1 frames on the same RS-422 daisy chain. It is possible to mix Symphonie and Quartet 2 frames on the same RS-422 daisy chain. The Quartet 2 will introduce a delay.
- The maximum number of Imaging cards that can be controlled by an Application Server is 200, provided sufficient physical memory is available (1 GB RAM or more depending on other services). If more cards are to be controlled, they must be distributed on multiple Application Servers.
- Connecting Symphonie frames live to the Imaging communicator will require the communicator to be restarted. Failing to do so will cause cards associated to the frames to appear incorrectly.

# Grass Valley Densité Frames

- The maximum number of Densité cards (with no streaming capabilities) that can be controlled by a single Application Server is approximately 400, provided sufficient physical memory is available (1 GB RAM or more depending on other services).
- Up to three Densité Managers per Application Server can be configured to support up to 150 streams each. One thumbnail, one ALM, one waveform/vector scope and the CC count as four separate streams. When using probes with streaming capabilities, no more than 150 cards should be allocated to one Application Server.
- As of iControl version 3.30, overall and GSM contribution alarms are disabled by default for all Densité services. Make sure all alarms and levels are configured as required.
- A Densité card upgrade may fail when another application—in addition to Grass Valley Interface Updater (MIU)—is already connected to that Densité card's CPU-ETH2 controller.

For added convenience, as of iControl version 3.40, Grass Valley Interface Updater displays a message listing all applications or services already connected to the same Densité frame. Such connections can come from the iControl Densité Manager, but also from other Application Servers, computers running iControl Solo, or from iControl Router Manager (if the Densité frame contains cards with router capabilities, such as the HRS-1801, HCO-18x1, DCO-17x1, MSB-1121).

**Note:** The message lists the IP addresses associated with connections made to the Densité controller. From the IP addresses your system administrator will be able to identify the associated application or service.

#### See also

For more information, see the iControl documentation for details on how to close or temporarily deactivate those connections.

# **Tips to Improve Performance**

- The number of health monitoring plug-ins monitoring any given Application Server should not exceed two.
- The streaming video decoder library used in iControl Navigator and iC Web is optimized for the Intel CPU Core, Core2 and iCore architectures. For optimal video decoding performance, use a client PC equipped with an Intel CPU.
- Do not start services on the iControl Application Server that are not required. By default, the Densité Manager, the RMI Daemon with lookup service and the GSM service are configured to start at boot time. All other services are stopped.
- Large systems require a proper system configuration and load balancing. Typically one
  Densité Manager is assigned no more than 150 streams. A thumbnail, ALM, scope or CC are
  all separate streams. If one card provides a thumbnail and one ALM, then one Densité
  Manager can handle 75 cards. Up to three Densité Managers can be configured for load
  balancing.
- The lookup service should preferably not be running on heavily loaded Application Servers.
- When there are more than two Application Servers within the same subnet, keep a maximum of two lookup services running.
- When a Kaleido-K2 is on the same subnet as an Application Server, the lookup server on the Kaleido-K2 must be stopped, and the one on the Application Server must be used instead. Refer to the Kaleido-K2 documentation for instructions on how to stop a Kaleido-K2 lookup service.
- If a network device does not exist (e.g. router, DNS, WINS) in the network environment, it is vital to remove its settings from the client PC's network configuration, and from the Application Server. Failure to do so will introduce unnecessary network time-out delays.

- The presence of a DNS in the network environment is preferable to speed up reverse host name lookup, used by part of the iControl infrastructure. If this is not possible, then specify the host name of the Application Server in the PC client Windows host file (C:\Windows\system32\etc\drivers\hosts). The Application Server can also play the role of a DNS server or forwarder.
- Ensure that the port settings on switches are set correctly for optimal performance. The
  Application Server's Ethernet ports eth0 and eth1 are configured to auto-negotiate.
  Negotiation with the switch must be 100 Mbits full duplex, or 1000 Mbits full duplex, for
  optimal performance.



iControl version 7.20 is a minor release. This section lists new features, bug fixes (see page 26), known issues and limitations, along with peripheral cards and devices supported in the current release.

# **Summary**

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## **New Features and Enhancements in iControl**

## New and Enhanced in Version 7.20

- ★ [Ref. #ICONTROL-19325] Initial support for the **GV Node CPU-ETH3** frame controller card, **GV Node Manager** control panel, and **GV Node** frame.
- ★ [Ref. #ICONTROL-19162] **Windows 10 support:** As of version 7.20, iControl supports Windows 10, in addition to Windows 8 and Windows 7, on the client PC.

## **Supported Devices**

#### See also

For more information about requesting licenses and activating support (in the case of iControl options) for any below-mentioned devices, see the "License Management" chapter of the *iControl User Guide*.

- ★ [Ref. #DRIVER-403] Support for the **Axon** DAW30 audio watermarks embedders.
- ★ [Ref. #DRIVER-417] Support for **Grass Valley** Imagestore 750 via the Oxtel protocol.
- ★ [Ref. #DRIVER-423] Support the **Imagine Communications** Panacea clean/quiet switch.
- ★ [Ref. #DRIVER-479] Support for the **Image Video** RDU-1510 series of under monitor displays.

## New and Enhanced in Version 7.10

• [Ref. #ICONTROL-18848] Initial support for the **Densité 3+ CPU-ETH3** controller card, and **Densité 3+ FR4** frame.

**Note:** The CPU-ETH3 controller cannot yet function as an SNMP agent.

- [Ref. #ICONTROL-19248] **Router control:** Support for Quartz router configurations with up to 26 levels.
- [Ref. #DSERV-1671] Support for the **IPG-3901** Densité card.
- [Ref. #DSERV-1501] Support for the **HDA-3911** Densité card.
- [Ref. #DSERV-1502] Support for the HDA-3931 Densité card.
- [Ref. #DSERV-1512] New upgrade package 1.0.1 for the **MAP-3901** Densité card. See DSERV-1505, on page 27.

## **Supported Devices**

#### See also

For more information about requesting licenses and activating support (in the case of iControl options) for any below-mentioned devices, see the "License Management" chapter of the iControl User Guide.

- [Ref. #DRIVER-407] Support for **DVBControl** DVBMosaic.
- [Ref. #DRIVER-401] Support for **QSC** Q-SYS Core.
- [Ref. #DRIVER-426] Support for the **Imagine Communications** Selenio X85 frame synchronizer and converter.
- [Ref. #DRIVER-435] Support for the **Imagine Communications** Selenio X100 frame synchronizer and converter.
- [Ref. #DRIVER-295] Support for the **Mystic** M-15x0 transcoder series.

### New in Version 7.00

#### Densité Services

[Ref. #ICONTROL-19130] iControl version 7.00 introduces support for the MAP-3901
 Densité card. The MAP-3901 is a 3G/HD/SD metadata and embedded audio processor card.

The Densité MAP-3901 is the latest generation metadata and audio processor in the Densité family, offering sophisticated audio signal processing on a single 3RU module. The powerful and versatile processing platform delivers significant value to users by simultaneously processing up to 56 channels of audio (16 channels of embedded audio from the video plus others generated internally). Functions include dual down-mixing, level control, channel shuffling/mixing and an on-board DSP engine that can run simultaneously as optional licenses up to two Dolby-E decoders, four Dolby Digital & Digital Plus encoders, and two Upmixers (2.0 to 5.1).

#### See also

For more information, see the MAP-3901 3G/HD/SD Metadata & Embedded Audio Processor Guide to Installation and Operation (M3022-9900-100).

## iControl Web/Creator—Widget Library

- [Ref. #ICONTROL-19101] iControl version 7.00 introduces the **SSP-3801 widget** in icontrol Creator and icontrol Web.
- [Ref. #ICONTROL-19100] iControl version 7.00 introduces the **SME-1901/1911 widget** in iControl Creator and iControl Web.
- [Ref. #ICONTROL-19098] iControl version 7.00 introduces the MAP-3901 widget in iControl Creator and iControl Web.
- [Ref. #ICONTROL-19097] iControl version 7.00 introduces the **HCO-3901 widget** in iControl Creator and iControl Web.

#### **GeckoFlex Services**

 [Ref. #DSERV-849, DSERV-853, ICONTROL-18963] iControl version 7.00 introduces support for the GeckoFlex line of services and a GeckoFlex Manager (similar in function to the Densité Manager) with which to manage them.

#### See also

For more information, see:

- "GeckoFlex Manager" section of the "Configuring Devices & Services" chapter of the iControl User Guide.
- "Working with GeckoFlex Communicators" section of the "Configuring Devices & Services" chapter of the *iControl User Guide*.

### **Supported Devices**

#### See also

For more information about:

- Requesting licenses and activating support (in the case of iControl options) for any below-mentioned devices, the "License Management" chapter of the *iControl User Guide*.
- Support details, the *iControl Supported Device Reference Guide*.
- [Ref. #DRIVER-197] **Harmonic** Prostream 1000 stream-processing platform—Newly supported in this version of iControl.
- [Ref. #DRIVER-192] **Grass Valley** Softel VFlex multi-purpose ancillary VBI, VANC and graphics data processing unit for broadcast applications—Newly supported in this version of iControl
- [Ref. #DRIVER-270] Harris Panacea Routing Switcher—Newly supported in this version of iControl
- [Ref. #ICONTROL-18649] **Grass Valley** 7600 SPG/REF device—iControl now supports health monitoring of this device.

- [Ref. #ICONTROL-19012] Grass Valley K2 External SAN—Newly supported in this version of iControl
- [Ref. #DRIVER-265] **Evertz** VIP7767 HSN—Newly supported in this version of iControl

# **Bugs Fixed in iControl**

## Fixed in Version 7.20

- ★ [Ref. #ICONTROL-19405] **Security Infrastructure:** Buffer overflow vulnerability CVE-2015-7547.
- ★ [Ref. #ICONTROL-19432] **Security Infrastructure:** TLS SSLv2 cross-protocol attack (DROWN) vulnerability CVE-2016-0800.
- ★ [Ref. #ICONTROL-19374] **Router control:** When an external controller that uses the SAM (Snell/Pro-Bel) SW-P-08 protocol, to control logical routers configured in iControl, sends a request message that is not supported in Grass Valley's implementation of the SW-P-08 protocol, the application server responds with NAK, instead of ACK. In addition, the application server does not respond instead of replying with NAK to messages whose packaging is incorrect (e.g., incorrect format, incorrect byte count, incorrect checksum), which eventually results in a loss of communication between the controller and iControl (some controllers deliberately send messages that have an invalid checksum, as a keep-alive mechanism).

**Note:** As of iControl version 7.20, the application server responds with ACK, and sends no other responses to unsupported commands, and it responds with NAK to messages that have incorrect packaging.

★ [Ref. #ICONTROL-19310] **Router control:** When a server that had become unresponsive restarts, existing router configurations could revert to a default configuration.

## Fixed in Version 7.10

• [Ref. #ICONTROL-19230] **Router control:** When an external controller that uses the SAM (Pro-Bel) SW-P-08 protocol, to control logical routers configured in iControl, sends a *Dual Controller Status* request message (command byte 08, not supported in Grass Valley's implementation of the SW-P-08 protocol), the application server responds with NAK, instead of ACK.

**Note:** As of iControl version 7.10, the application server responds with ACK, and sends no other responses to that command.

- [Ref. #ICONTROL-18899] **Security Infrastructure:** Buffer overflow vulnerability CVE-2015-0235, known as GHOST.
- [Ref. #ICONTROL-18291] **SNMP:** MIRANDA-MIB. mib includes a duplicate entry in its GsmTraps enumeration.

- [Ref. #ICONTROL-18828] **Backup and redundancy:** With iControl *versions 6.04–7.00*, performing a Manual Takeover followed by a Reverse Takeover may result in the loss of a backup file on the Main Application Server.
- [Ref. #ICONTROL-18763] **Redundancy / Failover:** On the *Upgrade/Downgrade and Backup* page, if the **Enable Automatic Backups** function is enabled, an Application Server failover does not replicate the automatic backup setting to the Backup server.
- [Ref. #ICONTROL-18717] **Redundancy / Failover:** Application Server failovers do not successfully transfer date and time information from the *Main* to the *Backup*.
- [Ref. #ICONTROL-18793] **Application Server health monitoring**: iControl does not support health monitoring of a remote Application Server.
- [Ref. #ICONTROL-19203] **Virtual alarm recursion:** In some circumstances, performing alarm actions—such as Reset all latches, or Acknowledge all—may result in a loss of communication with a controlled device.

Note: A system property is available to prevent an iControl GSM server from broadcasting alarm actions to specific GSMs. On the server where the broadcasts originate, in /usr/local/iControl/bin/conf/java\_gsm.properties/, set the icontrol.gsm.disableActionDispatch property to the appropriate value for your purposes. For example, to disable action dispatches to all remote GSMs, set icontrol.gsm.disableActionDispatch to *true*; to disable action dispatches to specific GSMs, list the IP addresses of the GSMs you wish to exclude from action dispatches (e.g., icontrol.gsm.disableActionDispatch=10.10.10.10, 10.20.20.20).

- [Ref. #DSERV-1505] In iControl *version 7.00*, a MAP-3901 card with firmware package 1.0.0 may prevent some cards from starting:
  - When MAP-3901 version 1.0.0 is installed with MAP-3901 version 1.0.1, both MAP-3901 cards will not start.
  - When MAP-3901 version 1.0.0 is installed with IPG-3901 version 1.0.0, the IPG-3901 cards will not start.
  - When MAP-3901 version 1.0.0 is installed with MAP-3901 version 1.0.1 and IPG-3901 version 1.0.0, the MAP-3901 and IPG-3901 cards will not start.

**Note:** The solution for this bug is in Densité upgrade package 1.0.1-RC-2 for MAP-3901. This package fixes this bug when installed in iControl version 7.00. This package is bundled within iControl version 7.10, which therefore does not require further MAP-3901 card upgrades.

## Fixed in Version 7.00

#### **SNMP Driver Creator**

 [Ref. #ICONTROL-18803] In SNMP Driver Creator, when attempting to toggle from the Script Editor tab to the Driver Configuration tab, an exception error may be logged and the driver may not function properly.

#### **GSM**

• [Ref. #ICONTROL-18813] Restarting a GSM with virtual alarms may result in entire groups of alarms containing those virtual alarms to go into an unexpected operational mode such as *Inverted, Maintenance,* or *Offline*.

#### **Notes**

- If your system includes Kaleido multiviewers, their GSM also requires the fix, which is available in version 7.60 (and later) of the Kaleido-X software.
- EdgeVision does not have the fix: always use native alarms from EdgeVision instead of virtual alarms.

## **Known Issues and Limitations**

The following is a list of known issues and limitations associated with iControl version 3.0 and later. The star  $(\star)$  symbol indicates a new issue.

### **Access Control**

- [Ref. #16903]When configuring Access Control, the use of special characters (e.g. #@+; "\,<>/) in the **User ID** and Phone number boxes causes errors.
- [Ref. #12422] In certain circumstances, having invalid Lookup Services (LUS) registered on an Application Server may prevent users from logging in to some iControl applications. Specifically, if 10 or more invalid LUS addresses are specified (refer to *Specifying JINI Lookup Locations* in the *iControl User Guide*), with security enabled, the message "Cannot communicate with LDAP server. This application will be closed." may appear.

*Workaround:* Temporarily remove the unreachable servers' IP addresses from the set of lookup locations.

# Alarm Management

- [Ref. #ICONTROL-18768] **Router health monitoring**: A space in the name of a router configured with the *NVISION Ethernet protocol Compact router* protocol results in missing alarm folders under Health monitoring | Routers, in the GSM alarm browser.
- [Ref. #ICONTROL-17705] **KX Router alarms**: If your system is connected to a Kaleido multiviewer, you may see KX Router health monitoring alarms published to the iControl GSM. These alarms are not relevant and should be ignored.

# Application Server Backup and Restore

• [Ref. #ICONTROL-18531] If using Microsoft Internet Explorer 10, when you restore from a backup, you may see an error message that indicates the restore operation has failed.

**Note:** This behavior has not been observed to occur when using iControl on a virtual machine.

Workaround: Remove the ReceiveTimeout DWORD from your PC's registry key at the following path in the Windows Registry Editor:

\\HKEY\_CURRENT\_USER\Software\Microsoft\Windows\CurrentVersion\Internet Settings

 [Ref. #ICONTROL-16687] In certain cases, when you back up configuration data from an Application Server, after you subsequently attempt a restore operation, LDAP configuration data does not survive. The success of the backup/restore operation of LDAP data depends upon both the hardware model of Application Servers and their respective versions of iControl software, and is summarized as follows:

LDAP restore behaviors based on tested hardware and software combinations

iControl version of machine generating a backup	iControl version of machine that data is restored to	Behavior	Recommended remedial action	
Dell PowerEdg	e R320 generates a	backup and then restores t	o an R310	
4.42	4.42	LDAP data is restored.		
Dell PowerEdge R320 generates a backup and then restores to itself or another R320				
4.41	4.41	LDAP data is restored.		
4.41	4.42	LDAP data is restored.		
4.42	4.42	LDAP data is restored.		
Dell PowerEdge R310 generates a backup and then restores to an R320				
4.40 or earlier	4.41	LDAP data is not restored.	Upgrade the machine generating a backup to iControl version 4.42.	
4.40 or earlier	4.42	LDAP data is restored.		
4.42	4.42	LDAP data is restored.		

# Data Management

• [Ref. #21507] Attempting to export a spreadsheet from the Data Management tool to an iControl Application Server while a spreadsheet with the same name is already open on the server will result in the Data Management tool displaying an error message, followed with other messages stating that the export was completed with success.

Workaround: Ignore the false success reports and export the spreadsheet again, after making sure that the corresponding spreadsheet is not open on the server.

#### Densité Services

• [Ref. #ICONTROL-19114] In setups where the version of iControl on your Application Server (or virtual machine) is version 7.00 or more recent and your client PC's Java Runtime

Environment is *NOT* version 8, the *Media Manager* from the iControl HMP-1801 control panel may not always start successfully.

#### Workaround:

- 1. On your client PC, install Java 8.
- 2. Add the HMP-1801 IP address to the list of trusted sites in your PC's Java configuration.
- **3.** Restart the HMP control panel and its *Media Manager*.
- [Ref. #ICONTROL-18127] If you are upgrading your Application Server from iControl version 5.00 to version 6.00 or later, and your Application Server monitors any of the following cards, then, after the upgrade, you may find firmware upgrades for those cards (through **Densité Upgrade Manager**) may produce a Software Installation Error message. The aforementioned Densité cards are as follows:
  - FRS-3901
  - HLP-1801
  - AMX-3981
  - EAP-3101
  - FAP-3901
  - ADX-3981

#### Workaround:

- 1. Perform the Application Server installation of iControl version 6.04.
- **2.** Upgrade all cards listed above (*except* the HLP-1801 Densité card) to Upgrade Package 3.0.1-RC1 or later.
- 3. Upgrade the HLP-1801 Densité card to Upgrade Package 2.0.1-RC1 or later.
- [Ref. #ICONTROL-16307] **Axino**: The Axino Densité service in iControl version 6.04 does not support versions of Axino below version 2.00.
- [Ref. #ICONTROL-16226] If a system contains Application Servers running a combination of iControl 4.XX and iControl 5.00, opening any iControl application (e.g. Navigator, iC Web, iC Creator) may result in a subsequent inability to open service panels. Specifically, if the Application Server hosting the iControl application you are running is version 5.00 and the Application Server hosting the Densité Manager is version 4.XX, you may be unable to open the desired Densité card service panel. The same behavior has also been observed in the reverse situation, where the server hosting the application is version 4.XX and the server hosting the Densité Manager is version 5.00.

Workaround: In systems which mix Application Servers running the aforementioned version sets, make sure you open iControl applications from the Application Server hosting the Densité Manager for the desired Densité card.

**Note:** Grass Valley recommends upgrading all servers in a system to the same version.

• [Ref. #ICONTROL-16189] **Densité 3 Frame**: In iControl version 4.00 and later, in iC Navigator, a *Densité* 3+ frame appears, in the **Physical View**, to have 21 slots. This is incorrect because

the *Densité 3+* frame supports only four (4) cards. **This does not impact performance in any way.** 

- [Ref. #ICONTROL-16023] XVP-3901: If the XVP-3901 card is logging loudness data and you
  enable then disable loudness monitoring, the loudness logging activity may be
  interrupted, that is, the log file will close while a new one is created. The overall effect is a
  loss of logged loudness data.
- [Ref. #ICONTROL-12902] Axino, Kaleido Solo-900/910: When attempting to rename either
  an Axino service or Kaleido Solo-900/910 service in iControl Navigator, these services may
  disappear from iC Navigator's view.

Workaround: Restart iControl Navigator.

 [Ref. #ICONTROL-12901] Lumo Controller Service: When attempting to rename the Lumo controller service in iControl Navigator, the controller may disappear from iC Navigator's view.

Workaround: Restart iControl Navigator.

• [Ref. #ICONTROL-12724] **HCO-3901**: When the refresh rate of an HCO-3901 card is set to 10 seconds, after you power up the card, thumbnails do not display on the thumbnail panel.

Workaround: Toggle the refresh rate to FAST and then back to 10 seconds.

- [Ref. #29836] **IRD-3811**: If your video output is SD and your reference is HD, the audio may not process correctly when either of the following conditions are true:
  - You have analog audio synchronized on an SDI output.
  - Your audio is de-embedded by a de-embedder with the same reference as the IRD card
- [Ref. #29503] If your Densité cards have firmware enabling support for fingerprint
  configuration, the control panels for these cards within iControl will show fingerprint
  controls, even if the version of iControl you are using does not support it. In this case, even
  if there are incoming lipsync and reference signals, iControl is unable to detect, compare,
  nor analyze them.
- [Ref. #25584] **HMP-1801**: Profiles are not implemented yet on this control panel.
- [Ref. # 23578] In iControl Navigator, after you disable audio in the player and then re-enable it, or when you change the size parameter, the card no longer produces sound.

Workaround: Close then reopen the card's control panel.

- [Ref. #23034/24793] Streaming from Densité cards may stop if more than one iControl Application Server (or a pre-version 3.41 iControl Solo client) are connected to the same Densité frame.
- [Ref. #17030] RALM (Remote Audio Level Meter) streams on Densité cards are sometimes lost if the Application Server's host name is modified.
- [Ref. #5327/5324] It could happen that a Densité frame assigned to m[ore than one Densité Manager remains assigned to both Densité Managers even after the Densité frame is

removed from one of the Densité Managers. To correct this problem, from iControl Webmin, stop and then restart the Densité Manager service.

# Device Profile Manager

• [Ref. #21245] In the Device Profile Manager's Import tab, if you choose to import card profiles from a file, the **Physical** view remains empty.

*Workaround:* Use the Logical view or the Flat view to select the source devices whose profile you wish to import.

## **Event/Incident Log**

 [Ref. #ICONTROL-18051] After upgrading to iControl version 6.04, an error message may appear when opening the **Event Log Viewer** or **Incident Log Viewer** of a Kaleido multiviewer logging to the Application Server.

*Workaround:* Remove the *Log* plug-in, and add it again, or else restart the Kaleido multiviewer.

- [Ref. #ICONTROL-15922] If you have a network of Application Servers arranged as a
  Redundancy Group in which the configured *Main* server runs on CentOS while the
  Backup(s) run on RedHat 9, takeovers may not properly or completely transfer licensing
  schemes over to a Backup.
- Workaround:Contact Grass Valley Technical Support to manage the manual transfer of licenses from Main to Backup in networks using more than one operating system (see "Contact Us", on page 57).
- [Ref. #28658] In both the Event Log Viewer and Incident Log Viewer, after you select Autoupdate mode, subsequent changes to search criteria are not always propagated to autoupdated log results.
- After upgrading from iControl Version 3.2x (or earlier) to version 3.30 or later, it will not be possible to view the existing log database content by using the Log Viewer. If you wish to be able to access these past records, use the Log Viewer's export feature to export the data to a CSV file before upgrading your system.
- [Ref. #28189] In the Incident Log Viewer, if you populate the **Duration of at least** field in the **History** area with an existing result's duration (using the **Add to search criteria** option in the results table's shortcut menu), the subsequent search may convert the duration criterion into seconds and yield no result.
  - Workaround: Take note of the duration from the result table row you would like to add to the search criteria, manually input this value into the **Duration of at least** field, select the desired unit of time in the drop-down list, and then click **Search**.
- [Ref. #22187] When the Event Log Viewer should display the full 10,000 events at a time, it may display only several hundred.
  - *Workaround:* Close the Event Log Viewer, point iControl Navigator to a specific location, then re-open the Event Log Viewer for the single GSM.

 [Ref. #21735] When the Create an incident for each alarm automatically option is not enabled, and the Resolved filter is set to No, the Incident Log Viewer may still show resolved incidents.

*Workaround:* Assuming the **Clear** filter is also set to **No**, manually clear the unwanted incidents.

- [Ref. #21720] Some router drivers (e.g. Emulator, SW-P-02, ETL, HRS-1801, VikinX Modular, NV9000, Pesa, Pesa USP, RC2000) publish crosspoint status updates to the Event Log even when there is no change on the matrix.
- [Ref. #21255] When you perform a filtered search while the Log Viewer's auto-update mode is active, rows that do not match the specified criteria may eventually appear among the filtered search results.

*Workaround:* Disable the auto-update mode, or click the **Search** button to remove unwanted results from the view.

- [Ref. #21197] When you perform a filtered search based on a duration, rows that do not match the specified duration may appear among the search results.
- [Ref. #18445] After a GSM restart, it could happen that the Event and Incident Log
   Configuration window does not open when you click Log properties on the Incident
   Viewer's File menu.

Workaround: Close and reopen the Incident Viewer.

- [Ref. #17340] If the system clock on the client PC with iC Navigator is behind compared to the Application Server's, incidents shorter than the difference between the two clocks will appear with a duration of zero in the Incident Viewer. Likewise, an incident duration may briefly stall at zero before starting to increment, depending on the time difference between client and server.
- [Ref. #17032] Log entries are timestamped using the client PC's internal clock rather than the Application Server's. This can cause some correlation issues when viewing log entries, including acknowledgements being ignored on some client PCs.

# Fingerprint Analysis

- [Ref. #ICONTROL-16048] When selecting *Video* as a Fingerprint Analysis Mode, there should not be audio channel selectors visible (or selectable) since the only thing being analyzed is video. Currently, the audio channel selectors are visible and selectable.
- [Ref. #ICONTROL-16860] If an EdgeVision device's **Use name resolution** setting is enabled, iControl's fingerprint functionality may not start or function properly.
- [Ref. #29630] In iControl installations, the following parameters and limitations currently apply:
  - If you have a Dell PowerEdge R200 Application Server, iControl supports a maximum of 40 audio fingerprint comparisons.
  - If you have a Dell PowerEdge R210 Application Server, iControl supports a maximum of 60 audio fingerprint comparisons.

- If you have a Dell PowerEdge R310 Application Server, iControl supports a maximum of 120 audio fingerprint comparisons.
- If you have a Dell PowerEdge R320 Application Server, iControl supports a maximum of 120 audio fingerprint comparisons.
- A group is composed of a reference source and 1 or more probe sources. For the purposes of counting comparisons, the reference source is not counted.
- Application Servers used for comparison should be dedicated (i.e. they should not run other resource-intensive services).

# General Status Manager

• [Ref. #ICONTROL-18956] In iControl versions 6.04 and later, after setting up a multiviewer's *KX Router* logical router in iC Router Manager (using the Compact Router protocol), your GSM may begin to log and publish health alarms for the multiviewer and then stop. Also, you may suffer a significant slow-down on your iControl Web pages.

#### Workaround:

- 1. In a secure shell (SSH), log on to your Application Server.
- **2.** Open, with a text editor, the java.router.properties file at the following location:

/usr/local/iControl/bin/conf

- **3.** Edit the following property to appear as it is shown, here:
  - com.miranda.icontrol.routers.np0016.enableIOX=false
- **4.** Restart the *Router Manager* service.
- [Ref. #ICONTROL-16731] If the GSM of an Application Server running iControl version 4.40 or later is configured to monitor (through the Appserver Health & Monitoring plug-in) an Application Server running iControl version 4.30 or earlier, statuses may erroneously be displayed as grey in color and the communication alarm may erroneously display as red in color.
- [Ref. #26605] When you rename a virtual alarm after configuring one or more of its plug-ins (for example e-mail or scripted actions), the plug-in information may not survive.
- [Ref. #26143] If you try to add the same alarm more than once as a sub-alarm to a virtual alarm, only one of them is retained. This behavior persists when creating a virtual alarm via the graphical user interface, scripts or by virtual alarm template.
- [Ref. #25112] If you downgrade an Application Server from one version of iControl to an older version during a scheduled event (that is, after the event has begun and before it ends), the event may continue beyond its scheduled duration.
- iControl version 3.30 offers a more robust GSM configuration database. However, if the database became corrupted in version 3.2x or earlier, upgrading to version 3.30 or later could result in the loss of some configuration data. Make sure to perform a backup of your iControl system configuration (by using Webmin's iControl Maintenance Form) before upgrading.
- [Ref. #22348] The following SNMP alarms from a Kaleido-X system are not yet supported in the GSM:

- WST-Teletext
- DTVCC
- AFD/WSS Loss
- Dolby E Loss
- Dolby AC-3 Loss
- [Ref. #ICONTROL-18569] If you set up an SNMP agent on a GSM and perform an SNMP request across a firewall, you will not get a response if the server port is not the same for both the transmit and receive of the SNMP command.

Workaround: Override the response port by performing the following steps:

1. Modify the following file on the Application Server where the GSM is running:

/usr/local/iControl/bin/conf/java\_gsm.properties

**2.** Add the following property:

icontrol.snmpagent.responsePortOverride=6565

- 3. Restart the GSM.
- **4.** Perform an snmp-get operation.
- **5.** Make sure the response is sent using port 6565 (the overriding port).
- [Ref. #9012] The RMON driver is not backward compatible between versions 3.00 (and later) and 2.7. In version 2.7, an alarm URI might look similar to this:

alarm://snmp:RMON/10.4.0.2/ifOperStatus101

In version 3.00 (and later), this URI would take the form:

snmp://RMON:10.4.0.2/ifOperStatus101

iC Web sites using these alarms may need to be updated accordingly.

• [Ref. #5721/2411] When exporting log files to CSV and opening them in Excel, the timestamp column data is displayed incorrectly. For example, "2006-02-01 16:20:35.938" would be displayed as "20:35.9". The problem is that Excel is attempting to guess the data type and fails.

Workaround: Specify a format explicitly by selecting the column, then **Format** > **Cells** (or **Ctrl+1**), and specify a custom format like "yyyy-mm-dd hh:mm:ss.000" (to obtain the same result as described above).

• [Ref. #2712] The GSM plug-ins for SNMP devices do not prevent duplicate instances for the same device. Be careful not to create multiple instances of the same device and IP address, since this could result in conflicting statuses. In the case of a duplicate plug-in, remove the plug-in and then open the Alarm Browser again to see if a duplicate plug-in appears. You can find and delete duplicate instances from the Alarm Browser's **Admin** tab.

### iC Core

• [Ref. #29858] The Kaleido-K2 is unable to fetch router labels from Application Servers running iControl version 4.00 and later.

### iC Creator

• [Ref. #32081] When using scripting to modify the logical path of a card service, the *Logical* path attribute data may not be successfully re-imported.

Workaround: Manually change the Logical path attribute to include the prefix Logical view!@#\$, followed by the logical path (replacing any slashes with !@#\$), followed by !@#\$. For example, if the logical path is test/data, then you should change the string to Logical view!@#\$test!@#\$data!@#\$.

• [Ref. #28297] In iC Creator, a dynamic player assignment with a video label may not succeed if the player has no default video label.

Workaround: Specify a default label (even a space character will work).

• [Ref. #2616] In Windows, it is not possible to create new folders directly in the My Documents directory, directly from the **Open** and **Save** windows.

*Workaround:* Create the folders using Windows Explorer and then open them in iC Creator.

• [Ref. # 24292] In iC Creator, if you create a page where the page name contains the word "Widgets" (exact case, plural), the page will not load properly.

Workaround: Rename the page.

- [Ref. #18864] Local changes done to composite widgets nested inside other composite widgets cannot be saved successfully.
- [Ref. #16000] It is not possible to save grouped components (e.g. video player + alarm panel) to a library.

# iC Navigator

• [Ref. #22767] Intermittently, the overall status of one or more cards below a selected row in the list is not updated. Clicking on a card to select it updates its status. This behavior occurs in both **Logical** and **Physical** views and on all types of cards.

**Note:** This behavior does not occur in the GSM Alarm Browser.

• [Ref. #DA 2009-00152/22480] If more than one person is working in iC Navigator's **Logical** view on the same Application Server and one is editing device names when another causes the list to re-sort, the first person will be editing a different device's name. If you do not notice it happening, you may change the wrong device's name.

Note: This problem does not happen in Physical view.

 [Ref. #14090] Changing the Application Server's internal clock may have an impact on some scripted tasks (e.g. polling an alarm status). If you must change the internal clock, you should restart iControl.

**Note:** This does not apply to changes in time displayed on web pages, such as those that occur when switching between Daylight Savings Time and Standard Time.

- [Ref. #12605] Up to 50 Composite Service Panels (created in Virtual Service Manager) are supported per Application Server.
- [Ref. #4231/11234] Empty folders in iC Navigator are automatically removed. A folder must contain at least one card to remain in iC Navigator.
- It could take up to one minute for iC Navigator to know that services are no longer available.

### iC Web

- [Ref. #ICONTROL-18547] An embedded Web browser configured without a toolbar also lacks a status bar, which prevents it from reporting download progress.
  - *Workaround:* When adding the zone meant to contain this Web browser, make sure to configure the Web browser with a—basic, or extended—toolbar.
- [Ref. #ICONTROL-18883] In iC Web—starting from version 6.04—an NV9647R panel embedded in a zone does not function properly.

**Note:** The NV9647R panel on an RCP-200 continues to function as designed in all versions.

• [Ref. #ICONTROL-13742] On client systems, you may not be able to load a Web browser in an iC Web zone.

Workaround: Disable the User Access Control (UAC) in Windows.

- Some icons appearing in sites created by earlier versions of iC Creator will not be properly sized or scaled when used with iControl version 3.00 (and later). To properly size and scale all icons, simply use iC Creator to open and re-save each page.
- iC Web sites that were created with iC Creator versions 2.0 or 2.2 can only be used with version 3.00 (and later) if each individual page is opened and re-saved with iC Creator.
- [Ref. #4871] It is not possible to replace the current home page with a new home page that differs only in character case (say, http://host/mysite/aPage.mpf and http://host/mysite/apage.mpf). Workarounds include clearing the home page before setting the new one, or setting an intermediate home page before setting the new one.
- [Ref. #2588] It is not possible to embed multiple iC Navigator instances in an iC Web page.

### iControl Web Interface

• [Ref. #ICONTROL-17872] After a brand new installation of an iControl Application Server running iControl version 6.04, when you navigate to the *System statistics* page, you might not see the expected hour, day, week, and month tabs.

This behavior will rectify itself (tabs will become visible, one-by-one) when the scheduled statistics are eventually received and can populate the respective graphs.

### **Imagestore**

• [Ref. #35435] On the control panel for an ImageStore device, when you click one of the Video GPI or Audio GPI buttons on the **Control** tab, the system activates a different virtual GPI than was indicated.

*Workaround:* Map the Video GPI and Audio GPI buttons of the ImageStore control panel to the corresponding activated GPI using the following matrix:

Mapped Virtual GPI
2
3
4
5
10
11
12
13

• [Ref. #17022] The **Bypass** button in the iControl service panel for an Imagestore only allows you to enable a bypass, not to remove it.

# **Imaging Series**

- Using a Quartet 1 frame to house AAP-711, ADL-701, AAP-712 and AAP-702 cards could cause iControl to mismatch slot numbers. If a card in the reference configuration is removed, another type of card inserted and removed in the slot, and then the first card is put back, it can re-appear in slot 2. The same cards could also cause iControl to misbehave. Sometimes, two of the cards can disappear from iC Navigator and return after a while. These cards consume a lot of power and the Quartet frame could encounter some problems from time to time; it is recommended to use a Symphonie frame with this set of cards.
- It can take up to 45 seconds to discover a Quartet 1 frame. Discovery of the Quartet 2 frame is much faster.
- [Ref. #10199] It can happen that an Imaging communicator fails on startup when trying to initialize its serial comport.

Workaround: Try restarting the Imaging Connection Manager for that port using Webmin's iControl services monitoring and configuration tool (refer to Starting & Stopping

*iControl Services* and *Working with Imaging Communicators*, in the *iControl User Guide*), or wait for the problem to correct itself (an auto-restart task ensures that any process that has failed is restarted; the auto-restart task runs every 60 seconds).

# Installation and Deployment

• [Ref. #ICONTROL-18759] If you are running an iControl client from an Application Server with software older than version 6.20, any attempt by that client to launch a service from a different Application Server that is running iControl version 6.20 (or later) will fail.

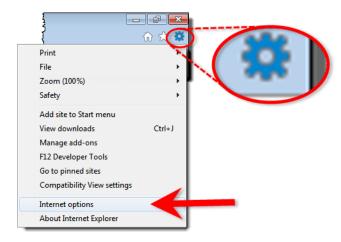
Workaround: Update all Application Servers in your network to iControl version 6.20 (or later).

[Ref. #ICONTROL-18003] When attempting to open iControl Launch Pad from the Startup page using Microsoft Internet Explorer 10 as a browser, on rare occasions, iControl Launch Pad may fail to open. Similarly, if you attempt to download this executable file to your PC using Internet Explorer 10, you may find that the download operation fails.

When Internet Explorer 10 attempts to launch or download a file with periods (.) in the file name, it substitutes underscores in the place of periods. Perform the following steps as a workaround procedure:

#### Workaround:

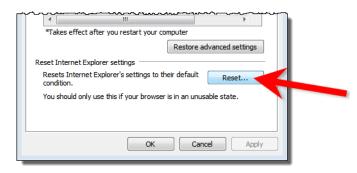
1. In Internet Explorer 10, click the cog icon in the upper, right corner, and then click **Internet options**.



Click on the Advanced tab.



3. Click Reset.



- **4.** Reboot your system.
- **5.** When opening Internet Explorer for the first time, select the recommended security settings.
- [Ref. #ICONTROL-17527] If your client PC's browser is Microsoft Internet Explorer, iControl
  may not display properly.

#### Workaround:

- 1. Open Internet Explorer.
- 2. Press F12.
- 3. Change the **Document mode** from **Quirks** to the latest Internet Explorer standard.

# Loudness Logger/Analyzer

• [Ref. #ICONTROL-18764] After powering down the NAS and waiting several minutes for the Loudness Logger interface to enter disabled mode, restarting the NAS and the Loudness Logger interface may not successfully restart the log streams from one or more source cards. The cards that fail to send loudness data will display Waiting for data or No data messages.

Workaround: Cards that fail to send loudness data in this situation must be restarted manually in order to restart loudness data streaming.

• [Ref. #ICONTROL-16025] If you have an active loudness data source and you attempt to remove the Kaleido-Solo in the Densité Manager, you may receive an error message indicating the device is unavailable.

#### Workaround:

- Remove the Kaleido-Solo from the Densité Manager while the source is still active.
   In Loudness Logger, the Kaleido-Solo should still be visible but will display as unavailable.
- **2.** In the Loudness Logger list, right-click the Kaleido-Solo and stop the service. Although an error message appears, the service will stop.
- [Ref. #ICONTROL-15959] If you have an XVP-3901 card whose *Loudness* option is not enabled, and you attempt to start logging from and then subsequently enable the card's *Loudness* option, the **Loudness Logger** status for that card remains <card> waiting for data.

*Workaround:* In **Loudness Logger**, once the option is enabled, right-click the service, toggle the log to **OFF**, and then toggle the log back to **ON**.

• [Ref. #37262] If the Loudness Logger is active while you switch inputs to the Kaleido-Solo (KS910), the Logger may not recover (restart logging) automatically. In such a case, on the Loudness Logger configuration page, the corresponding KS910 would display NO DATA.

#### Workaround:

### To recover logging capability:

- 1. Open the Densité Manager.
- 2. Select the problematic Kaleido Solo.
- **3.** Put the Kaleido Solo in *Standby* mode.
- 4. Put the Kaleido Solo in Online mode.
- [Ref. #36220] Loudness Analyzer does not display TIMECODE metadata.

# **Grass Valley Interface Updater**

• [Ref. #21974/25234] A Densité card upgrade may fail when another application—in addition to Grass Valley Interface Updater—is already connected to the CPU-ETH2 controller of this card's frame.

As of iControl version 3.40, Grass Valley Interface Updater displays a message listing all applications or services already connected to the same Densité frame. Such connections can come from the iControl Densité Manager, but also from other Application Servers, from computers running iControl Solo, or from iControl Router Manager (if the Densité frame contains cards with router capabilities, such as the HRS-1801, HCO-18x1, DCO-17x1, MSB-1121).

**Note:** The message lists the IP addresses associated with connections made to the Densité controller. From the IP addresses, your system administrator will be able to identify the associated application or service.

#### See also

For more information about how to upgrade firmware on a Densité card, see the "Upgrading Firmware on a Densité card" section in the "Configuring Devices & Services" chapter of the *iControl User Guide*.

# Grass Valley Media Player

• [Ref. #28668] On an iC Web page that has several players, when you switch from NTSC to PAL format, one or more players may no longer function properly.

*Workaround:* Make sure you select the appropriate video format check box (525 or 625) in the device's control panel.

# Platform and Support

• [Ref. #ICONTROL-19081] When upgrading a Dell PowerEdge **R200** Application Server, the system may report that the upgrade process is taking too long, after which the server does not automatically restart.

Workaround: Manually restart the Application Server.

- [Ref. #ICONTROL-19279] The Application Server Ethernet port eth1 does not support a
  default gateway.
- [Ref. #ICONTROL-9257] Once your iControl system is configured, **changing a Densité frame's host name**, results in the loss of any attributes (e.g., labels, comments, etc.) you might have previously configured for cards housed in the renamed frame. Contact Grass Valley Technical Support if this is required (see "Contact Us", on page 57).
- [Ref. #ICONTROL-7466] After the system is configured, **changing the Application Server host name** will require that all devices be renamed in iC Navigator, and all assignments be re-done in iC Web after the change. **Changing IP addresses** has a much smaller impact limited to re-assigning streams in iC Web. Also, "Reference Configuration" must be removed after changing the Application Server name. Otherwise, devices will still keep attributes based on previous host name. Contact Grass Valley Technical Support if this is required (see "Contact Us", on page 57). There is a way to recover the user settings after a system rename.
- [Ref. #ICONTROL-18774] When a configured Redundancy Group of Application Servers mixes virtual machines and physical Application Servers—such that virtual machines are in the role of *Backup* for a physical machine or vice versa—the *Backup* server may continue to restart, in a loop, following a failover scenario.

Additionally, when a configured Redundancy Group involves only virtual machines in **BOTH** the roles of *Main* and *Backup*, the same restart-loop behavior seen in the scenario above occurs if the *Main* and *Backup* are not both running underlying Linux platforms at the same bit-processing level (i.e. either **BOTH** 32-bit CentOS or **BOTH** 64-bit CentOS).

Workaround: When configuring the Redundancy Group and the overall redundancy topology, make sure virtual machines are not mixed with physical machines. Furthermore, if both *Main* and *Backup* devices are virtual machines, ensure they are running operating systems at the same bit-processing level.

- [Ref. #ICONTROL-15831] Application Servers of the Dell R200 model use a Linux kernel that does not support 4GB of RAM. This decreases the amount of usable memory in such systems to 3.3GB.
- [Ref. #30978] iControl's *Edit Service Location* Web page may not function properly when using Mozilla Firefox version 4.x.

Workaround: Use Mozilla Firefox version 3.6.

• [Ref. #21437] When a system takeover is performed, the redundant unit will be missing the Data Management Tool tables, if any, from the main system. The DMT tables are also missing when a system is restored from backup.

- *Workaround:* If you have exported data from DMT, you can restore the DMT tables by importing the data into DMT once the system takeover or restore is complete.
- [Ref. #20914] Mixing application servers that have different iControl versions in the same cluster is not supported. Although it is possible to configure an application server with iControl Version 3.20 to replicate a server that has Version 3.30 (using the Profile Replication Management Tool), any attempt to have the Version 3.20 system take over will fail.
- [Ref. #18748] An unexpected power disruption, such as might occur during a power failure, can damage the file system on an iControl Application Server. It is strongly recommended that all Application Servers be connected to a standby power source, such as a UPS (Uninterruptible Power Supply), as a preventive measure.
- [Ref. #9059] It is impossible to tell whether a TSL controller is actually connected to the Application Server over RS-422, so the service may reflect a normal status even though the device has been disconnected.
- In versions of iControl prior to 3.11, it was possible for multiple Application Server Health Monitoring driver instances to have the same overall URI. When upgrading to iControl Version 3.11 from previous versions, these URIs will change, so that you will need to update any iControl Web pages that refer to them.
- If the Application Server swaps heavily, the iControl home page may not respond due to a
  known problem with the third-party Web server (Tomcat) which may be indicating that
  more memory is required. Check the Historic System Resources in Webmin to verify
  available memory and whether memory swapping is occurring. Restart Tomcat on the
  Application Server or simply reboot to remedy this problem. A memory upgrade may be
  required if the problem persists.
- If a software upgrade of iControl fails during the first attempt, additional attempts to upgrade the software can result in loss of data. Recovery may consist of removing the folders /usr/local/iControl and /usr/local/iControl-Old from the Application Server and reinstalling the new build. Make sure a backup of the Application Server is performed from Webmin before doing this so that the configuration can be restored after a clean install.
- Ensure that the port settings on switches are set correctly for optimal performance. The Application Server Ethernet ports **eth0** and **eth1** are both configured to auto-negotiate.
- When upgrading to 3.00 (and later) from a pre-3.00 release, the MySQL service is uninstalled as it is being replaced by PostgreSQL. Contact Grass Valley Technical Support for instructions if you need to keep your MySQL installation (see "Contact Us", on page 57).
- To administer security for a given domain, it is important to launch the administration application from an Application Server in that domain.
- You should not use the superuser account to perform day-to-day operations as it may not work for all operations. The superuser account exists primarily to allow configuring access control for all other accounts. For all other operations, use a real account with administrator or operator privileges.

• iControl primarily supports English language characters. In some cases, the use of nonstandard characters may not be recognized when used in labeling devices, channels and parameters in iC Navigator, iC Web and iControl Router.

# Redundancy / Failover

• [Ref. #ICONTROL-17024] After an Application Server failover and subsequent reverse-takeover both occur, if there is no ensuing replication before the next failover, this second failover operation may not be successful.

Workaround: Either increase the replication frequency by reducing the amount of time between replication operations, or—if it is preferable *not* to permanently increase the frequency—set the replication to occur five minutes following a reversal, wait for the replication process to complete, and then reset the frequency to once every six hours.

• [Ref. #ICONTROL-16859] If an EdgeVision device's **Use name resolution** setting is enabled and a connected Application Server undergoes a reverse failover operation, the GSM of that server may not successfully detect routers (although Router Manager and iControl Navigator will) without restarting the GSM service in iControl.

Workaround: Restart the GSM service in iControl.

• [Ref. #ICONTROL-11281] When performing a reverse takeover, the Webmin services of the Main Application Server may fail to start.

Workaround: Before configuring redundancy groups, disable the **eth1** port.

- [Ref. #ICONTROL-17465] The *Redundancy Configuration* page may not auto-refresh, even when the **Refresh the Auto-failover page** check box is selected.
- [Ref. #ICONTROL-17138] After a failover or takeover operation, some iControl services may not restart on their own.

*Workaround:* Restart the GSM if you discover, after a failover or manual takeover, that some services remain *blue* in iC Navigator.

• [Ref. #27148] If a failover occurs and a scheduled action is already in progress, the scheduled action continues indefinitely regardless of the configured duration period.

Workaround: After a failover occurs, verify the configured time frames of scheduled events to ensure the command to end an action was not scheduled to happen while the Application Server was offline.

• [Ref. #25510] After performing the following steps, the Main IP address may be unknown according to the Redundancy page of the Backup Application Server, and the Reverse button may not be present:

#### Steps:

- **1.** Perform a takeover of a Main Application Server running CentOS by the Backup Application Server.
- 2. Reverse the takeover.
- **3.** Perform a takeover of another Main running Red Hat Linux 9 by the Backup Application Server.

Recommendation: It is strongly suggested to use the same operating system version on all platforms within the same cluster (that is, Option 1 is to use the Dell PowerEdge R200 and R210 together, Option 2 is to use the Dell PowerEdge 750, 850, and 860 together).

#### Workaround:

- **1.** Access the Application Server that has Red Hat Linux 9 by using PuTTY (available from the **Useful downloads** link on iControl's Startup page).
- 2. Create a temporary directory (for example, /root/tmp)
- **3.** Copy these files from the *CentOS* host machine to the tmp directory of the Red Hat Linux 9 host machine using SCP (also available from the **Useful downloads** link on iControl's Startup page):

```
/etc/ssh/ssh_host_rsa_key
/etc/ssh/ssh_host_rsa_key.pub
/root/.ssh/id_rsa
/root/.ssh/id_rsa.pub
```

- 4. Remove the cluster.conf files from all hosts.
- **5.** Remove these files from all hosts:

```
/root/.ssh/known_hosts
/root/.ssh/authorized_keys
```

**6.** On the Red Hat Linux 9 host, copy the files by typing the following commands:

```
cp ssh_host_rsa_key ssh_host_rsa_key.pub /etc/ssh
cp id rsa id rsa.pub /root/.ssh
```

**7.** Restart *sshd* by typing the following commands:

```
service sshd restart
```

- **8.** Reconfigure the Redundancy Groups.
- [Ref. #24597] If an Application Server (whose iControl services are initially online) is added to an existing redundancy group in the role of *Backup*, the iControl services of this new Backup Application Server continue to run after the server has been added to the group.

Workaround: Before adding an Application Server to a redundancy group as a Backup, make sure you stop iControl services first.

- [Ref. #24199] Connection to a Backup Application Server may be lost if either of the following is true:
  - The configured IP address, in the Redundancy Configuration Form's **Extra IP** field, is outside the group's subnet.

#### OR.

 There is no configured IP address in the Redundancy Configuration Form's Extra IP field, and the factory default IP address is outside the group's subnet.

Workaround: Disconnect and then reconnect the Backup from the network.

- [Ref. #23834] When a user connects a device to the network with the same IP address as one of the Main Application Servers in Auto-failover mode, the Main could become Yellow/Unknown and a failover could be triggered.
- [Ref. #23639] Backup Application Server keeps Main's host name after a reverse takeover if not taking Main's IP address.
  - *Workaround:* Change host name on Backup Application Server back to Backup host name.
- [Ref. #23624] Cluster synchronization problem when replacing a Main Application Server after a failover without taking the Main's IP address.
  - Workaround: The documented procedure (Replacing an Application Server in a Redundancy Group) in the iControl User's Guide outlines the appropriate steps you should take depending on whether you have chosen to have the Backup take the Main's IP address or not.
- [Ref. #23470] After a failover, the backup files listed on the iControl Backup page of the Application Server that is now online are the backup files of the configured Backup and not the configured Main. The backup files on the newly online Application Server should be from the configured Main.
  - Workaround: Perform a Reverse Takeover. After a Reverse Takeover, the Main's backup files are available on the Main Application Server and the Backup Application Server's backup files are on the Backup Application Server.
- [Ref. #23402] After a takeover, the cluster goes into Manual mode and does not automatically re-enable the Autofailover function after a reverse takeover is performed.
  - *Workaround:* Log on to the configured Backup Application Server's Webmin, navigate to the **Redundancy Configuration Form**, manually re-enable the Autofailover function for all Main Application Servers, and then click **Apply**.
- [Ref. #23109] After downgrading from iControl version 3.50 to an earlier version, if you attempt to upgrade back to iControl version 3.50, the upgrade may not work.
- Workaround:Contact Grass Valley Technical Support (see "Contact Us", on page 57).
- [Ref. #22986] When a Backup Application Server takes over a Main, permissions on the Web Pages will no longer work if both of the following conditions are true:
  - the LDAP server is enabled on the Main
  - the Autofailover function is NOT configured to take over the Main IP address

**Note:** If the Backup is configured to reuse the Main's IP address, this issue does not occur.

Workaround: Reset the permissions on the Web Pages of the Backup Application Server. You can change the permissions in iC Creator. Also, you must reconfigure the LDAP referrals if they exist on the Webmin Security page (see Configuring LDAP on an Application Server in the Access Control chapter of the iControl User Guide).

• [Ref. #22984] In situations where you are running a version of iControl earlier than 3.40 and are upgrading to a later version, replication data will not survive the upgrade.

After an upgrade from a version prior to Version 3.40 to a later version, you must re-enter replication data including the addition of Application Servers in the Redundancy Groups, the desired replication frequencies, and the desired Extra IP.

### **Router Control**

- ★ [Ref. #ICONTROL-19300] **NV9000 system controllers:** A logical router based on a physical router configured in iControl Router to use the NVISION Ethernet protocol - Enterprise router (Device ID based) protocol may lose communication with the actual NV9000 system controller.
- [Ref. #ICONTROL-15929] If your router is an NV9000 running software version 5.2.4 or earlier, your controller and overall router control may stop functioning.

#### Workaround:

- 1. Log into the Application Server via secure shell (SSH).
- **2.** In a text editor, open the rtr serv file, found at the following location:

/usr/local/iControl/bin/rtr serv

3. Edit the line DEF OPTIONS="\${DEF OPTIONS} by adding the following to the end of this line:

-Dcom.miranda.icontrol.routers.common.device.thread.sleep.enabled=false -Dcom.miranda.icontrol.routers.nv9000.max alias set=0 -Dcom.miranda.icontrol.routers.nv9000.max number categories=0"

**Note:** This is a single line of code.

- **4.** Restart the router service.
- [Ref. #28342] When there are multiple routers on a network with the same router name, Matrix and Single Bus views in iC Router Control may open with disabled Level buttons, a lack of status, and, in the case of the Matrix view, a  $16 \times 16$  matrix size not matching the actual device's configuration.

Workaround: Make sure you choose unique router names.

 [Ref. #24675] When configuring a logical router in Router Manager Configurator, the Auto update labels check box on both the Source mapping and Destination mapping tabs may not be visible. This happens if you leave the Router Manager Configurator window in its default size, and there is no indication that part of the user interface is hidden beyond view.

Workaround: Resize the window until it is wide enough to show the check box.

• [Ref. #23585] When an NV9000 system controller is controlling a multiviewer's KX Router logical router and the multiviewer is controlling the NV9000, the NV9000 may indicate that the multiviewer is offline.

*Workaround:* Change the timeout period on the NV9000 system controller. The recommended timeout value is 2000 milliseconds.

• [Ref. #22107] If a third-party router controller sends a command (using the VikinX Modular protocol) to Level 1 of a router connected to an iControl Application server, the command is sent to Level 0 instead. This is due to the particular way in which the VikinX Modular protocol is handled by the NDC component of iControl.

*Workaround:* On the third-party router controller, increment the target Level (or Frame ID) by one. For example, to change a crosspoint on Level 1, send the instruction to Level 2.

- [Ref. #21721] Physical labels from an SW-P-08 router are not visible in the associated Logical redundancy router.
- [Ref. #20029] After a router configuration change is made in Router Manager Configurator, current Matrix views will be reloaded, but may not reflect the actual level selection state.

Workaround: Restart the Matrix application, or press the level buttons to refresh the view.

- [Ref. #18955] As of version 3.30, router configuration changes made in Router Manager Configurator are not compatible with earlier versions of the software. Downgrading is supported but any change to the router configuration made in version 3.30 or later will be lost during the downgrade. After downgrading, any router configuration will have reverted to what it was before the last upgrade.
- [Ref. #5762] Direct router panel access from iC Navigator does not work if there is an underscore character (\_) in the Application Server host name (e.g. *qc\_appserver*). To access the Router Manager Configurator, the actual router manager name must be specified in the URL address.
- [Ref. #76/1495] If multiple Router Manager services must run on multiple Application
  Servers within the same subnet, make sure all Router Manager service names are different.
  To change a Router Manager service name, open the associated control panel from
  iControl Navigator.

**Note:** This and other issues can be avoided by observing proper syntax when creating host names. Please refer to *Restrictions on valid host names* at http://en.wikipedia.org/wiki/Hostname.

### **SNMP Drivers**

 [Ref. #31469] When iControl is connected to a large Kaleido system, using the Kaleido-X SNMP plug-in to retrieve alarms may cause system performance issues as well as an Out of Memory error.

Workaround: When attempting to retrieve multiviewer alarms, you should use the remote multiviewer GSM logging functionality on the Kaleido-X.

### **SNMP Driver Creator**

• [Ref. #29447] In a system involving traps but no polling, the Device communication alarm status may persist in a *Pending* state.

### Streaming Infrastructure

• [Ref. #24503] It is possible to lose a stream (audio or video, ALMS or thumbnail from any card that can stream) if a frame is moved from one Densité Manager to another on the same Application Server.

Workaround: Restart the Darwin Streaming Server.

### **Third Party Devices**

• [Ref. #26991] The values of the two text alarms related to the ETL 2745 LNB power supply (Firmware Revision, Polling Interval) are not properly updated.

Workaround: Change these text alarms' GSM contribution from Disabled to Passthrough.

• [Ref. #25278] When connecting an Application Server to more than one ETL 2745 LNB power supply, the first ETL 2745 device you connect to is accepted, but subsequent ETL devices are refused. The error message is as follows:

The service on <IP address of the Application Server> is already running.

*Workaround:* Connect no more than one ETL 2745 power supply to any one Application Server. For example, if you require three ETL 2745 devices, connect each of them to their own, separate Application Server.

- [Ref. #21877] iControl supports the Tektronix MTM400 firmware version 3.0 and earlier. It is *NOT* compatible with firmware version 3.1.
- [Ref. #18784] When upgrading from iControl version 3.20 (and later) to a newer version, the
  existing WidgetLibrary is renamed WidgetLibraryOld, and a new, upgraded WidgetLibrary
  is installed. Custom widgets that had been saved in the old WidgetLibrary become
  unavailable in iC Creator.

*Workaround:* Import custom widgets from WidgetLibraryOld, and save them in a location other than the new WidgetLibrary.

- [Ref. #17698] Upgrading from iControl version 2.XX to version 3.XX deletes all Webmin users except root and miranda.
- [Ref. #13242] If one transport stream frequency is wrong, the MTM400 service panel shows no data on any transport stream.
- [Ref. #12976] Support for the various input formats (QAM, QPSK, GigE) of the Tektronix MTM400 is strongly tied to the Tektronix firmware version. For example, support for QPSK input in iControl version 3.10 and later requires firmware version 2.6 on the MTM400. Please contact Grass Valley Technical Support for more information (see "Contact Us", on page 57).

# **Cards and Devices Supported in this Release**

# Densité Series Cards

Starting with version 5.00, iControl supports all Densité card types, including cards that do not yet exist, via *Densité Upgrade Manager*, an iControl utility allowing you to manage the firmware and software versions of individual cards. iControl version 7.20 is compatible with Densité Ethernet Controllers (CPU-ETH2 and CPU-ETH3). Use Densité Upgrade Manager to upgrade your Densité cards' firmware and services, as needed. Refer to the Release Notes included with a card's upgrade package, for compatibility information. Refer to *Working with Densité Upgrade Manager*, in the iControl User Guide, for more information.

### **Routers**

The following table lists the router protocols supported by iControl Router Manager. The individual drivers are available as options. Contact your sales representative for details.

Router protocols supported by iControl Router Manager

Company Protocol		Typically used with
Datatek	D-2815 Control Module Protocol	
Digipath	Digipath series communications protocol	Sahara
ETL	ETL Matrix	ETL Matrix
Evertz	Quartz Type 1 ASCII Protocol	EQX
Imagine Communications (Harris/Leitch)	Harris XY Passthrough Protocol	Platinum, Xplus, Integrator, Via-32, Panacea, Xpress
Lantronix	(Lightwave) Matrix-Hub Protocol	Matrix-Hub 1000
Nevion (Network	Network Compact (serial)	VikinX Compact
Electronics)	Network Modular (Ethernet)	VikinX Modular
Grass Valley	Densité	HRS-1801
	Densité	HCO-1801
Grass Valley (NVISION)	NVISION Ethernet protocol - Enterprise router	NV9000 system controllers
	NVISION Ethernet protocol - Compact router	Compact router series
	NVISION Serial Router Control protocol	NVISION routers
PESA	CPU Link Protocol No.1 (serial)	Cheetah, Tiger TDM3000, Jaguar, Cougar,
	USP (Unsolicited Status Protocol)	Ocelot, Bobcat, PERC2000 system controller
Quintech	XRM/SRM/MRF/MRM Series Protocol (serial)	SRM 2150 Matrix Switching Systems
SAM (Snell/Pro-Bel)	General Switcher Protocol (SW-P-02)	
	General Remote Protocol (SW-P-08)	Halo, Aurora and Sirius Controller (serial control)

### Router protocols supported by iControl Router Manager(Continued)

Company	Protocol	Typically used with
Sony	GVG-NP Emulation	Sony routers (requires HKSPC card); GVG routers (Ethernet)
Thomson/Grass Valley	GVG 7000 Native Protocol (serial)	Concerto-series routers, Encore-series control panels
Thomson/Grass Valley (Philips)	Jupiter VM-3000 ASCIII Protocol	Venus-series and Trinix-series routers
	ES-Switch Protocol (serial)	Jupiter VM 3000 and CM 4000 system controllers
Utah Scientific	PL-160/PL-320	AVS-1B
	RCP-1	SC-1, SC-2, SC-3 series
	RCP-3	SC-4 (Ethernet only)

# **SNMP Devices**

The following table lists the SNMP devices supported in iControl. SNMP drivers are available for each device. Contact your Grass Valley sales representative for details.

### Devices supported by iControl through SNMP

Manufacturer	Device	
Manufacturer	Device	
Alpermann + Velte	Rubidium Universal Video Data Processor	
APC	AP7900 Switched 19-inch Rack-mountable Power Distribution Unit	
Axon	DAW30 audio watermarks embedders	
Bridge Technologies	VB-Series	
	VBC VideoBRIDGE Controller	
Cisco (Scientific Atlanta)	9660 (serial control)	
	D9228 Multiple Decryption Receiver (IC-SNMP-032)	
	D9828 Multiple Decryption Receiver	
	D9850 Program Receiver (IC-SNMP-024)	
	D9900 Digital Content Manager MPEG Processor	
	PowerVu Network Center	
	D9140 Multiplexer	
	D9190 PCAM	
Communications & Power Industries	TL22CI TWT Compact High Power Amplifier	
CrystalVision	CrystalVision 2000 (IC-SNMP-021)	
Davicom	Mac Plus (IC-SNMP-001)	
DVBControl	DVBMosaic	

Ensemble Designs  Avenue  Evertz  500FC  3000 MVP  7700 Series Modular Video and Audio Interfaces (IC-SNMP-002)  7867VIPA-DUO  3405 Card  Kaleido-Alto/Quad/Quad-Dual  Kaleido-K2  Kaleido-X  NVISION N9000 system controllers  Imagestore 750 (via Oxtel protocol)  Grass Valley (Thomson)  Jupiter VM-3000  SMS-7000  Granite Sentinel Remote MPEG-2 QoS Monitor  Triton  Harmonic  MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris  See Imagine Communications  IETF  HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)  ILC (Datapath)  MaxView		
3000 MVP   7700 Series Modular Video and Audio Interfaces (IC-SNMP- 002)   7867VIPA-DUO   3405 Card   Kaleido-Alto/Quad/Quad-Dual   Kaleido-K2   Kaleido-X   NVISION N9000 system controllers   Imagestore 750 (via Oxtel protocol)   SMS-7000   Granite Sentinel Remote MPEG-2 QoS Monitor   Triton   Harmonic   MaxLINK HOA 8030 (IC-SNMP-029)   NMX   Proview 7000   Harris   See Imagine Communications   Internet Control Message Protocol (ICMP)   MIB-II (RFC 1213)   RMON (RFC 2819)   RMON (RFC 2819)		
T700 Series Modular Video and Audio Interfaces (IC-SNMP- 002)  7867VIPA-DUO  3405 Card  Kaleido-Alto/Quad/Quad-Dual  Kaleido-K2  Kaleido-X  NVISION N9000 system controllers  Imagestore 750 (via Oxtel protocol)  Grass Valley (Thomson)  Jupiter VM-3000  SMS-7000  Granite Sentinel Remote MPEG-2 QoS Monitor  Triton  Harmonic  MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris  See Imagine Communications  IETF  HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
T867VIPA-DUO 3405 Card  Grass Valley (Miranda/NVISION)  Kaleido-Alto/Quad/Quad-Dual  Kaleido-K2  Kaleido-X  NVISION N9000 system controllers  Imagestore 750 (via Oxtel protocol)  Grass Valley (Thomson)  Jupiter VM-3000  SMS-7000  Granite Sentinel Remote MPEG-2 QoS Monitor  Triton  Harmonic  MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris  See Imagine Communications  IETF  HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
Grass Valley (Miranda/NVISION)  Kaleido-Alto/Quad/Quad-Dual  Kaleido-K2 Kaleido-X NVISION N9000 system controllers Imagestore 750 (via Oxtel protocol)  Grass Valley (Thomson)  Jupiter VM-3000 SMS-7000 Granite Sentinel Remote MPEG-2 QoS Monitor Triton  Harmonic  MaxLINK HOA 8030 (IC-SNMP-029) NMX Proview 7000  Harris  See Imagine Communications  IETF HOST-RESOURCES MIB Internet Control Message Protocol (ICMP) MIB-II (RFC 1213) RMON (RFC 2819)		
Grass Valley (Miranda/NVISION)  Kaleido-Alto/Quad/Quad-Dual  Kaleido-K2  Kaleido-X  NVISION N9000 system controllers  Imagestore 750 (via Oxtel protocol)  Grass Valley (Thomson)  Jupiter VM-3000  SMS-7000  Granite Sentinel Remote MPEG-2 QoS Monitor  Triton  Harmonic  MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris  See Imagine Communications  IETF  HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
(Miranda/NVISION)       Kaleido-K2         Kaleido-X       NVISION N9000 system controllers         Imagestore 750 (via Oxtel protocol)         Grass Valley (Thomson)       Jupiter VM-3000         5MS-7000       Granite Sentinel Remote MPEG-2 QoS Monitor         Triton       Triton         Harmonic       MaxLINK HOA 8030 (IC-SNMP-029)         NMX       Proview 7000         Harris       See Imagine Communications         IETF       HOST-RESOURCES MIB         Internet Control Message Protocol (ICMP)         MIB-II (RFC 1213)         RMON (RFC 2819)		
Kaleido-K2  Kaleido-X  NVISION N9000 system controllers  Imagestore 750 (via Oxtel protocol)  Grass Valley (Thomson)  Jupiter VM-3000  SMS-7000  Granite Sentinel Remote MPEG-2 QoS Monitor  Triton  Harmonic  MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris  See Imagine Communications  IETF  HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
NVISION N9000 system controllers Imagestore 750 (via Oxtel protocol)  Grass Valley (Thomson)  Jupiter VM-3000  SMS-7000  Granite Sentinel Remote MPEG-2 QoS Monitor  Triton  Harmonic  MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris  See Imagine Communications  IETF  HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
Imagestore 750 (via Oxtel protocol)  Grass Valley (Thomson)  Jupiter VM-3000  SMS-7000  Granite Sentinel Remote MPEG-2 QoS Monitor  Triton  Harmonic  MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris  See Imagine Communications  IETF  HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
Grass Valley (Thomson)    SMS-7000		
SMS-7000  Granite Sentinel Remote MPEG-2 QoS Monitor  Triton  Harmonic MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris See Imagine Communications  IETF HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
Granite Sentinel Remote MPEG-2 QoS Monitor  Triton  Harmonic MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris See Imagine Communications  IETF HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
Triton  Harmonic  MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris  See Imagine Communications  IETF  HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
Harmonic MaxLINK HOA 8030 (IC-SNMP-029)  NMX  Proview 7000  Harris See Imagine Communications  IETF HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
NMX  Proview 7000  Harris  See Imagine Communications  IETF  HOST-RESOURCES MIB Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
Proview 7000  Harris See Imagine Communications  IETF HOST-RESOURCES MIB Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
Harris  See Imagine Communications  HOST-RESOURCES MIB  Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
IETF HOST-RESOURCES MIB Internet Control Message Protocol (ICMP) MIB-II (RFC 1213) RMON (RFC 2819)		
Internet Control Message Protocol (ICMP)  MIB-II (RFC 1213)  RMON (RFC 2819)		
MIB-II (RFC 1213)  RMON (RFC 2819)		
RMON (RFC 2819)		
ILC (Datapath) MaxView		
Image Video RDU-1510 series of under monitor displays	RDU-1510 series of under monitor displays	
Imagine Communications Panacea clean/quiet switch		
Selenio X85		
Selenio X100		
Ineoquest Singulus G1-T		
JDSU VSA API v2		
Lawo Nova 73 HD		

Manufacturer	Device		
Logic Innovations	RS-1100		
	IPE-4000-5		
Manzanita	LAdI (Local Add Inserter)		
Microsoft	Microsoft IPG (IC-SNMP-106)		
	Windows® SNMP Agent		
Miranda	See Grass Valley		
Miteq	NSU1 Switchover		
	U9853-6-1K Modulator		
Modulus	ME1000 (refer to Motorola SE-4000)		
	ME6000 (refer to Motorola SE-5000)		
Motorola	DM-6400 CherryPicker (Terayon)		
	DSR-4410, DSR-4500X (IC-SNMP-022), DSR-4520X (IC-SNMP-017/IC-SNMP-041)		
	DSR-4440		
	HDD-1100		
	Lifenet C6BD (IC-SNMP-025)		
	Lifenet C8M		
	MBT5000 (IC-SNMP-008)		
	OM-1000 (IC-SNMP-103/IC-SNMP-043)		
	SE-2000 (IC-SNMP-006)		
	SE-4000/4010		
	SE-1010/2000/2000IP		
	SE-5000/5010		
	SE-6000		
	SmartStream Encryptor/Modulator SEM (IC-SNMP-009)		
	SmartStream Transport Multiplexer TMX 2010 (IC-SNMP-007)		
NVISION	See Grass Valley		
Mystic	M-15x0 transcoders		
Omneon	Omneon Server (IC-SNMP-026)		
PBT	PBT ContactAgent 1		
PESA Switching Systems (QuStream Group)	SNM 35V3 (Cheetah, Tiger, Jaguar, Cougar, Ocelot, Bobcat, and TDM3000)		
Pinnacle	DS130(IC-SNMP-003)		
Pro-Bel	See SAM		

/lanufacturer	Device	
ro Broadband, Inc.	DCH4000P Receiver	
Quartz (Evertz Microsystems td.)	Xenon	
Quest Controls Inc.	TELSEC 2000A Controller (IC-SNMP-104)	
adyne	DM240XR	
esearch Concepts	RC2000A	
GB Networks	SEP 48	
iedel	Artist	
MON	RMON (IC-SNMP-002)	
AM (Snell/Pro-Bel)	see Routers (IC-SNMP-027)	
AM (Snell & Wilcox)	IQ and RollCall (IC-SNMP-028)	
copus Video Networks	CODICO CID 3100 (IC-SNMP-105)	
	IRD-2900 Series	
eaChange	SeaChange (IC-SNMP-011.1/IC-SNMP-012.2)	
	SeaChange Broadcast MediaLibrary	
	SeaChange MediaClient	
encore	MRD 3187A	
yStream (Tandberg)	iPlex	
	Mediaplex-20	
ell	See SAM	
ftel	Vflex	
ectraLogic	BOA T380 Tape Library	
mavision	EMR D8020	
ndberg	nCompass	
	RX1290	
	TT1260/1280 (IC-SNMP-005)	
	TT4130	
ktronix	MTM-400	
	WVR 611A	
	WVR7100	
erayon (Motorola)	CP 7585 Dual 8VSB to ASI Demodulator	
	CP 7600 Multichannel Integrated Decoder (MID) (IC-SNMP-102/IC-SNMP-036)	
	DM6400 (CherryPicker)	

Manufacturer	Device	
TSL (Television Systems Ltd.)	Mains Distribution Unit (MDU)	
	SC-11 Under Monitor Display System Controller	
VideoFrame	VF0037 GPI VNODE (IC-GPI-001)	

# Non-SNMP Devices

The following table contains a list of non-SNMP devices for which iControl drivers are available. Contact your Grass Valley sales representative for details.

### Devices supported by iControl through means other than SNMP

Manufacturer	Device Name		
Global Caché	GC-100		
Met One Instruments	50.5 Wind Sensor (serial control)		
Motorola	HDD-1100 (serial control)		
	Lifenet C6BD		
Sencore	IRD 3384 (serial control)		
Sony	9-pin VTR Control (serial control)		
Tandberg	Alteia		
Terayon	CP7585 (serial control)		
Thales/Thomson	Granite Sentinel		
TSL	SC -11 (serial control)		
Wegener	Unity 4422 Broadcast Receiver (serial control)		
	DTV720 Transport Stream Multiplexer		
	Unity 4600 Professional Media Receiver (serial control)		



# **Grass Valley Technical Support**

For technical assistance, contact our international support center, at 1-800-547-8949 (US and Canada) or +15304784148.

To obtain a local phone number for the support center nearest you, please consult the *Contact Us* section of Grass Valley's website (www.grassvalley.com).

An online form for e-mail contact is also available from the website.

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