grass valley

AURORA PLAYOUT
PLAYBACK CONTROL SYSTEM

User Guide

Software Version 7.0

www.grassvalley.com

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Including its implementation, meets the requirements of the standard:

ISO 9001:2008

Scope:
The design, manufacture and support of video and audio hardware and software products and related systems.

This Certificate is valid until: June 14, 2012
This Certificate is valid as of: June 14, 2009
Certified for the first time: June 14, 2000

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QuickTime

Revision Status

Rev Date	Description
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January 18, 2007	Release 071-8516-01 for Software Version 6.0b
May 23, 2007	Release 071-8516-02 for Software Version 6.1
September 19, 2007	Release 071-8516-03 for Software Version 6.3
November 19, 2008	Release 071-8516-04 for Software Version 6.5
April 14, 2010	Release 071-8516-05 for Software Version 7.0

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Grass Valley Product Support

To get technical assistance, check on the status of a question, or to report a new issues, 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.

World Wide Web: http://www.grassvalley.com/support/

Technical Support E-mail Address: gvgtechsupport@grassvalley.com

Telephone Support

Use the following information to contact Product Support by phone.

International Support Centers

Our international support centers are available 24 hours a day, 7 days a week.

Support Center	Toll free	In country
France	+800 80 80 20 20	+33 1 48 25 20 20
United States	+1 800 547 8949	+1 530 478 4148

Authorized Local Support Representative

A local support representative may be available in your country. To locate a support center during normal local business hours, refer to the following list. This list is regularly updated on the website for Grass Valley Product Support

(http://www.grassvalley.com/support/contact/phone/)

After–hours local phone support is also available for warranty and contract customers.

Region	County	Telephone
Asia	China	+86 10 5883 7575
	Hong Kong, Taiwan, Korea, Macau	+852 2531 3058
	Japan	+81 3 6848 5561
	Southeast Asia - Malaysia	+603 7492 3303
	Southeast Asia - Singapore	+65 6379 1313

Region	County	Telephone
	India	+91 22 676 10300
Pacific	Australia	1 300 721 495
	New Zealand	0800 846 676
	For callers outside Australia or New Zealand	+61 3 8540 3650
Central America, South America	All	+55 11 5509 3440
North America	North America, Mexico, Caribbean	+1 800 547 8949; +1 530 478 4148
Europe	UK, Ireland, Israel	+44 118 923 0499
	Benelux – Netherlands	+31 (0) 35 62 38 421
	Benelux – Belgium	+32 (0) 2 334 90 30
	France	+800 80 80 20 20; +33 1 48 25 20 20
	Germany, Austria, Eastern Europe	+49 6150 104 444
	Belarus, Russia, Tadzhikistan, Ukraine, Uzbekistan	+7 095 258 09 20; +33 (0) 2 334 90 30
	Nordics (Norway, Sweden, Finland, Denmark, Iceland)	+45 40 47 22 37; +32 2 333 00 02
	Southern Europe – Italy	Rome: +39 06 87 20 35 28 ; +39 06 8720 35 42. Milan: +39 02 48 41 46 58
	Southern Europe – Spain	+34 91 512 03 50
	Switzerland	+41 56 299 36 32
Middle East, Near East, Africa	Middle East	+971 4 299 64 40
	Near East and Africa	+800 80 80 20 20; +33 1 48 25 20 20

Chapter **1**

Introducing Aurora Playout

This section contains the following topics:

- *About Aurora Playout*
- *Terms You Should Know*
- *Overview of Aurora Playout*
- *Using Aurora Playout*
- *Overview of the Assignment List Plug-in*
- *Overview of the Assignment List Manager*
- *Overview of the Housekeeper*
- *Overview of the Simple Database (SDB) Server*
- *Overview of the XMOS Server*

About Aurora Playout

Aurora Playout is a playback control system that controls media servers for live playback. It includes tools to integrate the program production workflow between a media server, Aurora Edit, MediaFrame and optionally a newsroom computer system.

Aurora Playout is compatible with these systems:

Media Server	K2 Media Server and Media Client
	K2 Summit Production Client
	M-Series iVDR
Editing Application	Aurora Edit
Asset Management Tool	MediaFrame plug-in from Aurora Browse
Newsroom Computer System	Associated Press Electronic News Production System (ENPS)
	Avid Technology iNEWS
	Octopus Newsroom

By using Aurora Playout with a media server for server playout in live programs you can effectively replace four to six tape machines, depending on your media server. Aurora Playout displays each channel simultaneously and you can control playout with a keyboard and mouse, or with GPI buttons.

Aurora Playout consists of six software components:

*   Main Aurora Playout application
*   Assignment List Plug-in
*   Assignment List Manager
*   Housekeeper utility
*   SDB Server
*   XMOS Server

Terms You Should Know

To use Aurora Playout effectively and efficiently, you should become familiar with terms that are frequently used with Aurora products.

Term	Definition
Clip	A piece of media you can edit, containing video, audio, or both. Once a sequence is sent from a Aurora Edit workstation to a media server it becomes a clip again. All clips and subclips merge into one clip.
Logical Asset	Combination of the MediaFrame database information, metadata, physical asset or assets on the server, and proxy assets.

Term	Definition
MediaFrame	A metadata storage and asset management architecture deployed in the Aurora suite. This architecture shares media asset management (MAM) components with other applications and systems such as media servers, Aurora Ingest, Aurora Playout, and Aurora Edit workstations.
Metadata	Data about data; it can include keywords, timecode information, and other terms that help you find a particular asset.
Physical Asset	The raw program material, such as video or audio.
Placeholder	An item (in the Aurora Playout Assignment List Plug-in or the Assignment List Manager) reserved for a clip that doesn't yet exist or is not complete. Clips are linked to a placeholder in Housekeeper, NCS rundowns or via Aurora Ingest.
Proxy	A low-resolution clip that represents high-resolution material.
Script	The textual information for a news story in the newsroom computer system (NCS) rundown. Scripts can also reference electronic media, such as clips from a media server.
Sequence	Edited media, consisting of pointers to different clips and subclips edited using the Aurora Edit editing system.
Story	The story — a collection of clips, sequences, and scripts — is the complete news segment that plays to air.

Overview of Aurora Playout

Aurora Playout is a playout control system that links a nonlinear editing system with an electronic news production system, asset management tool and a media server for a complete digital solution.

Playback operators use the main Aurora Playout application to create new playlists, and to control playlists before and during broadcasts. Aurora Playout application consists of several components such as Clip Browser, Playlist Overview, Rundown List, Channel windows and Playlist to coordinate playback.

Aurora Playout also has graphics workflow through an interface to the Orad graphics playout engine, Maestro. With this addition, editors can place MOS-driven graphic elements on an Aurora Edit timeline and then transfer graphic timing information directly to Aurora Playout. As the story is then played to air, Aurora Playout can frame-accurately trigger the Orad graphics server for direct play-to-air.
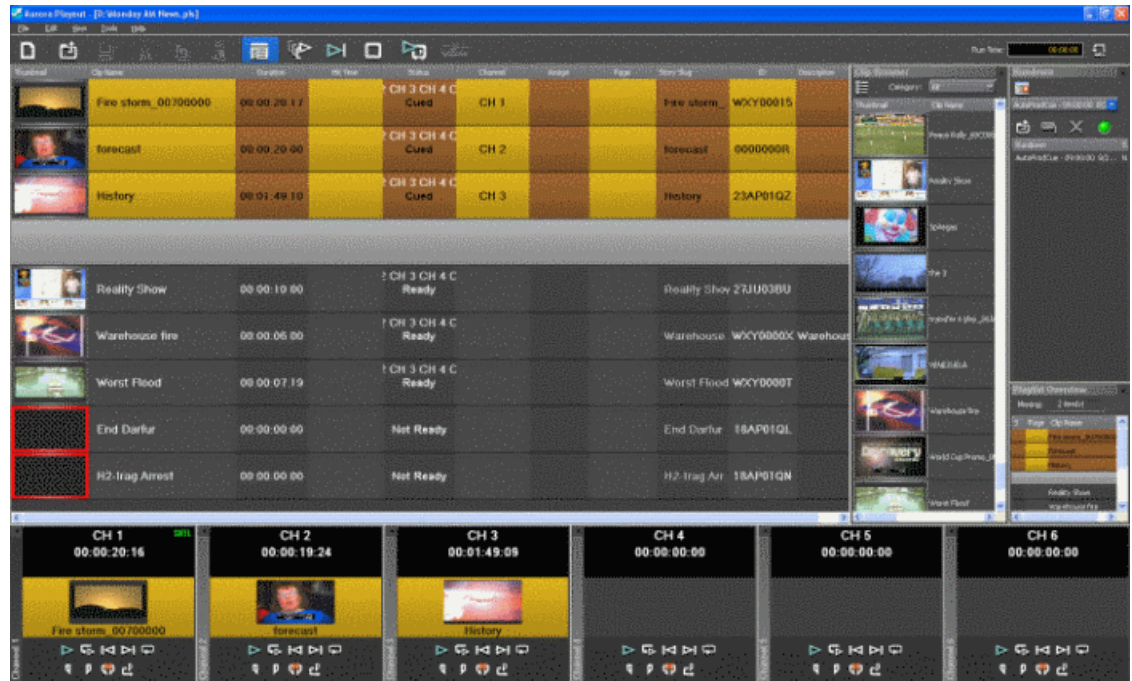
With the integration of MediaFrame asset management tool and Aurora Playout, playback operators can search, add and edit metadata of assets created for broadcasts. In addition, the MediaFrame clip player allows playback operators to preview proxy assets without taking up a channel of the playout server.

MediaFrame plug-ins can easily be used with Aurora Playout by specifying the MediaFrame server within the general setting of SDB Server. With that one-time setting, MediaFrame plug-ins can be accessed within Aurora Playout's Clip Browser, Housekeeper, Assignment List Plug-in and Assignment List Manager.

To view proxy assets via the MediaFrame clip player, playback operators should have access to the Proxy Network Attached Storage (NAS) and have roles and licenses configured. See the MediaFrame documentation for more details on client's prerequisites and configuration instructions.

Using Aurora Playout

Aurora Playout includes tools to integrate the program production workflow between a media server, Aurora Edit, MediaFrame and optionally a newsroom computer system.

With Aurora Playout, you can control live playback for your broadcast. You can use Aurora Playout in two ways:

• Create playlists by linking to a newsroom computer system (NCS)
• Create playlists manually in Aurora Playout

Linking to a Newsroom Computer System (NCS)

The most efficient way to use Aurora Playout is with a MOS-compatible newsroom computer system.

The producer uses the newsroom computer system to create rundowns for news shows, and links clips created in Aurora Edit to rundown scripts. After the clips are complete, control room personnel use Aurora Playout to play out the clips to air.
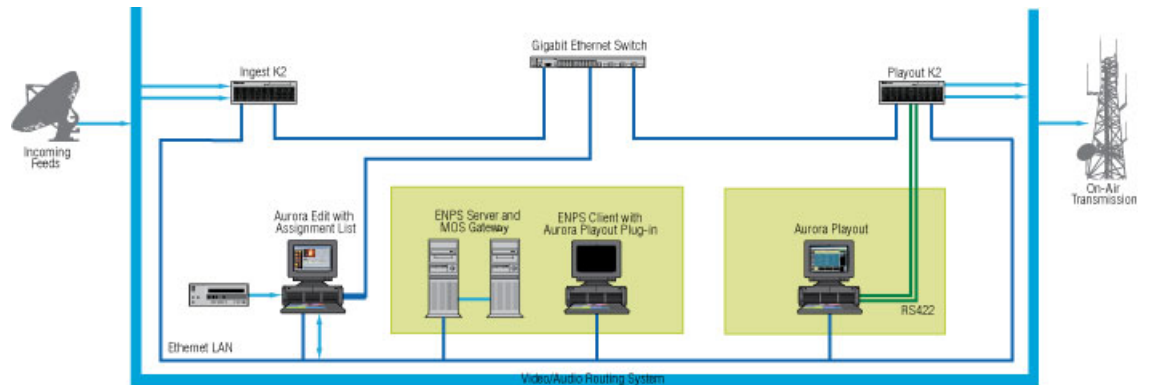
A typical newsroom workflow using a newsroom computer system (NCS) is:

1. The news producer creates a rundown using NCS.
2. The news producer uses the Aurora Playout Assignment List Plug-in to:

    • Create placeholders for scripts that require clips

    • Assign placeholders to editors

    • Link placeholders to scripts in the rundown

3. The news producer assigns playback channels within the NCS rundown.
4. The news editor creates sequences for assignments using Aurora Edit.
5. The news editor uses the Aurora Playout Assignment List Manager to:

    • Receive assignments from the producer

    • Create additional clip placeholders

    • Reassign placeholders to other editors

6. Control room personnel use the main Aurora Playout application to:

    • Open the producer's rundown playlist

    • Assign clips to specific channels for playback

    • Rearrange, insert, or delete clips prior to broadcast if necessary

    • Play back clips during the news broadcast

Creating playlists manually

When a MOS-compatible NCS is not available, you can manually create rundowns and playlists.

After creating playlists, using placeholders to link to clips created in Aurora Edit, you can cue and play the clips for broadcast.
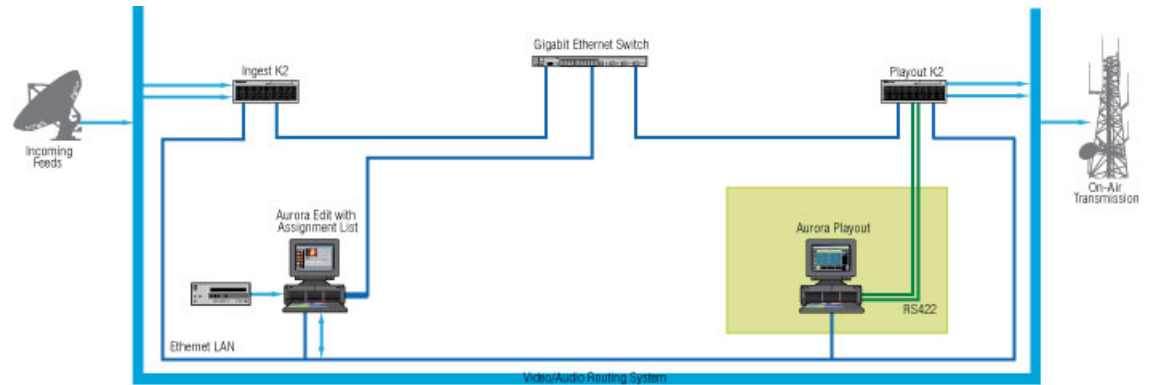
A typical newsroom workflow using Aurora Playout to create playlists is:

1. The news producer creates a rundown.
2. The news editor creates sequences for assignments using Aurora Edit.
3. The news producer uses the Aurora Playout Assignment List Manager to:

   • Create placeholders for clips

   • Assign placeholders to editors

4. The news editor uses the Aurora Playout Assignment List Manager to:

   • Create placeholders for clips

   • Reassign placeholders to other editors

5. Control room personnel use the main Aurora Playout application to:

   • Create a new playlist and rundown using the scripts from the producer and the clip database

   • Assign clips to specific channels for playback

   • Rearrange, insert, or delete clips prior to broadcast if necessary

   • Play back clips during the news broadcast

Overview of the Assignment List Plug-in

Producers use the Aurora Playout Assignment List Plug-in to create placeholders for clips and to coordinate electronic news stories with rundown scripts.

The Assignment List Plug-in integrates with the ENPS, iNEWS, and Octopus newsroom computer systems to coordinate clips with news stories. In addition, Assignment List Plug-in integrates with MediaFrame for asset management and enhanced search capabilities.
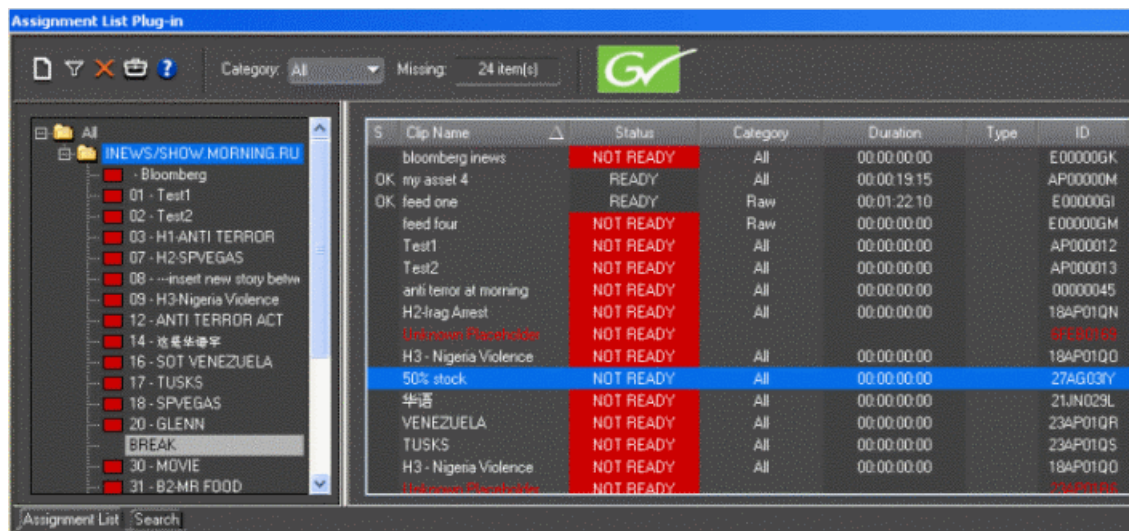
Overview of the Assignment List Manager

The Assignment List Manager comes in two forms: standalone and embedded into the Aurora Edit application.

Producers (or other station personnel) use the standalone Assignment List Manager to determine how many clips are missing for a given news show. Editors use the embedded Assignment List Manager to receive assignments from the producer. Both forms of the Assignment List Manager are used to create additional placeholders for clips and to reassign placeholders to other categories.

The standalone Assignment List Manager runs on any computer on the network—an icon in the task bar flashes red when items in the selected category or rundown are missing.
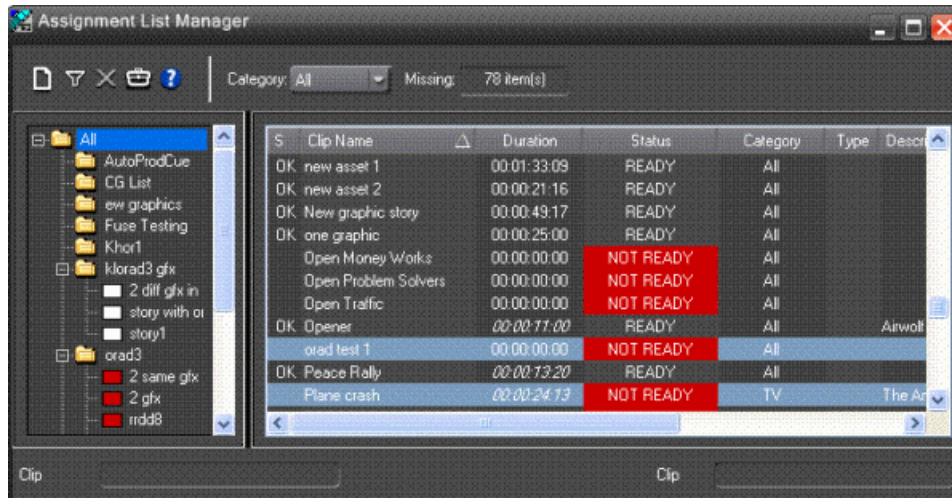
The embedded Assignment List Manager runs on the Aurora Edit workstation and integrates with Aurora Edit. The Aurora Edit toolbar displays part of the Assignment List so editors can see at a glance how many stories need video.
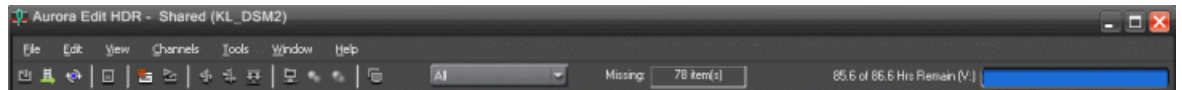
You can then click the box of Missing items to launch the Assignment List. Opening the Assignment List provides more details on specific stories.
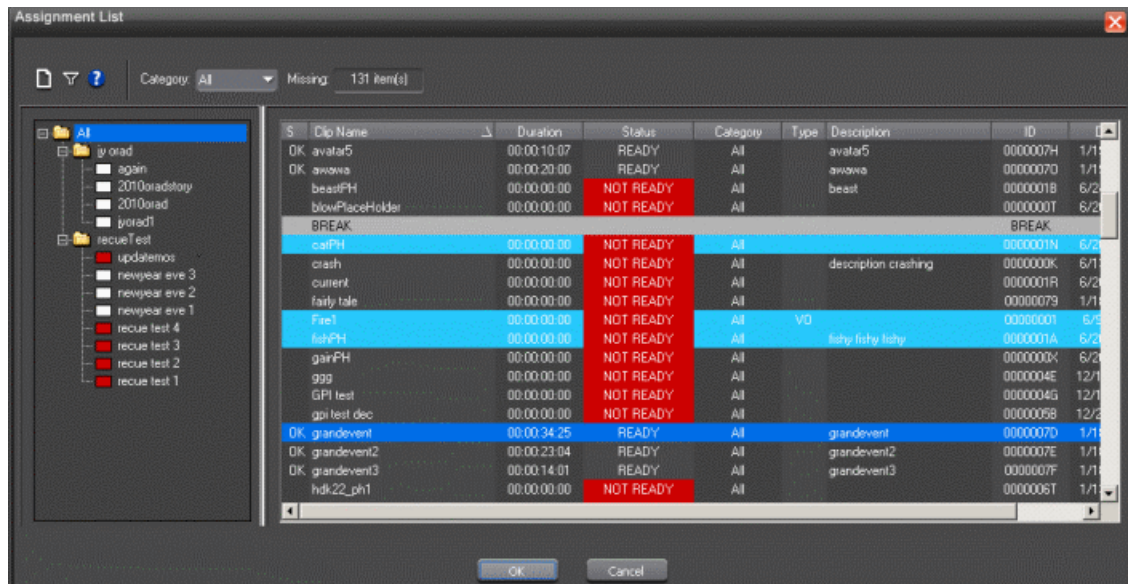
Overview of the Housekeeper

Playback operators use Housekeeper to remove files from the clip database, import files from media servers, and to archive clips.

Housekeeper typically runs on the computer with the Main Aurora Playout application, though it can be installed on multiple computers if necessary.

Due to differences in media server channeless connection limit, not all computers within your broadcast operation can run Housekeeper application at the same time. If your media server is K2 version 3.2 and above, you can run up to seven Housekeeper applications simultaneously. While for M-Series, Profile and K2 version 3.1 and lower; only three Housekeeper applications can be run at the same time.
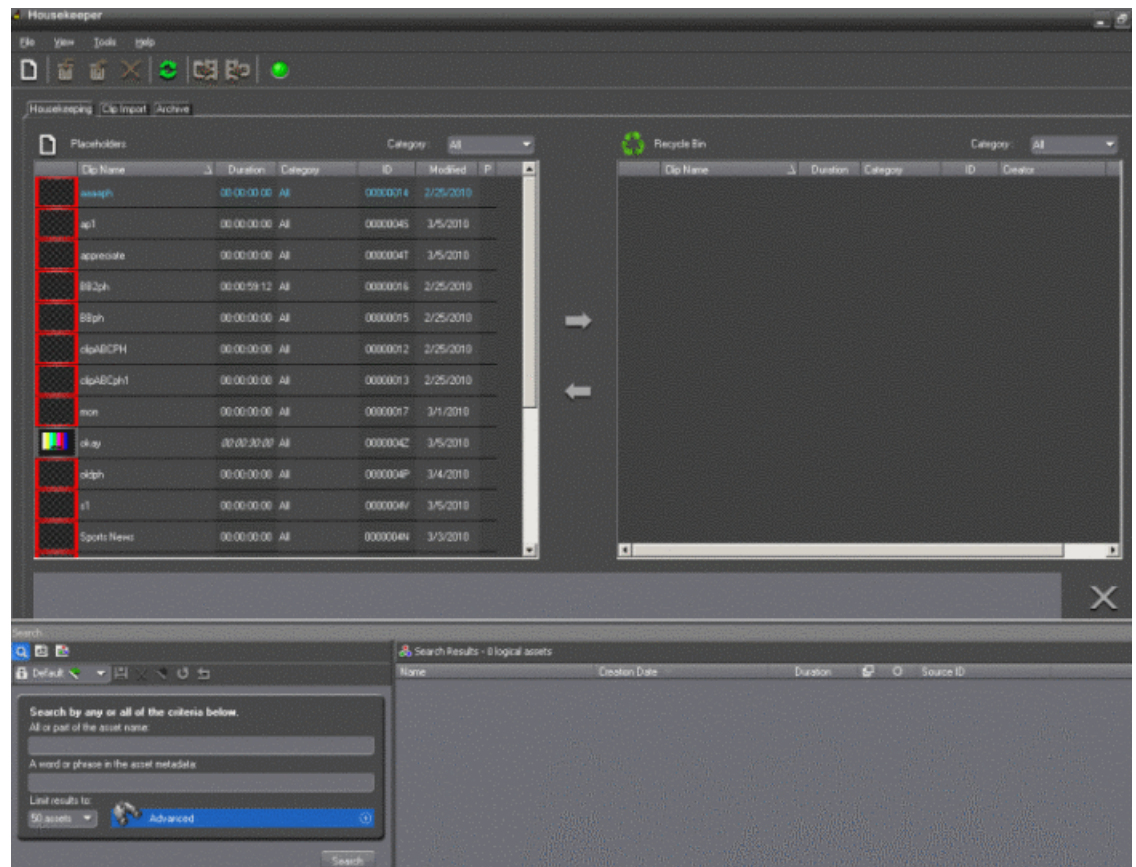
Overview of the Simple Database (SDB) Server

The SDB Server runs in the background to keep clip status current.

When the status of a clip changes, the SDB Server updates available status and clip duration in the Aurora Playout database, which in turn updates the Aurora Playout application. In addition, when a clip sent from Aurora Edit is associated with a Aurora Playout placeholder, the SDB Server updates the number of missing items in the Assignment List Manager and Assignment List Plug-in.

The SDB Server runs on the same computer as the XMOS Server, and optionally on a second system as a hot standby backup database.

Overview of the XMOS Server

The XMOS Server displays the communication between the Newsroom Computer System and Aurora Playout.

It runs on the same computer as the primary SDB Server.
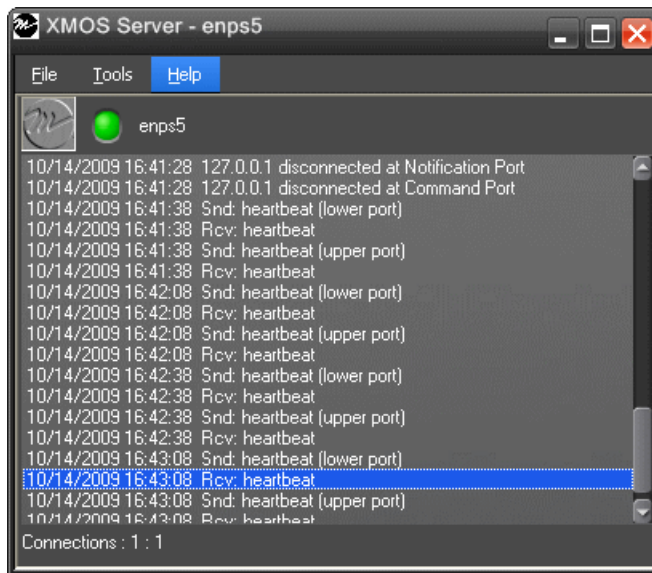
Chapter **2**

Preparing for installation

This section contains the following topics:

- *About Aurora Playout and SiteConfig*
- *About SiteConfig*
- *Aurora Playout installation checklists*

About Aurora Playout and SiteConfig

Grass Valley supplies a CD containing Aurora Playout software and documentation.

For initial install of Aurora Playout within your operation, SiteConfig is the recommended tool for network configuration and software deployment. For upgrading Aurora Playout from a previous version, you can either upgrade using SiteConfig or upgrade manually using the Aurora Playout CD. Refer to *Aurora Playout Release Notes* for detailed instructions on upgrading Aurora Playout.

The Aurora Playout Server can be supplied with all the necessary hardware and software installed. The software for other Aurora Playout components can be installed on any PC which meets the system requirement. After installing Aurora Playout, the software license number needs to be obtained. Refer to *Aurora Playout Release Notes* for instructions on obtaining the software license number.

About SiteConfig

ProductFrame is an integrated platform of tools and product distribution processes for system installation and configuration. SiteConfig is a ProductFrame application and it is the recommended tool for network configuration and software deployment.

You can use SiteConfig as a stand-alone tool for planning and system design, even before you have any devices installed or cabled. You can define networks, IP addresses, hostnames, interfaces, and other network parameters. You can add devices, group devices, and modify device roles in the system.

As you install and commission systems, SiteConfig runs on the control point PC. It discovers devices, configures their network settings, and manages host files. SiteConfig also manages software installations and upgrades and provides a unified software package with verified compatible versions for deployment across multi-product systems.

You should use SiteConfig for network configuration and software deployment at installation and throughout the life of the system in your facility. This enforces consistent policy and allows SiteConfig to keep a record of changes, which makes the system easier to maintain and aids in troubleshooting should a problem arise.

SiteConfig displays information from a system description file, which is an XML file.

SiteConfig operates in different modes that correspond to a system's life-cycle phases: network configuration, software deployment, and software configuration. You can expand nodes and select elements in the tree view and the list view to view and modify networks, systems, individual devices, software deployment, and configuration settings.

Aurora Playout installation checklists

Use the following sequence of checklists to guide the overall task flow of installing and commissioning an Aurora Playout system using SiteConfig.

Pre-installation planning checklist

	Task	Comment
☐	Procure the Aurora Playout Software	Aurora Playout installation files can be supplied via software CD, GrassValley website, FTP site or other distribution mechanisms
☐	Check hardware specification requirements for Aurora Playout devices	The minimum and recommended system specification requirements are listed in *Aurora Playout Release Notes*
☐	Install SiteConfig on a control point PC within your network operation	—
☐	Check whether Microsoft .NET version 2.0 is already installed on Aurora Playout devices	Mircosoft .NET version 2.0 is provided within ConnectivityKit folder at your SiteConfig install location if you need to install the application
☐	Check whether ProductFrame Discovery Agent service is already installed on Aurora Playout devices	ProductFrame Discovery Agent is provided within DiscoveryAgent Setup folder at your SiteConfig install location if you need to install the service
☐	Get Aurora Playout software installation (*.cab) file	Make the (*.cab) file accessible to the SiteConfig control point PC
☐	Next: Hardware installation checklist	

Hardware installation checklist

Use items in this checklist as appropriate for the optional equipment you are installing for your Aurora Playout.

	Task	Comment
☐	Connect GPI inputs and outputs depending on your device type	GPI inputs and outputs can be connected through PCI board or ethernet
☐	Connect the RDU 1510 Under Monitor Display	
☐	Install X-keys Jog/Shuttle Controller	
☐	Next: Network setup and installation checklist	

Network setup and implementation checklist

	Task	Comment
☐	Create a system description	If you already have a SiteConfig system description managing other devices such as K2 SAN in your facility, you can use that system description rather than creating a new one.
☐	Add a group for your Aurora Playout devices to the system description	If you have not already added the corporate LAN to the system description and you have Playout devices that connect to that network, use this procedure to add the corporate LAN to the SiteConfig system description.
☐	Add a placeholder device to the system description for each of your actual Aurora Playout devices	—
☐	Configure the names of the placeholder devices	—
☐	Configure the network interfaces of the placeholder devices	Specify IP address ranges and other network details
☐	Discover your Aurora Playout devices	—
☐	Assign each discovered device to its placeholder device	—
☐	For each discovered and assigned device, edit each network interface. Specify network settings and apply them to the device.	If a device connects to multiple networks, set the control network interface IP address first. Also set the hostname.
☐	If not already set correctly, set the hostname of discovered devices	Make sure the device name is correct, then make the hostname the same as the device name.
☐	Ping each Aurora Playout device to test network communication	—
☐	Generate host table information and distribute to hosts files on each device and on the control point PC	Make sure you have completed network configuration of all network interfaces across all devices to ensure complete and valid host table information. You can use SiteConfig to copy hosts files to devices, or you can manage hosts files yourself.
☐	Next: Software update checklist	

Software update checklist

	Task	Comment
☐	Add/remove software roles on Aurora Playout devices	Make sure software roles match the software that should be installed on each device, according to your system design.
☐	Create/configure a deployment group	If you also have Ingest and Edit devices, create a single deployment group to contain all ingest, edit and playout devices.
☐	Add Aurora Playout devices to the deployment group	—
☐	Place software on control point PC	Procure the correct version of software installation files and prerequisite files.
☐	Check software on devices	Refer to *Aurora Playout Release Notes* for upgrading instructions.
☐	Add software to deployment group	
☐	Set deployment options	
☐	Upgrade/install software to devices from control point PC	

Chapter *3*

Installing Aurora Playout Hardware

This section contains the following topics:

- *Hardware installation checklist*
- *Installing Aurora Playout Hardware*
- *Cabling the Aurora Playout computer*
- *Connecting the RDU 1510 Under Monitor Display*
- *Installing the X-keys Jog/Shuttle Controller (optional)*

Hardware installation checklist

Use items in this checklist as appropriate for the optional equipment you are installing for your Aurora Playout.

	Task	Comment
☐	Connect GPI inputs and outputs depending on your device type	GPI inputs and outputs can be connected through PCI board or ethernet
☐	Connect the RDU 1510 Under Monitor Display	
☐	Install X-keys Jog/Shuttle Controller	
☐	Next: Network setup and installation checklist	

Installing Aurora Playout Hardware

The Aurora Playout system which runs on a standard PC, offers coordinated news playback from the K2 Media Server, K2 Summit Production Client and the M-Series intelligent video digital recorder (iVDR). The Aurora Playout Server can be supplied with all the necessary hardware and software installed. Other Aurora Playout components can be installed on any PC which meets the system requirement.

Cabling the Aurora Playout computer

Aurora Playout is typically installed on a computer with RS-422 boards and GPI boards. Proper cabling is needed for flawless use of the application.

The following illustration provides an example of a typical computer. Your particular computer might be different.
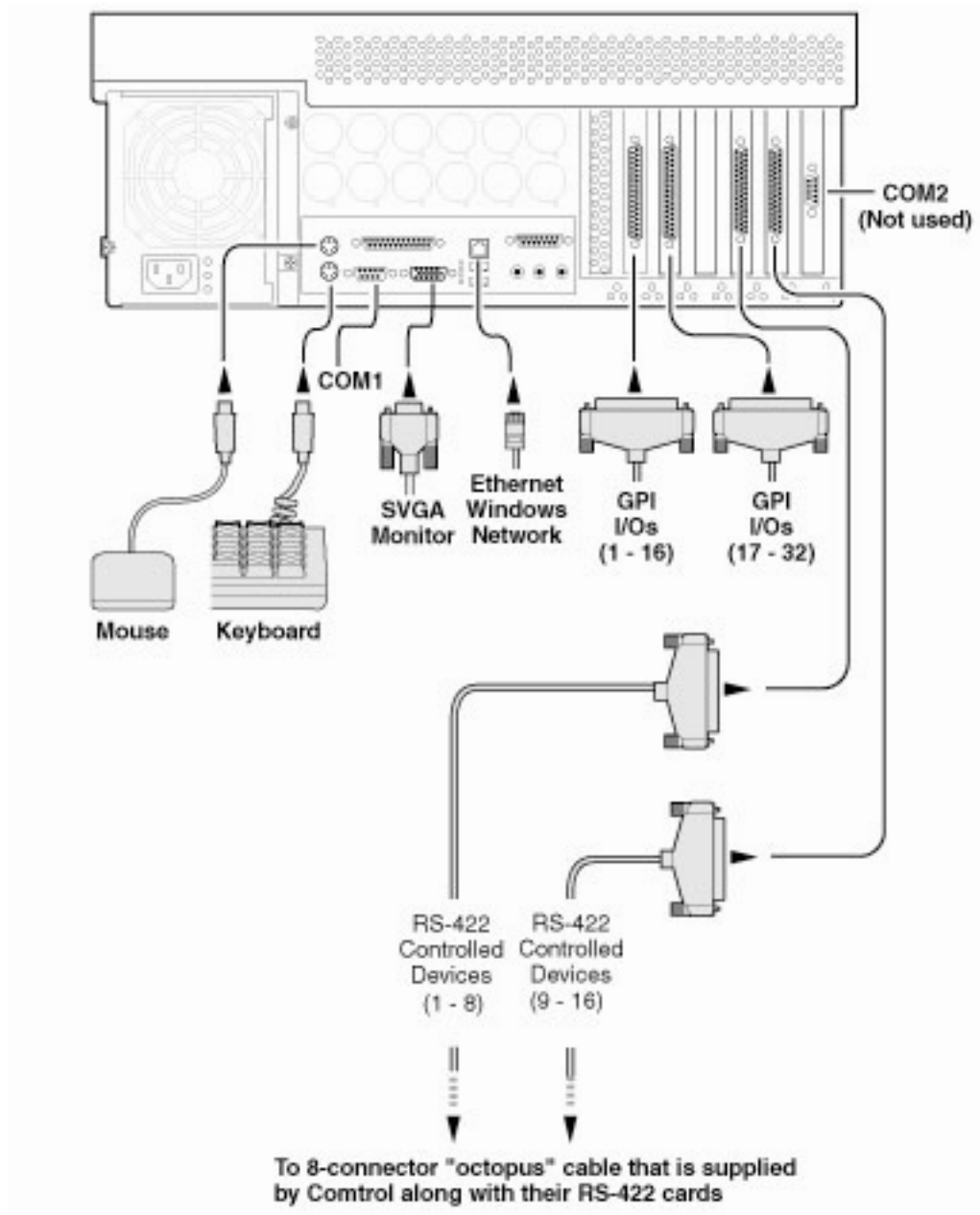
Connect the GPI inputs and outputs using the separate cables and connection blocks as instructed in the Sealevel manuals included with your system.

Connecting the RDU 1510 Under Monitor Display

A Remote Display Unit (RDU) can be controlled via Aurora Playout.

Use a cable that has a DB9 serial connector on one end and an RJ11 connection on the other. The DB9 end connects to the COM1 serial port on the back of the Aurora

Playout, and the RJ11 end connects to the port labeled "Control" on the back of the RDU-1510. This is an RS-422/RS-232 serial communication port.

The RJ11 connector's pinout is described in the table below. Pin 1 is at the bottom of the connector. Aurora Playout can be connected to either pins 3 and 4 for RS-422 or pin 4 for RS-232. When using RS-232, pin 3 must be connected to ground. The remote display unit does not transmit data to this serial port connector.

Pin	Function
1	No connection
2	Ground
3	RS-422 non-inverted data or grounded for RS-232
4	RS-422 inverted data or RS-232 data
5	No connection
6	No connection

Installing the X-keys Jog/Shuttle Controller (optional)

Once you have installed Aurora Playout and the other components, you can install the optional X-keys Jog/Shuttle controller.

Aurora Playout has been designed to work with the X-keys Jog/Shuttle controller (model XPS-08-USB).

1. Plug the X-keys Jog/Shuttle controller into a USB connector on the Aurora Playout machine.

2. On the Aurora Playout machine, insert the X-keys Macro Works installation CD and follow instructions. Do not check the box to put shortcuts on the desktop.

   If AutoRun is not enabled on your CD-ROM drive, find the file "ainstall.exe" on the installation CD and run it.

3. Reboot the computer when prompted.

4. When the installation has completed, the X-keys Macro Maker and Macro Manager windows automatically pop up. Close these windows. Aurora Playout comes with a pre-configured X-keys layout.

5. Start Aurora Playout.

6. In the Aurora Playout Tools menu, select **Options**.

7. Select the **Function Keys** tab.

8. Verify the "Enable X-keys" box is checked and click **OK**.

Now you can use the X-keys Jog/Shuttle controller.

A default layout has been provided with pre-configured X-keys. You can customize the X-keys to suit your needs.

Chapter **4**

Configuring the network

This section contains the following topics:

- *Network setup and implementation checklist*
- *About developing a system description*
- *About the corporate LAN*
- *Configuring the corporate LAN*
- *Adding a group*
- *Adding a device to the system description*
- *About device and host names*
- *Modifying a device name*
- *About IP configuration of network interfaces on devices*
- *Modifying unassigned (unmanaged) network interfaces on Aurora Playout devices*
- *About SiteConfig support on Aurora Playout devices*
- *Discovering devices with SiteConfig*
- *Assigning discovered devices*
- *Modifying Aurora Playout device managed network interfaces*
- *Making the host name the same as the device name*
- *Pinging devices from the control point PC*
- *About hosts files and SiteConfig*
- *Generating host tables for devices with SiteConfig*

Network setup and implementation checklist

	Task	Comment
☐	Create a system description	If you already have a SiteConfig system description managing other devices such as K2 SAN in your facility, you can use that system description rather than creating a new one.
☐	Add a group for your Aurora Playout devices to the system description	If you have not already added the corporate LAN to the system description and you have Playout devices that connect to that network, use this procedure to add the corporate LAN to the SiteConfig system description.
☐	Add a placeholder device to the system description for each of your actual Aurora Playout devices	—
☐	Configure the names of the placeholder devices	—
☐	Configure the network interfaces of the placeholder devices	Specify IP address ranges and other network details
☐	Discover your Aurora Playout devices	—
☐	Assign each discovered device to its placeholder device	—
☐	For each discovered and assigned device, edit each network interface. Specify network settings and apply them to the device.	If a device connects to multiple networks, set the control network interface IP address first. Also set the hostname.
☐	If not already set correctly, set the hostname of discovered devices	Make sure the device name is correct, then make the hostname the same as the device name.
☐	Ping each Aurora Playout device to test network communication	—
☐	Generate host table information and distribute to hosts files on each device and on the control point PC	Make sure you have completed network configuration of all network interfaces across all devices to ensure complete and valid host table information. You can use SiteConfig to copy hosts files to devices, or you can manage hosts files yourself.
☐	Next: Software update checklist	

About developing a system description

The topics in this manual assume that you are modifying an existing system description. Your system description is typically developed using one of the following taskflows:

- For a system in which all devices are new from Grass Valley with one or more K2 SANs, you first create a system description for your K2 SAN or SANs, then add Browse/MediaFrame, Edit, Ingest, and Playout devices as appropriate. Refer to the *K2 SAN installation and Service Manual* for instructions on creating the system description.
- For a system in which all devices are new from Grass Valley with one or more stand-alone K2 systems, you first create a system description and add your stand-alone K2 systems, than add other devices as appropriate. Refer to the *K2 System Guide* for instructions on creating the system description and adding your stand-alone K2 systems.
- For a system with existing devices running earlier software, you must first migrate the system to become a SiteConfig managed system. Refer to *SiteConfig Migration Instructions* for instructions on migrating your devices to be SiteConfig managed devices.

If you are using a different taskflow, use the topics in this manual as appropriate and refer to the *SiteConfig User Manual* or *SiteConfig Help Topics* for additional information.

Your devices must be in a SiteConfig system description in order to be managed by SiteConfig. When you already have a system description in place, you should use SiteConfig to modify this system description and add your devices. You can do this in your planning phase, even before you have devices installed or cabled. Your goal is to have the SiteConfig system description accurately represent all aspects of your devices and networks before you begin actually implementing any networking or other configuration tasks for those devices.

About the corporate LAN

Devices such as Aurora Playout Server, SDB Server, Assignment List Manager, Assignment List Plug-in and Housekeeper can be on the corporate LAN, which is considered an unmanaged network in SiteConfig. You can configure your system description to include the corporate LAN for the following purposes:

- If a device, such as the Aurora Playout Server, is on the corporate LAN yet is a SiteConfig managed device, then SiteConfig needs to know the connection for each network interface on the device, including the corporate LAN connection. Otherwise, SiteConfig displays error messages.
- If a device uses a DNS server on the corporate LAN for name resolution, SiteConfig needs to reference that DNS server.

- If a device has software that SiteConfig supports and the device is on the corporate LAN, such as Assignment List Manager or Housekeeper, you can use SiteConfig to deploy software to the device via the corporate LAN.

If the device is on the corporate LAN and is not on a network that is managed by SiteConfig, you cannot configure network settings on the device.

Configuring the corporate LAN

1. In the **Network Configuration | Networks** tree view, select a System node or a Site node.

   The networks under that node are displayed in the list view.

2. Proceed as follows:

   - To add a network under the currently selected node, in the tree view right-click the node and select **Add Network**.

   The Network Settings dialog box opens.

3. Configure the settings for the network as follows:

   - Type – Select Ethernet
   - Usage – Select Control
   - Redundancy – Select None
   - Name – Enter a name to identify the network in the system description
   - Exclude from Host Files – Select the checkbox
   - Unmanaged – Select this option, then select DNS and select the checkbox for IP Address Allocation via DHCP.
   - Base IP Address – Do not configure
   - Number of IP Addresses – Do not configure
   - Subnet Mask – Do not configure
   - DNS Servers – Servers providing DNS for name resolution. These DNS server can be for both managed and unmanaged networks.
   - Default Interface Name Suffix – The suffix added to the end of host names to identify interfaces on this network.

4. Click **OK** to save settings and close.

5. If you added a network, it appears in the **Network Configuration | Networks** tree view at the bottom of the list.

Adding a group

1. In the **Network Configuration | Networks** tree view, right-click a site node and select **Add Group**.

The group appears in the tree view.

2. Right-click the group and select **Rename**.

3. Enter the desired name for the group.

Adding a device to the system description

Prerequisites for this task are as follows:

• The system description contains a group.

1. In the **Network Configuration | Devices** tree view, right-click a group and select **Add Device**.

The Add Device dialog box opens.

2. Configure settings for the device you are adding as follows:

• Family – Select **Aurora**.

• Type – Select **Aurora Playout Platform**.

• Model – Select the appropriate Aurora Playout components.

• Name – This is the device name, as displayed in the SiteConfig device tree view and device list view. This name can be different than the host name (network name). You can accept the default name or enter a name of your choice. Devices in the tree view are sorted alphabetically.

• Amount – You can add multiple devices, as currently defined by your settings in the Add Device dialog box. An enumerator is added to the name to create a unique name for each device added.

- Control network – Select the control network. If this device is connected to the corporate LAN, choose that network from the drop-down.
- Starting Address – Select from the list of available addresses on the selected control network. If adding multiple devices, this is the starting address, with addresses assigned sequentially to each device added.

    NOTE: If this device is connected to the corporate LAN, a starting address is not needed since the address is provided by DHCP.

3. Click **OK** to save settings and close.
4. Repeat these steps for each of your devices.

About device and host names

In SiteConfig, a device can have different names, as follows:

- Device name — This is a name for display in SiteConfig only. It is stored in the SiteConfig system description, but not written to the actual device. It is displayed in the device tree view and in the device list view. It can be a different name than the device's host name.
- Host name — This is the network name of the device. SiteConfig has a default naming convention for host names which you can use or override with your own host names.

In most cases it is recommended that the Device name and Host name be the same. This avoids confusion and aids troubleshooting.

The Device name can serve as a placeholder as a system is planned and implemented. During the install/commission process, when you reconcile a device's current and planned network interface settings, the Host name as configured in the system description can be overwritten by the host name on the actual device. However, the Device name configured in the system description is not affected. Therefore it is recommended that in the early planned stages, you configure the Device name to be the desired name for the device, but do not yet configure the Host name. Then, after you have applied network interface settings, you can change the Host name to be the same as the Device name. This changes the host name on the actual device so that then all names are in sync.

SiteConfig does not allow duplicate device names or host names.

Items in the tree view are automatically sorted alphabetically, so if you change a name the item might sort to a different position.

Modifying a device name

1. In the **Network Configuration | Devices** tree view, right-click a device and select **Rename**.

2. Type in the new name.

   Note that this does not change the hostname on the physical device. If you want the hostname to match the device name, you must also modify the hostname.

About IP configuration of network interfaces on devices

You can perform IP configuration of network interfaces when working with a placeholder device prior to discovery. When you add a device and choose a particular model, the model defines the number, type and usage characteristics of network interfaces to expect on such a device.

You can view and edit each network interface and set up IP configuration selecting an appropriate IP from the network to which each interface connects. The process for editing IP configuration varies, depending on the device's phase.

Placeholder device IP configuration

On a placeholder device, you edit network interfaces using the Unmanaged Network Interfaces dialog box.
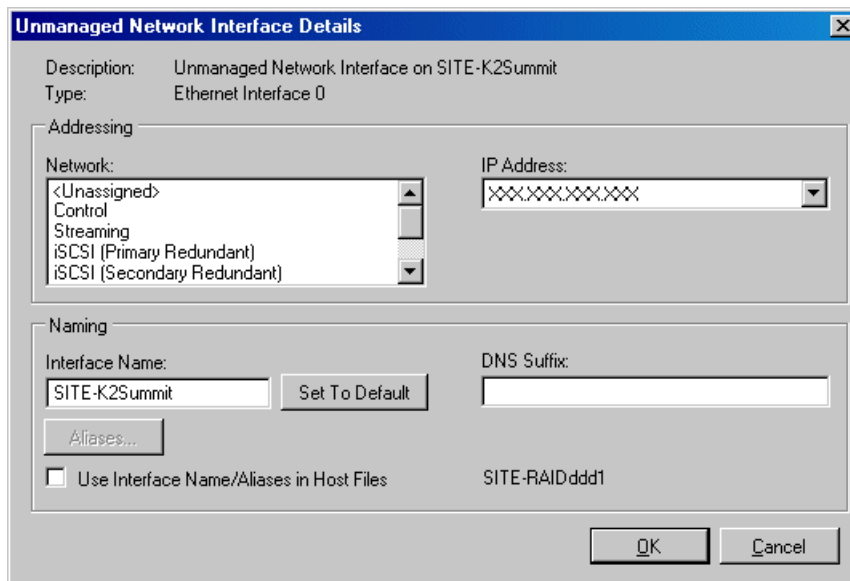
The Unmanaged Network Interfaces dialog box allows you only to save changes to the system description.

Discovered device IP configuration

On a discovered device, you edit network interfaces using the Managed Network Interfaces dialog box.
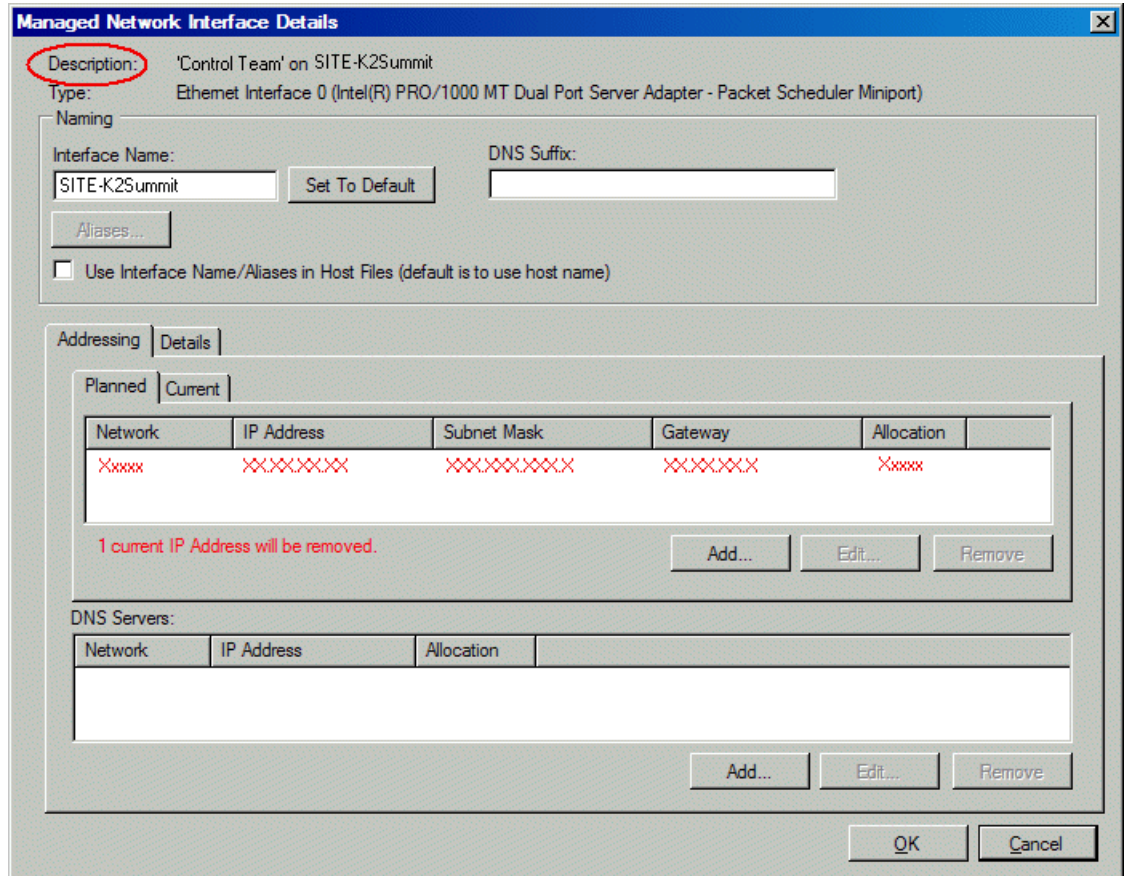
The Managed Network Interfaces dialog box allows you to edit and save changes to the device.

Modifying unassigned (unmanaged) network interfaces on Aurora Playout devices

Prerequisites for this task are as follows:

• The system description has one or more Aurora Playout devices that are placeholder devices.
• The placeholder device has a one or more unmanaged network interfaces.

Use this task to modify unmanaged network interfaces on Aurora Playout devices as follows:

- Aurora Playout Server
- Aurora Playout Client
- Aurora Playout Assignment List Plug-in

1. In the **Network Configuration | Devices** tree view, select Aurora Playout placeholder device.

   The interfaces for that device are displayed in the interfaces list view.

2. In the interfaces list view, right-click an interface and select **Edit**.

   The Unmanaged Network Interface Details dialog box opens.
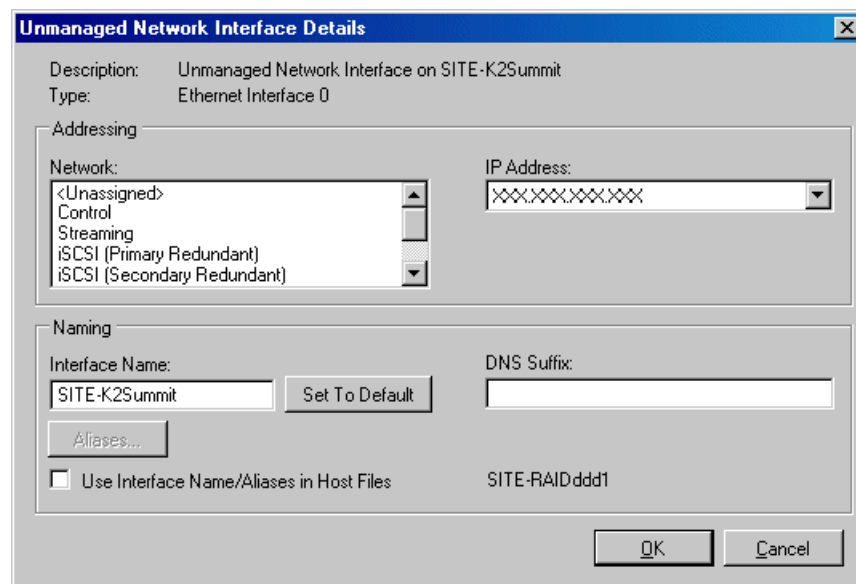
3. Configure the settings for the interface as follows:

Setting...	For control network interface
Network	*Control* is required
IP Address	The IP address for this interface on the network. Required.
Interface Name	The device host name. Required.
Set to Default	Not recommended. Sets the interface name to SiteConfig default convention, based on the root Site name and device-type.
Use Interface Name/Aliases in Host Files	*Unselected* is required. Since not selected, the default behavior occurs, which is to use the device host name in the hosts file.
Aliases	Not allowed

Setting...	For control network interface
DNS Suffix	Allowed, if applicable to the network. The DNS suffix is added to the interface name.

4. Click **OK** to save settings and close.

5. If configuring Aurora Playout device that is also on the corporate LAN, repeat steps to configure an interface for the corporate LAN, with settings as follows:

Setting...	For corporate LAN network interface
Network	If using DHCP or external hosts file, select the unmanaged network that you configured earlier.
IP Address	Select the IP address you plan to assign to the device.
Interface Name	These settings are irrelevant, as SiteConfig does not manage this network.
Set to Default	
Use Interface Name/Aliases in Host Files	
Aliases	
DNS Suffix	For communication on some networks, a suffix, such as *mycorp.com*, must be added to host names.

6. Click **OK** to save settings and close.

About SiteConfig support on Aurora Playout devices

Before SiteConfig can be used to discover or manage a device, the device must meet the following requirements:

• The device must be a Microsoft Windows operating system device.
• The device must have Microsoft .NET version 2.0 installed, as reported in the Windows Add/Remove Programs control panel.
• The ProductFrame Discovery Agent service must be running on the device, as reported in the Windows Services control panel.

For Aurora Playout devices shipped new from Grass Valley with software version 6.5 or higher, these requirements are pre-installed. These requirements are pre-installed on recovery images for these systems as well. Therefore, if you suspect a problem with these requirements, do not attempt to install SiteConfig support requirements. If you must restore SiteConfig support requirements, refer to the SiteConfig Migration Instructions for complete information on SiteConfig support requirements.

Discovering devices with SiteConfig

Prerequisites for this task are as follows:

* The Ethernet switch or switches that the support the control network are configured and operational. If multiple switches, ISLs are connected and trunks configured.
* The control point PC is communicating on the control network.
* There are no routers between the control point PC and the devices to be discovered.
* Devices to be discovered are Windows operating system devices, with SiteConfig support installed.
* Devices are cabled for control network connections.

1. Open SiteConfig on the control point PC.
2. In the toolbar, click the discover devices button. 🔍

   The Discover Devices dialog box opens.
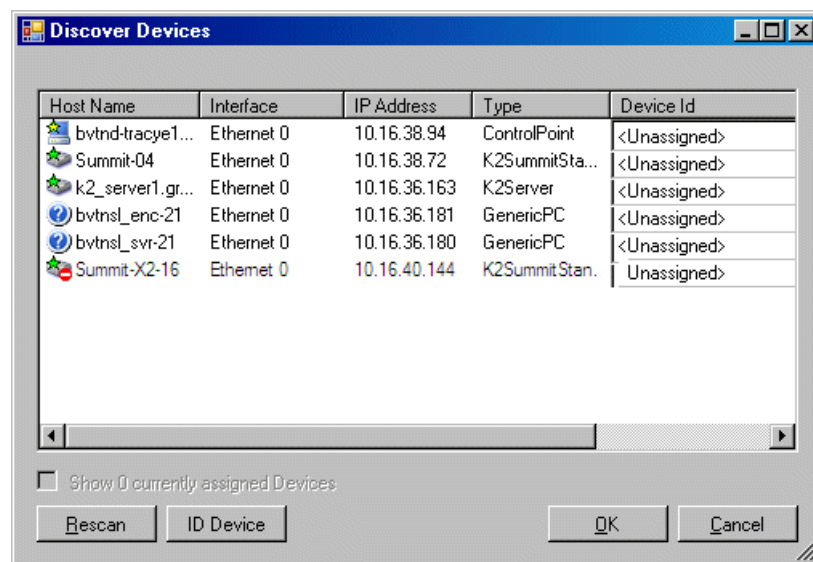
A list of discovered devices is displayed.

3. Click **Rescan** to re-run the discovery mechanism. You can do this if a device that you want to discover has its network connection restored or otherwise becomes available. Additional devices discovered are added to the list.

Assigning discovered devices

Prerequisites for this task are as follows:

* Devices have been discovered by SiteConfig
* Discovered devices are not yet assigned to a device in the system description

- The system description has placeholder devices to which to assign the discovered devices.

1. If the Discovered Devices Dialog box is not already open, click the discover devices button 🔍.

   The Discover Devices dialog box opens.

2. Identify discovered devices.

   - If a single device is discovered in multiple rows, it means the device has multiple network interfaces. Choose the interface that represents the device's currently connected control connection. This is typically Ethernet ... 0.
   - If necessary, select a device in the list and click **ID Device**. This triggers an action on the device, such as flashing an LED or ejecting a CD drive, to identify the device.

3. To also view previously discovered devices that have already been assigned to a device in the system description, select **Show … currently assigned devices**.

   The currently assigned devices are added to the list. Viewing both assigned and unassigned devices in this way can be helpful to verify the match between discovered devices and placeholder devices.

4. In the row for each discovered device, view items on the Device Id drop-down list to determine the match with placeholder devices, as follows:

   - If SiteConfig finds a match between the device-type discovered and the device-type of one or more placeholder devices, it displays those placeholder devices in the list.
   - If SiteConfig does not find a match between the device-type discovered and the device-type of a placeholder device, no placeholder device is displayed in the list.

5. In the row for a discovered device, click the Device Id drop-down list and select the placeholder device that corresponds to the discovered device.

   If there is no corresponding placeholder device currently in the system description, you can select **Add** to create a new placeholder device and then assign the discovered device to it.

6. When discovered devices have been assigned, click **OK** to save settings and close.

7. In the **Network Configuration | Devices** tree view, select each of the devices to which you assigned a discovered device.

Modifying Aurora Playout device managed network interfaces

Prerequisites for this task are as follows:

- The physical device you are configuring has been discovered and is assigned to a device in the SiteConfig system description.
- SiteConfig has communication with the device.
- The device is defined in the system description with an appropriate network interface.

Use this task to modify managed network interfaces on Aurora Playout devices as follows:

- Aurora Playout Server
- Aurora Playout Client
- Aurora Playout Assignment List Plug-in

1. In the Interfaces list view determine the interface to configure, as follows:

   - Identify the interface with which SiteConfig is currently communicating, indicated by the green star overlay icon. This should be the control network interface.

   - Verify that the interface over which SiteConfig is currently communicating is in fact the interface defined for the control network in the system description. If this is not the case, you might have the control network cable connected to the wrong interface port. The control connection should always be the first port on the motherboard, except when you have a loopback connection.

   - Configure the control network interface first before configuring any of the other interfaces.

   - After you have successfully configured the control network interface, return to this step to configure each remaining interface.

2. In the Interfaces list view, check the icon for the interface you are configuring.

   If the icon has a red stop sign overlay, it indicates that current settings and planned settings do not match or that there is some other problem. Hover over the icon to read a tooltip with information about the problem.

3. In the Interfaces list view, right-click the interface you are configuring and select **Edit**.

   The Managed Network Interface Details dialog box opens.
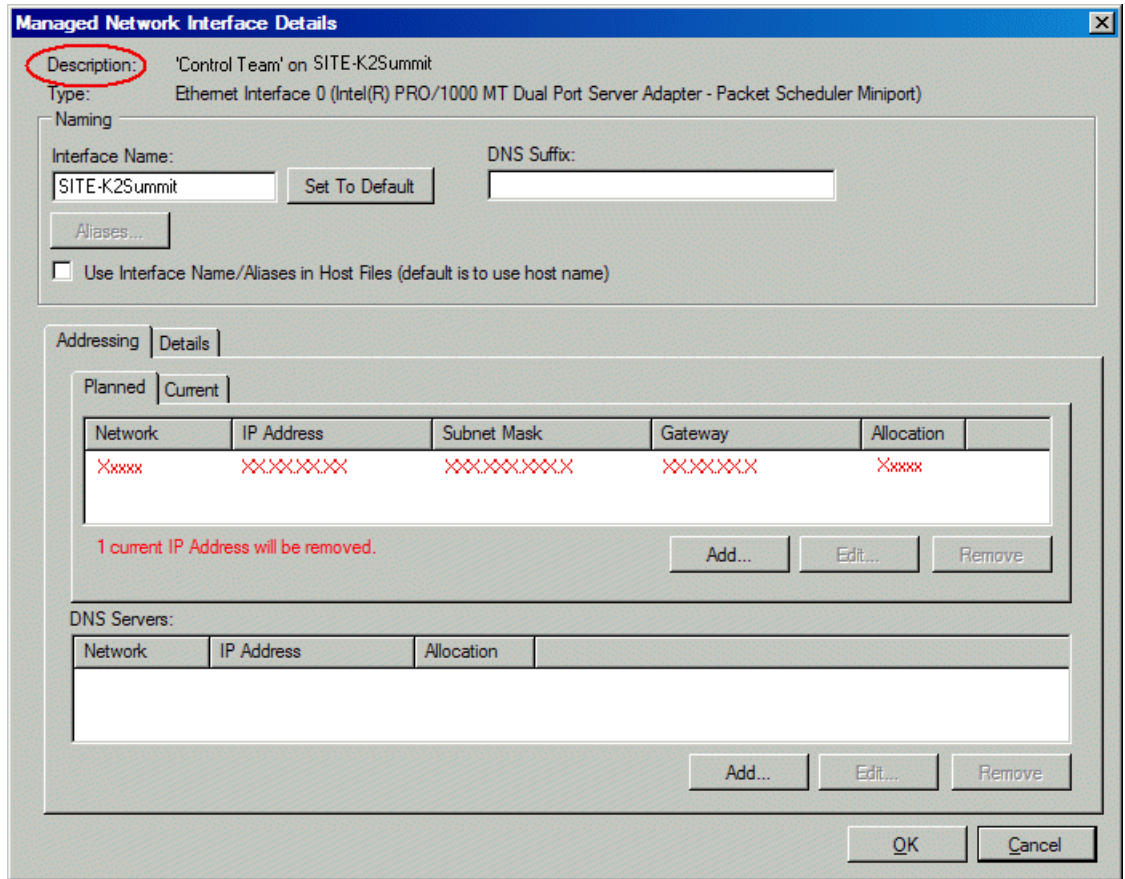
4. Identify the interface on the discovered device that you are configuring.

   • Identify Ethernet LAN adapters by their "Description" name. This is the
     Windows connection name. SiteConfig reads this name from the device and
     displays it at the top of this dialog box. This is the most accurate way to identify
     the network adapter on the discovered device that you are configuring.

5. Configure naming settings as follows:

Setting...	For network interface Network Connection
Interface Name	The device host name. Required.
Set To Default	Not recommended
DNS Suffix	Allowed, if applicable to the network. The DNS suffix is added to the interface name.
Aliases	Not allowed

Setting...	For network interface Network Connection
Use Interface Name/Aliases in Host Files	*Unselected* is required. Since not selected, the default behavior occurs, which is to use the device host name in the hosts file.

Setting...	For network interface Corporate LAN
Interface Name	The device host name. Required.
Set To Default	Not recommended
DNS Suffix	Allowed, if applicable to the network. The DNS suffix is added to the interface name.
Aliases	Not allowed
Use Interface Name/Aliases in Host Files	*Unselected* is recommended. Typically this setting has no effect, since the Corporate LAN does not use host files.

6. Evaluate settings on the Planned tab and change if necessary.

   • Compare settings on the Planned tab with settings on the Current tab.

   • If you want to keep the current settings as reported in the Current tab, click **Remove** to remove the planned settings.

   • Do not specify multiple IP addresses for the same interface. Do not use the Add button.

7. To modify planned settings, do the following:

   a) Select the network settings and click **Edit**.

   The Edit IP Address dialog box opens.
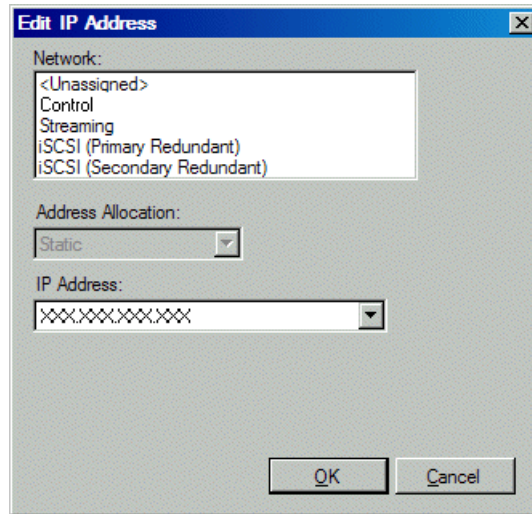
b) Edit IP address settings as follows:

Setting...	For network interface Network Connection
Network	*Control* is required
Address Allocation	*Static* is recommended.
IP Address	The IP address for this interface on the network. Required.

Setting...	For network interface Corporate LAN
Network	*Corporate LAN* is required
Address Allocation	*DHCP* is typical.
IP Address	When DHCP is selected, you cannot select an IP address.

The networks listed in the Edit IP Address dialog box are those currently defined in the system description, with available settings restricted according to the network definition. If you require settings that are not available, you can close dialog boxes and go to the **Network Configuration | Networks** tab to modify network settings, then return to the Edit IP Address dialog box to continue.

8. When you have verified that the planned settings are correct, click **OK**, then **Yes** to apply settings to the device and close.

A Contacting Device message box reports progress.

9. After configuring control network settings, do the following

a) If a message informs you of a possible loss of communication, click **OK**.

This message is normal, since this is the network over which you are currently communicating.

b) In the Device list view, observe the device icon and wait until the icon displays the green star overlay before proceeding.

The icon might not display the green star overlay for several seconds as settings are reconfigured and communication is re-established.

c) In the Interface list view, right-click the interface and select **Ping**.

The Ping Host dialog box opens.

If ping status reports success, the interface is communicating on the control network.

Making the host name the same as the device name

1. Verify that the current device name, as displayed in the SiteConfig tree view, is the same as your desired host name.

2. In the **Network Configuration | Devices | Device** list view, right-click the device and select **Edit**.

The Edit Device dialog box opens.

3. If the host name is currently different than the device name, click **Set to Device Name**.

This changes the host name to be the same as the device name.

4. Click **OK**.

Pinging devices from the control point PC

You can send the ping command to one or more devices in the system description over the network to which the control point PC is connected. Typically this is the control network.

1. In the **Network Configuration | Networks** tree view, select a network, site, or system node.

2. In the Devices list view, select one or more devices. Use Ctrl + Click or Shift + Click to select multiple devices.

3. Right-click the selected device or devices and select **Ping**.

The Ping Devices dialog box opens and lists the selected device or devices.

The Ping Devices dialog box reports the progress and results of the ping command per device.

About hosts files and SiteConfig

SiteConfig uses the network information in the system description to define a hosts file and allows you to view the hosts file. SiteConfig can manage this hosts file on Windows operating system devices that are in the system description and that are part of a SiteConfig managed network.

When you have successfully assigned devices and applied planned network settings to interfaces, it is an indication that host table information, as currently captured in the system description, is valid and that you are ready to have SiteConfig assemble the host table information into a hosts file. Your options for placing this host table information on devices are as follows:

- If you do not want SiteConfig to manage your host table information, you can manage it yourself. This is typically the case if your facility has an existing hosts file that contains host table information for devices that are not in the SiteConfig system description. In this case, you can have SiteConfig generate a single hosts file that contains the host table information for the devices in the system description. You can then copy the desired host table information out of the SiteConfig hosts file and copy it into your facility hosts file. You must then distribute your facility hosts file to devices using your own mechanisms.
- If you want SiteConfig to manage all information in hosts files on devices, you can have SiteConfig copy its hosts file to devices. In so doing, SiteConfig overwrites the existing hosts files on devices. Therefore, this requires that all devices that have name resolution through the hosts file be configured accordingly in the SiteConfig system description.

If you choose to have SiteConfig write hosts files to devices, the process consumes system resource and network bandwidth. Therefore you should wait until you have verified the information for all devices/interfaces in the host file, rather than updating hosts files incrementally as you discover/assign devices.

SiteConfig does not automatically deploy hosts files to managed devices as you add or remove devices. If you add or remove devices from the system description, you must re-deploy the modified hosts file to all devices.

Generating host tables for devices with SiteConfig

Prerequisites for this task are as follows:

- Planned control network settings are applied to control network interfaces and devices are communicating on the control network as defined in the system description.

- Interfaces for networks that require name resolution via the hosts file, such as the FTP/streaming network, have settings applied and are communicating.
- You have viewed host names, as currently defined in the system description, and determined that they are correct.
- The control point PC is added to the system description so that it is included in the host tables generated by SiteConfig.

1. In the **Network Configuration | Networks** tree view, select a network, site, or system node.
2. Click **View Hosts file**.

   A Hosts File Contents window opens that displays the contents of the hosts file as currently defined in the system description.
3. Verify the information in the hosts file.
4. Do one of the following:

   - If you are managing host table information yourself, click **Save As** and save a copy of the hosts file to a location on the control point PC. Then open the copy of the hosts file, copy the desired host table information from it, and paste it into your facility hosts file as desired. Then you can use your own process to distribute the facility hosts file to devices. Remember to distribute to the control point PC so that SiteConfig and other management applications such as K2Config can resolve network host names.
   - If SiteConfig is managing hosts files, do the following:

   NOTE: Writing hosts files to multiple devices consumes system resource and network bandwidth. Therefore it is recommended that you wait and do this after the system is complete and fully implemented, rather than updating hosts files incrementally as you discover/assign devices.

   a) In the **Network Configuration | Devices | Devices** list view, right-click a device to which you intend to write the hosts file and select **View Current Host File**.

      A Host File Contents window opens that displays the contents of the hosts file that is currently on that actual device.
   b) Verify that there is no information that you want to retain in the device's current hosts file that is not also in the hosts file as currently defined in the system description. If you need to save the device's current hosts file, click **Save As** and save to a different location.
   c) In the **Network Configuration | Devices | Devices** list view, right-click a device or use Ctrl + Click to select multiple devices, and select **Update Host File**.

      The current hosts file is overwritten with the hosts file as defined in the system description.

Chapter *5*

Managing Software

This section contains the following topics:

- *Software update checklist*
- *Create record of software installed on devices*
- *Adding a software role to a device*
- *Removing a software role from a device*
- *Configuring deployment groups*
- *Distribute devices into deployment groups*
- *About deploying software*
- *Installing Aurora Playout software manually*

Software update checklist

	Task	Comment
☐	Add/remove software roles on Aurora Playout devices	Make sure software roles match the software that should be installed on each device, according to your system design.
☐	Create/configure a deployment group	If you also have Ingest and Edit devices, create a single deployment group to contain all ingest, edit and playout devices.
☐	Add Aurora Playout devices to the deployment group	—
☐	Place software on control point PC	Procure the correct version of software installation files and prerequisite files.
☐	Check software on devices	Refer to *Aurora Playout Release Notes* for upgrading instructions.
☐	Add software to deployment group	
☐	Set deployment options	
☐	Upgrade/install software to devices from control point PC	

Create record of software installed on devices

If you have not already done so, create a document to keep track of the software that you plan to install on each of your system devices, according to your system design. This is especially helpful for Aurora product devices. The following table is an example of this type of document. Then, as you proceed with subsequent tasks and remove/add software roles to devices in SiteConfig, you can refer to your table and make sure you are assigning software roles correctly.

Software	SVR-1	HD-1, 2, 3	CONF-1	EDIT-1	DSM-1	ING-1	FSM-1	HDK2-1	FTP-1
MF Server	X								
+ K2 MDI	X								
+ News MDI			X						
+ NTFS	X								
+ FlashNET MDI	X								
+ Proxy MDI	X								
+ FTP MDI	X								
Aurora Browse	X								

Software	SVR-1	HD-1, 2, 3	CONF-1	EDIT-1	DSM-1	ING-1	FSM-1	HDK2-1	FTP-1
Proxy Encoder		X							
News Share					X				
Conform			X						
Aurora Suite						X			
+ Edit				X					
+ Edit LD				X					
+ FTP		X							X
+ SmartBins			X						
+ RMI core									
Aurora Ingest						X			
Aurora Playout						X			
K2 - Gen iSCSI		X	X	X	X				X
K2 - GVG MLib	X	X	X	X	X				X
K2 - Server							X		
K2 - Client								X	
Control Point						X			
StorNext		X	X	X	X		X	X	X

Adding a software role to a device

1. In the **Software Deployment | Devices** tree view, right-click the device and select **Add Role**.

   The Add Role dialog box opens.
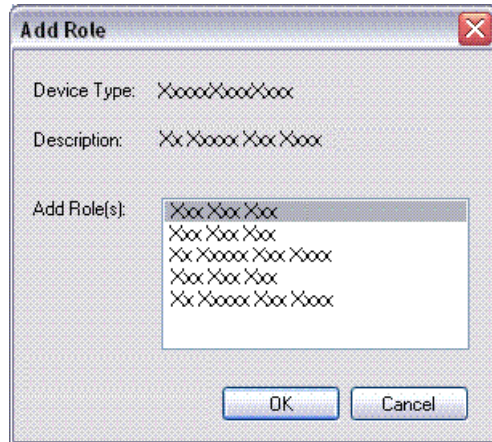
The Add Role dialog box displays only those roles that SiteConfig allows for the selected device type.

2. Select the role or roles that you want to add to the device. Use Ctrl + Click or Shift + Click to add multiple roles.

3. Click **OK** to save settings and close.

The new role or roles appear under the device in the tree view.

Removing a software role from a device

1. In the **Software Deployment | Devices** tree view, expand a device's node to expose the roles currently assigned to the device.

2. Right-click the role you want to remove and select **Remove**.

The role is removed from the device in the tree view.

Configuring deployment groups

Prerequisites for this procedure are as follows:

• The device is assigned in the SiteConfig system description and network connectivity is present.

1. In the **Software Deployment | Deployment Groups** tree view, right-click the top node and select **Add Deployment Group**.

A deployment group appears in the tree view.

2. Right-click the deployment group, select **Rename**, and enter a name for the deployment group.

3. Right-click the deployment group and select **Add Target Device**.

The Add Target Device(s) wizard opens.
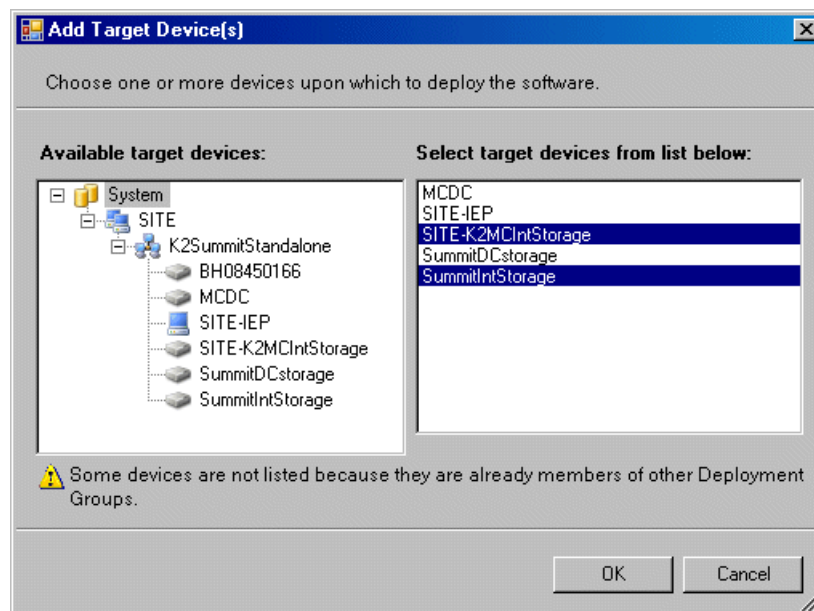
4. In the Available Target Devices tree view, select the node that displays the devices that you are combining as a deployment group.

5. In the right-hand pane, select the devices that you are combining as a deployment group.

   To select multiple devices, you can drag through the devices, use Ctrl + Click, or use Shift + Click.

6. Click **OK**.

The devices appear in the Deployment Groups tree view under the deployment group. Before you perform a software deployment, you must check software on the devices that will be receiving new software. If you have already added packages to the group, on the Deployment Groups tab you will also see deployment tasks generated for every device with roles that match the package contents.

Distribute devices into deployment groups

You can gather devices of different types into a SiteConfig deployment group. This allows you to deploy software to all the devices in the deployment group at the same time, as part of the same deployment session. Based on the roles you have assigned to the devices, SiteConfig deploys the proper software to each device. This increases the efficiency of your software deployment with SiteConfig.

If you have not already done so, configure your deployment groups. The recommended deployment group distribution is as follows. Depending on your system design, your system might not have all the device types listed.

- In a deployment group named "Aurora_Edit_Ingest_Playout", place the following devices:

    - Aurora Edit workstation of any storage options: Shared storage, NAS storage, and stand-alone.
    - Aurora Edit LD computer
    - DSM
    - Conform Server
    - SmartBin Server
    - FTP Server
    - Aurora Ingest Platform
    - IEP
    - Aurora Playout Platform

- In a deployment group named "Aurora_Browse_MediaFrame", place the following devices:

    - MediaFrame server
    - MDI server
    - Aurora Proxy Encoder
    - K2 Basecamp Express

- If you have a K2 Nearline SAN (NAS), in a deployment group named for the SAN system, place the following devices:

    - The Nearline SAN's K2 Media Servers.

About deploying software

You must control the sequence of tasks and device restarts as you install or upgrade software. The exact steps can vary from software version to version. The following sequence of SiteConfig tasks is typical:

1. Check currently installed software.
2. Add software package(s) to deployment group(s).
3. Set deployment options.
4. Deploy (install or upgrade) software.

Your product's release notes have the specific task flow for the version of software you are installing. The release notes are written for upgrading software on existing systems, but if you are installing software for the first time on a new system, the steps

are essentially the same. The primary difference is that when installing software for the first time, the SiteConfig "uninstall" deployment tasks are not displayed.

NOTE: Make sure you follow the documented task flow in the release notes for the version of software you are installing or to which you are upgrading.

## Installing Aurora Playout software manually

If you don't have SiteConfig within your operation, you can install Aurora Playout software using the Aurora Playout installation CD.

Because you must configure some components with the locations of other components, you should plan your overall installation before you begin.

The various Aurora Playout components reside on multiple computers. Using the installation CD, you can choose which component to install on a particular computer.

Component	Machine where you install it...
Aurora Playout application	Aurora Playout computer. *NOTE: It is recommended that Aurora Playout is run at a display resolution of 1280 x 1024.*
Aurora Playout Server Components: XMOS Server / SDB Server	Recommend installing on a separate computer even though they are allowed to be on Aurora Playout computer. *NOTE: When the XMOS Server application is running on a Windows XP system, it is recommended that the "Windows Firewall" feature be turned off, as it can adversely affect the speed of MOS communication with the newsroom computer system.*
Housekeeper	Aurora Playout computer or another PC on the same network.
Assignment List Manager (standalone version)	Non-NCS computers, usually used by Newsroom Producers.
Assignment List Plug-in	All NCS client computers.
Hot Standby Database Server	Optional; install on a PC on the same network as the Aurora Playout computer.

1. Insert the Aurora Playout CD into the CD-ROM drive.
2. Navigate to the CD and double-click **SetupAuroraPlayout.exe**.
3. Click **Next** until you reach the Select Features screen.
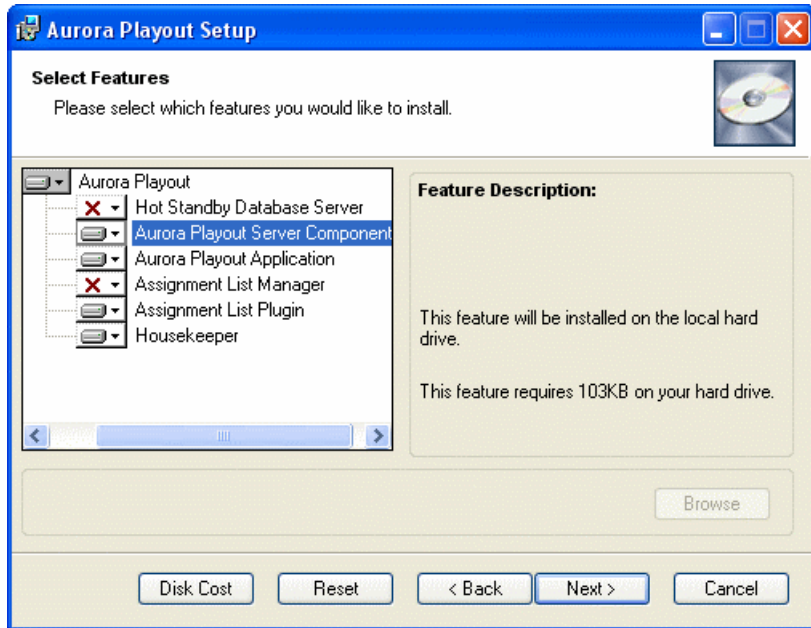
4. At the Select Features screen, select the component(s) that you want to install.

5. Click **Next** to start the installation.

6. Click **Finish** at the Installation Complete screen.

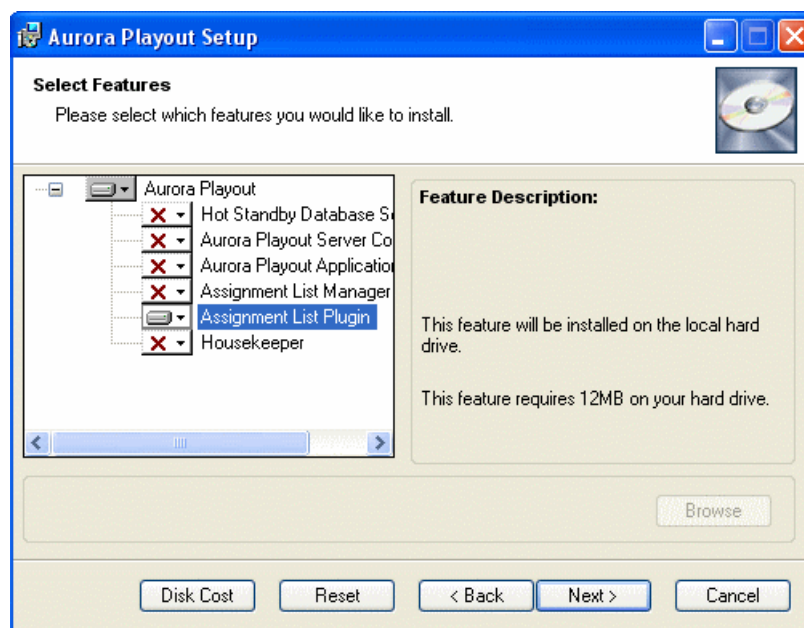## Installing the Assignment List Plug-in

The Assignment List Plug-in should be installed on each NCS computer that needs to access it.

You can install this plug-in on each computer using the installation CD, or you can create a network installation from which you can install the plug-in on multiple computers using the same configuration file.

Installing ALP using the installer

If you are installing the Assignment List Plug-in on a small number of computers, the easiest way to install it is to use the installation CD.

1. Insert the Aurora Playout CD into the CD-ROM drive.

2. Navigate to the CD and double-click **SetupAuroraPlayout.exe**.

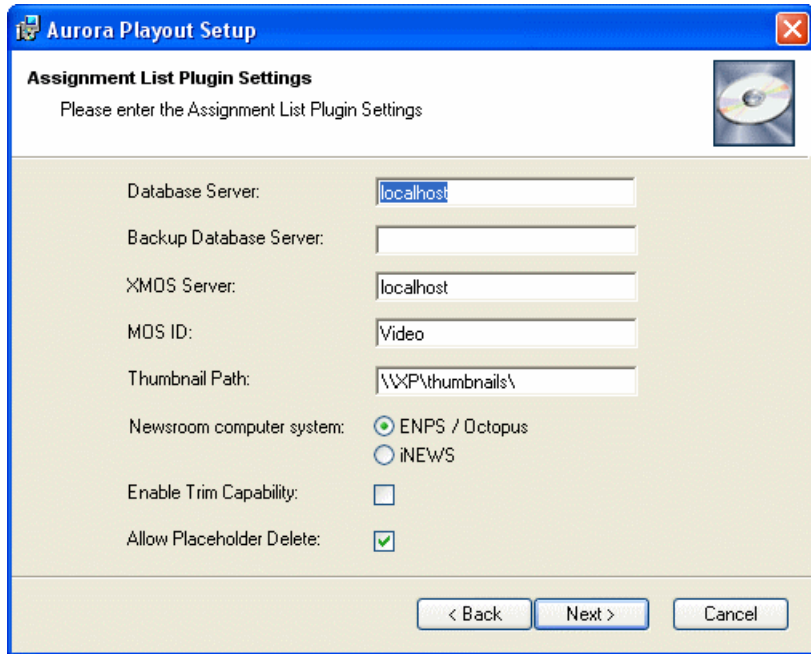3. Click **Next** until you reach the Select Features screen.

4. Select the **Assignment List Plugin** feature and click **Next**.
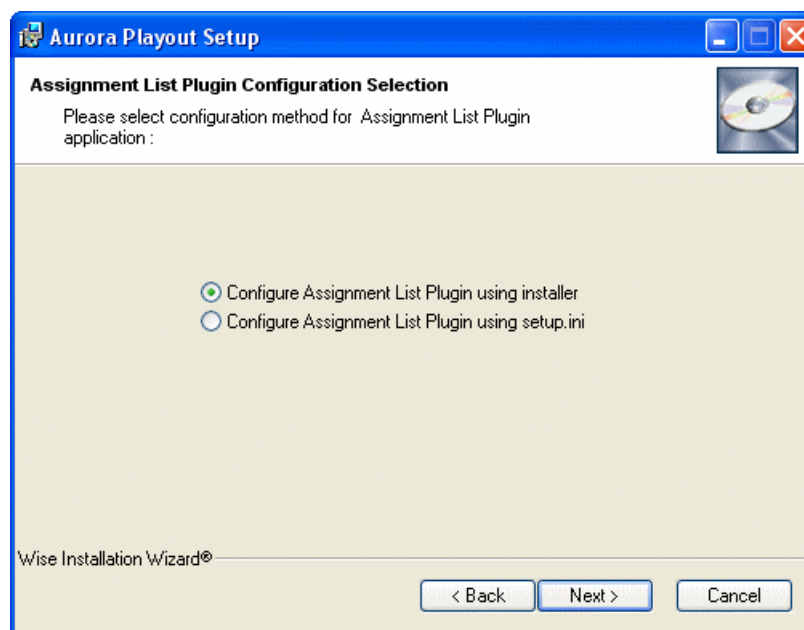
The Assignment List Plugin Configuration Selection screen appears:

5. Select **Configure Assignment List Plugin using installer** and click **Next**.

The Assignment List Plugin Settings screen appears:

6. Enter the following information for your system and click **Next**:

Name	Description
Database Server	Enter the name of the server hosting the Aurora Playout database (the primary SDB Server).
Backup Database Server	If you are using a backup server, enter the name of the server hosting the Hot Standby Database Server.
XMOS Server	Enter the name of the computer hosting the XMOS Server.
MOS ID	Enter your MOS ID; in ENPS, the MOS ID appears under ENPS | System Maintenance | MOS Configuration in the ID column.
Thumbnail Path	Enter the full path to the shared thumbnail directory on the computer where thumbnails are stored, in the format \\server\foldername; e.g., if you have a shared folder named "thumbnails" on your playout system named "Playout1", the path would be \\Playout1\thumbnails.This path needs to match the path set in Aurora Edit—Tools | Options | Aurora Playout | Thumbnail Path.
Newsroom computer system:	Select the type of Newsroom Computer System you are using—ENPS/Octopus or iNEWS.

Name	Description
Enable Trim Capability	Check the box if you want to enable trim capability of placeholder in the Asset Preview window of MediaFrame.
Allow Placeholder Delete	Check the box if you want to allow placeholders to be deleted via the Assignment List Plug-in.

7. Click **Next**.

8. Click **Finish** to complete the installation.

You can view or change configuration settings by clicking the Options button within the Assignment List Plug-in.

Installing ALP using a Configuration File

If you want to install the Assignment List Plug-in on multiple computers with the same configuration, you can create a network installer.

1. Copy the Aurora Playout software installation file, **SetupAuroraPlayout.exe**, from the CD onto your network.

2. Using a text editor such as Notepad, create a file called setup.ini similar to this example:

```
[AssignmentListPlugin]
DatabaseServer=localhost
BackupDatabaseServer=
MosID=gvg.nqp.mos
ThumbnailPath=C:\AuroraPlayout\thumbnails
XMOSServer=localhost
DisplayMode=2
AddTypeToObjSlug=0
UnicodeDragDrop=1
EnablePlayerTrim=0
EnableDelete=1
```

Name	Description
DatabaseServer	The name of the server hosting the Aurora Playout database (primary SDB Server).
BackupDatabaseServer	The name of the server hosting the hot standby Aurora Playout database (backup SDB Server).
MOSID	Your MOS ID.
Thumbnail Path	The full path to the shared thumbnail directory on the computer where thumbnails are stored, in the format \\server\foldername; e.g., if you have a shared folder named "thumbnails" on your playout system named "Playout1", the path would be \\Playout1\thumbnails.This path needs to match the path set

Name	Description
	in Aurora Edit—Tools	Options	Aurora Playout	Thumbnails Path.
XMOS Server	The name of the computer hosting the XMOS Server.
Display Mode	Determines the display mode of the Assignment List Plug-in: 0 for Placeholder List only, 1 for Rundown View only, 2 for both Rundown View and Placeholder List display.
AddTypeToObjSlug	Determines whether to insert the placeholder type to the MOS name when the placeholder is dragged and dropped into a script: 0 for off, 1 for on.
UnicodeDragDrop	Your Newsroom Computer System: 0 for iNEWS or 1 for ENPS/Octopus.
EnablePlayerTrim	Determines whether placeholder can be trimmed in the MediaFrame clip player: 0 for off, 1 for on.
EnableDelete	Determines whether placeholder deletion is allowed in ALP: 0 for off, 1 for on.

3. Save the file in the directory with the SetupAuroraPlayout.exe file.

4. a) Navigate to the network directory where you saved the installer and configuration file and double-click **SetupAuroraPlayout.exe**.

   b) Click **Next** until you reach the Select Components screen.

   c) At the Select Components screen, check the **Assignment List Plugin** checkbox and click **Next**.

   d) Select **Configure Assignment List Plugin using setup.ini** and click **Next**.

   e) Click **Next**.

   f) Click **Finish** to complete the installation.

The installer uses the setup.ini file to configure the Assignment List Plug-in.

Installing ALP using a Batch File

You can also create a batch file to automatically install the Assignment List Plug-in using the setup.ini file.

1. Create a text file named **setupALP.bat**.

2. In the file, put this text:

```
.\AuroraPlayout\FILEPATH1\DotNetInstall.EXE
```

```
.\AuroraPlayout\FILEPATH2\AuroraIngestPlayoutPrereq.EXE
msiexec.exe /package "AuroraPlayout.msi" /QB
ALP_INSTALL=1
```

3. Save the file into the same directory as the Aurora Playout installer and your setup.ini file.

4. From each computer on which you are installing the plug-in; double-click **setupALP.bat**.

The batch file runs and installs the plug-in.

Chapter **6**

Configuring Aurora Playout

This section contains the following topics:

- *Configuring Aurora Playout*
- *Configuring the Aurora Playout application*
- *Configuring the Simple Database (SDB) Server*
- *Configuring the XMOS Server*
- *Configuring Housekeeper*
- *Configuring the standalone Assignment List Manager*

Configuring Aurora Playout

Aurora Playout has many options that let you define how your system is set up.

If your system is already pre-configured at the factory, you might want to adjust some options based on how you use Aurora Playout.

Configuring the Aurora Playout application

Each setting of the Aurora Playout application is discussed in case you need to reconfigure your system.
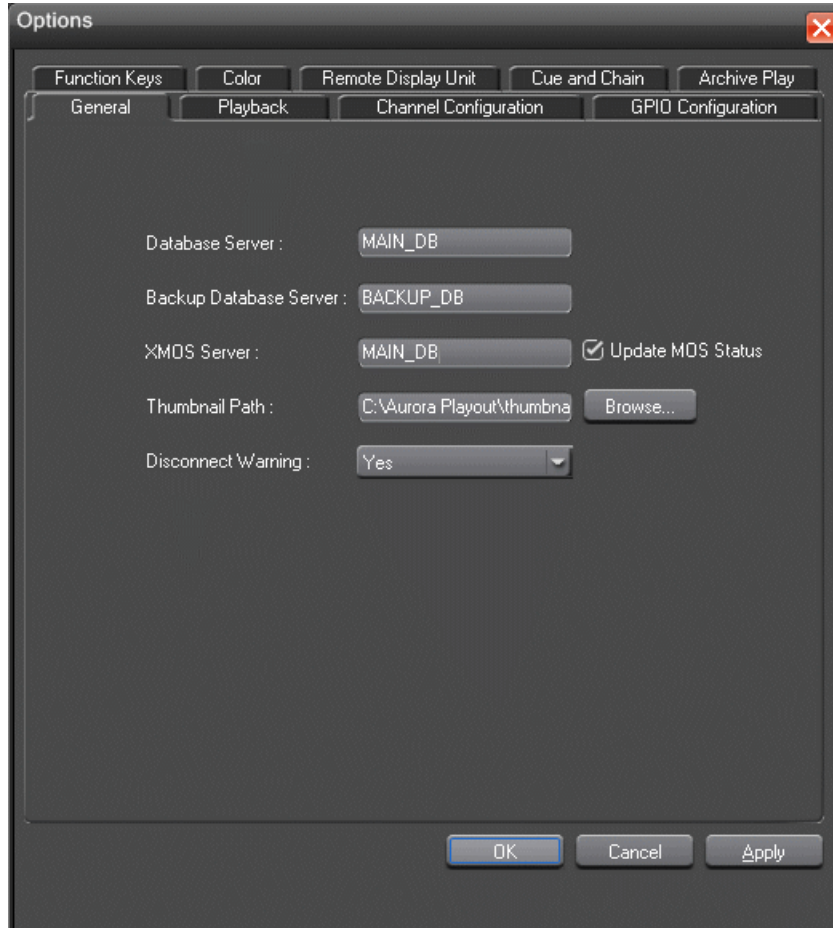
1. Choose **Tools | Options**.
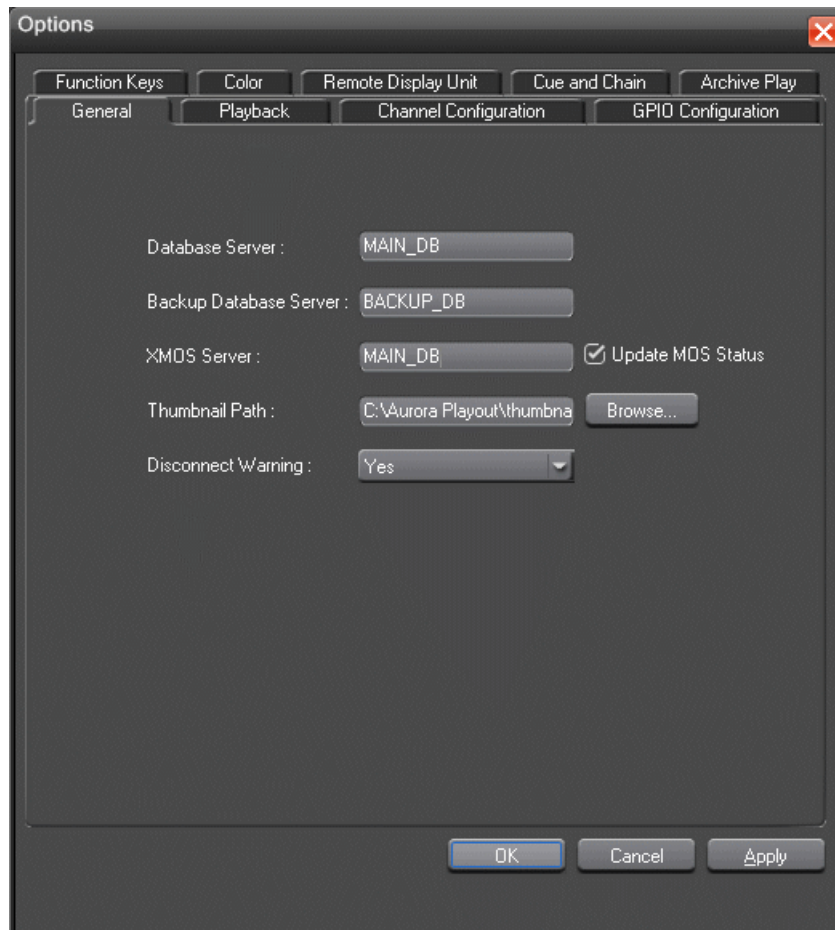
The Options window appears.

2. Go through each tab in the Options window and configure Aurora Playout using the descriptions for each tab.

3. Click **Apply** to apply your settings to each tab.

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

Setting General options

Setting	Options	Description
Database Server		Enter the name of the computer hosting the primary SDB Server.
Backup Database Server		Enter the name of the computer hosting the hot-standby SDB Server.
XMOS Server		Enter the name of the computer hosting the XMOS Server. By default, the Update MOS Status checkbox is selected. When you have two or more Playout systems

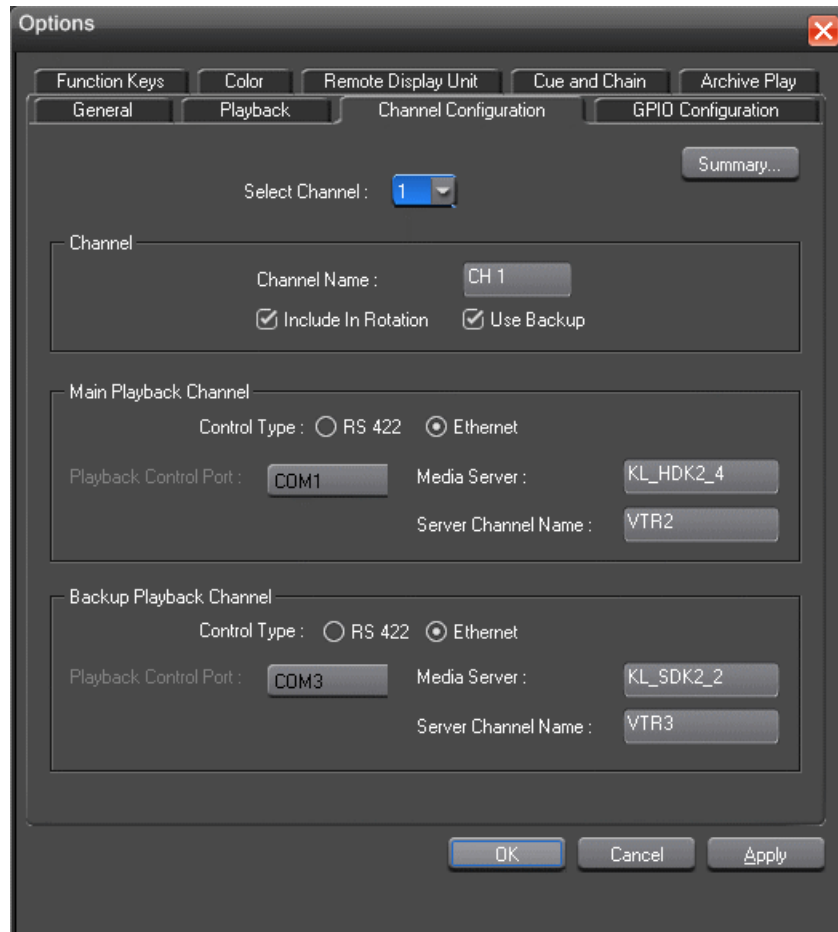| Setting	Options	Description
		running, uncheck the box on the backup system to avoid MOS status conflicts when the same rundown is loaded by more than one Playout system.
Thumbnail Path		Enter the full path to the shared thumbnail directory on the computer where thumbnails are stored, in the format \\server\foldername; e.g., if you have a shared folder named "thumbnails" on your playout system named "Playout1", the path would be \\Playout1\thumbnails.This path needs to match the path set in Aurora Edit—Tools	Options	Aurora Playout	Thumbnails Path.
Disconnect Warning	Yes; No	Select Yes to be alerted before Aurora Playout disconnects the synchronization with the NCS.

Setting Playback options
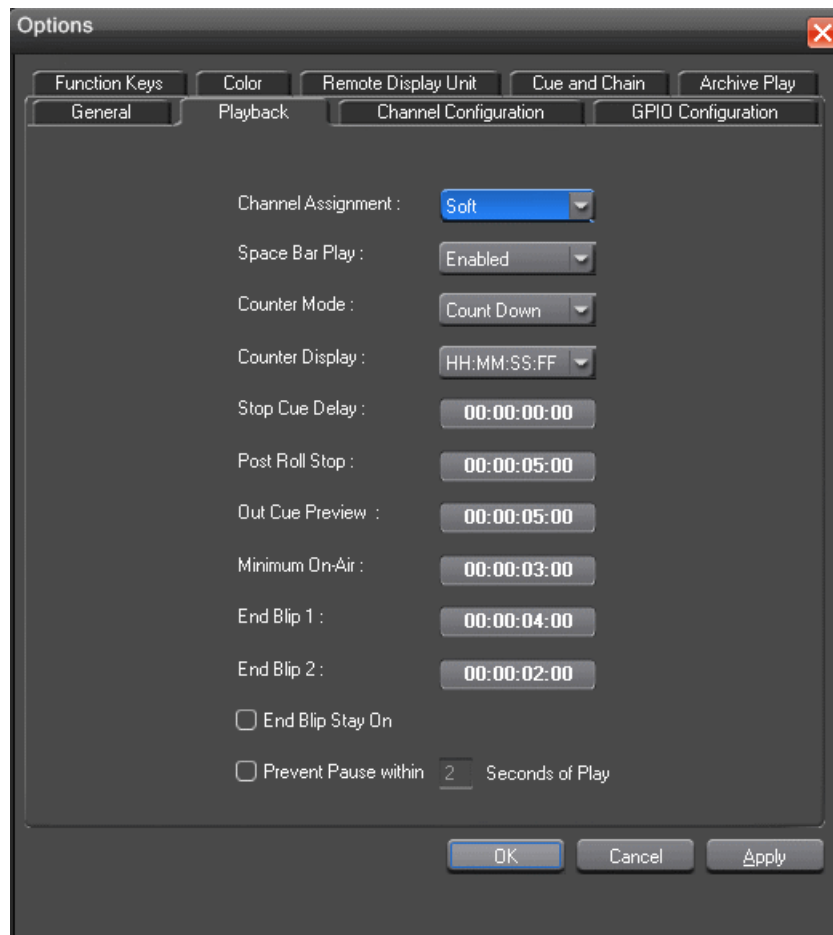
| Setting	Option	Description
Channel Assignment	Soft	When a rundown is loaded, does not assign channels to stories; clips will be cued to the first available channel.
	Hard	When a rundown is loaded, assigns channels to all stories without a current channel assignment and maintains that assignment regardless of the available channels.
Space Bar Play	Enabled	Enables or disables use of the space bar to play the next cued clip.
	Disabled	
Counter Mode	Count Down	Sets the clip duration counter to count time down from the clip duration to zero, or from zero up to the clip duration.
	Count Up	
Counter Display	HH:MM:SS:FF	Determines how the counter is displayed.
	MM:SS	
Stop Cue Delay		Determines the amount of time to freeze a clip on its last frame before cueing the next clip on that channel.
Post Roll Stop		When a channel is playing and Play Next is pressed, determines the amount of time that the clip continues to post roll before cueing the next clip to that channel.
Out Cue Preview		Previews the last few seconds of the clip and immediately recues. (The number of seconds that previews is determined by your studio's needs.)
Minimum On-Air		Determines the minimum time that the On-Air GPI trigger must be on before releasing it will send the clip into post-roll and cue the next clip.
End Blip 1 and 2		Determines the amount of time prior to the end of a clip to display an audio/visual warning.
End Blip Stay On		Determines whether the End Blip visual signal remains on once triggered or just flashes momentarily.
Prevent Pause within X Seconds of Play		Determines whether stop commands (through GPI input or mouse click) can occur within a determined period of time after the playing of a clip begins.

Setting channel configuration

Setting		Options	Description
Select Channel		1-6	Select the channel to configure.
Channel	Channel Name		Enter a label name for the channel.
	Include in Rotation	On; Off	Check Include in Rotation to include this channel when automatically assigning channels.
	Use Backup	On; Off	Check Use Backup if you are using a second media server for mirrored playback.
Main Playback Channel/Backup Playback Channel	Control Type	RS 422; Ethernet	Select the type of channel connection.
	Playback Control Port		Select the primary port for this channel.
	Media Server		Enter the name of the K2 Media Client, K2 Summit Production Client or M-Series.

Setting	Options	Description
	Server Channel Name	Enter the name of the channel you are using for this playback channel. Use the naming convention VTR1, VTR2, etc., for the channel name.

Click the Summary button for a complete list of channel information after all channels had been configured.

Configuring GPI Input and Output

General Purpose Interface (GPI) input and output allow you to connect a switcher or other control device to the Aurora Playout system and use it to control the Aurora Playout software.
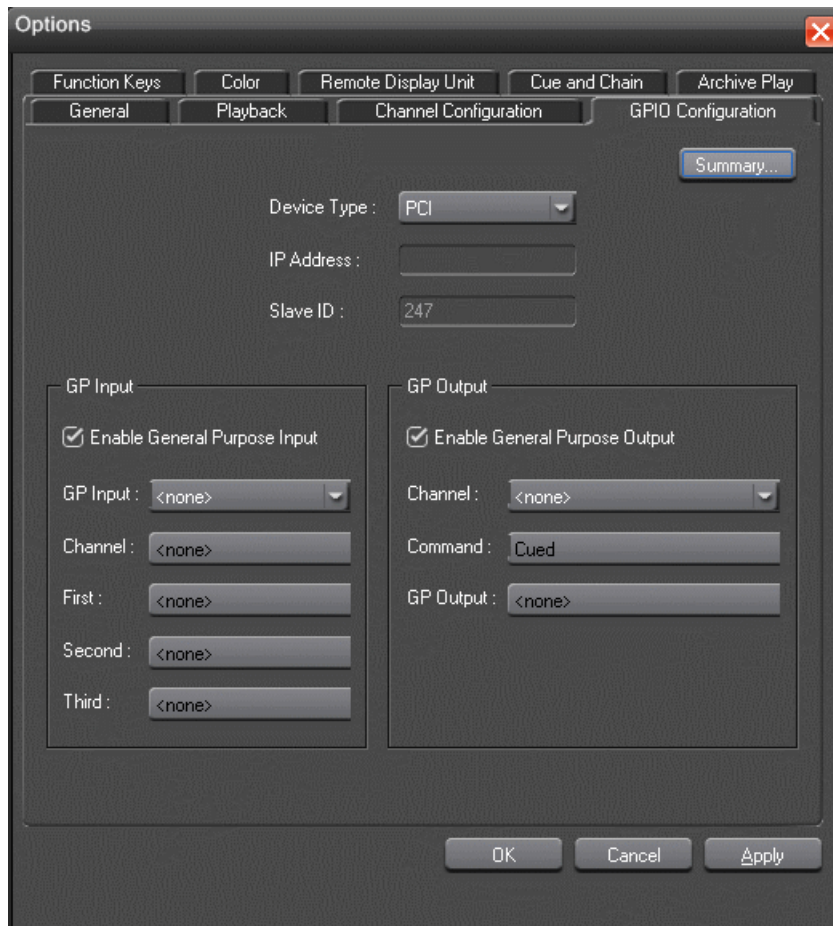
Aurora Playout supports both PCI and ethernet based GPI depending on your choice of GPI device. You can select either PCI or Ethernet from the Device Type dropdown list.

For ethernet based GPI connection, you then need to enter the IP address and slave ID of your GPI device.

• Check the Enable General Purpose Input box to start configuring your GPI Input.

To assign the function of a GPI input, select the GPI number, the channel it affects, and the function you want the GPI to perform.

| Setting	Options	Description
Enable GPI Input	On (checked); Off (unchecked)	Check Enable General Purpose Input to control the Aurora Playout software via GPI input.
GP Input	1 through 16 or 32	Select the GPI input you are configuring.
Channel	<none>; Channel 1-6; Not Channel Specific	Select the channel that this GPI trigger will affect.
GPI Function for Channel A-F labels: First; Second; Third	Select a function for each GPI input. Each input usually has only one function, though it can perform up to three functions.	
	<none>	The GPI has no assigned function.
	Play/Stop	Plays or stops the current clip.
	Play	Plays the current clip.
	Stop	Stops playing the current clip.
	Recue	Recues the current clip.
	Cue Previous	Cues the previous clip in the playlist.
	Cue Next	Cues the next clip in the playlist.
	On-Air	Only used with the First GPI function. Sends the specified channel an On-Air signal. When Aurora Playout detects a signal, the channel window becomes red to indicate the channel is playing to air. When the On-Air GPI trigger is held longer than the Minimum On-Air duration specified under Options and then released, the channel goes into post-roll and then cues the next clip.
GPI Function for Not Channel Specific:	<none>	The GPI has no assigned function.
	Cue All	Cues a clip into each available channel, starting with the selected clip.
	Play Next	Plays the next clip in the playlist.
	Stop All	Stops all playing channels in the playlist.
	Cursor Up	Selects the previous item in the playlist.
	Cursor Down	Selects the next item in the playlist.

• Check the Enable General Purpose Output box to start configuring your GPI Output.

To assign the function of a GPI output, select the channel it affects, the command in Aurora Playout that triggers GPI output and the GPI output number.

Setting	Options	Description
Enable GPI Output	On (checked); Off (unchecked)	Check Enable General Purpose Output to allow Aurora Playout to trigger GPI outputs.
Channel	<none>; Channel 1 - 6	Select the channel that will trigger the GPI output.
Command	Cued	The output is set when the channel is cued; reset when the channel is playing or if the clip is ejected.
	Playing	The output is set when the channel is playing; reset when the channel is stopped or the clip is ejected.
	Loop Play	The output is set when the channel is in loop play mode; reset if not in loop play mode.
	Jog Forward	The output is set when the Jog Forward or Jog Backward buttons are pressed; reset when the Play, Stop, or Eject buttons are pressed, or when the channel is re-cued.
	Jog Backward	
	End Blip 1 (Hold till End of Clip)	The output is set when the playing channel reaches End Blip 1; reset when the channel is stopped or the clip is ejected.
	End Blip 2 (Hold till End of Clip)	The output is set when the playing channel reaches End Blip 2; reset when the channel is stopped or the clip is ejected.
GP Output	<none>; 1-16 or 1-32 (depending on your configuration)	Select the GPI output you want to activate.

After configuring your GPI inputs and outputs, you can see the overview of your current GPI setting by clicking the [Summary...] button.

Defining Function Keys
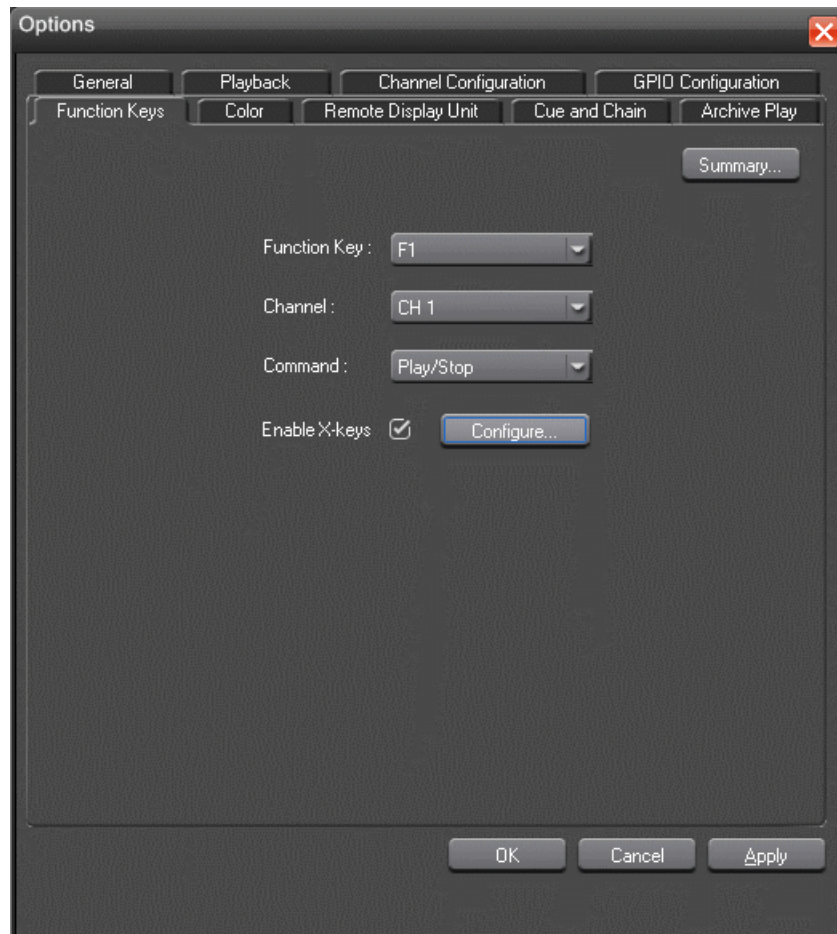
The computer function keys (F1 - F12) provide shortcuts to some Aurora Playout commands, and are pre-configured by default to control the following functions for

channels 1 through 3. You can click the [Summary...] button to view the summary of those pre-configured function key assignments.

Aurora Playout function	Function Key		
	Channel 1	**Channel 2**	**Channel 3**
Play/Stop Cued Clip	F1	F5	F9
Recue Current Clip	F2	F6	F10
Cue Previous Clip	F3	F7	F11
Cue Next Clip	F4	F8	F12

To reassign a function, select the Function Key number, the channel it affects, and the command you want the function key to perform.

Setting	Option	Description
Function Key	F1 through F12	Select the function key you want to set.
Channel	<none>	Select the channel on which the function key will operate.
	Channel 1-6	
Command	<none>	Select the command the function key will perform on the specified channel.
	Play/Stop	
	Recue	
	Cue Previous	
	Cue Next	
	Play without Graphics	This command is only enabled when you have graphics license with Aurora Playout.
Enable X-keys	On (checked)	Check Enable X-keys to allow Aurora Playout to use an X-keys Jog/Shuttle controller. Click Configure to define the function of each X-key.
	Off (unchecked)	

Configuring the X-Keys Controller

You can use Aurora Playout with the X-keys Jog/Shuttle controller.

Many of the X-keys have been pre-configured on the Green layer; only the Toggle key has been pre-configured on the Red layer. You can change the default layout or add new commands on the unused keys.
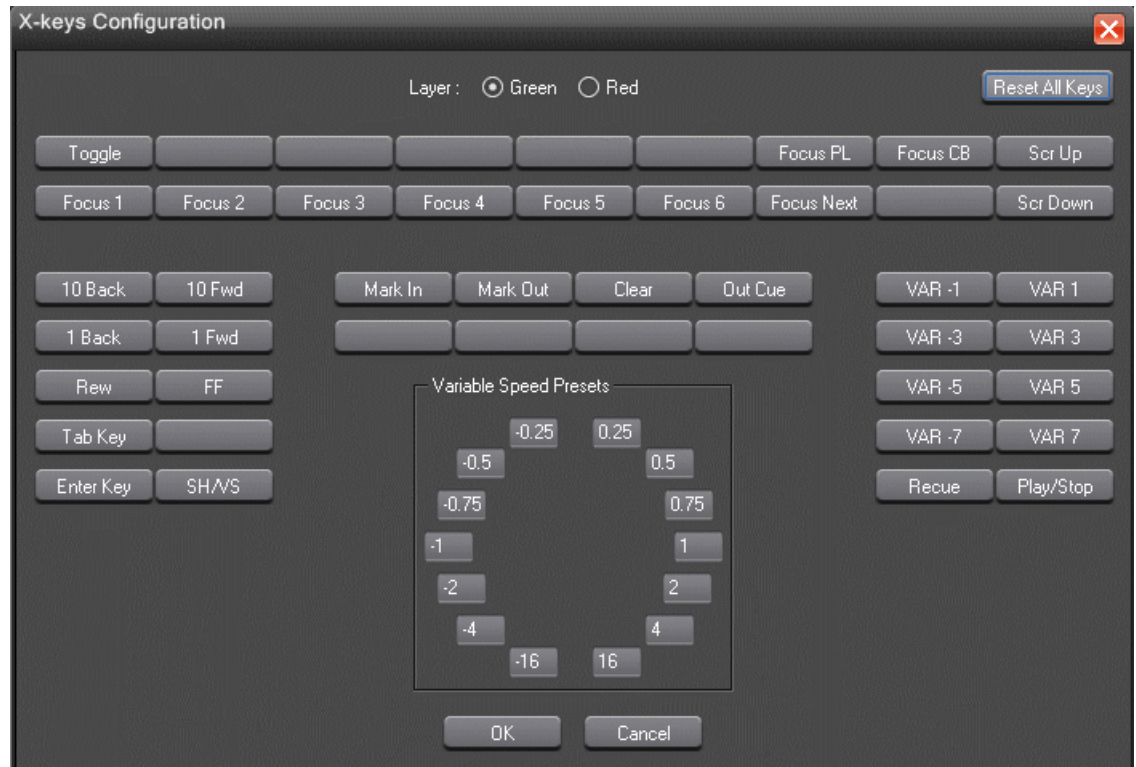
NOTE: Before you can use the X-keys Jog/Shuttle controller, you need to install the X-keys Macro Works software. However, do not use the X-keys Macro Maker application to modify the keys.

1. Check **Enable X-keys** on the Function Keys tab and click **Configure**.

2. Click on the key that you want to configure or modify.

    A drop-down list displays the available commands.

3. Select a command to apply to this key.

4. Repeat steps 2 and 3 to configure additional keys.

5. Once you have finished configuring keys, click **OK**.

In addition to keys, the controller comes with jog/shuttle knob. The jog control, the center disk of the knob, allows you to make precise frame by frame selections for editing. The outer rim can be used in Shuttle or Varispeed mode. The SH/VS key toggles between the two modes.

Shuttle and Varispeed modes both allow you to play clips at various preset fast forward, rewind, and slow-motion speeds. In Shuttle mode, when you release the knob the clip stops. In Varispeed mode, when you release the knob the clip keeps playing until you press the Stop key.

Using the X-keys Jog/Shuttle Controller

The X-keys controller allows you to simplify your workflow. For example, you can use the default layout to easily navigate between different channels or between the Playlist and Clip Browser windows.

Any commands you send using the X-keys controller apply to the currently active channel or window, which is considered to have **focus**. When a channel has focus, you can perform tasks such as navigating through a clip or trimming a clip. When a window has focus, you can scroll through the clips or the playlist. Always bear in mind that you need to give focus to a channel or window before you can apply the X-keys controller commands to it.

The following table describes the pre-configured keys on the X-keys Jog/Shuttle controller.

Setting	Description
Enable X-keys	Enables or disables the X-keys Jog/Shuttle controller.
Layer	Indicates whether you are configuring the Red or Green layer.
Reset All Keys	Resets all the keys on the particular layer that you are configuring. Reset All Keys does not affect keys that shift between the layers, i.e. the Toggle, Red, and Green keys.
Toggle	While you are using the X-keys controller, Toggle switches between the Red and Green layers.
Focus PL	Gives focus to the main Aurora Playout Playlist window, that is, makes the Playlist window active. X-keys commands such as scrolling will apply to the window that has focus.
Focus CB	Gives focus to the Clip Browser window, if open. X-keys commands such as scrolling will apply to the window that has focus.
Scr Up , Scr Down	When the focus is on the Clip Browser window, you can press the Scroll Up or the Scroll Down button to select a clip in the Clip Browser. When the focus is on the main Playlist window, you can press the Scroll Up or the Scroll Down button to select a clip in the Rundown.
Focus 1-6	Gives focus to the specified channel. X-keys commands such as those related to playing, shuttling, or trimming a clip in a channel will apply to the channel that currently has focus.
Focus Next	Gives focus to the next channel. All X-keys commands will apply to the channel that currently has focus.
10 Back	Jogs the clip backward 10 frames.
10 Fwd	Jogs the clip forward 10 frames.
1 Back	Jogs the clip backward 1 frame.
1 Fwd	Jogs the clip forward 1 frame.

Setting	Description
Rew	When the focus is on a channel, you can press the Rew button to rewind the clip in that channel.
FF	When the focus is on a channel, you can press the FF button to fast forward through the clip in that channel.
Tab Key	In message dialog boxes, functions in the same manner as the Tab key on a computer keyboard.
Enter Key	In message dialog boxes, functions in the same manner as the Enter key on the computer keyboard.
SH/VS	Toggles between Shuttle and Varispeed modes.
Mark In	Marks a new In point for a clip. After trimming, the clip must be recued to apply the new Mark In.
Mark Out	Marks a new Out point for a clip. After trimming, the clip must be recued to apply the new Mark Out.
Clear	Clears the trim marks of a clip.
Out Cue	When a channel has focus, you can use the Out Cue key to activate Out Cue Preview for that channel. This allows you to preview the end of a clip by playing the last few seconds, followed by a recue to the beginning. The duration of the preview can be configured by going to the Tools menu and selecting Options, then changing the Out Cue Preview field on the Playback tab.
VAR -1; VAR 1; VAR -3; VAR 3; VAR -5; VAR 5; VAR -7; VAR 7	These seven speeds correspond to whatever values are typed into the fields in the Variable Speed Presets section of the X-keys Configuration dialog box. When you press a VAR key, the clip plays at the preset speed for that key until you press the Stop key. You can move the wheel to the left to access the negative (backward) speeds, move the wheel to the right to access the positive (forward) speeds.
Recue	Recues the clip.
Play/Stop	Plays or stops the clip.
Play without Graphics	Plays the clip without the accompanying graphics. This setting is only applicable with graphics license of Aurora Playout.
Variable speed presets	Preset speeds that you can access by using the shuttle/varispeed wheel of the controller or by using the VAR keys. You can modify these to your own settings.

Defining status colors

Aurora Playout uses color to show clip status.
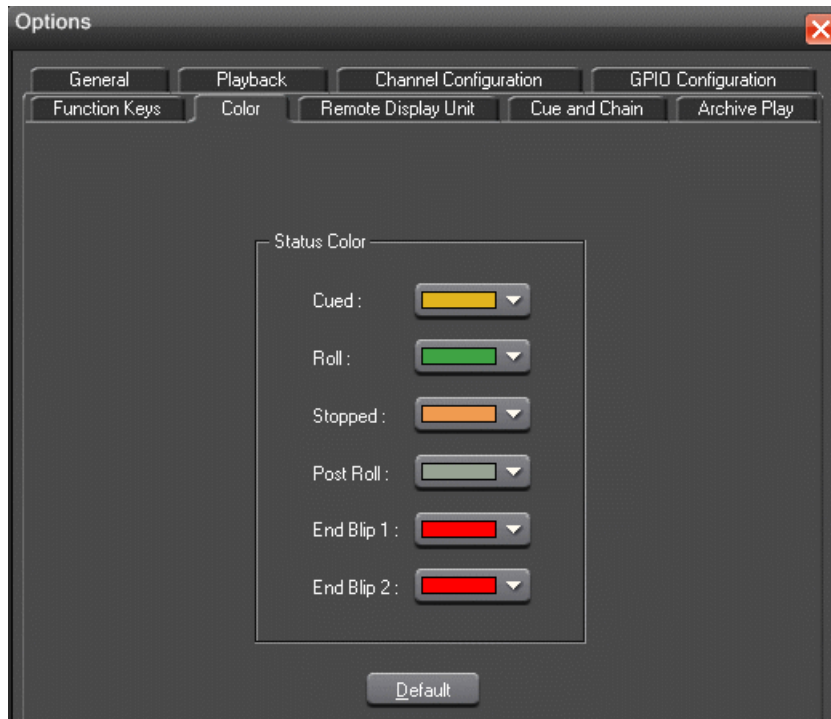
To change a color, open the drop-down menu for the color you want to change and select a new color.

Setting	Status Description
Cued	The color to indicate that a clip is cued.
Roll	The color to indicate that a clip is playing.
Stopped	The color to indicate that a clip is stopped during play.
Post Roll	The color to indicate that a clip is in post roll.
End Blip 1	The color to indicate the first audio/visual warning.
End Blip 2	The color to indicate the second audio/visual warning.
Default	Resets those colors to the default system colors.

Configuring the Remote Display Unit (RDU)

A Remote Display Unit (RDU) lets you see the clips playing on each channel and the status of each clip.

The RDU usually resides in the control room so that operators can monitor playback status during a broadcast. There are two different RDUs you can use with Aurora Playout: RDU 1510 or TSI 1000.
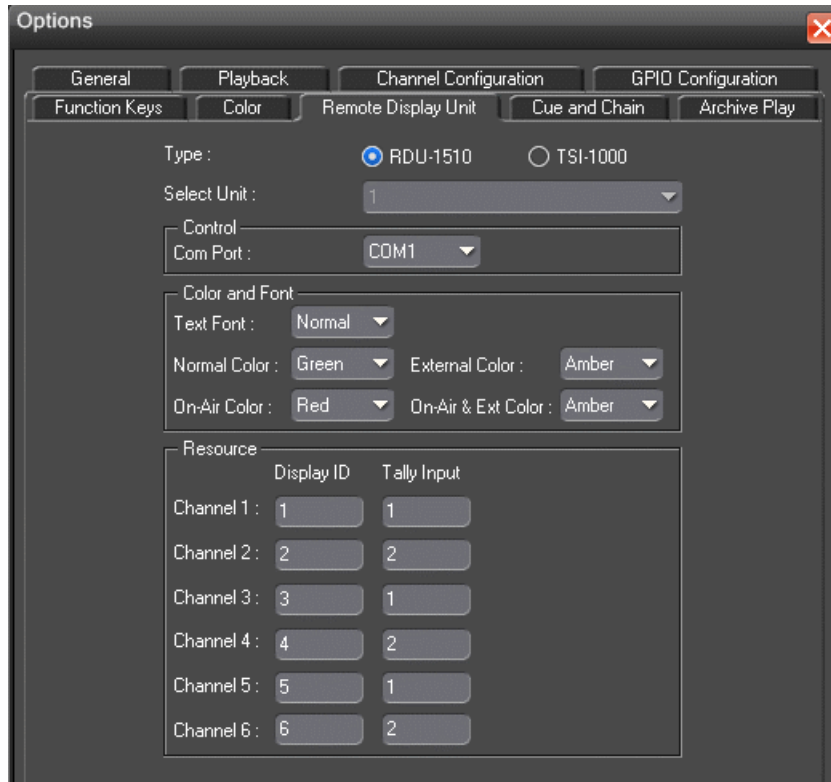
Setting		Options	Description
Type of Display Unit		RDU-1510; TSI-1000	Select your type of Remote Display Unit.
Select Unit		1; 2; 3	For the TSI, select the unit that you want to use. You can connect the Aurora Playout system to up to three TSI Remote Display Units. The default values of these units are 1,2, and 3. You can configure these to more appropriate names for your needs.
Control	Com Port; Machine Name		For the RDU 1510, select the Com Port on the Aurora Playout that the RDU is connected to (usually COM1). For the TSI 1000, enter the IP address or the host name of the TSI 1000 machine.
Color and Font	Text Font	Normal; Spaced; Thin; Small	Select the text format to display on the RDU.
	Normal Color	Red; Green; Amber	Select the color to display on the RDU during normal operation.

Setting		Options	Description
	On-Air Color	Red; Green; Amber	Select the color to display on the RDU to indicate a GPI On-Air trigger.
	External Color	Red; Green; Amber	Select the color to display on an external tally device to indicate an input trigger.
	On-Air and External Color	Red; Green; Amber	Select the color to display on the RDU to indicate that both the GPI On-Air and Tally Input are triggered.
Resource	Display ID (1-6) / Resource ID		Enter the Display ID number for each channel on the RDU. The Display ID determines the position of the clip information on the RDU.
	Tally Input (1-2) / Input ID		The Tally Input determines the state of the channel, and the color display associated with the current channel state on the RDU. Typically, these settings should be left at their default values. For more information about tally states, please see the user manual for your RDU.
	Display Size		Check the Size checkbox to display the clip name with the full number of characters allowed. If Full is checked, 19 characters can be displayed. If Full is not checked, 13 characters can be displayed. (TSI-1000 only)
	Duration		Check the Duration box to display the minute and seconds. (TSI-1000 only)

Setting Cue and Chain options
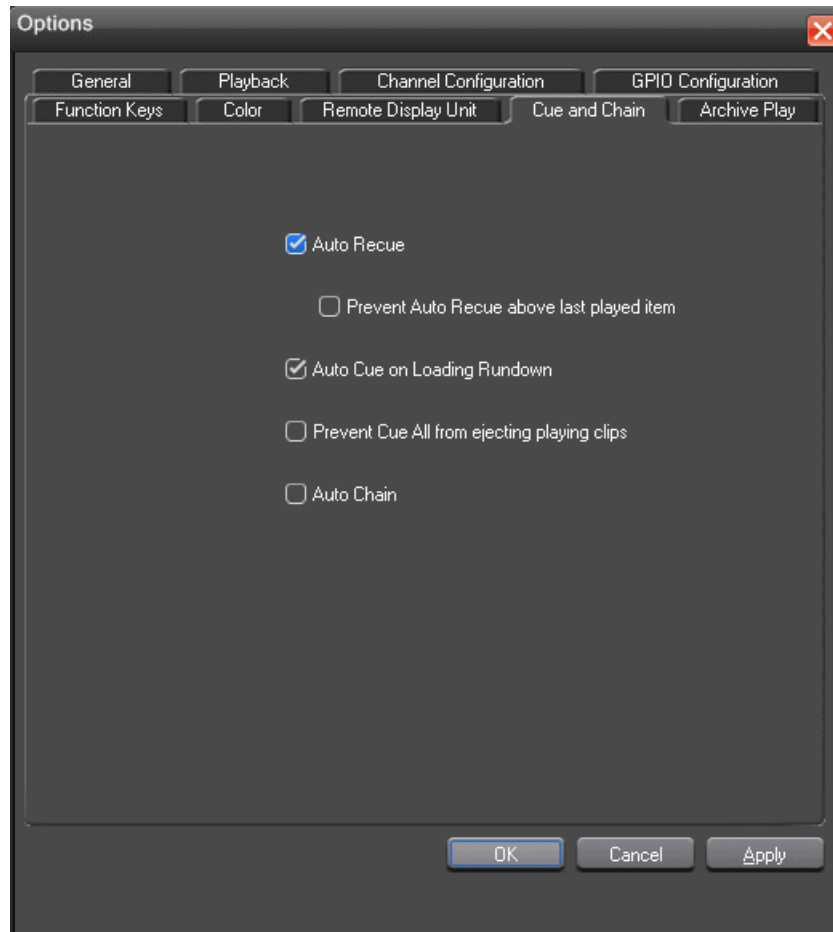
Setting	Description
Auto Recue	Check **Auto Recue** to automatically recue clips in the playlist when a clip is moved to a new position within the Aurora Playout playlist or the NCS rundown, or when clips change to Ready status.
Prevent Auto Recue above last played item	Check **Prevent Auto Recue above last played item** to automatically recue clips that are below the last played item in the playlist only. New clips that show up above the last played item can still be cued manually by the operator.
Auto Cue on Loading Rundown	Check **Auto Cue on Loading Rundown** to automatically cue clips into all available channels when you open a rundown.
Prevent Cue All from ejecting playing clips	Check **Prevent Cue All from ejecting playing clips** to prevent a playing clip from being ejected when the Cue All command is issued.

Setting	Description
Auto Chain	Check **Auto Chain** to have Aurora Playout automatically chain two or more consecutive clips in a playlist that are assigned to the same channel.

Configuring Archive Play

Setting	Options	Description
Channel	Channel 1-6	Select the channel to use for Archive Play. When in Archive Play mode, clips can be cued only to this channel.
Archive Black		Specify the Archive Black duration. Archive Black is the black video that separates each archived clip from the next. The default time is 5 seconds.If it does not already exist on your media server, you must record a black clip and place it in the default media bin. The clip should be about 10 seconds long and must be named "BLACK".
VTR Port		Select the COM port you are using to connect the VTR.
Disable GPI Input during Archive Play	On (checked); Off (unchecked)	Determines whether to disable GPI Input while archiving clips.

Configuring Graphics

Aurora Playout supports graphics trigger workflow through an interface to the Orad graphics playout engine, Maestro. Users need to require a license for the graphics workflow to be enabled. Once enabled, the Graphics tab can be accessed from **Tools | Options** of Aurora Playout.
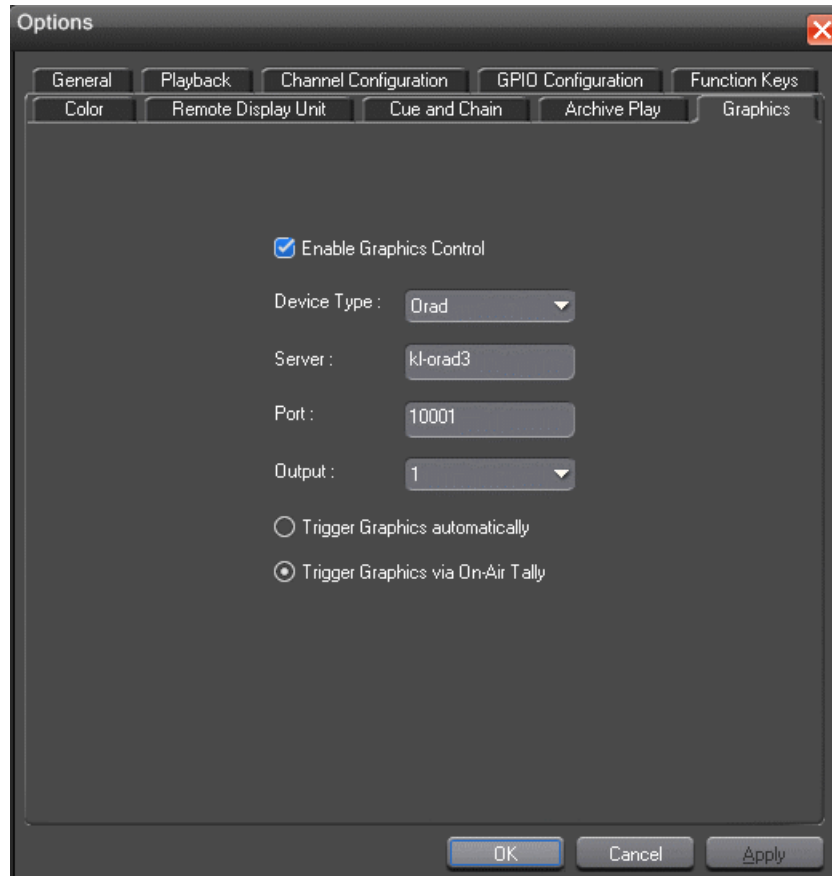
Setting	Options	Description
Enable Graphics Control		Check the box to enable graphics control in the workflow.
Device Type		Current support is for Orad device type only.
Server		Enter the name of the computer hosting the graphics server.
Port		Enter the port you are using to connect to the graphics server.
Output	Preview; 1; 2	Determines whether the output is for preview or played-to-air.

Setting	Options	Description
Trigger Graphics automatically		Select the radio button if you want to trigger graphics automatically with each play command.
Trigger Graphics via On-Air Tally		Select the radio button if you want to only trigger graphics when a channel is "on-air". If it is played without a corresponding tally event, the graphic will not be triggered.

Configuring the Simple Database (SDB) Server

The SDB Server provides you with status on all Aurora Playout playlists associated with NCS rundowns and media servers.

When using a Hot Standby SDB Server, you should be logged in as Administrator while making any changes to the Options settings.

1. Double-click **SDB Server** button . on the desktop; or click the **Start** menu and choose **Programs | Grass Valley | Aurora | SDB Server**.

2. Choose **Tools | Options**.

   The Options window appears.

3. Go through each tab on the Options window and configure SDB Server using descriptions in the following sections.

4. Click **OK**.

Setting General Options of SDB Server

Configuring Aurora Playout
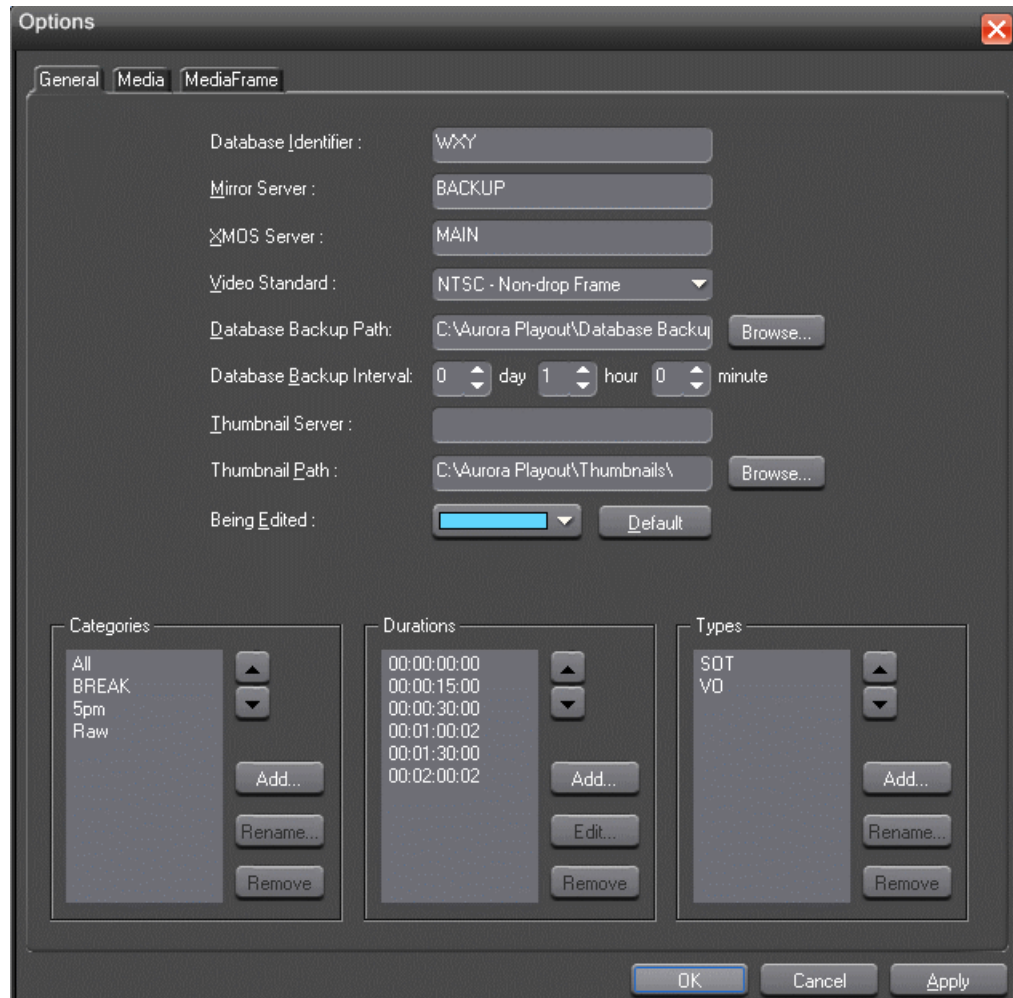
Setting	Description
Database Identifier	Enter an ID for the database, up to 4 characters, such as your station call letters. All clip IDs will begin with this identifier. This is an optional field.
Mirror Server	Enter the name of the computer hosting the backup database server. For the primary SDB Server, this is the system hosting the hot standby database server; for the hot standby database server, this is the system hosting the primary SDB Server.
XMOS Server	Enter the name of the computer hosting the XMOS Server.
Video Standard	Select your newsroom video standard: PAL, NTSC - Drop Frame, or NTSC - Non-drop Frame.
Database Backup Path	Enter the path for the database backups.

Setting	Description
Database Backup Interval	Enter how often you want the database to back up automatically.
Thumbnail Server	Specifies the name of the computer running the Thumbnail Server application (if used).
Thumbnail Path	Sets the path where the thumbnails will be stored.
Being Edited	Select the color that displays in the Assignment List to alert editors that a sequence is being edited.
Categories	Lets you define categories for sorting and assigning placeholders. To add a category, click Add, enter the name of the category, and click OK. Categories appear in these locations: Assignment List Plug-in; Assignment List Manager; Housekeeper; Aurora Playout Clip Browser and Aurora Edit.
Durations	Lets you set default estimated durations for new placeholders. To add a duration, click Add, enter the duration in the format hours:minutes:seconds:frames, and click OK.
Types	Lets you define story types for placeholders. Two story types, SOT (Story on Tape) and VO (Voice Over) are default types. To add a story type, click Add, enter the type, and click OK.

Setting Media options of SDB Server

Setting	Options	Description
Playout Servers		Lets you define the media servers you are using for playout. To add a playout server, click Add, enter the Name and Drive where the media is stored on the playout server, and click OK. If you are using mirrored playback, add both servers here.
Ingest Servers		Use the Auto Transfer feature to automatically transfer media from a source (ingest) server to a destination (playout) server. The Auto Transfer takes place only when media that is sent to or recorded on the ingest server is associated with a Playout placeholder that is part of a MOS-Active rundown. To add an ingest server, check Auto Transfer, click Add, enter the name, and click OK. To change the ingest server to a

Setting	Options	Description
		different server, select the server and click Rename. A media server can only be either a source or destination server for Auto Transfer, so the same media server should never be added to both the Playout and Ingest sections. If you are not using Auto Transfer, leave this section blank.
Media Bin		Aurora Playout creates a default Media Bin where playout media is sent; also used for monitoring ready status and clip duration.
Rundown Status	Monitor all rundowns	Select Monitor all rundowns to update statuses for stories in all active rundowns in your newsroom computer system, regardless of whether they are currently open in Aurora Playout; this is the default.
	Monitor open rundowns only	Select Monitor open rundowns only to update statuses for only the rundowns that are open in Aurora Playout; when set, only updates the status column in your newsroom computer system for open rundowns.
Thumbnails	16:9; 4:3	Select the video aspect ratio for thumbnails displayed in Aurora Playout components.

Setting up MediaFrame for SDB Server

1. Click on the **MediaFrame** tab.

2. Enter the following system information:

Setting	Description
MediaFrame Server	Enter the name of the computer hosting the MediaFrame Server. After this setting is configured, MediaFrame components can be accessed in Aurora Playout application, Housekeeper, Assignment List Manager and Assignment List Plug-in. *NOTE: If you have MediaFrame client applications on a different Windows domain from the MediaFrame server, you need to define a trust relationship (one way or two way). For example, you could have your MediaFrame system on Windows domain A with a trust in the B domain. Applications running on Windows domain B can then connect to the MediaFrame server on Windows domain A.*
Use Configured Web Proxy	When selected, the application will continue to go through the configured Web Proxy settings to communicate with MediaFrame services. When deselected, the application will bypass the configured settings.
Proxy Path	Enter the full path (or browse) to the directory where proxies are stored. You can then view those proxies via MediaFrame.

3. Click **Apply** and **OK**.

Reinitializing media monitor of SDB Server

To refresh rundowns, reinitialize media server connections and update database records, you can select the option to Reinitialize Media Monitor.

This is an option for you to manually execute the refresh function, even though SDB Server would be automatically updated each time there is a new change to your rundown.

1. Click **SDB Server** on the taskbar of your desktop to display the window.
2. Select **Tools | Reinitialize Media Monitor or press F5 for the shortcut button.**

Repopulating rundown items from SDB Server

The option to repopulate rundown items is useful if you were to accidentally delete placeholders in Housekeeper for an active rundown. You can repopulate those placeholders by selecting this option within SDB Server.

However, this option only repopulate empty placeholders and you still need to associate clips to those placeholders before the rundown is ready for playback.

In the case of a complete loss or corruption of the SDB database, repopulate could be used to rebuild the database by importing placeholders from all MOS active rundowns.

1. Click **SDB Server** on the taskbar of your desktop to display the window.

2. Select **Tools | Repopulate Rundown Items.**

   You could see the change from "Unknown Placeholder" to the previous name of the placeholder in the rundown list.

3. Open the **Housekeeper** application and associate the clip to the repopulated placeholder.

Restoring backup database of SDB Server

You also have the option to restore your backup database in case the current database is corrupted or your system crashed.

For extra precaution, it is also advisable to have a backup database server on another machine on your network.

1. Click **SDB Server** on the taskbar of your desktop to display the window.

2. Select **Tools | Restore Backup Database.**

Creating a Thumbnail folder

Regardless of which media server you're using, you need to create a directory in which to store video thumbnails.

1. Navigate to **C:\Aurora Playout**.

2. Create a folder and name it **Thumbnails**.

3. Right-click on the folder, select **Sharing**, and click **Share this folder**.

4. Click **OK**.

Configuring the XMOS Server

The XMOS Server provides communication between the Newsroom Computer System and Aurora Playout.

1. From the **Start** menu, choose **Programs | Grass Valley | Aurora | XMOS Server**.

2. Choose **Tools | Options**.

The Options window appears.

3. Enter the following system information:

Setting	Description
MOS ID	Enter your MOS ID: In ENPS, see ENPS	System Maintenance	MOS Configuration in the ID column. In iNEWS, this value matches the <mos> value within the configuration file on the iNEWS MOS Gateway at C:/Program Files/Avid/MOS Gateway/mosconfig.xml. See your iNEWS administrator for assistance. In Octopus, see Admin	MOS	Devices.
NCS ID	Enter the name of the server hosting your newsroom computer system: For ENPS, the name of the ENPS Server. If you have an ENPS Buddy server, you need to enter both the main and buddy server names in both the NCS ID and NCS MOS Server fields, in the format "MAIN,BUDDY". For iNEWS, the name of the iNEWS Server.For Octopus, see Admin	MOS	Devices.
NCS MOS Server	Enter the name of the server hosting the NCS MOS Server component: For ENPS, the same value you entered for the NCS ID. For iNEWS, the name of the iNEWS MOS Gateway machine. For Octopus, the name of the Octopus Server machine.
MOS Version	Select the version of MOS you are using from the pull-down menu: 2.6 or 2.8.2 for ENPS, 2.7 for iNEWS and 2.6 for Octopus. If your version is unknown, leave the setting at the default value, 2.6.

Setting	Description
Database Server	Enter the name of the server hosting the Aurora Playout database (primary SDB server).
Backup Database Server	Enter the name of the server hosting the backup Aurora Playout database (hot standby SDB server).If you are not using a hot standby SDB server, leave this field blank.
Script Path	Enter the full path (or browse) to the directory where scripts are stored.
Web Script Path	Enter the full path (or browse) to the directory where web scripts are stored. Users are able to view scripts created through NCS from a standard web browser such as Internet Explorer and Firefox.
Generate MOS Objects for Feeds	Check the box to enable an enhanced MOS workflow which requires MOS Objects generated for feeds. As assets are embedded with MOS Object IDs, they can be searched throughout ENPS and inserted below the black line of the script.

4. Click **OK**.

Refreshing rundowns in XMOS Server

To reflect new changes on your rundown, you can select the option to refresh rundowns within XMOS Server.

This is an option for users to manually execute the refresh function, even though XMOS Server would be automatically updated each time there is a new change to your rundown.

1. Double-click **XMOS Server** on the desktop or click the **Start** menu and choose **Programs | Grass Valley | Aurora | XMOS Server**.
2. Click **Tools | Refresh Rundowns.**

Configuring Housekeeper

Housekeeper has several options that can be tailored to the requirements and equipment in your newsroom.

1. Double-click **Housekeeper** button Housekeeper on the desktop; or click the **Start** menu and choose **Programs | Grass Valley | Aurora | Housekeeper**.
2. Choose **Tools | Options**.
3. Go through each tab on the Options window and configure Housekeeper using general and media options setup.
4. Click **OK**.

Setting General options of Housekeeper

Setting	Options	Description
Database Server		Enter the name of the computer hosting the Aurora Playout database (primary SDB server).
Backup Database Server		Enter the name of the computer hosting the backup Aurora Playout database (hot standby SDB server).
Editorial Duration Prompt		Check this box to prompt the user for an Editorial Duration when associating clips with placeholders through the Clip Import tab.
Thumbnail Server		Enter the name of the system running the Thumbnail Server application (if used).
Thumbnail Path		Enter the full path to the thumbnail directory.

Setting Media options of Housekeeper

In order for Housekeeper to connect to media servers where clips are stored, you must first add the server names to the Media tab.
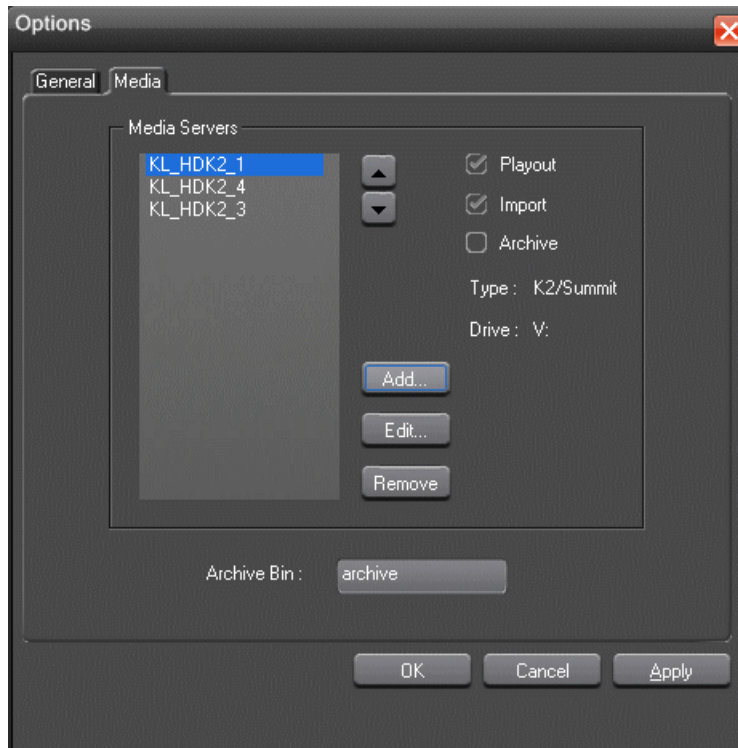
1. Click **Add**.
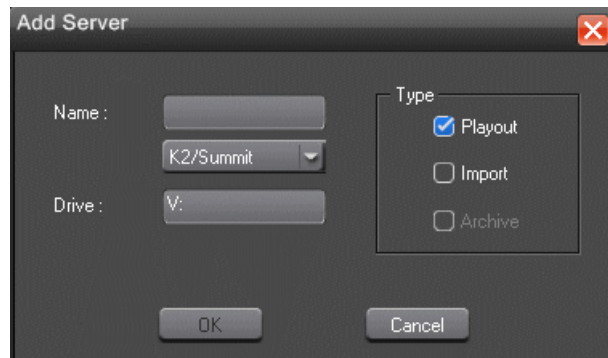
The Add Server window appears:

2. Enter the name of the server and select its type from the pull-down menu.

3. Enter the drive where media is located on the server.

    The default drive for a Profile Server is EXT: and for an M-Series, K2 or Summit is V:.

4. Select the type of server—**Playout**, **Import**, and/or **Archive**:

- **Playout Server**—A server where you will be sending clips to be played to air.

- **Import Server**—Any server where you want to import clips from; this server is listed on the Clip Import tab.

- **Archive Server**— Any server where you want to archive files; this server is listed on the Archive tab. You can only have one Archive Server.

5. Click **OK**.

Configuring the standalone Assignment List Manager

The Assignment List Manager lets producers create placeholders for clips, assign or reassign placeholders to editors, and monitor clip status.

1. Click the **Start** menu and select **Programs | Grass Valley | Aurora | Assignment List Manager**.

   The Assignment List Manager appears.

2. Click **Options** button .

The Options window appears.

3. Enter the following system information:

Setting	Options	Description
Database Server		Enter the name of the server where the Aurora Playout database resides (primary SDB server).
Backup Database Server		Enter the name of the server for the backup Aurora Playout database (hot standby SDB server).
Thumbnail Path		Enter the full path to the shared thumbnail directory on the computer where thumbnails are stored, in the format \\server\foldername; e.g., if you have a shared folder named "thumbnails" on your playout system named "Playout1", the path would be \\Playout1\thumbnails.
Display	Placeholder List; Rundown View	Select Placeholder List to display placeholders in the Assignment List Manager or select Rundown View to display the list of rundowns. Both can also be selected to display placeholders and rundowns in the Assignment List Manager.
XMOS Server		Enter the name of the computer hosting the XMOS Server.
Reset Columns		Click the button to reset columns to their original placement if they have been rearranged.
Enable Trim Capability		Check the box if you want to enable trim capability in the MediaFrame clip player.
Allow Placeholder Deletion		Check the box to allow placeholders to be deleted within the Assignment List Manager.

4. Click **OK**.

Chapter **7**

Setting up your NCS for Aurora Playout

This section contains the following topics:

- *Setting Up Your NCS for Aurora Playout*
- *Setting up ENPS*
- *Setting up iNEWS*
- *Setting up Octopus*

Setting Up Your NCS for Aurora Playout

With Aurora Playout, you can use your Newsroom Computer System (NCS) to create rundowns and link clips to rundown scripts. The MOS-compatible NCS needs to be configured for use with Aurora Playout.

- ENPS
- iNEWS
- Octopus

Setting up ENPS

To set up ENPS for use with Aurora Playout, you need to modify your ENPS configuration.

1. On the ENPS servers, find the nom.ini file and add the following section:

```
[MOS]
Inport=10540
Outport=10541
LogIn=1
LogOut=1
Version=2.6
NumberROConstruction=0
```

NOTE: Key-in **Version=2.8.2** *if you are using MOS version 2.8.2.*

2. Close the News Object Manager (NOM); it should restart automatically.
3. On an ENPS client, log in as the administrator and start up ENPS.
4. From the NEWS folder (e.g. KXYZ NEWS), select **System Maintenance | Groups | New** and create a new group with these parameters:

ID	KXYZGVG
Description	GV Clips
Server	Select the name of your ENPS server from the dropdown list

5. Click **Save** and close ENPS on the workstation.
6. At both ENPS Servers, choose **Resync** (if using an ENPS Buddy Server).
7. Close the News Object Manager and it should restart automatically. After the NOM has started, restart the ENPS client.
8. From the NEWS folder (e.g. KXYZ NEWS), select **System Maintenance | MOS Configuration | New** and create a new MOS entry with these parameters:

ID	The MOS ID; this value is case sensitive and must match the MOS ID configured in the XMOS Server Options. The recommended format is <family>.<machine>.<location>.<enterprise>.mos. Standard practice is to use station call letters for location and station group abbreviation for enterprise.
Description	GV Assignment List
IP	The IP address or host name of the machine hosting the SDB Server and the XMOS Server.
ActiveX	GVG.XMOSCtrl.1
Default Settings	Leave blank. These settings are configured when you install the Assignment List Plug-in.
Program	The group ID you configured in step 4.
MOS Version	2.6 or 2.8.2
Local DragDrop	Off
Auto Create	On
Story Send	On

9. From the NEWS folder (e.g. KXYZ NEWS), select **System Maintenance | Global Configuration Options**, add a new property named **AddMOSObjDuration** and set its value to **1**.

10. On the ENPS server, close the NOM one last time and let it restart automatically.

11. Restart the ENPS client application.

12. Install the Assignment List Plug-in on all ENPS clients where this functionality is needed.

Sending scripts with ENPS

The ENPS MOS Story Send feature allows Aurora Edit systems to view scripts.

1. For an existing rundown or template in ENPS, go to Properties.

2. Temporarily toggle the **MOS Control Active** field to **OFF**.

3. Click in the **MOS Story Send** field and turn on the checkbox for the MOS ID used for Aurora Playout.

4. Toggle the MOS Control Active to ON to make the rundown available to Aurora Playout.

5. Configure the XMOS Server to write scripts.

Aurora Edit systems will then be able to use the "Link to Story" and "Story View" features.

Setting ENPS MOS ready to air

If you want producers to have the ability to indicate to the Aurora Playout operation when a rundown is ready, use the ENPS MOS Ready to Air feature.

To set the feature:

• Set the ENPS rundown property "Ready to air" to ON.

A corresponding READY flag is set to ON in the Aurora Playout rundown window Status column.

Setting up iNEWS

To set up iNEWS for use with Aurora Playout, you need to add a new MOS device to the iNEWS configuration file:

1. On the MOS gateway machine, open the file C:\Program Files\Avid\MOSGateway\mosconfig.xml.
2. Modify the following lines of the file, adding values for your location:

Value	Description
ncs id	Your Newsroom Computer System name; this value is case sensitive and must match the NCS ID configuration in the XMOS Server options.
host	The hostname of the iNEWS server.
mos	Your MOS ID; this value is case sensitive and must match the MOS ID configuration in the XMOS Server options.
amcp	The tag displayed in iNEWS scripts for placeholders embedded in scripts. This value should match the device name that appears in the iNEWS SYSTEM.MAP file.
network	The hostname of the machine running the XMOS Server.

NOTE: With iNEWS, <handlesRoItemLevelCommands> default setting could cause stories to drop to the bottom of the playlist when they are newly inserted, or when their channel assignment is changed. Therefore, <handlesRoItemLevelCommands> value should be set to NO in the mosconfig.xml file.

Configuring status translations for iNEWS

To ensure correct status reporting between Aurora Playout and iNEWS server, you need to edit the status translation table in the iNEWS configuration file.

- The status translation table within the mosconfig.xml file should appear as below:

```
<statusTranslations>
    <statusUnavailable>NOT READY</statusUnavailable>
    <statusCueing>CUEING</statusCueing>
    <statusAvailable>READY</statusAvailable>
    <statusCued>STAND BY</statusCued>
    <statusPlaying>PLAY</statusPlaying>
    <statusPaused>STOPPED</statusPaused>
    <statusStopped>END</statusStopped>
</statusTranslations>
```

- On the iNEWS server, your MCS dictionary (located at /site/dict/mcs) would typically contain these lines:

```
A_EVERR                    /5ERROR
A_CAFRZ                    /END
A_CATREL                   /2STANDBY
A_CATHRD                   /THREAD
A_CACUING                  /2CUEING
A_CACUED                   /2CUED
A_CANOTAPE                 /4NOT READY
A_CABIN                    /READY
A_CAPLAY                   /3PLAY
A_CAPAUSE                  /3STOPPED
A_CAREW                    /REWIND
A_CAEJECT                  /EJECT
A_CAINCMPLT                /TRANSFER
```

NOTE: Since the statuses that appear in this dictionary can be customized, the values shown in the right column of your MCS dictionary may vary slightly from the ones shown here.

To ensure correct configuration with iNEWS, a sample of the mosconfig.xml file is provided in the appendix section.

Setting up Octopus

In order to use Octopus with Aurora Playout, you need to configure it first.

To configure Octopus for Aurora Playout, you need to register a file on the Octopus server, create an ActiveX device, and modify the MOS Devices configuration.

Registering the MOSWrapper file for Octopus

You need to register the MOSWrapper file before configuring Octopus for Aurora Playout.

1. Find the file **MOSWrapper.ocx** on the Octopus server machine.
2. Put the file on the Octopus server in the following location:

    • On a Windows 2000 machine, put the file in C:/WINNT

    • On a Windows XP machine, put the file in C:/WINDOWS

3. Double-click on the file to register it.
4. If necessary, specify the program to register it as REGSVR32.exe.

Creating an ActiveX Device for Octopus

You need to create an ActiveX device before using Octopus with Aurora Playout.

1. In the Octopus application, go to **Admin | MOS | Devices**.
2. Highlight the MOS ID for Aurora Playout.
3. Click the **ActiveX** button in the toolbar.
4. Click **New** and configure the device as follows:

Option	Setting
Name	User preference (e.g., ALP)
Long Name	User preference (e.g., Assignment List)
Size	800 width x 600 height
Type	browser
Version	1.0 iNews
Insert ActiveX using	GUID
Enter GUID of ActiveX control	4A7EA76A-62A5-11D4-BAE8-0050048C80CA

5. Click **OK**.

Configuring the MOS Device for Octopus

You need to configure the MOS Device before using Octopus with Aurora Playout.

1. In the Octopus application, go to **Admin | MOS | Devices** and double-click on the device you want to use with Aurora Playout.
2. Configure the Basic tab as follows:

mosID	These values must match those set for the XMOS Server.

ncsID	
Disabled	Unchecked
MOS protocol version	2.6
Media server host	Name of machine hosting the SDB Server
Media server port	SDB Server port (normally won't change from default setting)
Rundown server host	Name of machine hosting the XMOS Server
Rundown server port	XMOS Server port (normally won't change from default setting)

3. Configure the Advanced tab as follows:

Option	Setting
Send all objects	
Send empty elements	
Send empty stories	✓
Editable times	
Supports more than one show	✓
Replace rundowns after connection	roReplace
Content synchronisation allowed	✓
Send rundown metadata	✓
Send story texts	✓
Send story text elements	User Preference
Prompt story element labels	
Keep sending roStoryReplace	✓
Log heartbeats	
Send roElementAction	
Uses UTC time	✓
Receive feedback for all shows	✓
Allow mosListAll	✓
Use name instead of JobID	
Delete lowres files	

4. Configure the Object creation tab as follows:

Default MOS object creation device	✓
Allow automatic MOS object creation	✓
Default MOS object duration	00:00:00:00
MOS object naming pattern	%n (where n = the name of the slug)

5. Configure the Statuses tab as follows:

Controls story status	✓ (needed to provide status information on Aurora Playout)

a) Create these status categories (these are the suggested names and order):

6. Configure the Extra tab as follows:

Send channel info:	✓
Other settings based on user preference	

7. On the Times tab, use the default settings.
8. Click **OK**.

Chapter **8**

Using NCS rundowns and Aurora Playout

This section contains the following topics:

- *Using NCS rundowns and Aurora Playout*
- *About the Assignment List Plug-in*
- *Using the Assignment List Plug-in*
- *Using Assignment List Plug-in with ENPS*
- *Using Orad plug-in with ENPS*
- *Using Assignment List Plug-in with iNEWS*
- *Using Assignment List Plug-in with Octopus*

Using NCS rundowns and Aurora Playout

Producers can use Aurora Playout with a MOS-compatible newsroom computer system (NCS) to create rundowns, create placeholders for editor assignments, link clips to the rundown and insert graphics that can be frame-accurately triggered to play-to-air.

Producers can also use the NCS to assign clips to specific playback channels, eliminating the need for a playback operator to assign channels for the rundown.

In sites without an NCS, an editor can follow the producer's script and create placeholders using another component of Aurora Playout, such as the Assignment List Manager, and have a playback operator manually create playlists.

About the Assignment List Plug-in

The Aurora Playout Assignment List Plug-in integrates with your NCS and allows you to create placeholders for clips, assign those placeholders to newsroom editors, and link the resulting clips back to your NCS rundown.
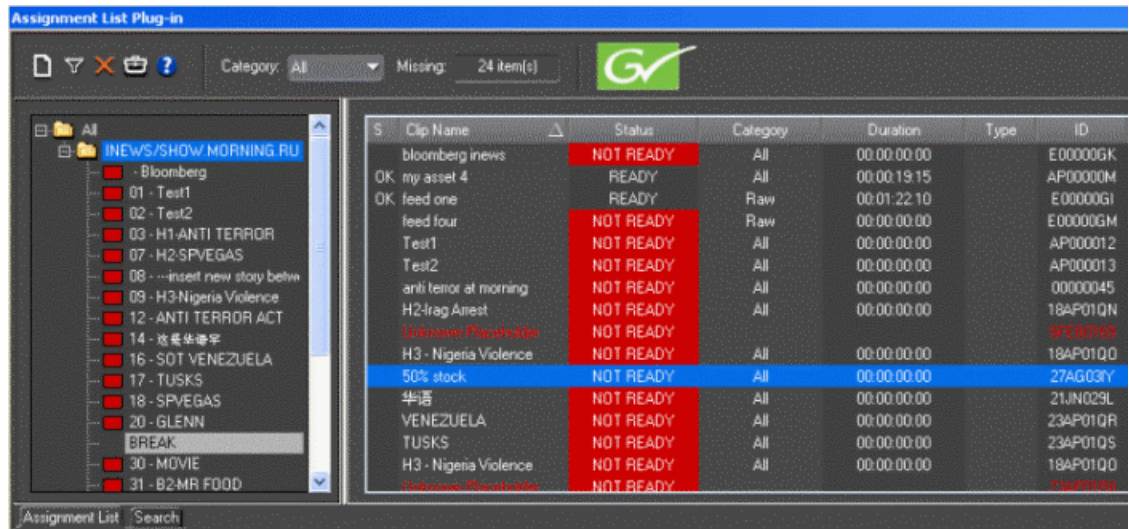
The Assignment List Plug-in displays the following information for each clip:

Column	Description
S	The clip status: displays OK if a clip has been completed, sent to the media server, and is ready for playback. Status is blank if a clip is incomplete and not ready for playback.
Clip Name	The name of the clip.
Duration	The duration of the clip when the placeholder was created. Once media is sent to the placeholder, this field updates to the actual duration of the media.

Column	Description
	A duration displayed in italics in the Assignment List Plug-in indicates that the Editorial Duration property has been set to be different than the actual duration of the clip.
Status	MOS status: matches the NCS status. Includes READY/NOT READY, PLAYED, etc.
Category	The category assigned to the clip; you can assign categories based on the editor to receive the assignment, for instance.
Type	The type of clip an editor needs to create: Voice Over (VO), Sound on Tape (SOT), or other types set in the SDB Server Options.
Description	Brief description of the clip an editor needs to create.
Clip ID	The clip ID, which is automatically defined when the placeholder is created.
Date	The date the placeholder was created.
P (Protected)	Protected status; displays P if the clip is protected, which prevents it from being erased or deleted from the database. Column is blank if the clip is unprotected.

Using the Assignment List Plug-in

With the Assignment List Plug-in, you can create placeholders, assign and sort them by category, monitor rundown or clip status, and view or change placeholder properties.

As you use your NCS to create rundowns for news programs and add scripts for each story, you can check the Assignment List Plug-in at a glance to ensure that the related news clip is ready for your story.

With the MediaFrame integration, you can add general metadata, keywords and custom metadata on a placeholder. Once the metadata is added, it will be searchable and editable throughout all MediaFrame clients.

Creating placeholders in Assignment List Plug-in

You need to create a placeholder for each news clip you are linking to a rundown.

Placeholders generate assignments for editors, who can then create news clips for the story and send them to a media server for playback. Placeholders also let you see if clips are complete and ready for air or not.

If you are using a newsroom computer system, use the Assignment List Plug-in to create placeholders. If not, use the Assignment List Manager or Housekeeper instead. All three components have the same purpose — to create placeholders and assign them to editors.

1. In the Assignment List Plug-In window, click the **New button** .
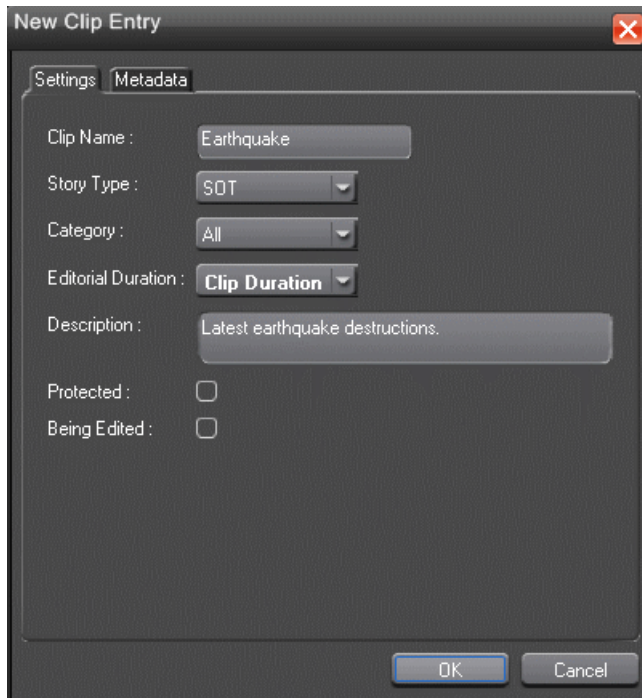
The New Clip Entry window appears with Settings tab and Metadata tab (if MediaFrame is configured):

2. In the Settings tab, enter a clip name.

   The name identifies the placeholder in the Assignment List Plug-in (in the NCS), the Assignment List Manager (in the Aurora Edit system or standalone), and in the Aurora Playout playlist.

3. Optionally, you can provide additional information about the placeholder:

   • **Story Type** — Select a Story Type from the drop-down menu. Story types are set in the SDB Server Options. Default story types are **SOT** (Sound On Tape) or **VO** (Voice Over). You can also leave this field blank.

   • **Category** — Select a category from the drop-down menu. The category determines how stories are grouped and sorted.

   • **Editorial Duration** — Enter a duration for the placeholder or select one from the drop-down list. The Editorial Duration is an optional value you can set for an estimated on-air duration of the clip that is changed to a more precise value later.

   NOTE: Editorial Duration has the priority over media duration. Once an Editorial Duration is set; it will not be adjusted to clip duration, even after media is associated with the placeholder. The editor needs to set the final Editorial Duration before the clip is sent for playback.

- **Description** — Enter a description for the placeholder. The description helps news editors identify the clip they need to create.

- **Protected** — Check this box to prevent the clip from being erased or deleted from the database.

- **Being Edited** — Check this box to indicate when the sequence for a placeholder is currently being edited.

  NOTE: This field allows users to easily determine that a clip is already being worked on. When checked, these areas designate that the clip is Being Edited: the clip in the Aurora Playout playlist and in the Assignment List Manager changes color, and the text for the clip in the standalone Assignment List Manager changes color.

4. If you already configured MediaFrame for use with Aurora Playout, you can enter metadata for the placeholder in the Metadata tab.

   - **Name** — The name of the clip will be the same as the one that you entered in the Settings tab.

   - **Source** — Enter the source of the clip.

   - **Expires** — Select the expiry date for the placeholder. If no expiry date is needed, you can leave it as the default setting: Not Defined.

   - **Description** — The description will be the same as the one that you entered in the Settings tab.

   - **Search Terms** — Enter the search term for the clip so that it will be easy to find when you search for it using MediaFrame Search component later.

   You can also enter metadata within Keywords tab, which referenced a specific timecode location in the media file. This is done by selecting mark-in/out points on the clip and inserting a keyword for that segment.

   Within the Custom tab, you can enter additional asset metadata such as editor, videographer, location and any other fields that had been listed. If you have the Administrator privileges, you can add, edit, or delete custom metadata fields.

5. Click **OK**.

The new placeholder appears on the Assignment List Plug-in.

NOTE: The Clip ID and the Date are set automatically when you create a new placeholder.

Sorting placeholders by category

If you want to sort your placeholders, you can assign placeholders into categories. Categories allow you to filter items you view in the Assignment List. You can create categories within **Tools | Options** of the SDB Server.

You can filter items by selecting a rundown in the left pane of the Assignment List and further filter using the Category box at the top of the Assignment List. Only items in the selected category appear in the list.

You can add placeholders to a category at any time.

1. Right-click on the clip and select **View Properties**.

The Clip Properties window appears.

2. Select a news editor, workstation name, or any other category from the **Category** list.
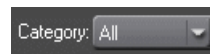
3. Click **OK**.

The placeholder automatically appears on the edit workstation if the particular category is selected.

*NOTE: You can change a category for multiple placeholders at once by clicking Shift + selecting a group of clips, then right-clicking and selecting **View Properties**.*

Viewing placeholder categories

In the Assignment List Plug-in, you can view placeholders and clips based on the Category.

1. Select a category from the **Category** list.
2. The list displays only the placeholders and clips in that category.
3. Select **All** to view all assignment placeholders again.

Searching placeholders

You can search for a specific placeholder easily in the Assignment List Plug-In. This is particularly useful when you have a long list of placeholders.

You can search by any of various ways below:

* Click on one of the placeholders in the list and scroll down to search for other placeholders.
* Use the up and down arrow keys on your keyboard to navigate through the list. Right and left arrow keys could also be used to see all column details.
* To search for a specific placeholder, type the first character and the active bar will automatically go to a placeholder that starts with that character.

If you type a second character within 1 second of the first character, the active bar will go to a placeholder that starts with those 2 characters. If you enter the same character repeatedly, the active bar will navigate through all placeholders that start with that character.

Viewing the video thumbnail of a placeholder

The Assignment List Plug-in, in addition to showing a clip's properties, displays the first frame of the clip as a thumbnail.

You can only see thumbnails for completed clips, which are identified with an **OK** in the Status column; the thumbnail is blank for incomplete clips.

• Right-click on a placeholder and select **View Properties**.

The Clip Properties window appears, displaying the video thumbnail if the clip is complete.
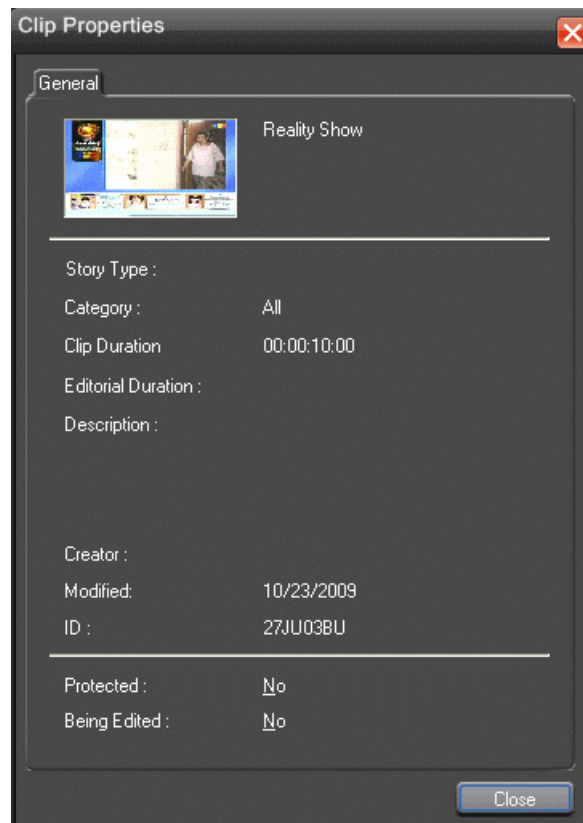
Viewing asset via MediaFrame clip player

If the MediaFrame is configured to create proxy video of edited stories in your system, there will be a corresponding proxy asset created for every story in your placeholders. In the Assignment List Plug-in, you can view the proxy of a clip if you already have MediaFrame and proxy NAS configured within the same domain in your system.

1. Select a clip with a "Ready" status from the Assignment List.
2. Right-click on the clip and select **View Asset** to view the proxy via the MediaFrame clip player.

   The Asset Preview window is displayed if **Enable Trim Capability** is selected in the **Options** window of the Assignment List Plug-in. If not selected, the Asset Details window is displayed instead.

3. Click the Play button ▷ to start playing the clip. Click other control buttons to get to a specific frame on the clip.

   If **Enable Trim Capability** is selected, you can trim the placeholder by selecting the mark in button, mark out button and click the button to trim the placeholder.

Adding breaks in your rundown

With Aurora Playout, you can add breaks to your rundown.

The Aurora Playout Assignment List Plug-in has a placeholder called BREAK that can be used to link to a line in your rundown.

1. In the newsroom computer system (NCS) application, insert a new line which will be used as the break.

2. Open this story of the rundown.

3. From the Aurora Playout Assignment List Plug-in, drag the BREAK placeholder into the story.

4. Save the story.

The break appears in the Aurora Playout playlist as a grey break line.
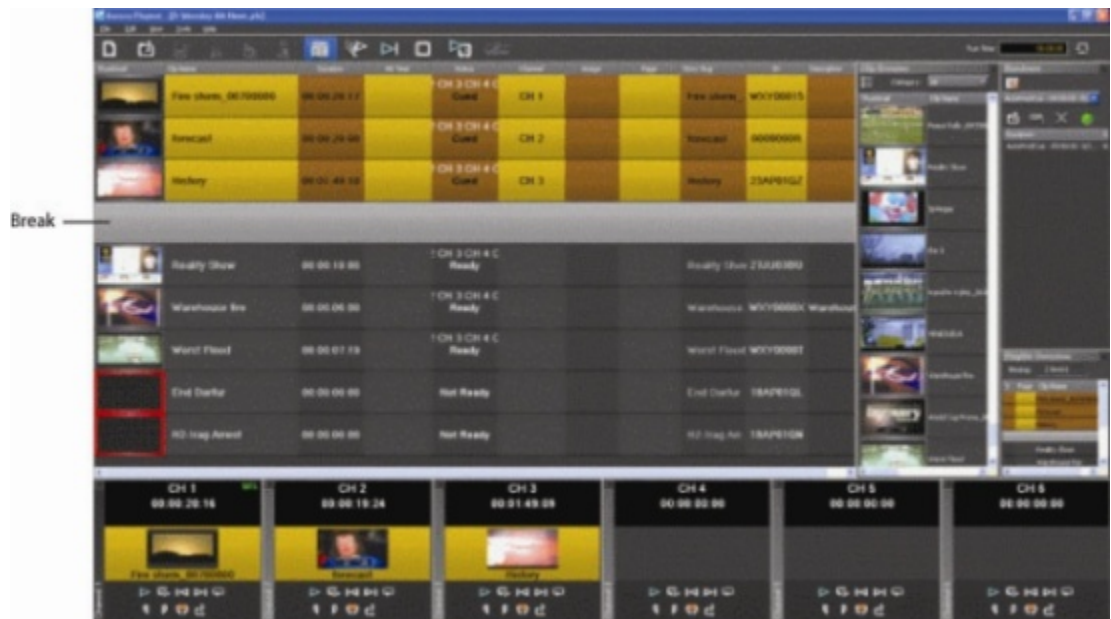
NOTE: With the current version of iNEWS and Octopus newsroom computer systems, setting BREAK as the story property or story type in the rundown of both systems will not show the break in Aurora Playout. To avoid this problem, iNEWS and Octopus users should not mark the story as a break item. Please refer to your NCS documentation on ways to create customized rundown templates that could readily include BREAK placeholder from the Assignment List Plug-in.

Using Assignment List Plug-in with ENPS

The Assignment List Plug-in lets you create a placeholder for a clip and insert it into the accompanying story slug in the NCS rundown.

With ENPS, you can create placeholders and insert them manually into your rundown; or use the auto-create feature, to create and insert the placeholder automatically.

Aurora Playout now supports an enhanced MOS workflow with ENPS newsroom computer system. With this workflow, assets will be embedded with MOS Object IDs and seen as MOS objects throughout ENPS. As they are recognized as MOS objects,

a search in ENPS can easily get the script, rundown and video elements. The video search result can be double-clicked to launch Assignment List Plug-in and if the proxy is already generated, the asset can be viewed via the MediaFrame Asset Preview window.

In addition, newly scheduled events through the Aurora Ingest Scheduler or ENPS Assignment Grid will have associated raw media MOS IDs. On the Assignment List Plug-in, those feeds are categorized under the **Raw** category if it had been setup within the SDB Server. These raw placeholders can then be dragged and dropped as MOS objects below the black line of a script.

Aurora Playout Assignment List Plug-in
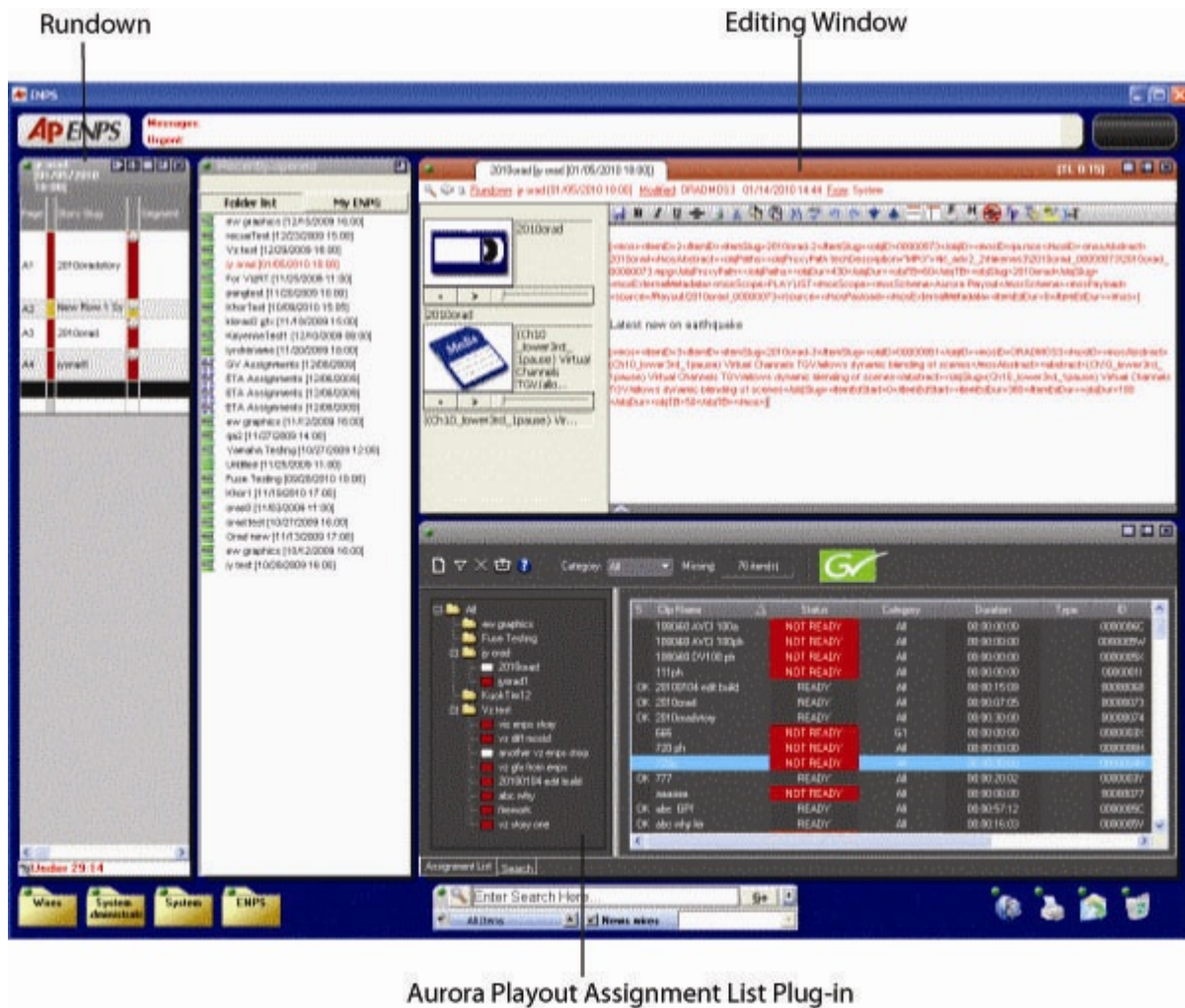
Creating placeholders automatically in ENPS

With ENPS, you can automatically create a placeholder linked to a story slug.

To link placeholders automatically, you need to enable the Auto Create feature in the ENPS MOS Configuration and add the Auto Create column to your ENPS rundown template.

1. Create a new rundown.

    Create a rundown as you normally would. See the ENPS documentation for details.

2. Create a new story slug in ENPS.

3. Create a new placeholder using the below method:

    Click the **Object AutoCreate** field, select the MOS ID from the drop-down list, and press **Enter**.

4. To assign a category when you create the placeholder, click the **Object Placeholder Create** field, select the MOS ID from the drop-down list, enter the Group name and Type of story, if desired, and press **Enter**.

A new placeholder is created in the Aurora Playout Assignment List Plug-in and a MOS object is automatically linked and embedded into the script for this story.

You can then use the Assignment List Plug-in to edit properties and enter metadata for the new placeholder.

Inserting placeholders manually into ENPS

As an alternative to using the ENPS Auto Create feature, you can manually create placeholders and add them to your story scripts.

1. Create a rundown as you normally would. See the ENPS documentation for details.
2. Create a new story in ENPS and open it.
3. Create a new placeholder using the Aurora Playout Assignment List Plug-in, Assignment List Manager, or Housekeeper.
4. Drag the new placeholder from the Assignment List Plug-in to the ENPS editing window.
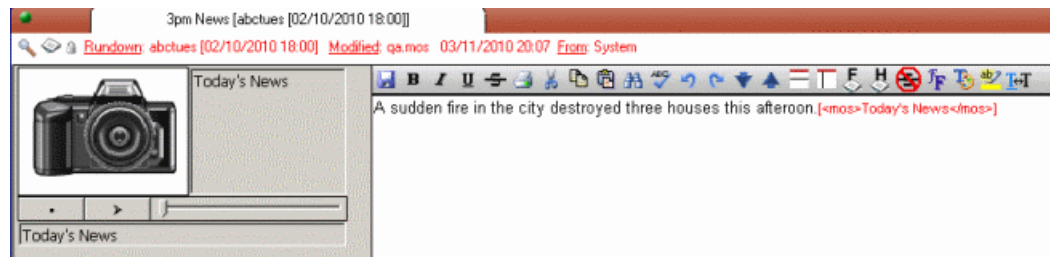
The script within ENPS now shows an embedded MOS Object, which represents the on-air placeholder.

5. Save the script.

The placeholder is added to the ENPS rundown.

NOTE: You can also use this method to add an existing placeholder to your script.

Assigning playout channels to clips in ENPS

Using ENPS, you can assign playout channels to stories in a rundown. When a playback operator opens the rundown, stories are already assigned to playout channels.

1. Click the **MOS Channel** column for the story you want to assign.
2. Enter the channel name in the MOS Channels box and click **OK**.

   You must enter the channel label exactly as it was set up in Aurora Playout.

The story is assigned to that channel and appears on the "Assign" column of the Aurora Playout application.

Searching assets in ENPS

As feed events are recognized as MOS objects, they can be searched within ENPS similar to finished story placeholders.

1. Click the ⬆ button to open the configuration window.
2. Select **GV Clips** to configure ENPS search setting to look for GV clips.
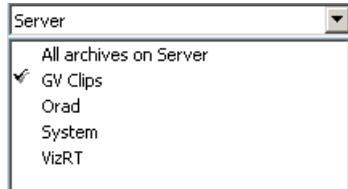
3. Click **Go** to close the configuration window.
4. Enter the name or part of the name for a GV clip that you are looking for and click **Go**.
5. Search results will be displayed in the standard ENPS window.

Search results may contain scripts, rundowns and videos related to the word that had been entered. The video search result can be double-clicked to launch the Assignment List Plug-in and if the proxy is already generated, the asset can be viewed via the MediaFrame Asset Preview window. In addition, the video search result can also be dragged and dropped into a script.

Inserting clips below the black line in ENPS

Feed clips and raw placeholders in the Assignment List Plug-in can be inserted as MOS objects below the black line of a script. Raw placeholders are displayed when **Raw** is selected in category filter of the ALP.

1. Search for a specific feed clip using the ENPS search or select a raw placeholder in the Assignment List Plug-in.
2. Create a new story or open an existing story from your rundown.
3. Drag the video element either from the search result or from the Assignment List Plug-in, and drop it below the black line of the script.
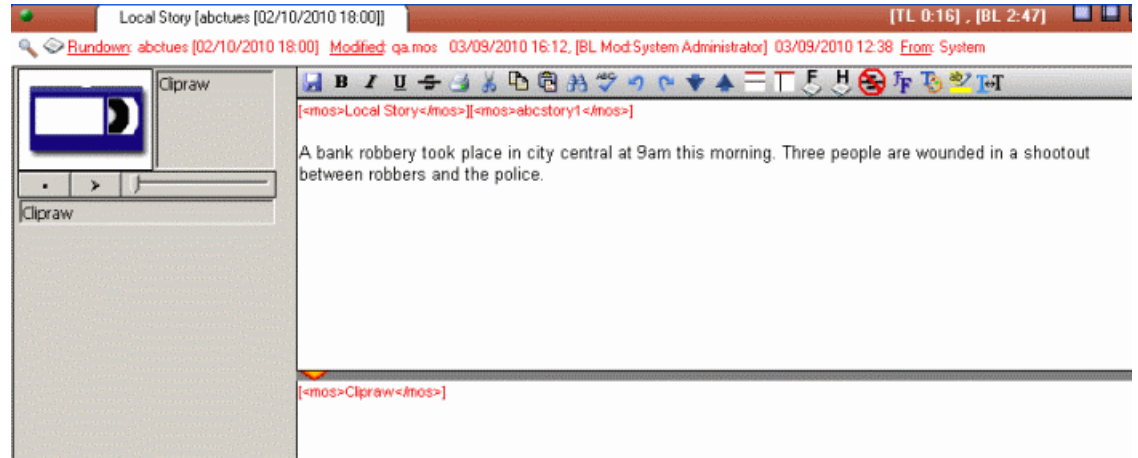
4. Save the script.

Once the editor links to a story, he or she will be able to access embedded objects that may be found below the black line. In Aurora Edit, operators will be able to see and access video elements that were embedded below the black line for use within the timeline.

Using Orad plug-in with ENPS

With ENPS, you can create stories, link them to placeholders and insert graphics into those stories. For graphics trigger workflow, the Orad plug-in within ENPS is used to insert graphics as MOS objects into the story slug of the rundown.

There are several graphics templates to choose from within the plug-in. You can enter texts into the chosen template and preview, before inserting graphics into a story.
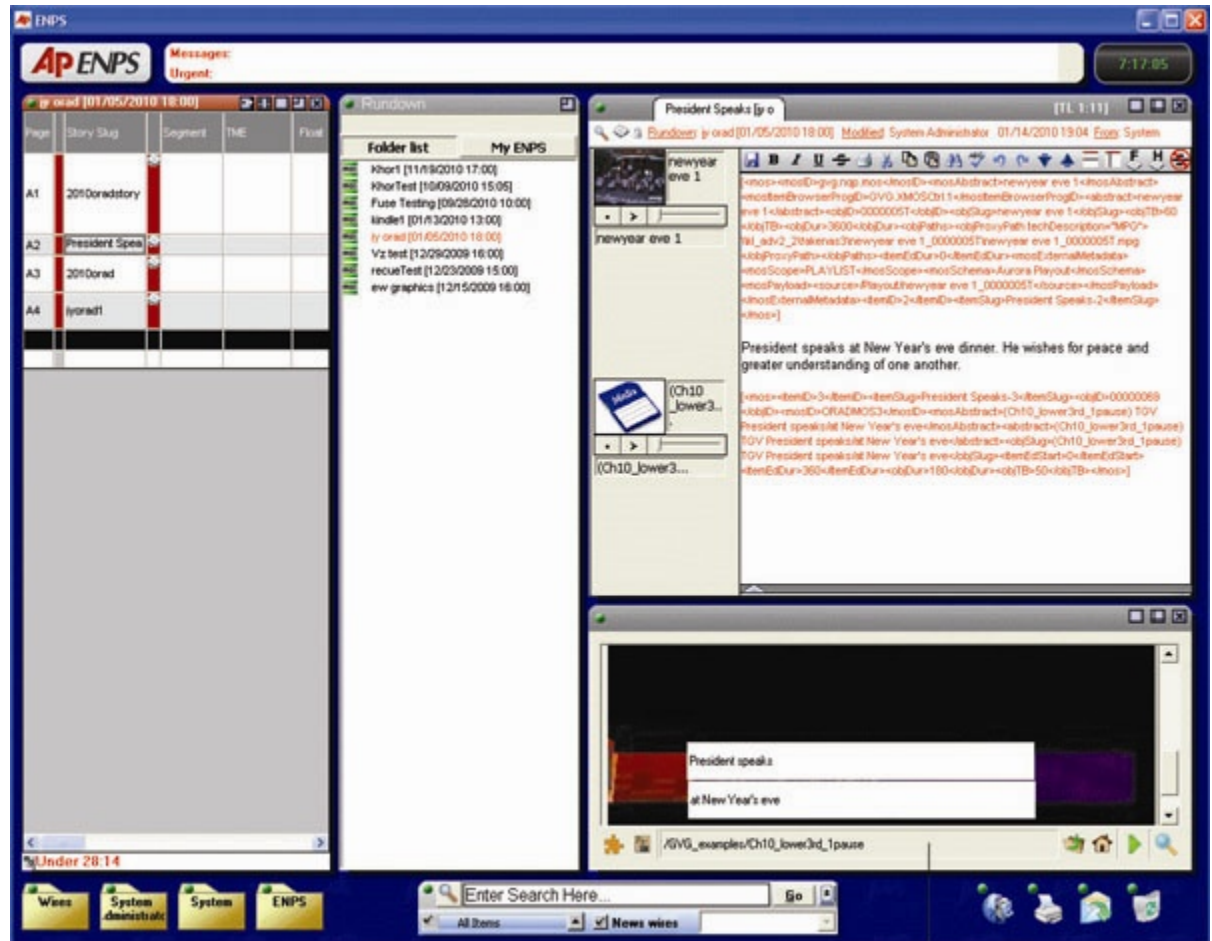
Orad graphics Plug-in

Inserting graphics into ENPS story

Graphics can be inserted as MOS objects into ENPS stories via the Orad plug-in.
Within the plug-in, you can call up existing graphics, modify templates, preview
graphics, and insert graphic elements into stories.

1. Create a new rundown or open an existing rundown in ENPS.

2. Create a new story in the rundown and prepare the script.

3. Select the related clip to your story in the Aurora Playout Assignment List Plug-in.

4. Drag the placeholder from the Assignment List Plug-in to the ENPS Editing
   Window.

5. Launch the Orad plug-in and select the appropriate graphic template.

6. Key-in texts related to your story into the template.

7. Click the **Save item** button to save the graphic into your story.

The graphic is added as a MOS object within your story in the ENPS.
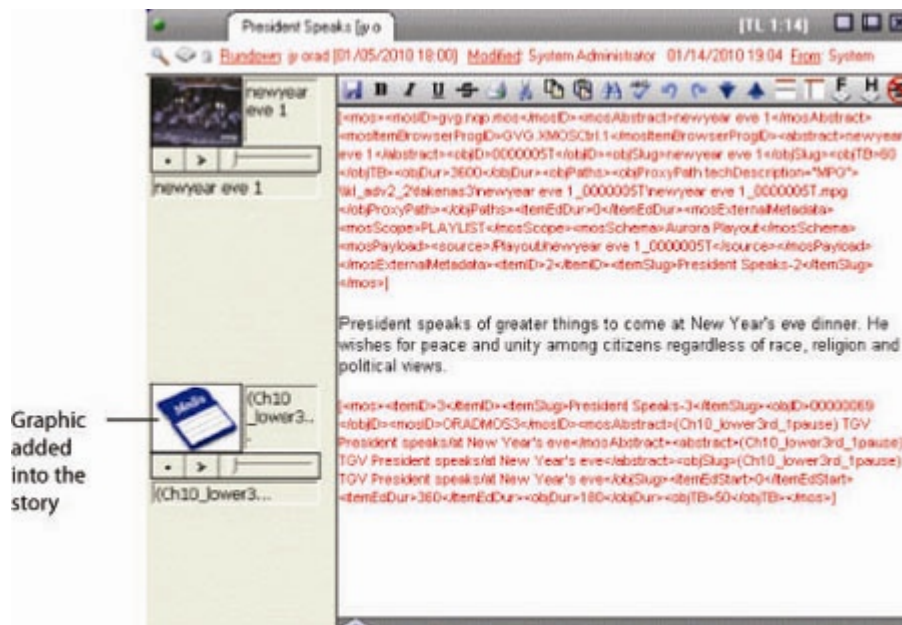
If needed, you can also insert multiple graphics into your story.

Using Assignment List Plug-in with iNEWS

The Aurora Playout Assignment List Plug-in lets you create placeholders for clips and insert them into the accompanying story slug in the iNEWS rundown.

With the plug-in available within iNEWS, you can insert placeholders into your story via drag and drop easily, and assign playout channels to clips as well.

Aurora Playout Assignment List Plug-in

Creating placeholders in iNEWS

1. Create a new rundown.

   Create a rundown as you normally would. See the iNEWS documentation for details.

2. Create a new story in iNEWS.
3. Create a new placeholder in the Aurora Playout Assignment List Plug-in, Assignment List Manager, or Housekeeper.
4. Verify that the new story slug is highlighted in the Queue Panel and then drag the new placeholder from the Assignment List Plug-in to the Story Form window.
5. Click on a different line in the Queue Panel to save your changes.

The placeholder links with the story and the clip name displays in the Clip Slug column in the iNEWS Queue Panel.

Assigning playout channels to clips in iNEWS

With iNEWS, you can assign playout channels to stories in a rundown. When a playback operator opens the rundown, stories are already assigned to playout channels.

1. Select the slug you want to assign and right-click the **Ch** box.
2. Choose **Assign Channel**.
3. Enter the channel name and click **OK**.

   You must enter the channel label exactly as it was set up in Aurora Playout.

4. Save the slug.

The story is assigned to that channel and appears in the Aurora Playout application in the "Assign" column.

Using Assignment List Plug-in with Octopus

The Aurora Playout Assignment List Plug-in lets you create placeholders for clips and insert them to the accompanying story slug in the Octopus rundown.

With Octopus, you can create the placeholders and insert them manually into your rundown or use the auto-create feature to create and insert the placeholder automatically.

Creating placeholders automatically in Octopus

With Octopus, you can create placeholders automatically using the Auto-create feature.

1. Create a new story in Octopus.

2. Open the story.

3.

— Click this button for auto-create
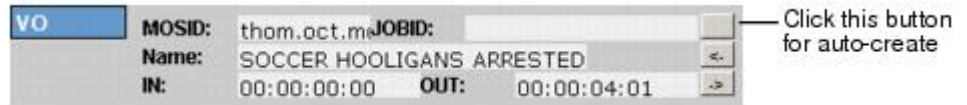
4. Click the button next to the JOBID field and select **Auto-create - MOS ID**.

   The MOS ID and Name of the placeholder fill in automatically.

5. Click **OK** to save.

Linking clips manually in Octopus

If your system doesn't have the auto-create feature enabled, you can create placeholders and insert them to your rundown manually:

1. Create a new story in Octopus.
2. Open the story.
3. If an element doesn't exist, right-click and select **New | type of element** and click **OK**.
4. Click the button next to the JOBID field and select **Create**.
5. In the Create MOS object on remote device window, enter the desired placeholder name in the Name field and click **OK**.
6. Click **Save** to save the placeholder.

Inserting clips manually in Octopus

With Octopus, you can insert clips using the Assignment List Plug-in.

1. Split the Octopus window so you can see the Rundown View and the Aurora Playout Assignment List Plug-in.
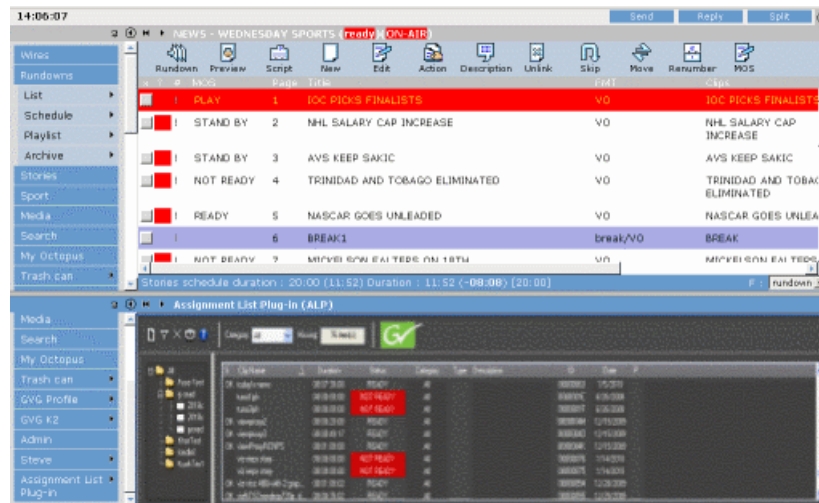
2. Insert a new element if one doesn't exist.

3. In the Assignment List Plug-in, create a new placeholder or use an existing one.

4. Drag the placeholder from the Assignment List Plug-in to the button next to the Name field on the Octopus element.
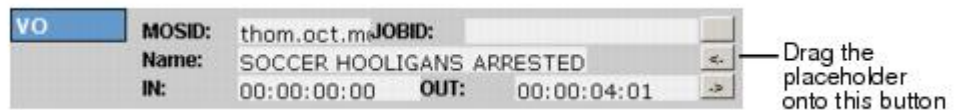
5. Click **OK**.

Assigning playout channels to clips in Octopus

For Octopus newsroom computer system (NCS), playout channel assignment to stories in a rundown is not supported.

When a playback operator opens the rundown, he or she needs to manually assign channels in Aurora Playout.

Chapter **9**

Editing and Aurora Playout

This section contains the following topics:

- *Editing and Aurora Playout*
- *Using the Assignment List Manager*
- *Receiving Editing Assignments*
- *Linking sequences to Aurora Playout placeholders*
- *Sending completed clips*
- *Additional features of Assignment List Manager*

Editing and Aurora Playout

News editors use the Assignment List Manager component of Aurora Playout to receive assignments from the producer and return completed assignments.

The Assignment List Manager runs on the computer with the Aurora Edit editing system. Editors create clips and sequences in Aurora Edit as usual and send them to a media server. A playlist is received from the NCS or a playback operator uses the clips in Aurora Playout to create a playlist, and then controls the playback of clips to air.

With MediaFrame integration, you can add general metadata, keywords and custom metadata on a placeholder. Once the metadata is added, it will be searchable and editable throughout all MediaFrame clients.

Using the Assignment List Manager

The Assignment List Manager is for editors to receive assignments from the producer, to create additional placeholders for clips, and to reassign placeholders to other editors.

The standalone Assignment List Manager runs on any computer in the network.

The embedded Assignment List Manager runs on the Aurora Edit workstation and integrates with Aurora Edit; the Aurora Edit toolbar displays part of the Assignment List Manager so you can see the number of assignments you've received.
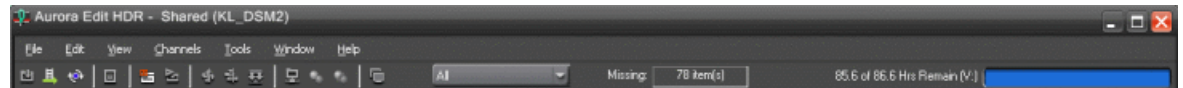
• In the standalone Assignment List Manager, maximize the window:
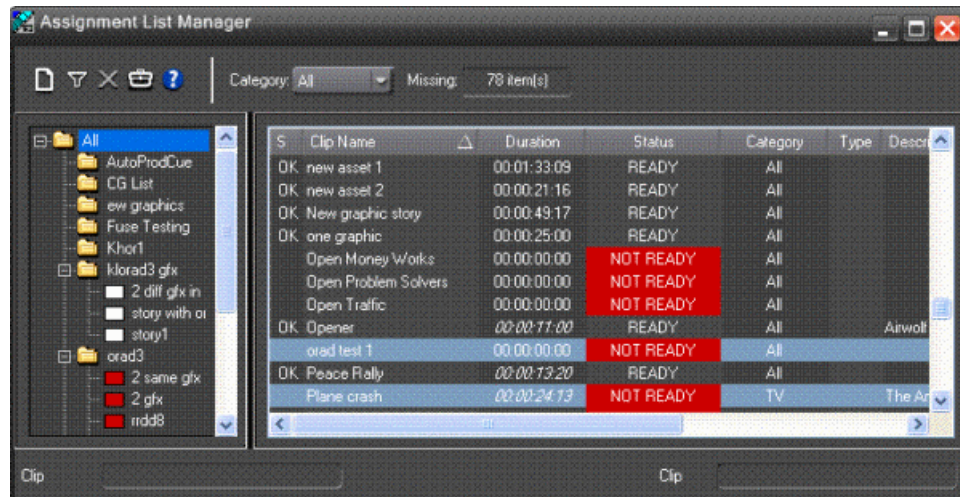
• In Aurora Edit, double-click the **Missing** box to open the Assignment List window:
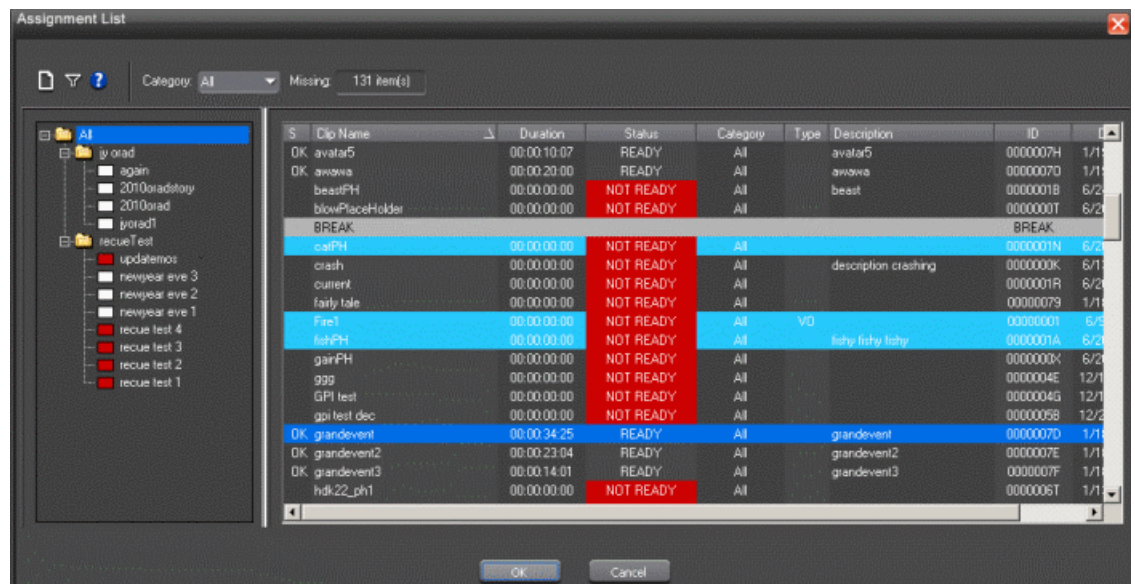
The list of assignments shows each clip/placeholder and its properties:

Column	Description
S	The clip status: displays OK if a clip has been completed, sent to the media server, and is ready for playback. Status is blank if a clip is incomplete and not ready for playback.
Clip Name	The name of the clip/placeholder.

Column	Description
Duration	The duration of the clip when the placeholder was created. This estimated value will be changed later when media is associated with the placeholder. A duration displayed in italics in the Assignment List indicates that the Editorial Duration property has been set to be different than the actual duration of the clip.
Status	MOS status: matches the NCS status. Includes READY/NOT READY, PLAYED, etc.
Category	The category assigned to the clip; you can assign categories based on the editor to receive the assignment, for instance.
Type	The type of story or sequence an editor needs to create: Voice Over (VO), Sound on Tape (SOT), or other types set in SDB Server Options.
Description	Brief description of the clip an editor needs to create.
Clip ID	The clip ID, which is automatically defined when the placeholder is created.
Date	The date the placeholder was created.
P (Protected)	Protected status; displays P if the clip is protected, which prevents it from being erased or deleted from the database. Column is blank if the clip is unprotected.

Receiving Editing Assignments

Assignments automatically appear in your Assignment List Manager when they are sent from the producer or assigned from another editor.

Producers create those assignments as clip placeholders for use in an upcoming news broadcast. You create clips in Aurora Edit and link them to the placeholders in the Assignment List Manager.

Linking sequences to Aurora Playout placeholders

Aurora Edit can link to scripts on iNEWS, Octopus, and AP/ENPS Newsroom computer systems, which you can use as an aid for creating your sequence.

You can link to a news or sports story when you create a new sequence, as described below, by opening Sequence Properties and clicking the Link to Story icon.

1. In Aurora Edit, click the **New Sequence** button in the Bin.
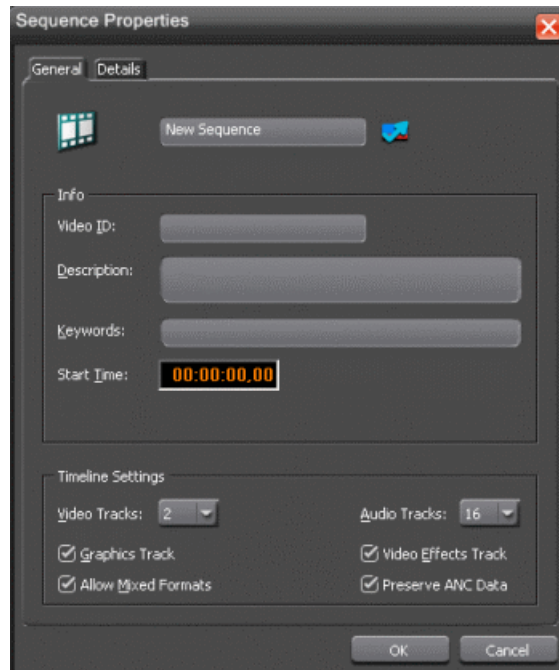
2. Click **Link to Story** button .

The Assignment List window appears, displaying available stories.
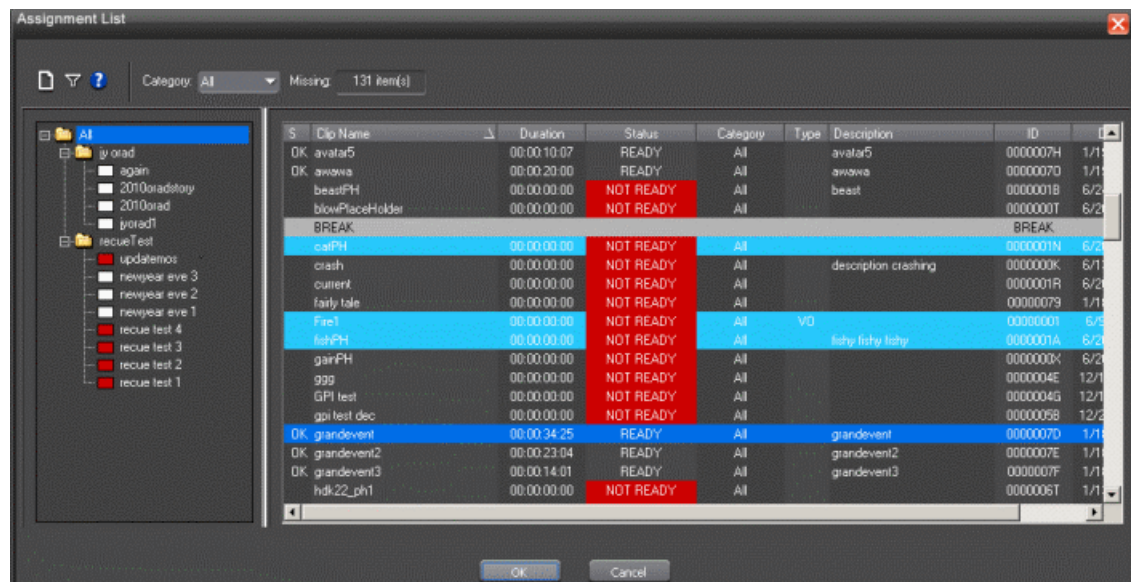
Once an Aurora Playout story is linked, the row color for the selected story
changes to reflect that the story is being edited. The various row colors represent:
green = play, blue = stand by, yellow = stopped, red = not ready.

3. In the Rundown View in the left portion of the Assignment List window, expand the desired rundown by clicking the + icon.

4. In the Rundown View, click on the name of the story you want to work on.

   Then, the list of available placeholders displays in the right portion of the Assignment List window.

5. If more than one placeholder displays, scroll down the list to search for the placeholder.

6. If you know the name of the placeholder to which you want to link, you can type the first character and the active bar will automatically go to the placeholder that starts with that character. Type few characters from the placeholder name to get to the specific placeholder and click **OK**.
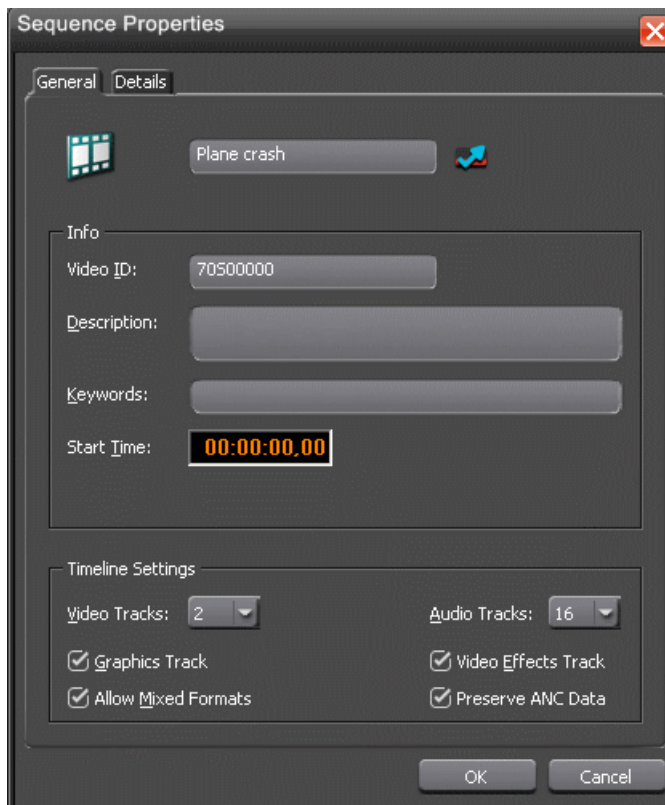
The Sequence Properties window now appears with the placeholder name and video ID filled in.

7. Click **OK**.

   The Timeline opens. Once a story is linked to a placeholder, the row color for the selected story changes to reflect that the story is being edited.

NOTE: When the timeline position cursor moves (e.g., when playing the sequence), the blue highlight in the Story View window moves in concert to match the current timeline position.

Sending completed clips

Once you create a clip or sequence on Aurora Edit for a specific placeholder, you need to send it to a media server so it can be played to air by Aurora Playout.

Your Aurora Edit workstation should be configured with the media server and its default directory as the default Send Destination. See your Aurora Edit documentation for more information.

If you didn't previously link your sequence to a Aurora Playout placeholder, you can do it before sending the clip.

1. Select the completed sequence in the Aurora Edit Bin.

   If you have the completed sequence open in Aurora Edit, it is already selected; click **Save** before sending to make sure you send the latest version.

2. Press **F2** on the keyboard or click the **Send to File** button ![icon] in the toolbar.

   The Send To Selected Destinations window appears, displaying the list of open Aurora Playout placeholders. If you linked the sequence to a Aurora Playout placeholder, that placeholder is highlighted.

3. If not already selected, click the checkbox for your media server's location.
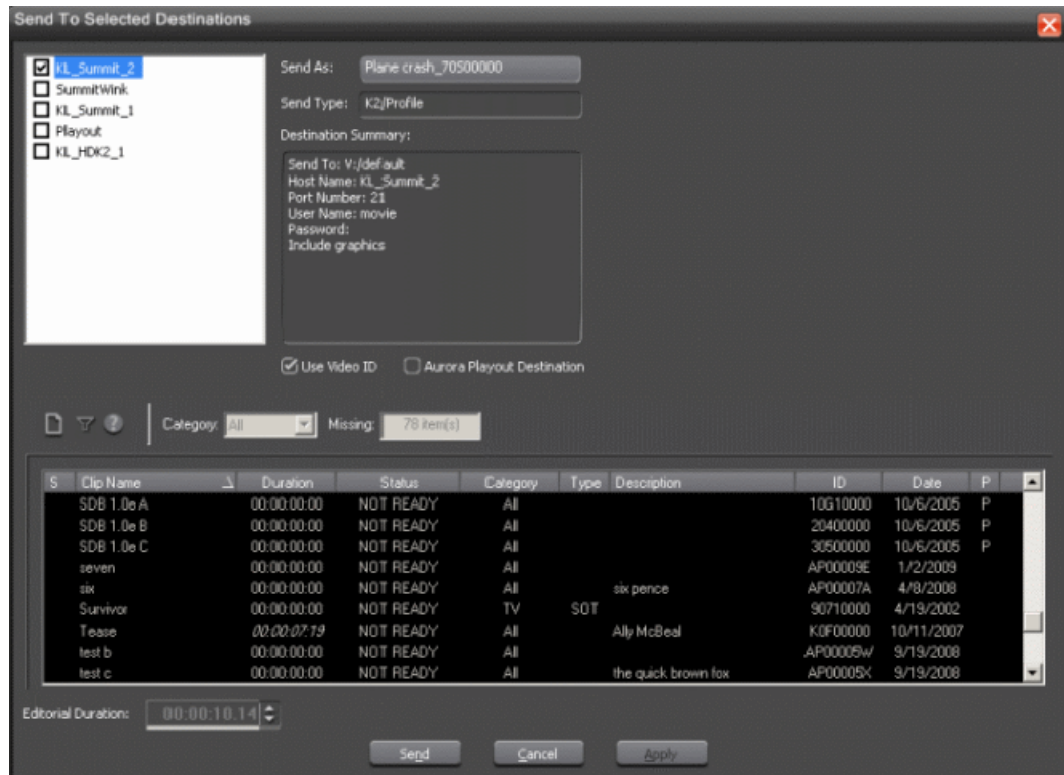
NOTE: Toggling the Missing Clips Only button ⧩ to off displays previously sent placeholders with media. You can also link a sequence to one of these placeholders, which overwrites the media with the new content.

4. If you haven't linked the sequence to a placeholder, select one to assign to your completed sequence.

5. Enter an **Editorial Duration** for the sequence, if desired.

   When sending a linked story to a Aurora Playout destination, you have the opportunity to change the Editorial Duration. To enter a duration, type it into the timecode Editorial Duration field at the bottom of the window, not by changing the Editorial Duration property of the placeholder.

   NOTE: Editorial Duration only affects the Duration Column in the ENPS newsroom computer system.

   The duration is sent back to the Newsroom Computer System as the actual on-air duration of the sequence for more accurate rundown timing.

6. Click **Send**.

The clip is sent to the media server. Once the clip is sent, the placeholder no longer appears in your Assignment List Manager and the number of missing items at the top of the screen decreases by one.
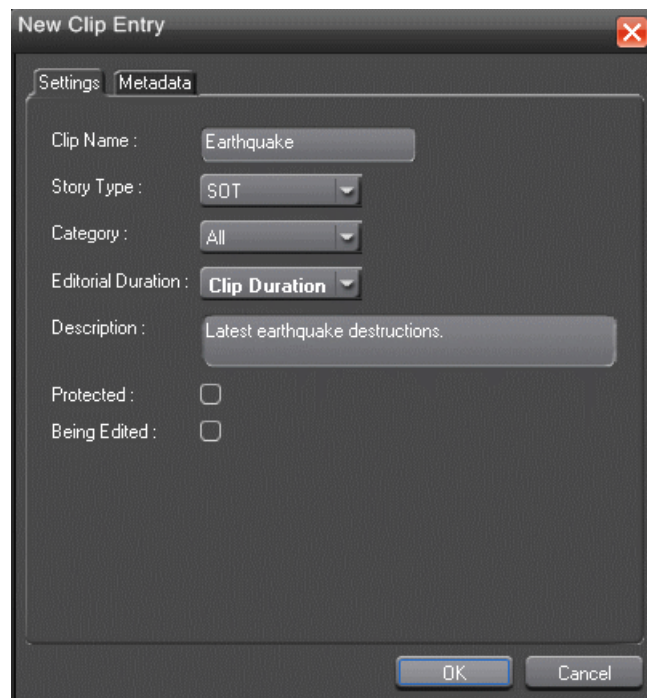
Additional features of Assignment List Manager

In addition to creating clips for assigned placeholders and sending them to the server for playback, there are other features of the Assignment List Manager that you can use.

Creating placeholders in Assignment List Manager

In addition to the assignments you receive from your producer, you can create additional placeholders for clips you want to include in a broadcast.

1. Click the **New Clip** button.

The New Clip Entry window appears with Settings tab and Metadata tab (if MediaFrame is configured):

2. Enter a clip name.

   The placeholder name identifies the placeholder in your Assignment List Manager, the Assignment List Plug-in on the ENPS system, and the Aurora Playout playlist.

3. Optionally, enter additional information about the placeholder:

   • **Story Type**— If desired, specify whether this is a SOT (story on tape), VO (voice over), etc.

- **Description** — Enter a description for the placeholder to help identify the clip you need to create.

- **Category** — Select a category from the drop-down menu. The category determines who receives the placeholder as an assignment. Selecting **ALL** makes the placeholder accessible to all editors who select **ALL** in their Assignment List Manager.

- **Editorial Duration** — If desired, enter an estimated duration for the story or select one from the drop-down list. The editor can also enter an editorial duration that is less than the clip length, which is sent back to the NCS for show timing.

  NOTE: Editorial Duration has the priority over media duration. Once an Editorial Duration is set; it will not be adjusted to clip duration, even after media is associated with the placeholder. The editor needs to set the final Editorial Duration before the clip is sent for playback.

- **Protected** — Check this box to prevent the clip from being deleted from the database.

- **Being Edited** — Check this box to show that the clip for a placeholder is being edited. This field allows editors to easily see that a clip is already being worked on in another edit room.

  NOTE: This field allows users to easily determine that a clip is already being worked on. When checked, these areas designate that the clip is Being Edited: the clip in the Aurora Playout playlist and in the Assignment List Manager changes color, and the text for the clip in the standalone Assignment List Manager changes color.

4. If you already configured MediaFrame for use with Aurora Playout, you can enter metadata for the placeholder in the Metadata tab.

- **Name** — The name of the clip will be the same as the one that you entered in the Settings tab.

- **Source** — Enter the source of the clip.

- **Expires** — Select the expiry date for the placeholder. If no expiry date is needed, you can leave it as the default setting: Not Defined.

- **Description** — The description will be the same as the one that you entered in the Settings tab.

- **Search Terms** — Enter the search term for the clip so that it will be easy to find when you search for it using MediaFrame Search component later.

You can also enter metadata within Keywords tab, which referenced a specific location in the media file. This is done by selecting mark-in/out points on the clip and a keyword will be assigned automatically for that segment.

Within the Custom tab, you can enter additional metadata for the asset such as editor, videographer, location and any other fields that have been listed. If you have the Administrator privileges, you can add, edit, or delete the metadata list.
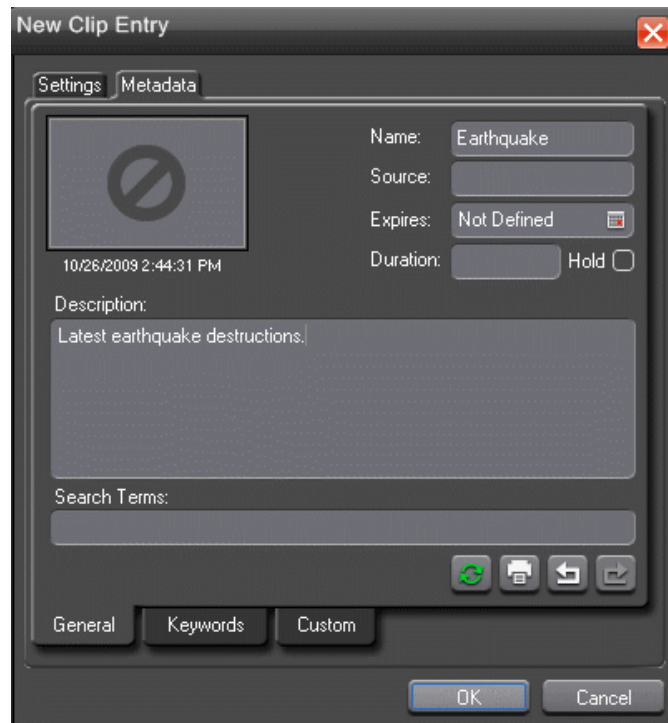
5. Click **OK**.

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

Deleting placeholders in Assignment List Manager

If you need to, you can delete placeholders from the Assignment List Manager.

However, deleting items using the Assignment List Manager only deletes the placeholder, not the corresponding media. For this reason, you should only delete empty placeholders from the Assignment List Manager and use Housekeeper for deleting clips.

• Select the placeholder that you want to delete and click the ✕ **Delete** button.

The placeholder is deleted from the Assignment List Manager.

Changing clip category in Assignment List Manager

If you need to, you can change a clip or placeholder category in the Assignment List Manager.

1. In the Clips window, double-click on the placeholder you want to assign.
2. Select a new editor, workstation name, or other category from the **Category** list.

Category: All

3. Click **OK**.

The placeholder appears on the edit workstation when that particular category is selected.

Viewing by category in the Assignment List Manager

In the Assignment List Manager, you can choose to view assignments within a selected category or all of the assignments in the list.

• Select a category from the **Category** drop-down list.

Category: All

The list displays only the placeholders and clips in that category.

Select **All** to view all assignment placeholders again.

Viewing asset via MediaFrame clip player

If the MediaFrame is configured to create proxy video of edited stories in your system, there will be a corresponding proxy asset created for every story in your placeholders. In the Assignment List Manager, you can view the proxy of a clip if you already have MediaFrame and proxy NAS configured within the same domain in your system.

1. Select a clip with a "Ready" status from the Assignment List.
2. Right-click on the clip and select **View Asset** to view the proxy via the MediaFrame clip player.

The Asset Preview window is displayed if **Enable Trim Capability** is selected in the **Options** window of the Assignment List. If not selected, the Asset Details window is displayed instead.

The Asset Preview window appears.

3. Click the Play button to start playing the clip. Click other control buttons to get to a specific frame on the clip.

If trim capability is enabled in the **Options** window of Assignment List Manager, you can trim by selecting the mark in button , mark out button and click the button to trim the placeholder.

Identifying missing clips

In the Assignment List Manager, you can filter the list of clips to show only missing clips.

• Click the **Missing Clips Only** button.

Only placeholders with missing clips will be shown on the Assignment List Manager.

Click the button again to show the entire clip list.

NOTE: If you are using the Rundown View, you can further filter the list by selecting only the rundown you want to view.

Chapter *10*

Playing clips to air

This section contains the following topics:

Playing Clips to Air

Playback operators use the Aurora Playout application to control the playback of news clips to air.

Using a playlist linked to an NCS rundown or the local Aurora Playout playlist, playback operators cue and play clips as required during a broadcast.
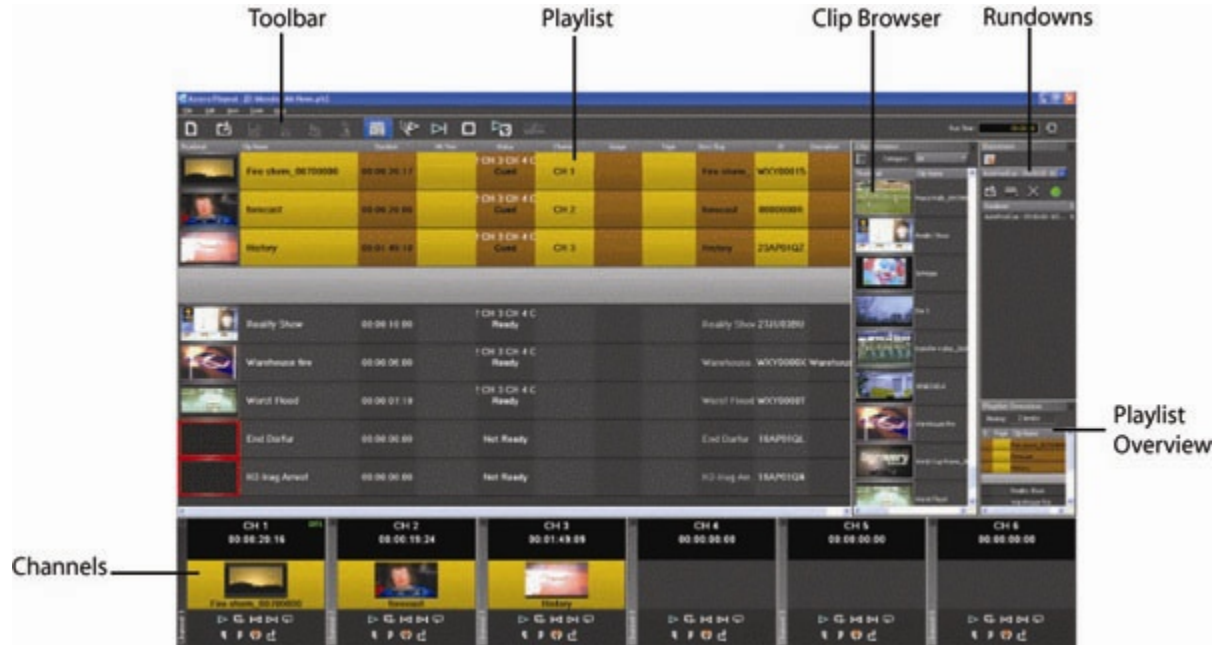
The Clip Browser, Rundowns, and Playlist Overview are all dockable; you can rearrange windows or close windows you aren't using (such as unused channels). The channel windows are not dockable, but each can be opened or closed.

To restore a window you have closed, choose the name of the window from the View menu. To restore all windows to their default locations, choose **Tools | Reset Windows**.

With MediaFrame integration, you can preview clips prior to air using MediaFrame clip player and view metadata properties that had been created by right-clicking within Clip Browser, Playlist Overview, Playout channels and Playlist.

About Playout Toolbar

The Aurora Playout Toolbar lets you access common features.

Icon	Function	Other Ways to Access...
	Creates a blank playlist.	File | New Playlist or Ctrl + N
	Opens a saved local (.pls) playlist.	File | Open Playlist orCtrl + O
	Saves the current playlist as a local (.pls) playlist.	File | Save Playlist orCtrl + S
	Cuts selected clips from the playlist to the clipboard.	Edit | Cut or Ctrl + X
	Copies selected clips from the playlist to the clipboard.	Edit | Copy or Ctrl + C
	Pastes clips from the clipboard into the playlist.	Edit | Paste or Ctrl + V
	Opens the Clip Browser, so you can add clips to the playlist.	Ctrl + I
	Cues all channels specified in the automatic channel assignment starting with the currently selected story.	
	Plays the next clip in the playlist.	Spacebar (if enabled) and external GPI
	Stops playing all clips.	

Icon	Function	Other Ways to Access...
	Puts the Aurora Playout application into Archive Play mode, which lets you archive stories to tape.	
	Re-syncs the Aurora Playout playlist with the NCS when sync has been broken with the NCS rundown, such as by reordering stories.	

About the Playlist

The playlist lists each clip and its properties.

You can rearrange the order of the columns in the playlist by dragging the title of the column to a new location. To restore all columns to their default position, choose **Tools | Reset Playlist Columns**.

You can also resize the columns by dragging to expand or shrink the column name.

Column	Description
Thumb	Displays a video thumbnail of the clip, if available. To change the thumbnail size, click the Thumb column heading or select View	(Small) or (Large) Thumbnail.A red border appears around a blank thumbnail if the clip is not ready for playback.
Clip Name	Displays the name of the clip. A scissors icon appears next to a clip that has been trimmed.
Duration	Displays the full duration of the media, not the editorial duration.
Hit Time	Counts up the relative time that the clip plays from when the Reset button was pressed, which is usually when a show starts.
Status	Displays the available channels and the status of the clip: [Not Ready] — The clip is not ready to play. [Ready] — The clip is ready to play. [Blank] — Clip has not yet been cued. [Cued] — The clip is cued to a specific channel and is ready to play. [Roll] — The clip is playing to air. [Stopped] — The clip has been manually stopped during play. [Played] — The clip has finished playing.
Channel	Displays the channel in which a clip is currently cued or playing.
Assign	Displays the channel assigned through the NCS or Aurora Playout. Allows you to assign a clip to a channel, overriding automatic channel assignment.
Page	Corresponds to the page of the NCS rundown. This column is blank if you are not using ENPS or Octopus with Aurora Playout or if the producer did not select Freeze Page Numbers for the rundown properties in ENPS.
Story Slug	Displays the name of the story from the NCS rundown.
ID	Displays the clip ID, which is automatically set when you create the placeholder.
Description	Displays any descriptive text entered in placeholder properties.
Graphics	Displays the graphic ID, which is automatically created when you insert graphics into your story. The column also displays total number of graphics inserted into the story if you have multiple graphics and shows the graphic ID for the particular graphic that is being play-to-air. Displays **Disconnected** if Aurora Playout is not connected to the graphic device. *NOTE: Graphics column will only be available on the playlist if you have the license for graphics and graphics control is enabled in **Tools|Options|Graphics** of Aurora Playout.*

Understanding Playlist colors

Each playlist entry appears in a color that identifies its status in Aurora Playout:

Row Background Color	Description
Yellow	The clip is cued for playback.
Green	The clip is playing.
Orange	The clip is stopped during play.
Gray	The clip is in post roll.

1. Select **Tools | Options**.
2. Click on the **Color** tab.
3. Click the row color box that you want to change and select a new color.

About Playout channels

The channel area displays all channels available on your system.

You can perform the following functions for each channel.

| Icon	Function
▷	Plays the current clip in the channel. If a clip is playing, clicking this button pauses the clip; click it again to resume playback.
⏮	Recues the current clip.
◁	Cues the previous clip in the channel.
▷|	Cues the next available clip.

Icon	Function
	Loops playback for the current clip.
	Sets a Mark In point to begin trimming the clip. A Scissors icon appears next to the clip name in the playlist to indicate a trimmed clip.
	Sets a Mark Out point to end trimming the clip.
	Clears both the Mark In and Mark Out points from the clip.
	Previews the last few seconds of the clip and immediately recues. (The number of seconds that previews is set under Options and determined by your studio's needs.)

This symbol indicates that an Aurora Playout channel is no longer connected to its corresponding channel on the media server. Check the following possible problems; as you cannot remotely control the media server while this symbol is present:

• If you are using RS-422, there is no physical serial/network cable connection between Aurora Playout and the media server used for playout.
• If you are using Ethernet channel connections, the entries for media server or Server Channel Name are not set correctly in the Aurora Playout Channel Configuration.
• COM ports are set incorrectly in the Aurora Playout Channel Configuration.
• Playout channels on the media server are not set to use the remote AMP protocol.

About Rundowns

The rundown area displays the open rundowns and their status, a list of available rundowns, server status, and control buttons.
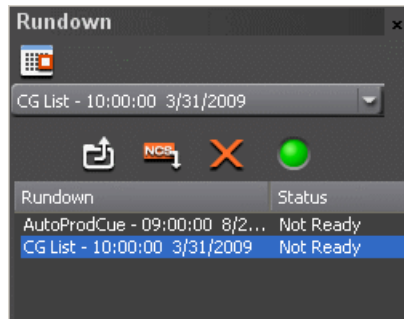
You can open up to five rundowns at once; all open rundowns merge into a composite playlist, allowing seamless control of back-to-back rundowns.

Clicking **Date** toggles a calendar which lets you filter the display of rundowns to a specific date.

Selecting a rundown from the rundowns list selects all clips in that rundown in the playlist area.

| Icon	Function
	Opens the selected rundown and creates a playlist.
	Appends the selected rundown to the end of the current playlist.
	Removes the selected rundown from the playlist.
	Indicates the connection status between Aurora Playout and the XMOS Server; green indicates a successful connection.

The status displays READY when the "MOS Ready to Air" property is enabled for a rundown through ENPS or Octopus. The Status column is not used with iNEWS; the column can be resized off of the screen if desired.

About the Clip Browser

Clip Browser displays thumbnails and information of clips and placeholders from Aurora Playout database, allowing you to easily add them to your playlist.

If the Clip Browser window is not open, click **Clip Browser button** 📇 from the toolbar.

The Clip Browser opens, displaying clips and placeholders from Aurora Playout database. Dragging a clip from the Clip Browser window and dropping it on the Playlist window appends the clip to the playlist.
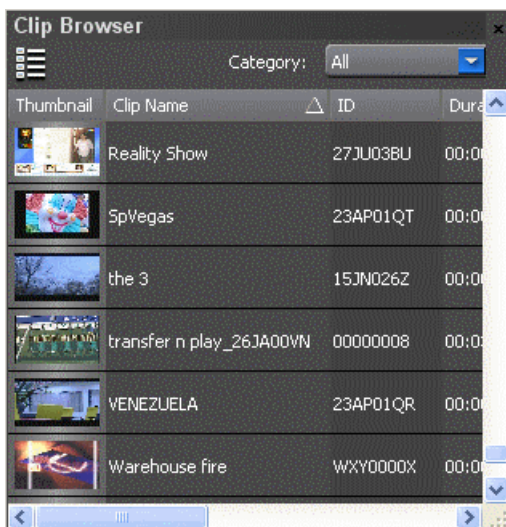
You can add clips that are ready or empty placeholders to which media will be sent later.

To filter display items on the Clip Browser window, you can select a specific category from the category dropdown list. Select All to view all clips and placeholders again.

To toggle the thumbnail size on Clip Browser window, you can click on the Toggle Thumbnail View button 📇.

The Clip Browser also consists of clip and placeholder information as described below:

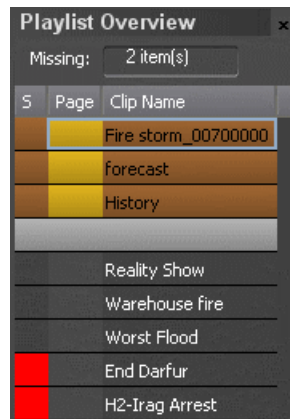| Column	Description
Thumbnail	Displays a video thumbnail of the clip, if available. A red border appears around a blank thumbnail if the clip is not ready for playback.To change the thumbnail size, click the Toggle Thumbnail View button.
Clip Name	Displays the name of the clip.
ID	Displays the clip ID, which is automatically set when you create the placeholder.
Duration	Displays the full duration of the media, not the editorial duration.
In Use	Displays a check sign if the clip is appended manually to the playlist.
Category	Displays the category assigned to the placeholder.

Column	Description
Type	Displays the story type of placeholder that had been created: Sound on Tape (SOT), Voice Over (VO), or other types set in in the SDB Server options.
Date	Displays the date the placeholder was created.
Description	Displays any descriptive text entered in placeholder properties.

You have several ways to search for clips and placeholders in Clip Browser. The most common way is to scroll down through the window to find the placeholder that you need. You can also get to a specific placeholder by entering the first few characters of the placeholder name.

- Click on one of the placeholders in the Clip Browser window and scroll down to search for other placeholders.
- Use the up and down arrow keys on your keyboard to navigate through the list.
- To search for a specific placeholder, type the first character and the active bar will automatically go to a placeholder that starts with that character. If you type a second character within 1 second of the first character, the active bar will go to a placeholder that starts with those 2 characters. If you enter the same character repeatedly, the active bar will navigate through all placeholders that start with that character.

About the Playlist overview

The playlist overview displays a subset of the playlist columns, allowing you to scroll to other parts of the playlist without disrupting the view in the main playlist window.

The Playlist Overview window shows clip's status, page and clip name.

| Column	Description
Status	Displays the status color of the clip: Black — The clip has not yet been cued. Yellow (Cued) — Clip is cued to a specific channel and is ready to play. Green (Roll) — The clip is playing to air. Gray (Played) — The clip has finished playing. Orange (Stopped) — The clip has been manually stopped during play. Red Square — Clip not ready for playback.
Page	Corresponds to the page of the ENPS or Octopus rundown. This column is blank if you are not using ENPS or Octopus with Aurora Playout or if your Producer didn't choose the **Freeze Page Numbers** option in ENPS.
Clip Name	Displays the clip name.

Creating a Playlist

You need to create a playlist before you can play clips to air.

*   By opening a rundown that you created in a newsroom computer system
*   By manually creating a playlist in Aurora Playout

Opening an NCS Rundown

If you use a newsroom computer system such as ENPS, iNEWS, or Octopus to create news rundowns, you can open those rundowns in Aurora Playout.

*   Select a rundown from the drop-down list and click the **Open Rundown** button.
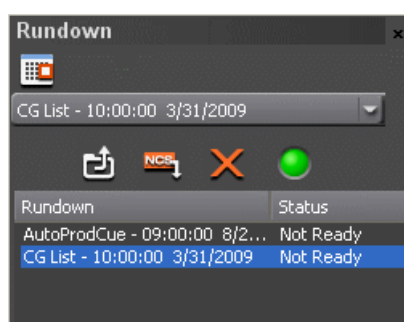
The rundown opens in the Aurora Playout application, displays all clips in the rundown, and cues clips to channels if **Auto Cue on Loading Rundown** is enabled. The playlist displays a headframe for each clip; while a red border and blank thumbnail appear for clips that are not yet ready for playback.

Appending rundowns to a playlist

With Aurora Playout and your NCS, you can add rundowns to create a playlist that includes all of the clips and other information from each of the rundowns. Appended rundowns are added to the end of the current playlist.

1. Select the rundown from the drop-down list.
2. Click the **Append Rundown button** ![icon].

The rundown is added to the end of the current Playlist, displays in the Playlist Overview, and the rundown name is added to the Rundown list.
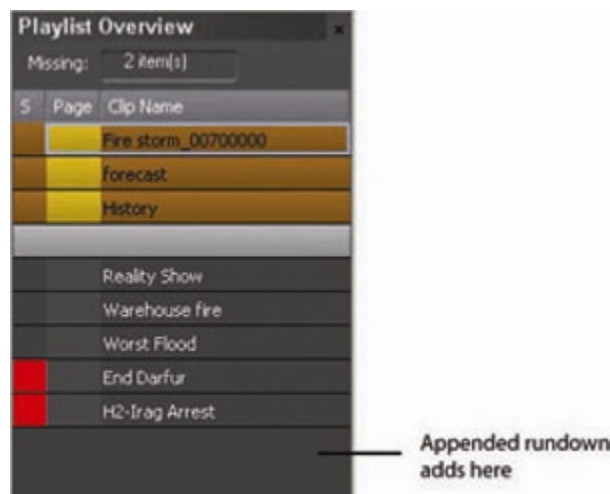
NOTE: You can open up to five rundowns in the playlist at a time.

Removing rundowns from a Playlist

If you don't need a certain rundown anymore, you can remove the rundown from the playlist.

1. Select the rundown to remove from the rundown list window.
2. Click the **Close Rundown button** ![icon].

The rundown is removed from the playlist.

Previewing other rundowns

If you need to look at another rundown, you can open it without disrupting the current Aurora Playout playlist.

1. Select **View | Rundown Preview** or press **Ctrl + R** on the keyboard.

The Rundown Preview window appears.

2. Select a rundown from the Rundown drop-down list.

The Rundown Preview window displays all placeholders and completed clips for the rundown.

A red square in the status column indicates that the clip is not complete. You can also see at a glance how many clips are missing.
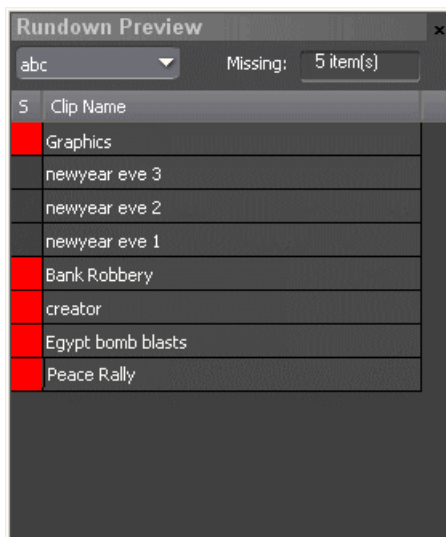
3. Select other rundowns from the drop-down list if you wish to preview other rundowns.
4. Click the **X** icon on top right of the window if you want to close the Rundown Preview window.

Creating a new playlist manually

Another way to create a playlist is manually using Aurora Playout.

1. Click the **New Playlist** button 🗋 in the main toolbar.

   An empty playlist appears.
2. If the Clip Browser isn't open, click the **Clip Browser** button 📧.

   The Clip Browser opens, displaying all available clips and placeholders from the Aurora Playout database.
3. Drag a clip into the Playlist window or the Playlist Overview window.

   The clip appears in the main playlist window.
4. Continue adding clips to the playlist as necessary.

Dragging a clip from the Clip Browser window and dropping it onto the horizontal scroll bar at the bottom of the Playlist window appends the clip to the end of the playlist.

You can add clips that are ready or empty placeholders to which media will be sent later.

Saving local playlists

You can save a playlist if you need to re-use it in a later broadcast.

For example, you could create a playlist for a 6 PM broadcast and then modify it for the 10 PM broadcast.

1. When you are done adding clips, click the **Save** button 🖫 on the main toolbar.
2. Select a location for the playlist and enter a file name.
3. Click **Save**.

The playlist is saved with a .pls extension.

To save a playlist with a different name, select **File | Save As**, enter a new filename, and click **Save**.

You can also save an NCS rundown as a local playlist. This creates a "snapshot" of the current state of the rundown. If the rundown is then changed on the NCS and you need to revert to the previous version, you can open the local .pls version.

Opening saved Playlists

You can open a saved playlist and re-use it if needed.

1. Click the **Open Playlist button** 🗐 on the main toolbar.
2. Select a playlist and click **Open**.

The playlist opens and displays the list of clips it contains.

You can modify, review, or play the playlist to air.

Appending a Playlist

If you want to add another local playlist, you can append one to the current playlist in Aurora Playout.

1. Select **Append Playlist** from the File menu.

   The Open window appears.
2. Select the playlist you want to append by browsing to a .pls file, and click **Open**.

The playlist appends to the end of the open playlist in Aurora Playout.

Exporting a Playlist

You can also export a playlist, open it in a text editor or spreadsheet program, and then print it.

1. Select **Export Playlist** from the File menu.

   The Save As window appears.
2. Enter a name for the playlist and click **Export**.

The playlist is saved as a .TXT file.

You can import the .TXT file into a spreadsheet program that supports comma delimited format and it sorts the playlist data into columns.

Chaining Clips in a Playlist

Sometimes you may want to group two or more clips together so the clips play back-to-back as one continuous clip. This grouping is called chaining, and provides the advantage of playing clips in succession without having to cue and play each one individually.

You can also chain clips through your NCS through the Auto-Chain feature by setting up your system so that any two or more consecutive clips assigned to the same channel will chain automatically.

1. Select the clips you want to chain by clicking on one clip and holding down the Shift key while selecting the other clip(s).
2. Right-click on one of the selected clips and select **Chain Clips**.

The clips are now chained together, indicated by a blue rectangle around the clips.

Cueing Clips

Once you have a playlist, you can cue the clips to the appropriate channels and play them to air.

The playlist automatically cues the first clip if the Auto Cue on Loading Rundown option is on, and cues subsequent clips when prior clips have played. If a clip isn't ready for playback, the clip is skipped and the next available clip cues. You can also cue clips manually.

- Select the clip that you want to cue and click the **Cue All** button ⎗ on the toolbar.

  All channels are cued as specified in the automatic channel assignment, starting with the selected clip.
- Manually cue a clip by dragging it to the target channel.
- In the channel window, click one of the following buttons:

  - **Recue Current Clip** ⎗ — Resets the current clip in the channel back to the beginning; the clip is ready to play.
  - **Cue Previous Clip** ⎗ — Cues the previous clip assigned to the particular channel; if no channel assignment is specified, Aurora Playout cues the first previously available clip.
  - **Cue Next Clip** ⎗ — Cues the next clip assigned to the particular channel; if no channel assignment is specified, Aurora Playout cues the next available clip.
  - **Turn Loop Playback On/Off** ⎗ — When on, continuously loops the currently playing clip. To turn loop playback off, click this button again.
  - **Set Mark In** ⎗ — Marks the starting point of the trimming of the clip.
  - **Set Mark Out** ⎗ — Marks the ending point of the trimming of the clip.
  - **Clear Marks** ⎗ — Clears all the trim marks on the clip.
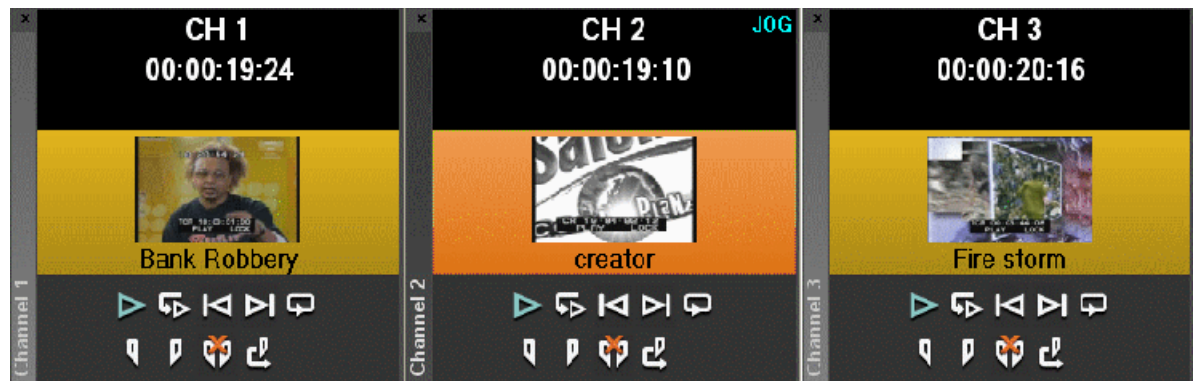 - **Out Cue Preview** ⎗ — Automatically plays the last few seconds of the clip and immediately recues. (The number of seconds that is previewed is determined by your studio's needs).

Using the Jog feature

If you need to change the start position of a cued clip, you can jog to the desired frame.

- Use the left and right arrow keys to step through 1 frame at a time.
- Use Ctrl + the arrow keys to step through 10 frames at a time.
- Use Shift + the arrow keys to step through 1 second at a time.

If desired, you may display trim controls by selecting **View | Channel Edit Controls** and setting a new starting point with the Mark In button.

When you play the clip, the clip starts at the new position.

NOTE: The X-keys jog/shuttle controller can be used as an alternative to jogging via the keyboard and also allows shuttling of the clip.

Playing clips

During a news broadcast, you play clips either according to the script or when the director signals you.

If not already cued, cue the clip to the desired channel. To cue a clip, drag and drop it into a channel window.

*   Click the **Play** button ▷ in the channel window.

The Play button is a toggle and changes to **Stop** when clicked; to stop a clip during play, click the **Stop** icon to pause it. Click **Play** to resume playing the clip.

You can also play the next clip in the playlist by clicking the **Play Next** button ▷| on the Aurora Playout toolbar.

For ease of operation, you can control clips in the playlist using GPI inputs, X-keys and keyboard function keys.

Playing clips with Orad graphics

Aurora Playout supports graphics workflow through an interface to the Orad graphics playout engine, Maestro. Editors can place MOS-driven graphic elements on an Aurora Edit timeline and then transfer graphic timing information directly to Aurora Playout.

On the Aurora Playout playlist, graphic ID can be seen in the Graphics column so operators can look at a glance to see which story includes graphics.

Thum...	Clip Name	ID	Duration	Hit Time	Status	Channel	Assign	Page	Story Slug	Description	Graphics
	2010oradstory	00000074	00:00:30:00		Ready				2010oradstory		00000062
	2010orad	00000073	00:00:07:05		Ready				2010orad		00000061
	today's news	00000063	00:07:30:00		Ready				jyorad1		

To play a clip:

• If not already cued, cue the clip to the desired channel. To cue a clip, drag and drop it into a channel window.

Clips with Orad graphics contain timing information that will be retrieved by Aurora Playout.

• Click the **Play** button ▷ in the channel window.

As the story airs, Aurora Playout triggers these frame accurate graphic elements through the graphics device for play-to-air.

If you have multiple graphics in your story, each time that a graphic is triggered and subsequently removed; the graphics column updates the number of graphics sequence in "n of n" value and displays the graphic ID of the currently playing graphic.

For Orad events, a second play command will automatically be sent via Aurora Playout for graphics that have an animated out. This trigger will begin the exit sequence for the graphic so that it can be removed at the out point of the timeline, which has been specified by the editor.

Archiving Clips

The Archive Play feature allows you to automatically play all clips in a playlist on a selected channel and record the output of that channel on a VTR.

You need to create a black clip if you don't have one.

To configure Archive Play, you must select the archive channel from the Archive Play configuration tab. You can also change the Archive Black duration on that tab; Aurora Playout rolls five seconds of black between each archived clip by default.

1. Click the **Archive Play** button to enable Archive Play.

   A message indicating successful connection to the VTR appears.

2. Cue a clip to the archive channel.

   Select the first clip and click the **Cue All** button on the toolbar.

> *NOTE: If you are archiving clips to a VTR, the first clip cued is the BLACK file.*

3. Click the **Play** button ▷ in the channel window.

   Aurora Playout starts the VTR deck recording and a message indicating play has started appears.

After all clips have played, the VTR deck stops recording and Archive Play mode automatically turns off.

You can use the Run Time counter to determine if you have enough room on the VTR tape to record all of the clips in a rundown for archiving.

Run Time: **00:16:05 / 00:35:01**

In Archive Play mode, Run Time displays as current hit time/total run time, including black clip duration. You can also clear the Run Time counter by clicking the **Reset Counter** button.

Aurora Playout logs "as run" data in a comma-delimited log file (C:\Aurora Playout\Log\ArchivePlay.log). Each line includes the Date, Time (start time to the nearest second), VTR Tape Time Code, Rundown Name, Clip Name, Clip ID, and Duration. You can use log data to determine where a specific story starts.

Each time you enable Archive Play, you can choose whether to clear the existing log file or append the new data.

Recording a black clip for Archive Play

To archive clips, you need to create a file called "**BLACK**" that contains black video.

NOTE: The file BLACK needs to be in the bin used for playout of clips (normally V:/default bin) in order to work properly.

You can record the file in two ways—using Aurora Edit or your media server.

- Using Aurora Edit:
  a) Create a new sequence named **BLACK**.
  b) Right-click in the Timeline and select **Insert Filler**, enter a 10 second duration, and click **OK**.
  c) Save and close the file.
  d) Send the file to the playout bin on your playout server.

- Using media server:
  a) Pull the input source (make sure you don't have a video feed on this source).
  b) Create a new clip and name it **BLACK**.
  c) Record for approximately 10 seconds.
  d) Eject **BLACK** from the record channel.

Customizing playlist for broadcast

In addition to cueing and playing clips, there are many other features of Aurora Playout that let you customize a playlist for your broadcast.

Rearranging the Playlist layout

You can change the order of the displayed playlist columns by dragging a column heading to the left or right.

The Thumb column is always the first column in the playlist; you can't move it or move another column in front of it.

• Select **Tools | Reset Playlist Columns**.

Viewing clip properties

You can view the properties of a clip in the playlist at any time.

The clip properties window displays the clip story type, category, and editorial duration, which are not shown in the playlist.

1. Double-click the clip in the Playlist Window.

   The Clip Properties window appears.
2. Click **OK** to close the window.

Assigning clips to channels

If you don't specify a specific channel for a clip, the system automatically assigns it to the next available channel. Channels can be set to be in rotation when you configure your Playout channels.

• Right-click on a clip in the playlist and select **Assign to "X".**

New channel assignment appears on the Assign column.

> For instance, you may have a small clip that you want to play in between two longer clips to create a smooth transition. So, you can assign the small clip to a specific channel.
>
> *NOTE: If you are using an NCS, you should assign channels through the NCS instead of using this method.*

You can remove the clip assignment by right-click on the clip and select **Unassign Clip**.

All clips that are unassigned to specific channels will be cued to any channels in rotation, while a clip that is assigned to a specific channel will only be cued to that channel regardless of the current rotation status.

Rearranging clips in a Playlist

You can rearrange clips in the playlist of Aurora Playout.

However, doing so breaks the link between Aurora Playout and the NCS rundown. Therefore, you won't see any subsequent changes made to the NCS rundown. For this reason, you should reorder the rundown through the NCS when possible.

If you created a playlist manually, you can rearrange clips as necessary.

To rearrange clips, you can use one of the following methods:

- Using the toolbar icons or keyboard shortcuts, you can cut (**Ctrl + X**), copy (**Ctrl + C**), and paste (**Ctrl + V**) clips in any order in the playlist.
- You can also just drag clips to another position in the playlist.

Adding new clips to a playlist

Occasionally, you may need to add a news clip directly to the playlist if you aren't able to add it to the NCS rundown first.

However, doing so breaks the link between Aurora Playout and the NCS rundown, and the Sync button ![icon] on the toolbar flashes to indicate that the playlist is not synced anymore. In that case, you won't see any subsequent changes made to the NCS rundown.

1. If the Clip Browser isn't open, click the **Clip Browser button** ![icon].
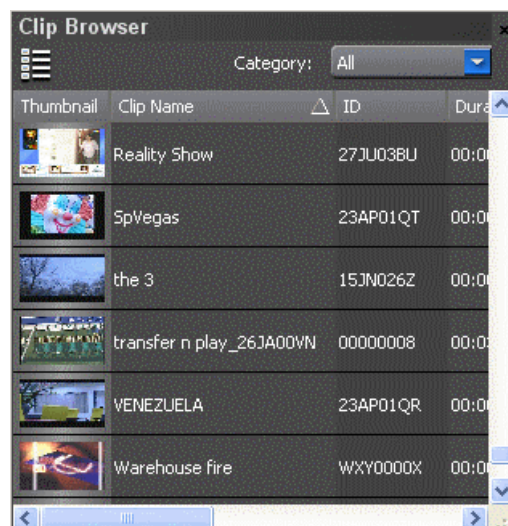
The Clip Browser appears, displaying all available clips.

2. Drag a clip into the Playlist window. To append the clip to the bottom of the playlist, drag the clip onto the scroll bar at the bottom of the playlist window.

The clip appears in the Playlist window and the Playlist Overview window.

3. Continue adding clips to the playlist as necessary.

To re-link the Aurora Playout playlist with the NCS rundown, click the flashing Sync rundown icon ![NCS icon] on the Aurora Playout toolbar. You will be prompted to save changes as a local playlist before re-syncing.

Using the context-sensitive playlist menu

Several Aurora Playout features are available by right-clicking in the Playlist window.

Menu Item	Description
Assign to channel_name	Assigns the selected clip to channel_name for playback. Choose **Tools	Options	Channel Configuration** to change channel names; you may configure up to six channels.
Unassign Clip(s)	Removes the channel assignment from the selected clip(s).
Mark Played	Marks the currently selected clip(s) as played.
Unmark Played	Removes the played status from the currently selected clips.
Unmark All Played	Removes the played status from all clips marked played.
Chain Clips	Chains two or more selected clips together for continuous playback.
Unchain Clips	Unchains the selected clips.
View Asset	Displays the low-resolution proxy of the selected clip.
View Properties	Displays the properties of a selected clip.

Using MediaFrame Plug-in

MediaFrame components can be used with Aurora Playout after the MediaFrame server has been specified within the general setting of SDB Server.

Below is the MediaFrame component that can be used with the Aurora Playout application:

• Viewing assets via MediaFrame clip player

Viewing assets via MediaFrame clip player

If the MediaFrame is configured to create proxy video of edited stories in your system, there will be a corresponding proxy asset created for every story in your placeholders. Within the Playlist, Clip Browser and Playlist Overview; you can view the proxy of a clip if you already have MediaFrame and proxy NAS configured within the same domain in your system.

1. Select an asset.
2. Right-click on the asset and select **View Asset** to view the proxy via the MediaFrame clip player.

The Asset Preview window appears.

3. Click the Play button [▷] to start playing the clip. Click other control buttons to get to a specific frame on the clip.

You can also select the mark in button [◖], mark out button [◗] and click the [✂] button to trim the placeholder.

Chapter **11**

Managing Clips with Housekeeper

This section contains the following topics:

- *About the Housekeeper*
- *About Housekeeping tab*
- *About Clip Import tab*
- *About Archive tab*
- *About Housekeeper toolbar*
- *Deleting clips from the clip database*
- *Importing clips from a media server*
- *Changing clip properties*
- *Creating placeholders in Housekeeper*
- *Using MediaFrame in Housekeeper*
- *Archiving clips in Housekeeper*
- *Resynchronizing clips*

About the Housekeeper

Housekeeper lets you remove unwanted clips from the database to reduce the database size. You can also import clips from a media server to access a wider variety of video footage and move files to archive directories.

Housekeeper typically runs on the same computer as the Aurora Playout application, but can be installed separately on another system as well. Housekeeper consists of tabs that let you remove clips from the database, import clips, and archive clips.

With MediaFrame integration, you can search, add and edit metadata of assets that have been created. In addition, you also can preview proxy of assets via the MediaFrame clip player.

About Housekeeping tab

Use the Housekeeping tab to remove clips and placeholders from the database. Deleting clips removes them from both the Aurora Playout database and the media server.

The left side of the Housekeeping tab displays clips and placeholders in the database, the right side displays the Recycle Bin, and the lower part displays a system message area.
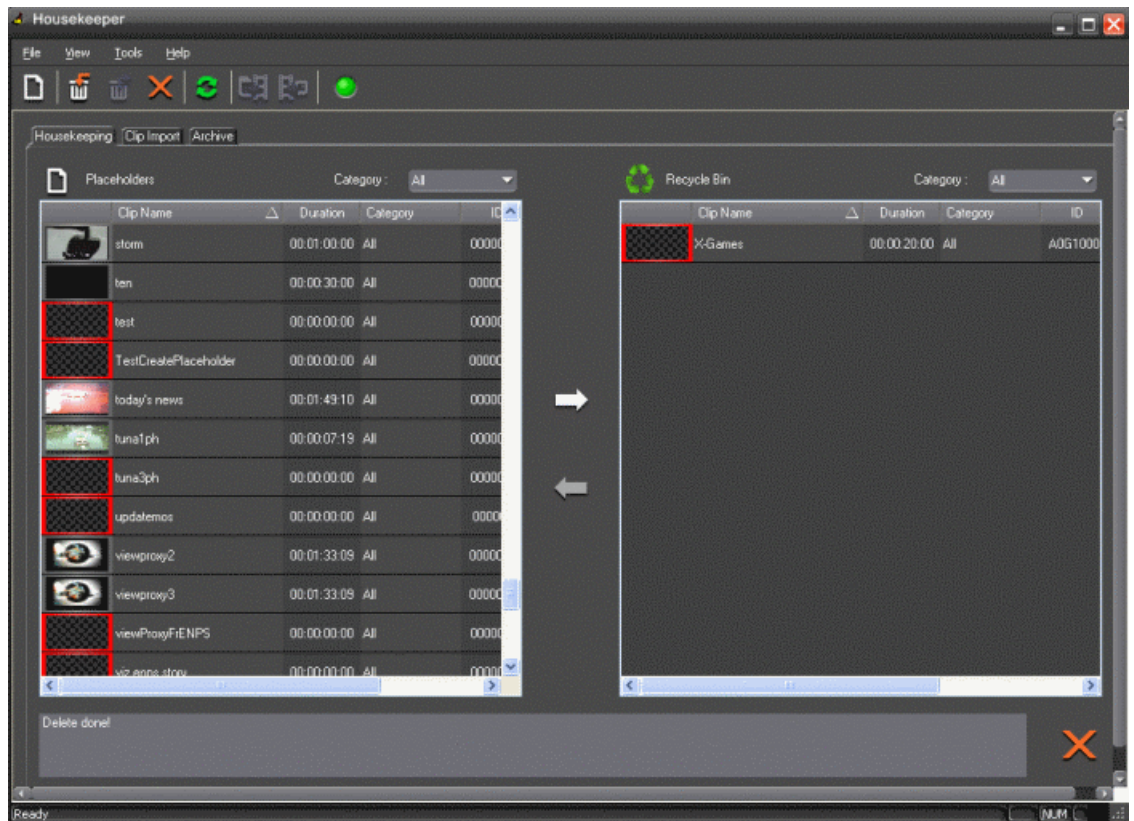
About Clip Import tab

You use the Clip Import tab to associate existing clips on a media server with Aurora Playout placeholders. Once you import a clip to the database you can use it in playlists.

The left side of the Clip Import tab displays empty placeholders in the Aurora Playout database and on the right are available clips on the media server that you can import.
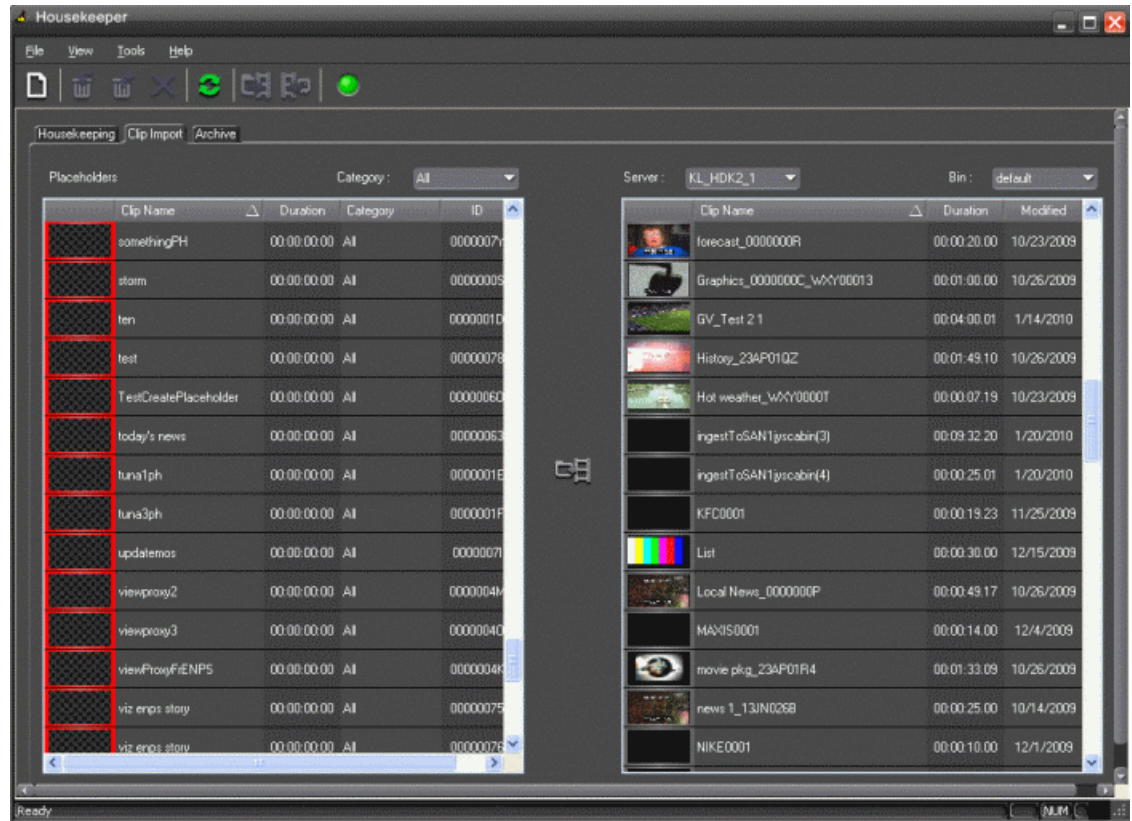
About Archive tab

You use the Archive tab to copy selected clips from a media server's playout bin to a media server's archive bin so the clips can be archived for permanent storage.

The archive bin can be located on a different media server than the one used for playout.

The left side of the Archive tab displays the ready clips in your database and the right side displays the archive bin on the media server.
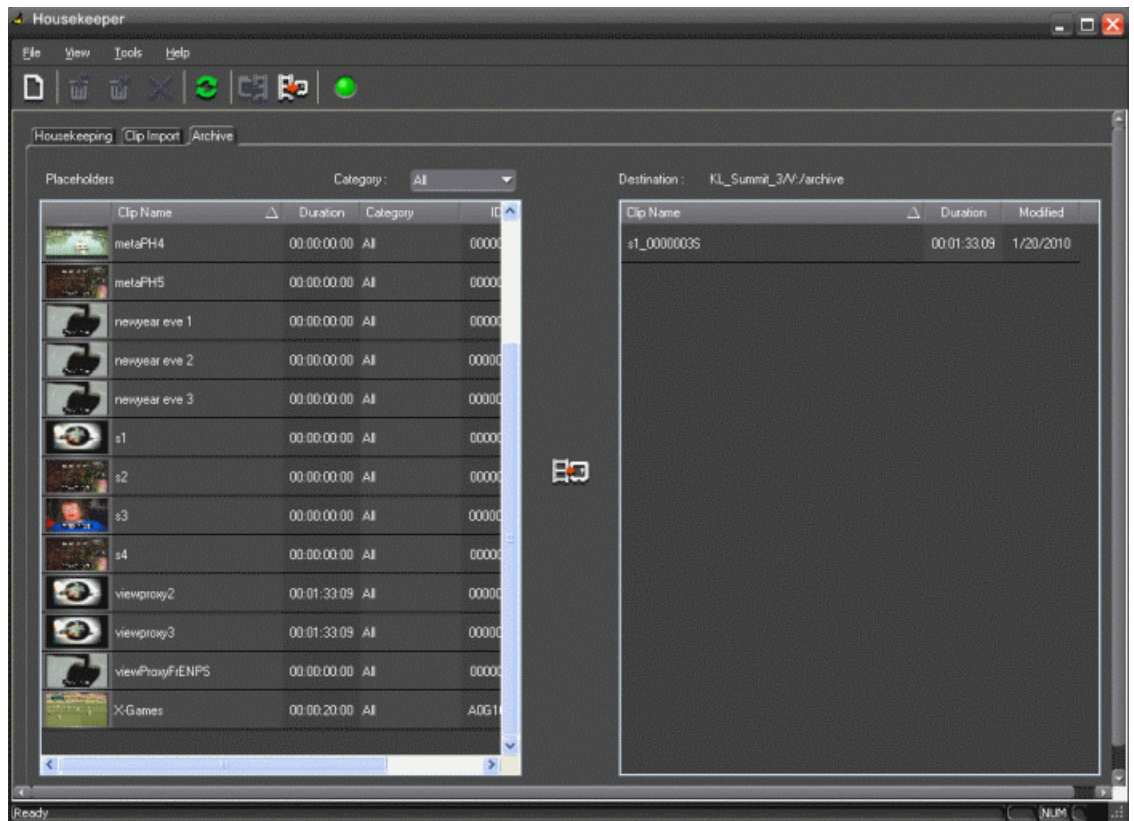
About Housekeeper toolbar

The toolbar lets you access common Housekeeper functions.

Icon	Description
	Creates a new placeholder in the Aurora Playout clip database.
	Allows you to send a clip to the Recycle Bin where it can be deleted.
	Allows you to restore a deleted clip from the Recycle Bin.
	Deletes the selected placeholder from the clip database, as well as its media from the media server, bypassing the Recycle Bin.

Icon	Description
✕	
↻	Refreshes the view of the clip database.
🎞	Links the selected media server clip to the selected placeholder in Aurora Playout. (This feature is enabled only on the Clip Import tab).
🎞	Copies the selected clip into an archive bin on the media server. (This feature is enabled only on the Archive tab).
●	Displays media server status. Green indicates all media servers are connected; red indicates at least one server is disconnected. Click the icon to see a list of all media servers and their status.

Deleting clips from the clip database

You use the Housekeeping tab to remove clips from the clip database.

To manage the size of the clip database, you should remove clips from the database when they are no longer needed. When you delete clips with the Housekeeper utility you remove the placeholder from the Aurora Playout database and the corresponding media from the media server.

Deleting clips immediately

You can use the delete option to delete clips permanently, bypassing the Recycle Bin.

• Select the clip(s) in the Placeholders area and click the **Delete** button ✕.

Moving files to the recycle bin

If you want to remove clips from your system but don't want to immediately delete them, you can move them to the Recycle Bin and later empty the bin.

1. Select the clip(s) you want to move to the Recycle Bin.
2. Use one of the following methods to move the clip(s):

- Click the right arrow ➡

- Drag the clip(s) from the Clips area to the Recycle Bin

- Click the **Send to Recycle Bin button** 🗑

To move more than one clip at a time, hold down the **Ctrl** key while selecting clips and then drag the files into the Recycle Bin. You can also select a consecutive range of clips by holding down the **Shift** key, clicking the first clip in the range, and then clicking the last clip in the range.

If you move a file by mistake, drag it back into the Clips area. It will not be deleted.

Emptying the recycle bin

After you move the files to be deleted into the Recycle Bin, you can empty it to delete the files:

- Click the **Purge** button ✕.

The Recycle Bin empties and the clips are permanently removed from the clip database and the media server.

Unprotecting a clip

Protected clips are identified with a **P** in the rightmost column of the Housekeeping tab, and cannot be deleted.

To delete a protected clip, you have to unprotect it before moving it into the Recycle Bin.

1. Double-click the desired clip.
2. Uncheck the **Protected** checkbox.
3. Click **OK**.

You can now move the clip into the Recycle Bin and delete it.

Refreshing the clip list

If you think the clip database may have changed since you opened the Housekeeper utility, you can refresh the clip list so you see the most recent list from which to choose files.

- Click the **Refresh Clip List button** 🔄.

The list refreshes with any changes.

Deleting clips from a media server only

You can delete clips from the media server without deleting the placeholder from the Aurora Playout database.

Rather than deleting clips, if you want to update a clip after it has been sent to a media server for playback, you can overwrite it by associating the new sequence with the same placeholder.

1. On the Housekeeping tab, right-click on the clip you want to remove.
2. Choose **Delete clip from media servers**.

The clip is removed from the media server and appears as "Missing". In the Housekeeper Placeholder list, the placeholder remains but the thumbnail is empty with a red box around it.

NOTE: If the media fails to delete, make sure it is not Protected and is not currently cued to a channel in Aurora Playout.

Importing clips from a media server

Within the Clip Import tab of the Housekeeper utility, you can import clips from media servers. You associate these clips with an Aurora Playout placeholder for use in your broadcast.

Importing clips from a media server provides a greater selection of video footage from which to choose. Imported clips are copied into your database and into the media server's playout bin.

You have several ways to search for clips and placeholders in Housekeeper. The most common way is to scroll down through the list to find the clip or placeholder that you need. You can also get to a specific clip or placeholder by entering the first few characters of the title.

1. To navigate and search for clips or placeholders, you can choose one of the following methods:

   - Click on one of the clips or placeholders in the Housekeeper window and scroll down to search.

   - Use the up and down arrow keys on your keyboard to navigate through the list.

   - To search for a specific clip or placeholder, type the first character and the active bar will automatically go to a clip or placeholder that starts with that character.

   - If you type a second character within 1 second of the first character, the active bar will go to a clip or placeholder that starts with those 2 characters. If you enter the same character repeatedly, the active bar will navigate through all clips or placeholders that start with that character.

2. To import a clip, do the following:

a) Select a placeholder on the left pane.

b) Select the **Server** and the **Bin** you want to import from on the right pane.

c) Click the **Associate media clip with placeholder** 🖼 button.

> The Transfer Monitor appears showing transfer progress. A copy of the Server clip is linked to the Aurora Playout placeholder.

NOTE: You can also import clips by drag and drop between the left and right pane of the Clip Import tab.

If no placeholder for the clip is created yet, Housekeeper will automatically create a placeholder for you. Just highlight a clip on the right pane (with nothing selected on the left pane), and click the **Associate media clip with placeholder** 🖼 button.

Changing clip properties

You can also modify clip properties through Housekeeper:

1. Double-click the desired clip.
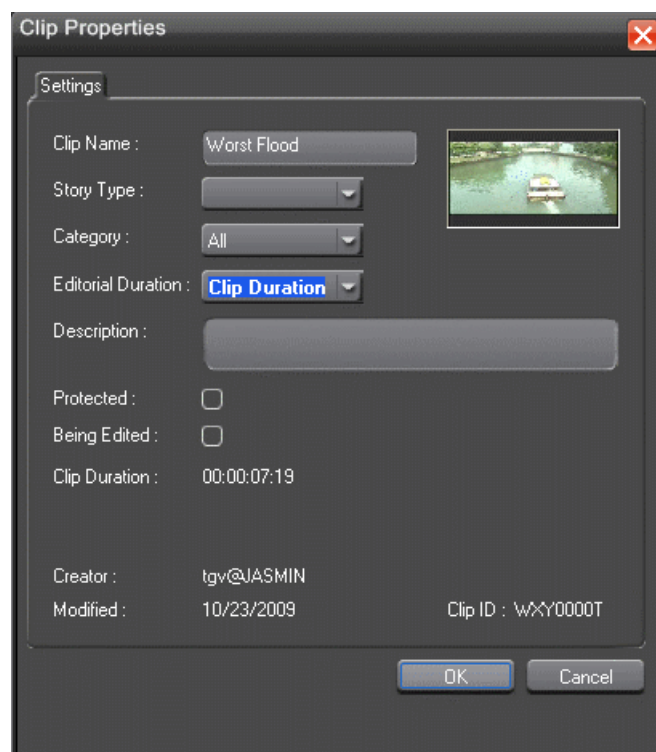
The Clip Properties window appears.

2. Modify the properties of the clip and click **OK**.

   You can modify properties of multiple clips at once by holding down the **Shift** key, clicking the first clip in the range, clicking the last clip in the range, right-clicking and selecting **View Properties**.

Creating placeholders in Housekeeper

You can create additional placeholders in Housekeeper for clips you are planning to import. New placeholders are created in the Aurora Playout clip database.

1. Click the **New Placeholder** ▣ button. You can also select **File | New Placeholder** or press **Ctrl + N** on the keyboard.
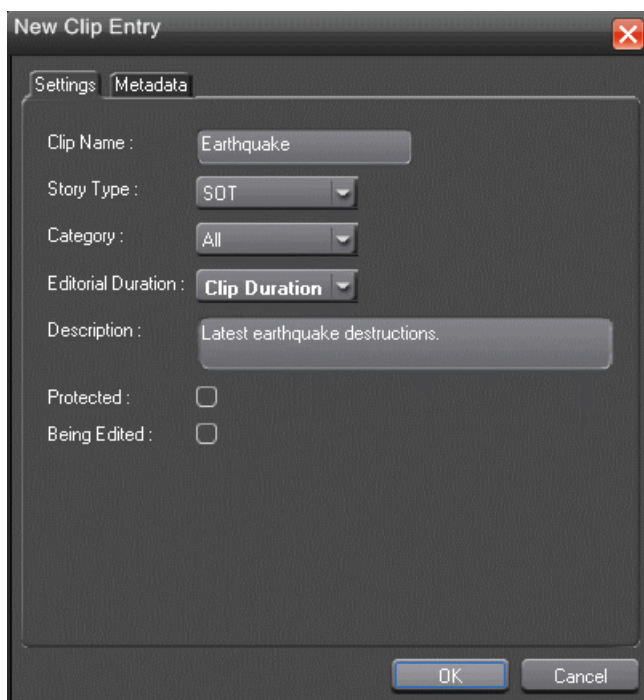
The New Clip Entry window appears with Settings tab and Metadata tab (if MediaFrame is configured).

2. Enter the clip information:

   • **Clip Name** — Enter a placeholder name. The name identifies the placeholder in the Assignment List Plug-in (in the NCS), the Assignment List (in the Aurora Edit system or standalone), and in the Aurora Playout playlist.

   • **Story Type** — Select a Story Type from the drop-down menu. Story types are set in the SDB Server Options.

*NOTE: Default story types are **SOT** (Sound On Tape) or **VO** (Voice Over). You can also leave this field blank.*

- **Category** — Select a category from the drop-down menu. The category determines how stories are grouped and sorted.

- **Editorial Duration** — Enter a duration for the placeholder or select one from the drop-down list. The Editorial Duration is an optional value you can set for an estimated on-air duration of the clip that is changed to a more precise value later.

  NOTE: Editorial Duration has the priority over media duration. Once an Editorial Duration is set; it will not be adjusted to clip duration, even after media is associated with the placeholder. The editor needs to set the final Editorial Duration before the clip is sent for playback.

- **Description** — Enter a description for the placeholder. The description helps news editors identify the clip they need to create.

- **Protected** — Check this box to prevent the clip from being erased or deleted from the database.

- **Being Edited** — Check this box to indicate when the sequence for a placeholder is currently being edited. This field allows users to easily determine that a clip is already being worked on.

  NOTE: When checked, these areas designate that the clip is Being Edited: the clip in the Aurora Playout playlist and in the Assignment List Manager turns blue, and the text for the clip in the standalone Assignment List Manager turns blue.

3. If you already configured MediaFrame for use with Aurora Playout, you can enter metadata for the placeholder in the Metadata tab.

- **Name** — The name of the clip will be the same as the one that you entered in the Settings tab.

- **Source** — Enter the source of the clip.

- **Expires** — Select the expiry date for the placeholder. If no expiry date is needed, you can leave it at its default setting: Not Defined.

- **Description** — The description will be the same as the one that you entered in the Settings tab.

- **Search Terms** — Enter the search term for the clip so that it will be easy to find when you search for it using MediaFrame Search component later.

You can also enter metadata within Keywords tab, which referenced a specific timecode location in the media file. This is done by selecting mark-in/out points on the clip and inserting a keyword for that segment.

Within the Custom tab, you can enter additional asset metadata such as editor, videographer, location and any other fields that had been listed. If you have the Administrator privileges, you can add, edit, or delete custom metadata fields.

4. Click **OK**.

The new placeholder is created. The Clip ID and Date are set automatically when you create a new placeholder. With metadata added to the placeholder, it will be searchable and editable throughout MediaFrame clients.

Using MediaFrame in Housekeeper

MediaFrame components can be used within Housekeeper after the MediaFrame server has been specified within the general setting of SDB Server.

Below are MediaFrame components that can be used with Housekeeper:

• Viewing and editing properties using MediaFrame metadata tab
• Searching assets within servers, MDIs and MediaFrame database
• Viewing asset via MediaFrame clip player

Viewing and editing metadata on clip properties

You can view the metadata of a clip on a separate tab within the clip properties window.

The clip properties window displays additional information such as clip story type, category, editorial duration, description and other metadata, which are not shown in the playlist.

1. Right-click on the placeholder and select **View Properties** to view the clip properties.

    The Clip Properties window appears showing information on the Settings tab.

2. Click the Metadata tab to view metadata that had been created for the placeholder.

    The metadata tab has 3 other additional tabs such as general, keywords and custom.
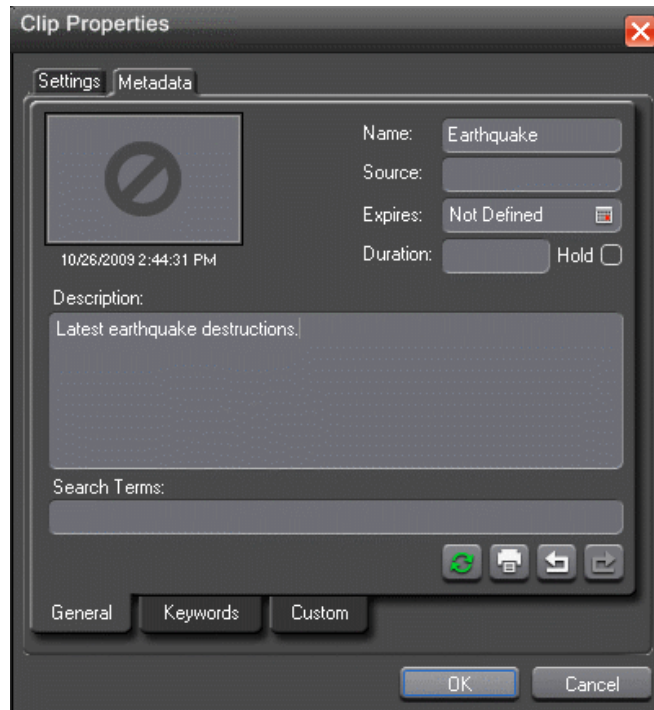
3. You can add, edit, refresh or print these metadata on the General tab if needed.

4. When viewing the proxy via MediaFrame clip player, you can set mark in/out points and select **Add Keyword** within the keyword tab of the Metadata view.

5. On the Custom tab, you can enter additional asset metadata such as editor, videographer, location and any other fields that had been listed.

   If you have the Administrator privileges, you can add, edit, or delete custom metadata fields.
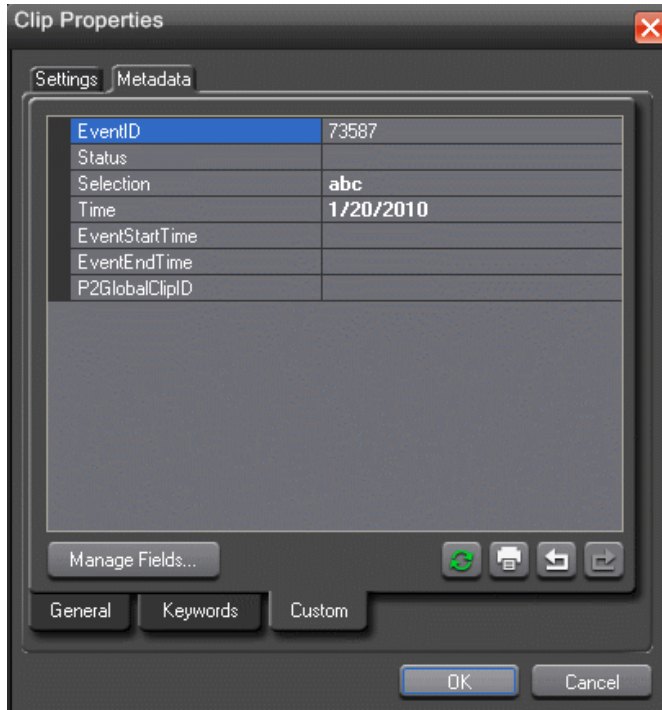
6. Click **OK** to close the window.

Searching assets using MediaFrame

The MediaFrame plug-in allows users to search logical and physical assets within the MediaFrame database and MDI devices.

At the top of the MediaFrame plug-in, users can click Search, Explore or Collections icons to select the appropriate search process.
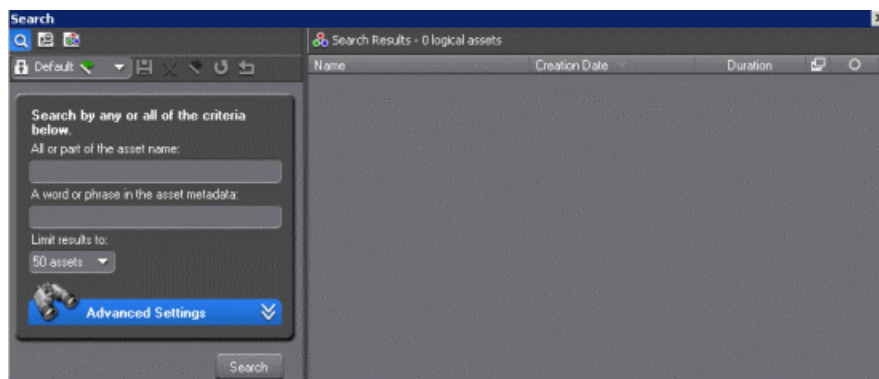
The Search section is usually for users searching logical assets within the MediaFrame database. Users can also search for physical assets in MDI devices by selecting **Advanced Settings**.

The Explore section allows users to create short-cuts to frequently used MDI folders by adding them to **Personal Favorites** list.

The Collections section allows users to create short-cuts to frequently used assets for easy access. Users can choose to create collections for logical or physical assets that they use repeatedly.

NOTE: Putting an asset into a collection does not move the asset; it only creates a reference that points to the original asset.

To search for assets within the MediaFrame database, do the following steps:

1. Select the **Search** button on the MediaFrame plug-in.
2. Enter any word related to the asset name or asset metadata that you want to search for.
3. Click the **Search** button to start the searching process.

   Search results appear showing logical assets that contain metadata and links to any physical assets including high-resolution media and proxy video.

4. You can select an asset, drag and drop it into a placeholder within the Clip Import tab of the Housekeeper.

   The transfer process will be automatically initiated and you can see the progress on the Transfer monitor.

Searching for an asset by name

Do not enter more than one word in the Asset Name text field unless you want to find both words exactly as typed with spaces.

NOTE: The Asset Name field does not recognize quotation marks.

   To search for an asset by name, enter text or numbers in the Asset Name text field and click the **Search** button.

Search results list assets that contain the search term in the name of the asset, even if it is a fragment of the name.

Searching for an exact phrase

How you search for an exact phrase depends on whether you're entering the search term in the Asset Name or the Asset Metadata text field.

NOTE: The Asset Name field does not recognize quotation marks.

- If you search within the Asset Metadata text field, enter the phrase in quotation marks.
- If you search within the Asset Name text field, enter the exact phrase.

Searching for numbers

You can search for numbers in three ways:

- To find a number in an asset's name, use the Asset Name text field.
- To find a number in the asset's text field metadata, such as the description, use the Asset Metadata text field.
- To find a number only in a specific category, such as a number metadata field or a specific Creation Date, Modification Date, etc., create a filter and select the property to search on.

NOTE: You cannot search for single numbers in the Asset Metadata text field. Any single character, letter or number, is treated like a "noise" word and is ignored. To search for a single number in the metadata, create a filter.

Using Explore to bookmark locations

The Explore tool allows you to browse your network and save network locations (servers and folders) as Favorites just as you would in the Windows Explorer. Favorites serve as one-click shortcuts to the locations you use most, and also as destinations onto which you can drag assets to transfer them across the network.

To do this task...	Follow these steps...
Browse the network	1. Navigate the network from the All Locations pane. 2. Select a location from the All Locations pane to view its contents in the Explore pane.
Add a favorite location	1. Browse the network in the All Locations pane. 2. Right-click on a server or folder and select • **Add to Favorites** -- Adds the location to Favorite Locations | Personal Favorites • **Add to Global Favorites** -- Adds the location to Favorite Locations | Global Favorites You can drag Favorites to reorder them, or right-click a Favorite and select Move Up or Move Down.
Go to a favorite location	Click on a Personal or Global Favorite in the Favorite Locations pane.
Copy an asset	1. Right-click on an asset in the Explore pane and select **Copy.** 2. Right-click on a Favorite and select **Paste**.
Transfer (move) an asset	1. Drag an asset (clip or folder) from the Explore pane onto a Favorite.

To do this task...	Follow these steps...
	The Transfer Options window appears.
	2. Select **Automatically rename destination "K2 Movie" ...** to rename the asset if an asset with that name exists at the destination.
	3. Select **Save settings for similar transfers** to have subsequent clips being transferred keep these settings.

Creating a Collection

You can create collections to sort and organize frequently-used clips for easy access.

1. Click the **New Collection** button.

   The New Collection window appears.

2. Enter a **Collection Name**.

3. Select a **Collection Type**:

   - Private - Saves a collection that only you can access
   - Shared - Saves a collection that all users may access
   - Temporary - Creates a collection until you close the application, then it is deleted

4. Select the **Content** type:

   - Logical - The collection references clip content (raw video, audio, sound, images), metadata, and proxy assets (low-res footage)
   - Physical - The collection references clip content (raw video, audio, sound, images) only

5. Click **OK**.

Adding clips to a Collection

A Collection content type can either be logical or physical.

You can only add clips of the same content type as the Collection group.

1. Select the clip(s) you want to add to a collection.

2. Choose one of these methods to add clips:

   - Right-click on the clip and select **Add to Collection | *collection_name***.
   - If you need to create a new collection, right-click on the clip and select **Add to Collection | New Collection**, and add the collection properties in the New Collection window.

To remove a clip from a collection, select the clip from the collection contents and press **Delete.**

Modifying Collections

Once a collection is created, you can modify the name of the collection, as well as change the Content type, or delete a collection.

To do this task...	Follow these steps...
Delete a collection	Select the collection and click **Delete Collection**
Rename a collection	Select the collection, click on the name, and type a new name
Toggle a collection between private and shared	Right-click on the collection and [de]select **Shared With Others**
Save a collection	Right-click on the collection and select **Saved for Future Sessions**
Perform a batch operation on all the assets in a collection (e.g. copy all the assets)	Right-click on the collection, select **Act on Contents**, and choose the desired action.

Creating filters

Filters let you customize your searches so that you can quickly locate specific assets.

1. In the Search window, click the plus sign next to Advanced.

   The **Advanced Settings** dialog box displays.
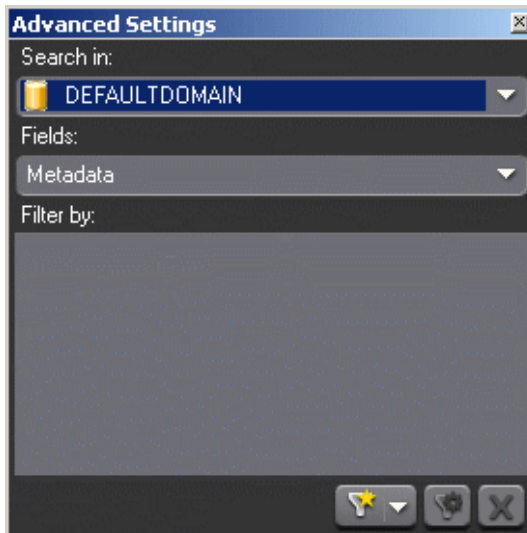
2. Click the Add Filter icon .

The Add Filter dialog box displays.
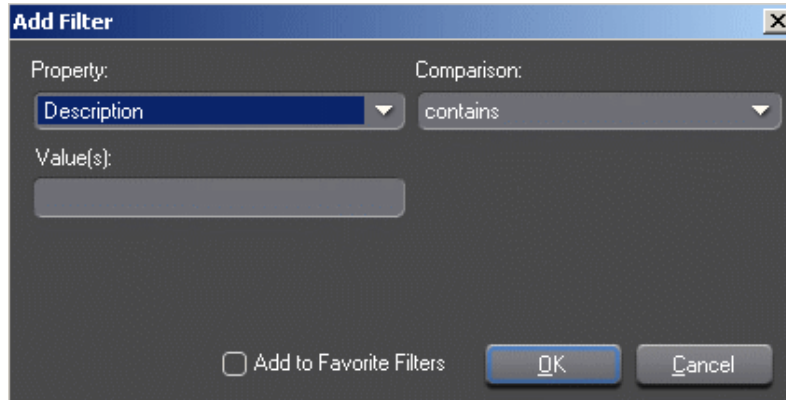
3. Select the Property and Comparison criteria from the drop-down lists.
4. If you want to use this filter frequently, check the Add to Favorite Filters box.
5. Click **OK** to add the newly created filter to the active filter list.

The new filter is displayed in the Filters field.

Filter icon reference table

The following table describes the Filter icons.

Icon	Description
	Creates a new filter
	Displays favorite filters
	Modifies a created filter
	Deletes the selected filter.

Searching assets with advanced settings

The MediaFrame search tools with advanced settings allow users to search assets within MediaFrame database and MDI devices.

Searching within MediaFrame database will return logical assets, while searching within MDI devices will return physical assets.

1. Enter any word related to the asset name or metadata that you want to search for.
2. Click the plus sign next to **Advanced**.

    The Advanced Settings dialog box appears.
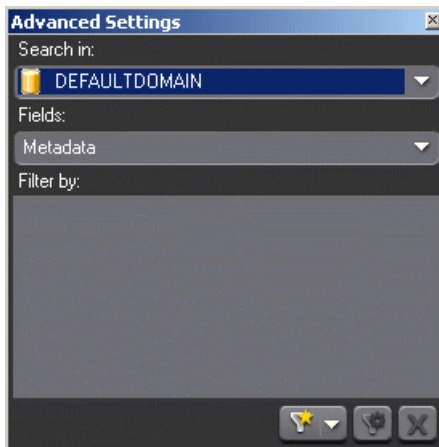
3. Click the **Search in** drop-down list to select the MDI device that you want to search into or just leave it at **DEFAULTDOMAIN** if you want to search within the MediaFrame database.
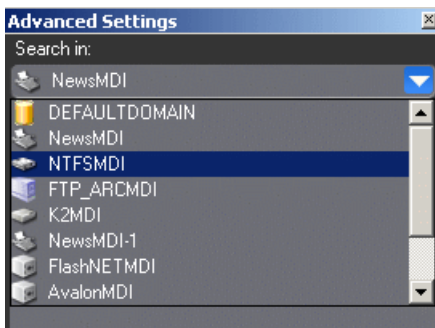
4. Click the **Fields** dropdown list to check the field or fields that you want to search on.

5. Click the **Search** button to start the searching process.

   Search results appear showing assets from the database or MDI device that you selected.
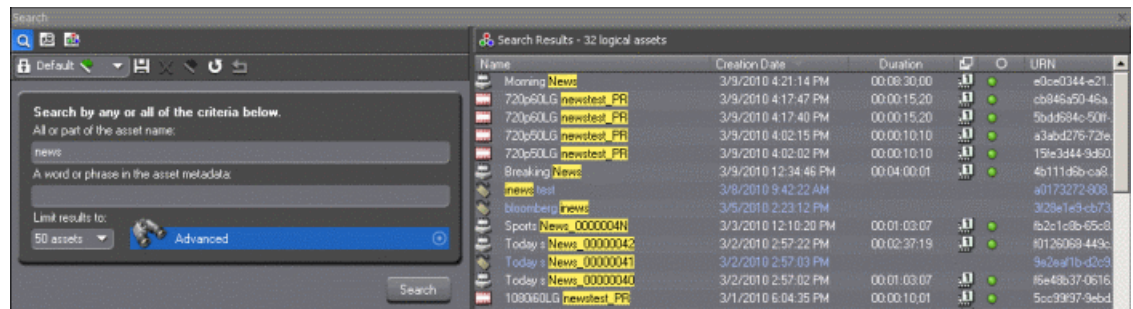
6. You can select an asset, drag and drop it into a placeholder within the Clip Import tab of the Housekeeper.

   The transfer process will be automatically initiated and you can see the progress on the Transfer monitor.

Viewing asset via MediaFrame clip player

If the MediaFrame is configured to create proxy video of edited stories in your system, there will be a corresponding proxy asset created for every story in your placeholders. In Housekeeper, you can view the proxy of a clip if you already have MediaFrame and proxy NAS configured within the same domain in your system.

1. Select a placeholder.
2. Right-click on the clip and select **View Asset** to view the proxy via the MediaFrame clip player.

The Asset Preview window appears.

3. Click the Play button ▷ to start playing the clip. Click other control buttons to get to a specific frame on the clip.

You can also trim the asset by selecting the mark in button ▐, mark out button ▐ and click the ✂ button to trim the placeholder.

Archiving clips in Housekeeper

You can use the Housekeeper utility to copy Aurora Playout placeholders to an archive bin on the media server.

1. Select the clip(s) you want to archive.

The first column displays the first frame of the placeholder.

2. Click the **Archive placeholder clip** button. You can also drag clips directly from the Aurora Playout placeholder list to the archive directory.

The Transfer Monitor appears showing transfer progress and the clip is copied to the archive bin on the media server.
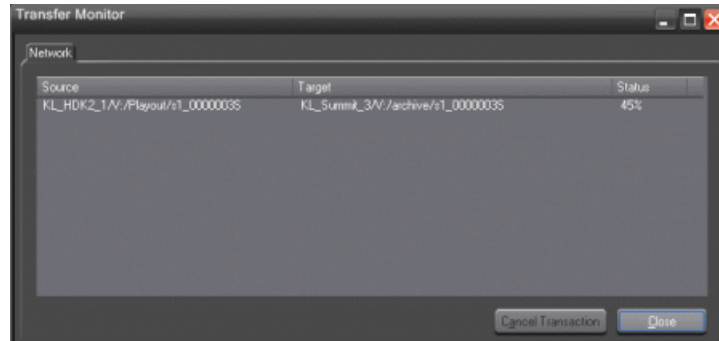
Resynchronizing clips

In a broadcast operation, a media server might have to be rebooted from time to time and you need to resyncronize clips after the media server is restarted.

When a media server that the Housekeeper is connected to is shut down or rebooted, clips from that media server will not be available in Aurora Playout and Housekeeper.

You can see that the media server status icon turned from green to red 🔴 to indicate at least one server is disconnected.

1. When the media server is reconnected, a pop-up window will be displayed to confirm that you want to reconnect to that media server.

2. Click **OK**.

   You can see that the media server status icon on the Housekeeper toolbar will be flashing alternate colors of green and red.

3. Click on the flashing media server status icon.

   A pop-up window will be displayed to confirm that you want to resynchronize content with the media server.

4. Click **Yes** to synchronize and re-enumerate all clips from the reconnected media server.

   If you click **No**, the media server status icon will keep on flashing alternate colors of green and red to indicate that status of clips from the reconnected media server has not been reinitialized.

Even though you can see clips from that media server had been repopulated in the Clip Import tab, the resynchronization process will not be activated until you instructed Housekeeper to do so.

Appendix **A**

Aurora Playout Appendix

This section contains the following topics:

- *Sample of MOS Gateway configuration file*

Sample of MOS Gateway configuration file

NOTE: Due to the book's margin requirements, some wrapping of the text may occur in the following sample file that should not appear in the actual file.

For use with Aurora Playout, the iNEWS mosconfig.xml file should be configured as follows:

```
<?xml version="1.0" encoding="UTF-16" standalone="no"?>

<!-- This file contains configuration settings for the iNEWS
MOS Gateway. xmlns="http://www.
inewsroom.com/mosgateway"-->

<!-- It is in an XML-based format, with the root element being
 mosGatewayConfiguration. -->

<mosGatewayConfiguration
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespace
SchemaLocation="mosconfig.xsd">

<!-- The logging element specifies the directory in which to
put log files, -->

<!-- the maximum number of log files to create, and how big
each one can grow. -->

<logging>
    <directory>C:\Program Files\Avid\MOSGateway\Logs</directory>

    <maxFileCount>1</maxFileCount>
    <maxFileBytes>10000000</maxFileBytes>
    <!-- YES/NO Also sends all logging to OutputDebugString so
 any Windows debugger will see it. -->
    <winDebugTrace>NO</winDebugTrace>
    <!-- on/off Sends all incoming socket traffic to seperate
log files. -->
    <socket>off</socket>
</logging>

<!-- -->

<!-- The tcpPorts element specifies the TCP ports on which the
 MOS Gateway listens for -->

<!-- MOS connections. Every MOS that connects to the MOS Gateway
 must use the same ports. -->

<tcpPorts>
    <out_upper>10541</out_upper>
    <out_lower>10540</out_lower>
    <in_upper>10541</in_upper>
    <in_lower>10540</in_lower>
</tcpPorts>
```

```
<!-- -->

<!-- Newsroom system info -->

<ncs>
    <!-- -->
    <!-- The ncsID used for replication-->
    <ncsID>WXYZ</ncsID>
    <!-- -->
    <!-- NCS's Host Name -->
    <!-- Make sure this is resolvable -->
    <host>WXYZ</host>
    <!-- -->
    <!-- Allow or Disallow Replication -->
    <!-- YES/NO -->
    <!-- default is YES -->
    <AllowReplication>NO</AllowReplication>
    <!-- -->
    <!-- This is the NCS username that the replication service
 logs into the ncs with. -->
    <!-- default is mosrep -->
    <ReplicationUsername>mosrep</ReplicationUsername>
    <!-- -->
    <!-- This is the password the ReplicationUsername uses to
log into the ncs. -->
    <!-- default is mosrep -->
    <ReplicationPassword>mosrep</ReplicationPassword>
    <!-- -->
    <!-- Allow or Disallow mosItemReplace -->
    <!-- YES/NO -->
    <!-- default is YES -->
    <AllowMosItemReplace>YES</AllowMosItemReplace>
</ncs>

<!-- -->
<!-- The listDevices element contains device-specific
configurations. It contains -->
<!-- one or more mosDevice elements. The mosDevice element
contains configuration -->
<!-- settings that are specific to a particular MOS. -->

  <listDevices>

     <mosDevice>
       <!-- The names element contains the mapping of the MOS's
 mosID value to -->
        <!-- an NRCS device name, as well as the network name
of the MOS. -->
            <names>
                <mos>GVMOS</mos>
                <amcp>playout</amcp>
                <network>sdbserver1</network>
            </names>

            <roChannels>
                <roChannel>
                    <iNewsChannel>A</iNewsChannel>
                    <MosDevChannel>A</MosDevChannel>
```

```
                    </roChannel>

                    <roChannel>
                        <iNewsChannel>B</iNewsChannel>
                        <MosDevChannel>B</MosDevChannel>
                    </roChannel>

                    <roChannel>
                        <iNewsChannel>C</iNewsChannel>
                        <MosDevChannel>C</MosDevChannel>
                    </roChannel>

                    <roChannel>
                        <iNewsChannel>D</iNewsChannel>
                        <MosDevChannel>D</MosDevChannel>
                    </roChannel>

                    <roChannel>
                        <iNewsChannel>E</iNewsChannel>
                        <MosDevChannel>E</MosDevChannel>
                    </roChannel>
                </roChannels>

                <handlesRoStorySend>YES</handlesRoStorySend>

                <!-- -->
                <!-- The handlesEmptyStories element specifies
whether this device accepts -->
                <!-- a roStoryInsert message that contains no item.
 -->

                <handlesEmptyStories>NO</handlesEmptyStories>

                <!-- -->
            <!-- The handlesRoStoryMoveMultiple element specifies
 whether this device supports -->
                <!-- the roStoryMoveMultiple message. The router
defaults to YES. -->
                <!-- Valid settings are YES or NO -->


<handlesRoStoryMoveMultiple>NO</handlesRoStoryMoveMultiple>

                <!-- -->
            <!-- The handlesRoItemLevelCommands element specifies
 whether this device supports -->
                <!-- roItemInsert, roItemDelete and roItemReplace.
 The router defaults to YES. -->
                <!-- Valid settings are YES or NO -->


<handlesRoItemLevelCommands>NO</handlesRoItemLevelCommands>
                <!-- -->
                <!-- the sendRoCreateOnStartLoad element specifies
whether the rundown is created -->
                <!-- by sending a blank roCreate command to the MOS
 device then add each story -->
                <!-- separately (YES) or whether one large roCreate
```

```
 message will be sent with the -->
               <!-- entire rundown (NO). The default is YES. -->


             <sendRoCreateOnStartLoad>NO</sendRoCreateOnStartLoad>


               <!-- -->
               <!-- The statusTranslations element defines the
status strings that correspond -->
               <!-- to the various NRCS status codes. This allows
 the MOS Gateway to translate -->
               <!-- the roItemStatus messages received from a MOS
 into status codes that NRCS -->
               <!-- can recognize and display. -->

               <statusTranslations>
                 <statusUnavailable>NOT READY</statusUnavailable>

                 <statusCueing>CUEING</statusCueing>
                 <statusAvailable>READY</statusAvailable>
                 <statusCued>STAND BY</statusCued>
                 <statusPlaying>PLAY</statusPlaying>
                 <statusPaused>STOPPED</statusPaused>
                 <statusStopped>END</statusStopped>
               </statusTranslations>

               <mosObjReplication>
                   <trigger>manual</trigger>
                   <replicationTime>12:31:15 PM</replicationTime>
                   <clearQueue>false</clearQueue>
                   <path>clips.gvg</path>
               </mosObjReplication>

         </mosDevice>

     </listDevices>

</mosGatewayConfiguration>
```

Appendix **B**

Software Licenses

This section contains the following topics:

- *cmemdc*
- *cping*
- *CSizingToolBar*
- *CTextProgressCtrl*
- *MIT*
- *mozilla*
- *Paintlib*
- *resizeable lib*
- *tconvert*
- *zlib*

cmemdc

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CMemDC - memory DC

/Author: Keith Rule

Email: keithr@europa.com

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History

10/3/97 Fixed scrolling bug. Added print support. - KR

11/3/99 Fixed most common complaint. Added background color fill. - KR

11/3/99 Added support for mapping modes other than MM_TEXT as suggested by Lee Sang Hun. - KR

02/11/02 Added support for CScrollView as supplied by Gary Kirkham. - KR

This class implements a memory Device Context which allows flicker free drawing.

cping

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CSizingToolBar

License

CSizingControlBar Version 2.43

Created: Jan 24, 1998 Last Modified: August 03, 2000

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The sources and a short version of the docs are also available at www.codeproject.com . Look for a "Docking Windows" section and check the version to be sure you get the latest one ;)

Hint: These classes are intended to be used as base classes. Do not simply add your code to these file - instead create a new class derived from one of CSizingControlBarXX classes and put there what you need. See CMyBar classes in the demo projects for examples.

Modify this file only to fix bugs, and don't forget to send me a copy.

Acknowledgements:

- Thanks to Harlan R. Seymour for his continuous support during development of this code.
- Thanks to Dundas Software for the opportunity to test this code on real-life applications.
- Some ideas for the gripper came from the CToolBarEx flat toolbar by Joerg Koenig. Thanks, Joerg!
- Thanks to Robert Wolpow for the code on which CDockContext based dialgonal resizing is based.
- Thanks to the following people for various bug fixes and/or enhancements: Chris Maunder, Jakawan Ratiwanich, Udo Schaefer, Anatoly Ivasyuk, Peter Hauptmann.
- And, of course, many thanks to all of you who used this code, for the invaluable feedback I received.

CTextProgressCtrl

License

Written by Chris Maunder (chrismaunder@codeguru.com)

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Modified : 26/05/98 Jeremy Davis, jmd@jvf.co.uk

Added colour routines

TextProgressCtrl is a drop-in replacement for the standard CProgressCtrl that displays text in a progress control.

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zlib

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Zlib

zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.2, October 3rd, 2004

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The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files http://www.ietf.org/rfc/rfc1950.txt (zlib format), rfc1951.txt (deflate format) and rfc1952.txt (gzip format).

Glossary

ASK

The central registry for all the MediaFrame components. Other software components refer to the ASK component to establish communication and exchange commands and data as well as populate fields and lists.

Asset

See Logical Asset and Physical Asset.

Asset Details

The MediaFrame view that contains detailed information about the assets, including all the associated metadata and storyboard and video proxy information.

Asset List

The MediaFrame view that lists all the assets in a search or a folder.

Asset Navigator

The MediaFrame view that is used for searching logical assets or browsing for physical assets.

Device

In Aurora Browse, a term used to designate a component that contains physical asset. Devices have MDIs that represent the device's assets in a way that is understandable by the other components of the system. This allows the MediaFrame server to coordinate the activity of the system. Different devices perform different functions in the MediaFrame system. For example, the K2 MDI device is used for transferring assets, while the News MDI is used for Aurora Edit assets and the Flashnet (SGL) MDI is used for archiving assets.

Essence

See Physical asset.

FTP

File Transfer Protocol is a common IT protocol for the bulk movement or transfer of large volumes of data. K2 servers can handle multiple FTP transfers simultaneously at faster than real-time speeds.

HD

High Definition video.

Logical Asset

A logical asset is a combination of the MediaFrame database information, physical asset or assets on the server, and proxy assets. A logical asset has a globally unique Universal resource Name (URN) that uniquely identifies it.

Material

A high-resolution clip, upon which the low-resolution proxy is based.

MDI

Managed Device Interface.

MediaFrame

A metadata storage and asset management architecture deployed in the Aurora suite. This architecture shares media asset management (MAM) components with other applications and systems such as servers, Aurora Ingest, and Aurora Edit workstations.

MediaFrame Status

A tool in Aurora Browse that tracks the status of the various components of Aurora Browse.

Metadata

Data about data. For example, metadata can include keywords, descriptions, and other terms that you would use to search for an asset in a database. Foreign metadata is imported XML metadata that is associated with a MediaFrame logical asset.

Offline

In Aurora Browse, offline refers to an asset that has been archived.An asset can be both offline and online simultaneously.

Online

In Aurora Browse, online refers to an asset that is located on the high-resolution server. An asset can be both offline and online simultaneously.

Physical Asset

A physical asset, or essence, is the raw program material, represented by pictures, sound, text video, etc. It carries the actual message or information.

Proxy

A low-resolution clip that represents high-resolution material.

SD

Standard Definition video.

Storyboard

A series of video thumbnails used to show scene changes in an asset.

Storyboard proxy

The low-resolution video clip that provides the thumbnails for the storyboard.

Subclip

A clip created by referencing a portion of media from another clip.

Thumbnail

A frame of video used for visual identification of a clip. By default, the thumbnail is generated in the K2 server from the 16th frame of video. You can select a new thumbnail using the Storyboard.

Thumbnail view

The MediaFrame view that shows the Asset List information with thumbnails instead of strictly textual information.

Transfer Monitor

A tool in Aurora Browse that monitors asset transfers.

Up Conversion

Conversion of an SD (standard definition) video format to an HD ((high definition) video format.

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