Chapter 13:

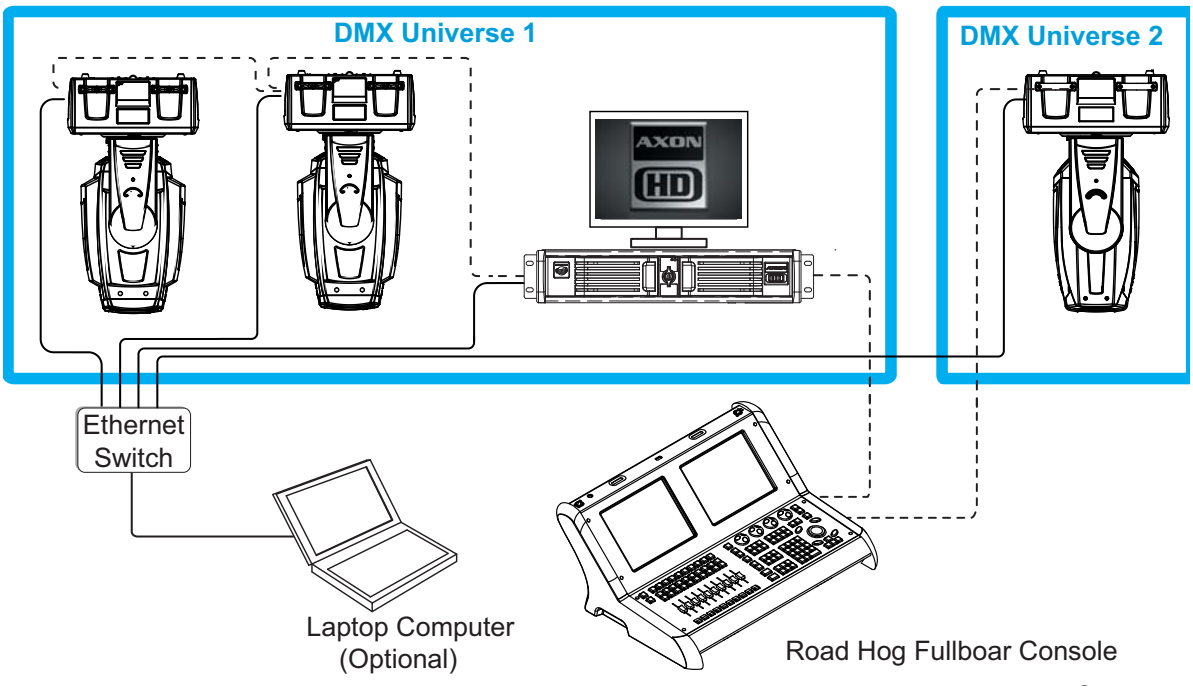
Content Management Application (CMA)

A Content Management Application (CMA) running on an Axon HD media server or a computer connected through an Ethernet network gives you remote control of content, software and configuration management functions.

The CMA software that shipped on removable media with your Axon HD media server is used to:

- Upload and download custom digital content to digital light fixtures
- Configure units to use in a DMX environment
- Edit warping of output for display on diverse surfaces
- Update software for multiple units

The CMA can access all media servers connected to the same Ethernet network.



NOTE: If you are using a DMX console and other automated lighting products compatible with Art-Net, this network can also serve as the link for DMX control.

Launching the CMA

Installing the CMA on Your Computer

You can download the latest version of the application from the Digital Lighting support section of the High End Systems website www.highend.com/support/digital_lighting/. A download wizard simplifies installation on your personal computer.

The following are the recommended software requirements for running the CMA:

- Windows 7 (32 and 64 bit) (other OS's have limited support)
- Microsoft .Net 4
- 100/1000 base Ethernet card (a Gigabit Ethernet card is recommended for fast content uploading of large files)

To automatically install the CMA on your computer's hard drive, insert the CD that shipped with your media server.

NOTE: ***If you are running Windows OS and the CMA doesn't automatically install, navigate to the CMA.msi file in your windows browser and double click to install the CMA.***

Once the CMA is installed, double clicking on the application icon will launch it and display the CMA Client Window.

Launching the CMA on Axon

Axon media servers can launch the CMA locally. When you start Axon, the local monitor will display a desktop that gives you access to the CMA.

Press the **Launch CMA** button on the local desktop. The application automatically finds and identifies the **Local Drives** including any connected USB drives, the CD/DVD drive as well as other Axon HD, Axon, DL.3 and DL.2 media servers connected to the same Ethernet network.

NOTE: The AxonHD server supports an onboard DVD drive you can use for copying content into an Axon HD Server as well as burning User content onto DVD/CD.

Auto Discovery

When a DL.3, DL.2 fixture, an Axon or AxonHD media server is connected to an ethernet network, it sends out “Discovery” messages. These messages are received by other media servers on the link as well as the CMA software. The messages contain information that allows the media servers to communicate with each other, and the CMA to communicate with all the units on the network.

The CMA window will display the IP Address, Fixture ID, the Media Server software version and the server model. Fixtures derive their IP addresses through a router or automatic IP assignment.

Fixture Identification

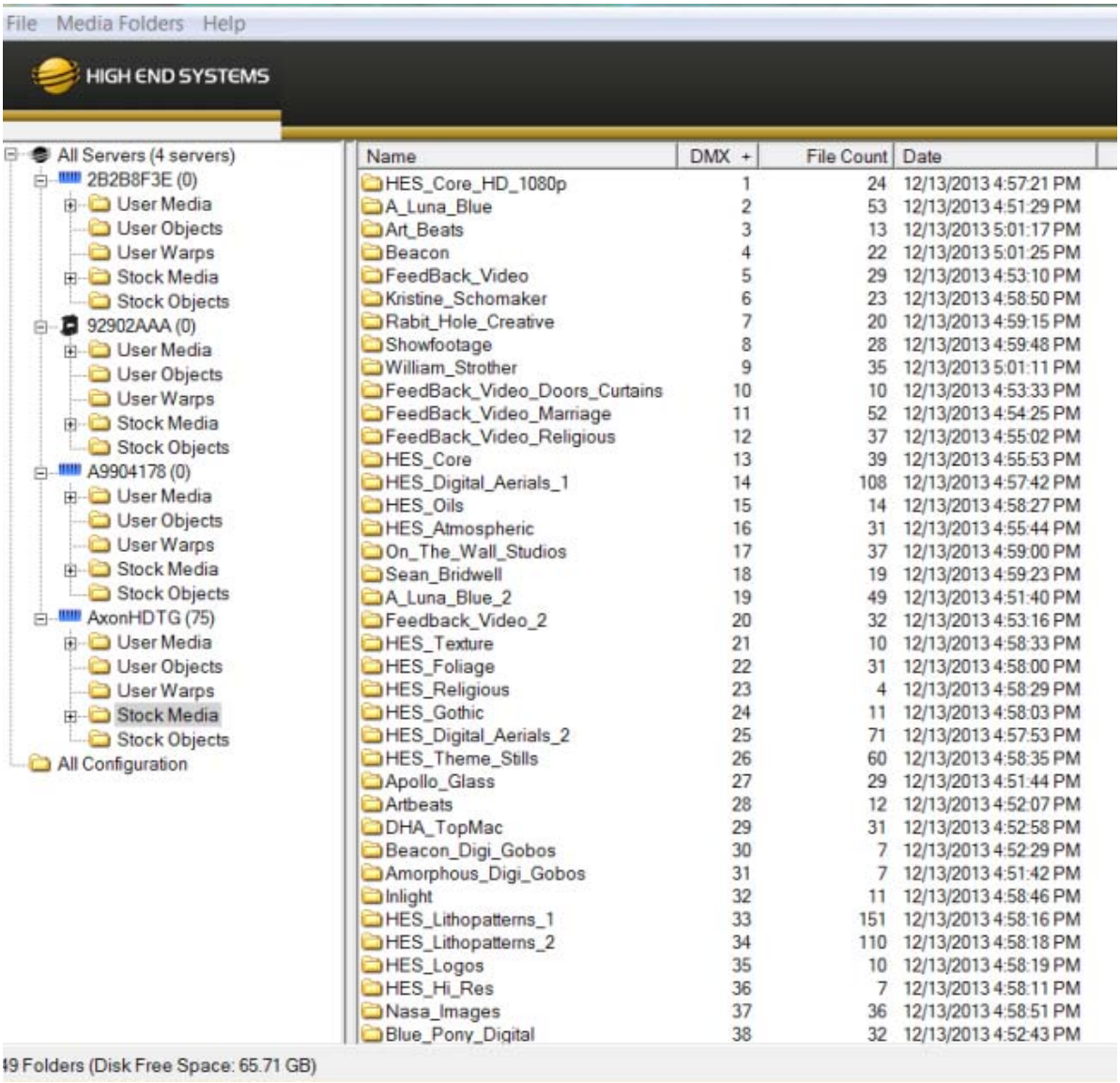
The Fixture ID is a unique number used in the control protocol to identify specific fixtures for sychronization functions. For more information on Sychronization content playback, see *Chapter 10: Graphic Functions: Synchronizing Content* on page 109.

NOTE: To ensure that sychronization works properly, each DL.3, DL.2 or Axon media server should be assigned a unique fixture ID.

The CMA Client Window

The CMA Client Window provides views of the content and configuration for all DL.3, DL.2 and Axon servers connected to the Ethernet network in the Left pane. Information is displayed in the right pane for any item selected. Access options through the menus at the top of the window or by right clicking in the right pane.

NOTE: You cannot drag folders or files between the left and right panes of the CMA window.

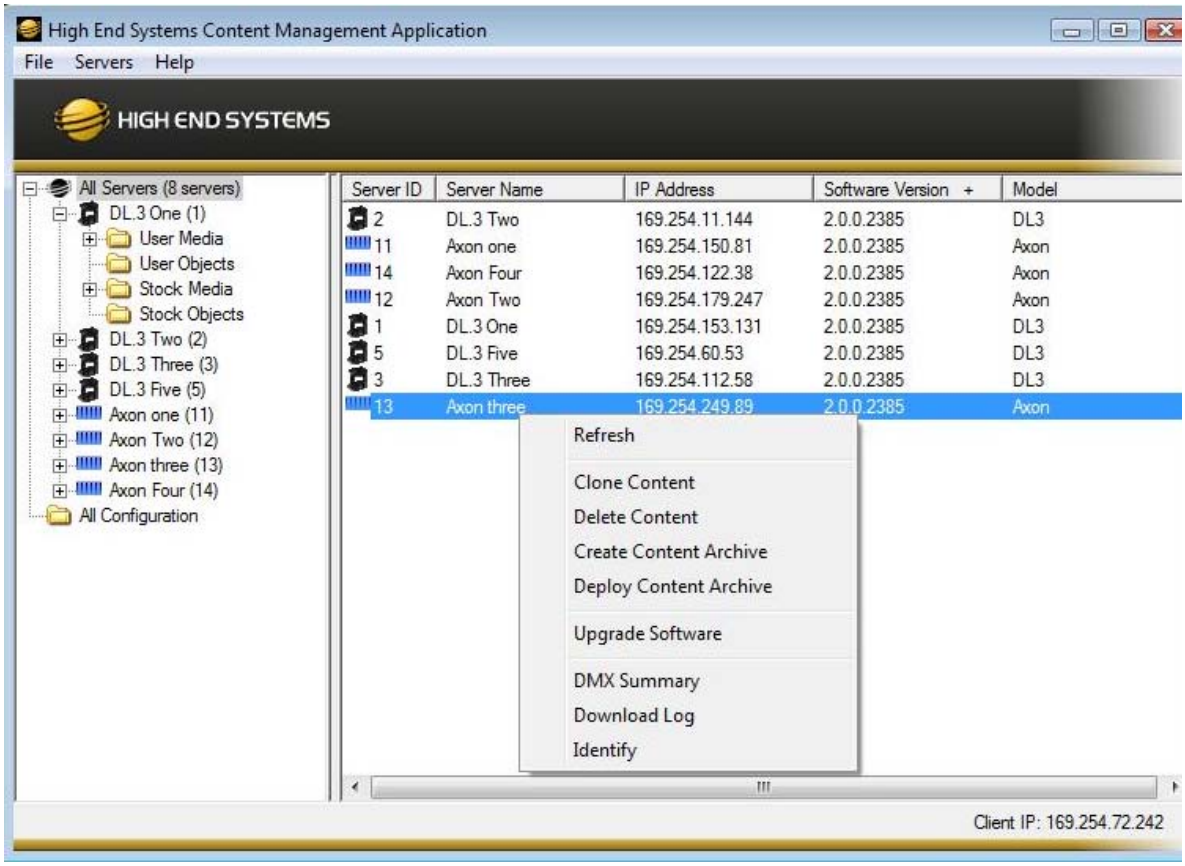


A **Status Bar** at the bottom of the page, indicates the number of files or folders in a selected folder in the left pane, as well as free space on the local computer hard drive and its IP address.

Viewing Server Identification Information

Selecting the **All Server** view displays all the Digital Light fixtures and Axon servers on the fixture network. In the following example, six servers have been identified on the network. The right pane contains the following details in a table format.

- **Server ID** number defaults to 1, but can be configured in the CMA or in the DL.3 or DL.2 fixture's Menu system
- **Server Name** is a name you assign to a Digital Light fixture or Axon server
- **IP Address** is assigned to that unit by the router or Auto IP
- **Software Version** Number
- **Model** identifies the media server as a DL.3, DL.2 , Axon, Axon HD



NOTE: Clicking in a column heading sorts the table according to the values in that column.

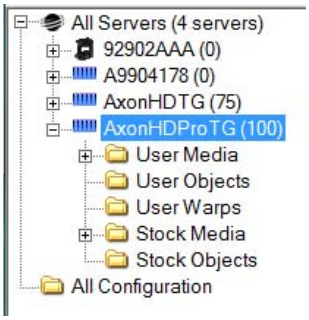
In the **All Server** view, the drop down **Servers** menu or right clicking to select a server in the right pane gives you these options:

- **Refresh** the screen.
- **Clone Content** replicates the server's user content to one or more other servers on the network, *(see page 208).*

- **Delete Content** removes all the user content from the server.
- **Create Content Archive** lets you back up all the server's user content to a compressed file, *(see page 207)*.
- **Deploy Content Archive** restores user content to the server from the backup, *(see page 207)*.
- **Upgrade Software** allows you to upgrade fixture software. For more information on upgrade options, see *Upgrading Software* on page 211.
- **DMX Summary** provides a web-based summary of a server's content in a table format.
- **Download Log** provides useful troubleshooting information to Customer Service if needed.
- **Identify** will cause a fixture to strobe, so you can find it in the rig.

Content Organization

The media server on each fixture has a file system that holds the movies, images, 3-D objects and User Warp files that make up the content that the server uses.



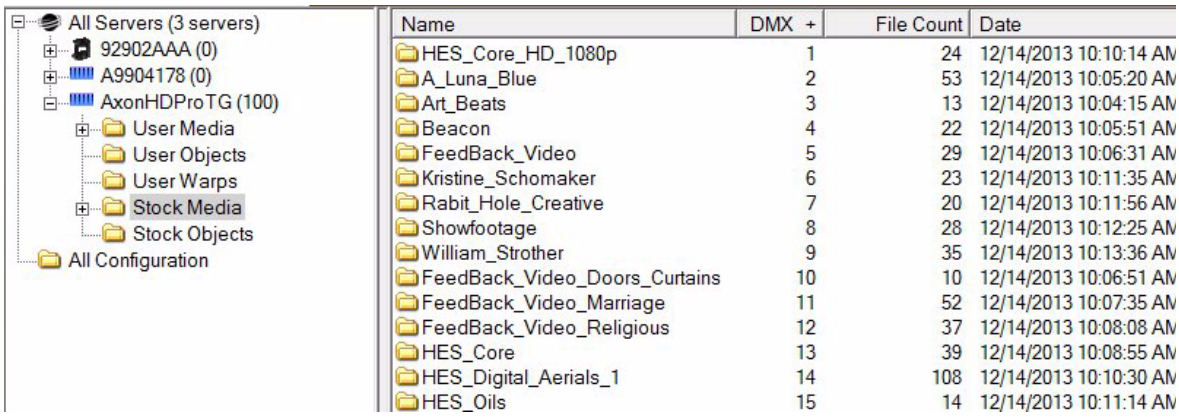
These files, folders, and their DMX values are collectively known as the "Content" on the media server.

The CMA Client Window organizes and identifies content by source (preloaded Stock content or custom User content) and type (Media files or 3-D Object files).

Preloaded Stock Content

A large library of **Stock Media** and **Stock Objects** ships on every AxonHD and AxonHD Pro media server and will also be provided through upgrades from High End Systems.

This content is read only. You won't be able to download, edit the DMX values or remove these files from the fixture.



Custom User Content

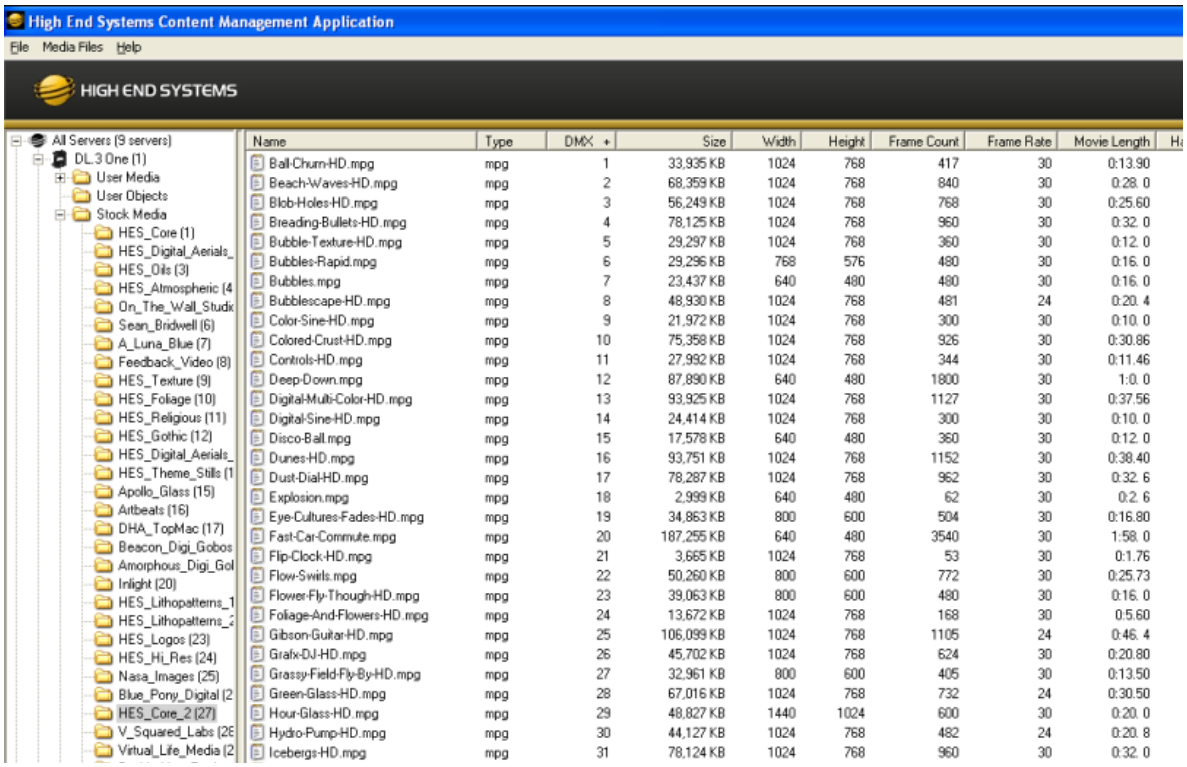
You can create your own custom **User Media**, **User Objects**, and **User Warps** and upload them to media servers. The Stock Content and User Content reside in separate folders. The High End Systems website (highend.com) and the High End Systems Digital Lighting Community (forums.highend.com) are resources for tips and techniques on creating User Content. See *Custom User Content* on page 283 and Custom User Warps for basic considerations in developing your own content for Axon HD media servers.

Stock Media Files

Inside **User Image** and **Stock Image** folders are Library folders containing collections of media files. Media files can be still images or video clips in one of the following formats:

.jpg	.gif	.png	.bmp	.mpv	.m1v	.mpg	.m2v

NOTE: ***AxonHD media servers support .jpg formatted using RGB color. CMYK color files are not currently supported.***



The stock media files provided by High End Systems have been compressed and optimized for reliable and smooth playback from AxonHD media servers. Each file and folder has an associated DMX value. These values are fixed for Stock Content but must be assigned for all user created content. See *Assigning DMX Values to User Content* on page 199 for more information.

Object Files

Object files are the 3-D object component files used to build a graphic image. User Warps are .obj files created using the Warp Editor. Axon HD protocol supports a combined total of 255 object files displayed in **Stock Objects**, **User Objects** and **User Warps** folders. As with **Stock Media** files, the **Stock Objects** have a fixed DMX value and cannot be edited. A user-created object file must be assigned a unique DMX value between 150-255.

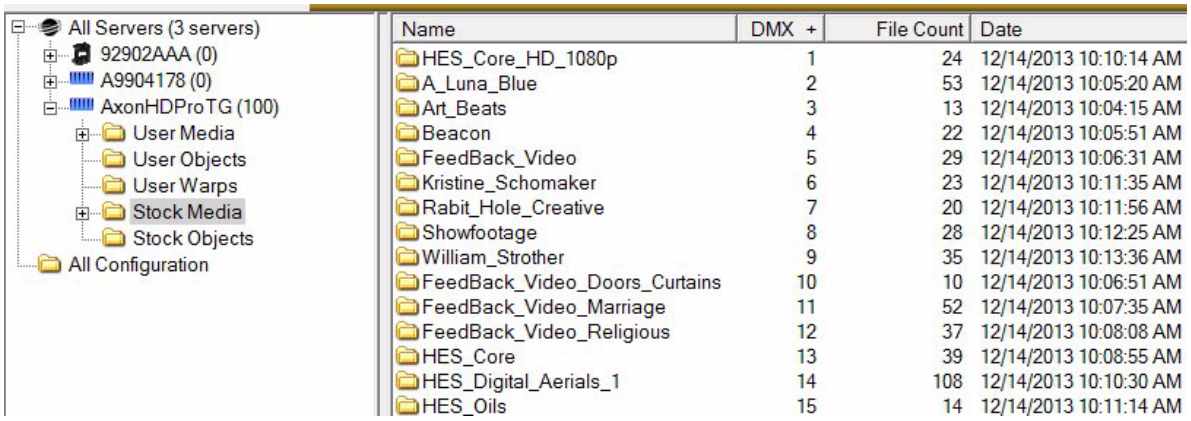
Viewing Server Configuration Data

Selecting an individual server from the list in the left pane displays all the configuration values for that server in the right pane. Selecting **All Configuration** displays the combined configuration values for all the servers on the network. For more information on server configuration, see *Viewing Server Configuration* on page 213.

Viewing Content

You can view information about media folders and files within each folder in a table format.

NOTE: Clicking on a column heading sorts the table according to the values in that column.



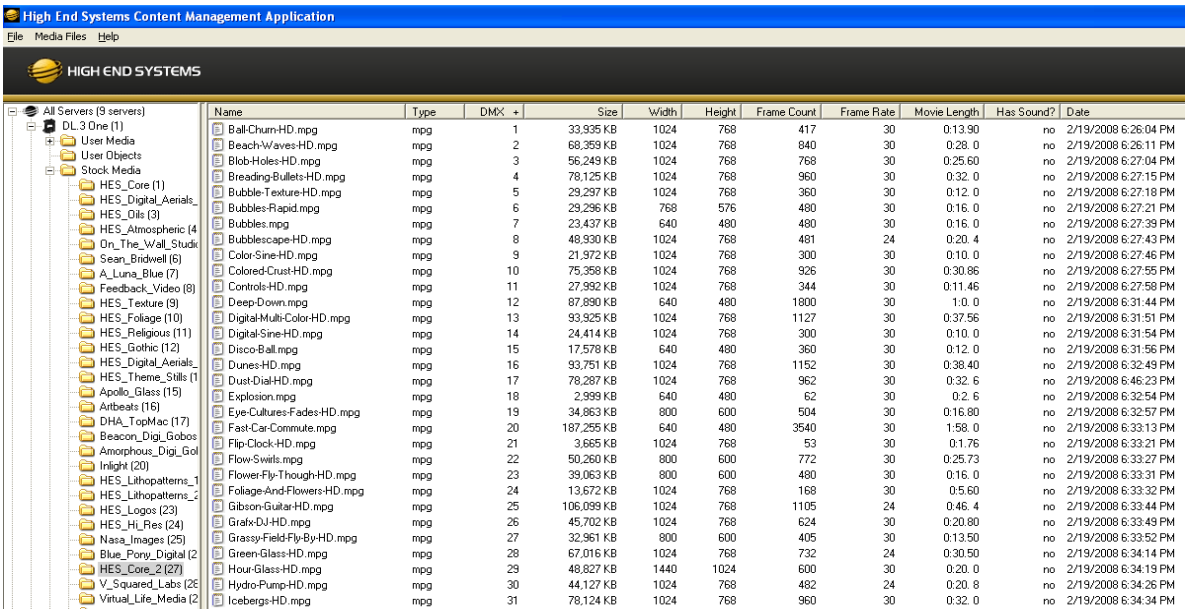
Viewing Folders

Clicking on a media folder in the left pane reveals information about any sub-folders it contains.

- **Name** of the Media File collection. This value is editable for User content. See *Naming and Deleting User Content Files and Folders* on page 199.
- **DMX** is the currently assigned DMX value for the folder. This value can be auto-assigned and edited for User content. See *Editing User Content DMX Values* on page 200.
- **File Count** of files in this collection
- **Date** the folder was last modified

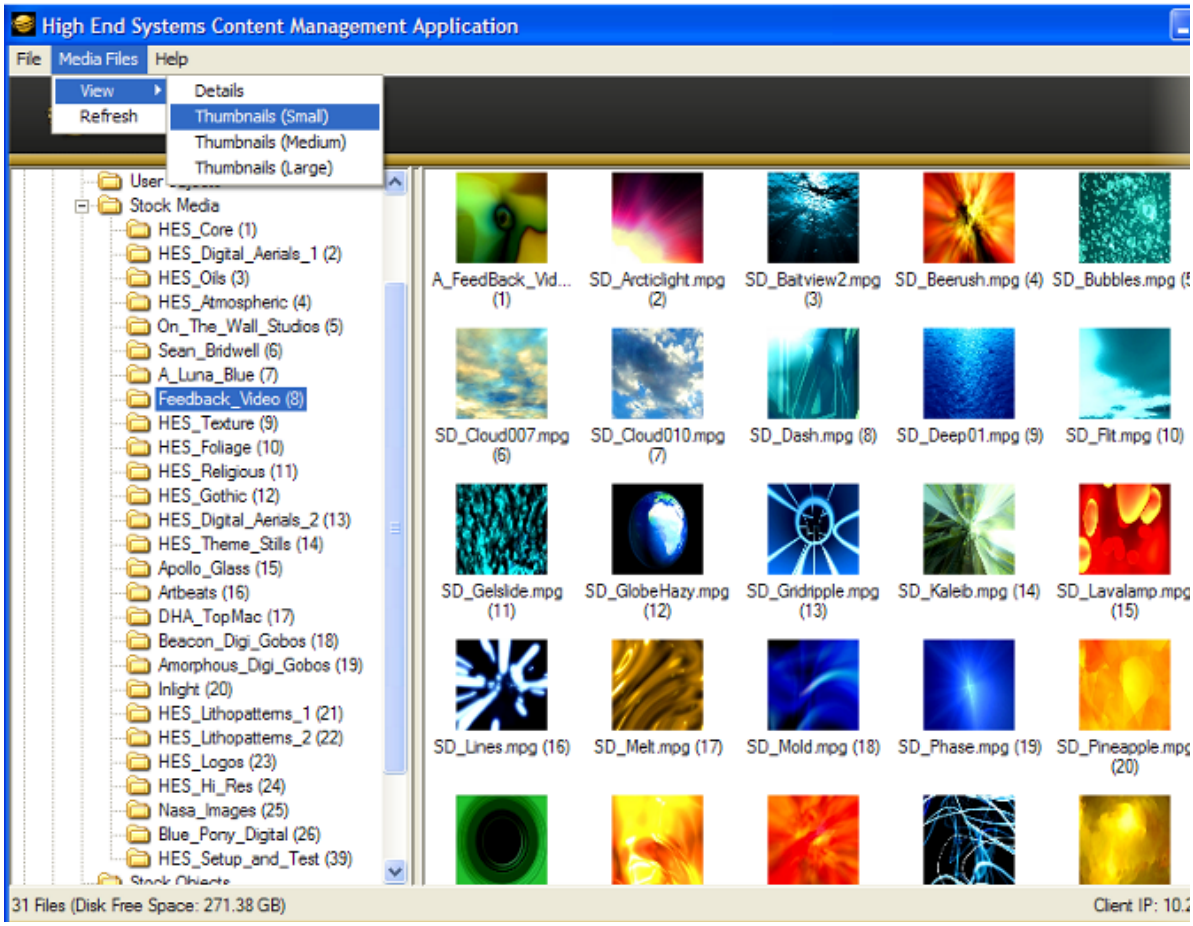
Viewing Files

Double clicking on a media folder in the left pane reveals information about its content files.



- **Name** of the file. This value is editable for User content. See *Naming and Deleting User Content Files and Folders* on page 199.
- **Type** indicates the file format extension
- **DMX** is the currently assigned DMX value for the folder. This value can be auto-assigned and edited for User content. See *Assigning DMX Values to User Content* on page 199.
- **Size** of file in kilobytes
- **Width** in pixels
- **Height** in pixels
- **Frame Count**
- **Frame Rate** in frames per second
- Movie Length in hr.min.sec
- **Date** the file was last modified

You can access several options for displaying files in the right pane through the drop down menu or by right clicking in the right pane when files are being displayed.



Managing User Media and Object Content

All Stock and User content can be viewed and refreshed but you have additional control over other aspects of your custom content. Within the CMA Client Window, you can:

- Rename user files and folders
- Delete files and folders
- Control DMX value assignment to files and folders
- Move files and folders between your local drive and a media server.

Naming and Deleting User Content Files and Folders

You can **Rename** any user content folder or file displayed in the right pane of the CMA window using the pull down **Media Folders**, **Objects,** or **3D Warp** menu or with a right click selection. Use the standard Windows operating system naming conventions.

You can **Delete** any user content folder or file displayed in the right pane of the CMA window using the pull down **Media Folders**, **Objects,** or **3D Warp** menu or with a right click selection.

NOTE: You cannot Delete a movie if the media server is playing it.

Assigning DMX Values to User Content

The DMX Value associated with each file and folder makes it easy to use the DMX control protocol to identify a unique media file or object.

There are up to 240 Media file folders with each capable of containing up to 255 image or movie media files. This gives a theoretical total of 61,200 possible locations for Media image or movie files. There is one DMX parameter used to identify a object so 255 DMX values are available between the Stock and User Content to identify objects.

Assigning DMX Values Automatically

The CMA can automatically assign a unique DMX value to any file or folder that does not already have a value. This automated assignment is based on alphabetically sorting the existing file/ folder names, and assigning each item a unique consecutive integer.

To automatically assign DMX values to a single file or folder with user content:

1. Display the User content folder or file in the right pane of the CMA Window
2. Select **AutoSet DMX** from either the **Media Files** folder or **Objects** drop down menu or the right click popup list. The CMA will assign a valid DMX value to the file or the folder.

You can automatically assign DMX values to all folders at once or to all the files within a folder at once. You cannot set both files and folder values at the same time. To automatically assign DMX values to all the User content folders or all files within a User content folder:

1. Display the User content folders or the files for a single folder in the right pane of the Content Management window and deselect all files or folders.
2. Select **Autoset All DMX** from either the **Media Folders** or **Objects** drop down menu or the right click popup list. The CMA will assign a valid DMX value to all selected files or folders.

Using the same steps, you can also **Reset DMX** for a single file or folder or **Reset All DMX** for all display files or folders displayed in the right pane to zero.

Editing User Content DMX Values

You can manually assign any valid DMX value to your files or folders by selecting the file or folder in the right pane and then, using the pull down menu or the right click popup, selecting **Edit DMX**. A dialog box will allow you to input the DMX value. If it is a valid value from 0-255, the CMA will change the DMX value displayed for the file or folder.

Valid DMX Values

Certain DMX values are **Reserved** for special purposes and are not user assignable. You can change the assigned DMX value for a User Content item to another valid DMX value. A valid DMX value is:

- From 0-255
- Is not one of the reserved values for that type of content
- Is unique from other content of its type except for zero

The following table shows valid and reserved values for User Content.

Content Type	DMX Values	Description	Reserved?
Media Folders (media file collections)	0	No Selection	No
	1-55	Default Stock media	Yes
	56-239	User collections	No
	240-254	Reserved	Yes
	255	Internal Camera video feed	Yes
Media Files	0	No Selection	No
	1-255	Media files	No
Objects	0	No selection	No
	1-149	Stock Objects	Yes
	150-255	User Objects	No

Moving User Content Files and Folders

User content can be easily moved between fixtures or between your local drive and fixtures. Which method you use depends on:

- How much content you want to move
- What existing server content you want to preserve
- Whether the client machine is currently connected to the Ethernet fixture link
- If you want to maintain currently assigned content identification DMX values

There are several methods for moving User content files and media folders between media servers to your local drive:

- Drag and Drop
- Copy and Paste commands
- Cloning transfers the User Content files and their DMX value assignments from one media server to one or more server(s) on the fixture network.
- Creating a Content Archive
- Deploying a Content Archive

Use the following table to determine the best method for your situation.

Fixture Network File-Transfer Method	Transfer Type			Notes
	From Server to Client Machine	From Client Machine to Server(s)	Between Networked Server(s)	
Drag and Drop	Yes	Yes, if format is valid for the destination folder	No	Does NOT preserve DMX Values
Copy and Paste commands	Yes	Yes	No	
Clone	No	No	Yes	Preserves DMX values and Replaces any previous User Content on destination drive
Deploying a Content Archive	No	Yes	No	
Creating a Content Archive	Yes	No	No	Saves assigned DMX values when creating archive from content on a fixture

Downloading Content from a Media Server to Your Local Drive

The CMA supports downloading User content files or folders from a media server to your local drive. To download a file or folder of User Content:

1. Display the Folder or File that you wish to move in the right pane of the CMA window
2. If the destination for the file on your local drive is visible, you can simply drag and drop the folder or file to that location or an external drive connected to your computer.

   OR
3. Select **Copy** from the **Media Files** or **Objects** drop down menu or the right click popup list.
4. Browse to the destination on your hard drive; then select **Paste** from the **Media Files** or **Objects** drop down menu or the right click popup list.

Uploading Content from Your Local Drive to a Media Server

You can upload User Content Media files, Media folders and Object files from your hard drive to a DL.3, DL.2 or Axon media server, provided they are:

- A valid file format (.jpg, .gif, .png, .bmp, .avi, .mpg, .m2v for Media Files; .x for Object files)
- You are uploading them to the appropriate User content folder on the media server
- They have been encoded correctly

To upload content:

1. Display the file or folder destination in the right pane of the CMA window
2. Browse to the file or folder you want to upload on your hard drive and click on it to select.
3. Drag and drop it into the appropriate User content folder

   OR
4. Select **Copy** from the **Edit** drop down menu or the right click popup list.
5. Select **Paste** from the **Media Files** or **Objects** drop down menu or the right click popup list.

As files are uploaded to fixtures, the User interface displays progress information and notifies the user of any naming conflicts in renamed files or encoding problems.

Content Scanning

Incorrectly encoded content can cause issues with playback performance, network synchronization, and graphics engine stability. To prevent this, the CMA automatically scans content locally on your computer (or the Axon media server) before actually loading it. If no warnings or errors are found, the content is loaded on to the server. If warnings or errors are found, a dialog box describes specific content problems.

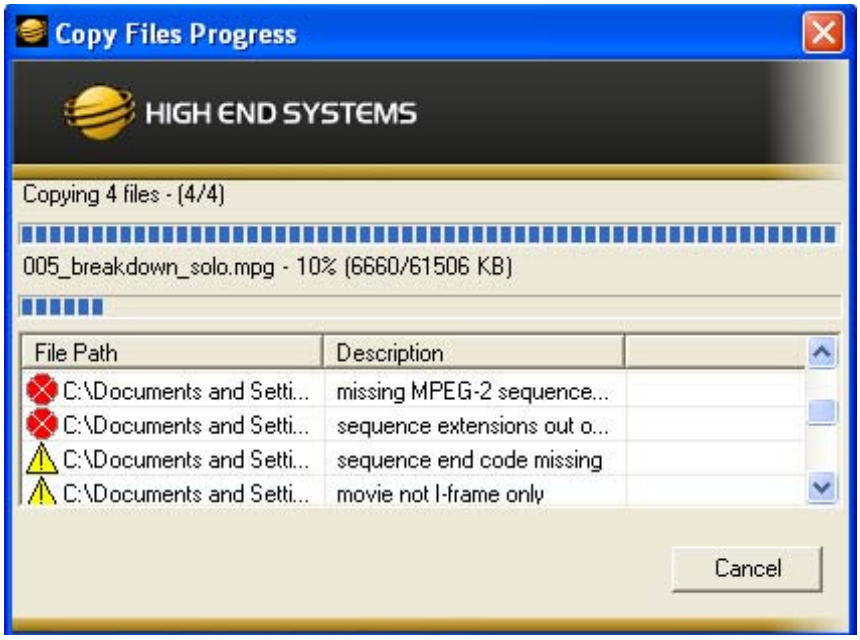
Warnings are problems that will potentially cause issues with playback of the media on the fixture, but won't affect graphics engine stability. An example would be a movie not being encoded with all I-frames or not having an End-of-Sequence header. The CMA will allow these files to be loaded on to the server, but it will alert you to potential issues by displaying the warnings in a dialog.

Errors are more serious problems with content that can create severe stability issues in media server software; for example, content encoded as the wrong type of stream (Transport Stream instead of an Elementary Stream). Errors are caused when content does not adhere to the MPEG2 encoding standard. When an error is found, the CMA will not allow this content to be loaded on to a server at all. A dialog will describe the issue, and after dismissing the dialog, you will find the specific file has not been loaded onto the server.

CMA Interaction

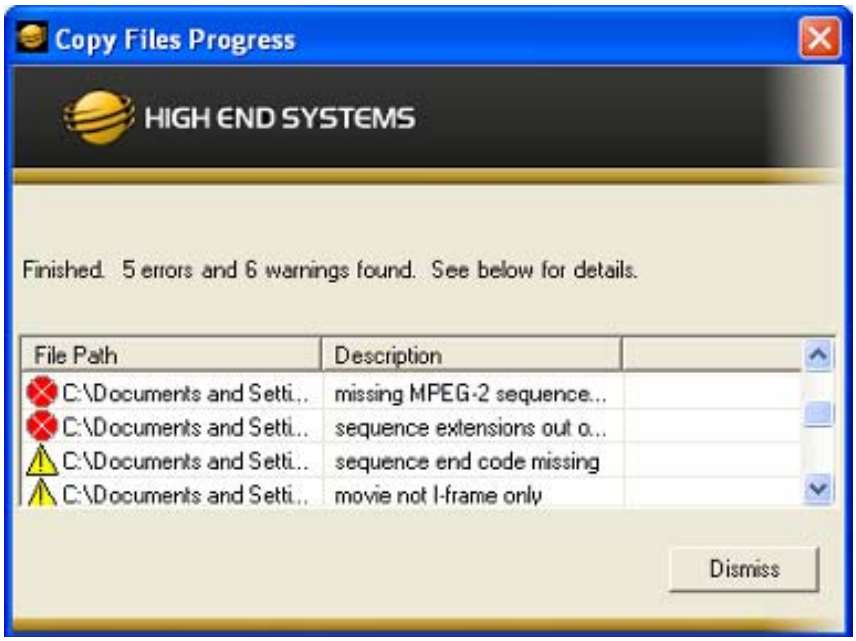
When you drag a content file (or folder) on to a server, a dialog shows the progress of the file copy process. If there is nothing wrong with the content, it copies to the fixture.

If warnings or errors are found, the CMA compiles the list of issues in the bottom half of the *Copy Files Progress* dialog.

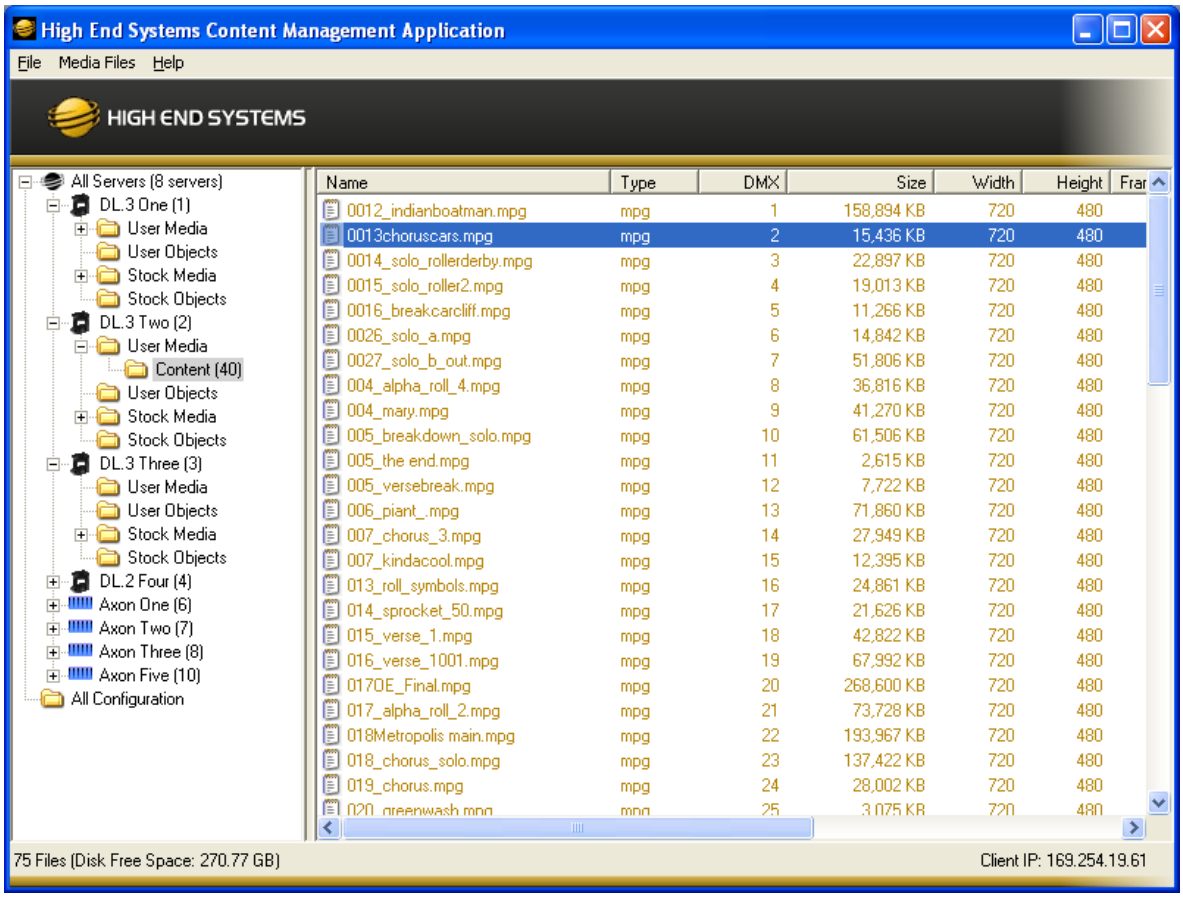


NOTE: ***Since the CMA executes the scanning/copying process for the entire group of folders/files in a single operation, it will not stop or pause during the process to dismiss the errors.***

After the process has finished, the dialog will indicate the number of issues that it found and a listing of the affected files. After viewing the list, click on the **Dismiss** button to continue working with CMA.



The files with errors in a group of files will not be copied on to the server. Files with warnings will be copied. They will show up highlighted in yellow when viewed in the “Details” view in the CMA to indicate to the user that this file is problematic.



Double-clicking on the highlighted file will bring up another dialog describing the identified file error.

Archiving User Content

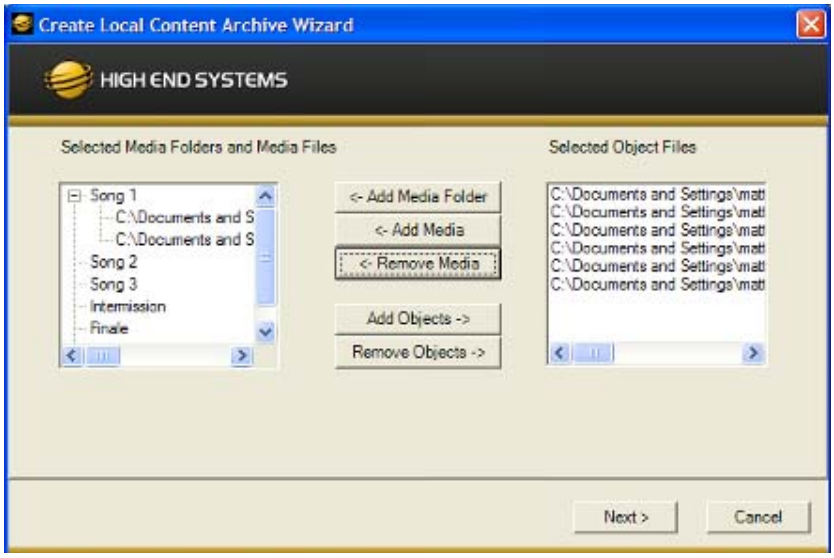
An Archive/Image is a compressed file used to store media files, folders and object files along with valid identification DMX values. This Content Archive is used to backup User Content that can be restored to any media server.

Using Local Archives to Prepare Content Offline

You can create a Local Archive of files stored on your hard drive to be deployed to a server at another time. This lets you work on organizing files for a specific show offline and then upload it to a server at a later date.

Creating a Local Archive

To create a Local Archive:



1. Under the **File** menu, select **Create Local Archive** to launch the archiving wizard.
2. Click on **Add Media Folder.** This will add a media folder to the left-hand column named “MyMedia0”. Each successive media folder will be named “MyMedia1, MyMedia2, and so forth. You can rename these folders with a single click on the folder name.
3. After creating a folder and renaming it (if you wish), highlight the folder to add media files.
4. Click **Add Media**. This will bring up a file browser window that will allow you to navigate to the spot on your hard drive containing the media you want to add. You can add single files or multiple files. To add multiple files, hold down shift and select multiple media files with your mouse.
5. Click **Add Objects** if you wish to add custom 3-D objects to the archive. This will again bring up a file browser window to navigate to your 3-D objects. Any 3-D objects added will appear in the right hand column of the wizard. 3-D objects do not get added to folders.
6. Click **Next** at the bottom of the wizard. This will take you to another screen where you choose where to save and what to name your archive.
7. Click **Browse** to navigate to where you want to save and name your archive.
8. Click **Next.** Your archive will then be created.

NOTES: The Remove Media and Remove Object buttons can be used to remove media files and objects from the wizard when creating the archive.

Currently, the archive will not be created unless each media folder created has at least one media file in it.

All media folders, files and objects will be assigned DMX addresses in alphabetical fashion.

Creating Content Backup Archive

Backups are created using the **Content Archive** feature. An Content Archive file is a compressed file containing all the User Content from a single fixture along with the assigned DMX values for folders and files.

To create a Content Archive:

1. In the CMA Client Window select **All Server** in the left pane.
2. Select the Server with the content you want to backup in the right pane.
3. Select **Create Content Archive** from the **Media Files** or **Objects** drop down menu or the right click popup list.

Deploying a Content Archive

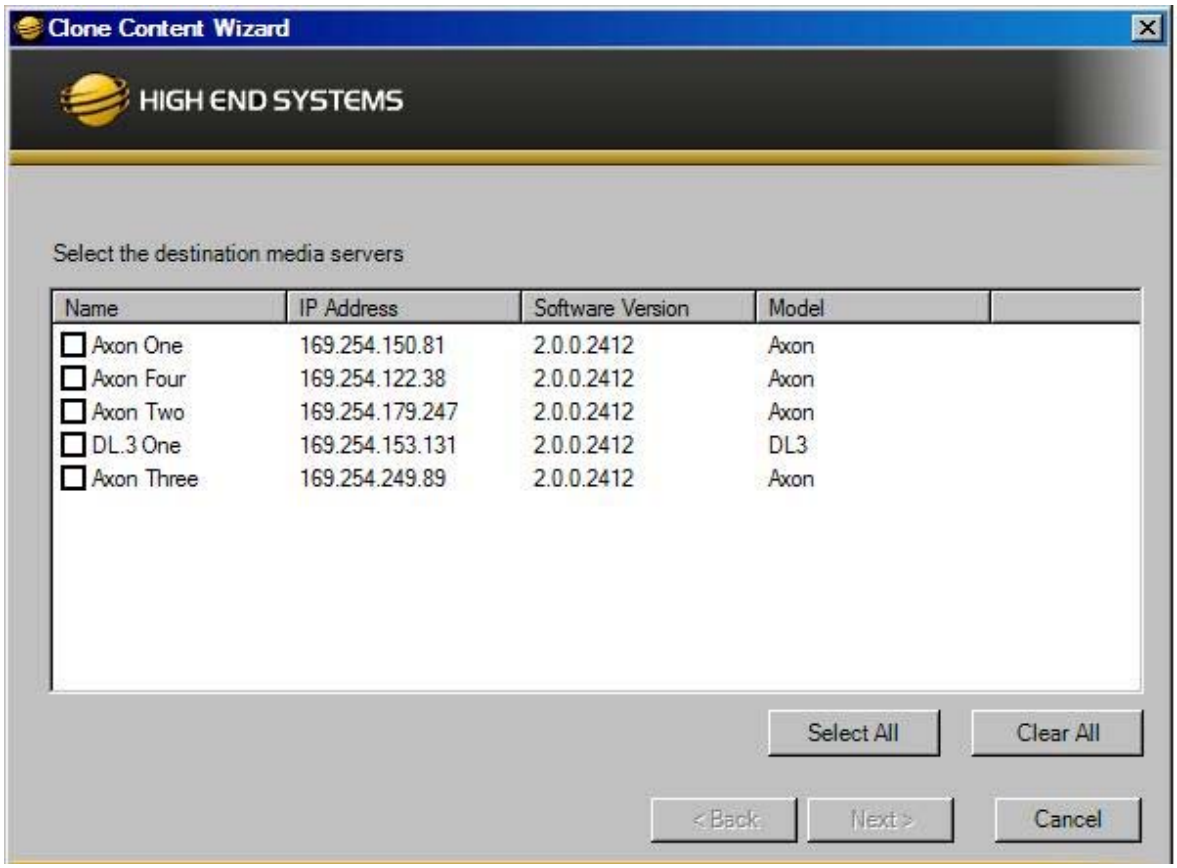
Deploying the Content Archive you created restores the user content to a fixture. To replicate this content to other fixtures on the link, use the **Clone Content** feature (see *Cloning User Content* on page 208).

Cloning User Content

Cloning is a file transfer operation where all the User Content of a single fixture is replicated across one or more other fixtures. Cloning preserves all user content naming and DMX values. This allows you, for example, to send the custom content for a specific show to all the fixtures used in that show with one operation.

To clone user content:

1. In the CMA Client Window select **All Server** in the left pane.
2. Select the Server with the content you want to clone in the right pane.
3. Select **Clone Content** from the **Media Files** or **Objects** drop down menu or the right click popup list. A Clone Content Wizard lets you select one or more servers on the fixture network as the destination for cloned content.

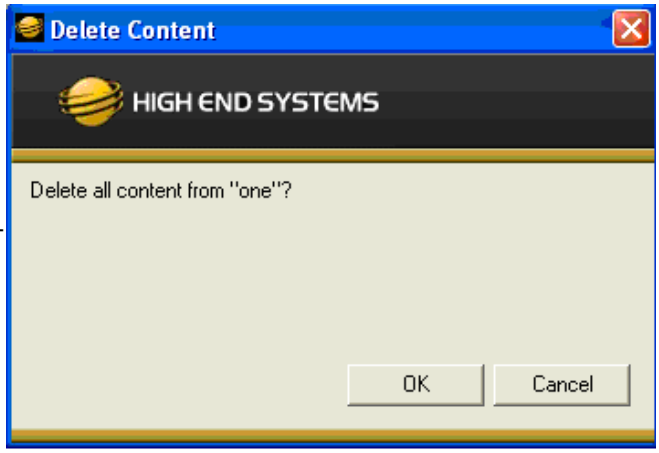


The cloning process erases all destination server(s) user content and replaces it with the selected server's user content. Stock content is unaffected.

Deleting Content

To delete ***all*** User Content from a server:

1. In the CMA Client Window select **All Server** in the left pane.
2. Select the Server with the content you want to delete in the right pane.
3. From the drop down menu or the right-click popup list, select **Delete Content.** A dialog box OKs/cancels the action.



DMX Summary

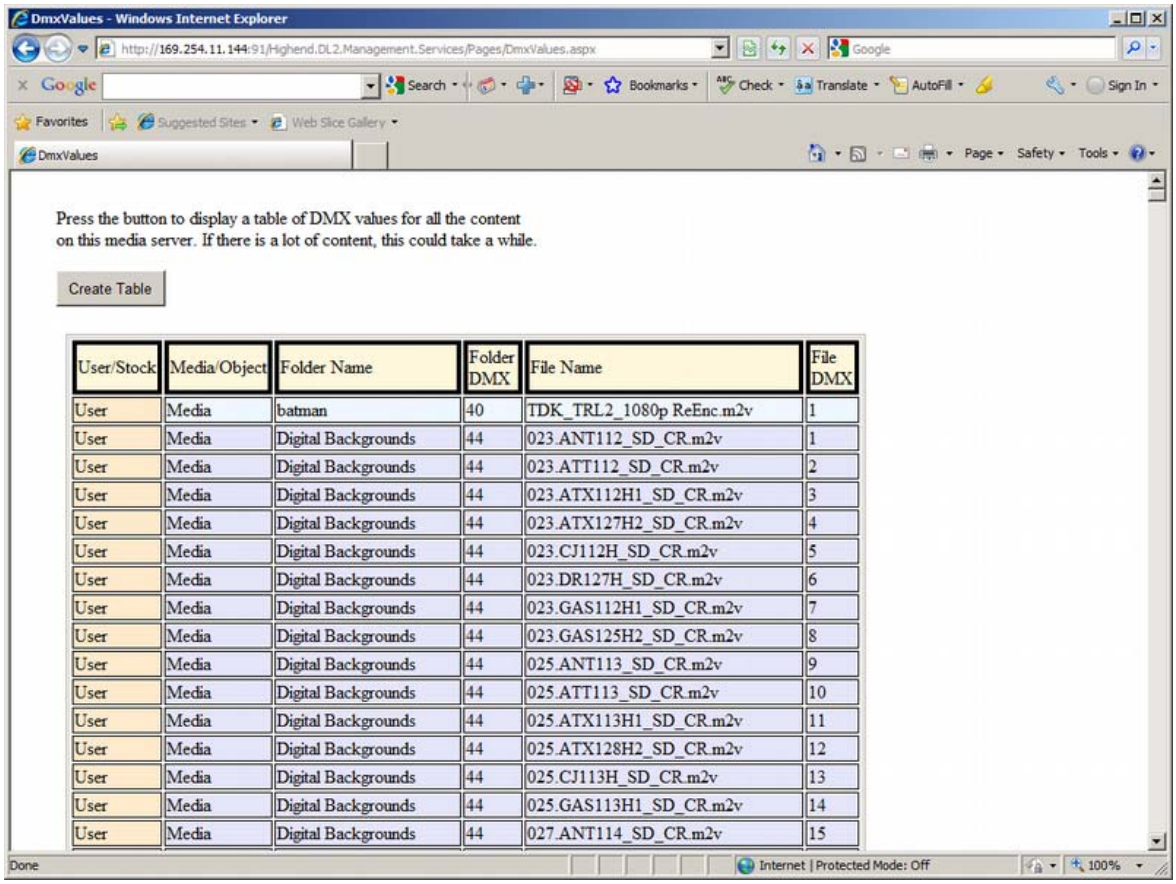
The DMX Summary lets you view all the content for a single server in a table format with the following details:

- Whether the content is a **User** Media file/folder, a **Stock** Media file/folder, or a **Object**
- The associated **Folder Name** for media files
- The **Folder DMX** value for media files
- The **File Name** for media or object files
- The **File DMX** value for media or object files

To view the DMX summary table:

1. Select **All Servers** from the left pane of the CMA Client Window.
2. Select a Server in the right pane
3. Select DMX Summary from the drop down menu or the right-click popup list.

4. Press the **Create Table** button on the screen to build the summary table.



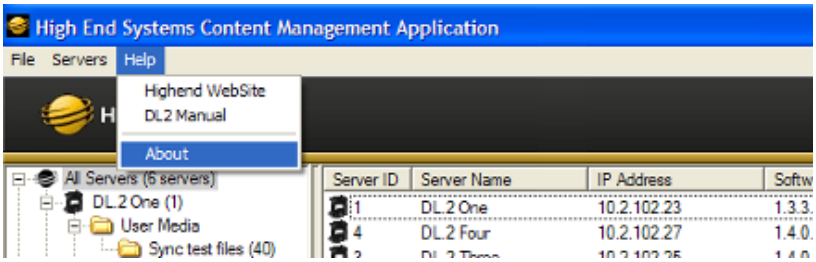
User/Stock	Media/Object	Folder Name	Folder DMX	File Name	File DMX
User	Media	batman	40	TDK_TRL2_1080p ReEnc.m2v	1
User	Media	Digital Backgrounds	44	023.ANT112_SD_CR.m2v	1
User	Media	Digital Backgrounds	44	023.ATT112_SD_CR.m2v	2
User	Media	Digital Backgrounds	44	023.ATX112H1_SD_CR.m2v	3
User	Media	Digital Backgrounds	44	023.ATX127H2_SD_CR.m2v	4
User	Media	Digital Backgrounds	44	023.CJ112H_SD_CR.m2v	5
User	Media	Digital Backgrounds	44	023.DR127H_SD_CR.m2v	6
User	Media	Digital Backgrounds	44	023.GAS112H1_SD_CR.m2v	7
User	Media	Digital Backgrounds	44	023.GAS125H2_SD_CR.m2v	8
User	Media	Digital Backgrounds	44	025.ANT113_SD_CR.m2v	9
User	Media	Digital Backgrounds	44	025.ATT113_SD_CR.m2v	10
User	Media	Digital Backgrounds	44	025.ATX113H1_SD_CR.m2v	11
User	Media	Digital Backgrounds	44	025.ATX128H2_SD_CR.m2v	12
User	Media	Digital Backgrounds	44	025.CJ113H_SD_CR.m2v	13
User	Media	Digital Backgrounds	44	025.GAS113H1_SD_CR.m2v	14
User	Media	Digital Backgrounds	44	027.ANT114_SD_CR.m2v	15

Upgrading Software

Upgrade Management lets you upgrade the media server application and system firmware.

Verifying Software Versions

Running the latest version of both the CMA software and the media server software will ensure that you get the best performance from the fixtures on your network.



To verify the CMA version, select **About** from the **Help** drop down menu. The media server software version is displayed for each server on the network in the All Servers view.

NOTE: ***Although running different versions of software on servers is not prohibited, it is highly recommended that all servers on the network be running the same software version.***

Upgrading the CMA Software

Close the CMA before upgrading the CMA software. To Upgrade software:

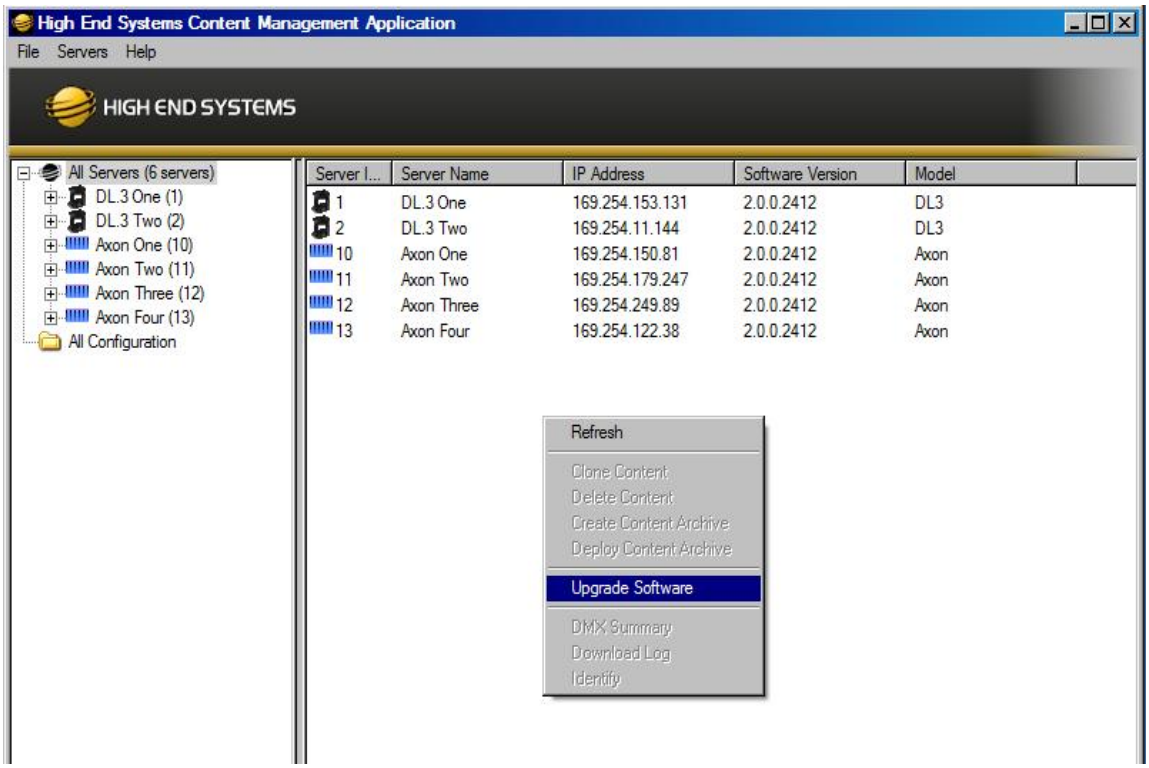
1. Download the latest version of the application from the Support section of the High End Systems website (www.highend.com). A download wizard simplifies installation on your personal computer.
2. A dialog box will give you the option to Run or Save the application. Pressing ***Run*** automatically uninstalls any existing CMA version on your hard drive and installs the new version.

Upgrading Server Software

The server software for Digital Lights and Axon media servers can only be uploaded to fixtures from the CMA. You must first save the latest version of the software from the High End Systems website (www.highend.com) to your hard drive and then use the CMA to upload it to any media server on your link. To Upgrade Server Software:

1. Using your internet browser, select the latest version from the support section of the High End Systems website. A dialog box will give you the option to ***Save***.
2. Select the location and press ***Save*** again to put a copy of the Fixture software on your local drive.

3. Click on **All Servers** in the left pane of the CMA Window.

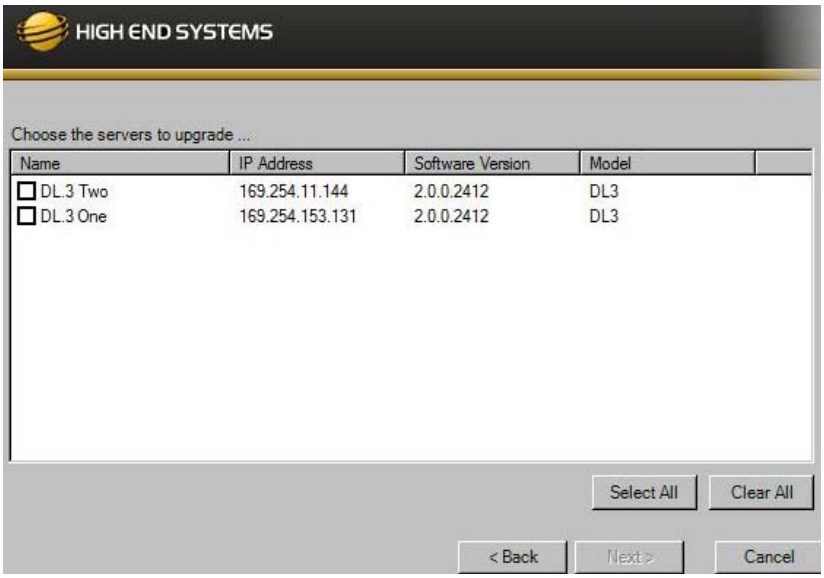


4. Right click anywhere in the CMA Window or use the Server's pull down menu to select **Upgrade Software**. The Upgrade Wizard will prompt you to browse to the location where you saved a copy of latest version.

5. After locating the upgrade file, press Next. The Upgrade Wizard displays a list of all servers connected to the fixture network.

6. Click in the box to the left of the server name to select a server(s) for upgrading.

7. Click **Next** to continue upgrade. The server will reboot after upgrading the software.



Viewing Server Configuration

The CMA lets you remotely view and modify fixture settings.Some settings like Lamp Hours, Software Versions, etc. are view only. Other settings such as Fixture ID, various Projector settings, DMX Start Channel, etc. can be modified (configured).

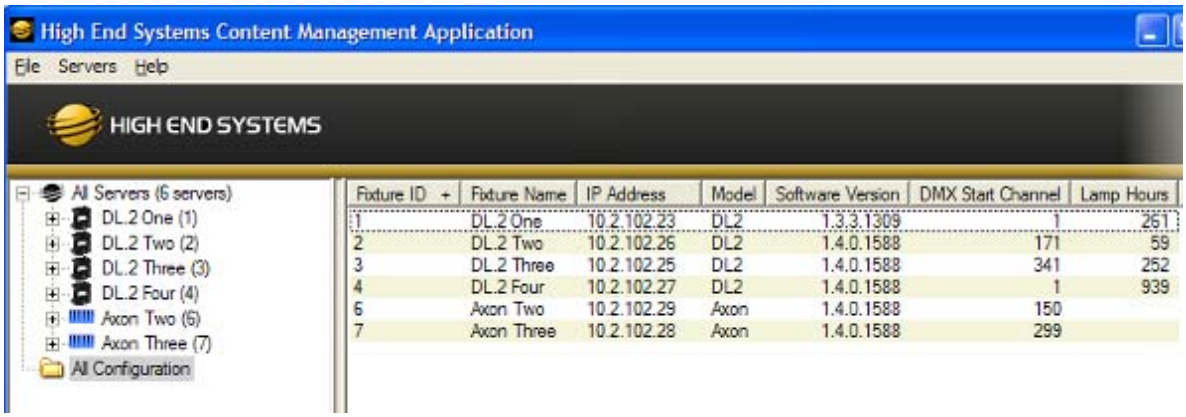
NOTE: All of these settings are also available for DL.3 and DL.2 fixtures through the Digital Light onboard menu system.

The CMA also has some additional configuration features that let you:

- Assign a name to servers connected over the network for easier identification of servers on your network.
- Compare all the Configuration Items of a certain type for a group of fixtures. For example, viewing the DMX Start Channels of all the fixtures on a network.
- Control monitor display settings for Axon media servers.

Viewing Current Configuration of All Servers

To view configuration information for all Servers on the network, select All Configurations in the left pane. The right pane now displays configuration values for all the media servers on the fixture link in a sortable table. Click in the column heading to sort by that column's values. A + symbol appears in the "sort by" column heading.

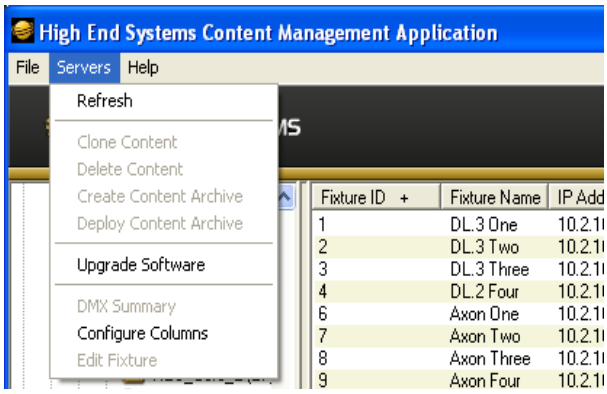


The example above contains the following information for one or all servers:

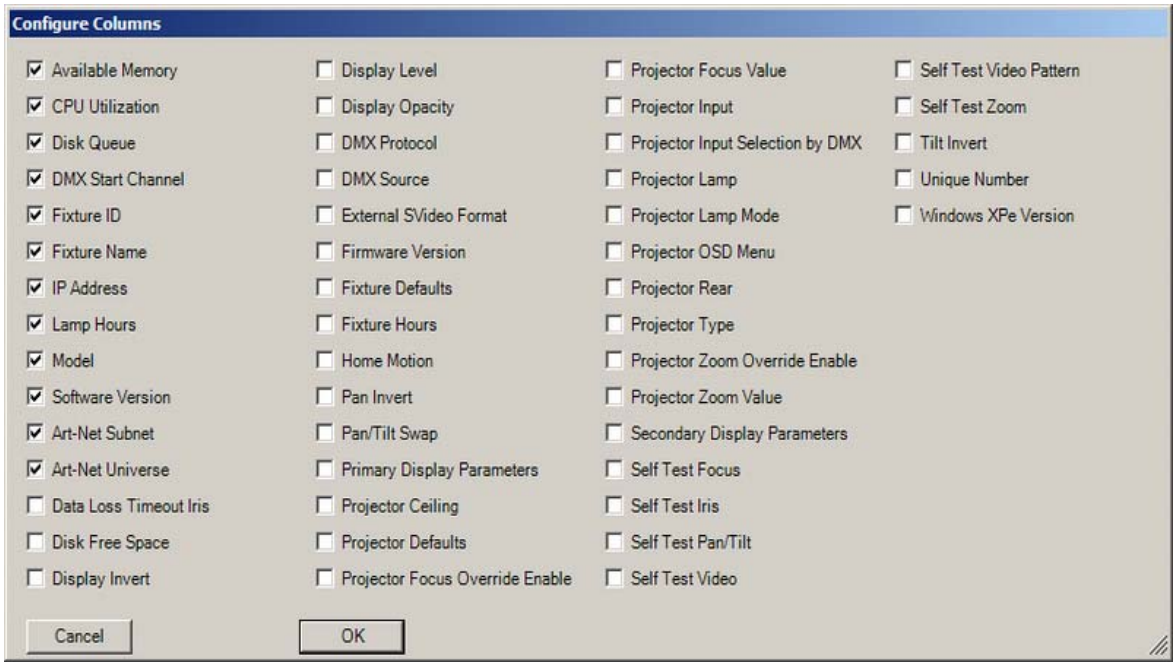
- The Fixture ID from 1-255
- The Fixture Name you have assigned
- The IP Address
- Model type
- The DMX Start Channel currently assigned to each server
- The current lamp hours for each server

Configuring Columns

Select which columns are present by selecting **Configure Columns** from the **Servers** menu in the menu bar or by right clicking anywhere in the main pane of the CMA.



Once you select **Configure Columns**, you can view a list of all possible columns. Choose which columns to view by either checking or un-checking each selection. Once you have selected the columns you want to display, click on OK.



Re-Order Columns

You also have the option to change the order that the columns are displayed. Left-click on the head of the column you wish to move, hold down the mouse button and drag the column to the desired position. Releasing the mouse button will move that column to the new location.

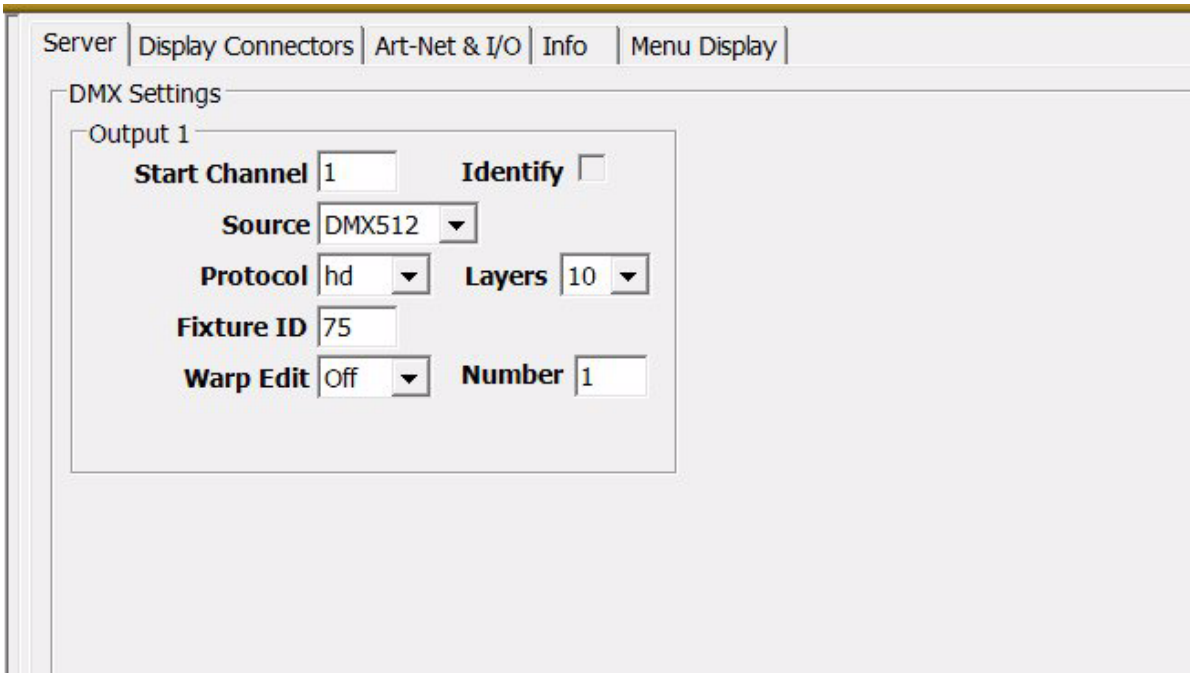
Viewing Individual Fixture Configuration Values

To view configuration information for a individual server, click on **All Servers** in the left pane of the CMA window and select the + to view all the servers on the fixture network. Select a server in the left pane to view its configuration information in the right pane. Configuration information is grouped under tabs in the right pane. Fields are provided for all editable configuration values.

AxonHD Media Server Configuration Options

Axon configuration options are grouped under a Server, Display Connectors, Art-Net & I/O, Info, and Menu Display tabs.

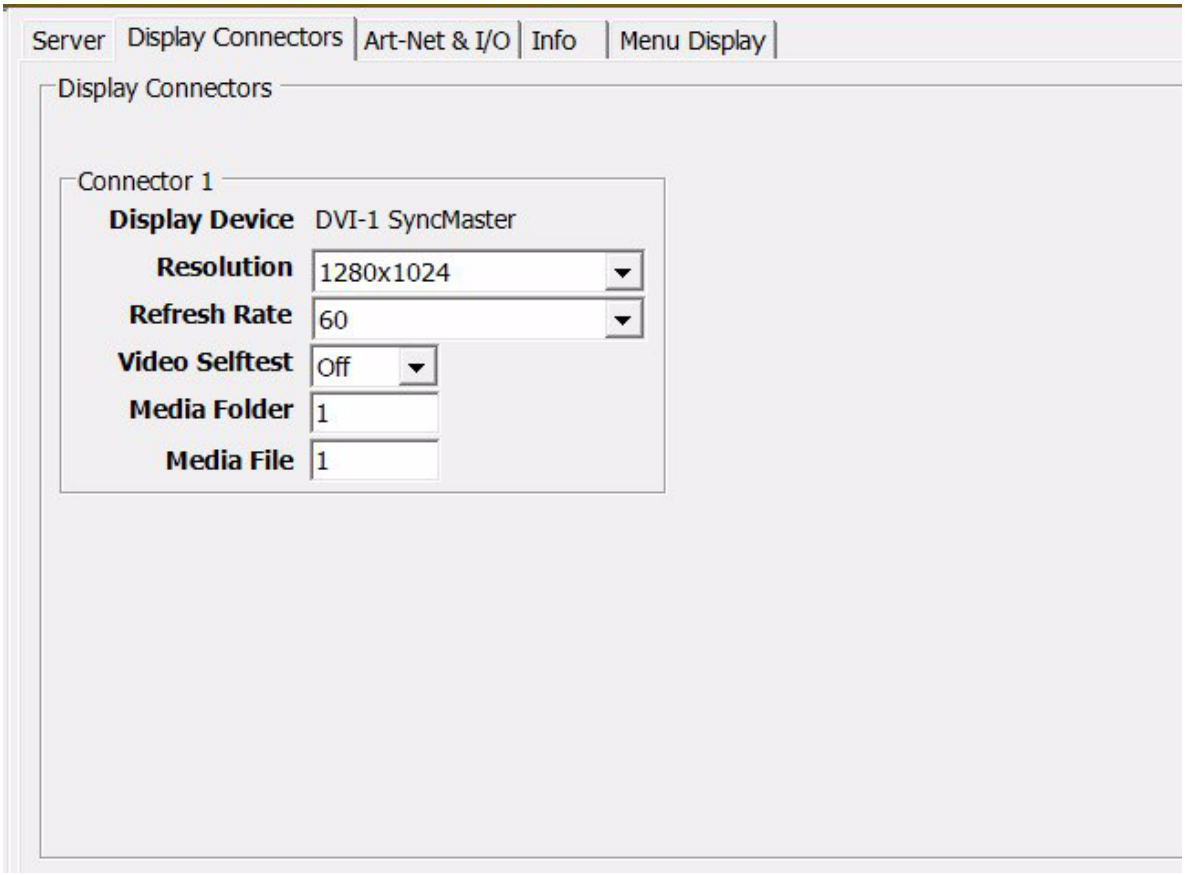
Server Tab



DMX Settings

Configuration Item	Configuration Value Options	
DMX Start Channel	1-512	Identify
DMX Source	**DMX512** or **Art-Net**	
DMX Protocol	HD	Sets graphic objects from 1-10
Fixture ID	1-255	Fixture ID
Warp Editor	Off or On	Number

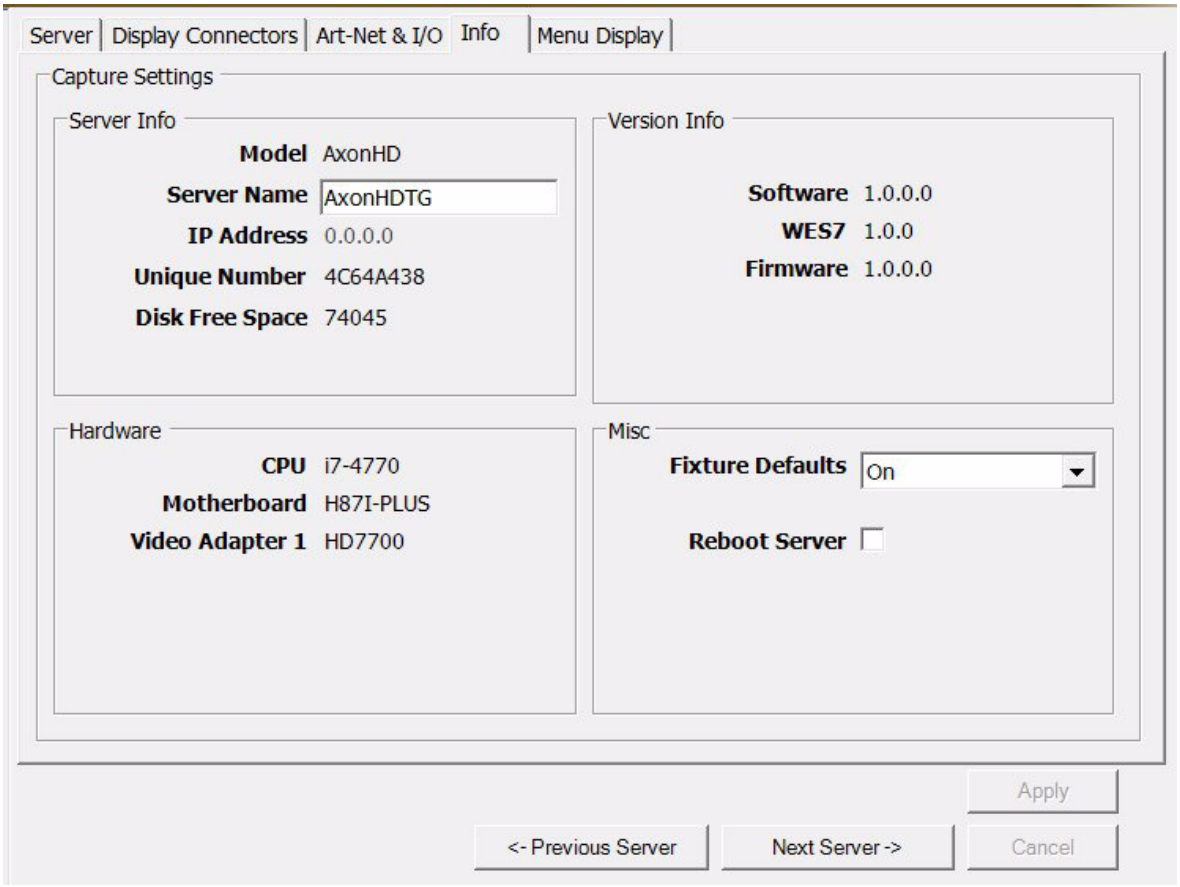
Display Connectors Tab



Display Connectors

Configuration Item	Configuration Value Options
Resolution	Options in the drop-down lists are automatically populated by the Axon software for the specific display device attached.
Refresh Rates	
Video Pattern	**1** displays graphic object with texture for the number of graphic layers you have defined **2** alternates between an alignment grid and a color calibration screen
Media Folder	Current Selected
Media File	Current Selected

Info Tab



Server Info

Configuration Item	Configuration Value Options
Model	Axon HD
Server Name	Allows fixture name of up to 26 characters
IP Address	Read only assigned to that unit by the router or Auto IP
Unique Number	Read only assigned by factory
Disk Free Space	Read only in MB

Version Info

Configuration Item	Configuration Value Options
Software	Read only
WES7	Read only
Firmware	Read only

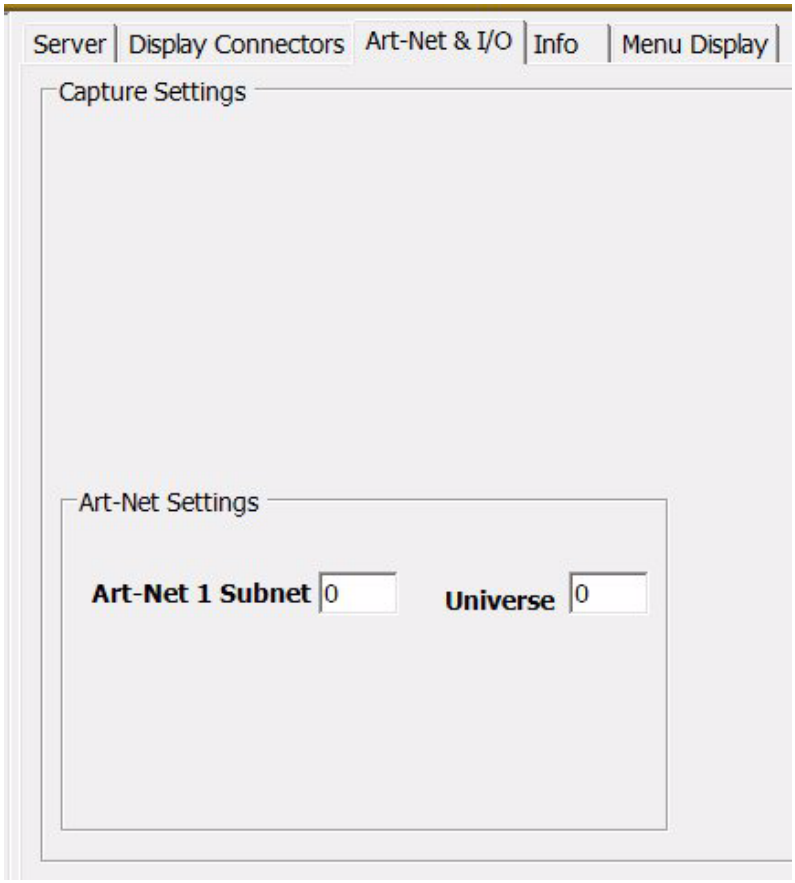
Hardware

Configuration Item	Configuration Value Options
All CPU	Read Only displays current hardware configuration
Motherboard	
Video Adapter 1	

Miscellaneous

Configuration Item	Configuration Value Options
Fixture Defaults	**On** restores fixture defaults **Off** displays whenever defaults has been changed
Reboot Server	Check **Reboot** to restart the internal graphics engine

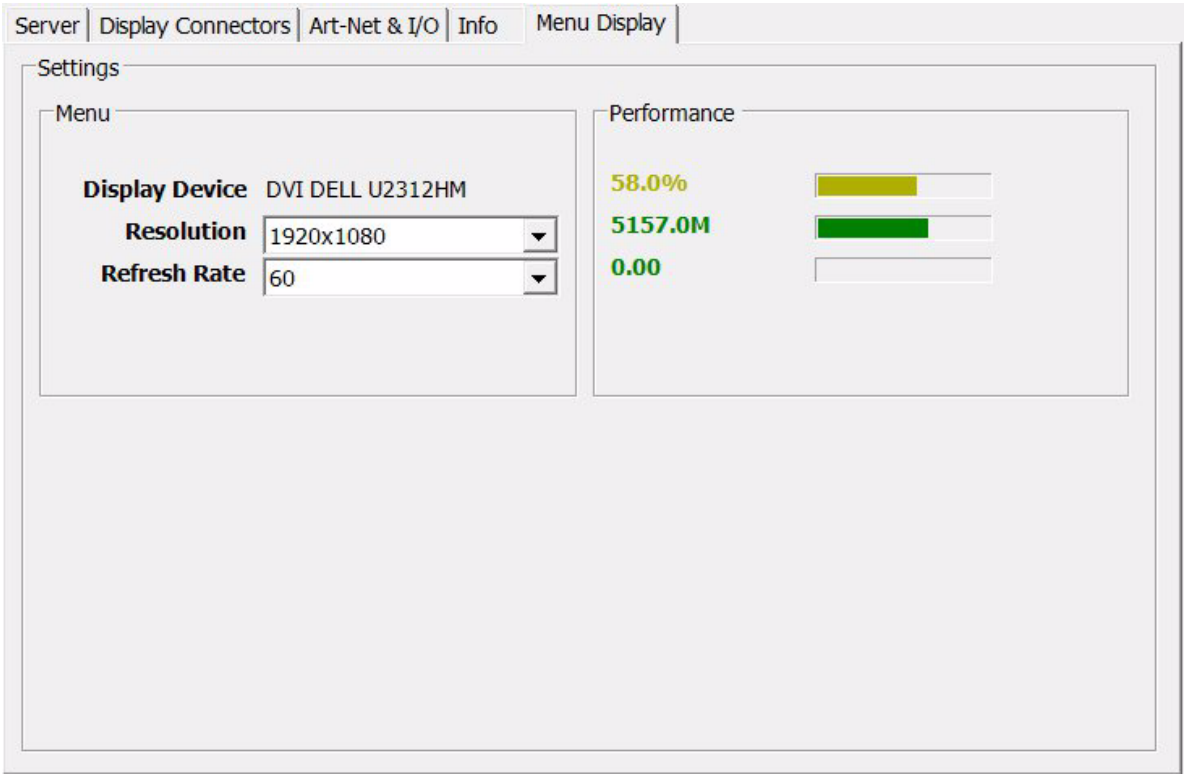
ArtNet and I/O Tab



ArtNet Settings

Configuration Item	Configuration Value Options
Art-Net Subnet	0-16
Art-Net Universe	0-16

Menu Display Tab



Menu

Configuration Item	Configuration Value Options
Display Device	Read Only
Resolution	
Refresh Rate	

Performance

Configuration Item	Configuration Value Options
CPU Utilization	Gauges display available resources remaining. This can help with balancing additional layers with the capabilities for the hardware configuration of this device.
Available Memory	
Disk Queue	

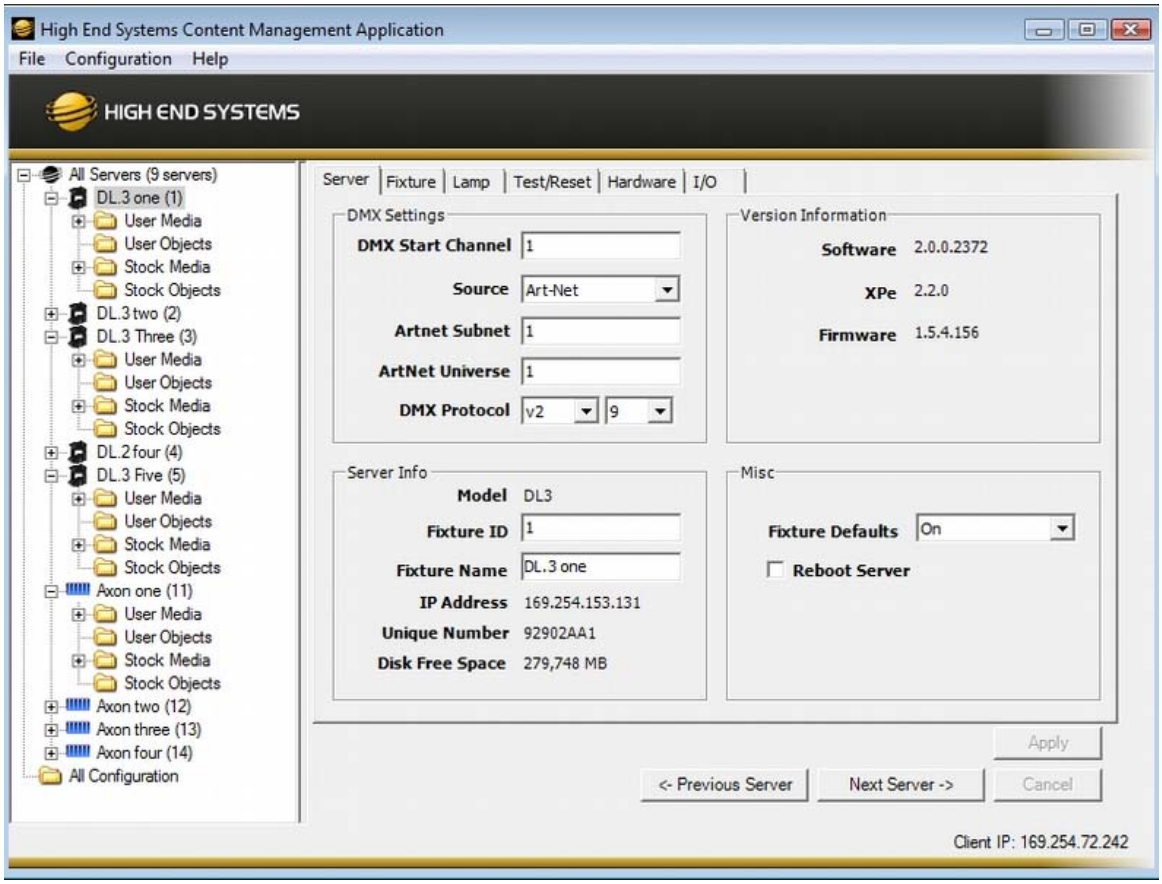
Configuration Example

Before programming a Digital Light fixture or the Axon media server from a DMX512 console, you need to:

- Identify the DMX Source for the fixture
- Select the Protocol type to determine the DMX channel footprint this fixture will utilize
- Select a Fixture Number to identify this Axon on the Ethernet link (required if you will be synchronizing output between fixtures).
- Assign a valid Start Channel (the first channel in the unique range of DMX channels designated by the console for this Axon)

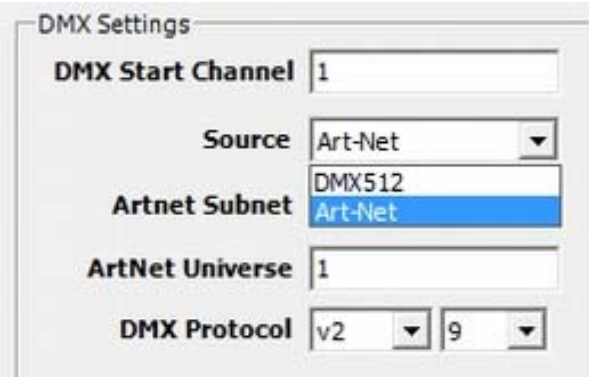
All these selections can be made in the **Server** tab for all models of media servers.

1. To view configuration information for an individual server, click on **All Servers** in the left pane of the CMA window and select the + to view all the servers on the fixture network. Select a server in the left pane to view its configuration information in the right pane.



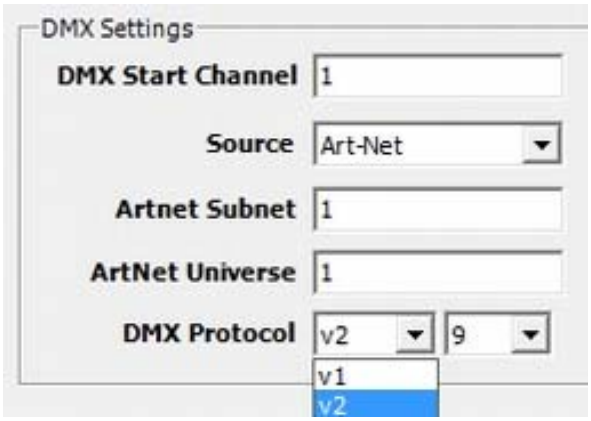
2. Select a **DMX Source** type by clicking on the down arrow of the Source field to select DMX512 or Art-Net.

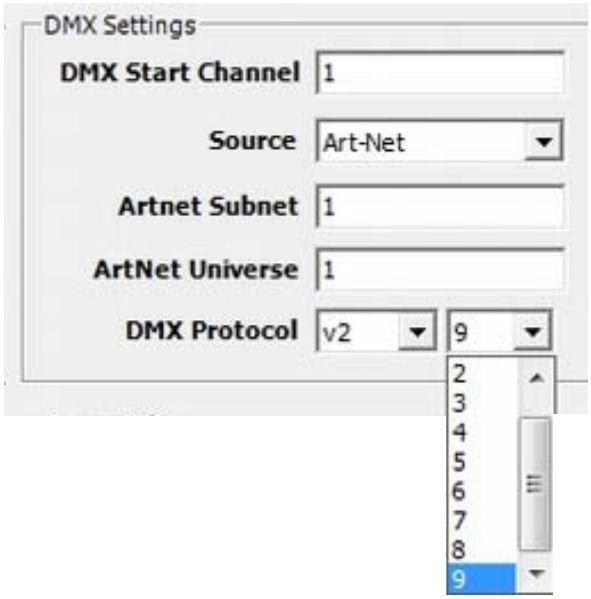
   If you select Art-Net, assign a universe number from 1–16.



3. Select a **DMX Protocol** type by choosing **V1**, or **V2** from the drop down list in the option field. and then select the number of Graphic Object layers for your application.

   The Protocol you select is based on how many DMX channels are required for your application. For more information on selecting protocol, see *Protocol Options* on page 27 and .





4. Edit the DMX **Start Channel** by entering a valid Start Channel for the protocol type you have chosen.

   For more information on selecting a valid start channel, see *Determining a DMX Start Channel* on page 21.