

Aurora Ingest INGEST MANAGEMENT SYSTEM	
System Guide	
SOFTWARE VERSION 6.3	
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Grass Valley Product Support

To get technical assistance, check on the status of a question, or to report new issue, contact Grass Valley Product Support via e-mail, the Web, or by phone or fax. Contact Grass Valley first regarding problems with third party software on Grass Valley products, such as the Microsoft[®] Windows[®] operating system, Windows Media[®] player, Internet Explorer[®] internet browser, SQL ServerTM and QuickTimeTM.

Web Technical Support

To access support information on the Web, visit the product support Web page on the Grass Valley Web site. You can download software or find solutions to problems by searching our Frequently Asked Questions (FAQ) database.

World Wide Web: http://www.thomsongrassvalley.com/support/ Technical Support E-mail Address: gvgtechsupport@thomson.net.

Phone Support

Use the following information to contact product support by phone during business hours. Afterhours phone support is available for warranty and contract customers.

International (France)	+800 80 80 20 20 +33 1 48 25 20 20	Italy	+39 02 24 13 16 01 +39 06 87 20 35 42
International (United States, Canada)	+1 800 547 8949 +1 530 478 4148	Belarus, Russia, Tadzikistan, Ukraine, Uzbekistan	+7 095 258 09 20 +33 (0) 2 334 90 30
Hong Kong, Taiwan, Korea, Macau	+852 2531 3058	Indian Subcontinent	+91 11 515 282 502 +91 11 515 282 504
Australia, New Zealand	+61 1300 721 495	Germany, Austria, Eastern Europe	+49 6150 104 444
Central, South America	+55 11 5509 3440	Near East, Africa	+33 1 48 25 20 20
China	+861 066 0159 450	Netherlands	+31 (0) 35 62 38 421
Belgium	+32 (0) 2 334 90 30	Northern Europe	+45 45 96 88 70
Japan	+81 3 5484 6868	Singapore	+65 6379 1313
Malaysia	+603 7805 3884	Spain	+41 487 80 02
Middle East	+971 4 299 64 40	UK, Ireland, Israel	+44 118 923 0499



Authorized Support Representative

A local authorized support representative may be available in your country. To locate the support representative for your country, visit the product support Web page on the Grass Valley Web site.

Safety Summaries

General Safety Summary

Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it.

Only qualified personnel should perform service procedures.

While using this product, you may need to access other parts of the system. Read the *General Safety Summary* in other system manuals for warnings and cautions related to operating the system.

Review all system operator manuals, including manuals in electronic format on the system hard drive.

Injury Precautions

Use Proper Power Cord	To avoid fire hazard, use only the power cord specified for this product.
Ground the Product	This product is grounded through the grounding conductor of the power cord. To avoid electric shock, the grounding conductor must be connected to earth ground. Before making connections to the input or output terminals of the product, ensure that the product is properly grounded.
Do Not Operate Without Covers	To avoid electric shock or fire hazard, do not operate this product with covers or panels removed.
Do Not Operate in Wet/Damp Conditions	To avoid electric shock, do not operate this product in wet or damp conditions.
Do Not Operate in an Explosive Atmosphere	To avoid injury or fire hazard, do not operate this product in an explosive atmosphere.
Avoid Exposed Circuitry	To avoid injury, remove jewelry such as rings, watches, and other metallic objects. Do not touch exposed connections and components

Product Damage Precautions

Use Proper Power	Do not operate this product from a power source that applies more than
Source	the voltage specified.

when power is present.

Provide Proper Ventilation To prevent product overheating, provide proper ventilation.

Do Not Operate With Suspected Failures

If you suspect there is damage to this product, have it inspected by qualified service personnel.

Battery Replacement To avoid damage, replace only with the same or equivalent type recommended by the circuit board manufacturer. Dispose of used battery according to the circuit board manufacturer's instructions.

Safety Terms and Symbols

Terms in This Manual These terms may appear in this and other product manuals:



WARNING: Warning statements identify conditions or practices that can result in personal injury or loss of life.



CAUTION: Caution statements identify conditions or practices that can result in damage to the equipment or other property.

Terms on the Product These terms may appear on the product:

DANGER indicates a personal injury hazard immediately accessible as one reads the marking.

WARNING indicates a personal injury hazard not immediately accessible as you read the marking.

CAUTION indicates a hazard to property including the product.

Symbols on the Product

The following symbols may appear on the product:



DANGER high voltage



Protective ground (earth) terminal



ATTENTION - refer to manual

Service Safety Summary

Do Not Service Alone Do not perform internal service or adjustment of this product unless another person capable of rendering first aid and resuscitation is present.

No Power Switch

To avoid electric shock, disconnect the main power by means of the power cord. The power cord is the main power disconnect. Ensure that the power cord is easily accessible at the rear of the product or at the power receptacle.

Use Care When Servicing With Power On Dangerous voltages or currents may exist in this product. Disconnect power and remove battery (if applicable) before removing protective panels, soldering, or replacing components.

To avoid electric shock, do not touch exposed connections.

Certifications and Compliances

Canadian Certified Power Cords Canadian approval includes the products and power cords appropriate for use in the North America power network. All other power cords supplied are approved for the country of use.

FCC Emission Control

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by Grass Valley can affect emission compliance and could void the user's authority to operate this equipment.

Canadian EMC Notice of Compliance

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A préscrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Canadian Certified AC Adapter

Canadian approval includes the AC adapters appropriate for use in the North America power network. All other AC adapters supplied are

approved for the country of use.

EN55022 Class A Warning

For products that comply with Class A. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Laser Compliance

Laser Safety Requirements

The device used in this product is a Class 1 certified laser product. Operating this product outside specifications or altering its original design may result in hazardous radiation exposure, and may be considered an act of modifying or new manufacturing of a laser product under U.S. regulations contained in 21CFR Chapter 1, subchapter J or CENELEC regulations in HD 482 S1. People performing such an act are required by law to recertify and reidentify this product in accordance with provisions of 21CFR subchapter J for distribution within the U.S.A., and in accordance with CENELEC HD 482 S1 for distribution within countries using the IEC 825 standard.

Laser Safety

Laser safety in the United States is regulated by the Center for Devices and Radiological Health (CDRH). The laser safety regulations are published in the "Laser Product Performance Standard," Code of Federal Regulation (CFR), Title 21, Subchapter J.

The International Electrotechnical Commission (IEC) Standard 825, "Radiation of Laser Products, Equipment Classification, Requirements and User's Guide," governs laser products outside the United States. Europe and member nations of the European Free Trade Association fall under the jurisdiction of the Comité Européen de Normalization Electrotechnique (CENELEC).

FCC Emission Limits

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesirable operation.

Certification

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Category	Standard
Safety	Designed/tested for compliance with: ANSI/UL60950-2000 - Safety of Information Technology Equipment IEC 60950 - Safety of Information Technology Equipment (3rd edition, 1999) CAN/CSA C22.2, No. 60950-00 - Safety of Information Technology Equipment
	EN60950:2000 - Safety of Information Technology Equipment (3rd edition)

Environmental Criteria

The following table lists the environmental criteria for Aurora Ingest.

Characteristics	Description	
Operating Temperature	Requirement:	10° to 40°C
Storage Temperature	Requirement:	-40° to 65°C
Operating Altitude	Requirement: Supplemental Data: 2000 meters	To 10,000 feet IEC 60950 compliant to
Storage Altitude	Requirement:	To 40,000 feet
Mechanical Shock	Supplemental Data: 001131500	Class 5 (30G) Grass Valley
Random Vibration	Requirement: Valley 001131500	Operational: Class 6 Grass
	Requirement: Grass Valley 001131500	Non-Operational: Class 5
Transportation	Requirement:	Grass Valley 001131500
Equipment Type	Supplemental Data:	Information Technology
Equipment Class	Supplemental Data:	Class 1
Installation Category	Requirement: mains, appliances,	Category II Local level
	· · · · · · · · · · · · · · · · · · ·	portable equipment, etc.
Pollution Degree	Requirement: environment, indoor use only.	Level 2 operating
Relative Humidity	Requirement: +40°C	Operating 80% from +30° to
	+30° to +60°C	Non-Operating 90% from
		Do not operate with visible
	moisture on the circuit boards.	

Aurora Ingest System Guide September 2007

Introducing Aurora Ingest

Aurora Ingest is an automated media digitization system, made up of several integrated applications, that allows you to ingest footage from VTRs, feeds from a router, or files from multiple Digital Media Cameras and Digital Media Recorders, all directly to a Media Server in your operation.

This manual shows you how to install and configure the Aurora Ingest applications in your newsroom, and how to use Aurora Ingest to capture and record clips for later use in a newscast.

This chapter is divided into the following sections:

- "What is Aurora Ingest?"
- "Aurora Ingest applications"
- "Aurora Ingest workstations"
- "Integration with Aurora Suite and third-party products"
- "Understanding Status Colors"

What is Aurora Ingest?

Aurora Ingest lets you get footage from VTRs and from router feeds and ingest it directly to your Media Server. With Aurora Ingest applications, you can select clips from multiple VTR tapes, create a batch (also known as a segment) list, and record it to the server. You can also ingest feeds from a router source directly to the same server. Up to eight VTRs are supported at any time. You can select the supported VTRs from an unlimited number of VTRs or RS-422-connected routers. Batch jobs can be saved as Edit Decision Lists (EDLs).

The Aurora Ingest system supports the K2 Media Server and M-Series iVDR media server or servers. You can configure your system to record clips into two servers in parallel. If one server fails or has inadequate storage, only the recording on that server will be stopped. When the system continues to the next clip, the storage capacity on both servers is checked again, allowing parallel recording to resume if storage is made adequate.

Raw footage comes from a VTR connected directly to the Aurora Ingest workstation, a CompuSat satellite dish control system, or a router source. While you connect the media servers to the Aurora Ingest workstation using AMP Sockets, you need RS-422 connection from the VTR to the Aurora Ingest workstation to have control of the VTR in the Aurora Ingest windows. For router sources, Aurora Ingest supports the Grass Valley SMS 7000, Grass Valley Acapella, Encore control and Jupiter systems, and allows source selection and renaming.

Aurora Ingest applications

Aurora Ingest consists of the following applications:

- Aurora Ingest Server, which lets you configure the other Aurora Ingest
 applications for batch or feed events, as well as monitor the status of the media
 servers, database servers, routers, CompuSat satellite dish control system, and
 channels. You can also access the logs. For more information, see "Aurora Ingest
 Server" on page 27.
- VTR Controller, which lets you monitor and manage the VTRs you use with VTR Ingest. For more information, see Chapter 4, *Using VTR Controller* on page 97.
- VTR Ingest, which lets you ingest footage from VTRs and import or export Edit Decision Lists (EDLs). Supporting up to eight channels, VTR Ingest can record footage and configurable handle durations. It lets you set mark points using either the VTR, the PC keyboard, or the mouse. You can ingest a single item or build a batch list of items to capture from multiple tapes. You can also create a batch list offline and then import the list into VTR Ingest as a common EDL. Once you create a batch list, you can optimize the list by timecode, which allows the material to be ingested in the shortest time possible, or manually arrange the batch list items in order to prioritize immediately needed clips. For more information, see Chapter 5, Using VTR Ingest on page 101.
- Aurora Ingest Scheduler, which lets you schedule ingest feed events from a media server, CompuSat satellite dish control system, router source and VTRs. You can also schedule events to record, up to one year in advance, on each server port, including recurring events. Schedule Viewer provides an easily readable way to see all ports and more specifically the task assigned to each port. For more information, see Chapter 3, *Using Aurora Ingest Scheduler* on page 65.
- Removable Media Interface (RMI), which lets you ingest files from multiple
 Infinity Digital Media Cameras and Digital Media Recorders, as well as Sony
 XDCam and Panasonic P2 removable media devices. For more information, see
 Chapter 6, *Using Aurora Ingest RMI* on page 111.

For information on installing and configuring the Aurora Ingest applications, see Chapter 2, *Installing and Configuring Aurora Ingest* on page 15.

If you use Aurora Playout as a playback system in your operation, you can ingest clips directly to a Aurora Playout rundown by linking clips to a Aurora Playout placeholder at the point of record. For more information, see Chapter 7, *Linking Clips to Aurora Playout Placeholders* on page 113.

Aurora Ingest workstations

Aurora Ingest has a client/server architecture that allows for multiple simultaneous users. It supports simultaneous event creation, event modification, event deletion, event monitoring, and resource viewing from multiple workstations.

Each workstation can control up to eight VTRs for batch list creation and batch ingest. You can work with either directly attached VTRs and dedicated server ports or through a router.

You can trigger multiple channel records from disparate sources simultaneously and schedule record events without reference to physical server port. Aurora Ingest automatically allocates any available port as determined at the optimum time before the record event is scheduled to begin. RS-422 router level control allows any router-connected VTR to be controlled by any Aurora Ingest channel.

Aurora Ingest - Server

This application has the following functionality:

- control of all Media Servers for all types of ingest
- stores the ingest schedule
- switches the Encore/SMS7000/Acapella/Jupiter router
- interfaces to ENPS
- interfaces to CompuSat satellite dish control system
- user account administration

Aurora Ingest - VTR Controller

This application has the following functionality:

• controls up to eight VTRs for VTR Ingest (AI server controls media server ports)

Aurora Ingest - VTR Ingest

This application has the following functionality:

- provides a user interface for playing tapes and marking in and out points
- creates batch (segment) lists
- provides a user interface for ingested clips to be recorded to Media Servers

Aurora Ingest - Scheduler Client

This application has the following functionality:

- schedules ingests from router sources, CompuSat satellite dish control system, and VTRs.
- · displays schedule status
- asset viewer if optional video card installed on the system

Aurora Ingest - RMI Client

This application has the following functionality:

• Ingests material from P2/XDCAM/Infinity removable media devices

Integration with Aurora Suite and third-party products

Aurora Ingest is integrated with the other applications in the Aurora Suite and third-party removable media devices. In addition to serving as a metadata entry and transfer application for metadata created in the newsroom computer system (NRCS), it supports:

- Mark In/Out of incoming feed material, allowing direct assignment of field-edited material to Aurora Playout placeholders.
- Simultaneous file transfer ingest, including MOS-ID matching, status updating, and metadata import and transfer to Aurora Browse from multiple Rev Pro and Professional Compact Flash removable media devices.

Understanding Status Colors

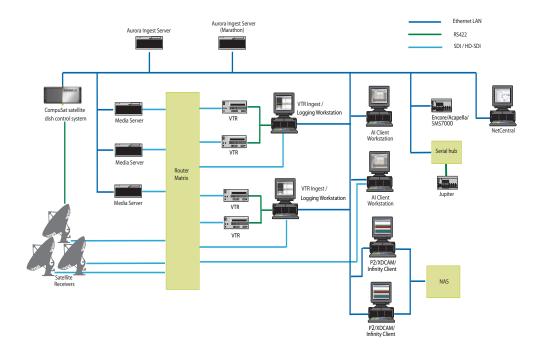
Each entry in the batch list, schedule viewer and scheduler window displays a certain color according to its status. The default colors are:

Event Background Color	Description
Red	The entry is recording.
Gold	The entry is cued and is next to record.
Green	The entry has finished recording.
Blue	The Scheduler entry is ready to record.
Black	VTR Ingest has reserved this channel at this time.
Purple	The entry failed to record. See the Error Message field for more information.
Grey	The entry time has elapsed, probably due to a conflict with another recording.

Users can change status colors in Aurora Ingest - Scheduler by changing the configuration as shown in "Configuring Scheduler in the Aurora Ingest - Scheduler application" on page 19.

Installing and Configuring Aurora Ingest

The Aurora Ingest system consists of an Aurora Ingest Server, one or more Aurora Ingest Scheduling Clients, K2 Media Server or M-Series iVDR media server or servers, VTRs, router or CompuSat satellite dish control system sources.



This chapter is divided into the following sections:

- "System Requirements"
- "Installing Aurora Ingest"
- "Setting Up Your Media Server"
- "Configuring Aurora Ingest"
- "User Administration for Aurora Ingest"

System Requirements

Grass Valley supplies a CD containing the Aurora Ingest software and documentation. For some of the Aurora Ingest components, Grass Valley also supplies hardware. The following section details the software and hardware requirements for each Aurora Ingest component.

Aurora Ingest - Server

The Aurora Ingest - Server application could be installed on the Aurora Ingest Server or Aurora Ingest Base Workstation on any regular office machine. The application must be running for an Aurora Ingest client to connect to it. All Aurora Ingest Clients should have their system time synced to the Aurora Ingest Server.

NOTE: Grass Valley recommends that the Scheduler, VTR Ingest and Aurora Ingest - Server applications are not installed in the same machine as K2 AppCenter application or its remote Control Point software.

Grass Valley supplies the Aurora Ingest - Server software/hardware configuration:

- Dell Server with Windows 2003 Server (two units if redundant option selected)
- Additional Windows 2003 license and Marathon Ftvirtual Server license (if redundant option selected)
- DIGI One SP 1 Port RS 422 Serial to Ethernet Device Server (RoHS Compliant)
- Microsoft .NET Framework 2.0
- Microsoft Visual C++ 2005
- Microsoft SQL Express 2005
- Microsoft SQL Server Management Studio Express

Aurora Ingest - VTR Ingest/VTR Controller

VTR Ingest and VTR Controller can be installed on the same machine. If VTR Ingest and VTR Controller are on two separate machines, the two machines need to be connected via Ethernet. For your VTR Controller client, Grass Valley supplies an RS-422 card. (See "Installing Hardware" on page 18.)

NOTE: Grass Valley recommends that the Scheduler, VTR Ingest and Aurora Ingest - Server applications are not installed in the same machine as K2 AppCenter application or its remote Control Point software.

The PC you use to run VTR Ingest/VTR Controller should conform to these requirements:

- Windows XP Pro, with the Intel P4 CPU and a minimum of 512 MB RAM
- 10 GB HDD
- Minimum 1024x768 SVGA display adapter (Preferred: 1280 x 1024)
- CD-ROM drive for installation
- Two available PCI slots for the video capture and RS-422 boards (for VTR Controller)
- 100BaseTX Ethernet interface
- Hauppage WinTVGo Video Capture Card (optional)
- Blackmagic Design DeckLink Video Capture Card (optional)

Aurora Ingest - Scheduler

NOTE: Grass Valley recommends that the Scheduler, VTR Ingest and Aurora Ingest - Server applications are not installed in the same machine as K2 AppCenter application or its remote Control Point software.

The PC you use to run Aurora Ingest - Scheduler should conform to these requirements:

- Windows XP Pro, with the Intel P4 CPU and a minimum of 512 MB RAM
- 10 GB HDD
- Minimum 1024x768 SVGA display adapter (Preferred: 1280 x 1024)
- CD-ROM drive for installation
- 100BaseTX Ethernet interface
- Hauppage WinTVGo Video Capture Card (optional)
- Blackmagic Design DeckLink Video Capture Card (optional)

Aurora Ingest - RMI

Do not install the Aurora Ingest - RMI client on a machine that already has Aurora Edit installed. You need to install the Aurora Core software instead. (*SetupAuroraCore.exe* on the Aurora Ingest software CD.)

The PC you use to run RMI Client should conform to these requirements (minimum):

- Windows XP Pro, with the Intel P4 CPU and a minimum of 512 MB RAM
- 10 GB HDD
- Minimum 1024x768 SVGA display adapter
- · CD-ROM drive for installation
- · USB Port
- Aurora Core software

For HD ingests, Grass Valley recommends the following configuration:

- · Windows XP Pro
- HP Workstation xw8400, with Xeon 5160/3.0GHz 4MB/1333 dual core processor and 2GB (2x1GB) 667MHz DDR2 RAM
- 80GB SATA 3Gb/s 7200 HDD
- NVIDIA Quadro FX3450 256MB PCI-Express
- 1280 x 1024 SVGA display adapter
- 16X DVD-ROM/CDRW Combo
- Xeon 5160/3.0GHz 4MB/1333 dual core processor
- Intel Pro/1000 GT Gigabit PCI NIC desktop adapter

- · USB Port
- Aurora Core software

Installing Aurora Ingest

To install Aurora Ingest, you need to install the hardware in your computer, install the Aurora Ingest software, and obtain a software license number.

This section is divided into the following topics:

"Installing Hardware"

"Installing Software"

"Obtaining a Software License Number"

"Backing up Aurora Ingest Database"

"Upgrading Aurora Ingest Software"

"Migrating Aurora Ingest - Server"

"Restoring Aurora Ingest Database"

Installing Hardware

Grass Valley supplies the Aurora Ingest Server with all the necessary hardware and software installed. The software for the other Aurora Ingest components can be installed on any PC which meets the "System Requirements" for that component.

Installing RS-422 card (VTR Controller)

For VTR Controller, Grass Valley supplies a RocketPort Plus Universal PCI 422 SMPTE 8 Port RoHS RS-422 card that must be installed.



- 1. If you are connecting one or more VTRs to VTR Controller, install the RS-422 card in your computer, making sure the dip switches are set to the down position, as shown, and install the card's driver.
- 2. Connect the VTR(s) to the VTR Controller machine via RS-422.
- 3. If you are using LTC for timecode, connect a timecode cable from the timecode source (VTR for VTR Ingest, Timecode Generator for Aurora Ingest Scheduler) to the Media Server.
- 4. Without the LTC physical connection, timecodes could still be polled via RS-422. Check the option to enable RS-422 timecode mode within **Tools|Options** of VTR Controller application as described in "Configuring VTR Controller" on page 51.

Installing Video Capture card (optional)

You can install either Hauppage WinTVGo Video Capture Card or Blackmagic Design DeckLink Video Capture Card to view clips on Aurora Ingest Clients. Check for minimum system requirements needed before choosing and purchasing your video capture card.

Both video capture cards are for SD (standard definition) video only. If you want to ingest HD video and then view it, first downconvert from HD to SD.

For Hauppage WinTVGo video capture card, you have to then convert from digital to analog. The video capture card accepts composite analog video only (NTSC or PAL).

For Blackmagic Design DeckLink Video Capture Card, SDI input and output with embedded audio are supported. For audio monitoring, you could also connect SPDIF output to your audio peripheral.

Follow the steps below to install your video capture card:

- 1. Install the video capture card in your machine and install the card's driver. Refer to the manufacturer's manual for installation instructions.
- 2. For Hauppage WinTVGo video capture card, connect the video capture board's S-Video Input connector to the device you're using for on-screen video display (VTR, router, or switch box).
- 3. For Blackmagic Design DeckLink Video Capture Card, connect SDI Output from your media server or router to SDI Input connector of the video capture card.
- 4. If you have a video capture card installed in your machine and a router configured in your system, select the router destination from the dropdown list within **Tools|Options|Video Viewer** of Aurora Ingest Scheduler or VTR Ingest.
- 5. After the video capture card has been successfully configured, it could be selected from the Capture Device dropdown list within **Tools|Options|Video Viewer** of Aurora Ingest Scheduler or VTR Ingest.

Installing Software

If you are upgrading Aurora Ingest from an existing installation to a new software release, refer to "Backing up Aurora Ingest Database" on page 20 and "Upgrading Aurora Ingest Software" on page 21.

If you are migrating Aurora Ingest - Server from an existing installation to a new machine, refer to "Migrating Aurora Ingest - Server" on page 22.

To install the Aurora Ingest software on your computer, insert the Aurora Ingest CD-ROM into the machine's CD-ROM drive and follow these instructions:

On this screen	Do this
Welcome	Click Next.
License Agreement	Select I Agree and click Next.
Choose Destination Location	Click Next.
Select Components	Specify the Aurora Ingest applications to install: Server, Scheduler, VTR Controller, VTR Ingest, or RMI.
	With Server component, Microsoft .NET Framework 2.0 and Microsoft SQL Express 2005 will also be installed by default.
	[Note: RMI cannot be installed on a machine that already has Aurora Edit installed. You need to install the Aurora Core software instead. (<i>SetupAuroraCore.exe</i> is on the Aurora Ingest software CD.)]

Chapter 2 Installing and Configuring Aurora Ingest

On this screen	Do this
Specify Server Name	Enter host name of Aurora Ingest Server.
	Select the SQL Server configuration that will be used by Aurora Ingest Server.
	If you choose SQL Server 2005, select the server instance from the dropdown list.
	Then, click the Test Connection button to ensure that the SQL Server is accessible.
Start Installation	Click Next.
Installation Complete	Click Finish.

Obtaining a Software License Number

Once the Aurora Ingest software is installed, you are provided with a 30-day demo license. You need to get a license number from Grass Valley in order to install the permanent license. Obtaining the software license number is important because you cannot launch channels or configure Aurora Ingest after your 30-day demo license has expired.

When you install the Aurora Ingest - Server application, the SabreTooth License Manager is installed as well. To get a license number, follow these steps:

- 1. Click on the License Manager icon on the desktop. The SabreTooth License Manager opens.
- 2. Select File|Generate Unique ID and License Manager will generate a unique ID (a unique string of characters).
- 3. Email this unique ID to BVTN-Auroralicenses@thomson.net and you will be provided with the software license number.

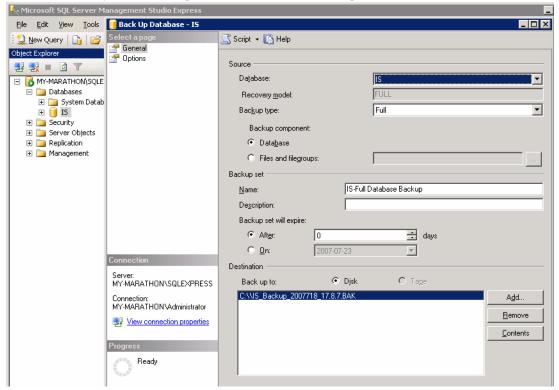
Backing up Aurora Ingest Database

It is advisable for users to back-up the Aurora Ingest database before upgrading to the latest version of the software. With a database back-up, you can avoid any lost of feed schedules and the need to key-in everything again in case of a system crash. The back-up could also be placed on another machine or an external drive for extra precaution.

The database back-up could be done easily using Microsoft SQL Server Management Studio Express. Listed below are the steps to back-up your Aurora Ingest database:

- 1. Login to Windows XP as an administrator or as a user with administrative rights.
- 2. Go to Start>All Programs> Microsoft SQL Server 2005 and select SQL Server Management Studio Express to launch the application.
- 3. Connect to your SQL Server by Windows Authentication.
- 4. Double-click on Databases and you could see the folder expands to show System Databases and IS.
- 5. Right-click on IS and select Tasks>Back Up.

- 6. In the General page, select IS from the Database dropdown list or type "IS" if it's not listed in the dropdown list, and select Full from the Backup type dropdown list.
- 7. Key in the backup name and select the backup destination.



- 8. In the Options page, select Back up to the existing media set and Overwrite all existing backup sets.
- 9. Click OK.

NOTE: DO NOT delete Aurora Ingest folder in the registry key and 2 files (IS_Data.mdf and IS_Log.ldf) in C:\Program Files\Microsoft SQL Server\90\Tools\Binn if you don't have a backup on another machine or an external drive. All data in the current database could not be retrieved if those files were to be deleted and the system crashed.

Upgrading Aurora Ingest Software

Before upgrading from one version of Aurora Ingest to another, you should close all components in the current Aurora Ingest application.

Aurora Ingest 6.3 installer provides an option to install Microsoft SQL Express 2005 or attaching your Aurora Ingest database to the full version of Microsoft SQL Server 2005. The full version of SQL Server 2005 allows customers to run the Aurora Ingest - Server database component on the same server as the NewsShare DSM.

This means that both news database and ingest database will share the same SQL processes. If you want to move your current Aurora Ingest database that runs on SQL Express 2005 to your NewsShare DSM machine that runs the full version of SQL Server 2005, refer to "Migrating Aurora Ingest - Server" on page 22.

To upgrade Aurora Ingest, follow the steps below:

- 1. Uninstall all components in the current version of Aurora Ingest by selecting Start>Control Panel> Add or Remove Programs.
- 2. Run the Aurora Ingest 6.3 installer and follow the steps described in "Installing Software" on page 19.
- 3. Reboot your machine after the installation is complete.

NOTE: When installing onto a clean system, Aurora Ingest will embed the SQL Express 2005 install into its installer. The full version of Microsoft SQL Server 2005 is available as an optional item.

Migrating Aurora Ingest - Server

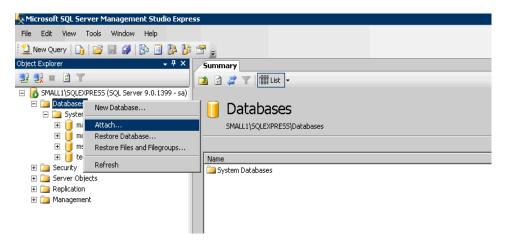
Database migration should be done if you need to move Aurora Ingest database from the current machine to a brand new machine, or to move your Aurora Ingest database to the machine that runs your NewsShare DSM.

Follow the steps below for migration process of the Aurora Ingest database:

- 1. Run the latest Aurora Ingest 6.3 installer on the existing machine to update the Aurora Ingest database.
- 2. Export the Aurora Ingest Server registry key under "My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Grass Valley\Aurora Ingest\Server" from existing machine.

CAUTION: DO NOT launch the Microsoft SQL Server Management Studio Express on both existing machine and new machine. If you do this, you cannot back up the database.

- 3. Shut down the Aurora Ingest Server application on the existing machine and copy two files (IS_Data.mdf and IS_Log.ldf) from C:\Program Files\Microsoft SQL Server\90\Tools\Binn from existing machine to same directory path in new machine. Make sure these two files are NON-READ ONLY.
- 4. Make sure the "SQLServer (or SQLEXPRESS)" service is running on new machine. You can check the state of the service in the "Services" application.
- 5. Launch the Microsoft SQL Server Management Studio Express on new machine.
- 6. Log on, using Window Authentication Mode, to attach the Aurora Ingest database.
- 7. Attach the Aurora Ingest database as shown in the following screenshot.

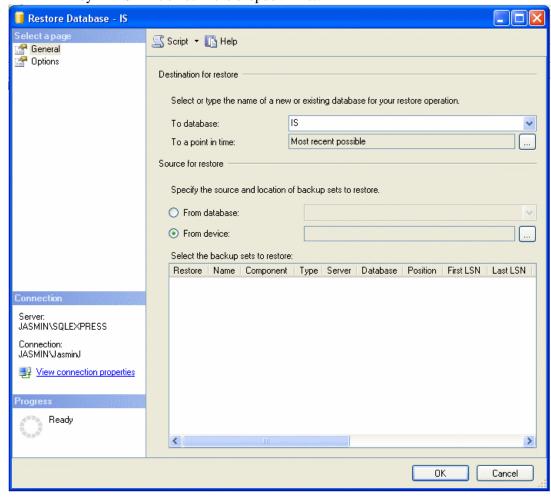


- 8. Select the IS_Data.mdf from the same directory (C:\Program Files\Microsoft SQL Server\90\Tools\Binn).
- 9. After the Aurora Ingest database had been attached successfully, you should be able to view Aurora Ingest database folder shown under the Databases root folder.
- 10. Import the server registry key to new machine.
- 11. Run the Aurora Ingest 6.3 installer on new machine.
- 12. Reboot the machine after installation is complete.
- 13. License the Aurora Ingest software (Number of Channels, Scheduler, VTR Ingest and RMI). For more information on licensing, see "Obtaining a Software License Number" on page 20.
- 14. Remove the licenses from the existing machine.
- 15. Launch the Aurora Ingest Server application on the new machine. Select **Tools** | **Options** and click on the System tab.
- 16. Edit settings of SDB Server, XMOS Server and SabreTooth Server according to the new machine.

Restoring Aurora Ingest Database

In case of a system crash or a corrupted database, database restore could easily be done using Microsoft SQL Server Management Studio Express. Before proceeding to restore, make sure that database back-up had been done and the back-up location identified. Follow the steps below to restore your Aurora Ingest database:

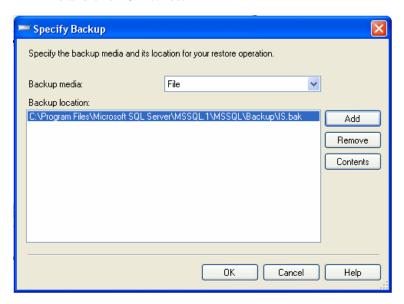
- 1. Login to Windows XP as an administrator or as a user with administrative rights.
- 2. Shut down Aurora Ingest Server if it's currently running on your machine.
- 3. Go to Start>All Programs> Microsoft SQL Server 2005 and select SQL Server Management Studio Express to launch the application.
- 4. Connect to your SQL Server by Windows Authentication.
- 5. Right-click on Databases and select Restore Database.



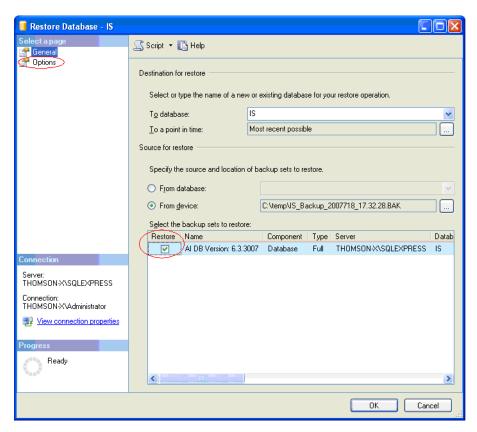
6. In the Destination for restore section, select IS from the database dropdown list. Key in "IS" if it's not in the dropdown list.

- 7. In the Source for restore section, select From device and click to browse to the folder that you had stored your backup.
- 8. Click Add to get to the folder where you had saved the backup, select the backup

file and click OK twice.



9. Check the box under Restore column to select the backup database to be restored.



- 10. In Options page, check Overwrite the existing database.
- 11. Click OK.

Setting Up Your Media Server

Once you've cabled Aurora Ingest and installed software, you need to configure your Media Server to work with Aurora Ingest.

K2 Media Server

To configure the K2 system for Aurora Ingest:

- See your K2 documentation; set up the record channels to use Advanced Media Protocol (AMP).
- Configure channels to use LTC or VITC input.

M-Series iVDR

The configuration of M-Series iVDR for Aurora Ingest depends on the type of communication you're using for the server—DCOM or RS-422.

DCOM

If you are using DCOM, see your M-Series iVDR documentation and set up the record channels to use Advanced Media Protocol (AMP).

RS-422

If you are using RS-422, see your M-Series iVDR documentation and set up the server as follows:

- Make sure you configure the record channels to the correct RS-422 port.
- Set up record channels to use Advanced Media Protocol (AMP).
- Configure channels to use LTC or VITC input.

Configuring Aurora Ingest

Once you have installed any hardware (if necessary) and the software components of Aurora Ingest, you need to configure the Aurora Ingest options for your particular newsroom equipment and workflow.

You can add and configure VTRs with the VTR Controller and VTR Ingest applications. The Aurora Ingest - RMI client is configured through the Aurora Ingest - RMI application and Aurora Ingest - Scheduler is configured through Aurora Ingest - Scheduler application. All other configurations can be performed in the Aurora Ingest - Server application.

This section is divided into the following topics:

```
"Aurora Ingest - Server"
```

"Configuration Overview"

"Configuring System Settings"

"Configuring Media Servers"

"Configuring Routers"

"Configuring Channels"

"Configuring Channel Groups"

"Configuring Aurora Ingest - Scheduler (Feed)"

"Configuring VTR Controller"

"Configuring VTR Ingest (VTR)"

"Configuring Preview Channels"

"Configuring RMI"

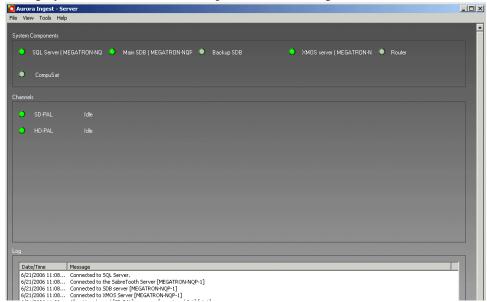
Aurora Ingest - Server

The Aurora Ingest - Server application shows the status of the system components and channels, as well as the system logs. The server machine name might be truncated, however the full name is visible if you hover your mouse over the area.

Additional information regarding a channel can also be obtained if you hover on the channel name. These information include channel name, server name, recording port,

remaining storage and status of the channel.

- A green indicator—the component or channel is connected.
- A red indicator—the component or channel is not connected.
- A grayed-out indicator—the component is not configured.



To configure Aurora Ingest, select **Tools | Options**. The following section gives an overview of the process of configuring Aurora Ingest.

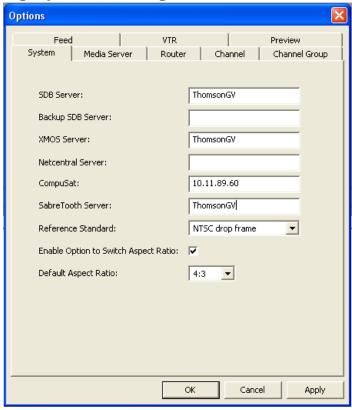
Configuration Overview

In Aurora Ingest - Server application, you can configure most of the Aurora Ingest settings. (Configure VTR controller settings in VTR Controller and VTR Ingest.) The following table details the configurable options in the Aurora Ingest - Server application. The following sections describe the Aurora Ingest configuration process in detail.

Options	Description	
System	Allows you to specify servers, such as the SDB server, XMOS Server, SabreTooth server, CompuSat satellite dish control system, etc. You can also specify the Video standard, enable the option to switch aspect ratio and set the default aspect ratio of feeds and VTR ingests.	
Media Server	Allows you to add, edit, or delete information about the media servers, including the drive and record locations. Note: the record location is not machine dependent.	
Router	Allows you to specify the type of router (Encore/SMS7000, Acapella or Jupiter) and its IP address or COM port.	
Channel	Allows you to specify the various channels and the media server they are associated with, a well as the record location. (The record location is the router destination, which is physically connected to the media server using the AV cable.)	
Channel Group	Allows you to specify channel groups and channels to be included in those groups. Channel groups are assigned to users in the User Administration setup. Auto-assign would only be limited to channels that are available to the particular user.	

Options	Description	
Feed	For feed ingests performed using Aurora Ingest - Scheduler, this tab allows you to specify default information about the clips, such as name, record duration, crash record location and duration, and timecode source (System time, LTC or VITC).	
VTR	For segment (batch) ingests performed using VTR Ingest, this tab allows you to specify default information about the clips, such as name, record location, handle and preroll times, and timecode source (Control track, LTC or VITC).	
Preview	Allows you to specify the preview channel for Asset Viewer in Aurora Ingest - Scheduler.	

Configuring System Settings

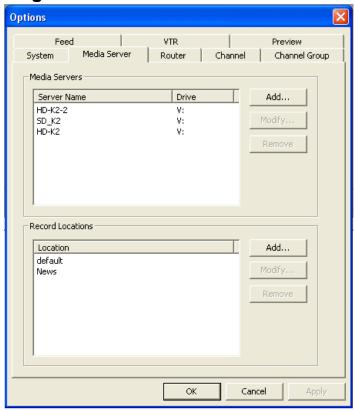


Setting	Description
SDB Server	Enter the IP address or computer name of the server where the Aurora Playout database resides (primary SDB Server is running).
Backup SDB Server	If you are using a backup database server, enter the IP address or computer name of the server where the backup Aurora Playout database resides (hot-standby SDB Server is running).
XMOS Server	Enter the name of the computer hosting the XMOS server.
NetCentral Server	If your system uses NetCentral to monitor equipment, enter its name or IP address.

Chapter 2 Installing and Configuring Aurora Ingest

Setting	Description			
CompuSat	If you are using CompuSat satellite dish control system, enter the location where the CompuSat application is running.			
SabreTooth Server	Enter the name of the server where the SabreTooth license is located.			
Reference Standard	PAL NTSC drop frame NTSC non-drop	Select the video reference standard used in your operation.		
Enable option to switch aspect ratio	Click the check box if you want to enable the option to switch video aspect ratio of feeds and VTR ingests. This feature is currently supported for SD K2 media client version 3.2 only.			
Default aspect ratio	16:9 4:3	Select the default aspect ratio for your ingest operation.		

Configuring Media Servers



Setting Recording Locations in Media Servers

You can also specify where scheduled recordings will reside on each server. Once you configure them, select which folder to record to when recording clips and feeds.

To set a record location:

1. In the Media Servers box, click Add.



- 2. Enter the media server name and its drive letter (e.g. V:), and click **OK**.
- 3. In the Record Locations box, click Add.

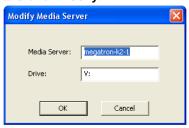


- 4. Type the name of the location and click **OK**.
- 5. Repeat step 3 and step 4 to create additional locations.

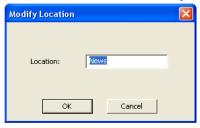
Modifying Recording Locations

To modify a record location:

1. In the Media Servers box, select the media server name that you want to change and click **Modify**.



- 2. Enter the new media server name and its drive letter (e.g. V:), and click **OK**.
- 3. If you need to change the folder name as well, select the folder name in the Record Locations box and click **Modify**.



- 4. Enter the new folder name and click **OK**.
- 5. Repeat step 1 to step 4 to modify more recording locations.

Removing Recording Locations

To remove a record location:

1. In the Media Servers box, select the media server name and click **Remove**.

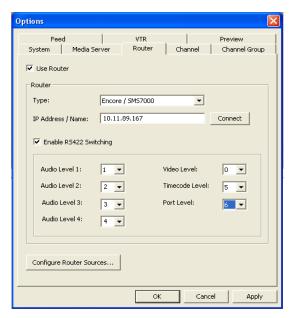


- 2. Click **Yes** to confirm the removal of the media server from the Aurora Ingest -Server setting.
- 3. If you need to remove a folder as well, select the folder name in the Record Locations box and click Remove.
- 4. Click **OK** to close the options window or click **Apply** to continue with other configuration settings.

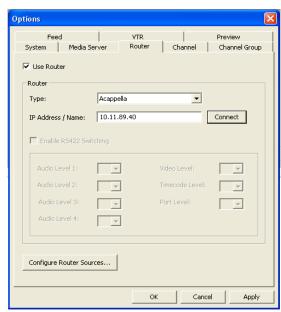
Configuring Routers

If you are using Encore, SMS7000, Acappella or Jupiter router as part of your news station, you can configure Aurora Ingest to use sources from the router to record clips.

Encore/SMS7000 Router



Acappella Router

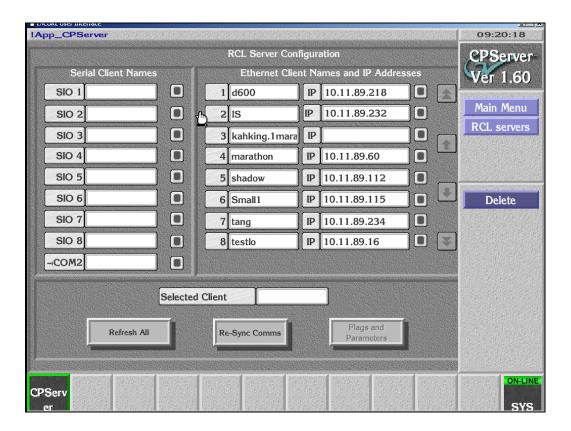


To configure a router for use with Aurora Ingest:

- 1. Check the **Use Router** checkbox.
- 2. For router type, select between Encore/SMS7000, Acappella or Jupiter from the dropdown list.
- 3. For SMS7000 or Acappella router, enter the IP address or name of the router that you want to connect to. Then, go to step 11.

Aurora Ingest System Guide

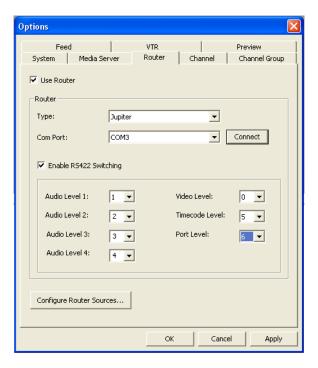
- 4. For Encore router, enter the IP address or name of the router that you want to connect to. Then, you also need to ensure that the IP address of your Aurora Ingest Server is entered in the RCL Server configuration of the Encore router control system.
- 5. Login to Encore OUI, select App_CPServer and RCL Servers.
- 6. On the Ethernet Client Names and IP Addresses section of the RCL Server Configuration window, enter the machine name and IP address of your Aurora Ingest Server.



- 7. Logout from Encore OUI and proceed to step 11.
- 8. When connecting to a Jupiter router, use the ESswitch interface protocol.
- 9. For Jupiter with direct connection via RS422, select either COM1 or COM2 (depending on your setup) from the COM Port dropdown list.
- 10. For Jupiter with connection via the serial hub, select the appropriate COM port that had been configured. For more information, see "Configuring Virtual COM port"

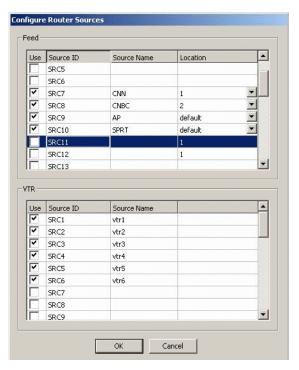
on page 35.

Jupiter Router



11. Click Connect.

- 12. If you are using Encore, SMS7000 or Jupiter, you can also enable RS-422 switching. This feature enables you to switch between VTRs for each channel without having to swap the RS-422 cables manually, as Aurora Ingest will switch the RS-422 port. Aurora Ingest switches video from the VTR to the video capture card whether RS-422 switching is enabled or not. For more information on RS-422 switching, see "About RS-422 switching" on page 39.
- 13. Select 0 (zero) for the video level if video is the first level in your router control system, 1 if it is the second level and so on. Select the level from the dropdown list.
- 14. Click **Apply** to save changes.
- 15. Click the **Configure Router Sources** button. Aurora Ingest connects to the router and queries the list of sources. The Configure Router Sources dialog box displays, showing the available sources.



16. In the Feed window, you can enable the router sources that are connected to the CompuSat satellite feed. You can also rename the router source in the "Source Name" column and choose a default location in the Media Server for the feed to record to.

NOTE: Once you have enabled the Feed router sources, a list of enabled Feed router sources is available in the router source list of the Add Feed dialog box in the Scheduler application.

17. In the VTR window, you can enable the router sources that the VTRs are connected to. You can also rename the router source in the "Source Name" column.

NOTE: Once you have enabled the VTR router sources, a list of enabled VTR router sources is available in the VTR Ingest application.

- 18. Click **OK** to exit the Configure Router Sources dialog box. The settings will take effect once you click **Apply** in the Options dialog box.
- 19. Click **OK** to accept the changes and exit the dialog box.

Configuring Virtual COM port

In order to connect to Jupiter router via ethernet, a serial hub needs to be configured. This serial hub will act as a virtual COM port, which enables serial-to-ethernet connectivity as though Jupiter is communicating with Aurora Ingest via the local COM port.

Chapter 2 Installing and Configuring Aurora Ingest

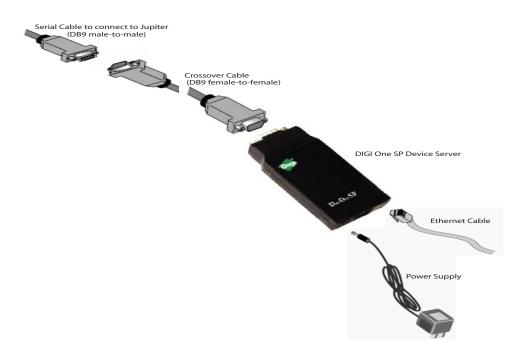
When you purchase Aurora Ingest, DIGI One SP RS422 Serial to Ethernet Device Server is also provided in the same package. Before starting to configure the device server, write down the MAC address located at the bottom of the hardware.

To setup the hardware:

1. A serial crossover cable (also known as null-modem cable) is needed to allow proper communications between Jupiter router and DIGI One SP Device Server. The appropriate pinouts can be referred from the table below:

DIGI One SP Device Server		Jupiter Router	
Pin Name	Pin Number	Pin Number	Pin Name
Rx +	2	3	Tx +
Tx +	3	7	Rx +
Rx -	6	8	Tx -
Tx -	9	2	Rx -

2. Connect one end of the crossover cable to the device server and the other end to RS422 serial cable to connect to Jupiter.



- 3. Connect an ethernet cable from the device server to a network point on your LAN.
- 4. Connect the power supply to the device server.

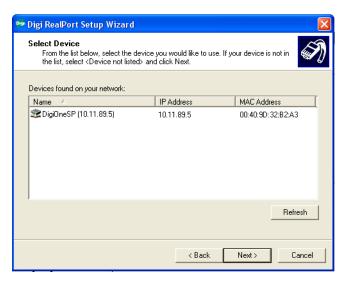
To install the software:

- 1. Insert the DIGI CD in your CD ROM drive.
- 2. The setup wizard will automatically be displayed on your screen. If not, click **Start**

> My Computer > CD ROM drive: > setup.exe

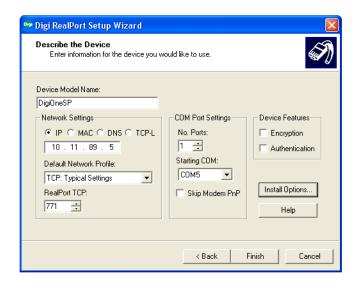


3. Click **Next** and the setup wizard will search your network to locate the DIGI One SP device server.

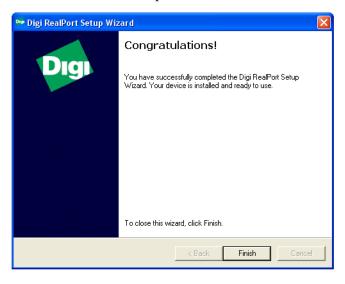


- 4. Select the device server according to its specific MAC address.
- 5. Take note of the device IP address and click Next.

Chapter 2 Installing and Configuring Aurora Ingest



- 6. In the Network Settings section, select IP and enter the IP address that had been retrieved by the setup wizard.
- 7. In the COM Port Settings section, set the number of ports to 1 and select the appropriate COM port from the Starting COM drop down list. This will be your virtual COM port.
- 8. Click **Finish** and the setup wizard will install the software.



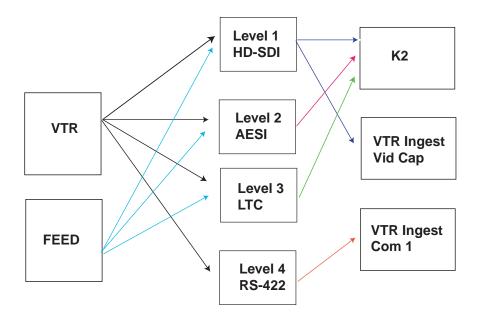
9. Click **Finish** after the installation is done.

NOTE: Once you have configured the virtual COM port, it will be available in the COM Port dropdown list on the router configuration window of Aurora Ingest - Server.

About RS-422 switching

If RS-422 switching is not enabled, you do not have to select the levels because Aurora Ingest switches all levels when switching the router for server port switching and VTR Ingest monitoring switching. Conversely, if RS-422 switching is enabled, Aurora Ingest switches the router differently.

- Each VTR source has four levels.
- Feed sources have two (if they use VITC) or three (if they use LTC) levels.
- K2 destinations have the HD-SDI, AES and LTC levels (we know for certain VTRs use LTC).
- VTR Ingest video capture destinations have the HD-SDI level (and AES if speakers are connected).
- VTR Ingest com ports destinations have the RS-422 level.

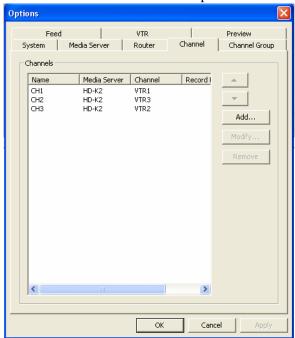


Aurora Ingest switches:

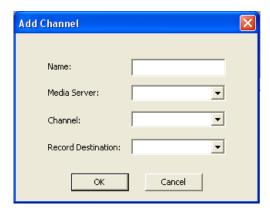
- level 1, 2 and 3 for source-to-server port switching.
- level 1 (and 2) for VTR Ingest monitoring switching.
- level 4 for VTR to VTR Ingest Com Port switching.

Configuring Channels

The number of channels is limited only by your media server hardware. You need to configure each channel in order to record clips.



To add a channel, click the **Add** button.



Configure the channel by entering details as below:

Setting	Description
Name	Enter a name for the channel. This name identifies the channel in Aurora Ingest - Server and its clients.
Media Server	Select media server for the channel from the dropdown list. (Media servers are configured in the Media Server tab.)
Channel	In the dropdown list, select or enter the name of the media server channel you are using to record, such as VTR1, VTR2, VTR3, etc.

Setting	Description
Record	Select the recording location from the dropdown list. (Recording destinations are
Destination	specified in the VTR and Feed tabs respectively for VTR Ingest and Aurora
	Ingest - Scheduler ingests.)

If channel groups had been configured prior to channel setup, you have to assign the channel to a channel group first. The Assign Channel Groups window will be displayed when you click the Add button.



Select the particular channel group for the new channel to be assigned to, and click OK to continue configuring the channel. For more information on Channel Group setting, refer to "Configuring Channel Groups" on page 42.

NOTE: Channels could belong to more than one group.

To modify a channel, select the channel and click the **Modify** button.



Change any details on the channel configuration and click OK.

To delete a channel, select the channel and click the **Remove** button. The confirmation window will be displayed as below:

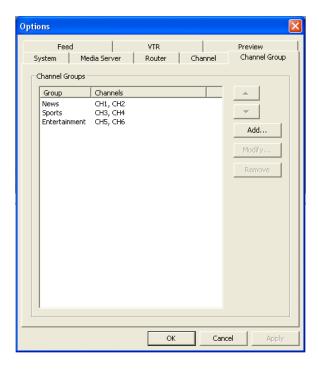


Click **Yes** to confirm the removal of the channel.

Configuring Channel Groups

Channel group setting is for users to organize channels into several categories according to broadcasting needs. The feature lets you specify group names and assign channels to be included in those groups.

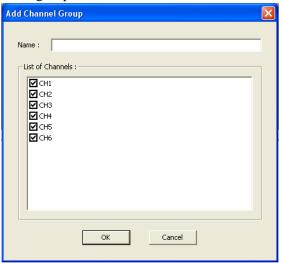
For example, "News" channel group could contain several channels that ingest assets related to local news, national news, world news and breaking news. While other channel groups contain channels that ingest assets related to their own group.



Setting	Description
Group	Enter a name for the channel group. This name identifies the channel group for Aurora Ingest - Server and its clients.
Channels	Select channels to be assigned to the channel group. If desired, a channel could also be assigned to several channel groups. If a channel is assigned to all groups, the particular channel is available for all users of Aurora Ingest clients.

By this feature, channel availability are assigned according to user logon setup. Channel groups are assigned to users in the Aurora Ingest - Server by your system administrator. With this setup, auto-assign of channels would only be limited to channels that are available to the particular user. For more information regarding User Administration setup, refer to "User Administration for Aurora Ingest" on page 59.

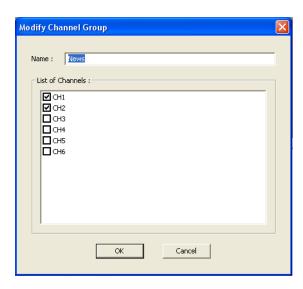
To add a channel group, click the **Add** button.



By default, all channels are selected when you create a new channel group. You can deselect channels by unchecking boxes that are not to be assigned to your channel group.

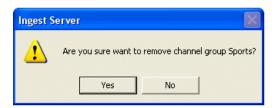
Enter the name of the channel group, assign channels to the group by deselecting unwanted channels and click OK.

To modify a channel group, select the channel group and click **Modify** button.



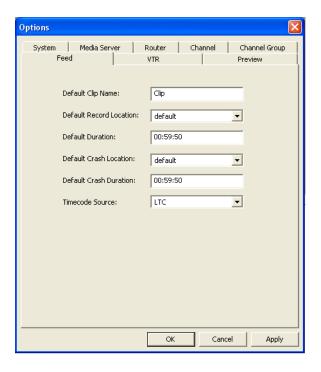
Edit the name of the channel group, check or uncheck channels for the group and click OK.

To delete, select the particular channel group and click **Remove** button.



Click **Yes** to confirm the removal of the channel group.

Configuring Aurora Ingest - Scheduler (Feed)



Setting	Description
Default Clip Name	Specify the default clip name.
Default Record Location	Enter the default location for any scheduled record event.
Default Duration	Enter the default duration for any new feed event you schedule. (00:59:50 by default). To easily schedule back-to-back records, adjust the default duration by 10 seconds in order to avoid a recording conflict. For example, for a 1 hour feed duration, set the default duration to 00:59:50.
Default Crash Location	Enter the default location for any un-scheduled, i.e. crash record event. Once specified, all crash records will go to the same folder name on all media servers.

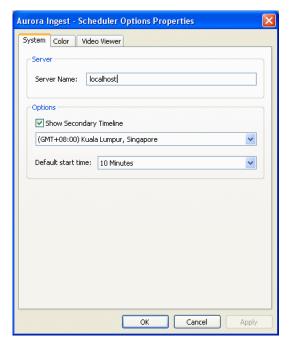
Setting	Description
Default Crash Duration	Enter the default duration for any un-scheduled record event.
Timecode Source	Select the timecode source from the dropdown list: System Time, LTC, or VITC

Configuring Scheduler in the Aurora Ingest - Scheduler application

After you have configured Scheduler in the Aurora Ingest - Server application, you need to configure the options in the Aurora Ingest - Scheduler application.

If you have the optional Hauppage WinTVGo video capture card or Blackmagic Design DeckLink video capture card installed in your scheduler machine and a router configured in your system, you will need to define the destination of the router connected (via digital to analog converters, if needed) to your video capture card.

1. In Aurora Ingest - Scheduler, select **Tools | Options** and the below window displays:

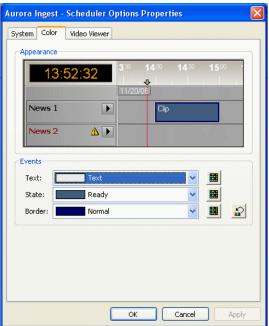


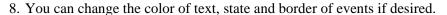
- 2. If you want to use an Aurora Ingest Server that is hosted on another machine, you need to specify the server name here. In the Server section of System tab, specify the Aurora Ingest Server for your operation.
- 3. In the Options section, you can select to show a secondary timeline on Aurora Ingest Scheduler main window. This feature allows you to display dual time zones on Scheduler application, which is of great use for global operations.
- 4. Select the time zone that you need from the dropdown list for your secondary timeline. Once configured, Scheduler will display both primary and secondary clock and timelines on the main window.



Chapter 2 Installing and Configuring Aurora Ingest

- 5. You can also set a default start time for a newly added event. The default start time ranges from 5 minutes to the next hour on the dropdown list. For example, if you set the default start time to 10 minutes and click the Add Event button at 11.10 am, the default start time on the Add Event window will be set to 11.21 am after allowing 10 minutes default between adding and recording the event.
- 6. Click **Apply** to save changes without exiting the Options window.
- 7. Select the Color tab to customize status colors in the Aurora Ingest Scheduler application.





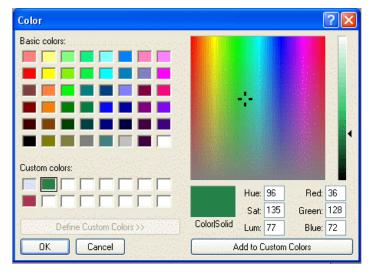


- 9. To change the text color, click text on the dropdown list and click the color palette button.
- 10. Select the text color that you want from the color palette display. You can choose



either to use basic colors as provided or define your own custom colors.

11. To create custom colors, click **Define Custom Colors** button and the color palette window will be expanded as shown below:



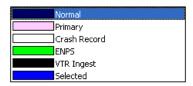
- 12. To change the luminance value of your color, move the right arrow up and down with the minimum value at the bottom and maximum value at the top of the scale.
- 13. To change the hue, move the crosshair marker left and right with the minimum value on the most left and maximum value on the most right.
- 14. To change the saturation value of your color, move the crosshair marker up and down with the minimum value at the bottom and maximum value on top.
- 15. Click **Add to Custom Colors** button to add the color that you chose to the Custom colors section on the color palette.
- 16. Select the text color that you want for Scheduler application and click OK.
- 17. To change the status color for 7 states of events in the Scheduler, select the state

Chapter 2 Installing and Configuring Aurora Ingest

from the dropdown list.



- 18. Follow steps 11-15 if you want to customize your own state colors.
- 19. Select the color for each state from the color palette and click OK.
- 20. To change the color of an event border, select the border from 6 types of borders in the dropdown list.

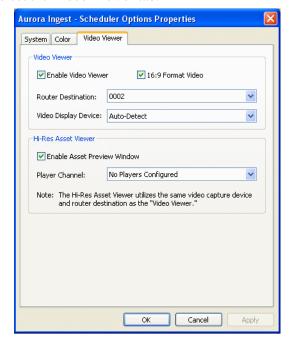


- 21. Follow steps 11-15 if you want to customize your own border colors.
- 22. Select the color for each border from the color palette and click OK.
- 23. Click **Apply** to implement your color changes.
- 24. To reset back to default colors, click the **Reset** button and a pop-up window will be displayed.



25. Click **Yes** to confirm the reset of your color scheme and click **Apply** to implement your color changes.

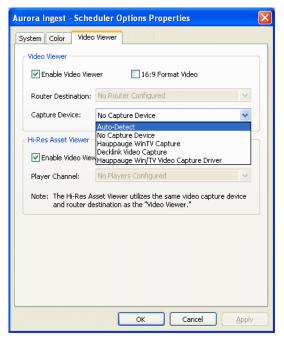




26. Then, select the Video Viewer tab.

- 27. Check the Enable video viewer box to have a video viewer in your Scheduler application. This feature enables user to view the asset as it is ingested into the media server.
- 28. If desired, check the 16:9 video format.
- 29. If using a router, select the router destination from the dropdown list. If no router has been configured, this field will be grayed out. To configure a router, see "Configuring Routers" on page 32.
- 30. If you have installed a video capture card, select the device in the capture device

dropdown list.



- 31. Select No Capture Device if you want to view the asset via a separate video monitor.
- 32. Once Hauppauge WinTV video capture card or Blackmagic Design DeckLink video capture card is configured for the video viewer, it could also be utilized for high resolution asset viewer.
- 33. The High Resolution Asset Viewer enables users to view ingested asset in the media server and edit asset with Mark In/Out points via the asset viewer controls. To enable the feature, check the Enable video viewer box in that section.



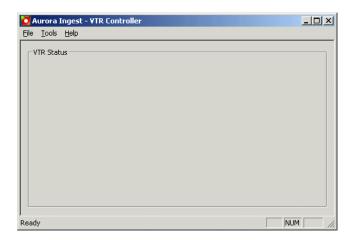
- 34. Select the player channel of the asset viewer from the dropdown list. The channel setting is done in the Preview tab within **Tools | Options** of Aurora Ingest Server. For more information on the setup, refer to "Configuring Preview Channels" on page 57.
- 35. Click **OK**.
- 36. The Aurora Ingest Scheduler application is now configured. For more information, see "Using Aurora Ingest Scheduler" on page 65.

Configuring VTR Controller

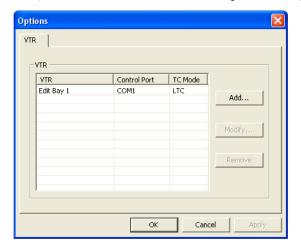
Before you can use VTR Ingest with a VTR or VTRs, you need to configure the VTR Controller application. VTR Controller can be installed on the same machine as the VTR Ingest application, but this is not required.

To configure VTR Controller, follow these steps:

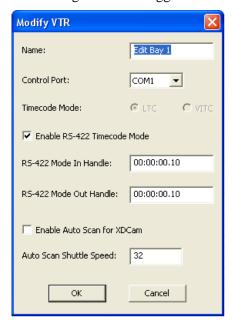
1. From the Windows Start menu, select All Programs | Aurora 6.3 | Aurora Ingest - VTR Controller. The VTR Controller application opens.



2. Select **Tools** | **Options**. The VTR Controller Options dialog box displays.



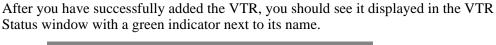
- 3. Click the **Add** button. A dialog box displays that allows you to enter a name and select a control port and timecode mode. The listening port is automatically populated. (Knowing the listening port can be useful if, for example, you are having difficulties with firewall and need to know which port should be allowed as an exception.)
- 4. Without the LTC physical connection, timecodes could still be polled via RS-422. Check the option to enable RS-422 timecode mode in the Add VTR window if you want to poll the timecode. Once configured, timecode is no longer a required input

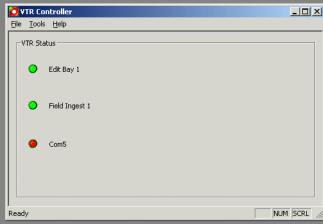


and records on VTR Ingest will be triggered with timecode detection via RS-422.

NOTE: Records with RS-422 timecode mode have a frame accuracy recording window of +/- 10 frames. Due to this, in and out handle settings are provided within the setup.

- 5. You can set In and Out Handles for recordings with VTR using the RS-422 timecode mode. Both handles are set to 10 frames by default.
- 6. If you are using an XDCAM VTR, you can select the checkbox to enable auto scan for the XDCAM VTR. The XDCAM VTR does not adhere to typical RS-422 shuttle commands. By enabling the auto scan feature for XDCAM VTR, previous and next commands will be used instead of the usual shuttle forward and back.
- 7. You can also change the shuttle speed for the auto scan feature. The default is set to 32, but you can change to any value depending on the type of VTR that you use. When XDCAM mode is selected, the field to set the shuttle speed of auto scan will be disabled and grayed out.
- 8. Click OK to add the VTR.





Once you have added VTRs, you can modify or delete them. However, if you only have one VTR displayed in the status window, you cannot delete it and have an empty status window.

Troubleshooting VTR Controller configuration

If you see a red indicator next to the VTR's name, try restarting VTR Controller. If the VTR status still displays a red indicator, verify the following:

- The correct COM port has been specified for the VTR.
- The COM port is not being used by another application controlling the VTR.
- The VTR is turned on.
- The hardware has been correctly installed. For more information, see "Installing Aurora Ingest" on page 18.
- The IP address or computer name where VTR Controller is installed matches the address or name in the VTR Ingest application.

The VTR Controller application is now configured. For more information, see "Using VTR Controller" on page 97. Before you can use a VTR with Aurora Ingest, you need to configure the VTR Ingest application and make sure the VTR information matches the information you entered when configuring VTR Controller. For more information on VTR Ingest, see "Configuring VTR Ingest (VTR)" on page 53.

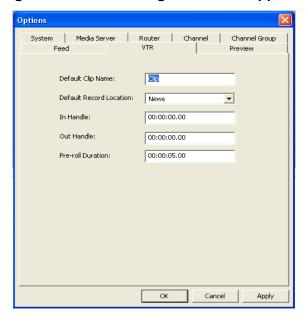
Configuring VTR Ingest (VTR)

Configuring VTR Ingest is a two-step process.

- 1. Populate the fields in the VTR tab under **Tools | Options** in the Aurora Ingest Server application.
- 2. Populate the VTR information under **Tools | Options** in the VTR Ingest application and verify that it matches the VTR information under **Tools | Options** in the VTR

Controller application.

Configuring VTR Ingest in the Aurora Ingest - Server application



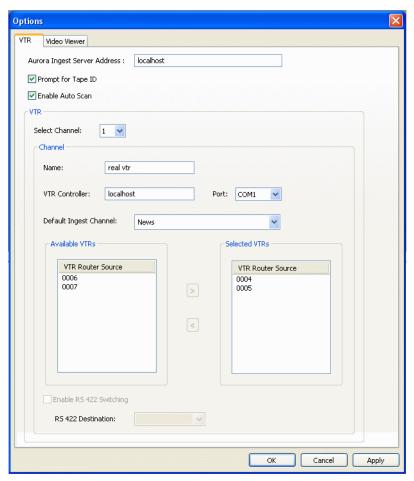
Setting	Description
Default Clip Name	Specify the default clip name.
Default Record Location	Enter the default location for any vtr ingest record event.
In Handle	Handles allow you to have additional frames to use
Out Handle	while editing. Enter the duration you want for the In and Out Handles (0 seconds by default).
Preroll Duration	Enter the number of seconds of preroll you want to use when recording clips (5 seconds by default).

Configuring VTR Ingest in the VTR Ingest application

Make sure you have already configured the VTR Controller application before completing this section. The VTR information in these two applications needs to match. For more information, see "Configuring VTR Controller" on page 51.

- 1. In the VTR Ingest application, select **Tools | Options**.
- 2. In the VTR tab, enter the IP address or host name of the Aurora Ingest Server.
- 3. If desired, check the prompt for Tape ID box. This feature allows you to customize the identification of your tape. If you don't enter a tape ID, VTR Ingest prompts you to enter the ID before you ingest the first clip.
- 4. If needed, you can also enable the Auto Scan feature. It allows you to scan and capture media from a tape according to timecode breaks.

- 5. Select a channel from the dropdown list and enter the name of the channel.
- 6. Enter the IP address or name of the computer where VTR Controller is installed. (If VTR Controller is installed on the same machine, enter **localhost**.)



- 7. Select the COM Port from the dropdown list.
- 8. When using channel groups, the Default Ingest Channel dropdown list reflects the configuration that had been set for the user. You can select one or more groups, or select individual channels depending on your setup.
- 9. Once a channel group is checked and selected, individual channels within that group become red in the dropdown list and they can no longer be individually selected.



10. If a user or user group is configured to belong to no channel groups, then those

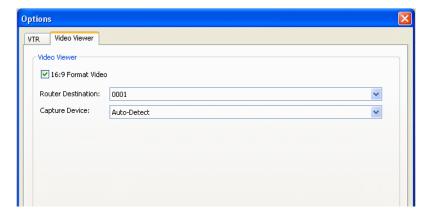
Chapter 2 Installing and Configuring Aurora Ingest

users could see and select all available channels within the dropdown list.

- 11. From the list of available VTRs, select the VTR router source. Once selected, the router source is displayed in the Selected VTR box.
- 12. You can also check the Enable RS-422 Switching box and select the RS-422 destination.
- 13. To make the changes but keep the Options dialog box open, click **Apply**.
- 14. Proceed to configure video viewer in the Video Viewer tab.

NOTE: If you have the optional Hauppage WinTVGo video capture card or Blackmagic Design DeckLink video capture card installed in your VTR Ingest machine, you will need to define the destination of the router connected (via digital to analog converters, if needed) to your video capture card.

- 15. Click the Video Viewer tab.
- 16. Check the 16:9 format video if desired.
- 17. Select the router destination from the dropdown list. If no router has been configured, this field will be grayed out. To configure a router, see "Configuring Routers" on page 32.

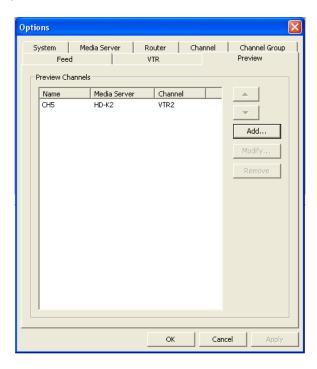


- 18. For the Capture Device dropdown list, select No Capture Device if you want to view the asset via a separate video monitor.
- 19. If you have installed a video capture card, select the device in the capture device dropdown list.
- 20. Click OK after you are done with the configuration.

The VTR Ingest application is now ready for use. For more information, see "Using VTR Ingest" on page 101.

Configuring Preview Channels

With the high resolution asset viewer in Aurora Ingest - Scheduler, users can view assets that had been ingested into the media server. The configuration of playback channel for this asset viewer is done in the Preview tab within **Tools | Options** of Aurora Ingest - Server.

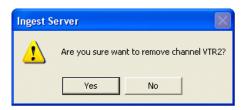


1. To configure the channel, click the **Add** button.



- 2. Enter the name of the channel and select the media server from the dropdown list.
- 3. Then, select the channel and router source from the dropdown list.
- 4. Click OK. After the preview channel had been configured, you can select it from the Player channel dropdown list within **Tools | Options** of Aurora Ingest Scheduler.
- 5. To modify the channel configuration, select the preview channel and click the **Modify** button.
- 6. Edit the channel configuration and click OK.

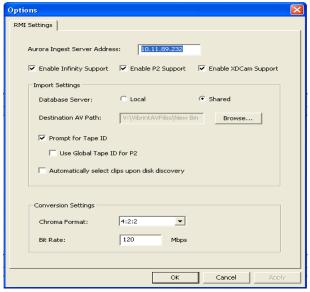
7. To remove, select the preview channel and click the **Remove** button.



8. Click **Yes** to confirm the removal of the preview channel.

Configuring RMI

The Aurora Ingest - RMI application is configured in the RMI application.



Once the "System Requirements" have been met, you can use this dialog box to configure Aurora Ingest - RMI.

- 1. Enter the IP address or computer name of the Aurora Ingest Server.
- 2. Specify the removable media device or devices.
- 3. Specify the import and conversion settings.
- 4. Select local or shared storage, and browse to the VibrintAVFiles location.
- Prompt for tape ID this feature lets you give the disk and all of the clips useful names right up front.
- Use Global Tape ID for P2 select this if you want to use global tape ID when ingesting from Panasonic P2. With the global tape ID, you can have a single ID to represent multiple Panasonic P2 cartridges.
- Automatically select clips upon disk discovery use this feature if it's better for your workflow to ingest all clips, then select or de-select individual clips.
- 5. If you are configuring for HD Infinity files or HD XDCAM files, you also need to

specify the conversion settings.

- Chroma Format select the chroma format from the dropdown list.
- Bit Rate set the appropriate bit rate needed.
- 6. Click **OK**.

User Administration for Aurora Ingest

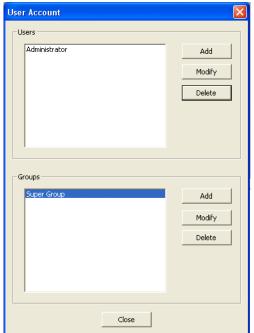
User administration for Aurora Ingest clients is done within **Tools | User Administration** in Aurora Ingest - Server. With this administrative feature, a system administrator can create user accounts, user groups and specify permissions according to user groups or user accounts.

By specifying permissions, an administrator can control who can access Aurora Ingest applications and what actions can be performed. By default, users are granted permissions for all tasks and access to all Aurora Ingest components when you initially create user accounts. You can deselect permissions that are not to be assigned to the particular user or the particular group.

For a smooth operation, it is best to create user groups with specific permissions to each group and configure channel groups before assigning them to users. Therefore; once you select group and channel group for the user, pre-configured permissions would be automatically set up as well.

It is mandatory for users to belong to groups. Groups have permission granted or denied to access the following tasks and components:

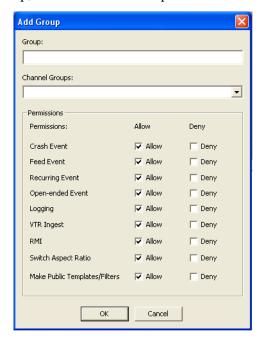
Permission	Description
Crash Event	Allows a user to record an unscheduled Aurora Ingest - Scheduler event.
Feed Event	Allows a user so assigned to record Aurora Ingest - Scheduler event.
Recurring Event	Allows a user so assigned to create a recurring Aurora Ingest - Scheduler record event.
Open-ended Event	Allows a user so assigned to record a Aurora Ingest - Scheduler event with no end time specified.
Logging	Allows a user to log a tape, create an EDL and save it. (Does not give the user permission to record.)
VTR Ingest	Allows a user so assigned to create Aurora Ingest- VTR batch events.
RMI	Allows a user to access Aurora Ingest - RMI to ingest events from playout devices such as the Infinity Digital Media Cameras and Digital Media Recorders or from Panasonic P2 or Sony XDCam removable media devices
Switch Aspect Ratio	Allows a user to switch video aspect ratio of Aurora Ingest - Scheduler record event and Aurora Ingest - VTR Ingest record event.
Make Public Templates/ Filters	Allows a user to create public templates and public filters. Without this permission, the make public check box for templates and filters will be grayed-out.



To create a user, select **Tools | User Administration** and the following window will be displayed.

Super Group is the default group that has permissions to all tasks and components.

To create a group, click Add in the Groups section.

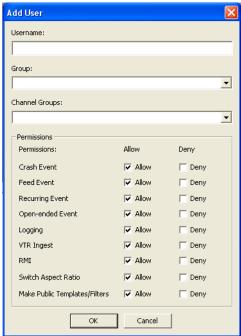


Enter the name of the group and select channel group from the dropdown list. Channel Groups are configured within Channel Group tab of **Tools | Options** in Aurora Ingest - Server. For more information on how to create channel groups, refer to "Configuring Channel Groups" on page 42.

Set permissions for the group by checking the Allow box or Deny box for each item.

Click OK after you finish configuring the group and proceed to create more groups to suit your broadcasting needs.

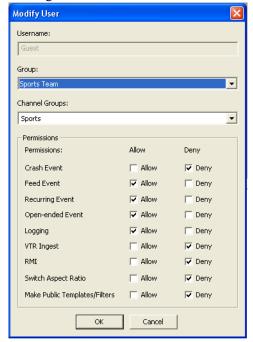
To create a user, click Add in the Users section.



Enter the Username and select a group for the user from the dropdown list. If specific permissions had been set for the group, the user will automatically will be set with the same appropriate permissions. If needed, you can still edit permissions to the particular user in this window.

If channel groups had also been configured for the particular group, they will be automatically shown under Channel Groups. If not, you can also select channel groups from the dropdown list. You can select more than one channel group if needed.

Click OK after you finish configuring the user setting and proceed to create more users to suit your broadcasting operation.

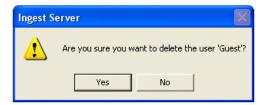


To modify user settings, select the user name and click **Modify**.

The user name could not be changed, but you can change the group, channel group and edit permissions for the user in this window.

Click OK to apply the changes.

To delete a user, select the user name and click **Delete**.



Click **Yes** to confirm the removal of the user.

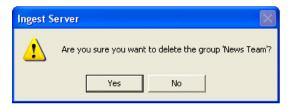


To modify group settings, select the group name and click Modify.

The group name could not be changed, but you could change the channel group and edit permissions for the group in this window.

Click OK to apply the changes.

To delete a group, select the group name and click **Delete**.



Click **Yes** to confirm the removal of the group.

Chapter 2 Installing and Configuring Aurora Ingest

Using Aurora Ingest - Scheduler

With Aurora Ingest - Scheduler, you can record an event from a VTR, router source, CompuSat satellite dish control system and ENPS. You can crash record, allowing for the immediate recording from any router source, or schedule events to record up to one year in advance, including recurring events. You can also gang roll, allowing several router sources to start recording simultaneously. In addition, you can view a recording item or a previously recorded item, and trim the clip if it is already linked to an Aurora Playout placeholder.

Before you can record an event, you need to have the Aurora Ingest system configured. For more information, see "Configuration Overview".

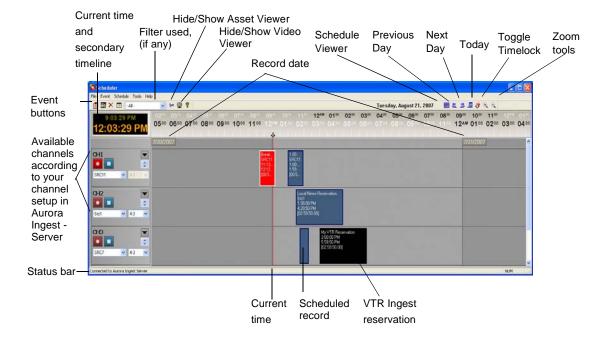
This chapter describes the Scheduler layout and details how to use Scheduler to capture and record clips for later use in a newscast. For information on configuring the Scheduler application, see "Configuring Aurora Ingest - Scheduler (Feed)" on page 44.

This chapter is divided into the following sections:

- "Tour of the Aurora Ingest Scheduler Window"
- "Tour of Schedule Viewer"
- "Crash Recording"
- "Scheduling Recordings"
- "Viewing Recordings"

Tour of the Aurora Ingest - Scheduler Window

The Scheduler user interface allows you to quickly view channels configured via Aurora Ingest - Server, and schedule or record events for your broadcast operation.



By default, Scheduler window opens to the current day, date and time according to your system time.

If you hover on a channel name on the left pane of the application, a tooltip will appear to show the channel name, server, recording port, remaining storage and status of the channel.

If you hover on an event on the main Scheduler window, a tooltip will appear to show the title, router source, start time, end time, duration of the event, recording location, channel group (if applicable), aspect ratio setting of the channel, description of the event and error (if applicable).





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Toolbar

These buttons let you perform common Scheduler functions:

Icon	Function
	Add a scheduled event.
	Modify a selected event.
×	Delete the selected event.
?	View the selected event
%<	Hide or show the high resolution Asset Viewer.
9	Hide or show the Video Viewer.
 	Launch the Schedule Viewer window.
=	Go to previous day on the main Scheduler window. The day and date on the toolbar will show the previous day and date as well.
=	Go to next day on the main Scheduler window. The day and date on the toolbar will show the next day and date as well.
	Go to today's date on the main Scheduler window. The day and date on the toolbar will show the current day and date.
₹\$	Toggle timelock on the main Scheduler window.
•	Zoom in to the main Scheduler window. The maximum display that could be zoomed in shows 5 minutes difference on the timeline.
Q	Zoom out of the main Scheduler window. The display could be zoomed out to show 2 hours difference on the timeline at most.

Clock and Timeline Display

Clock and timeline display are two essential features to schedule recordings.



You also have the option to display a secondary clock and timeline on your Scheduler window. If you have multiple sites across many time zones, seeing another time zone and timeline could make the scheduling process easier. For more information on how to setup the secondary clock and timeline, see "Configuring Scheduler in the Aurora Ingest - Scheduler application" on page 45.

Chapter 3 Using Aurora Ingest - Scheduler

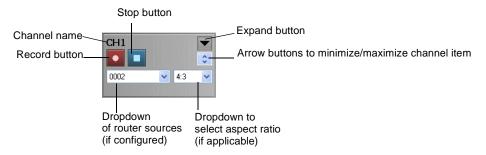
Once configured, Scheduler will display both times on the main window...



However, the secondary time is only shown on the clock and timeline display. You will not see the secondary time within add feed dialogs or tooltips within the Scheduler.

Channel Window

The channel window shows channels that had been configured within your Aurora Ingest - Server. For more information on channel configuration, see "Configuring Channels" on page 40.



Each channel window contains buttons and dropdowns that you need if you want to record an event immediately or also known as a crash record. For more information on crash recording, see "Crash Recording" on page 71.

Icon	Function
•	Start recording an event.
	Stop recording the event.
Þ	Expand channel window to show channel items. The arrow on the expand button shows downward if the channel window is already expanded.
•	Arrow button to minimize channel display by row.
•	Arrow button to expand channel display by row.

The router sources dropdown will show available router sources if you already configured your router and router sources for feeds. For information on how to configure your router and router sources, see "Configuring Routers" on page 32.

The aspect ratio dropdown will be available if the Enable Option to Switch Aspect Ratio is selected in System tab within **Tools|Options** of Aurora Ingest - Server. The availability of the dropdown also depends on user's permission to switch aspect ratio within the logon setup. This is done through the User Administration tool within Aurora Ingest - Server.

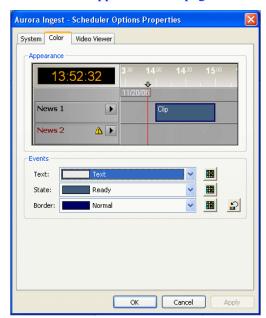
The feature to change aspect ratio is currently supported for K2 version 3.2 when controlling SD channels only. The feature will not work with previous versions of K2, HD channels, or other media servers, such as Profile and M-Series.

Status Colors

Each event entry appears in a color that identifies its status in Scheduler:

Event Background Color	Description
Red	The entry is recording.
Gold	The entry is cued and is next to record.
Green	The entry has finished recording.
Blue	The entry is ready to record.
Black	VTR Ingest has reserved this channel at this time.
Purple	The entry failed to record. See the Error Message field for more information.
Grey	The entry time has elapsed, probably due to a conflict with another recording.

You can change those default colors if you want to. For more information on how to modify color setting within the Scheduler grid, refer to "Configuring Scheduler in the Aurora Ingest - Scheduler application" on page 45.

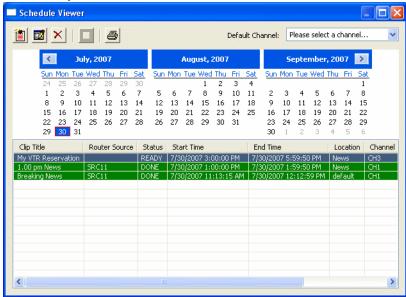


A preview window is provided in the color tab within **Tools|Options** of Aurora Ingest - Scheduler. You could see the change in appearance when different colors are selected from dropdown lists of events

Tour of Schedule Viewer

To see the details of the events scheduled for a particular day, you might want to use Schedule Viewer. Schedule Viewer provides an easy way to select dates for scheduling and to view scheduled events.

To access Schedule Viewer, click the **Schedule Viewer** icon or select **View** | **Schedule Viewer**. Schedule Viewer opens, and displays all scheduled events for the selected day.



In Schedule Viewer, you could add, modify, and delete events using appropriate buttons just as you would from the toolbar on Aurora Ingest - Scheduler main window.

Event Columns

Each column displays information about the event:

Column	Description
Clip title	The name of the event placeholder.
Router source	The router source selected for this event.

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Column	Description
Status	The current status of the event:
	Ready = The event is ready to record.
	Cueing = The event is preparing to record.
	Recording = The event is currently recording to the server.
	Done = The event has finished recording.
	Failed = The event could not record. Check the Error Message field for more information.
	Elapsed = The time for the event to record has passed. The status color is gray
	as the elapsed time is passing, and turns to black when the time has passed.
Start time	The beginning and ending time for the event.
End time	
Location	The name of the folder where the clip resides in the database.
Channel	The channel that had been selected for the event
Owner	The user who created the clip.
Error Message	Any error message describing why the event was not recorded to the server.

Crash Recording

You can crash record when you want to record an event immediately.

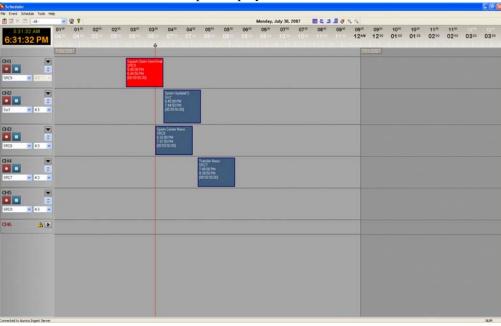
To crash record:

- 1. Select the channel where you want to record the event. If you do not select a channel, Scheduler will automatically assign a channel.
- 2. Select the router source for the recording by selecting from the router source dropdown list.



- 3. If the feature to switch aspect ratio is enabled within your Aurora Ingest Server and the feature is supported on your media server, select the aspect ratio that you need from the dropdown list.
- 4. Click **Record**. The clip cues, and after a short time the clip begins recording.
- 5. Aurora Ingest application will automatically name each clip using the prefix you set when you configured each channel. Refer to "Configuring Channels" on page 40.
- 6. You can rename the clip by right-click on the event and select **Rename Event** or press the **F2** key to bring up the Rename window.
- 7. While the clip is recording, the record button flashes and the clip is displayed as



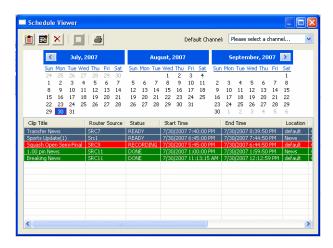


red. A scheduled clip is displayed as blue.



8. When you are done recording, click **Stop Record**.

Recording stops and the clip status changes to Done. You can view the event setup by selecting a clip and clicking on the View Event button or you can view the status of all the clips recorded that day by using Schedule Viewer.



Scheduling Recordings

With Scheduler, you can set up events to record automatically at pre-defined times and dates. You can also schedule recurring events, allowing you to record the same event every day of the week or once a week.

This section is divided into the following topics:

"Adding New Events"

- "Adding New Events from CompuSat"
- "Adding Recurring Events"
- "Setting up ENPS Assignment Grid"
- "Scheduling events with ENPS"
- "Extending Events"
- "Deleting Events"
- "Creating a Template"
- "Using VTR Ingest Reservation"
- "Using filters"

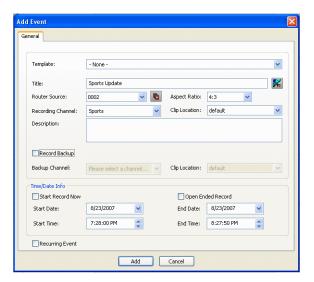
Adding New Events

To record events, you add a scheduled event for each event you want to record. You provide information about the event and Scheduler adds the event to the record schedule.

To add a new event:

- 1. Select the channel where you want to record the event. If you do not select a channel, Scheduler automatically assigns a channel.
- 2. Click Add Event.

The Add Event dialog box appears:



- 3. Fill out the information for the event you are scheduling:
 - Template—Select a template from the dropdown list.
 Templates save information such as clip location and recording channel so that you can save time on repeated ingests. See "Creating a Template" on page 86.
 - Clip Title—Enter a name for the scheduled event, if you want to.



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If not, Aurora Ingest automatically names each clip using the prefix you set when you configured each channel. See "Configuring Channels" on page 40.



- Assignment List Manager—Click Assignment List Manager to link this event to an Aurora Playout rundown. See "Linking Clips to Aurora Playout Placeholders" on page 113 for details.
- Router Source—Select the source to record from in the dropdown list. If no router had been configured to your system, None will be displayed in the dropdown.
- Gang Roll—Click **Gang Roll** to select several router sources to start recording simultaneously as can be seen in the window below:



- Aspect ratio—Select the aspect ratio that you want for the recording of the feed. This feature is enabled if the option is selected in System tab within Tools|Options of Aurora Ingest Server, the user is given permission to switch aspect ratio and the feed is going to be recorded into K2 version 3.2 when controlling SD channels only. This aspect ratio setting applies to both primary and backup event, if the option to record backup is selected.
- Recording Channel—Channel availability for a user depends on channel group and user administration setup within Aurora Ingest Server. If a user or user group is not configured to any channel groups, then those users will see all channels that had been configured on Aurora Ingest Server. When using channel groups, the user can only see channels and channel groups that they have access to. Initially, users can select individual channels and one or more channel groups from the dropdown list. However, once a channel group is selected; channels within that group will be displayed in red and they can no longer be individually selected. Other channels from other channel groups are grayed out and can no longer be selected as well. If needed, more than one channel group could be selected from the dropdown list.



- Clip Location—Select a record location for the event from the dropdown list.
 Record locations are configured in the Media Server tab within Tools|Options of Aurora Ingest Server.
- Record Backup—Check this box if you want to record a backup of the feed.
 After the option is selected, you need to set the backup channel and location of the clip.



- Start Record Now—Check this box to start a recording as soon as you click **OK**. If you check this box, you need to provide an ending time for the record. It can also be used with Open Ended Record.
- Open Ended Record—Check this box if you want a recording to continue until you manually stop it. You only provide a start time for the record as the end time section is grayed out when this option is selected.
- Start Date—Select the date you want the recording to start on using the dropdown calendar. Move to a different month using the arrows at the top of the calendar.
- Start Time—Enter the time you want the recording to start, using the format hour:minutes:seconds.

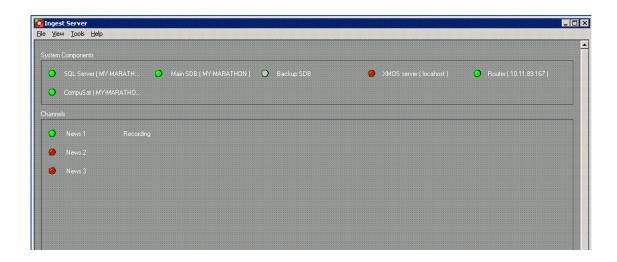
NOTE: When scheduling two events back-to-back, a space of 10 seconds is required from the stop of the first record to the start of the second record. In order to compensate for this, it is recommended that the default record duration reflect a stop time 10 seconds prior to the rounded duration (e.g., 00:59:50 for a 1 hour record).

- Stop Date—Select the date you want the recording to end on using the dropdown calendar.
- Stop Time—Enter the time you want the recording to end, using the format hour:minutes:seconds.
- Recurring—Check this box if you want this scheduled event to occur more than once. See "Adding Recurring Events" on page 77 for instructions.
- 4. Click **Add** and the scheduled event is added to Scheduler with a **Ready** status.

Adding New Events from CompuSat

To record events from a CompuSat-controlled satellite dish, you have to ensure that the CompuSat system component is connected to Aurora Ingest Server. See "Configuring System Settings" on page 29 for configuration instructions.

Make sure that the CompuSat system indicator is green to signify that the component is connected on the System Components display of Aurora Ingest Server.



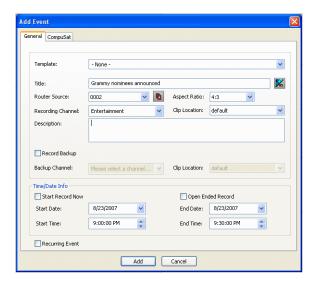
To add a new event:

1. Select the channel where you want to record the event. If channel group is selected, channels from other groups will be grayed out and can no longer be individually selected. Your event will be auto-assigned to channels within the selected channel group(s).

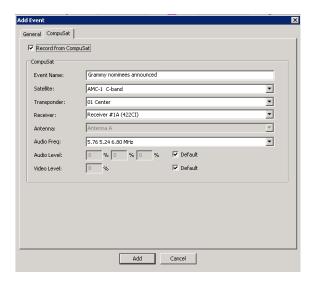


2. Click Add Event.

The Add Event dialog box appears. Note that there is an additional CompuSat tab in the dialog box.



- 3. Fill out the information for the event you are scheduling in the General tab. For details on each item in this tab, refer to "Adding New Events" on page 73.
- 4. Then, fill out the information needed for CompuSat setting.



• Event Name—Enter a name for the scheduled event. If you had entered Clip

Title in the General tab, the same name will appear in this box.

- Satellite—Select the satellite that you want to record the event from in the dropdown list.
- Transponder—Select the corresponding transponder to record the event from on the dropdown list.
- Receiver—Select the corresponding receiver to record the event from on the dropdown list.
- Audio Frequency—Select the corresponding audio frequency that you need for this event on the dropdown list.
- Audio Level/Video level—Set the corresponding percentage of audio and video levels that you need for this event. If not, you can always check the default box for default settings.

5. Click Add.

The scheduled event is added to Scheduler with a **Ready** status.

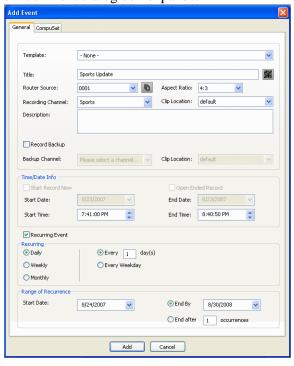
Adding Recurring Events

If you want to schedule an event to record on more than one occasion, such as every day of the week, or once a week, you create a recurring event. Scheduling a recurring event is the same as scheduling a one-time recording except that you enter information about how the event recurs throughout time.

NOTE: If using CompuSat, you can only schedule weekly recurring events.

To add a recurring event:

- 1. Follow steps 1-4 from "Adding New Events" on page 73.
- 2. Check the **Recurring Event** checkbox.

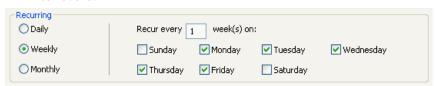


The Add Event dialog box expands:

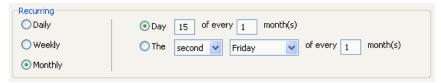
- 3. Select information about how you want the event to recur:
 - For daily occurrence, select either Every Weekday or enter a number of days for the event to recur.



• For Weekly occurrence, check the boxes for the day or days you want the entry to record.



• For Monthly occurrence, select a specific day each month to record, or select a specific day of the week, such as the second Friday, to record.



4. Select the range of occurrence, by selecting a Start date, and either an End by date or an End after a certain number of occurrences.



5. Click Add.

The recurring events are added to Aurora Ingest - Scheduler with a **Ready** status.

Setting up ENPS Assignment Grid

ENPS provides a standard layout for assignment grid of Newsgathering that can be customized according to your needs. Each line of the grid represents a separate story item. When you click on a line of the Newsgathering, you will see linked grids into which information about the story can be entered. In order to schedule events via ENPS, you need to set up specific assignment fields and assignment template.

Setting up assignment fields:

- 1. On an ENPS client, log in as the administrator and start up ENPS.
- 2. From the NEWS folder (fourth folder rover), select **System Maintenance | Global Configuration Options** and make sure that **DEFAULTMOSVERSION** is set to 2.6.
- 3. Add a new field, **FormatSubFieldValues** and set its value to 1. (Only applicable for ENPS version 5.00.0077 or higher.)
- 4. If no setting has been changed or added, go directly to step 5. If yes, restart News Object Manager (NOM) to ensure that the new field is added.
- 5. From the NEWS folder (fourth folder rover), select **System Maintenance** | **[Enterprise Name] Fields** and add the following parameters:

ID	Default Caption	Just	Validation	List	Width	Туре	Word Wrap	MOS Send
GVFeedS ource	Feed Source	Left	ComboBox	List of router sources. [Available choices to appear in a pull-down list, delimited by pipes] Eg. Source1 Source2 Source3	1000	Event Sheet		



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ID	Default Caption	Just	Validation	List	Width	Туре	Word Wrap	MOS Send
GVStart	Start Time	Left	Time (For ENPS versions lower than 5.00.0077) MOSDateT ime (For ENPS 5.00.0077 or higher)		1000	Event Sheet		
GVEnd	End Time	Left	Time (For ENPS versions lower than 5.00.0077) MOSDateT ime (For ENPS 5.00.0077 or higher)		1000	Event Sheet		
GVFeed Notes	Feed Notes	Left	Text		1000	Event Sheet	/	
GVFeeds	Feeds	Left	Form	Feed Source,C\[See note*],,GVFeedSou rce Start Time, Time,,GVStart End Time,Time,,GVEn d FeedNotes,,GVFe edNotes (For ENPS versions lower than 5.00.0077)	1000	Event Sheet		•

ID	Default Caption	Just	Validation	List	Width	Туре	Word Wrap	MOS Send
GVFeeds	Feeds	Left	Form	Feed Source,C\[See note*],,GVFeedSou rce Start Time,,,GVStart End Time,,,GVEnd Fee dNotes,,GVFeedNotes (For ENPS 5.00.0077 or higher)	1000	Event Sheet		<
				Note* Available choices to appear in a pull-down list, delimited by back-slashes and should be similar to the ones in GVFeedSource Eg. Source1\Source2\Source3				

6. Restart ENPS client.

Sample assignment fields for ENPS versions lower than 5.00.0077:



Sample assignment fields for ENPS version 5.00.0077 or higher:



Setting up assignment template

- 1. Create a new Newsgathering by naming it *GV Assignments*.
- 2. Enable MOS Control Active and MOS Story Send (to Aurora Playout's MOS ID).
- 3. Delete all existing columns except Story Slug.
- 4. Select **Layout | Add Columns** and name them with the following:
 - Break

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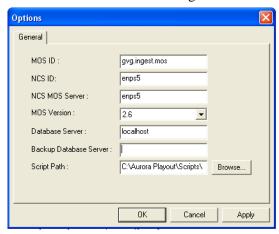
- · Feed Source
- · Start Time
- · End Time
- · MOS Status
- · Feed Notes
- 5. Insert two new rows, change the *Story Slugs* to *AM Assignments* and *PM Assignments* and select *Break* for both.
- 6. Delete the *Break* column.
- 7. Select Layout | Save as template and click Yes to save the template.

Scheduling events with ENPS

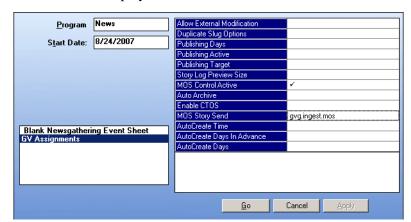
When scheduling events with ENPS, keep the following in mind:

- If there aren't any channels available in the scheduler, ENPS doesn't have any way of alerting the user.
- Channel availability depends on channel group and user logon setup within Aurora Ingest - Server.
- Make sure there is at least 10 seconds of space between feeds.
- Scheduling recurring feeds is not available via ENPS.

Prior to creating a newsgathering on ENPS, take note of the MOS ID in your XMOS Server and ensure that the NCS ID is configured to ENPS.



1. From the NEWS folder (fourth folder rover), select New | Newsgathering and this



window will be displayed on screen.

- 2. Select **GV Assignments** template and the program name will also be GV Assignments by default. You can change the program name to suit your broadcast operation.
- 3. Enable **MOS Control Active** field by clicking on it and a check sign will be displayed.
- 4. Click on MOS Story Send and select your MOS ID from the list.
- 5. Click **Go** and the below window will be displayed.



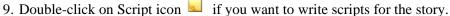
- 6. To create a story or newsgathering item, right-click on AM Assignments or PM Assignments and select **Insert row** or press CTRL-I for the hotkey.
- 7. Enter the name of the story and click on each column on the selected line of the assignment grid to fill out other information of the event you are scheduling:
 - Feed Source—Select the feed source from the dropdown list. If a router is configured within Aurora Ingest - Server, router sources are available within the dropdown.
 - Location—Select the record location of the event. Record locations listed on the dropdown are according to record location setup within Aurora Ingest - Server.
 - Channel—Enter the name of the channel for the recording. Available channels
 depend on channel group and user logon setup within Aurora Ingest Server. A
 channel will be auto-assigned, if no channel is entered for this setting.
 - Start Time—Enter the start time of the event. The time format is HH:MM.
 - End Time—Enter the end time of the event. The time format is HH:MM.
 - Feed Notes—Enter the description or any extra information of the event.
- 8. Create more stories if you want to schedule more events via ENPS. Details of the

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Feed Source Location Start Time End Time MOS Status Feed Notes AM Assignments 8/24/2007 10:00:00 8/24/2007 10:30:00 STAND BY Sports Update Source1 default 8/24/2007 11:00:00 8/24/2007 12:00:00 PGA Update Source2 default STAND BY 8/24/2007 2:00:00 8/24/2007 3:00:00 EPL Weekly Update Source1 default 2 STAND BY 8/24/2007 4:00:00 8/24/2007 6:00:00 Asian Youth Cup Source2 default 3 STAND BY Sports News 8/24/2007 10:00:00 8/24/2007 10:30:00 STAND BY Source3 default

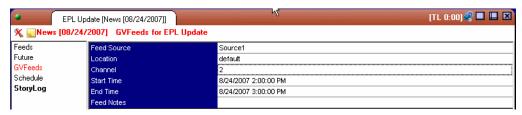
scheduling can easily be changed and viewed on the assignment grid.

NOTE: Do not create story or newsgathering item below the black line as the XMOS Server will not be able to update the MOS Status of that story.

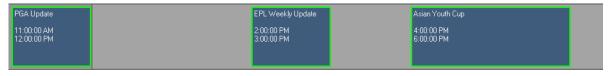




- 10. You can also click \(\simeg \) within the script window to edit details of the scheduling.
- 11. The following window will be displayed and select **GVFeeds** page to change any details of the event.

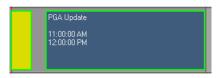


12. Open your Scheduler main window to see events scheduled via ENPS. Those events are distinguished from other events by green borders.



- 13. You can also change the border color of ENPS events in color tab within **Tools|Options** of the Scheduler.
- 14. Status colors of ENPS events are the same with other event setup on the Scheduler.

As can be seen below, the ENPS event displays in yellow as the event is cueing.



15. MOS Status change is updated on the assignment grid of ENPS as displayed in the following window.



16. However, you cannot delete an ENPS event via Scheduler. The following window will be displayed if you try to delete an ENPS event.



17. An ENPS event on the Scheduler can only be deleted from the assignment grid of ENPS.

Modifying Events

If you need to modify a scheduled event for any reason:



- 1. Select the entry you want to modify and click **Modify Event**. The Modify Event window opens.
- 2. If the event is part of a series, you see a message asking if you want to modify this occurrence or the entire series. Select which you want to modify and click **OK**.
- 3. Make your changes in the Modify Event window.
- 4. Click **OK**.

The event updates in Scheduler.

Extending Events

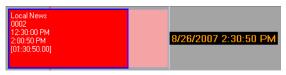
You can also modify the start and end time of an event on the Scheduler window, without opening the Modify Event window. After an event has been scheduled or while recording, you can drag and drop the start or end time.

1. Select the event that you want to extend within the Scheduler. Once selected, an

extend icon will appear if you hover over the start or end time of the event.



- 2. Click and drag to extend or retract the start or end time according to your broadcast needs.
- 3. A time tooltip and a shadow will be displayed to indicate the time change. You can also extend your feed while recording, as shown below:



4. Release your mouse after the new time for the event has been selected. A window will be displayed for you to confirm the time change.



5. Click **Yes** to confirm the time change of your event.

Deleting Events

If you need to delete an event:



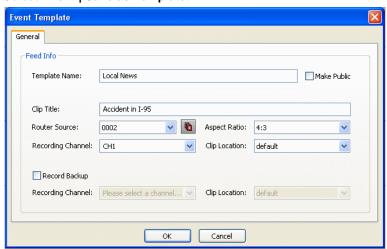
- 1. Select the event you want to modify and click **Delete**.
- 2. Select **Yes** in answer to the message asking if you want to delete the selected event or events.

The event is removed from Scheduler.

Creating a Template

A template saves time by storing information that will be used for multiple events. A template is created from an event. Without details from prior event, you can also create a template within Schedule Manager window of the Scheduler. In addition, you can create a template that enable gang rolls, that is, a template that lets you trigger multiple channel records from disparate sources simultaneously.

1. Select the event you want to use as a template. For more information on how to add an event, see "Adding New Events" on page 73.



2. Select Event | Save as Template.

- 3. Fill in the information that you want included in the template.
 - Template Name—Enter the name of the event template.
 - Make Public—This option is available if your logon configuration had been setup to allow you making public templates and filters. The permission to allow this option for a user is within User Administration setup of Aurora Ingest Server. Check the box if you want to set the template as a public template.
 - Clip Title—Enter a different clip title if needed. By default, the clip title of the selected event is automatically entered in this field.
 - Router Source—Select a different router source to record from in the dropdown list if needed. By default, the router source of the selected event is automatically entered in this field.
 - Gang Roll—Click **Gang Roll** button to select several router sources to start recording simultaneously as can be seen in the window below:



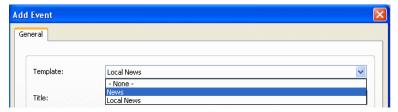
- Aspect ratio—Select the aspect ratio that you want for the recording of the feed.
 This feature is enabled if the option is selected in System tab within Tools |
 Options of Aurora Ingest Server, the user is given permission to switch aspect ratio and the feed is going to be recorded into K2 version 3.2 controlling SD channels only.
- Recording Channel—Select a different channel than the one automatically entered from the selected event if you want. Channel availability depends on channel group and user logon setup within the Aurora Ingest Server.
- Clip Location—Select a different record location than the one automatically entered from the selected event if you want. Availability of record locations depend on your setup within the Aurora Ingest Server.



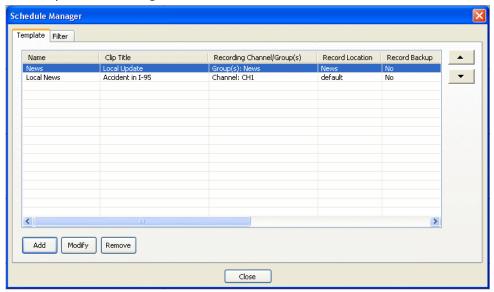
- Record Backup—Check the box if you want to record backup of an event as part of the event template. Select the recording channel and recording location of the backup from the dropdown lists.
- 4. Click **OK** to save the template.

NOTE: You cannot create a template from a VTR Ingest Reservation, only from a feed event in the Scheduler.

5. The template will be available for you, or other users within your broadcast operation if you set it as a public template. You can select it within the Template dropdown list in the Add Event or Modify Event window.



6. You can also add a new template, modify or remove existing template within **View** | **Schedule Manager** of the Scheduler.

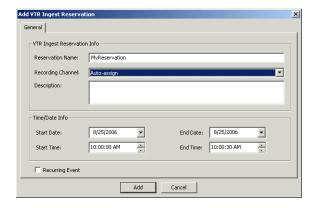


Using VTR Ingest Reservation

Using VTR Ingest Reservation allows you to reserve a channel for a record event by VTR Ingest. This ensures that the channel and the specified record time are reserved for VTR Ingest and cannot be used to schedule events.

To schedule a VTR Ingest Reservation, follow these steps:

1. Select Event | Add VTR Ingest Reservation. The Add VTR Ingest Reservation dialog box displays.



2. Specify the name of the reservation and the time/date info. If desired, add a description of the clip.

You can make the reservation a recurring event. If you do not specify a channel, Ingest with automatically assign one based on availability.

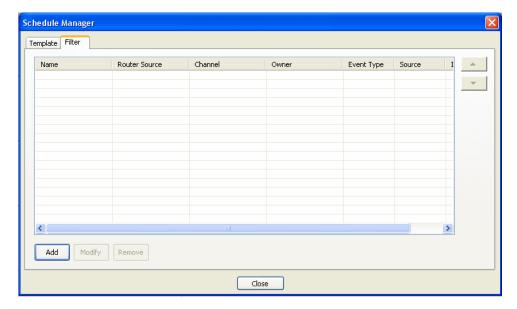
NOTE: Do not use the Stop button in Scheduler to stop a VTR Ingest recording. Stop the recording through the VTR Ingest application instead.

Using filters

If you have a large number of feeds, it can sometimes be tedious trying to locate the particular type of event, or channel, and so on, that you want to view. You can use filters to view the channels that you are particularly interested in.

To set up a filter, follow these steps:

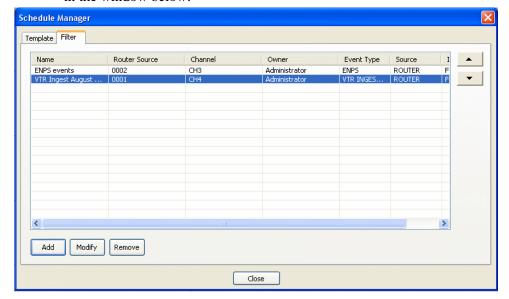
1. In Scheduler, select the Filter tab within **View | Schedule Manager**, as can be seen in the below window





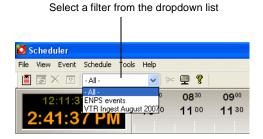
2. Click Add to add a new filter. The Add Filter dialog box displays.

- 3. Name the filter and select the criteria you want to use to filter.
 - Make Public—This option is available if your logon configuration had been setup to allow you making public templates and filters. The permission to allow this option for a user is within User Administration setup of Aurora Ingest -Server. Check the box if you want to set the filter as a public filter.
 - Event Type—Select the event type from the dropdown list. You can select all or select a particular event type such as ENPS, Feed, VTR or VTR Ingest Reservation.
 - Source Type—Select the source type that you need to filter. You can select all or select a particular source such as CompuSat or a router.
 - Router Source—Select the particular source if it's applicable for your filter or select all if needed.
 - Channel—Select the channel that you will be recording the feeds into. You can select all or select the specific channel that you need to filter.
 - Owner—Select all or a particular user of Aurora Ingest that had recorded the feeds. Names that appear on the dropdown list are according to user administration setup in Aurora Ingest - Server. For more information on user administration setup, see "User Administration for Aurora Ingest" on page 59.
- 4. Click Add to add the filter to Schedule Manager. The filter is added as can be seen



in the window below:

Once a filter has been added, you can select it from the dropdown list on the Scheduler toolbar and only filtered events can be seen on the main Scheduler window.



Viewing Recordings

With Aurora Ingest - Scheduler, you can view scheduled recordings via two different viewers known as Video Viewer and Asset Viewer. With the Asset Viewer, you can also trim the top and tail of a clip if it is already linked to an Aurora Playout placeholder. Both viewer buttons are easily accessible on the toolbar of Scheduler.

Using Video Viewer

The Video Viewer or also known as Live Feed Viewer can be used to monitor the recording of an event. You need to enable the feature in the video viewer tab within **Tools | Options** of the Scheduler. For more information on how to configure the video viewer, refer to "Configuring Scheduler in the Aurora Ingest - Scheduler application" on page 45.

If you have a router configured in your system, you can setup the router source for your video viewer in the video viewer tab within **Tools | Options** of the Scheduler.

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You do not need to have a video capture card installed in order to use this feature. You can set the **Video Display Device** dropdown to **No Capture Device** and configure your router source to an external monitor to preview the feed.



To launch Video Viewer:



- Select an event on the Scheduler and click the Video Viewer icon or select View |
 Live Feed Viewer.
- 2. The Live Feed Viewer window opens and displays the clip from the selected event.



- 3. You can click on the Video Viewer icon again to hide the Live Feed Viewer window.
- 4. If you click the Asset Viewer button while the Live Feed Viewer window is on display, the Live Feed Viewer will close its window and the View Asset window will launch; and vice versa.

Using Asset Viewer

With the Asset Viewer, you can view a previously recorded item or a currently recording item, and trim the top and tail of the clip if it is already linked to an Aurora Playout placeholder. This feature is currently supported for playbacks on K2 media clients only.

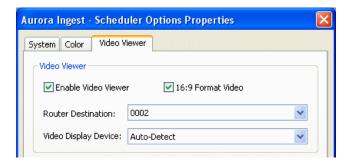
A video capture card is not mandatory because the Asset Viewer window will still launch and you can trim the clip by previewing it using an external monitor. The Asset Viewer uses the same video capture device and router destination as the Video Viewer. For more information on configuring the high resolution asset viewer, refer to "Configuring Scheduler in the Aurora Ingest - Scheduler application" on page 45.



Playback of clips on Asset Viewer requires the configuration of preview channels in the preview tab within **Tools|Options** of Aurora Ingest - Server.



If you have a router configured in your system, you need to setup the router source for the playback channel. Aurora Ingest - Server will switch the router source of the playback channel to the router destination of video capture card or video monitor defined in the video viewer tab within **Tools|Options** of the Scheduler.



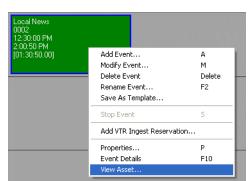
Once configured, preview channels will be available for individual clients of Scheduler. Although multiple clients can be configured to use the same preview channel, it is advisable to configure multiple preview channels and assign different channels to different clients. To configure a particular playback channel, select it from the Player Channel dropdown list in the video viewer tab within **Tools|Options** of the Scheduler.



To launch Asset Viewer:

- 1. Select an event on the Scheduler.
- 2. Click the Asset Viewer icon or select View | Asset Viewer. You can also right-click





on the selected event and select View Asset.

3. The clip loads to the playback channel and the View Asset window launches the clip.



4. You can use control buttons on the View Asset window to view the clip. However, only clips that are linked to Aurora Playout placeholders can be trimmed. The control buttons are described below:

Butto	n Function		
<	Jogs one frame back.		
<<	Jogs 10 frames back.		
>	Jogs one frame forward.		
>>	Jogs 10 frames forward.		
*	Rewinds the clip.		
-	Fast forwards the clip.		

Button	Function
D	Ejects the clip.
•	Plays the clip.
	Stops the clip.
-	Sets mark in point on the clip.
	Sets mark out point on the clip.
▼ +	Moves to the mark in point.
→	Moves to mark out point.
	Clears the mark in point.
	Clears the mark out point.
>€	Activates the trim to placeholder.

Trimming the clip

You can trim the top and tail of a clip if it is already linked to an Aurora Playout placeholder. For information on how to link an event to Aurora Playout placeholder, refer to Chapter 7, *Linking Clips to Aurora Playout Placeholders* on page 113.

To trim the clip in View Asset window:

1. Select an event on the Scheduler and click the Asset Viewer icon to launch the clip on the View Asset window.





Chapter 3 Using Aurora Ingest - Scheduler

2. Drag the slider to get to a point on the clip.



3. Click the Mark In button to set the mark in point on the clip. You can see that the color of the trim button changes to yellow to indicate that trimming is in progress.



- 4. Drag the slider to get to another point and click the Mark Out button to set the mark out point on the clip. You can use other control buttons on the View Asset window to clear mark in/out points or to get to mark in/out points.
- 5. After you are satisfied with your mark in and mark out points, click the Trim button to trim the clip.



- 6. The trim button reverts back to green color to indicate that the trimming is done.
- 7. You could now select the trimmed clip and placeholder via Housekeeper or Clip Browser within Aurora Playout, and drag it into your playlist for playback.





Chapter 4

Using VTR Controller

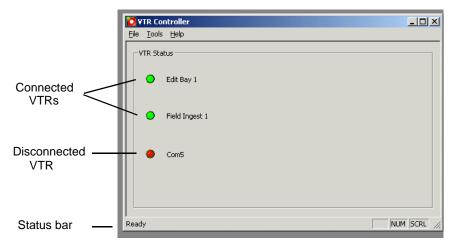
VTR Controller allows you to control up to eight VTRs for VTR Ingest application. Furthermore, VTR Controller allows you to add, modify, or edit VTRs and configure them to work with other Aurora Ingest applications. This chapter shows you how to use VTR Controller once it has been installed and configured. For information on how to install and configure the application, see "Installing Aurora Ingest" on page 18.

You can have VTR Controller and VTR Ingest on the same machines or on two connected via Ethernet. If you modify a VTR in VTR Controller, verify the change doesn't conflict with the VTR settings in the VTR Ingest application.

- "Tour of the VTR Controller Window"
- "Accessing VTR Controller"

Tour of the VTR Controller Window

The VTR Controller window shows the status of one to eight VTRs. The status of each VTR is indicated by the colors: a green indicator shows that the VTR is connected, while a red indicator shows that the VTR is not connected. The status bar at the bottom of the window show the status of the VTR Controller application.



To see the properties of a VTR, click on the red or green icon next to the VTR. The Properties window displays.



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Accessing VTR Controller

To start the VTR Controller application, click on the VTR Controller icon on the desktop or from the Start button follow this path: **Start | Program | Aurora 6.3 | VTR Controller**. When VTR Controller is first started, it automatically minimizes to an icon in the right-hand corner of the Windows taskbar. Double-click on the icon to bring up the main VTR Contoller window.



NOTE: If you click the X in the upper-right corner of the VTR Controller window or select **File | Exit**, the application does not exit. Instead, it is minimized, and the VTR Controller icon appears in the Windows taskbar.

To exit the VTR Controller application, right click on the icon and select Exit.

Chapter 4 Using VTR Controller

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Using VTR Ingest

Aurora Ingest - VTR Ingest allows you to record footage from VTRs or feeds from a router directly to a Media Server in your newsroom. With VTR Ingest, you can select clips from multiple VTR tapes, create a batch (also known as a segment) list, and record it to the server.

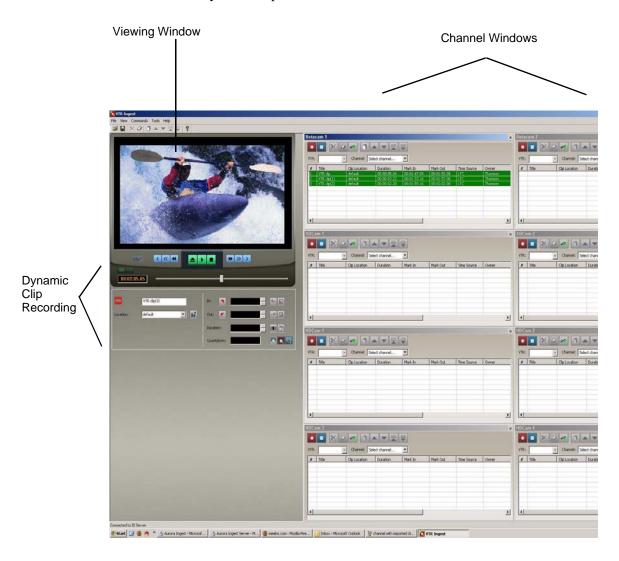
You can also export the segment list as an EDL and import it into Aurora Edit. The following sections describe each step in detail.

This chapter is divided into the following sections:

- "Tour of the VTR Ingest Window"
- "VTR Ingest Overview"
- "Importing an EDL"
- "Exporting an EDL"

Tour of the VTR Ingest Window

The VTR Ingest window consists of one to eight channel windows, a viewing window, and a dynamic clip record area.

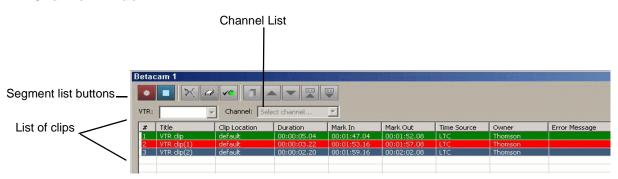


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Clip Record Area



Channel Window



Channel Window Toolbar

The Toolbar lets you perform common functions for recording clips:

Icon	Function
√ 0	Displays channel status—A green icon indicates status is OK; a red icon indicates a problem. Click on this icon to see status for the VTR, Primary Server, and Backup Server.
×	Deletes the selected clip(s).
0	Clears the segment (batch) capture list.
ס	Organize the segment (batch) capture list firstly by tape IDs, and then by mark in points.
	Move up the selected clip in the capture list.
	Move down the selected clip in the capture list.
	Move segments within the same tape up in the capture list.
•	Move segments within the same tape down in the capture list.

Channel Columns

Each channel window displays information about the clips in the segment (batch) list:

Column	Description
Title	The name of the clip.
Clip Location	The name of the folder where the clip resides in the media server.
Duration	The duration of the clip.
Mark In	The mark points for the clip.
Mark Out	-
Time Source	Control track (CTLTRACK), LTC, or VITC. Note: if using CTL, clip will not be frame accurate, instead it will be +/- 10 frames.
Owner	The name of the person who marked the clip
Tape ID	The identification of the particular tape
Error Message	Any error messages describing why the clip was not recorded to the server.
Use Handles	Indicate whether handles have been added to the clip.

VTR Ingest Overview

To record clips from a VTR, follow these basic steps:

- 1. Decide if you want to add handles to your clips.
- 2. Create a segment list or import an EDL.
- 3. Record the segment list to your Media Server.

Using VTR Ingest

You can use VTR Ingest to create a segment (batch) list of clips from videotape recordings, which you then record to your Media Server. For instructions on recording VTR clips, see "Creating a Segment List" on page 105. (You can schedule recordings using Scheduler. For more information, see "Using Aurora Ingest - Scheduler" on page 65.)

To view video, make sure you have configuring VTR Ingest for video viewing. For more information, see "Configuring VTR Ingest (VTR)" on page 53.

This section is divided into the following topics:

"Adding Handles"

"Creating a Segment List"

"Controlling the VTR with VTR Ingest"

"Marking In and Out Points"

"Deleting the Segment List"

"Recording Clips to the Media Server"

"Scanning Tape with Broken Timecodes"

Adding Handles

If you add handles to your clips, you will have additional frames to choose from when trimming your clips. Grass Valley recommends handles be used.



To use handles:, click the Record Handle button.

To set the duration of the handles, see "Configuring System Settings" on page 29.

Creating a Segment List

To create a segment (or batch) list:

- 1. Insert a tape into the VTR.
- M
- 2. Click **Tape ID** and name this videotape.

If you don't enter a Tape ID, Aurora Ingest prompts you before you add the first clip.

- 3. Play through the videotape to get the footage you need (see "Controlling the VTR with VTR Ingest" on page 106).
- 4. If desired, name the clip.

If not, Aurora Ingest will automatically name each clip using the prefix you set when you configured each channel. Refer to "Configuring Channels" on page 40.

- 5. Select a different record location for the clip, if you want to.
- 6. Mark an In and Out point for the clip (see "Marking In and Out Points" on page 107).



7. Click Add Segment to List or press C on your keyboard.

The clip is added to the list in the Channel Window.

- 8. Repeat steps 3-7 for additional clips.
- 9. To use additional tapes, insert a new tape into the VTR and repeat the steps above. When you eject a tape, Aurora Ingest clears the tape ID field. You can add the new videotape name anytime after you insert a new tape; if you haven't entered a new Tape ID before you add the first clip from that tape to the segment (batch) list, Aurora Ingest prompts you to add one.

Deleting the Segment List

You can delete a clip or the entire segment list:

Button	Function	Other Ways to Access
×	Deletes the selected clip.	Right-click in segment list and select Delete .
0	Clears the segment list.	Right-click in segment list and select Clear All.

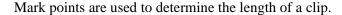
Controlling the VTR with VTR Ingest

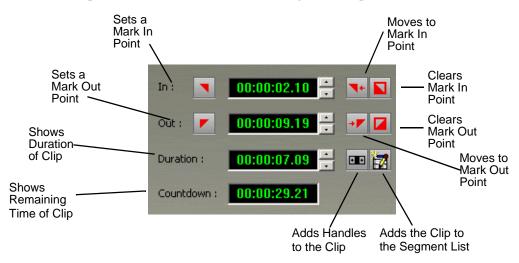
To get the footage you need to create clips, you need to play through the videotape in the VTR. Aurora Ingest provides transport control buttons like those on a tape deck. Use these controls to locate the material you want to record as a clip.

The deck controls are described in the following table:

Butto	n Function	
<	Jogs one frame back.	
~	Jogs 10 frames back.	
>	Jogs one frame forward.	
<i>>></i>	Jogs 10 frames forward.	
D	Ejects the tape.	
*	Rewinds the tape.	
•	Plays the tape.	
>>	Fast forwards the tape.	
	Stops the tape.	

Marking In and Out Points





To set Mark In and Out Points:

- 1. Find the spot on the videotape where you want your clip to begin.
- 2. Mark an In Point using any of the following methods:
 - Press I on your keyboard.
 - Click the Mark In button on the Aurora Ingest window.
 - Type the timecode in the In field.
 - Create a Mark In on the VTR.
- 3. Play through the tape until you reach the point where you want the clip to end.
- 4. Mark an Out Point using any of these methods:
 - Press **O** on your keyboard.
 - Click the Mark Out button on the Aurora Ingest window.
 - Use the up or down arrows to find the correct timecode.
 - Type the ending timecode in the Out field.
 - Create a Mark Out on the VTR.

Recording Clips to the Media Server

After you've created a segment (batch) list, you can record the clips to your media server. If you are recording to SD channels of K2 version 3.2, you can also set the clip aspect ratio in the clip record area of VTR Ingest. The option to switch aspect ratio is set in the System tab within **Tools|Options** of Aurora Ingest - Server and it depends on the user administration setup of your ingest operation.

To record:

1. Make sure the Channel Window is selected.





2. Click Record.

Aurora Ingest records the clips from the VTR tape to the server for later use in a news story. Clip status changes from Ready -> Cueing -> Recording -> Done. If the clip didn't record for some reason, status shows as Failed.



While the clip is recording, the record button flashes to indicate an active record.

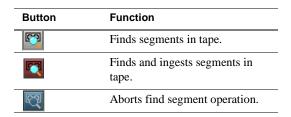
NOTE: If you want to reserve a channel to record a clip using VTR Ingest, you can ensure this in Aurora Ingest - Scheduler by using Add VTR Ingest Reservation. For more information, see "Using VTR Ingest Reservation" on page 88.

Scanning Tape with Broken Timecodes

One limitation of using VTR tapes in your broadcast operation is dealing with broken timecodes. You can now scan your tape and capture clips according to timecode breaks. A batch list will automatically be created and saved as the .vlg EDL type.

To enable the feature, you need to select the Enable Auto Scan checkbox in the VTR tab within **Tools|Options** of VTR Ingest. Once selected, three additional buttons will appear in the clip record interface of VTR Ingest.

Those buttons are as described in the following table:



To find segments in tape:



- 1. Insert tape into the VTR and click the **Find segments** button.
- 2. VTR Ingest rewinds the tape and automatically proceed to scan for timecode changes.
- 3. Once the mark in and mark out points are inserted around particular timecode changes, the clip is automatically added to the list.
- 4. When all clips have been logged, the batch list is created.
- 5. VTR Ingest will stop.



6. If you want to ingest those clips directly, you can click the **Find and Ingest segments** button at the beginning of the operation. VTR Ingest will run the operation from step 2 to step 4 as described above, and capture all clips in the batch list at the end of the operation.



7. You can stop the scanning for broken timecodes operation by clicking the **Abort** Find button.

NOTE: Do not save the EDL in .ale or .edl format, as the internal "control track" to properly locate broken timecodes could be lost and may result in standard VTR confusion when dealing with timecode direction. Save the EDL as .vlg type only.

Importing an EDL

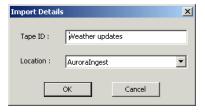
You can also import an Edit Decision List (EDL) to use as your segment (batch) list. Supported EDL formats are .ale, .edl, .vlg, and .xml. Clip names in the imported file cannot be longer than 32 characters.

To export an EDL, see "Exporting an EDL" on page 110.

NOTE: Importing an EDL will clear any existing segments in a VTR's segment list.

To import an EDL:

- 1. Choose File | Import EDL.
- 2. In the Open window, navigate to the correct folder, select the EDL to import, and click **Open**. The Import Details dialog box opens
- 3. Enter the Tape ID and select where to record the clips and click **OK**.



The EDL appears in the segment (batch) list for the selected channel and is ready to record:

4. Record your clips to the media server, as described on page 107.

NOTE: If you have a clip that failed to record for some reason, you can change its status back to Ready by highlighting the clip, right-clicking and selecting Mark Ready.

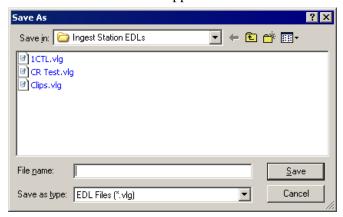
Exporting an EDL

Instead of recording your clips to a media server, you can export them as an EDL file, which can be used by other programs. By default, EDLs are saved in a .vlg format.

To export an EDL:

- 1. Highlight the file or group of files you want to export.
- 2. Choose File | Export EDL.

The Save As window appears:



- 3. Navigate to the folder where you want to export the EDL.
- 4. Enter a name for the file and click **Save**.

The EDLs can also be opened using Aurora Edit's batch (segment) capture feature.

Using Aurora Ingest - RMI

Aurora Ingest - RMI is an automated media digitization system that allows you to record footage from VTRs or feeds from a router directly to a Media Server in your newsroom.

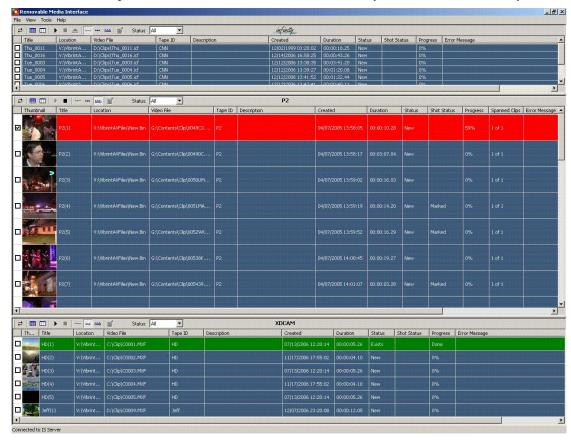
This chapter shows you how to use RMI to capture and record clips for later use in a newscast. For information on configuring RMI, see "Configuring RMI" on page 58.

This chapter is divided into the following sections:

- "What is Aurora Ingest RMI?"
- "Using Aurora Ingest RMI"

What is Aurora Ingest - RMI?

Aurora Ingest - RMI is an application that lets you simultaneously ingest files from multiple removable media devices such as Infinity, Panasonic P2 and Sony XDCam.



Using Aurora Ingest - RMI

After you have configured Aurora Ingest - RMI and attached the removable media device, RMI is ready for use.

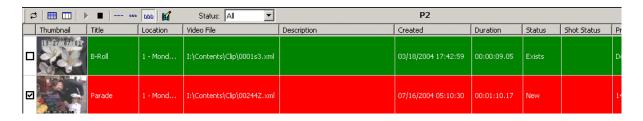
To use RMI, follow these steps:

- 1. Verify that the removable media device is plugged in and media is attached or inserted.
- 2. Select Programs | Aurora 6.3 | Aurora Ingest RMI.

The detachable media option (Rev, P2, XD) is seen automatically.

- 3. To select the clips you want to ingest, check the box next to each of the clips.
- 4. Click the Transfer icon.

While the transfer is proceeding, the clip information has a red background, and the percentage of the transferred media is displayed. Once the clip has been transferred, the clip information has a green background.



RMI recognizes good-shot marks. Select "Marked" from the Status drop-down list to see only those good shots. The screenshot below shows the Status drop-down list from the Panasonic P2 removable media device:



For XDCAM, RMI recognizes good-shot and bad-shot marks. Select from the drop-down list as shown below to choose a particular status for your view.



Chapter 7

Linking Clips to Aurora Playout Placeholders

If you are using Aurora Playout for playout, you can link clips you record with Aurora Ingest to placeholders in Aurora Playout. You can link clips for both VTR Ingest and Aurora Ingest - Scheduler using Aurora Ingest's Assignment List Manager. In VTR Ingest, you can link a placeholder to any of the individual clips in the batch list. In Aurora Ingest - Scheduler, you can link the placeholder to the entire feed, and you can also trim the top and tail of the feed via Asset Viewer.

You can link to a Aurora Playout placeholder for scheduled feeds, but not for recursive feed recordings.

Tour of the Assignment List Manager



The list of assignments shows each clip placeholder and its properties:

Column	Description
Clip Name	The name of the clip placeholder.
Duration	The length of the clip.
Editorial Duration	The duration of the clip set when the placeholder was created. This estimated value will be changed later when media is associated with the placeholder.
Category	The category assigned to the clip; you can assign categories based on the editor to receive the assignment, for instance.
Туре	The type of story or sequence an editor needs to create: Voice Over (VO), Sound on Tape (SOT), or other types set in News Q Pro's SDB Server Options.
Description	Brief description of the clip an editor needs to create.
Clip ID	The clip ID, which is automatically defined when the placeholder is created.
Date	The date the placeholder was created.

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Linking Clips

To link an ingested clip to a Aurora Playout placeholder:

1. In VTR Ingest, mark an In and Out point to create a clip; in Aurora Ingest - Scheduler, select your feed source.



2. In the left pane of VTR Ingest, click **Assignment List Manager**; in Aurora Ingest - Scheduler, click **Assignment List Manager** in the Add Event window, The Assignment List Manager opens.

Select a placeholder to link to and click **OK**.
 The placeholder name and description fill in on Aurora Ingest.



 In VTR Ingest, click Add Clip to Batch List; in Aurora Ingest - Scheduler, click Record.

The ingested clip or feed is now associated with the Aurora Playout placeholder.

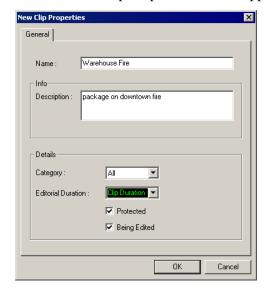
Creating New Placeholders

If you need to, you can create additional placeholders for clips you want to link to Aurora Playout.

To create a new placeholder for a clip:



1. In the Assignment List Manager, click **New**. The New Clip Properties window appears:



- 2. Enter the clip information:
 - Name Enter a name for the placeholder. The name identifies the placeholder in your Assignment List Manager, the Assignment List Plug-in on the ENPS system, and the Aurora Playout playlist.
 - **Description** Enter a description for the placeholder to help identify the clip you need to create.

Chapter 7 Linking Clips to Aurora Playout Placeholders

- Category Select a category from the drop-down menu. The category determines who receives the placeholder as an assignment. Selecting ALL makes the placeholder accessible to all editors who select ALL in their Assignment List Manager.
- Editorial Duration If desired, enter an estimated duration for the story or select one from the drop-down list. The editor can also enter an editorial duration that is less than the clip length, which is sent back to the NCS for show timing.
- **Protected** Check this box to prevent the clip from being deleted from the database.
- **Being Edited** Check this box to show that the clip for a placeholder is being edited. This field allows editors to easily see that a clip is already being worked on in another edit room.

3. Click **OK**.

The Clip ID and Date are automatically set when you create the placeholder.

Appendix A The Aurora Ingest Keyboard

This appendix lists all of the keyboard functions that control Aurora Ingest, including key combinations using the Control keys.

lcon	Key	Name	Function
•	F12	Record	Starts recording the clips in the segment list or the feed from the router source.
D	Ctrl + Q	Eject	Ejects tape from tape deck.
•	W	Play	Plays the tape or feed.
*	Е	Rewind	Rewinds the tape or feed.
*	R	Fast Forward	Fast Forwards the tape or feed.
•	I	Mark In	Marks an In point.
* +	Ctrl + I	Go to Mark In	Moves to the Mark In point.
	0	Mark Out	Marks an Out point.
→	Ctrl + O	Go to Mark Out	Moves to the Mark Out point.
	P	Clear Mark In	Clears the In point.
	[Clear Mark Out	Clears the Out point.
<	A	Back 1 Frame	Moves cursor one frame back on the Timeline.
>	S	Forward 1 Frame	Moves cursor one frame forward on the Timeline.
<<	D	Back 10 Frames	Moves cursor 10 frames back on the Timeline.

Appendix A The Aurora Ingest Keyboard

lcon	Key	Name	Function
>>	F	Forward 10 Frames	Moves cursor 10 frames forward on the Timeline.
	С	Add Clip to Segment List	Adds marked clip to segment list.
	Space Bar	Stop	Toggles between recording and stopping recording.

Appendix **B**Aurora Ingest Error Messages

The following table describes the Aurora Ingest error messages.

Error Message	Description
No available channel at the time of record	Could not allocate channel for recording. Please make sure that AppCenter is running and channel is set to AMPRecorder.
Could not switch router	Could not switch router. Please make sure that the destination is not locked and router is running.
Could not switch timecode mode	Could not switch timecode mode.
Could not cue the clip	Could not cue the clip. Please make sure that channel is set to AMPRecorder, not AMPPlayer.
Clip already exists at this location	Clip already exists at this location. Please use a different name.
Could not start record	Could not start record. Please make sure your Media Server is running and responding.
Could not stop record	Could not stop record. Please make sure your Media Server is running and responding.
The server storage is full	The server storage is full. Please clean up the server storage.
Could not eject clip	Could not eject clip. Please make sure your Media Server is running and responding.
Event may not start record as it conflicts with another allocated event	Event did not/may not start record as it conflicts with another allocated event.
Could not control CompuSat for recording	Could not control CompuSat for recording. Please ensure that you have the correct CompuSat configuration.
Aurora Ingest Server could not complete record due to system shutdown	Aurora Ingest Server could not complete record due to system shutdown. Please restart the system in order to resume.
A user has canceled this Ingest event	A user has cancelled the Ingest event.
This event was prematurely stopped by the media server	The event was prematurely stopped by the Media Server. Please check your storage status.
This event may not have started and/or stopped at correct timecode	The event may not have started and/or stopped at correct timecode.

Appendix B Aurora Ingest Error Messages

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