Aurora Edit

Installation Guide

SOFTWARE VERSION 6.5

071-8501-03
NOVEMBER 2008

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Revision Status

Rev Date	Description
March 28, 2005	Initial release, part number 071-8294-00
November 21, 2005	Release 071-8294-01 for Software Version 5.5
June 30, 2006	Release 071-8501-00 for Software Version 6.0
October 26, 2006	Release 071-8501-01 for Software Version 6.0a
September 20, 2007	Release 071-8501-02 for Software Version 6.3
November 25, 2008	Release 071-8501-03 for Software Version 6.5

Contents

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.

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 when power is present.

Product Damage Precautions

Use Proper Power Source

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

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 manual:

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 may result in damage to equipment or other property, or which may cause equipment crucial to your business environment to become temporarily non-operational.

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

WARNING: The service instructions in this manual are intended for use by qualified service personnel only. To avoid personal injury, do not perform any servicing unless you are qualified to do so. Refer to all safety summaries before performing service.

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.

Disconnect Power

To avoid electric shock, disconnect the main power by means of the power cord or, if provided, the power switch.

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.

EN55103 1/2

Class A Warning

This product has been evaluated for Electromagnetic Compatibility under the EN 55103-1/2 standards for Emissions and Immunity and meets the requirements for E4 environment.

This product complies with Class A (E4 environment). In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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.

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).

Safety Certification

This product has been evaluated and meets the following Safety Certification Standards:

Standard	Designed/tested for compliance with:
UL1950	Safety of Information Technology Equipment, including Electrical Business Equipment (Third edition).

Standard	Designed/tested for compliance with:
IEC 950	Safety of Information Technology Equipment, including Electrical Business Equipment (Second edition, 1991).
CAN/CSA C22.2, No. 950-95	Safety of Information Technology Equipment, including Electrical Business Equipment.
EN60950	Safety of Information Technology Equipment, including Electrical Business Equipment 1992.

Preface

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.

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.

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END-OF-LIFE PRODUCT RECYCLING NOTICE

Grass Valley's innovation and excellence in product design also extends to the programs we've established to manage the recycling of our products. Grass Valley has developed a comprehensive end-of-life product take back program for recycle or disposal of end-of-life products. Our program meets the requirements of the European Union's WEEE Directive, the United States Environmental Protection Agency, and U.S. state and local agencies.

Grass Valley's end-of-life product take back program assures proper disposal by use of Best Available Technology. This program accepts any Grass Valley branded equipment. Upon request, a Certificate of Recycling or a Certificate of Destruction, depending on the ultimate disposition of the product, can be sent to the requester.

Grass Valley will be responsible for all costs associated with recycling and disposal, including freight. However, you are responsible for the removal of the equipment from your facility and packing the equipment to make it ready for pickup.

For further information on the Grass Valley product take back system please contact Grass Valley at + 800 80 80 20 20 or +33 1 48 25 20 20 from most other countries. In the U.S. and Canada please call 800-547-8949 or 530-478-4148, and ask to be connected to the EH&S Department. Additional information concerning the program can be found at: www.thomsongrassvalley.com/environment

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Chapter **1**

Introducing the Aurora Edit System

The Aurora Edit system is a combination of hardware and software that provides the tools necessary to create and manage content for news and sports broadcasts.

This chapter discusses the following topics:

- Aurora Edit Components
- Installing Optional Equipment
- Connecting External Controllers

Aurora Edit Components

The Aurora Edit family consists of several components that comprise a digital news production system. All Aurora Edit applications run on the Aurora Edit platform.

Workstation Components

The Aurora Edit workstation is a desktop or laptop computer. For a list of supported hardware configurations, see the Release Notes. Basic system components include:

• Keyboard and Mouse

  The Aurora Edit keyboard has groups of color-coded keys that help you to locate and use editing functions at a glance. The Aurora Edit system also includes a standard USB mouse.

• Monitor

  Aurora Edit workstations support either one or two monitors (or, in the case of LD, one external monitor). In a dual-monitor configuration, one monitor is typically used to display bins while the other displays other Aurora Edit application components.

• Breakout Box

  Aurora Edit HD supports an optional video board and HDR Breakout Box (BOB) that provides multiple video and audio inputs and outputs. See "Installing Video Boards and Breakout Boxes" on page 3.

Storage Options

The Aurora Edit system provides two options for storing files:

• **NAS** (Network Attached Storage) network, a shared storage network consisting of:

  • A NAS Server to manage the network file systems

  • RAID arrays to provide media storage

  • A Database System Manager (DSM) to host the News database and (optionally) the SmartBins Service

  NAS networks support Gigabit Ethernet or Fibre Channel networking.

• **K2**, a shared storage network consisting of these components:

  • A K2 Media Server to manage network file systems

  • RAID arrays to provide media storage

  • Gigabit Ethernet Switches to connect the K2 Media Server to Aurora Edit clients

  • A Control Point PC to K2 Configuration application

  • A Database System Manager (DSM) to host the News database and (optionally) the SmartBins Service

  K2 networks use Gigabit Ethernet networking.

Installing Optional Equipment

Aurora Edit allows you to connect a variety of specialized equipment to enhance your editing capabilities.

Installing Video Boards and Breakout Boxes

Aurora Edit HD workstations can be equipped with a video board and external, rack-mountable HDR Breakout Box (BOB) to provide additional, high-quality audio and video connections for high definition video production workflows.

The Aurora Edit hardware installation kit contains a rack-mountable HDR Breakout Box with an accompanying video board and cables. See Appendix to determine the slot in which the board must be installed.

Installing the Video Board and Breakout Box

To prepare the workstation for any box-board combination:

1. Install the video board in the workstation; see Appendix A for the proper slot.

2. Connect the video board and BOB using the cables provided:

   • Custom cable with 60-pin connectors

   • Serial digital cable with three BNC connectors

3. Start Windows.

4. Install the HDR board driver.

   This driver is located in the Drivers directory of the Aurora Edit CD-ROM. You can use either the Found New Hardware Wizard or the Update Device Driver Wizard to install the driver.

5. Click **Start | Settings | Control Panel**.

6. Double-click **Administrative Tools | Local Security Policy**.

   The Local Security Settings window appears.

7. Click **Local Policies** and then double-click **Security Options**.

   A list of security policy/setting options appears.

8. Double-click **Network access: Sharing and security model for local accounts** and change the Network access setting to: **Classic - local users authenticate as themselves**.

9. Click **OK**.

Connecting Audio and Video Cables to the Breakout Box

The following illustration and table detail how to connect other video and audio cables to your Aurora Edit system.
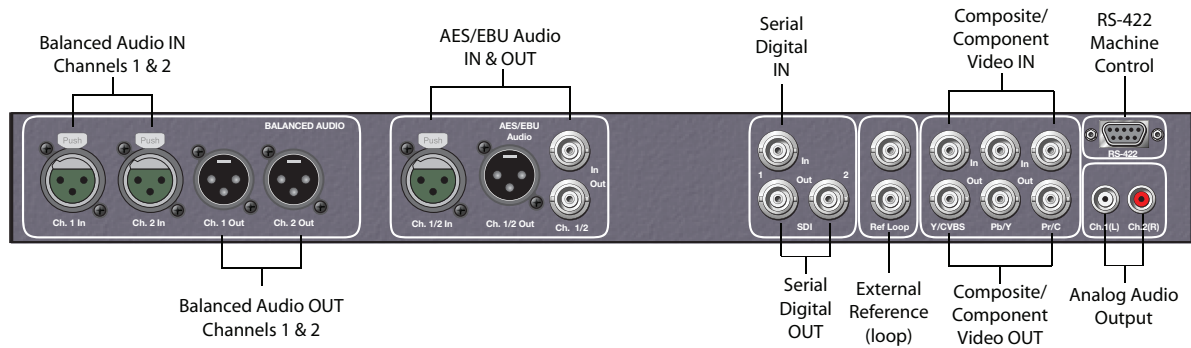
Input	From	To	Cable type
Analog Audio (without mixer)	VTR Channel 1 output	BOB Balanced IN left channel	XLR-female to XLR-male
	VTR Channel 2 output	BOB Balanced IN right channel	XLR-female to XLR-male
	BOB Balanced Left Out	VTR Channel 1 input	XLR-male to XLR-female
	BOB Balanced Right Out	VTR Channel 2 input	XLR-male to XLR-female
	BOB Unbalanced Left Out	Left desktop speaker	RCA-male to XLR or 1/4" male
	BOB Unbalanced Right Out	Right desktop speaker	RCA-male to XLR or 1/4" male
Digital Audio	VTR AES/EBU Channels 1&2 Output	BOB AES/EBU Channels 1&2 Input	XLR-male to XLR-male
	BOB AES/EBU Channels 1&2 Output	VTR AES/EBU Channels 1&2 Input	XLR-male to XLR-female
	BOB Unbalanced Left Out	Left desktop speaker	RCA-male to XLR or 1/4" male
	BOB Unbalanced Right Out	Right desktop speaker	RCA-male to XLR or 1/4" male
Video	VTR-SDI Output	BOB SDI Input	Single BNC-BNC
	BOB SDI Output	VTR SDI Input	Single BNC-BNC
	VTR Composite Output	BOB Composite Input	Single BNC-BNC
	BOB Composite Output	VTR Composite Input	Single BNC-BNC
	VTR Component Output	BOB Component Input	Tri BNC-BNC harness
	BOB Component Output	VTR Component Output	Tri BNC-BNC harness

Connecting an Audio Mixer

You can enhance Aurora's audio capabilities by adding an audio mixer and feeding multiple inputs into the editor. The following table describes a suggested configuration based on a Mackie 1402VLZPro mixer.

Input	From	To	Cable type
Analog Audio with a Mixer	VTR Channel 1 output	Mixer channel 1 line IN	XLR-female to 1/4"-male
	VTR Channel 2 output	Mixer channel 2 line IN	XLR-female to 1/4"-male
	Main mixer out left channel	BOB Balanced IN left channel	XLR-female to XLR-male
	Main mixer out right channel	BOB Balanced IN right channel	XLR-female to XLR-male
	BOB Balanced Left Out	VTR Channel 1 input	XLR-male to XLR-male
	BOB Balanced Right Out	VTR Channel 2 input	XLR-male to XLR-male
	BOB Unbalanced Left Out	Left desktop speaker	RCA-male to XLR or 1/4" male
	BOB Unbalanced Right Out	Right desktop speaker	RCA-male to XLR or 1/4" male

Connecting a Video Tape Recorder

To import tape footage, connect a VTR to your system using an RS-422 remote serial cable.

Connecting External Controllers

Aurora Edit supports three types of external controllers: the Motorized Fader Controller, the Jog/Shuttle Controller, and the Effects Controller.

Controller	Description
Jog/Shuttle	Assists editing with a jog/shuttle wheel for convenient searching, buttons to minimize keyboard strokes, and a backlit LCD timecode display.
Motorized Fader	Assists audio mixing with four touch-sensitive, motorized faders, 16 channel switches, 4 function keys, and bank shift buttons.
Effects	Assists effects editing with a 3–axis joystick mechanism, five rotary encoders, and 10 switches.

Connecting a Jog/Shuttle Controller

1. Plug the controller's 9-pin connector into the lower RS-422 port on the back of the Aurora Edit workstation (COM4).

2. Plug the controller's power connector into a DC power adapter connection.

3. Verify that the following information appears on the controller's display when it powers up:

   Grass Valley
   Aurora Edit
   Rev x.xx

4. Turn on your Aurora Edit workstation.

Connecting a Motorized Fader or Effects Controller

1. Plug the controller's USB connector into one of the two available USB ports on the back of your Aurora Edit workstation (usually COM5 for the Motorized Fader Controller and COM6 for the Effects Controller).

2. If you are connecting the Motorized Fader Controller, plug the controller's power connector into a DC power adapter connection.

   The Effects Controller is powered via the USB cable.

3. Turn on your Aurora Edit workstation.

4. When the New Hardware Wizard appears, follow the directions on the screen.

5. When asked for the controller's driver, insert the Aurora Edit CD and navigate to **\Drivers\JLC USB Drivers**.

6. Finish the new hardware installation.

7. Configure Windows and Aurora Edit COM ports as described in the following two sections.

Assigning a COM Port (Windows)

To verify that the COM port is set correctly in the Windows Device Manager:

1. Right-click on My Computer and select **Properties**.

2. Click the Hardware tab on the System Properties window and then click **Device Manager**.

3. Click the **+** symbol next to the Ports item.

4. Click on **JLCooper USB to Serial (COM#)** and select **Properties**.

5. Click the Port Settings tab on the Properties tab and click **Advanced**.

6. Select the correct **COM Port Number**.

7. Click **OK** to close the Advanced window, and again to close the Properties window.

Assigning a COM Port (Aurora Edit)

To use any of the controllers, you need to assign a specific Aurora Edit COM port for the controller. Aurora Edit has pre-configured COM ports as follows:

COM Port	Type of Port	Configured Device
1	GPIO	Aurora Playout GPIO
2		
3	RS-422	Video Tape Recorder (VTR)
4	RS-422	Jog/Shuttle Controller
5	USB	Motorized Fader Controller
6	USB	Effects Controller

To assign a COM port:

1. In Aurora Edit, choose **Tools | Options | Controller**.

2. For the Jog/Shuttle Controller, select the correct COM port from the **422 Controller Comm Port** drop-down list; for the other controllers, select the correct COM port from the **USB Controller Comm Port** drop-down list.

   The COM port needs to match the number of the USB port where you connected the controller.

3. Click **OK**.

Chapter **2**

Introducing NewsShare

NewsShare allows Aurora Edit to share a common news database and media volume, making the editing workflow easier to create and maintain.

This chapter discusses NewsShare configuration for NAS and K2 networks:

- Configuring the Database System Manager (DSM)
- Configuring Aurora Edit Workstations
- Testing the NewsShare Installation

Notes for K2 Networks

- Before creating a NewsShare environment, you first need to install and configure a K2 Media Server (see the ***K2 Storage System Instruction Manual***).

- Many K2 network components, particularly the StorNext File System (SNFS), require all clients and servers to use fixed IP addresses. If your network uses a DHCP server, you must create address reservations or a fixed address subnet.

- Complete IP connectivity must exist between all DSMs, K2 Media Servers, and Aurora Edit workstations for a particular K2 network. You may find it convenient to assign all machines on a K2 network to the same Workgroup.

Configuring the Database System Manager (DSM)

You must perform the following steps on each DSM to use NewsShare:

- Install Windows 2003 Server and SQL Server software
- Configure SQL Server
- Install the NewsShare server
- Configure IP addresses (NAS only)

Installing Windows 2003 Server and SQL Server

Install the Windows 2003 Server and SQL Server software following the network configuration for your news station. See the Microsoft documentation for details.

Configuring SQL Server

To configure the SQL server:

1. Select **Start | Programs | Microsoft SQL Server | Enterprise Manager**.

2. Expand the Tree view to reveal the DSM machine by clicking the "+" next to "Microsoft SQL Servers" and also next to "SQL Server Group."

3. Right click on the DSM icon and select **Properties**. (Except as noted in the following steps, do not change default values.)

    a. Click the Security tab. Under Authentication, make sure that **SQL Server and Windows** is selected.

    b. Click the Memory tab and verify that **Dynamically configure SQL Server memory** is selected. Set the memory limit to 256 MB less than the server's memory size.

4. Click **OK** to save settings and close the SQL Server Properties dialog box.

Installing the NewsShare Server

You must install a NewsShare server on each NAS DSM. This installation does not modify or delete existing News databases; it makes changes for programming interface compatibility only. Nonetheless, it is strongly recommended that you back up existing News databases before running the installer. See Appendix B for backup utilities.

To install the NewsShare Server:

1. Log in to the DSM machine as Administrator.

2. Stop the Failover Monitor Service and make sure the unit is not in active service to NewsShare clients or SmartBin Services.

3. On the Aurora Suite CD, go to the **NewsShare** directory and double-click **Setup.exe**.

    The installer can be run directly from the CD, a network volume, or a local drive.

After the installer has been run on both DSMs, they can be returned to service.

Configuring IP Addresses (NAS Only)

Before using a NAS system, you need to configure the NAS server IP addresses for the NAS servers.

To set the IP address for the NAS Servers:

1. From any PC on your network with Internet access, right-click on Network Places and select **Properties**.

2. In the Network & Dial-up Connections window, select the Local Area Connection for your primary public ethernet port, right-click, and select **Properties**.

3. In the Properties window, select **Internet Protocol (TCP/IP)** and click **Properties**.

   The Internet Protocol (TCP/IP) Properties window opens:

4. Click **Use the following IP address:** and set the IP address and Subnet mask to the Thomson Grass Valley settings, using an unassigned address on the same subnet.

5. Click **OK** twice.

6. Using Internet Explorer, log on to the NewsShare NAS application.

   The default address is 192.168.50.20:9890.

7. Configure your network ports according to the type of NAS system you have:

   • For the NewsShare NAS Fibre Channel Network system, select **Network | Network Port Configuration**.

   • For the NewsShare NAS Serial ATA Network system, select **Network | Network Ports**.

8. Configure the Public IP, Private IP, and Netmask addresses for both Nodes.

NOTE: Private IP is supported on NAS Fibre Channel Network systems only.

An example of an appropriate scheme is:

Name	Node1	Node2
Public IP	192.168.50.20	192.168.50.21
Private IP	192.168.50.22	192.168.50.23
Netmask	255.255.0.0	

9. Click **Save**.

10. Reboot your computer.

11. Follow steps 1-5 and reset the IP address for your computer back to its original settings.

Configuring Aurora Edit Workstations

For each Aurora Edit workstation on your NAS network, you must mount the NAS:

You must mount the NAS volume from each Aurora Edit workstation before installing the Aurora Edit software as described in Chapter 3.

Configuring Workstations for NAS

For each client machine and the Conform Server running the SmartBin Service, if applicable, you need to mount the NAS volume before installing the Aurora Suite software. In addition, if the client machines are used by more than one user login, you need to log in under each user account and mount the NAS volume.

To mount a NAS volume:

1. On the machine you want to map the drive to, open **My Computer** and select **Tools | Map Network Drive**.

2. Select the NAS drive.

3. Type in the name of the NAS folder where the shared database resides.

4. Check the **Reconnect at login** checkbox.

5. Click **Finish**.

Configuring Workstations for K2

1. Uninstall any previous versions of the SNFS Client, GVG_MLib, Generic iSCSI, or Conform Server software via the Windows **Add or Remove Programs** control panel.

2. Install the SNFS Client software.

   a. On the Aurora Suite CD, go to **Software Installs\SNFS** and double-click on **SnfsSetup32.exe**.

   b. Follow the instructions in the table below for each installation screen.

On this screen...	Do this...
Welcome	Click **Next**.
Ready to Install	Click **Next** to begin the installation.
Aurora Suite Successfully Installed	Click **Finish**.

3. Following the instructions in the *K2 Storage System Instruction Manual*, do the following, if not set up already:

   • Set up the Control Point PC.

   • Run the K2 Config application to set up the K2 Server and Gigabit Ethernet switch.

   • Connect the Aurora Edit workstation to the K2 Server via the Gigabit Ethernet switch.

4. Use K2 Config to configure the Conform Server as a generic iSCSI client.

Given the bandwidth that a client workstation is expected to use, the K2 network can load balance workstations' iSCSI connections to the K2 storage system.

You can estimate the required bandwidth using the following formula:

(Video Bit Rate in Mbps x Number of Streams) / 8

a. Determine the highest bit rate you use on the Aurora Edit machine.

DV rates for NTSC and PAL are 28.8 Mbps for DV25, 57.6 Mbps for DV50, and 115.2 Mbps for DV100. MPEG bit rates are variable; use the configured bit rate.

b. Multiply the highest bit rate by the number of streams that are licensed on the workstation.

c. Divide that number by 8 to and round to the nearest integer to convert Mbps to MB.

d. Use the final MB number in the K2 Configuration wizard's iSCSI Client Bandwidth Input screen.

See the K2 documentation for complete instructions.

5. Install the Generic iSCSI software.

a. On the Aurora Suite CD, go to **Software Installs\K2 3.2.74.967\GenericISCSI** and double-click on **setup.exe**.

b. Follow the instructions in the table below for each installation screen.

On this screen...	Do this...
Welcome	Click **Next**.
Ready to Install	Click **Next** to begin the installation.
Aurora Suite Successfully Installed	Click **Finish**.

Testing the NewsShare Installation

To verify that NewsShare is working properly:

1. Record a short DV, MPEG2, or I-frame-only clip on a Media Server.

2. Verify that each Aurora Edit workstation is running in shared mode (indicated on the main title bar).

3. Create and open a test bin, and then drag the new clip into the new Aurora Edit bin.

4. Create a new sequence and drag the clip from the Bin to the Timeline.

5. Cue to the head of the sequence and play it.

6. Leave the sequence open on that workstation.

7. On a second workstation, use the Bin Explorer to find and open the sequence you created on the first workstation.

8. Acknowledge the message that the sequence is edit-locked.

9. Cue to the head of the sequence and play it.

10. Close the read-only sequence.

11. On the first workstation, save the sequence and close it.

12. Create a send destination for the Media Server.

13. Send the sequence to that destination.

14. On the Media Server, open the sequence and play it.

Chapter **3**

Installing and Licensing Aurora Edit Software

Aurora Edit comes pre-installed with most of the software you need. If you ever need to re-install it, this chapter provides instructions.

This chapter discusses the following topics:

- Upgrading to Aurora Edit 6.5
- Installing the Aurora Edit Software
- Configuring the Disk Volume
- Understanding the System Self-Test
- Licensing Your Aurora Suite Software

Upgrading to Aurora Edit 6.5

Follow the instructions below to upgrade your Aurora Edit or Aurora Edit LD system.

Aurora Edit version 6.5

To upgrade your workstation to Aurora Edit 6.5:

1. Upgrade the memory in your workstation if needed.

   See the ***Aurora Edit 6.5 Memory Upgrade*** document located in the Docs folder on your Aurora Suite CD.

2. Procure the AURORA-EDIT-SYS license on the DSM:

   a. Run the License Request Wizard.

   b. From the License drop-down list, select AURORA-EDIT-SYS and select a license for each Aurora Edit workstation you have on your NewsShare.

   c. Email the generated file following the instructions.

   See "Licensing Your Aurora Suite Software" on page 23 for more information.

3. For all Aurora Edit workstations:

   a. Using the Add/Remove Programs Control Panel, uninstall the previous version of Aurora Edit software.

   b. Install the 6.5 Aurora Edit software. See "Installing the Aurora Edit Software" on page 18.

4. Upgrade the SmartBins server.

5. Upgrade the NewsShare Server.

NOTE: For all Vibrint Services, which include Conform Server, SmartBins Service, Cache Service, Export Service, and FTP Service, the password has been changed to "Triton2008". If you have a previous version of these services, you need to change this password in the Services first so the Conform Server will work correctly.

Aurora Edit LD version 6.5

Aurora Edit LD version 6.5 now connects to the NewsShare database, not the Aurora Browse database.

NOTE: Sequences that exist within the Aurora Edit LD 6.3 application will not be present in the MediaFrame 6.5 database after you upgrade. It is advised that all important sequences be exported to the NewsShare database prior to upgrading the Aurora Edit LD software to version 6.5.

To upgrade to Aurora Edit version 6.5:

1. Uninstall the current version of Aurora Edit LD.

2. Map the V: drive to VibrintAVFiles for connectivity to shared high-resolution storage.

3. Install Aurora Edit LD, version 6.5. See "Installing the Aurora Edit Software" on page 18.

4. Define a one-way relationship between Aurora Edit LD and the MediaFrame Server.

5. Re-create your send locations using **Tools | Options | Send**.

6. If you want to use Shared SmartBins with Aurora Edit LD, you need to install the GVG_Mlib software:

   a. On the Aurora Suite CD, go to **Software Installs\K2 3.2.74.967\GVG_Mlib** and double-click on **setup.exe**.

   b. Follow the instructions in the table below for each installation screen.

On this screen...	Do this...
Welcome	Click **Next**.
Server Names	Enter the name of the primary FSM server (and the secondary FSM Server, if any) and click **Next**.
Ready to Install	Click **Next** to begin the installation.
Aurora Suite Successfully Installed	Click **Finish**.

Installing the Aurora Edit Software

The Aurora Edit software should already be installed on your workstation when your system arrives. If you ever need to reinstall it, follow these instructions.

There are two basic installation types:

- **Local:** All media are kept locally (Aurora Edit only)
- **Shared:** Media is stored on a NAS or K2 server (Aurora Edit, or Aurora Edit LD with MediaFrame)

The Aurora Edit 6.5 installer checks for the following software as prerequisites installs them if necessary:

- IPP Runtime 5.1
- .NET Framework 3.5
- QuickTime 7.5
- SabreTooth and SabreTooth License Request Wizard
- SQL Server Express 2005 (with SP2)
- Thomson Event Viewer
- Windows Installer 3.1

To install the Aurora Edit software:

1. Uninstall any previous version of NewsEdit or Aurora Edit software via the Windows **Add or Remove Programs** control panel.
2. If you are using NewsShare on a NAS media server, mount the NAS volume.

   See "Configuring Workstations for NAS" on page 12.
3. On the Aurora Suite CD, go to **AuroraSetup** and double-click on **Setup.exe.**
4. Follow the instructions in the table below for each installation screen.

On this screen...	Do this...
Welcome	Click **Next**.
License Agreement	Review the license agreement, click **I Agree** and click **Next**.
Select Features	Click the **X** next to **Aurora Edit** or **Aurora Edit LD** and select **Will be installed on local hard drive**. Click **Next**.
Select Shared or Local Installation	• If you are installing a *local* Aurora Edit workstation, select **Local** and click **Next**. *Skip the next two shaded rows.* • If you are installing a *shared* Aurora Edit installation or Aurora Edit LD, select **Shared** and click **Next**.

On this screen...		Do this...
SHARED ONLY	Select Shared Server	Enter the name of the Database System Manager (DSM) that hosts the shared database.
	Select Shared AV Files Directory	Click **Next** to accept the default, **V:\VibrintAVFiles**.
	Select Local AV Files Directory	Click **Next** to accept the default, **D:\VibrintAVFiles**.
	Select AV Cache Files Directory	Click **Next** to accept the default, **V:\VibrintAVCache**.
	Select Shared Drives	Enter the drive letter(s) of the drive(s) used on the shared system. Separate multiple drives with commas; the default drive is **V**. Click **Next** to continue.
LD ONLY	MediaFrame Server Settings	Enter the name of the MediaFrame server. Optionally, enter the NAS media path to access low-resolution media.
	Ready to Install	Click **Next** to begin the installation. If the DiskVolumeConfig window appears, see "Configuring the Disk Volume" on page 20 for instructions.
	Aurora Suite Successfully Installed	Click **Finish**.

The Aurora System Self-Test starts automatically when the installation is complete (see page 21).

5. For Aurora Edit LD only, set Internet options to bypass proxies:

   a. From the Internet Options Control Panel, select **Connections | LAN Settings.**

   b. Check **Bypass proxy server for local addresses** and click **OK**.

Updating the AJA driver (Aurora Edit HD only)

When upgrading from a previous version of Aurora Edit, the AJA Driver needs to be upgraded in order to have the officially approved version for Aurora Edit 6.5.

To upgrade the AJA driver:

1. Make sure you've upgraded the Aurora Edit software to version 6.5.

2. Open the Windows Device Manager.

3. Expand the item **Sound, video, and game controllers**.

4. Right click on **AJA Xena…** and select **Properties**.

5. Click the **Driver** tab (this tab also displays the driver date, so it is the only way to tell the two drivers apart).

6. Click **Update Driver**.

The Hardware Update Wizard appears.

7. When asked to connect to Windows Update, Select **No, not this time** and click **Next**.

8. Select **Install from a list or specific location** and click **Next**.

9. Select **Search for the best driver in these locations**, specify the location of the new driver: C:\Program Files\Grass Valley\Aurora\Drivers\AJA\Xenahddriver (or Xenasddriver), and click **Next**.

    Windows installs the new driver.

10. Reboot Windows if prompted.

Configuring the Disk Volume

When you install Aurora Edit software for the first time, you will see the Disk Volume Configuration window. You must configure a shared volume for your type of network and equipment. The Disk Volume Configuration only needs to be done once on each shared volume, on the first Aurora Edit system on which the software is installed.
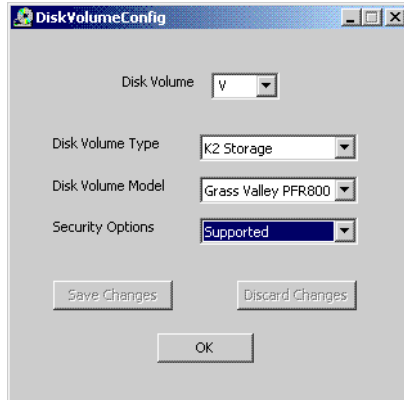
To configure the disk volume:

1. Select the disk volume drive letter and configure the volume as follows:

Setting	Options	Description
Disk Volume Type	**Unknown** **LocalDisk** **NAS** **K2 Storage** **Open SAN**	Select your type of shared storage.
Disk Volume Model	**Unknown** **Grass Valley PFR500, PFR600, PFR700, PFR800** **Ciprico 1700, 2400, 3600** **IBM NAS**	NAS: Choose **Ciprico 1700**, **2400**, **3600**, or **IBM NAS**. K2 Storage: Choose **Grass Valley PFR700**.
Security Options	**Supported** **Not Supported**	Select **Supported** if your system uses Domain Security; otherwise, select **Not Supported**.

2. Click **OK** to save changes and return to the software installer.

Understanding the System Self-Test

The Aurora Edit workstation runs a self-test automatically each time it starts up. The System Self Test looks at three areas:

- Software Installation—Checks for the correct version of K2 software, Direct X driver, operating system, video drivers, and export and cache service.

- System Configuration—Checks for the correct version of the video board, Breakout Box firmware, audio renderer, and the VMR.

- AV Disk Performance—Tests the media drive's input and output performance (local storage only).

As the System Self-Test runs, you see the results in the System Self-Test window. Each area displays one of three results:

This symbol...	Means...	Do this...
?	The test is currently running.	Wait for the test to complete.
✔	The test passed.	Use your Aurora Edit workstation as usual.
✘	The test failed.	See "Troubleshooting the System Self-Test" on page 22 for instructions.

Running the System Self-Test Manually

You can run the System Self-Test anytime you want to test the system. Before running the System Self-Test, make sure that the Aurora Edit program is not running.

To run the System Self-Test:

- Go to **Programs | Startup | SystemSelfTest**.

Troubleshooting the System Self-Test

On occasion, you may have a need to troubleshoot an error message from the system self-test. If any of the three tests fail, use this table to determine the cause and fix the problem.

If you see this message...	It means...
Video card driver ___ is not supported. **CVFS client file system ___ is not supported.** **DirectX driver version ___ is not supported.** **AJA driver ___ is not approved.** **Emulex LAN driver ___ is not approved.** **Emulex SCSI driver ___ is not approved.** **QLogic LAN driver ___ is not approved.** **QLogic SCSI driver ___ is not approved.**	You need to reinstall a driver on your system. 1. Insert the Aurora Edit CD and navigate to the Drivers directory. 2. Install the latest driver. Contact your Customer Service Representative for further details.
The XX database server is not compatible.	The shared database is not compatible with your version of Aurora Edit software. On your DSM, run the **SetupAuroraShareServer** utility, which can be found on the Aurora Edit CD-ROM.
Windows animation or fade effect is enabled.	The processing overhead of Windows' animation and fade effects may cause dropped frames. To turn these effects off: 1. Open the Display control panel and click the Appearance tab. 2. Click Effects. 3. Clear the first checkbox and click OK.
Hewlett-Packard HP xw8600 Workstation System BIOS ____ is older than approved version.	Update the system BIOS.
Terminal Services and Remote Desktop are not supported.	Aurora Edit must be run from the local desktop.
Recommended video driver is ___.	Install the correct video driver.
This version of Aurora Edit requires Windows XP SP3.	Install Windows XP SP3.
Stream Count not set.	Run AuroraStreamSetup.exe to configure the stream count.
The system drive is not an NTFS volume	Convert the drive to NTFS using the convert command.
The cache drive is not an NTFS volume	
Aurora Edit requires at least 1 GB of RAM for Aurora Edit LD, 2 GB of RAM for Aurora Edit SD, and 3 GB of RAM for Aurora Edit HD.	Install additional RAM as necessary.

Licensing Your Aurora Suite Software

Once you've installed the Aurora Edit software, you need to get a License Number from Grass Valley.

NOTE: Aurora Suite software comes with a 30-day trial period during which you can use the software without a license.

To license your Aurora Edit software:

1. Double-click the **Aurora License Request** icon on your desktop.

2. Create a license request file following these instructions:

On this screen...	Do this...
Welcome	Read the on-screen instructions and click **Next** to continue.
Customer	Enter your name, email, and company into the required fields. Filling in the address, country, and phone fields is optional.
	Click **Next** to continue.
Sales Number	Enter the Sales Order number from the Aurora License Document provided by Grass Valley.
	Click **Next** to continue.
Licenses	Select each of the licenses purchased from the list and click **Add**.
	If you are licensing SmartBins, select **GXF SmartBins** for Transfer SmartBins, and **SAN SmartBins** for Shared SmartBins.
	Click **Next** to continue.
Summary	Verify that the information is correct and click **Finish**.
	This creates a file on your desktop called **License_Request_*sales#*.txt**

3. Email the file to **BVTN-AuroraLicenses@thomson.net**.

4. When you receive a licensing file back from Grass Valley, detach it to the desktop of your editing system.

5. Open License Manager (located on your desktop) and drag the license.txt file into the window.

6. Click **OK**.

Chapter **4**

Configuring Your System

Before you can use your Aurora Edit or Aurora Playout system, you need to configure some basic settings.

This chapter discusses the following topics:

- Setting Up the Host Table
- Setting Up Media Files for Sharing
- Configuring Aurora Edit

Setting Up the Host Table

The host table is a file that resides on the Aurora Edit workstation, which resolves the name of each Aurora Edit workstation with its IP addresses. Aurora Edit uses this file to verify that clips are sent across the proper network.

A sample hosts file looks like this:

```
# Copyright (c) 1993-1999 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#      102.54.94.97     rhino.acme.com          # source server
#       38.25.63.10     x.acme.com              # x client host

150.234.187.36  VMAN2_MAN_Broker_fc0
10.16.56.179    GV004739_fc0
150.234.187.21  PVS100000_fc0
150.234.187.22  VMAN2_PVS1000_fc0
150.234.187.23  vman2_pvs1000_fc0
150.234.187.31  VMAN_DEMO1_FC0
150.234.187.32  DEMONEWSEDIT2_FC0
150.234.187.33  VMAN_DEMO3_FC0
150.234.187.34  VMAN_DEMO4_fc0
150.234.187.35  GV006906_fc0
150.234.187.36  VMAN2_GV011265_FC0
150.234.187.37  VMAN_PRO6_FC0
150.234.187.38  VMAN2_DEMO5
150.234.187.42  vman2_xre1650_fc0
150.234.187.43  vman_NE6_fc0
```

To set up a hosts file:

1. Open the following file using Notepad, or some other text editor:

   C:\WINNT\System 32\Drivers\etc\hosts

2. Enter text in a single line for each Aurora Edit workstation and Profile server on your network, as follows:

   Type the IP address, then use the TAB key or Space bar to insert a few spaces. Then type the device name, such as AuroraEdit1 followed by the characters _FC0 for Fibre Channel or _HE0 for Gigabit Ethernet.

3. Save the file and close the text editor.

4. Copy the new hosts file onto all other Aurora Edit workstations.

Setting Up Media Files for Sharing

Before you can transfer media files to another Aurora Edit workstation, you need to set up your workstation for sharing.

To share files:

1. In Windows Explorer, navigate to the drive where media files are stored (usually D:\).

2. Right click on the **VibrintAVFiles** folder and choose **Sharing**.

3. Select the **Shared As** option and leave the default share name **VibrintAVFiles**.

4. Click **OK**.

The folder you shared appears with the standard Windows sharing icon.

Configuring Aurora Edit

Aurora Edit has many customization options. While your system was pre-configured at the factory, you may want to adjust some options based on how you use Aurora Edit.

Adding Video Sources to Aurora Edit

Before using footage from a particular source, you must add the source to the Aurora Edit source list. Aurora Edit pre-installs two sources for you — video and clip:

• The video source, usually a tape deck, allows you to record footage directly into the Timeline or Bin.

• The clip source allows you to edit a clip as a Timeline source directly in the Bin, which is useful for large clips so you don't have to go back and forth from a tape deck. You only need one clip source; you don't have to create a new clip source for each clip you want to use.

To add other sources to Aurora Edit:

1. Choose **View | Sources**.

   The Sources window appears, listing the currently configured sources.

2. Click **Add**.

The Add Source window appears:
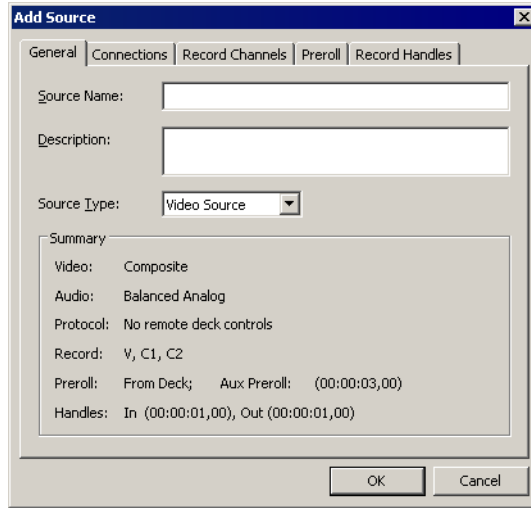
3. Go through each Add Source tab to configure the new source.

   The following sections describe each tab in the Add Source window.

4. Click **OK** when you are done.

Setting General Source Options

Setting	Options	Description
Source Name		Enter a name for the source, such as Tape Deck.
Description		Enter a description for the source.
Source Type	Video Source	Select **Video Source** for all incoming sources, including audio.
	Clip Source*	Select **Clip Source** to use an existing clip in the bin as a source.
	Microphone*	Select **Microphone** for any microphone sources.
	1394 Source	Select **1394 Source** when connecting to a specific 1394 source if multiple IEEE devices are present.

* Aurora Edit LD can create Clip and Microphone sources only.

Setting Connections

The options available depend upon your Source Type setting on the General tab.

Setting	Options	Description	Source Type
Video Input	Composite Component SDI S-Video (Y/C)	Select the Video Input option that corresponds to the source's connection to Aurora Edit. **Composite** is the default video input.	Video Source
1394 Input	Any *<Device Name>*	Select the 1394 device you are using.	1394 Source
Audio Input	Balanced Analog AES/EBU (BNC) AES/EBU (XLR) SDI/Embedded	Select the Audio Input option that corresponds to the source's connection to Aurora Edit. **Balanced Analog** is the default audio input.	Video Source
	Mic Preamp	Default setting for a Microphone Source.	Microphone
Deck Protocol	No remote deck controls Sony 422 Protocol Sony DNW-A100 Sony PDW-F70 Sony PDW-F-1500 DV 1394	Select the Deck Protocol that corresponds to the type of tape deck control you are using with Aurora Edit. If you are adding a clip source, video router, or a non-video source, select **No remote deck controls**, which is the default setting.	Video Source 1394 Source
Comm Port	None COM1 - COM10	Select the Comm Port you are using to connect the source to Aurora Edit.	Video Source 1394 Source
Input Latency		Enter a duration to add an input latency when using a 1394 converter.	Video Source 1394 Source
Loop Tones		Enter a duration to set how many seconds exist between loop record takes; each second, a tone plays through the system speakers.	Microphone

Setting Record Channels

Setting	Options	Description
Video		Check **Video** to record video with this source.
Channel 1 Audio through Channel 16 Audio	**A1** to **A16**	Check each audio channel that should record audio from this source and select the default audio track (A1–A16) on the Timeline to which you want the channel routed.

NOTE: Setting up a microphone source that does not record video (audio-only record) greatly reduces the required disk space.

Setting Preroll

Setting	Description
Get Preroll From Deck	Check **Get Preroll From Deck** to use the preroll settings from your tape deck instead those configured in Aurora Edit.
Preroll	Enter the number of seconds of preroll to use when recording from this source. This setting overrides the source's Preroll setting unless you check **Get Preroll From Deck**.
Aux Preroll	Enter the number of seconds of auxiliary preroll you want to use when using an auxiliary input or a non-remote source.

Setting Record Handles

Setting	Description
In Handles	Enter the number of seconds for the In and Out Handle length.
Out Handles	Handles provide the extra frames necessary to trim or add transition effects at the head or tail of a clip. When you Mark In and Mark Out, Aurora Edit begins recording the specified number of seconds before your Mark In and after your Mark Out. Only the material between your marks is edited to the Timeline.

Setting Options

To configure Aurora Edit options for your equipment and workflow:

1. Choose **Tools | Options**.

   The Options window appears:
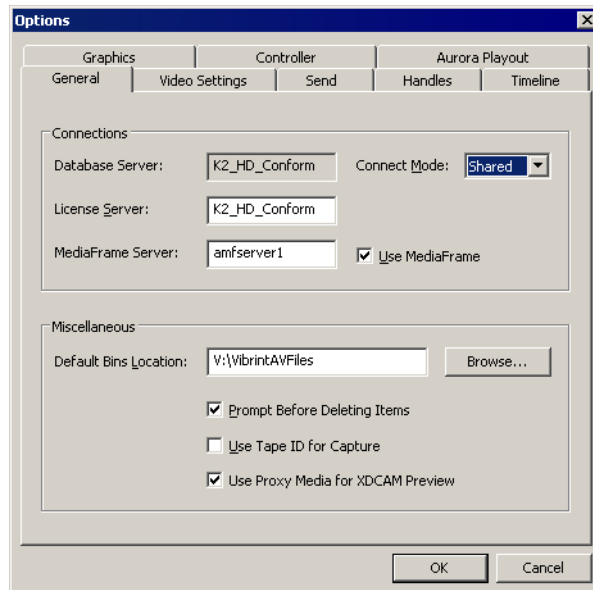
2. Configure the options on each tab as necessary.

   The following sections describe each tab in the Options window.

   - General —

   - Proxy Support (Aurora LD only) —

   - Video Settings —

   - Send —

   - Handles —

   - Timeline —

   - Graphics (Aurora Edit only) —

   - Controller (Aurora Edit only) —

   - Aurora Playout —

3. Click **OK** when you finish setting options.

Configuring General Options

Setting	Options	Description
Database Server		Displays the name of the database server.
Database Connection Mode	Local Shared	Select **Local** if you are using local disk storage and a local Aurora Edit database. You can access files on your local machine only. Select **Shared** if you are using shared disk storage and a shared database. You share the Bin with all Aurora Edit workstations that are part of the network, according to security settings. Aurora Edit LD must use Shared mode.
License Server		Enter the name of the server where the MOV generation license is located; automatically fills in as the DSM name.
MediaFrame Server		Enter the name of the MediaFrame server.
Use MediaFrame		Check this option to use MediaFrame (you can uncheck it to disable MediaFrame without losing the server name). Aurora Edit LD must use a MediaFrame Server.
Default Bins Location		Enter the default path to your media files. V:\VibrintAVFiles is the Default Bins Location.
Prompt Before Deleting Items		Check this option to receive a confirmation prompt before deleting files; setting is on by default.
Use Tape ID for Capture		Check this option to identify which source tape a particular clip came from; used in the Source Tool; setting is off by default.
Use Proxy Media for XDCAM Preview		Check this option to view the low-resolution proxy for media when previewing XDCAM files. This setting is on by default; it is always selected for Aurora Edit LD. This does not affect HD media, which always uses proxy media for previewing.

Configuring Proxy Support (Aurora Edit LD Only)

Setting	Description
Media Path	Enter the path to the NAS Server.

Configuring Video Settings

Setting	Options	Description
Reference Standard	NTSC (59.94 Hz) PAL (50.00 Hz)	Select the Reference Standard you are using. NTSC (default) has a frame rate of 29.97 frames/second and is used primarily in the Americas and Japan. PAL has a frame rate of 25 frames/second and is used in Europe, most of Asia, and Australia.
Has Setup		Check **Has Setup** if the analog composite signal carries setup information.

Setting	Options	Description
Video Format	480i (SD) 576i (SD)	Select **480i** Video Format for interlaced (i) SD format (default) for NTSC; select **576i** for PAL.
	720p (1280x720)	Select **720p** for progressive (p) HD format.
		Select **1080i** for an interlaced HD format.
	1080i (1920x 1080)	
NTSC Timecode	SMPTE Drop Frame	Recommended setting to avoid the time slipping problems associated with non-drop frame; default setting.
	SMPTE Non-drop Frame	Standard format used to represent timecode.
Compression Type	DV25 DV50 DV100 IMX30 IMX40 IMX50 MPEG2	Select a Compression Type. **MPEG2** is the default compression type. The **DV50** and **IMX** formats are optional and may not be available on all systems.
Bit Rate	4-50 mbits	Enter the Bit Rate specified by your system administrator. 50 mbits is the default setting. More than 25 mbits is optional.
Chroma Format	4:1:1	The **4:1:1** Chroma Format is selected if you use DV25 compression.
	4:2:0	Select the **4:2:0** or **4:2:2** Chroma Format if you use MPEG2 compression.
	4:2:2	Select the **4:2:2** Chroma Format if you use DV50 or MPEG2 compression—**4:2:2** offers more color resolution than **4:2:0** with MPEG2; this is the default setting.
Video Aspect	4:3	Select **4:3** for SD format.
	16:9	Select **16:9** for HD format.
Video Resolution	720 x 512	Select for NTSC systems using MPEG2 compression.
	720 x 480	Select for NTSC systems using DV25, DV50, or MPEG2 compression; default setting.
	720 x 576	Select for PAL systems using DV25, DV50, or MPEG2 compression.
	720 x 608	Select for PAL systems using MPEG2 compression.
Apply Clean Aperture Cropping (Aurora Edit only)		By default, Aurora Edit automatically trims a small amount of video around the edges of a frame to ensure a clean image. This setting is on by default. Leave this option selected for SD video; setting is optional for HD video.
Show All 720p Frames in Timecode Displays		When using the 720p video format, check this option to display all timecode in Aurora Edit as 60/50 frames per second. When unselected, timecode displays in the standard 30/25 frames per second format. This setting is off by default.
Allow Non-Admin Users to Change Video Settings		Check this option to allow all users to change video settings; off by default.

Configuring Send Locations

After completing a sequence you can send it to a playout machine or to a network video server. The Send tab allows you to configure Aurora Edit with your send locations —another Aurora Edit workstation, a Media Server, or a Bin. You can also create a local send location if you want to store completed sequences on your PC.

The table below describes the Send tab; the procedure for configuring a location follows.

Item	Description
[locations]	The left pane displays the currently configured send locations.
Send Type	Displays the Send Type of the selected location.
Destination Summary	Displays a summary of the destination settings.
Use Video ID	Check **Use Video ID** if you will be linking to stories on a Newsroom Computer System (NRCS) that use Video IDs. When you send an Aurora Edit sequence to this location, the system uses the Video ID as the file name.
Aurora Playout Destination	Indicates whether this send location is an Aurora Playout server (this is configured within the send location).
GXF Sequence Transfer	Check this option if you want to send sequences via GXF. If unselected, Aurora Edit can send sequences to a Profile Server or K2 in a shared storage system without using a fiber channel IP connection.
Test for Invalid Video Server Characters	Check this option to have Aurora Edit check for invalid characters when creating files, including creating a new clip, creating a new sequence, renaming a Bin object, sending a sequence with a video ID, importing a removable media clip, and editing the name of the sequence when sending to another destination. Invalid characters are: * \	/ < > : " ? [ ] % & '
Add	Configures a new send location.
Remove	Deletes the selected send location.
Edit	Opens the send location configuration for editing.

To set up a send location:

1. Click **Add**.

   The Add Named Destination to Send List window appears.

2. Enter a **Send Name** to identify the location (displayed on the Send tab).

3. Select the **Send Type** from the drop-down list:

Send Type	Description
Vibrint	Select **Vibrint** if the send location is another Aurora Edit or an Aurora Playout system.
Profile*	Select **Profile** if the send location is a K2 Server or M-Series iVDR.
Publish*	Select if you want to transfer sequences.
GXF ftp*	Select **GXF ftp** to send completed sequences as GXF streams that can be used for a generic FTP site.
GXF file	Select **GXF file** to send completed sequences as GXF files.

Send Type	Description
DV Video ES	Select **DV Video ES** to send completed sequences as a DV video elementary streams; used for Publison NewsMix.
Media Send	Select **Media Send** to send completed sequences as an .asf media export.

*Aurora Edit LD supports Profile, Publish, and GXF ftp types only.

4. Select the **Send Type** options:

Option	Description
Use Video ID	Check **Use Video ID** if you will be linking to stories on a Newsroom Computer System (NRCS) that uses Video IDs. When you send an Aurora Edit sequence to this location, the system uses the Video ID as the file name.
Include Graphics	Check **Include Graphics** to keep all graphics with the sequence.

5. Configure the **Destination** based on the **Send Type**:

Send Type	Option	Description
Vibrint	Send to	Click **Browse** and select the file destination path.
Profile	Send to	Enter the drive letter and destination folder; e.g., V: \ default.
	Host Name	Enter the destination server name; e.g., Profile 1.
	User Name	Defaults to **movie**; leave as-is.
	Password	Leave this field blank.
	Aurora Playout Destination	Check **Aurora** Playout **Destination** if this send location is an Aurora Playout server.
	Send as MPEG2	Check **Send as MPEG2** to send the Aurora Edit sequence as a GXF stream with MPEG2 LGOP compression. To adjust the MPEG options, click the **Settings** button.
Publish	Send to	Click **Browse** and select the file destination path.
	Render All Effects	Check **Render All Effects** to render all transitions and effects before sending.
	Aurora Playout Destination	Check **Aurora Playout Destination** if this send location is an Aurora Playout server.
GXF FTP	Send to	Click **Browse** and select the file destination path.
	Host Name	Enter the name of the server computer.
	User Name	Enter your user name.
	Password	Enter the password for the send location, if you have one.
	Aurora Playout Destination	Check **Aurora Playout Destination** if this send location is an Aurora Playout server.
	Send as MPEG2	Check **Send as MPEG2** to send the Aurora Edit sequence as a GXF stream with MPEG2 LGOP compression. To adjust the MPEG options, click the **Settings** button.

Send Type	Option	Description
GXF File	Send to	Click **Browse** and select the file destination path.
	Send as MPEG2	Check **Send as MPEG2** to send the Aurora Edit sequence as a GXF stream with MPEG2 LGOP compression. To adjust the MPEG options, click the **Settings** button.
DV Video ES	Include EDL For Sequence	Check **Include EDL for Sequence** to send sequence EDLs to the same destination folder as the DV video elementary stream.
	Send to	Click **Browse** and select the file destination path.
	Aurora Playout Destination	Check **Aurora Playout Destination** if this send location is an Aurora Playout server.
Media Send	Send to	Click **Browse** and select the file destination path.
	Send as	Click **Settings** to configure an .asf profile.
	Send Story Script	Check **Send Story Script** to attach the story script.

6. Click **OK**.

Configuring Handle Durations

Setting		Description
Handle Type	Import	The duration to use when you import a file from another workstation to your own; 1 second is the default.
	Export	The duration to use when you export files from your workstation to another workstation or server; 1 second is the default.
	Trimmer*	The duration to use when you trim a clip with the Trim Tool and trim the set duration from either side of your clip; 10 seconds is the default.
	Consolidation	The duration to use when you consolidate a clip or sequence, which reduces file size by removing unused footage; 10 seconds is the default.
	Render	The duration to use when you use media with effects and transitions; provides handles to effects that are mixed down; 1 second is the default.

*Aurora Edit LD supports Trimmer only.

To change the handle durations, select the handle type from the drop-down menu and enter the new duration in the **In** or **Out** fields.

Configuring Timeline Options

Setting	Options	Description
Output Channels	1 - 16	Select the number of output channels to use in your sequence; configure panning and routing from via **Default Mix** settings.
Digital Reference Level	-20, -18, -12	Select the preferred dBFS level, which is indicated on audio meters with a blue tick mark. This setting does not alter recorded audio in any way; it moves the reference level so editors in different regions can ride audio at their preferred level of headroom.
Default Mix		Configures pan control and channel routing for each track of the Timeline.
		1. Click **Settings**.
		2. Select **Monitor Mix** or **Output Mix**.
		• Monitor Mix controls panning and channel output for speakers in the edit bay, and does not affect sends to the server, play to tape, or live playout.
		• Output Mix controls the panning and channel output for the actual sequence output for playout.
		3. Set the pan control by dragging the pan slider for an audio channel to the right or left position; alt-click on a pan slider to set the pan direction to center. By default, odd-numbered channels pan to the left and even-numbers channels pan to the right. Changing the pan direction affects the entire track in a sequence.
		4. Route audio channels by selecting specific channels (**1+2**, **3+4**, etc.) or **All**.
		Default routing for two-channel systems is as follows:
		• Left >> Channel 1
		• Right >> Channel 2
		• Center >> All channels
		If you have more than eight audio tracks, click the Bank Select arrow to access the additional tracks on Bank 2.
Undo/Redo Limit	1 - 1024	Enter the number of undo levels to track; 32 is the default.
		NOTE: Increasing the number of undo levels increases Aurora Edit's system memory usage.
Default Play Speed		Enter the speed at which to play clips when reviewing them in the Timeline; 200% is the default.
Review Edit Duration		Enter the amount of preroll to play on a clip prior to playing an edit; 3 seconds is the default.
Output Channels	1-8	Select the number of output channels to use; 4 is the default.

Setting	Options	Description
Allow Mixed Format Timeline		Allows different video formats to be mixed in real-time within the same Timeline. This setting can only be modified by administrators — it allows or disallows users from selecting a preference when creating a new Timeline.
		Although Aurora Edit allows for real-time mixing and matching of various formats within the Timeline, all clips that differ from the video format of the Timeline must be transcoded when the sequence is sent to a media or playout server. Therefore, some editors choose to disallow mixed formats for individual timelines based on their needs, which can be controlled in either the New Sequence or Sequence Properties windows.
		When disabled, all clips that don't match the Timeline settings are transcoded when they are added to the Timeline. When enabled, all clips that do not match the Timeline format will have a blue bar at the top of the clip to indicate that transcoding will take place when the sequence is sent.
Map Hot Keys For Non-QWERTY Keyboards		Check this option keep the color-coded hot key functions in place regardless of the keyboard input language.
		If unchecked, the hot key functions follow the letter placement on non-QWERTY keyboards; this setting is off by default.
Show MediaFrame Storyboard		Allows the MediaFrame Storyboard to be toggled on and off from the Timeline.
Final Cut Pro Network Mapping		Enter a path for the EDL to map to on the Macintosh computer, using this format:
		MacOS 10.4x (Tiger): **file://localhost/Volumes/ K2_server_name**
		MacOS 10.5x (Leopard): **file://Network/V**

Configuring Graphics Options (Aurora Edit Only)

Setting	Description
Initial Duration	Enter the initial duration for a graphic placed on the Timeline; 5 seconds is the default.
Fade In	Enter the number of frames over which the graphic fades in to the clip; 10 frames is the default.
Fade Out	Enter the number of frames over which the graphic fades out to the next clip; 10 frames is the default.
Editor	Indicates whether the Chyron Title Tool is installed with the system.
Templates Folder	Enter the path to the Graphics template directory.
Enable Right to Left Input Mode	Check **Enable Right to Left Input Mode** to use the Title tool with bidirectional languages, enabling text that reads from right to left. This setting is off by default.

Configuring Controller Options (Aurora Edit Only)

Setting	Options	Description
422 Controller Comm Port	**None** **COM1 - COM10**	If you are using an external controller with Aurora Edit, select the COM port to which it is connected. Otherwise, select **None**.
USB Controller Comm Port		
USB Controller Comm Port		

Configuring Aurora Playout Options

Setting	Description
Primary Database Server	The server that hosts the primary Aurora Playout database.
Backup Database Server	The server that hosts the secondary Aurora Playout database.
XMOS Server	The machine that hosts the XMOS Server.
Thumbnail Path	The path to the thumbnail directory.

Chapter *5*

Installing and Creating SmartBins

SmartBins provide a way to automatically synchronize media access between Aurora Edit and media server bins. A SmartBin monitors a folder on a media server and automatically updates the SmartBin contents when new or updated media appears.

This chapter discusses the following topics:

- Understanding SmartBins
- Installing the SmartBins Service
- Running the SmartBins Setup Tool
- Verifying the DCOM Configuration

The SmartBins Service software requires a license from Grass Valley; see "Licensing Your Aurora Suite Software" on page 23 (Select **GXF SmartBins** for Transfer SmartBins, or **SAN SmartBins** for Shared SmartBins).

Understanding SmartBins

A SmartBin is an Aurora Edit bin that monitors a folder on a media server and automatically updates the SmartBin contents when new or updated media appears. SmartBins work differently depending on the type of shared storage network you are using.

The Aurora Edit system offers three types of SmartBins:

- **Transfer SmartBin**—Automatically transfers clips from a Media Server to an Aurora Edit Bin.

- **Shared SmartBin**—Maps folders between a Media Server and a bin in Aurora Edit.

- **Media Import SmartBin**—Automatically imports QuickTime DV25 or DV50 .mov files into an Aurora Edit Bin.

The three types work differently depending upon the type of shared storage network.

Transfer SmartBins

Transfer SmartBins automatically transfer clips from an M-Series iVDR or K2 media server to an Aurora Edit bin or MediaFrame database.

Transfer SmartBins use a static directory mapping so all files in a particular media server bin are monitored and automatically transferred via GXF to an Aurora Edit bin or MediaFrame database as they arrive, and are then (optionally) deleted from the media server.

Transfer SmartBins effectively create a buffered recording so that material is protected and redundantly saved (both on the media server and on the NAS or K2 storage) while still making the file available for shared editing or immediate playout. There is a 30-second delay before the recorded material is available to Aurora Edit or MediaFrame.

Transfer SmartBins on a NAS or a K2 system require a DSM or external Conform Server to provide the folder monitoring and transfer services to the NAS system. A DSM can support up to four 25-Mbit record streams (2 M-Series iVDR chassis). Additional streams can be handled by dedicated Conform Servers, which support six streams each. You also need to mount the NAS or iSCSI volume on the workstation running the SmartBins Service.

Shared SmartBins

Shared SmartBins map clips — a process known as "winking" — from a K2 media server to an Aurora Edit bin or MediaFrame database. As with drag and drop via Media Manager, this automatic synchronization never moves actual media files, but instead provides a different view into the shared media file system.

Shared SmartBins support simple (flattened) movies, but not sequences, sub-folders, or sub-clips that the K2 cannot use directly. SmartBins do not support sub-bins. The workstation running the SmartBins SAN service must have a Fibre Channel-SCSI connection to the Open SAN and a CVFS or SNFS license.

When you first create a bin in Aurora Edit, you can map that bin to a K2 bin; after an Aurora Edit bin is created, it cannot be mapped. Once an association is created, the Aurora Edit and K2 bins are kept synchronized.

When the SmartBins Service starts, it determines which Aurora Edit bins are associated with media server bins and then queries the media server database for the movies in each associated bin. Any movies in media server bins that are not in the associated Aurora Edit bin are registered to the Aurora Edit database. The SmartBins service does not verify that Aurora Edit clips are in the media server database, so the synchronization is one way only—media server to Aurora Edit.

Media Import SmartBins

Media Import SmartBins facilitate the automatic import of QuickTime DV25 and DV50 .mov files into Aurora Edit or MediaFrame. This allows you to use Apple's Final Cut Pro video editing application within a NAS environment to create news or sports footage, and then import it into an Aurora Edit bin or MediaFrame database. Media Import SmartBins work with MOV import for Final Cut Pro (FCP).

Only one Media Import SmartBin server can be active at any given time.

Database Monitoring and Updating

A SmartBins Service constantly monitors the Aurora Edit, MediaFrame, and media server databases. Examples of updates to the database are listed below.

Action	System	Media Server Database	Aurora Edit Database
Rename clip	media server	Clip is renamed.	SmartBins service renames the clip; if it cannot be renamed, the databases become out-of-sync.
	Aurora Edit or MediaFrame	Clip is renamed unless there is a conflict, in which case renaming fails.	Clip renamed unless there is a conflict on the media server, in which case renaming fails.
Delete clip	media server	Clip is deleted.	SmartBins service deletes the clip; if the clip is in use, the databases become out-of-sync.
	Aurora Edit or MediaFrame	Clip deleted unless there is a conflict, in which case deletion fails.	Clip deleted unless there is a conflict on the media server, in which case deletion fails
Delete bin	media server	The bin (and all movies contained within it) is deleted unless a clip is being used, in which case the deletion fails.	
	Aurora Edit or MediaFrame	No change; bin not deleted.	SmartBin monitoring disabled; the bin and bin contents are deleted.
Add a movie	media server	Movie added.	SmartBins service registers clip unless it is a complex movie, in which case the clip is not registered and the databases become out-of-sync.
Create master clip	Aurora Edit or MediaFrame	SmartBins service registers master clip when recording is complete.	Master clip created while recording

Installation Overview

Perform the following tasks on the media server, per the type of SmartBin.

Task	SmartBin Type			See...
	Transfer	Shared	Media Import	
Install and Configure the Server	**Yes** (also requires GVG_Mlib)	**Yes** (also requires SNFS)	**Yes**	See Chapter 6, "Installing the Conform Server" to install the GVG_Mlib and SNFS software; see the media server documentation and Chapter 2, "Introducing NewsShare" to install and configure the server.
Install the SmartBins service	**Yes**	**Yes**	**Yes**	See "Installing the SmartBins Service" on page 45.
Run the SmartBin Setup Tool	**Yes**	**Yes**	**Yes**	See "Running the SmartBins Setup Tool" on page 46.
Verify DCOM Configuration	**Yes**	—	—	See "Verifying the DCOM Configuration" on page 47.
Obtain a software license	**Yes**	—	**Yes**	See "Licensing Your Aurora Suite Software" on page 23.

Installing the SmartBins Service

Install the SmartBins service on the machine that will act as the SmartBins server.

To install the SmartBins Service:

1. Uninstall any previous version of the SmartBins software via the Windows **Add or Remove Programs** control panel.

2. Insert the Aurora Edit CD and navigate to **Software Installs | DNP Application**.

3. Double-click on **Setup.exe**.

   Follow the instructions in the table below for each installation screen.

| On this screen...	Do this...
Welcome	Click **Next**.
License Agreement	Review the license agreement, click **I Agree** and click **Next**.
Select Features	Click the **X** next to **AuroraFTP** and select **Will be installed on local hard drive**. Click **Next**.
Select Shared Server	Enter the name of the server that hosts the shared database. • For a K2 system, enter the name of the K2 Media Server • For a NAS system, enter the name of the Database System Manager (DSM)
Select Shared AV Files Directory	Click **Next** to accept the default, **V:\VibrintAVFiles**.
Select Local AV Files Directory	Click **Next** to accept the default, **D:\VibrintAVFiles**.
Select AV Cache Files Directory	Click **Next** to accept the default, **V:\VibrintAVCache**.
Select Shared Drives	Enter the drive letter(s) of the drive(s) used on the shared system. Separate multiple drives with commas; the default drive is **V**. Click **Next** to continue.
Ready to Install	Click **Next** to begin the installation. If the DiskVolumeConfig window appears, see "Configuring the Disk Volume" on page 20 for instructions.
Aurora Suite Successfully Installed	Click **Finish**.

Running the SmartBins Setup Tool

If you are using SmartBins on a NAS or K2 system, you also need to configure your M-Series iVDR or K2 Media Server to use SmartBins.

To configure the SmartBins Service:

1. Go to **Start | Programs | Grass Valley | Aurora | SmartBins Setup Tool**.
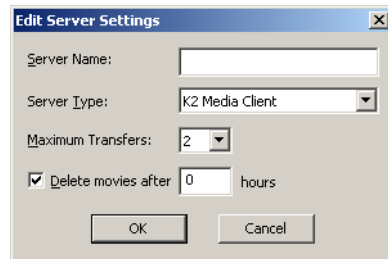
   The SmartBins Setup Tool opens.
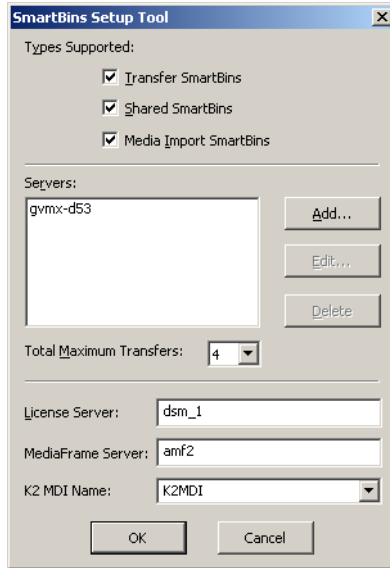
2. Select the types of SmartBins you are using with Aurora Edit.

   For Shared SmartBins and Media Import SmartBins, no other configuration is needed. Click **OK** to close the tool.

3. For Transfer SmartBins:

   a. Click **Add**.

      The Edit Server Settings window appears:

   b. Enter the name of the M-Series iVDR or K2 Media Client you are using.

   c. Select the Server Type from the drop-down list.

   d. Select the number of **Maximum Transfers** per server from the drop-down list.

      If you are installing this software on a DSM, the maximum is **4**.

   e. Check **Delete movies after __ hours**, and enter the number of hours after a transfer is complete for media to remain in the database before being automatically

removed from the video server (not the Aurora Edit workstation).

f. Click **OK** to close Server Settings.

g. Select the **Total Maximum Transfers** from the drop-down list.

The Total Maximum Transfers is the total number of streams for this particular instance of the SmartBins Service. Select **4** if the SmartBins Service is installed on a DSM, or select **6** if the SmartBins Service is installed on a standalone PC.

NOTE: Increasing the number of Total Maximum Transfers affects the bandwidth on the NAS system.

h. Enter the name of the License Server; this is the same as the License Server in Aurora Edit (see "Configuring General Options" on page 32).

i. Enter the name of the MediaFrame Server.

j. Enter the K2 MDI Name.

k. Click **OK** to close the setup tool.

The SmartBins Service restarts.

Verifying the DCOM Configuration

Transfer SmartBins require that DCOM permissions are configured correctly on the media server.

To verify the DCOM configuration:

1. Click **Start** on the Windows taskbar and choose **Run**.

2. Enter **Dcomcnfg.exe** and click **OK.**

3. Expand the **Component Services** branch, and the **Computers** branch beneath it.

4. Right-click on **My Computer** and choose **Properties**.

5. Click the **COM Security** tab.

6. In the **Access Permissions** section, click **Edit Limits**.

7. Select **ANONYMOUS LOGON** and verify that the **Remote Access** box is allowed (checked).

8. Select **Everyone** and verify that the **Remote Access** box is allowed (checked).

9. Click **OK** and then **OK** again to close the Properties window.

10. If you made any changes, you must reboot your system; if no changes were required you can exit Component Services.

Chapter **6**

Installing the Conform Server

This chapter describes how to install and configure a Conform Server, which conforms an Aurora Edit EDL to high resolution media on the K2 Media Clients.

This chapter discusses the following topics:

- System Requirements
- Installation Procedure
- Conform Server Configuration
- Testing the Installation

System Requirements

Hardware Requirements

See the *Release Notes* on the installation CD for current system requirements.

Software Requirements

The following software components are required to run the Conform Server:

- Microsoft Windows 2003 Server with Service Pack 2
- Microsoft IIS 6.0 (IIS *must* be installed before .NET)
- Microsoft .NET Framework 3.5 SP1

Installation Procedure

1. Uninstall any previous versions of the SNFS Client, GVG_MLib, Generic iSCSI, or Conform Server software via the Windows **Add or Remove Programs** control panel.

2. Install the SNFS Client software.

   a. On the Aurora Suite CD, go to **Software Installs\SNFS** and double-click on **SnfsSetup32.exe**.

   b. Follow the instructions in the table below for each installation screen.

On this screen...	Do this...
Welcome	Click **Next**.
Ready to Install	Click **Next** to begin the installation.
Aurora Suite Successfully Installed	Click **Finish**.

3. If you are using a Fibre Channel card, verify that the IP MTU uses the same setting as other Aurora Edit clients.

4. Install the GVG_MLib software.

   a. On the Aurora Suite CD, go to **Software Installs\K2 3.2.74.967\GVG_Mlib** and double-click on **setup.exe**.

   b. Follow the instructions in the table below for each installation screen.

On this screen...	Do this...
Welcome	Click **Next**.
Server Names	Enter the name of the primary FSM server (and the secondary FSM Server, if any) and click **Next**.

On this screen...	Do this...
Ready to Install	Click **Next** to begin the installation.
Aurora Suite Successfully Installed	Click **Finish**.

5. Install the Generic iSCSI software.

   a. On the Aurora Suite CD, go to **Software Installs\K2 3.2.74.967\GenericISCSI** and double-click on **setup.exe**.

   b. Follow the instructions in the table below for each installation screen.

On this screen...	Do this...
Welcome	Click **Next**.
Ready to Install	Click **Next** to begin the installation.
Aurora Suite Successfully Installed	Click **Finish**.

6. Use K2 Config (Control Point) to configure the Conform Server as a generic iSCSI client; see the K2 documentation for instructions.

7. Verify that you can mount, read from, and write to the V:\ drive before proceeding.

8. Install the Conform Server software.

   a. On the Aurora Suite or Conform Server CD, go to **Conform Server** and double-click on **Setup.exe**.

   b. Follow the instructions in the table below for each installation screen.

On this screen...	Do this...
Welcome	Click **Next**.
License Agreement	Review the license agreement, click **I Agree** and click **Next**.
Destination Folder	Accept the default path or click **Browse** to choose another. Click **Next**.
Select Shared Server	Enter the name of the server that hosts the shared database. • K2: enter the name of the K2 Media Server • NAS: enter the DSM name
Select Shared AV Files Directory	Click **Next** to accept the default, **V:\VibrintAVFiles**.
Select Shared Drives	Enter the drive letters used on the shared system. Separate multiple drives with commas; the default drive is **V**. Click **Next** to continue.
MediaFrame Server Settings	Enter the name of the MediaFrame Server and click **Next**.
Ready to Install	Click **Next** to begin the installation.
Install Successful	Click **Finish**.

9. Reboot the server.

Installing the AuroraFTP Service

The AuroraFTP service allows you to view the Aurora database and serve up assets as GXF files. You can use the AuroraFTP service in two ways:

• Integrated with Aurora Browse

• As an archive system—You can view the Aurora database and transfer clips from location to another using an FTP client

The AuroraFTP service installs on a Conform Server workstation.

NOTE: The AuroraFTP Service is automatically installed with the SmartBins Encoder.

To install the AuroraFTP service:

1. Uninstall any previous version of AuroraFTP software via the Windows **Add or Remove Programs** control panel.

2. Insert the Aurora Edit CD and navigate to **Software Installs | DNP Application**.

3. Double-click on **setup.exe**.

Follow the instructions in the table below for each installation screen.

On this screen...	Do this...
Welcome	Click **Next**.
License Agreement	Review the license agreement, click **I Agree** and click **Next**.
Select Features	Click the **X** next to **AuroraFTP** and select **Will be installed on local hard drive**. Click **Next**.
Select Shared Server	Enter the name of the server that hosts the shared database. • For a K2 system, enter the name of the K2 Media Server • For a NAS system, enter the name of the Database System Manager (DSM)
Select Shared AV Files Directory	Click **Next** to accept the default, **V:\VibrintAVFiles**.
Select Local AV Files Directory	Click **Next** to accept the default, **D:\VibrintAVFiles**.
Select AV Cache Files Directory	Click **Next** to accept the default, **V:\VibrintAVCache**.
Select Shared Drives	Enter the drive letter(s) of the drive(s) used on the shared system. Separate multiple drives with commas; the default drive is **V**. Click **Next** to continue.
Ready to Install	Click **Next** to begin the installation. If the DiskVolumeConfig window appears, see "Configuring the Disk Volume" on page 20 for instructions.
Aurora Suite Successfully Installed	Click **Finish**.

Conform Server Configuration

After installing the Conform Server software, there are additional tasks you must perform on the server itself:

- Disabling IE Enhanced Security Configuration
- Disabling Power Management
- Configuring IIS
- Configuring DEP

Disabling IE Enhanced Security Configuration

You must remove Internet Explorer Enhanced Security Configuration software from the conform server.

1. Open the **Add/Remove Programs** control panel.
2. Click **Add/Remove Windows Components**,
3. Uncheck **Internet Explorer Enhanced Security Configuration**.
4. Click **Apply**.

Disabling Power Management

You must disable any screen savers or power-saving features on the conform server.

1. Open the **Display Properties** control panel
2. On the **Screen Saver** tab, select **None** as the screen saver and click **OK**.
3. Open the **Power Options** control panel.
4. On the **Power Schemes** tab, select the **Always On** power scheme.
5. Select **Never** for all monitor, hard disk, and system standby settings.
6. Click **Apply**.
7. Click the **Hibernate** tab and verify that the **Enable Hibernation** option is not checked.
8. Click **OK**.

Configuring IIS

1. Open the IIS Manager.

2. Expand the **Application Pools** folder, right-click on **Default App Pool**, and select **Properties**.

   If you do not see the Application Pools folder, do the following:

   a. Right-click on the **Web Sites** folder and select **Properties**.

   b. Click the **Service** tab and verify that **Run WWW service in IIS 5.0 isolation mode** is unchecked.

   c. Click **OK**.

   d. Stop and restart IIS.

3. On the **Recycling** tab, uncheck **Recycle worker processes**.

4. On the **Performance** tab, uncheck **Shutdown worker processes**.

5. On the **Identity** tab, specify **Predefined** as the security account and then select **Local System**.

6. Click **OK**.

7. Expand the tree view and select the Default Web Site. Right-click and then **Properties**. Go to the ASP.NET tab. Select the **2.0.x.x.x** version from the drop-down and hit **Apply**.

8. Select the **Web Service Extensions** folder.

9. Verify that **ASP.NET** extensions are **Allowed** and that all other extensions are **Prohibited**.

Configuring DEP

1. Open the **System** control panel and click the **Advanced** tab.

2. In the **Performance** section, click **Settings** to display the Performance Options window

3. Click the **Data Execution Prevention** (DEP) tab.

4. Select the first option (**run only for essential Windows programs and services**).

5. Click **OK**.

Testing the Installation

This section describes two quick tests to determine if IIS and the conform service are running properly.

Testing IIS installation

To test IIS, do the following on the conform server:

• Using Internet Explorer, go to **http://<Conform_Server_name>**

If the page displayed does not indicate that the web service is running, recheck the IIS installation procedure.

Testing Conform Service Installation

On the Conform Server, do the following:

1. Using Internet Explorer, go to **http://<Conform_Server_name>/xre/Services.asmx**.

The Conform Server Web Services page appears.

2. Click **QueryBoxInfo**.

3. In the **Test** section, click **Invoke**.

An XML page displays information such as the software version, job queue information, and service uptime.

From an Aurora Edit client, do the following:

1. Open the Conform Manager tool.

The Conform Server and job queue should be visible.

2. Submit a conform Job via the Send command and verify that it completes.

If errors occur, use the Thomson Event Viewer (to inspect the conform server log:

1. From the Windows task bar, select **Start | Programs | Thomson | Thomson Event Viewer**.

2. Verify that, under the **View** menu, that **Aurora Application** and **Conform Service** are both checked; these are the two services you should monitor.

Web.Config

The Conform Server contains an XML configuration file called Web.config that resides in the *\InetPub\wwwroot\xre* folder. Most of the settings in this file are used by IIS.

You can use this file to confirm settings while troubleshooting a problem with the Conform Server.

The adds several parameters in the appSettings section as in the following example:

```
<appSettings>
 <add key="resolverURL" value="http://10.16.57.161/AMUI/
AM_ResolverService.asmx" />
 <add key="resolverUserId" value="nbadmin"/>
 <add key="resolverPwd" value="newsat10"/>
 <add key="resolverDomain" value="MyDomain"/>
 <add key="xBoxAVFiles" value="V:\XreAVFiles" />
</appSettings>
```

The appSettings section contains the following items:

- **resolverURL**. The URL of the Resolver service, used by the Conform Server to locate the High Resolution media described in the EDL.

- **resolverUserId**. The user account under which the Conform Server service runs.

- **resolverPwd**. The password for the ResolverUserId account.

- **resolverDomain.** The domain name of the resolver service.

- **xBoxAVFiles**. The fully qualified path to the temporary working directory.

Chapter **1**

Aurora Edit Security

With SAN security, you can control the visibility and access for users and groups within Aurora Edit bins by associating the bins and assets with file system permissions. SAN security uses the overlapping modes of inheritance, exclusivity, and group membership, as implemented by Windows, to establish file system security. These principals apply:

* Selective access—You create groups of users, such as Editors or Producers, and set permissions for each group.
* Partial control—You control access to branches of the Bin tree for users and groups.
* Administrative control—The Administrator has exclusive access to a tool in the top-level bin that allows the setting of permissions in the top-level bins.

When you are joining computers to the domain or setting permissions, the NewsShare system must be off line, during a maintenance window.

This chapter discusses the following topics:

* Designing a security schema
* Configuring the Domain Controller
* Configuring SNFS for SAN Security
* Setting Security Permissions
* Testing

Designing a security schema

In order to set up security in your SAN system you need create a schema for permissions. The schema determines which groups you create, and which permissions you give each group.

Thomson Grass Valley has created a typical schema for use in illustrating security principles in this document. You may use this schema if it is appropriate for your newsroom, or create your own. For the examples in this manual, we'll assume that the newsroom has five groups: Editors, Producers, Archivists, Ingestors, and Viewers.

The SAN security principles are agnostic to these groups, though the use of groups greatly simplifies the establishment of the security schema. We picked these names as exemplary; you do not need to use them in your operation. You can have as many or as few groups as you like, named however you wish. If your domain has a tree hierarchy, you may assign permissions to global groups as well.

Sample security schema

The following table lists the groups and permissions being used as an example in this document:

News Group	Bin	Permissions
Domain Administrator	All	Full control
Editors	Monday-Sunday	Read/Write/Delete in top level bins, but cannot delete material from newscast bins.
	Feeds	Read only
	HFR	Read/Write
	Archive	Read/Write
Producers	Monday-Sunday	Read/Write
	Feeds	Read only
	HFR	Full control
	Archive	Read/Write
Archivists	Monday-Sunday	Read only
	Feeds	Read/Write
	HFR	Read only
	Archive	Full control
Ingestors	Monday-Sunday	Read only
	Feeds	Full control
	HFR	None (permission denied)
	Archive	Read/Write

News Group	Bin	Permissions
Viewers	Monday-Sunday	Read only
	Feeds	Read only
	HFR	Read only
	Archive	Read only

NewsShare system users and groups

At a minimum, you need to create two user-group sets for use by certain components of the NewsShare system:

Group	User Members	Password
Profile Services	profile	profile
Vibrint Services	VibrintService	triton

Configuring the Domain Controller

A Domain Controller is a separate machine running Windows 2003 Server software and configured with Active Directory. If purchased from Thomson Grass Valley, a Conform Server is used. If the sole responsibility of the machine is to act as a domain controller, SMG- or customer-furnished equipment may be used, provided that it meets the specifications necessary to host Windows 2003 Server.

Guidelines

In general, you need to follow these guidelines for the Domain Controller:

• The Domain Controller cannot be an FSM.

• A separate Domain Controller and related domain node should be allocated to the technical LAN subnet. This Domain Controller should also have sufficient access to all related LANs to establish trusts and provide authentication services.

• A Conform Server can be used to host another Aurora Edit product, SmartBins.

• The domain controller may be remote to the SAN, but needs high availability and direct configurability by your newsroom engineering department.

• Consistent with the Windows domain model, the domain controller may also use a backup within the SAN subnet.

• You can either create a Domain Controller as a new domain tree or as a child domain to an existing Domain Controller on your network.

• For normal newsroom operation, if the domain controller is a member of a forest or tree, the Domain Controller can be subordinate: trusting but not trusted.

Each news organization has different infrastructure and policies regarding the configuration of domains. What NewsShare SAN security requires is an Active Directory zone with at least one dedicated Windows 2003 Server domain controller; there are several ways to achieve this, and the choice appropriate for your organization depends on your organization's culture, infrastructure, and IT policies.

In planning, you need to determine the relationship of the new domain to its tree; whether it will use integrated, delegated, or standalone DNS; and whether the domain controller's mode will be mixed, in order to interoperate with pre-Windows 2000 domain controllers, or native, allowing advanced features, particularly greater opportunity in configuring user groups. The recommended configuration to effect the most flexible control of the technical domain is to run integrated DNS on a native-mode domain controller.

This chapter details two of the many ways to set up a domain controller with Active Directory:

- First node in a domain tree, integrated DNS, (mixed-mode) permissions compatible with pre-Windows 2003 servers.

- Child node in an existing domain tree, (integrated) DNS in the parent, (native-mode) permissions compatible with Windows 2003 servers and higher.

As an adjunct step, depending on the trust relationship between the domain controllers for NewsShare and those of the larger organization, the use of a standalone DNS with forwarding may be necessary to achieve a highly isolated domain.

Creating Groups

You create groups on your Domain Controller according to the security schema you created. Use this table as a guideline for creating your groups:

Group Name	Group Scope	Group Type	Required?
Vibrint Services	The Group Scope is dependent on the type of Domain Controller you are configuring.[1]	Security	Yes
Profile Services		Security	Yes
Archivists		Security	Optional
Editors		Security	
Ingestors		Security	
Producers		Security	
Viewers		Security	
Other groups as necessary for your newsroom			

[1]·If you are working in a mixed-mode domain, your only practical scope choice is Global, which is documented here. In a native-mode domain, other choices are available. Consult the Windows Active Directory documentation on group scopes.

Creating Users

You need to create the users who will become members of the groups you just created. Users represent each person who logs on to an Aurora Edit workstation. If you are creating a new domain tree, you need to create each user using the directions below. If you are creating a child domain, and will get your users from the parent domain, you can skip this step.

Regardless of the type of Domain Controller you are configuring, you need to create these two users:

Full name	User logon name	Password
profile	profile	profile
VibrintService	VibrintService	triton

Adding Users to the New Groups

Once you've created groups and users, you can add the users to their respective groups. If you are configuring a child domain, you may select users from the parent domain.

You also need to add the profile user to the Profile Services group, and the VibrintService user to the Vibrint Services group.

This table illustrates how users fit into groups you previously defined:

Group Name	Users	Required?
Profile Services	profile	Yes
Vibrint Services	VibrintService	Yes
Editors	Administrator	Optional
	joe edit 1	
	joe edit 2	
	joe edit 3	
	joe producer	

Configuring SNFS for SAN Security

The StorNext File System (SNFS) runs on the File System Manager(s) as part of the SAN network. In order to use security on Aurora Edit workstations, you need to modify the SNFS configuration to use Windows Security and then power cycle the FSMs.

NOTE: You cannot use the SNFS Configuration Tool to add Windows Security to SNFS. Using the Configuration Tool changes other settings you don't want to modify.

To add windows security to SNFS:

1. On the primary FSM, go to **C:\MediaAreaNetwork\config**.

2. Using Notepad, open the file **default.cfg**.

3. Change the **Windows Security** line's value to **YES**.

   If the line item doesn't exist, add it to the file.

4. Save the file and exit Notepad.

5. Repeat these steps 1 through 4 on the backup FSM.

6. Power cycle the FSMs as follows:

   a. Shut down the backup FSM.

   b. Reboot the primary FSM.

   c. Power on the backup FSM.

Setting Security Permissions

The last step in setting up security for your DNP system is to set permissions for the Aurora Edit folders and bins. You again use your security schema to determine permissions for users and groups.

You can set all permissions from one Aurora Edit machine. You need to set permissions in three different places—in the V:\ directory, in Aurora Edit options, and in the Aurora Edit bins.

You must log in as a Domain Administrator to set security permissions.

Setting Initial Shared Volume Permissions

This task assures a uniform starting point in setting volume permissions, essentially setting the secure volume's permissions to be identical to either an SNFS volume that does not implement Windows Security, or a default NTFS volume.

To set shared volume permissions:

1. Open a cmd window, switch to the V: drive, and type the following:

   cacls V:* /T /G Everyone:F

2. In Windows Explorer, right-click on the V: drive and select **Properties**.

3. Click the **Security** tab.

4. If necessary, add the user **Everyone** and allow **Full Control**.

5. Click **Advanced...** and select **Replace permission entries on all child objects with entries shown here that apply to child objects**.

6. Click **OK** and click **Yes** in response to the dialog **This will remove explicitly defined permissions... Do you wish to continue?**

7. Click **OK** to exit the Properties window.

Setting High Level Shared Volume Permissions

Permissions on the V:\ folders are set using Windows Explorer. First you add the group(s) to the drive and then set security permissions for that group.

To set permissions on the V:\ folders:

1. In Windows Explorer, navigate to the V:\ drive.

2. Right-click on the desired folder and select **Properties**.

   a. Uncheck **Allow inheritable permissions from parent to propagate to this object**.

3. Configure permissions as shown in this table:

	Domain Admins	Everyone	SYSTEM	Archivists	Editors	Ingestors	Producers	Viewers	Profile Services	Vibrint Services
V:\	F	F	F						F	F
V:\media		F*	F*							
V:\PDR	F		F		F	F			F*	F*
V:\Thumbnails	(inherit Full Control from V:\)									
V:\VibrintAttic	(inherit Full Control from V:\)									

F = Full Control
* = Inherits permissions from the folder directly above it

Setting Aurora Edit Root Level Permissions

Permissions for V:\VibrintAVFiles are set in Aurora Edit options. First you add the group(s) to the drive and then set security permissions for that group. You must log in as Domain Administrator to set root permissions.

To set permissions for VibrintAVFiles:

1. Open Aurora Edit and select **Tools | Set Root Permissions**.

   The Select a Volume window appears.

2. Select a volume and click **OK**.

   The Permissions for V:\VibrintAVFiles opens:
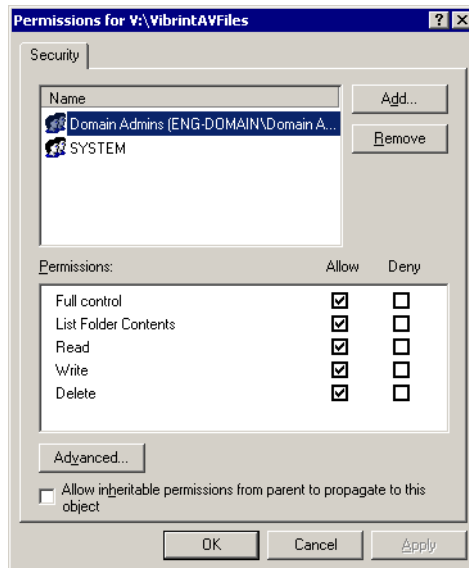
3. Uncheck **Allow inheritable permissions from parent to propagate to this object**.

   A Security message appears.

4. Select **Copy**.

5. Remove the current permissions.

6. Select the Everyone group and click **Remove**.

7. Add each of the groups you created (if you are using the typical security schema, add the groups **Archivists**, **Editors**, **Ingestors**, **Producers**, and **Viewers**).

8. Set permissions for each group according to the table below.

9. Click **OK**.

	Domain Admins	Everyone	SYSTEM	Archivists	Editors	Ingestors	Producers	Viewers	Profile Services	Vibrint Services
V:\VibrintAVFiles	**F**		**F**	**L R**	**L R**	**L R**	**L R**	**L R**	**F**	**F**

F = Full Control
L = List Folder Contents
R = Read

Setting Aurora Edit Bin Permissions

Aurora Edit bin permissions are set in the Properties tab for each Bin. Follow the instructions below to set permissions for each bin in your top-level Aurora Edit bin.

To set permissions for Aurora Edit bins:

1. In the Aurora Edit bin, right-click on the first bin and select **Properties**.
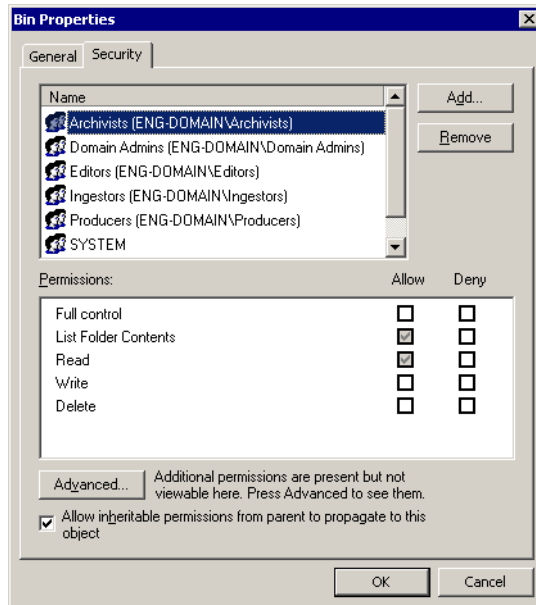
2. Click the **Security** tab.

3. Change permissions for each group listed based in the table below.

4. Click **OK** when you are done setting permissions.

	Domain Admins	Everyone	SYSTEM	Archivists	Editors	Ingestors	Producers	Viewers	Profile Services
Monday-Sunday Bins	F*		F*	-W -D	W D	-W -D	W -D	L R*	
Feeds Bin	F*		F*	W -D	-W -D	W D	-W -D	L R*	
HFR Bin	F*		F*	-W -D	W -D	-F	W D	L R*	
Archive Bin	F*		F*	W D	W -D	W -D	W -D	L R*	

F = Full Control
L = List Folder Contents
R = Read
W = Write
D = Delete
- = Deny
* = Inherits permissions from the folder directly above it
** = Inheritance is blocked at this level

Testing

After creating and configuring the Domain Controller and setting permissions for Aurora Edit bins, you should test the system to make sure that the security is working:

• Aurora Edit system operation:

Basically, check that permissions exist functionally where they should and that permissions are denied functionally where they should be denied. A Viewer user should not be able to write or delete. Significantly, where a user is denied all permissions (as might be the case for an investigative report that should be editable by only a small group) make sure that users outside the group have no access and no availability in the private group. Check that delete permissions are truly denied. Check that read only users in a particular bin cannot write.

• Winking:

Winking requires a complicated security relationship between several processes. Therefore, it's important to check that users who were expected to be able to wink can wink. Create a clip on the K2 media client and wink it to a non-SmartBin using Aurora Edit. Likewise, create a Aurora Edit clip and wink it to a K2 media client non-SmartBin.

• SmartBins:

Since SmartBins on an SAN function by winking, they have similar dependencies to user-initiated winking. Check that a clip recorded on a Profile SmartBin appears in the associated Aurora Edit SmartBin and vice-versa.

• Conform Server:

The Conform Server has overlapping permissions needs. Publish a story out of Aurora Edit or Aurora Edit LD to make sure that it works.

Chapter **2**

Using Final Cut Pro With Aurora Edit

Aurora Edit allows you to work with Apple's Final Cut Pro video editing application. Files created in Aurora Edit and in a shared environment include a .mov file as one of its components, which makes it compatible with the Final Cut Pro format. You can also export a sequence as an XML EDL that can be imported into Final Cut Pro for additional editing.

These instructions apply to MacOS 10.4 or 10.5 used with:

• Final Cut Studio version 6.0.4 and a K2 standalone media client

• K2 SAN (version 3.2.74 or later) configured to offer the NAS service, with an Aurora Edit 6.5 System (optional) and with DSM and .MOV generator.

Use these instructions to install and use the Final Cut Pro plug-in in your newsroom.

This chapter discusses the following topics:

• Installing the Grass Valley Plug-in

• Mounting the Shared Drive

• Optimizing System Bandwidth

• Creating a Media Import SmartBin on Aurora Edit

• Workflows

• Converting Existing Aurora Edit Files to .mov Format

Installing the Grass Valley Plug-in

The first step is to install the Grass Valley plug-in to Final Cut Pro.

To install the Grass Valley plug-in:

1. Insert the Grass Valley FCP-Menu CD-ROM into the Mac.

2. Copy the file **GrassValley.bundle** to the appropriate path below:

    • MacOS 10.4.x

      ~/Library/Preferences/Final Cut Pro User Data/Plugins

    • MacOS 10.5.x

      ~/Library/Application Support/Final Cut Pro System Support/Plugins

The plug-in is ready to use.

Mounting the Shared Drive

After the Grass Valley plug-in is installed, the next task is to map the media drive (V:). The process differs slightly between MacOS 10.4 and 10.5.

Mounting V:\ from MacOS 10.4.x (Tiger)

In order for EDLs to export correctly, you need to map the Final Cut Pro network drive and mount the V:\ drive.

Mapping the Network Drive

You need to map the drive on the Mac for the exported EDL files.

1. In Aurora Edit, choose **Tools | Options | Timeline**.

2. In the Final Cut Pro Network Mapping field, enter **file://localhost/Volumes/ K2_server_name**.

3. Click **OK**.

Mounting the V:\ Drive

You need to mount the V:\ drive from the Mac to use files on the shared database.

To mount the drive:

1. Launch **NetInfo Manager** from the Applications/Utilities folder.

2. Click the lock in the lower left corner and authenticate.

3. Click the **/mounts** directory.

4. Click **New+**. An item named new_directory appears.
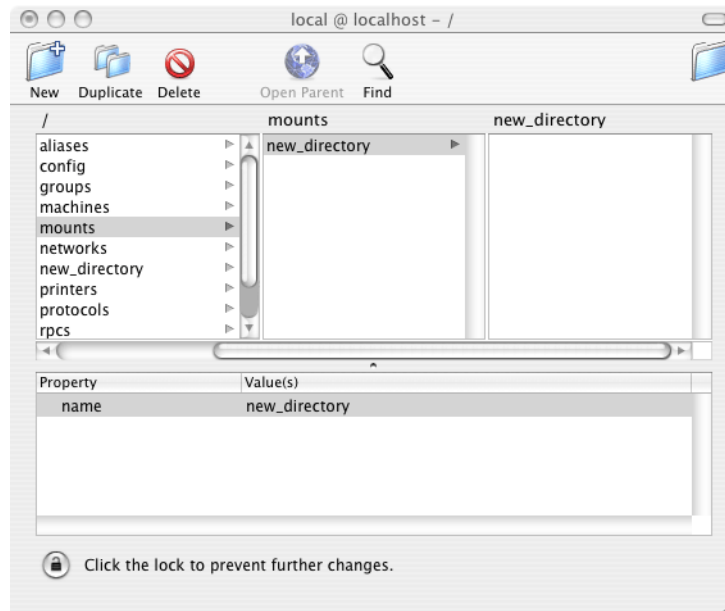
5. Double-click in the Value field and change **new_directory** to **server IP address:/Shared Directory** (notice the extra ':' after the server IP address).

6. Select **Directory | New Property** and enter the Property:Value pairs for three new properties:

vsftype	url
opts	**url==smb://loginName:password@sNASIPAddress/SharedDirectory**
	The login name and password are the same as the Mac.
	Example: **url==smb://administrator:admin@10.10.10.10/share1**
dir	**/network/sharedDriveLetter**
	Example: **/network/V**

Your window should look similar to this:
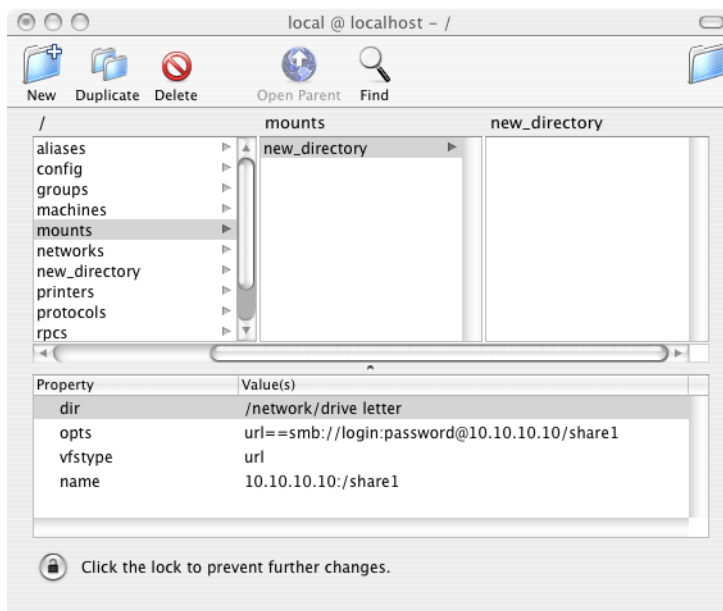
7. Select **Domain | Save Changes**.

8. Restart your Mac and verify that the V: drive is mounted correctly.

Mounting V:\ from MacOS 10.5.x (Leopard)

Before mounting the V:\ drive, you must first configure the Mac's Ethernet interfaces. Once configured, you can mount the drive manually via the Finder or automatically via AppleScript.

Mapping the network drive

1. In Aurora Edit, choose **Tools | Options | Timeline**.

2. In the Final Cut Pro Network Mapping field, enter **file:///Network/V**.

3. Click **OK**.

Configuring Ethernet Addresses

The Mac uses the FTP network to access the K2 system's media drive, and the Control network for accessing Scripts and Placeholders from Aurora Playout (version 7.0). You must configure the Ethernet interfaces with addresses on these two networks:

1. Open System Preferences and select **Network**.

2. Select **Edit Locations** from the **Location** list.

3. Click **+** to add a new location, name it **K2 Edit in Place**, and click **Done**.

4. Select **K2 Edit in Place** from the **Location** list.

5. Configure one Ethernet interface to an IP address on the K2 Control network, and the other to an IP address on the K2 FTP Network.
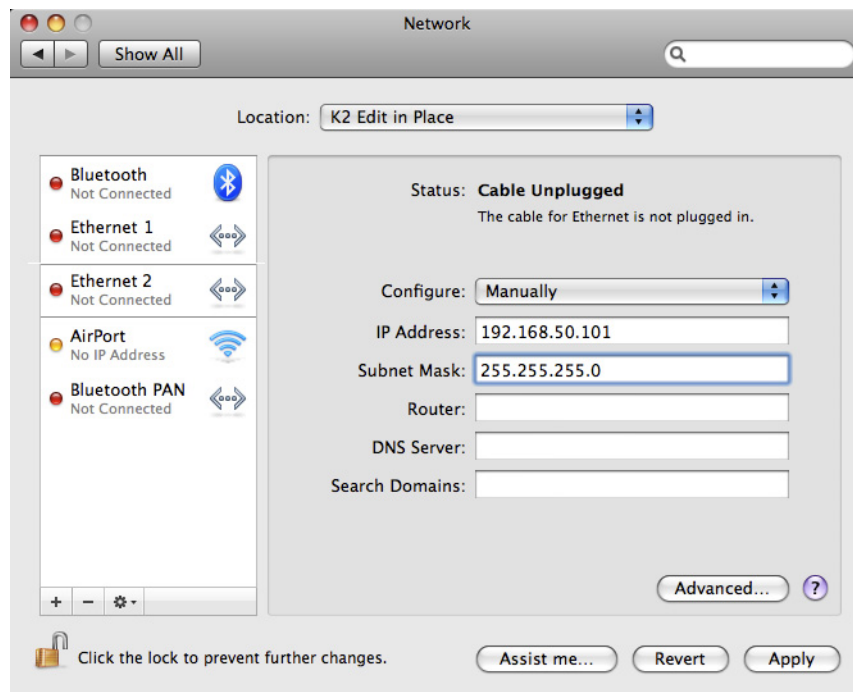
Mounting the V:\ Drive via the Finder

This procedure describes how to configure the K2 network addresses so you can manually mount the V:\ driver from the Finder. You will need to remount the drive each time you log in. (The next section describes how to connect automatically.)

1. From the Finder, choose **Finder | Preferences**.

   The Finder Preferences window appears.

2. On the **General** tab, verify that **Connected Servers** is checked, and then close the window.
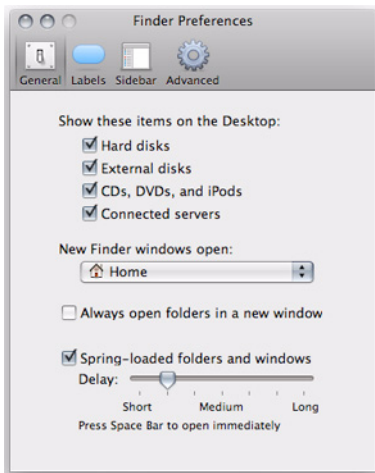
3. From the Finder, choose **Go | Connect to Server**.

   The Connect to Server window appears.

4. Enter the **Server Address** of the K2 server.

   Use the **smb://** prefix to create a CIFS mount, followed by the the IP address for the K2 server's FTP network card.

5. Click **+** to add the address to the **Favorite Servers** list.

6. If you are connecting to Aurora Playout v7.0 for script and placeholder services, repeat steps 4. and 5. for the K2 server's Control network.

7. Select the FTP network address from the Favorite Servers list and click **Connect**.

8. Select **Registered User**, enter your username and password, and click **Connect**.

9. From the list of volumes, select the **V** share and click **OK**.
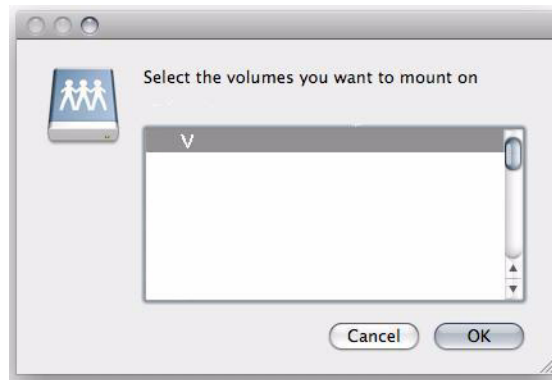
You can now access the V:\ drive from the desktop, Finder windows, and so on. For future logins, you can select the address from the Connect to Server window.

Mounting the V:\ Drive via AppleScript

You can automate the drive mount processes by creating an AppleScript application with your login data that executes automatically each time you log in.

1. From the Finder, go to Applications/AppleScript and launch the Script Editor.

2. Enter the following script:

```
(*
AppleScript to connect to K2 SAN from Mac running OS X
Leopard. Edit the properties below with your login
information and save the script as a run-only application.
Launching the script will mount the specified drives.
*)

property username : "administrator"
property pass : "adminK2"
property K2FTP_IP : "192.168.50.10"
property K2_share : "V"
property sharedirectory : ""

tell application "Finder"
set K2_share to "smb://" & username & ":" & pass & "@"
              & K2FTP_IP & "/" & sharedirectory

  if not (exists K2_share) then
      mount volume K2_share
  else
     eject K2_share
      mount volume K2_share

  end if

end tell
```

The defaults in the example work for a Mac that is not part of any workgroup or domain, connecting to a K2 SAN system set up as workgroup with the FTP address 192.168.50.10 so the V: drive is shared on the correct (FTP) network and not on the control network.

If your system is inside a domain amend the set K2_share command to:

```
set K2_share to "smb://" & domain & ";" & username & ":"
            & pass & "@" & K2FTP_IP & "/" & sharedirectory1
```

3. Test the script and confirm that it works.

4. Choose **File | Save** and name the script; change the save location if necessary.

5. Set the **File Format** to **Application** and select the **Run Only** option.

6. Click **Save**.

If you would like the script to run each time you log in, you can add it to your Login Items (**System Preferences | Accounts | Login Items**).

Optimizing System Bandwidth

Both the Macintosh and Final Cut Pro tend to use large amounts of bandwidth during multi-layer operations, which may result in dropped frames in Aurora Edit or other systems on the NAS (storage). To avoid this, Grass Valley recommends that you manually configure the network ports on the Cisco Switch and the Mac to 100BaseT.

Configuring the Cisco Switch

To modify the port configuration:

1. Download the Cisco Network Assistant from www.cisco.com.

2. Open the Cisco Network Assistant.

3. On the Connect screen, enter the IP address of your switch and click **Connect**.

4. Log on to the application.

5. When the application opens, select **Port | Port Settings** from the left pane.

   The Port Settings window appears, listing available ports.
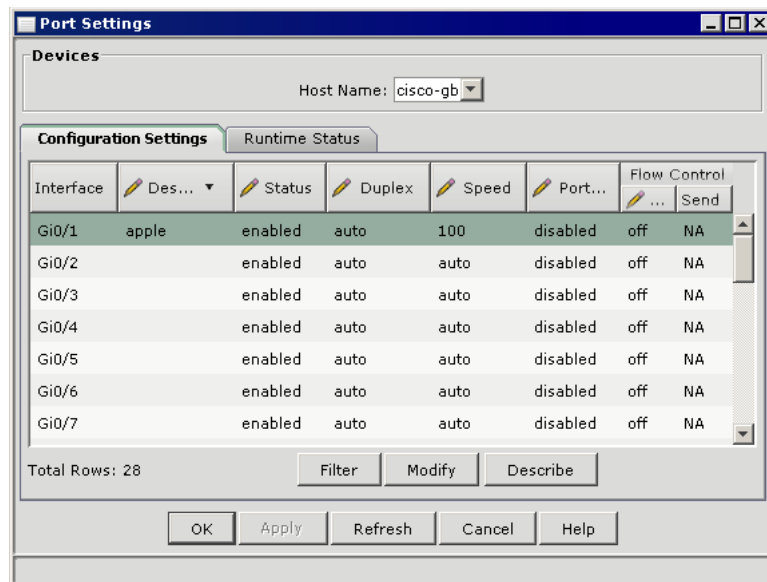
6. Select the port you want to change and click **Modify**.

   The Modify Port Settings window appears:
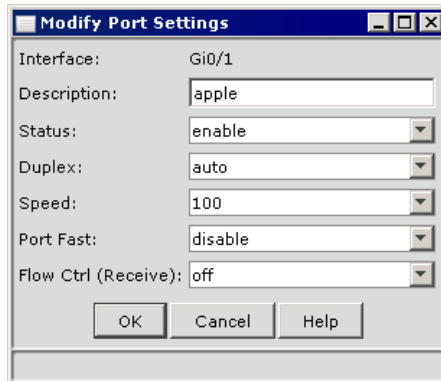
7. Enter a port **Description**, set the **Speed** to **100**, and click **OK**.

8. Click **OK** to close the Port Settings window and exit the Cisco Network Assistant.

Configuring the Mac

MacOS 10.4.x (Tiger)

To set your Mac network to 100BaseT:

1. Under the Apple menu, select **System Preferences**.

2. Click **Network**.

3. In the Network window, select **Built-in Ethernet** and click the **Configure** button.

4. Under the Ethernet tab, select the following options:

Configure	**Manually (Advanced)**
Speed	**100baseTX**

5. Click **Apply Now**.
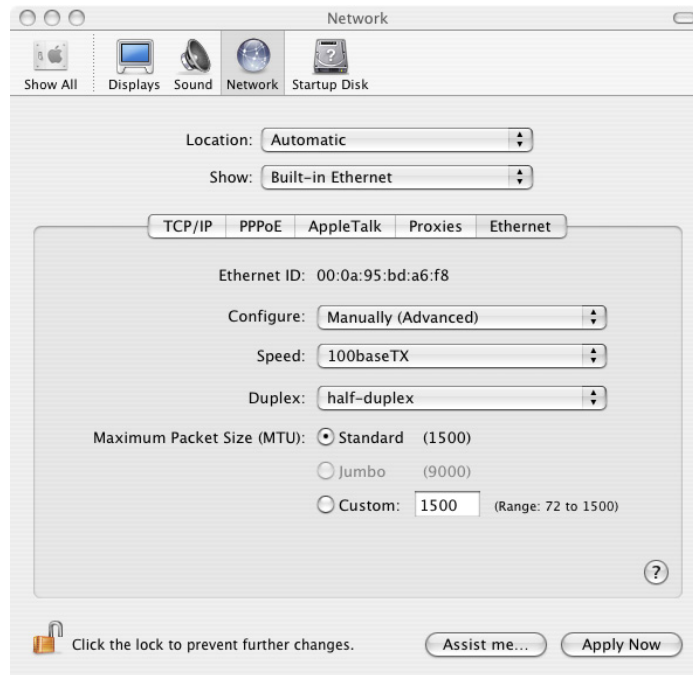
6. Close the System Preferences window.

MacOS 10.5.x (Leopard)

To set your Mac network to 100BaseT:

1. Under the Apple menu, select **System Preferences**.

2. Click **Network**.

3. Select **Built-in Ethernet** and click the **Advanced** button.

4. On the **Ethernet** tab, select the following options:

Configure	**Manually (Advanced)**
Speed	**100baseTX**
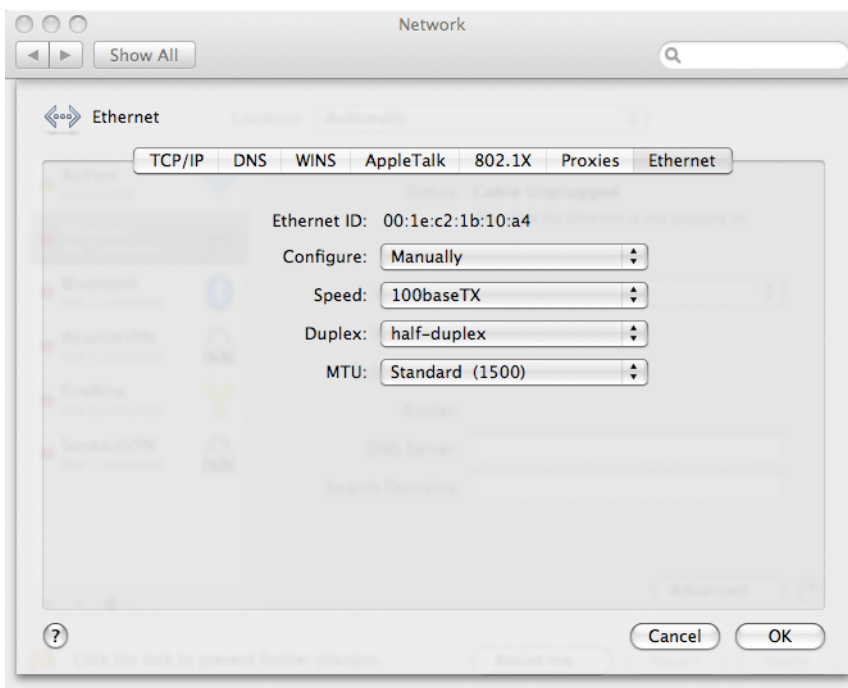
5. Click **OK**.

6. Close the System Preferences window.

Creating a Media Import SmartBin on Aurora Edit

Media Import SmartBins allow you to automatically import the following .mov formats into Aurora Edit:

- DVCAM
- DVC PRO 25
- DV50
- DV100
- XDCAM HD 35
- XDCAM HD 50

This allows you to use Final Cut Pro to create news footage in a shared environment have it automatically copied to an Aurora Edit bin or MediaFrame database for use in a sequence.

See for instructions on creating a Media Import SmartBin.

Workflows

You can use Final Cut Pro and Aurora Edit in two different ways in your newsroom workflow: you can create a sequence in Aurora Edit and add further finish editing using Final Cut Pro, or you can create a sequence from scratch in Final Cut Pro and choose clips directly off the NAS.

Editing on Aurora Edit

When you edit a sequence in Aurora Edit and use Final Cut Pro for additional finish editing, you follow this workflow:

1. Create a sequence in Aurora Edit.

2. Export the sequence as a Final Cut Pro EDL (XML file).

3. Import the XML file into Final Cut Pro.

4. Edit the sequence in Final Cut Pro as necessary.

5. Export the file to the Media Import SmartBin.

   You can also use K2 Hot Bins if you prefer.

6. In Aurora Edit, send the file for playout.

Exporting an Aurora Edit Sequence as a Final Cut Pro EDL

When working in a shared environment with a media server, you can export a sequence from Aurora Edit to Final Cut Pro for additional editing. Files are transferred using Aurora Edit's XML EDL format and Apple's XML Interchange format. These components of the Aurora Edit sequence are transferred:

- Clips
- Rendered effects and titles (if mixed down)
- Dissolves (other transitions, e.g., wipes, pushes, or slides are converted to dissolves)
- Varispeed
- Fit to Fill
- Audio voice disguise

To export a sequence to Final Cut Pro:

1. Highlight the sequence in the Bin you want to export.

2. Choose **File | Export | Final Cut Pro EDL**.

3. Navigate to the folder where you want to export the EDL.

4. Enter a name for the file and click **Save**.

You can now import the file to Final Cut Pro.

Importing an Aurora Edit Sequence on Final Cut Pro

To import an Aurora Edit XML EDL:

1. In Final Cut Pro, select **File | Import | XML**.

   The Choose a File window appears:
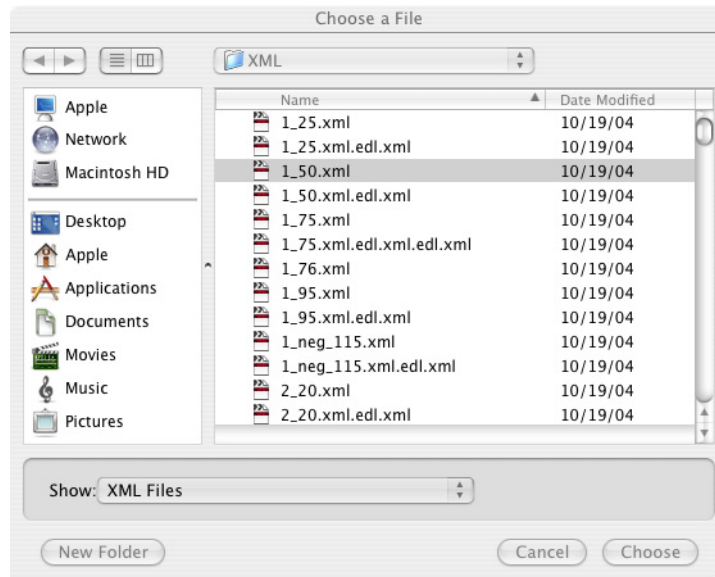
2. Navigate to the folder containing the XML file you want, select the file, and click **Choose**.

The file is imported into Final Cut Pro.

Exporting a Final Cut Pro File

After editing a clip/sequence in Final Cut Pro, you can export to Aurora Edit for playout on a Grass Valley DNP product.

To export a Final Cut Pro file:

1. In Final Cut Pro, select **File | Export | Export to Grass Valley**.

   The Grass Valley Export window appears:
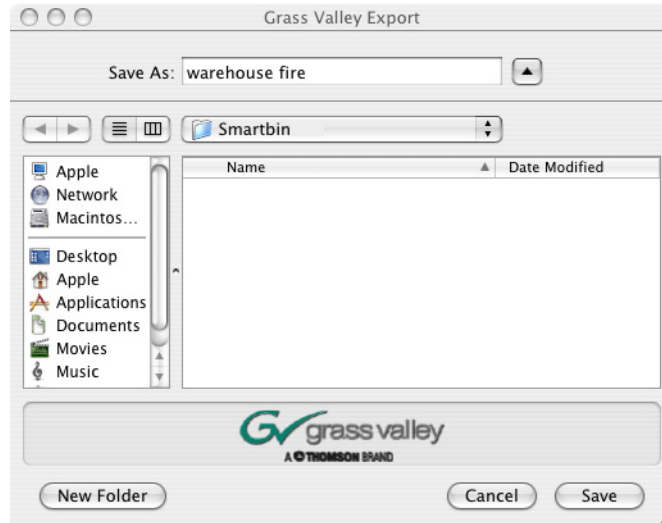
2. Enter a name for the file in the **Save As** field.

3. Select the directory of the Media Import SmartBin.

4. Click **Save**.

The file is converted from a .mov file into an Aurora Edit clip.

Editing on Final Cut Pro

When you use Final Cut Pro for creating sequences, you follow this workflow:

1. In Final Cut Pro, get the media from the media server using the Grass Valley plug-in.

2. Create a local copy of your Final Cut Pro project.

   This step is optional; you may choose to work within the Bin.

3. Create a sequence in Final Cut Pro.

4. Export the file to the Media Import SmartBin.

   You can also export to a K2 Hot Bin if you prefer.

5. In Aurora Edit, send the file for playout.

   If you are using a K2 Hot Bin, the file arrives in Aurora Playout for playout.

Creating a Local Copy of a Final Cut Pro Project

To optimize bandwidth usage for projects requiring frequent storage access, you may wish to import the Aurora Edit XML file and create a local copy of the media in Final Cut Pro.

NOTE: Regardless of the device's RT Extreme settings, using more than three or four layers in Final Cut Pro will result in dropped frames.

To create a local copy of your project:

1. In Final Cut Pro, select **File | Open Grass Valley** and open the XML file.

2. Select the clip in the Final Cut Pro bin.

3. Select **File | Media Manager**; the Media Manager window appears:
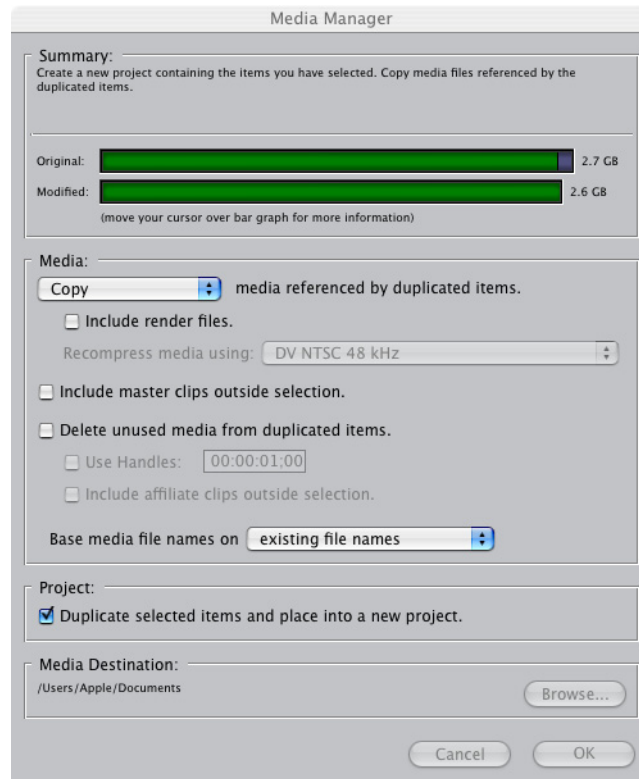
4. Verify that the Media field is set to **Copy media referenced by duplicated items** and the Media Destination is local on the Mac.

   The other settings can be set to your preferences.

5. Click **OK**.

Opening an Aurora Edit Clip on Final Cut Pro

You can also open an Aurora Edit clip in Final Cut Pro instead of importing an entire sequence.

To open an Aurora Edit clip:

1. In Final Cut Pro, select **File | Open Grass Valley**.

   The Grass Valley Import window appears.

2. Select the clip and click **Open**.

   The clip opens in Final Cut Pro and is available for editing.

Converting Existing Aurora Edit Files to .mov Format

The following Aurora Edit clip formats include a .mov file component, which allows you to bring an Aurora Edit sequence into Final Cut Pro for additional editing:

- DVCAM
- DVC PRO 25
- DV50
- DV100
- XDCAM HD 35
- XDCAM HD 50

You can also convert previously created files to .mov format:

1. Go to **Start | Program Files | Vibrint 3.0 | Utilities** and select **MediaServicesTestApp**.

2. Choose **Utility | Create MOV from VMF**.

3. Enter the name of the database server where you will convert files and click **OK**.

4. Select the bin to convert and click **OK.**

   The conversion process begins.

Appendix **A**

Workstation Slot Map

This appendix lists the supported Aurora Edit workstations and the corresponding slot assignments.

HP xw8400 Workstation Board Assignment

Single-CPU

Slot #	Slot Type	Aurora Edit Configuration	
		SD/SDR	**SDFX**
1	PCI	Comtrol RS-422 (optional) **OR** additional IEEE 1394 (optional)	Comtrol RS-422 (optional) **OR** additional IEEE 1394 (optional)
2	PCI-e	NVIDIA Quadro FX560 graphics	NVIDIA Quadro FX560 graphics
3	PCI-e	Network Interface	Network Interface
4	PCI-e	Network Interface	Network Interface
5	PCI-X	SDR I/O	SDFX I/O
6	PCI-X		SDFX Audio Adapter
7	PCI-X	Fibre Channel	Fibre Channel

Dual-CPU

Slot #	Slot Type	Aurora Edit Configuration	
		HD/HDR	**HDFX**
1	PCI	Comtrol RS-422 (optional) **OR** additional IEEE 1394 (optional)	Comtrol RS-422 (optional) **OR** additional IEEE 1394 (optional)
2	PCI-e	NVIDIA Quadro FX1500 graphics	NVIDIA Quadro FX1500 graphics
3	PCI-e	Network Interface	Network Interface
4	PCI-e	Network Interface	Network Interface
5	PCI-X	HDR I/O	HDFX I/O
6	PCI-X		HDFX Audio Adapter
7	PCI-X	Fibre Channel	HDFX Effects

HP xw8600 Workstation Board Assignment

Slot #	Slot Type	
1	PCI	Comtrol RS-422 (optional) **OR** additional IEEE 1394 (optional)
2	PCI-e x16	NVIDIA Quadro FX3700 graphics
3	PCI-e x8 (x4)	Empty (use as needed)
4	PCI-e x16 (x16 or x8)	Empty (use as needed)
5	PCI-e x8 (x1 or x8)	Empty (use as needed)
6	PCI-e x8 (x4)	Empty (use as needed)
7	PCI-X	SDR/HDR I/O board

HP xw9300 Workstation Board Assignment

Single-CPU

Slot #	Slot Type	Aurora Edit Configuration		
		SD/SDR	SDFX (Option 1)	SDFX (Option 2)
1	PCI-e	NVIDIA Quadro FX1400 graphics	NVIDIA Quadro FX1500 graphics	NVIDIA Quadro FX1400 graphics
2	PCI	Comtrol RS-422 (optional) **OR** additional IEEE 1394 (optional)	Comtrol RS-422 (optional) **OR** additional IEEE 1394 (optional)	Comtrol RS-422 (optional) **OR** additional IEEE 1394 (optional)
3	PCI-e	—inactive—	—inactive—	SDFX Audio Adapter
4	PCI-X	Network Interface, Fibre Channel, or RS422	SDFX Audio Adapter	Network Interface
5	PCI-X	Network Interface	SDFX I/O	SDFX I/O
6	PCI-X	SDR I/O		SDFX Effects

Dual-CPU

Slot #	Slot Type	Aurora Edit Configuration	
		HD/HDR	HDFX
1	PCI-e	NVIDIA Quadro FX3450 graphics	NVIDIA Quadro FX3450 graphics
2	PCI	Comtrol RS-422 (optional) **OR** additional IEEE 1394 (optional)	Comtrol RS-422 (optional) **OR** additional IEEE 1394 (optional)
3	PCI-e	Network Interface	Network Interface
4	PCI-X	Network Interface or Fibre Channel	HDFX Audio Adapter
5	PCI-X	Network Interface or Fibre Channel	HDFX I/O
6	PCI-X	HDR I/O	HDFX Effects

Appendix **B**

Database Maintenance

Six command-line maintenance utilities are available for the News database used by Aurora Edit, Aurora Playout, and NewsShare. These utilities are automatically installed on DNP client machines and most NewsShare servers in the C:\Program Files\Grass Valley\Aurora\DB Maintenance directory. They can also be installed from the Aurora Suite CD.

This appendix discusses the following utilities:

Name	Description
newsBackUpDb	Backs up the News database
newsRestoreDb	Restores the database from a backup
newsDropDb	Removes the database (for complete uninstall)
newsInstallDb	Recreates an empty News database
newsShrinkDb	Shrinks the database
newsInitAutoBack	Schedules automatic backups of the News database

WARNING: Use these utilities with great care. The restore and drop commands, respectively, overwrite and delete existing databases such that current data will be lost.

Overview

When used, the utilities must be run from the C:\Program Files\Grass Valley\Aurora\DB Maintenance directory of the machine whose database is being operated upon. The user must be a member of the system's Administrators group. For a local, stand-alone machine, run the utilities at that workstation. For the central News database of a shared storage system (NewsShare), run the utilities at the DSM.

To run any of the utilities, open a command window and type the command. The following sections describe each utility and its usage. Note that filenames used in the commands must be fully qualified.

Before running any of the utilities, follow these preparatory steps:

- For restore and drop operations, the News database must not be servicing clients. Close all DNP applications that would use it.

- For DSM-based News databases, observe these constraints:

  - Back up the database from the primary DSM.

  - If automatic database backups are scheduled, they must be set to occur during periods of extremely low system utilization, preferably when zero NewsShare or are recording or playing clips.

  - Stop all access before restoring or dropping the database.

  - Take DSMs out of service before restoring or dropping the database.

  - Close all SQL applications before restoring or dropping the database.

  - Restore the database to the primary DSM.

newsBackUpDb

Template

newsBackUpDb <backup file name>

Example

```
C:\Program Files\Grass Valley\Aurora\DB Maintenance>
newsBackUpDb c:\backups\news.dat

Backing up this machine's News 4.1+ database to location
c:\backups\news.dat

. . .

Contents of log file vNewsBackUpDb.log:

---------------------------------------------------------

Tue 11/26/2002 4:38p

Administrator

Backing up news DB from VMAN_VBRFSM3 to file
c:\backups\news.dat.
```

```
27 percent backed up.
55 percent backed up.
83 percent backed up.
99 percent backed up.
```

Processed 432 pages for database 'news', file 'news_dat' on file 1.

100 percent backed up.

Processed 1 pages for database 'news', file 'news_log' on file 1.

BACKUP DATABASE successfully processed 433 pages in 0.326 seconds (10.863 MB/sec).

```
-----------------------------------------------------------
```

Press any key to exit . . .

C:\Program Files\Grass Valley\Aurora\DB Maintenance>

newsRestoreDb

WARNING: This will overwrite the current News database.

Template

newsRestoreDb <backup file name>

Example

C:\Program Files\Grass Valley\Aurora\DB Maintenance> newsRestoreDb C:\backups\news.dat

Restore will overwrite any current News 4.1+ DB on this machine!

Press Cntl-C to abort, any other key to proceed . . .

Restoring this machine's News 4.1+ database from file C:\backups\news.dat . . .

Contents of log file vNewsRestoreDb.log:

```
-----------------------------------------------------------
```

Tue 11/26/2002 4:58p

Administrator

Restoring news DB on VMAN_VBRFSM3 from C:\backups\news.dat.

x percent restored.

Processed 432 pages for database 'news', file 'news_dat' on file 1.

Processed 1 pages for database 'news', file 'news_log' on file 1.

```
RESTORE DATABASE successfully processed 433 pages in 0.213
seconds (16.626 MB/sec).
```

```
'vibrint' added to role 'db_owner'.
```

```
The number of orphaned users fixed by updating users was 0.
```

```
Press any key to exit . . .
```

```
C:\Program Files\Grass Valley\Aurora\DB Maintenance>
```

newsDropDb

WARNING: This will delete the current News database.

If the Microsoft SQL Server is ever to be removed, this drop should be done first. Otherwise, remnant files will interfere with future installations of the News database.

Template

newsDropDb

Example

```
C:\Program Files\Grass Valley\Aurora\DB Maintenance>
newsDropDb
```

```
Ensure that the Failover Service is stopped before dropping
the news DB.
```

```
Drop will delete the News 4.1+ database on this machine!
```

```
Press Cntl-C to abort, any other key to proceed . . .
```

```
Dropping News 4.1+ database on this machine . . .
```

```
Contents of log file vNewsDropDb.log:
```

```
------------------------------------------------------------
```

```
Tue 11/26/2002 4:41p
```

```
Administrator
```

```
Deleting database file 'C:\Program Files\Microsoft SQL
Server\MSSQL\data\news.ldf'.
```

```
Deleting database file 'C:\Program Files\Microsoft SQL
Server\MSSQL\data\news.mdf'.
```

```
------------------------------------------------------------
```

```
Press any key to exit . . .
```

```
C:\Program Files\Grass Valley\Aurora\DB Maintenance>
```

newsInstallDb

First run newsDropDb, as shown above, on the host machine for the database. Then run newsInstallDb as shown here. This batch file dispatches to the dbInstall program which is placed on each client by the DNP installer. This will work for standalone editors. For DSM servers, use Add/Remove Programs to remove the TGV DNP database program entry and rerun Setup NewsShareServer. Before or after creating the empty database, you need to purge or manually reconcile the media files.

Template for local (non-shared) database

newsInstallDb -local [-noxform]

If the -noxform switch is not present and the installer finds certain markers that indicate that NewsEdit 4.0 had previously been used on the machine, the program will attempt to convert the 4.0 database to 4.1+ form for local use. If such a conversion happens, media-database skew will render the data nearly useless unless the machine has just been converted from 4.0. The noxform switch **should be used** except for upgrades.

Example

```
C:\Program Files\Grass Valley\Aurora\DB Maintenance>
newsInstallDb -local -noxform

Skipping MSDE installation. Ver. 8.00.194 already
installed.

Installing skeletal news DB on local MSDE server.

This may take a moment...success.

Database installation complete.

Press any key to exit . . .

C:\Program Files\Grass Valley\Aurora\DB Maintenance>
```

newsShrinkDb

Since the database automatically shrinks its transaction log, this operation would be necessary only under unusual circumstances.

Template

newsShrinkDb

Example

```
C:\Program Files\Grass Valley\Aurora\DB Maintenance>
newsShrinkDb

Shrinking News 4.1+ database on this machine . . .

Contents of log file vNewsShrinkDb.log:

---------------

Tue 11/26/2002 4:58p
```

```
Administrator

Cannot shrink file '2' in database 'news' to 12800 pages as
it only contains 256 pages.

DBCC execution completed. If DBCC printed error messages,
contact your system administrator.

---------------

Press any key to exit . . .

C:\Program Files\Grass Valley\Aurora\DB Maintenance>
```

newsInitAutoBack

WARNING: This utility should be used only by experts or as instructed by Grass Valley personnel, due to required considerations of system load, system drive space, network load, and necessary familiarity with the Windows at command and Task Scheduler.

This command schedules a system event which will automatically back up the News database every Monday at 3 am. The event in turn dispatches the vbrAutoBack batch file, which affects these files in the \Program Files\Grass Valley\Aurora\DB Maintenance\ directory:

newsAutoBack.dat	Most recent backup
newsAutoBack.old.dat	Previous backup
vNewsBackUpDb.log	Most recent backup log
vNewsBackUpDb.old.log	Previous backup log

As each successive auto-backup occurs, the previous backup is shifted onto the old images. After you have run newsInitAutoBack, use the at command or (on Windows 2000) the Task Scheduler to reschedule the event to suit your facility. Alternatively, without running newsInitAutoBack at all, you can directly schedule an event to dispatch vbrAutoBack.

Before you use this utility, consider these cautions:

* The DNP and DSM systems are highly tuned for load. The backups must occur only at times when the systems are quiescent. Disregarding this caveat may cause erratic performance or system-wide failure.

* The backup files, particularly on a DSM, can become quite large and thus deleteriously affect system performance. If your databases are large, you should plan to move the backup files off the system as part of the backup process.

* The DNP systems require very high Ethernet performance, particularly for shared storage. If your backup strategy involves network transfers of the backups, these systems must not be playing or recording any clips. s

* The newsInitAutoBack command does not check for overlapping backup events. Be sure to run it only once and inspect its task listing for collisions.

Template

newsInitAutoBack

Example

```
C:\Program Files\Grass Valley\Aurora\DB Maintenance>
newsInitAutoBack

Added a new job with job ID = 1

SCHEDULED TASKS:

Status ID  Day  Time  Command Line

---------------------

1 Each M  3:00 AM  "C:\Program Files\Vibrint 3.0\

DB Maintenance\vbrAutoBack.bat"

C:\Program Files\Grass Valley\Aurora\DB Maintenance>
```

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