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 <u>www.highend.com/support/digital_lighting/</u>. 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.

File Media Folders Help				
B Servers (4 servers)	Name	DMX +	File Count	Date
E 28288F3E (0)	HES Core HD 1080p	1	24	12/13/2013 4-57-21 DM
	A Luna Blue	2	24 53	12/13/2013 4.57.21 PW
Coor mount	Art Bests	2	13	12/13/2013 5-01-17 DM
Costr Objects	Beacon	4	22	12/13/2013 5:01:05 DM
Cost Walps	EeedBack Video	5	20	12/13/2013 4-53-10 PM
Grade Objects	Krietina Schomakar	6	23	12/13/2013 4:58:50 DM
Stock Objects	Babit Hole Creative	7	20	12/13/2013 4:50:50 PM
92902AAA (0)	Showfootnoo	0	20	12/13/2013 4:55.15 PM
🗉 🛄 User Media	William Strathor	0	20	12/13/2013 4.55.40 FW
User Objects	EadBack Video Doors Cutains	10	10	12/13/2013 5.01.11 PM
🗀 User Warps	EadBack_Video_Doors_Cuitains	11	50	12/13/2013 4.53.55 PM
B Stock Media	EcodBack_Video_Baligious	12	32	12/13/2013 4-5E-02 DM
Stock Objects	HES Core	12	30	12/13/2013 4:55:53 DM
A9904178 (0)	HES Digital Assists 1	14	109	12/13/2013 4:55:53 PM
🖽 🗀 User Media		15	100	12/13/2013 4.57.42 FW
- 🗀 User Objects	HES_OIIS	15	21	12/13/2013 4:50.27 PW
🗀 User Warps	On The Well Studies	17	37	12/13/2013 4:55.44 FW
B Stock Media	Conse Bridwall	10	10	12/13/2013 4.59.00 PW
Stock Objects	Sean_bridwell	10	19	12/13/2013 4:59:23 PW
AvenHDTG (75)	A_Luna_Dide_2	19	43	12/13/2013 4:51.40 PW
in Collars Madia	Peedback_video_2	20	10	12/13/2013 4:53.10 PW
Contraction Chicago		21	10	12/13/2013 4:50:33 PM
User Objects	HES_Foliage	22	31	12/13/2013 4:50:00 PW
User Warps	HES_Religious	23		12/13/2013 4:50:29 PWI
E Stock Media	HES_GOINC	24	71	12/13/2013 4:50.03 PM
Stock Objects	HES_Digital_Aerials_2	25	/1	12/13/2013 4:57:53 PM
🗀 All Configuration	HES_Ineme_Stills	20	60	12/13/2013 4:50.35 PWI
	Adda and Add	21	29	12/13/2013 4.51.44 PM
		20	12	12/13/2013 4:52:07 PM
	DHA_TOPMac	29	31	12/13/2013 4:52:56 PM
	Beacon_Digi_Gobos	30	7	12/13/2013 4:52:29 PM
	Amorphous_Digi_Gobos	31		12/13/2013 4:51:42 PM
		32	11	12/13/2013 4:58:46 PM
	HES_Lithopatterns_1	33	151	12/13/2013 4:58:16 PM
	UES_Lithopatiems_2	34	110	12/13/2013 4:58:18 PM
	HES_LOGOS	35	10	12/13/2013 4:58:19 PM
	HES_HI_Kes	36	/	12/13/2013 4:58:11 PM
	Nasa_Imagés	3/	36	12/13/2013 4:58:51 PM
	Blue_Pony_Digital	38	32	12/13/2013 4:52:43 PM

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.

All Servers (3 servers)	Name	DMX +	File Count	Date
🗄 🖷 📮 92902AAA (0)	HES_Core_HD_1080p	1	24	12/14/2013 10:10:14 AN
庄 ··· 🛄 A9904178 (0)	A_Luna_Blue	2	53	12/14/2013 10:05:20 AN
AxonHDProTG (100)	CArt_Beats	3	13	12/14/2013 10:04:15 AN
🗄 🗀 User Media	Beacon	4	22	12/14/2013 10:05:51 AN
User Objects	EedBack_Video	5	29	12/14/2013 10:06:31 AN
User Warps	CKristine_Schomaker	6	23	12/14/2013 10:11:35 AN
Stock Media	Rabit_Hole_Creative	7	20	12/14/2013 10:11:56 AN
Stock Objects	Showfootage	8	28	12/14/2013 10:12:25 AN
All Configuration	CWilliam_Strother	9	35	12/14/2013 10:13:36 AN
	EedBack_Video_Doors_Curtains	10	10	12/14/2013 10:06:51 AN
	EedBack_Video_Marriage	11	52	12/14/2013 10:07:35 AN
	EedBack_Video_Religious	12	37	12/14/2013 10:08:08 AN
	HES_Core	13	39	12/14/2013 10:08:55 AN
	HES_Digital_Aerials_1	14	108	12/14/2013 10:10:30 AN
	HES_Oils	15	14	12/14/2013 10:11:14 AN

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 (<u>highend.com</u>) and the High End Systems Digital Lighting Community (<u>forums.highend.com</u>) 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
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NOTE: AxonHD media servers support .jpg formatted using RGB color. CMYK color files are not currently supported.

High End Systems Content Ma	nagement Application								
Elle Media Files Help									
iigh end systems									
🖃 🥌 All Servers (9 servers)	Name	Туре	DMX +	Size	Width	Height	Frame Count	Frame Rate	Movie Length Ha
🖻 📮 DL.3 One (1)	Ball-Churn-HD.mpg	mpg	1	33,935 KB	1024	768	417	30	0:13.90
🕀 🧰 User Media	Beach-Waves-HD.mpg	mpg	2	68,359 KB	1024	768	840	30	0:28.0
User Objects	Blob-Holes-HD.mpg	mpg	3	56,249 KB	1024	768	768	30	0:25.60
E Stock Media	Breading-Bullets-HD.mpg	mpg	4	78,125 KB	1024	768	960	30	0:32.0
HES_Lore [1]	Bubble-Texture-HD.mpg	mpg	5	29,297 KB	1024	768	360	30	0:12.0
HES_DIgital_Aeriais_	Bubbles-Rapid.mpg	mpg	6	29,296 KB	768	576	480	30	0:16.0
HES_DIIS [3]	Bubbles.mpg	mpg	7	23,437 KB	640	480	480	30	0:16.0
Do The Wall Study	Bubblescape-HD.mpg	mpg	8	48,930 KB	1024	768	481	24	0:20.4
Sean Bridwell (6)	E Color-Sine-HD.mpg	mpg	9	21,972 KB	1024	768	300	30	0:10.0
A Luna Blue (7)	Colored-Crust-HD.mpg	mpg	10	75,358 KB	1024	768	926	30	0:30.86
- Carl Feedback, Video (8)	Controls-HD.mpg	mpg	11	27,992 KB	1024	768	344	30	0:11.46
HES_Texture (9)	E Deep-Down.mpg	mpg	12	87,890 KB	640	480	1800	30	1:0.0
HES_Foliage (10)	Digital-Multi-Color-HD.mpg	mpg	13	93,925 KB	1024	768	1127	30	0:37.56
Ca HES_Religious (11)	Digital-Sine-HD.mpg	mpg	14	24,414 KB	1024	768	300	30	0:10.0
🚞 HES_Gothic (12)	🖹 Disco-Ball.mpg	mpg	15	17,578 KB	640	480	360	30	0:12.0
HES_Digital_Aerials_	Dunes-HD.mpg	mpg	16	93,751 KB	1024	768	1152	30	0:38.40
HES_Theme_Stills (1	E Dust-Dial-HD.mpg	mpg	17	78,287 KB	1024	768	962	30	0:32.6
Apollo_Glass (15)	Explosion.mpg	mpg	18	2,999 KB	640	480	62	30	0:2.6
Artbeats [16]	Eye-Cultures-Fades-HD.mpg	mpg	19	34,863 KB	800	600	504	30	0:16.80
DHA_TopMac (17)	E Fast-Car-Commute.mpg	mpg	20	187,255 KB	640	480	3540	30	1:58.0
Americhaus Digi Gel	E Flip-Clock-HD.mpg	mpg	21	3,665 KB	1024	768	53	30	0:1.76
loight (20)	E Flow-Swirls.mpg	mpg	22	50,260 KB	800	600	772	30	0:25.73
HES Lithopatterns 1	E Flower-Fly-Though-HD.mpg	mpg	23	39,063 KB	800	600	480	30	0:16.0
HES Lithopatterns 2	Foliage-And-Flowers-HD.mpg	mpg	24	13,672 KB	1024	768	168	30	0:5.60
HES Logos (23)	🗐 Gibson-Guitar-HD.mpg	mpg	25	106,099 KB	1024	768	1105	24	0:46.4
HES_Hi_Res (24)	🗐 Grafx-DJ-HD.mpg	mpg	26	45,702 KB	1024	768	624	30	0:20.80
- 🛅 Nasa_Images (25)	🗐 Grassy-Field-Fly-By-HD.mpg	mpg	27	32,961 KB	800	600	405	30	0:13.50
- 🚞 Blue_Pony_Digital (2	🗐 Green-Glass-HD.mpg	mpg	28	67,016 KB	1024	768	732	24	0:30.50
HES_Core_2 (27)	E Hour-Glass-HD.mpg	mpg	29	48,827 KB	1440	1024	600	30	0:20.0
V_Squared_Labs (2E	🗐 Hydro-Pump-HD.mpg	mpg	30	44,127 KB	1024	768	482	24	0:20.8
🚞 Virtual_Liře_Media (2	E Icebergs-HD.mpg	mpg	31	78,124 KB	1024	768	960	30	0:32.0

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.

All Servers (3 servers)	Name	DMX +	File Count	Date
B 92902AAA (0)	HES_Core_HD_1080p	1	24	12/14/2013 10:10:14 AM
⊕	A_Luna_Blue	2	53	12/14/2013 10:05:20 AM
AxonHDProTG (100)	Art_Beats	3	13	12/14/2013 10:04:15 AM
🗄 🔂 User Media	Beacon	4	22	12/14/2013 10:05:51 AM
🖾 User Objects	FeedBack_Video	5	29	12/14/2013 10:06:31 AM
User Warps	Garage Kristine_Schomaker	6	23	12/14/2013 10:11:35 AM
E Stock Media	Creative	7	20	12/14/2013 10:11:56 AM
Stock Objects	C Showfootage	8	28	12/14/2013 10:12:25 AM
All Configuration	William_Strother	9	35	12/14/2013 10:13:36 AM
	FeedBack_Video_Doors_Curtains	10	10	12/14/2013 10:06:51 AM
	FeedBack_Video_Marriage	11	52	12/14/2013 10:07:35 AM
	FeedBack_Video_Religious	12	37	12/14/2013 10:08:08 AM
	HES_Core	13	39	12/14/2013 10:08:55 AM
	HES_Digital_Aerials_1	14	108	12/14/2013 10:10:30 AM
	HES_Oils	15	14	12/14/2013 10:11:14 AM

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.

🥌 High End Systems Content Ma	nagement Application										
<u>File</u> Media Files <u>H</u> elp											
igh end systems											
- S All Servers (9 servers)	Name	Туре	DMX +	Size	Width	Height	Frame Count	Frame Rate	Movie Length	Has Sound?	Date
🖻 📮 DL.3 One (1)	Ball-Churn-HD.mpg	mpg	1	33,935 KB	1024	768	417	30	0:13.90	no	2/19/2008 6:26:04 PM
🕀 🧰 User Media	Beach-Waves-HD.mpg	mpg	2	68,359 KB	1024	768	840	30	0:28.0	no	2/19/2008 6:26:11 PM
User Objects	Blob-Holes-HD.mpg	mpg	3	56,249 KB	1024	768	768	30	0:25.60	no	2/19/2008 6:27:04 PM
E G Stock Media	Breading-Bullets-HD.mpg	mpg	4	78,125 KB	1024	768	960	30	0:32.0	no	2/19/2008 6:27:15 PM
HES_Lore (1)	Bubble-Texture-HD.mpg	mpg	5	29,297 KB	1024	768	360	30	0:12.0	no	2/19/2008 6:27:18 PM
	Bubbles-Rapid.mpg	mpg	6	29,296 KB	768	576	480	30	0:16. 0	no	2/19/2008 6:27:21 PM
HES Atmospheric (4	Bubbles.mpg	mpg	7	23,437 KB	640	480	480	30	0:16.0	no	2/19/2008 6:27:39 PM
On The Wall Study	Bubblescape-HD.mpg	mpg	8	48,930 KB	1024	768	481	24	0:20.4	no	2/19/2008 6:27:43 PM
Sean Bridwell (6)	Color-Sine-HD.mpg	mpg	9	21,972 KB	1024	768	300	30	0:10. 0	no	2/19/2008 6:27:46 PM
A Luna Blue (7)	Colored-Crust-HD.mpg	mpg	10	75,358 KB	1024	768	926	30	0:30.86	no	2/19/2008 6:27:55 PM
Eedback_Video (8)	📋 Controls-HD.mpg	mpg	11	27,992 KB	1024	768	344	30	0:11.46	no	2/19/2008 6:27:58 PM
HES_Texture (9)	🕒 Deep-Down.mpg	mpg	12	87,890 KB	640	480	1800	30	1:0.0	no	2/19/2008 6:31:44 PM
HES_Foliage (10)	🗐 Digital-Multi-Color-HD.mpg	mpg	13	93,925 KB	1024	768	1127	30	0:37.56	no	2/19/2008 6:31:51 PM
HES_Religious (11)	Digital-Sine-HD.mpg	mpg	14	24,414 KB	1024	768	300	30	0:10.0	no	2/19/2008 6:31:54 PM
HES_Gothic (12)	Disco-Ball.mpg	mpg	15	17,578 KB	640	480	360	30	0:12.0	no	2/19/2008 6:31:56 PM
HES_Digital_Aerials_	🗊 Dunes-HD.mpg	mpg	16	93,751 KB	1024	768	1152	30	0:38.40	no	2/19/2008 6:32:49 PM
HES_Theme_Stills (1	🗐 Dust-Dial-HD.mpg	mpg	17	78,287 KB	1024	768	962	30	0:32.6	no	2/19/2008 6:46:23 PM
Apollo_Glass (15)	Explosion.mpg	mpg	18	2,999 KB	640	480	62	30	0:2.6	no	2/19/2008 6:32:54 PM
Artbeats (16)	Eye-Cultures-Fades-HD.mpg	mpg	19	34,863 KB	800	600	504	30	0:16.80	no	2/19/2008 6:32:57 PM
DHA_TOPMac (17)	E Fast-Car-Commute.mpg	mpg	20	187,255 KB	640	480	3540	30	1:58. 0	no	2/19/2008 6:33:13 PM
American Digi Col	E Flip-Clock-HD.mpg	mpg	21	3,665 KB	1024	768	53	30	0:1.76	no	2/19/2008 6:33:21 PM
loliabt (20)	Flow-Swirls.mpg	mpg	22	50,260 KB	800	600	772	30	0:25.73	no	2/19/2008 6:33:27 PM
High (20)	E Flower-Fly-Though-HD.mpg	mpg	23	39,063 KB	800	600	480	30	0:16. 0	no	2/19/2008 6:33:31 PM
HES Lithopatterns 2	Foliage-And-Flowers-HD.mpg	mpg	24	13,672 KB	1024	768	168	30	0:5.60	no	2/19/2008 6:33:32 PM
HES Logos (23)	📋 Gibson-Guitar-HD.mpg	mpg	25	106,099 KB	1024	768	1105	24	0:46.4	no	2/19/2008 6:33:44 PM
	🗾 Grafx-DJ-HD.mpg	mpg	26	45,702 KB	1024	768	624	30	0:20.80	no	2/19/2008 6:33:49 PM
🛁 Nasa_Images (25)	📋 Grassy-Field-Fly-By-HD.mpg	mpg	27	32,961 KB	800	600	405	30	0:13.50	no	2/19/2008 6:33:52 PM
Blue_Pony_Digital (2	🗐 Green-Glass-HD.mpg	mpg	28	67,016 KB	1024	768	732	24	0:30.50	no	2/19/2008 6:34:14 PM
Core_2 (27)	E Hour-Glass-HD.mpg	mpg	29	48,827 KB	1440	1024	600	30	0:20.0	no	2/19/2008 6:34:19 PM
V_Squared_Labs (28	E Hydro-Pump-HD.mpg	mpg	30	44,127 KB	1024	768	482	24	0:20.8	no	2/19/2008 6:34:26 PM
Virtual_Life_Media (2	E Icebergs-HD.mpg	mpg	31	78,124 KB	1024	768	960	30	0:32.0	no	2/19/2008 6:34:34 PM

- **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	0	No Selection	No
(media file collections)	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.

		Transfer Type		
Fixture Network File-Transfer Method	From Server to Client Machine	From Client Machine to Server(s)	Between Networked Server(s)	Notes
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
Deploying a Content Archive	No	Yes	No	Replaces any previous User Content on destination drive
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.

	STEMS	٥
HIGH END ST	SIEMS	_
Finished. 5 errors and 6 warning	ngs found. See below for details.	
File Path	Description	
🚫 C:\Documents and Setti	missing MPEG-2 sequence	
the second		
Sc:\Documents and Setti	sequence extensions out o	
C:\Documents and Setti	sequence extensions out a sequence end code missing	
C:\Documents and Setti	sequence extensions out o sequence end code missing	
C:\Documents and Setti C:\Documents and Setti C:\Documents and Setti	sequence extensions out o sequence end code missing movie not I-frame only	

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.

High End Systems Content Ma	nagement Application						
<u>F</u> ile Media Files <u>H</u> elp							
HIGH END SYSTEMS							
All Servers (8 servers)	Name	Туре	DMX	Size	Width	Height I	Frar 📩
🖻 📮 DL.3 One (1)	📋 0012_indianboatman.mpg	mpg	1	158,894 KB	720	480	
🕀 🧰 User Media	0013choruscars.mpg	mpg	2	15,436 KB	720	480	
	0014_solo_rollerderby.mpg	mpg	3	22,897 KB	720	480	
+ D Stock Media	🗐 0015_solo_roller2.mpg	mpg	4	19,013 KB	720	480	=
	🔋 0016_breakcarcliff.mpg	mpg	5	11,266 KB	720	480	
DL.3 Two (2)	📳 0026_solo_a.mpg	mpg	6	14,842 KB	720	480	
Content (40)	📳 0027_solo_b_out.mpg	mpg	7	51,806 KB	720	480	
User Objects	📳 004_alpha_roll_4.mpg	mpg	8	36,816 KB	720	480	
⊕ 🛅 Stock Media	📳 004_mary.mpg	mpg	9	41,270 KB	720	480	
- 🛅 Stock Objects	📳 005_breakdown_solo.mpg	mpg	10	61,506 KB	720	480	
🖃 🛱 DL.3 Three (3)	📳 005_the end.mpg	mpg	11	2,615 KB	720	480	
🗌 🗀 User Media	📳 005_versebreak.mpg	mpg	12	7,722 KB	720	480	
🗀 User Objects	📳 006_piantmpg	mpg	13	71,860 KB	720	480	
🕀 🧰 Stock Media	📳 007_chorus_3.mpg	mpg	14	27,949 KB	720	480	
Stock Objects	📳 007_kindacool.mpg	mpg	15	12,395 KB	720	480	
	📳 013_roll_symbols.mpg	mpg	16	24,861 KB	720	480	
	📳 014_sprocket_50.mpg	mpg	17	21,626 KB	720	480	
Axon I wo (7)	📳 015_verse_1.mpg	mpg	18	42,822 KB	720	480	
Axon Three (8)	📳 016_verse_1001.mpg	mpg	19	67,992 KB	720	480	
All Configuration	📳 0170E_Final.mpg	mpg	20	268,600 KB	720	480	
All conliguration	📳 017_alpha_roll_2.mpg	mpg	21	73,728 KB	720	480	
	📳 018Metropolis main.mpg	mpg	22	193,967 KB	720	480	
	📔 018_chorus_solo.mpg	mpg	23	137,422 KB	720	480	
	📔 019_chorus.mpg	mpg	24	28,002 KB	720	480	-
	🗐 020. greenwash mog	mna	25	3 075 KB	720	480	
75 Files (Disk Free Space: 270.77 GB)					Client IP	: 169.254.19	2 9.61

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:

- 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 lefthand 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.

elected Media Folde	ers and Media F	iles	Selected Object Fi	les
Song 1	^	<- Add Media Folder	C:\Documents and	Settings\mat
- CADocument	s and S s and S	<- Add Media	C:\Documents and	Settings mat
Song 2	-	Remove Media]	C:\Documents and C:\Documents and	Settings\matt
Song 3			C:\Documents and	Settings'mat
- Finale	~	Add Objects ->		
¢ 10	Σ	Remove Objects ->	< 11	>

- 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.

Nama	ID Address	Coffeense Varian	Madal	
	100 DEA 1E0 01	Software version		
Axon One	169.254.150.81	2.0.0.2412	Axon	
Axon Four	169.254.122.38	2.0.0.2412	Axon	
Axon Iwo	169.254.1/9.24/	2.0.0.2412	Axon	
DL.3 One	169.254.153.131	2.0.0.2412	DL3	
Axon Three	169.254.249.89	2.0.0.2412	Axon	

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.
- From the drop down menu or the rightclick 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.

♥ 2 http://1	169.254.11.144:91/	Highend, DL2, Management, Serv	vices/Pages/Dn	nxValues.aspx	💌 🗟 🤩 🗶 😽 Goog	gle	
gle		🚽 🔧 Searc	h - 🕂 🧒 - 🛛	👉 · 🔯 · 🏠 Bookmarks •	Check • 🚑 Translate •	• 🎦 AutoFill • 🌛	و. • €
tes 😭 🍘 :	Suggested Sites 🔹	🖉 Web Sice Gallery 🔹					
alues					🙆 • 🖾	- 🖃 👘 - Page -	Safety • Too
ess the buttor	n to display a tab	ole of DMX values for all	the content				
this media se	erver. If there is	a lot of content, this could	d take a whi	le.			
Create Table	1						
oreate rable]						
		r	T-14				
User/Stock	Media/Object	Folder Name	DMX	File Name	DMX		
User	Media	batman	40	TDK_TRL2_1080p ReEn	ic.m2v 1		
User	Media	Digital Backgrounds	44	023.ANT112_SD_CR.m	2v 1		
User	Media	Digital Backgrounds	44	023.ATT112_SD_CR.m2	v 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.m2	v 5		
User	Media	Digital Backgrounds	44	023.DR127H_SD_CR.m	2v 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.m	2v 9		
User	Media	Digital Backgrounds	44	025.ATT113_SD_CR.m2	v 10		
User	Media	Digital Backgrounds	44	025.ATX113H1_SD_CR	.m2v 11		
User	Media	Digital Backgrounds	44	025.ATX128H2_SD_CR	.m2v 12		
	Media	Digital Backgrounds	44	025.CJ113H_SD_CR.m2	v 13		
User		Distant Destances de	44	025 GAS113H1 SD CR	m2v 14		
User User	Media	Digital Backgrounds	1.4.4	our on on on one on			

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.

High End Systems Content A	lanagement A	pplication		
File Servers Help				
Highend WebSite DL2 Manual				
About				
Al Servers (6 servers)	Server ID	Server Name	IP Address	Softw
🖹 💭 DL.2 One (1)	D 1	DL.2 One	10.2.102.23	1.3.3
E G User Media	2 4	DL.2 Four	10.2.102.27	1.4.0
Sync test files (40)	1 1 2	DL 2 Three	10.0.100.05	140

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:

- Download the latest version of the application from the Support section of the High End Systems website (<u>www.highend.com</u>). A download wizard simplifies installation on your personal computer.
- 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 (<u>www.highend.com</u>) 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*.
- 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.

Servers (6 servers)	[Server 1	Server Name	IP Address	Software Version	Model
DL.3 One (1)	101	DI 3 One	169 254 153 131	2002412	DI 3
DL.3 Two (2)	2	DL.3 Two	169.254.11.144	2.0.0.2412	DL3
Axon One (10)	10	Axon One	169.254.150.81	2.0.0.2412	Axon
Axon Two (11)	11	Axon Two	169.254.179.247	2.0.0.2412	Axon
Axon Three (12)	12	Axon Three	169.254.249.89	2.0.0.2412	Axon
Configuration	13	Axon Four	169.254.122.38	2.0.0.2412	Axon
			Refresh		
			Lione Content		
			Create Content Archi	VP.	
			Deploy Content Archi	ve	
			Upgrade Software		
			DMX Summary		

- 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.
- After locating the upgrade file, press Next. The Upgrade Wizard displays a list of all servers connected to the fixture network.
- Click in the box to the left of the server name to select a server(s) for upgrading.
- Click Next to continue upgrade. The server will reboot after upgrading the software.

Name	IP Address	Software Version	Model	1
DL.3 Two	169.254.11.144	2.0.0.2412	DL3	N.
DL.3 One	169.254.153.131	2.0.0.2412	DL3	

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.

High End Systems Content Management Application							
Ele Servers Help							
igh end system	MS						
T Carrow (Carrows)			10.4.4		C.A. 11	DINGLIG	Laws Here
P P D 2000 (1)	Foture IU + F	odure Name	IP Address	Model	Software Version	DMX Start Channel	Lamp Hours
DL 2 True (1)	1	L2Une	10.2.102.23	DL2	1.3.3.1309	171	261
DL.2 Two (2)		L 2 Three	10.2.102.20	DL2	1.4.0.1588	341	252
DL2 milee (3)	4 0	DL 2 Four	10 2 102 27	DL2	1.4.0.1588	1	939
DL.2 Four (4)	6 A	won Two	10.2.102.29	Axon	1.4.0.1588	150	
(+) WW Axon Two (6)	7 A	kon Three	10.2.102.28	Axon	1.4.0.1588	299	
Al Configuration							

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.

High End Systems Content Management Application File Servers Help Refresh ٨S Clone Content Delete Content Fixture ID + Create Content Archive Fixture Name IP Add Deploy Content Archive DL.3 One 10.2.1 2 DL.3 Two 10.2.1 Upgrade Software 3 DL.3 Three 10.2.1 4 DL.2 Four 10.2.1 DMX Summary 6 Axon One 10.2.10 Configure Columns 7 Axon Two 10.2.1 8 Axon Three 10.2.1 Edit Fixture 9 Axon Four 10.2.1

	The second s		and the second second
Available Memory	Display Level	Projector Focus Value	Self Test Video Pattern
CPU Utilization	Display Opacity	Projector Input	Self Test Zoom
🔽 Disk Queue	DMX Protocol	Projector Input Selection by DMX	Tilt Invert
DMX Start Channel	DMX Source	Projector Lamp	🔲 Unique Number
Fixture ID	External SVideo Format	Projector Lamp Mode	Mindows XPe Version
Fixture Name	Firmware Version	Projector OSD Menu	
IP Address	Fixture Defaults	Projector Rear	
Lamp Hours	Fixture Hours	Projector Type	
Model	Home Motion	Projector Zoom Override Enable	
Software Version	Pan Invert	Projector Zoom Value	
Art-Net Subnet	Pan/Tilt Swap	Secondary Display Parameters	
Art-Net Universe	Primary Display Parameters	Self Test Focus	
Data Loss Timeout Iris	Projector Ceiling	Self Test Iris	
🗖 Disk Free Space	Projector Defaults	Self Test Pan/Tilt	
Display Invert	Projector Focus Override Enable	Self Test Video	

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

X Settings
Start Channel 1 Identify
Source DMX512 -
Protocol hd 🖵 Layers 10 🖵
Fixture ID 75
Warp Edit Off - Number 1

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

Defrech Date		_		
Refresh Rate 6	0	•		
Video Selftest	ff 💌			
Media Folder				
Media File 1				

Display Connectors

Configuration Item	Configuration Value Options
Resolution	Options in the drop-down lists are automatically populated by the Axon
Refresh Rates	software for the specific display device attached.
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		Version Info
Model	AxonHD	
Server Name	AxonHDTG	Software 1.0.0.0
IP Address	0.0.0.0	WES7 1.0.0
Unique Number	4C64A438	Firmware 1.0.0.0
Disk Free Space	74045	
Hardware		Misc
CPU	17-4770	Fixture Defaults On
Motherboard	H8/I-PLUS	Physics Communic
Midaa Adamban 1		Repool Server
Video Adapter 1	07700	
Video Adapter 1	107700	
Video Adapter 1		Apply

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	

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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

Server	Display Connectors	Art-Net & I/O	Info	Menu	Display
-Captu	ure Settings				
⊢Art- Aı	Net Settings	Unive	rse 0		

ArtNet Settings

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

Menu Display Tab

ettings Menu			Performance		
Display Device Resolution	DVI DELL U2312HM 1920x1080		58.0% 5157.0M		
Refresh Rate	60	•	0.00		

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
Available Memory	balancing additional layers with the capabilities for the hardware
Disk Queue	configuration of this device.

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.

All Servers (9 servers) All Servers (9 servers) DL3 one (1) DL3 user Media Stock Media DL 3 three (3) DL3 three (3) DL3 three (3) DL2 four (4) DL2 four (4) DL3 five (5) DL2 four (4) DL3 five (5) DL3 five (5) DL2 four (4) DL3 five (5) DL2 four (4) DL3 five (5) DL3	S Server Fixture Lamp Test/Reset Hardwa DMX Settings DMX Start Channel 1 Source Art-Net Artnet Subnet 1 ArtNet Universe 1 DMX Protocol v2 9 9 Server Info Model DL3 Fixture ID 1 Fixture Name DL.3 one IP Address 169.254.153.131 Unique Number 92902AA1	are I/O Version Information Software 2.0.0.2372 XPe 2.2.0 Firmware 1.5.4.156 Misc Fixture Defaults On Reboot Server
Stock Objects Stock Objects Avon two (12) Avon three (13) Avon four (14) All Configuration		Apply Apply Cancel Client IP: 169.254.72.2

 Select a DMX Source type by clicking on the down arrow of the Source field to select DMX512 or Art-Net. 	DMX Settings DMX Start Channel	1
If you select Art-Net, assign a universe	Source	Art-Net 💌
number from 1–16.	Artnet Subnet	DMX512 Art-Net
	ArtNet Universe	1
	DMX Protocol	v2 🔻 9 💌

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

DMX Settings		DMX Settings	2.0		
DMX Start Channel	1	DMX Start Channel	1		
Source	Art-Net 💌	Source	Art-Net		
Artnet Subnet	1	Artnet Subnet	1		
ArtNet Universe	1	ArtNet Universe	1		
DMX Protocol	v2 • 9 •	DMX Protocol	v2 -	9	•
	v1 v2			2	^
				4 5	=
				7 8	
				9	-

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.

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