



Avid® Media Composer | Cloud v3.2

ReadMe

Important Information

Avid® recommends that you read all the information in this ReadMe file thoroughly before installing or using any new software release.

Important: Search the Avid Knowledge Base at www.avid.com/support for the most up-to-date ReadMe file, which contains the latest information that might have become available after the documentation was published.

For more information on using Media Composer Cloud, see the following documents:

- “Using Your Avid Editing Application with Media Composer Cloud” in the *Avid Media Composer Editing Guide*
- *Media Composer | Cloud Installation and Configuration Guide*
- *Avid Remote News Editing Workflow Guide*

Revision History

Date Revised	Changes Made
January 1, 2016	Revised the unsupported workflows list for greater detail. See “ Unsupported Workflows ” on page 6.
October 8, 2015	Added a note about the Delivery Receiver server and the Delivery Receiver service. See “ Media Composer Cloud and Delivery Receiver ” on page 16.
May 7, 2015	Updated installation instructions for Media Composer Cloud Playback v1.3.1. Contains information on fixed limitations. For more information, see “ Installing the Media Composer Cloud Playback v1.3.1 Update ” on page 8 and “ Fixed in Media Composer Cloud Playback v1.3.1 ” on page 10.
April 14, 2015	Updated command to stop and restart the Media Indexer on Mac OS X systems. See “ Stopping and Starting Media Indexer on a Mac OS X System ” on page 21.
February 27, 2015	Updates for Media Composer Cloud Playback v1.3.

Date Revised	Changes Made
January 22, 2015	Updates to installation, licensing information. Contains information on feature support, fixed and known limitations.
December 22, 2014	First publication. Contains information on feature support, fixed and known limitations. See “Avid Interplay Sphere and Media Composer Cloud Versions” on page 3 for more information.

Contents

Avid Interplay Sphere and Media Composer Cloud Versions	3
Qualified Hardware and Operating Systems	3
Media Composer Cloud Playback v1.3.1 Compatibility	4
Media Composer Support for Media Composer Cloud	4
Supported Project Types and Formats	5
Unsupported Workflows	6
Product Rebranding	6
Checking the Current Version of Media Composer Cloud Playback	7
Installing Media Composer Cloud Components	7
Installing the Media Composer Cloud Playback v1.3.1 Update	8
Changes in Media Composer Cloud Playback v1.3.0	8
Changes in Media Composer Cloud Playback v1.2.0	8
Settings for the Media Composer Cloud User	9
Suggestions for Working with Remote Playback	9
Fixed in Avid Media Composer Cloud Component Releases	11
Fixed in Avid Editing Application Releases	12

Fixed in MediaCentral Platform Releases	16
Documentation Changes	16
Limitations	22

Avid Interplay Sphere and Media Composer | Cloud Versions

Media Composer Cloud releases match the corresponding releases of the Avid Interplay components. The Interplay components are available on the Interplay Client installer for the corresponding Interplay release. For example, the Interplay Sphere v3.0.5 components are available on the Interplay v3.0.5 Client installer.

For a list that matches editor releases with supported Interplay releases search for “Interplay and Avid Editor Compatibility” on the Avid Knowledge Base.

Media Composer v8.3.0 is not supported as a Media Composer Cloud client.

The Media Composer | Cloud components of Interplay v3.2 support Media Composer v8.2.0. However, Media Composer v8.2.0 does not support the following features:

- remote download
- remote send to playback

Qualified Hardware and Operating Systems

For a list of qualified hardware for your Avid editing application client system, please refer to the *Avid Editing Application ReadMe*.



(Macintosh Only) Media Composer v6.5.4.1. is not supported as a remote client in an Media Composer Cloud environment.

The qualified operating systems for using Media Composer Cloud, Interplay Sphere, and remote editing are Windows v7 64-bit SP1(Professional) and Windows v8.1 (Professional and Enterprise), and Macintosh Mac OS v10.8.5, v10.9.4, and v10.9.5. Avid recommends systems with a minimum of 12 GB of RAM.



Media Composer Cloud on Mac OS v10.9 or v10.9.1 requires Avid Interplay Access v3.0.6.

If you are using Media Composer Cloud clients in an Interplay v3.0 environment with ASF v1.6, you must run the 64-bit version of ASF on the system running the Lookup Service.



Media Composer Cloud is not supported in Avid Unity MediaNetwork configurations.

For more information on qualified hardware for Interplay environments, see *MediaCentral Platform Services Hardware Guide* on the Avid Knowledge Base.

Media Composer | Cloud Playback v1.3.1 Compatibility

The following table lists the compatibility minimum requirements for the Media Composer Cloud Playback v1.3.1. For more information on installation, see [“Installing the Media Composer | Cloud Playback v1.3.1 Update” on page 8](#).

Media Composer Cloud Playback v1.3.1			
Media Composer	v6.5.4.6	v7.0.4.x	v8.2.2
MediaCentral Services (MCS)	v2.0.x	v2.0.x	v2.1.1
Interplay Production	v2.7	v3.1.x	v3.1, v3.2.x
Windows Operating System	Windows 7	Windows 7	Windows 8.1
Mac OS X	10.9.5	10.9.5	10.9.5

For more compatibility information, see [“Media Composer Support for Media Composer | Cloud” on page 4](#).

Media Composer Support for Media Composer | Cloud

Media Composer v8.3.0 is not supported as a Media Composer Cloud client.

The Media Composer | Cloud components of Interplay v3.2 support Media Composer v8.2.0. However, Media Composer v8.2.0 does not support the following features:

- remote download
- remote send to playback

Interplay Production v3.1 also does not support these features.

Supported Project Types and Formats

The remote editing feature and check in to Interplay support the following project formats when transcoding local clips for remote upload:

- 25i PAL
- 30i NTSC
- 720p 50
- 720p 59.94
- 1080i 50
- 1080i 59.94
- 1080p 23.976
- 1080p 24
- 1080p 25
- 1080p 29.97



1080p projects at 23.976, 24, 25, and 29.97 offer H.264 800Kbps only for upload proxy resolution.

You can use source clips with mixed frame rates in your remote sequence, but you can transcode only those segments with the same frame rate as your sequence. For example, if you want to transcode and upload mixed frame rate clips in an NTSC 30i sequence, you can transcode NTSC 30i clips (or 1080i 29.97 or 1080i 59.94 clips) to either an H.264 Proxy 525 or an H.264 Proxy 1080i 29.97, which have the same frame rates as the sequence (29.97 fps). You cannot transcode a 720p 50 or a 720p 59.94 clip to H.264 in this example, since the frame rates (50 fps and 59.97 fps, respectively) do not match. However, you can upload a sequence with mixed formats if you select Same as Source in the Media Composer Cloud Upload Settings dialog box.

The MediaCentral Playback Services (MCPS) server supports the following media formats:

- AVC-Intra 50/100
- DNxHD
- DV 25 (4:1:1/4:2:0)
- DV 50
- DVCPro-HD
- HDV 720p
- IMX 30/40/50
- MPEG-2 Long GOP

- Sony XDCAM EX
- Sony XDCAM HD 17.5/35/50
- h.263/MPEG-1 layer 2 (proxy)
- h.264/MPEG-1 layer 2 (proxy)
- 1:1 8-bit/10-bit Avid JFIF
- 2:1/3:1/10:1/20:1 Avid JFIF

The MCPS server currently does not support the following formats:

- RGB
- J2K
- DNxHR

In order to stream these formats, the MediaCentral Platform Services server performs a real-time transcode to a proxy format. Avid recommends a bandwidth of 3.5 Mbps or greater for remote playback. 5 Mbps or higher delivers the best results. Please note that lower bandwidth can result in dropped frames during the initial playback.

Unsupported Workflows

The following workflows are not supported with Media Composer Cloud while working as a remote client:

- Editing or playing in-progress clips (edit while capture media)
- Editing or playing multicamera media
- Performing a digital cut or exporting sequences that include remote media
- Editing or adding closed captions
- Playing remote media with ancillary data — for example, closed captions
- Playing of remote media with embedded alpha
- Displaying waveforms for uncached remote media in Timeline window

Product Rebranding

For the Interplay Production v3.1 release, some Avid products have been rebranded with new product names. Interplay Sphere is now called Avid Media Composer | Cloud. References to earlier versions of Media Composer Cloud continue the older branding, using Interplay Sphere as the product name.



The pipe character is used in some Avid product names, such as Media Composer | Cloud. In documentation, the pipe is used in product names when they are in titles, headings or at their first use in text.

Checking the Current Version of Media Composer | Cloud Playback

You should install the latest version of Media Composer Cloud Playback. You can determine the version currently installed on your Media Composer system by using the Console window or checking the Info tab in the Projects window.

To view the current version of Media Composer | Cloud Playback:

1. Start Avid Media Composer.
2. Do one of the following:
 - ▶ Select Tools > Console. In the Console command line, type **ama_listplugins**, and then press Return.
 - ▶ Click the Info tab on the Projects window. Then check under AMA Plugin Info in the list.

The name of the plugin is MSP_Cloud.

Installing Media Composer Cloud Components

You must install a Delivery provider and the Delivery Receiver service in the Interplay Production environment in the broadcast or production facility in order to upload media files from and download media files to the remote Media Composer client. The same services run on the Media Composer Cloud client for remote upload and remote download.

For complete information on installing Media Composer Cloud, see the *Media Composer | Cloud Installation and Configuration Guide*.



Avid recommends that you always check the Avid Download Center for the latest version of Media Composer Cloud Playback. The version that installs with the Media Composer Cloud components might not be the latest one.

Installing the Media Composer | Cloud Playback v1.3.1 Update

Avid Media Composer does not automatically install Media Composer Cloud Playback when you install the editor.

In order to play back remote media with Media Composer Cloud, you must go to the [avid.com/download](http://esd.avid.com/ProductList.aspx) site at <http://esd.avid.com/ProductList.aspx>, navigate to the Media Composer | Cloud page, and download the Media Composer Cloud Playback installer. After you install the editing application, run the appropriate program to install Media Composer Cloud Playback:

- (Windows) AMA_Media_Composer_Cloud_Playback_setup.exe
- (Macintosh) Media_Composer_Cloud_Playback_Installer.pkg



Avid recommends that you always check the Avid Download Center for the latest version of Media Composer Cloud Playback. The version that installs with the Media Composer Cloud components might not be the latest one.

If you are upgrading from a previous version of Media Composer Cloud Playback, uninstall the older version before installing v1.3.1. For information on installing the components necessary for Media Composer Cloud, see the *Media Composer | Cloud Installation and Configuration Guide*.

Changes in Media Composer | Cloud Playback v1.3.0

Media Composer Cloud Playback v1.3.0 includes the following enhancements:

- Image quality improvements in playback of interlaced media.
- Additions to Avid diagnostic utilities to improve serviceability.

Changes in Media Composer | Cloud Playback v1.2.0

Media Composer Cloud Playback v1.2.0 includes the following enhancements:

- Increased responsiveness when you start to play back media.
- An increase in the default and maximum cache sizes: The default cache size is now listed as 20840 MB in the Cloud Playback Settings dialog box in Media Composer, and the maximum cache size is now 200000 MB.

- The default location of the Caches folder has changed:
 - C:/Users/[user_name]/AppData/Roaming/Avid Technology Inc/com.avid.xcorekit/Caches
 - (Macintosh) /Users/[user_name]/Library/Caches/com.avid.xcorekit



Your Library folder might be hidden, depending on which version of Mac OS X your system uses. For information on making the Library folder visible, see your Mac OS X documentation.

- For a list of fixed limitations, see the following topics:
 - “Fixed in Avid Media Composer | Cloud Component Releases” on page 11
 - “Fixed in Avid Editing Application Releases” on page 12
 - “Fixed in MediaCentral | Platform Releases” on page 16

Settings for the Media Composer | Cloud User

For users to play back remote media from their Interplay | Production system, the Interplay administrator must set two matching user credentials, one in the Application Settings in the Interplay Administrator tool and the other in System Settings in MediaCentral | UX. The credentials must be identical and unique for Media Composer Cloud users. For more information, see “[Setting MCPS Credentials for Media Composer | Cloud Users](#)” on page 18.

The Interplay user must also be listed as an ISIS client with read/write privileges in order to use the remote upload functionality of Media Composer Cloud.

Suggestions for Working with Remote Playback

When you load a remote clip into the Source monitor for the first time, you should be able to play back the media with little decline of performance, depending on your connection to the Interplay system at your station or production facility. If you scrub through your sequence by dragging the position indicator, you might notice that playback for remote media is slower than for local media or media stored on a connected shared storage system such as Avid ISIS. As you move the position indicator in the Timeline, Media Composer Cloud caches a few seconds of footage on either side of the position indicator and adds that media to the footage already cached on your remote client. Similarly, when you play a remote clip, the part of the clip that you play is cached on your system, along with a few additional seconds of media. Once the remote media is cached, playback performance should be smooth.

As you build a sequence using remote media, Media Composer Cloud caches much of the media as you work with it in the source monitor. This results in smooth playback for your sequence. However, if you open a complex sequence made up of mostly remote clips with no cached media, you might experience slow or uneven playback where there are video effects with multiple streams until the system caches some of the media.

If you experience uneven playback, you can try the following to improve performance:

- Since caching starts at the position indicator in the Timeline, moving the position indicator by clicking near transitions or other places in the Timeline before you click the Play button can improve playback.
- Playback of sequences with multiple streams might be uneven. If you play your clip or sequence several times, more of the media is saved in the cache and playback improves.
- If there are tracks in your sequence you do not need to play back, you can disable those tracks. For example, if your clip has eight audio tracks but you only need to monitor two of those, you can make the others inactive by deselecting the Active/Inactive buttons for the tracks in the Track Control panel. Avid recommends that you limit your video streams and audio channels to only those essential to your sequence in order to optimize playback performance.
- When you load a remote sequence in the Timeline that includes rendered effects, the effects become unrendered locally. Multi-stream video effects might not play well until the system caches the media. Play the effect or move the position indicator around in the effect by clicking in the Timeline to cache the media and improve performance. You can also render the effect to ensure smooth playback.
- To ensure the best performance when playing back remote media, Avid recommends that you work with sequences containing up to 100 remote clips. If your sequence requires more than 100 remote clips, you can divide your work into smaller sequences.

Fixed in Media Composer | Cloud Playback Release

Fixed in Media Composer | Cloud Playback v1.3.1

- **Bug Number:** SRP-229. If you open or close a project or bin with local and remote media, Media Composer might become unresponsive and require that you restart the application. This has been fixed.

Fixed in Media Composer | Cloud Playback v1.3

- **Bug Number:** SRP-183. (Windows only) If you logged on to your system as a new user or a user without administrative privileges, you could not play back remote media. The media in the Source/Record monitor it displayed as “Remote Media offline.” This has been fixed.

Fixed in Avid Media Composer | Cloud Component Releases

Fixed in Interplay v3.2

- **Bug Number:** UDevC00183771. If you uploaded a sequence and checked it in to Interplay Production, then cleared your bin cache and enabled Dynamic Relink, the video in your sequence sometimes linked to the remotely uploaded clip while the audio linked to the locally stored clip. This has been fixed so that the sequence links to local media by default.
- **Bug Number:** PAM-1183. If you created a subclip from a remote master clip, and added it to a new sequence on your remote client, then trimmed the subclip out to add a frame and download the sequence, the subclip's entire media span (plus the one added frame) was downloaded again. This has been fixed.
- **Bug Number:** PAM-1206. Remote download delivered both video and audio tracks for a sequence even if the sequence only included just video tracks or audio tracks. This has been fixed.

Fixed in Interplay v3.0.6

- **Bug Number:** UDevC00183761. When you remotely upload a sequence, Media Composer Cloud only uploads parts of the source clips actually used in the sequence. If you tried to remotely upload a sequence that contains segments with previously-uploaded source clips but which also includes parts of those source clips that have not been uploaded before, you received an error stating that there were no clips to upload. This has been fixed.

This fix requires users to install Avid Interplay Transcode v3.0.7.

- **Bug Number:** UDevC00182853. Remotely uploading a clip intermittently failed due to special characters included in the AAF file. This has been fixed.
- **Bug Number:** UDevC00182784. (Windows only) Installation of Media Composer Cloud components on a system with region and language set to a non-English language failed to install the Interplay Transcode service due to a issue with the Authorization and Access Control settings. This has been fixed.
- **Bug Number:** UDevC00182465. On some Macintosh workstations, remote upload operations did not complete due to a failure to create an Avid Transcode folder in the directory hierarchy. This has been fixed and the correct transcode folder is automatically created.

- **Bug Number:** UDevC001822310, UDevC00182613. The Macintosh installer for Sphere encountered errors when installing on Mac OS X 10.9. This has been fixed.
- **Bug Number:** UDevC00181859. (Macintosh only) The first attempt to remotely upload a clip after you rebooted your system sometimes failed to properly transcode the clip or clips. This has been fixed.

Fixed in Avid Editing Application Releases

Fixed in Media Composer v8.2.1

In previous versions, remote clips used the remote clip icon to differentiate them from local master clips and clips checked out of Interplay Production. However, remote subclips displayed in the bin using the same subclip icon as other subclips. This has been fixed. Subclips now display with remote subclip icons for subclips and audio-only subclips.

Fixed in Media Composer v7.0.4 and NewsCutter v11.0.4

- **Bug Number:** UDevC00183732. (Macintosh only) When you uploaded media to Interplay and then tried to play back the clip either in Interplay Central or on your Media Composer Cloud remote client, the audio sounded corrupted and eventually stopped playing back. This has been fixed.
- **Bug Number:** UDevC00183080, UDevC00183492. (Intermittent) Media Composer Cloud displayed an error message stating that the remote upload service is unavailable even if the service was running or if you were not uploading media assets. This has been fixed.
- **Bug Number:** UDevC00183761. If you created a sequence using remote clips and uploaded the sequence to Interplay, then created another sequence with different or overlapping spans of the same clips, remotely uploading the second sequence might fail. This has been fixed.
- **Bug Number:** UDevC00176644. If you tried to perform a video mixdown on a sequence that contained at least one remote clip that was offline, the error message did not indicate the reason why the mixdown failed. This has been fixed and the error message informs you that the mixdown failed due to remote clips being offline.
- **Bug Number:** UDevC00170655. If you type an incorrect password in the Interplay Login dialog box to log in to Interplay, you must close the dialog box and reopen it before typing the correct password. This is as designed.

- **Bug Number:** UDevC00170678. If you logged in to Interplay by typing a password using Cyrillic characters in the Interplay Login dialog box, the password was visible in the password text box. This has been fixed, and now the password is hidden when you type in the text box.
- **Bug Number:** UDevC00182874. If you created Sphere disk cache folder in a directory other than the default location using the Sphere Playback Settings dialog box, the cache folder was automatically deleted when the editing application restarted. This has been fixed, and the cache folder persists across editing sessions.
- **Bug Number:** UDevC00174493. The remote sync options, “Start Remote Sync Sequence” and “Stop Remote Sync Sequence,” both remain active regardless of whether you have sequences marked for remote sync or not. This has been fixed. The “Start Remote Sync Sequence” option is active only when you have no sequences marked for remote sync, and the “Stop Remote Sync Sequence” option

Fixed in Media Composer v7.0.3 and NewsCutter v11.0.3

- **Bug Number:** UDevC00181404. (Macintosh only) If you resized the Source/Record monitor in Media Composer with a remote clip loaded in the monitor, the application could become unresponsive. This has been fixed and you can now resize the Source/Record monitor.
- **Bug Number:** UDevC00182719. (Macintosh only) Media Composer configured as an Media Composer Cloud client could become unresponsive when you started the application with a remote clip already loaded in the Source monitor from a previous session. This has been fixed.
- **Bug Number:** UDevC00176496, UDevC00176640. Remote playback of interlaced clips in progressive projects at Full Quality might cause the clips to display in the Source monitor with degraded quality. Also, remote playback of 1:1 clips at Full Quality might cause the Avid editing application to become unresponsive. This has been fixed.
- **Bug Number:** UDevC00172273. Opening Interplay Folder Settings dialog box and setting a new path for the Interplay root folder might result in seeing two paths displayed in the dialog box. This has been fixed.

Fixed in Media Composer v7.0.2 and NewsCutter v11.0.2

- **Bug Number:** UDevC00179619. (Macintosh only) The first transcode operation after a system reboot might appear to stall, showing the processing status as “Queued Transcode.” This has been fixed.
- **Bug Number:** UDevC00179952. You cannot open the Sphere Upload Settings dialog box by double-clicking the setting in the Settings list in the Project window. This has been fixed.

Fixed in Media Composer v7.0 and NewsCutter v11.0

- **Bug Number:** UDevC00172407, UDevC00172559. Depending on how fast your Internet connection is, you might experience some performance degradation for playback and remote upload, or you might encounter error messages due to latency. Performance has improved for the current release, although Avid still recommends using either a 4G or Wi-Fi connection.
- **Bug Number:** UDevC00172604. Media Composer Cloud install option for Delivery Receiver: If you perform an upgrade of the Delivery Receiver software, the installer does not upgrade or install Web Services (required for Sphere support). This has been fixed so that when you upgrade your Media Composer Cloud installation, the Web Services also upgrades to the new version.
- **Bug Number:** UDevC00175522. (Macintosh only) Remote playback of media might fail and generate an audio time-out error message unless the clip is cached first. This has been fixed.

Fixed in Media Composer v6.5.2, Symphony v6.5.2, and NewsCutter v10.5.2

- **Bug Number:** UDevC00169966. If you loaded a clip in the Source monitor and a sequence in the Record monitor, and then clicked the Toggle Source/Record button in the Timeline, the Start Remote Sync Sequence button in the Timeline became inactive. This has been fixed.
- **Bug Number:** UDevC00169956. If you remotely uploaded a sequence in the Timeline, loaded another sequence in the Timeline that you did not upload, then reloaded the first sequence, the Start Remote Sync Sequence button did not change to the Stop Remote Sync Sequence button and was not highlighted even though the sequence in the Timeline was still uploading to or syncing with Interplay. This has been fixed.
- **Bug Number:** UDevC00170350. The Remote Upload Settings menu includes VC1 APL3 MXF in list of resolution options, although this resolution is not supported for Interplay transcode. This has been fixed, and the resolution no longer appears in the upload settings.
- **Bug Number:** UDevC00171518. Playing back a sequence that you were remotely uploading caused the Remote Upload icon to stop spinning. This has been fixed.
- **Bug Number:** UDevC00172051. If you attempted to remotely upload an AMA file that had been linked to P2 media, the upload failed, while uploading an AMA volume linked P2 media succeeded. This has been fixed and both upload workflows work.
- **Bug Number:** UDevC00172418. Remote playback did not support uploaded DNxHD 100 media. This has been fixed. You can use DNxHD 100 clips as remote clips inside 1080i59.94 and 1080i50 projects.

- **Bug Number:** UDevC00172837. Using the option “Relink to AMA file” to relink to your original media file, and then changing your Dynamic Relink setting to link to another resolution, resulted in a Quality Manager error. This has been fixed.
- **Bug Number:** UDevC00172851. When the Avid editing application automatically reduced the disk cache to its maximum size, the most recent media files were deleted instead of the least recent media files. This has been fixed.
- **Bug Number:** UDevC00172941. If you used PhraseFind with your Avid editing application, the phonetic indexer became unresponsive when using it with AVCHD master clips. This has been fixed.
- **Bug Number:** UDevC00172975. If you disconnect from the network while attempting to play remote media that has not fully been cached, the Avid editing application could become unresponsive. This has been fixed, although you cannot play uncached media if you disconnect from the network. Error messages and a Remote Media Offline message indicate that the media cannot play back, but you can dismiss the errors and continue working.
- **Bug Number:** UDevC00173572, UDevC00172691, UDevC00172557. Trying to remotely play precomputes resulted in purple frames displaying in the monitor. Similarly, some offline clips also might have displayed as purple frames. In remote playback, You cannot remotely play back precomputes or other unrendered media. Offline clips now correctly display as offline media.

For some clips, you can also refresh the display in order to view and play your remote media clip by right-clicking the clip in the bin and selecting Refresh Remote Media. You might also want to clear the cache on your local system by deleting the contents of the SphereCache folder at the following location:

- C:/Users/[user_name]/AppData/Roaming
/Avid Technology Inc/com.avid.xcorekit/Caches
- (Macintosh) /Users/[user_name]/Library/Caches/com.avid.xcorekit



Your Library folder might be hidden, depending on which version of Mac OS X your system uses. For information on making the Library folder visible, see your Mac OS X documentation.

Fixed in MediaCentral | Platform Releases

Fixed in MediaCentral Platform Services v2.0.2

- **Bug Number:** UDevC00182783. When you played a remote clip with audio on multiple tracks in the Source monitor, the audio tracks played out of phase. Displaying waveforms for the audio tracks showed that the audio appears out of sync. This affected only Media Composer Cloud clients playing back audio remotely. This has been fixed. You can now play back remote clips with multiple audio tracks and the audio remains in sync.

This fix requires both the Media Composer Cloud Playback v1.2.0 and MediaCentral Platform Services v2.0.2.

- **Bug Number:** UDevC00174082, UDevC00174224. When you play back remote clips with compressed audio, you might notice some dropped audio samples, causing a small pop every few seconds.

This fix requires both the Media Composer Cloud Playback v1.2.0 and MediaCentral Platform Services v2.0.2.

Documentation Changes

The following changes have occurred since the documentation was completed.

Media Composer | Cloud and Delivery Receiver

You must install a Delivery Receiver server and the Delivery Receiver service in the Interplay Production environment in the broadcast or production facility in order to push media files to the remote Media Composer Client client (which installs and runs the Delivery Receiver from the Media Composer Cloud client installer).

Media Composer | Cloud and ISIS User Credentials

The Interplay user must also be listed as an ISIS client with read/write privileges in order to use the remote upload functionality of Media Composer Cloud.

On a Media Composer Cloud client on a Windows system, the ISIS client mounts all the workspaces as network shares that the user has privileges for. These are available even if you do not explicitly mount the workspaces. The ISIS client mounts the shares using the settings of last user that logged into ISIS, even if the user has logged out of ISIS. This is as designed. However,

Media Composer Cloud then can link to the media using these network shares, which can disrupt playback of remote media. To resolve this, you can restart your system, or you can to log into ISIS using credentials for a user that has no access to any workspace.

Obtain and Install the Media Composer | Cloud License for the Interplay Engine

Media Composer Cloud requires a license file for Media Composer Cloud users. The license file is generated for a particular Interplay Engine. See your Avid representative for information on obtaining a license file. It may involve exporting your current license and installing a new license as described in this section. Licenses are different depending on the release as shown in the following table.

Interplay Release	License Type	License (counted)	License (not counted)
Interplay v3.1	Connection based license	Key-XA or Key-J/G	
Interplay v3.2	Connection based license	Key-XA or Key-J/G	
	License to enable Media Composer Cloud		Key-LI

Counted licenses are those where each client increases the license count, if the license count is exhausted, additional clients cannot perform licensed functions. However, the Interplay Engine might assign another license type to a client — for example, an Advance license might be used if no more Base licenses are available for a client. Uncounted licenses require at least one counted license to be valid, but do not increase the license count. For more information, see “License Types and Usage” in the *Interplay | Engine and Interplay | Archive Engine Administration Guide*.

You can view and export the current licenses in the Licenses view of the Interplay Administrator tool.

To export your license information:

1. Open the Interplay Administrator’s tool and open the Licenses view.
2. Click the Export license button.
3. Type or browse to a .nxn file name.
4. Select Save.
5. Contact your Avid representative about how to obtain the updated license file.

To install a license:

1. Start and log in to the Interplay Administrator.
2. Make a folder for the license file on the root directory (C:\) of the Interplay Engine server or another server. For example:
C:\Interplay_Licenses
3. Copy the license file (*.nxn) into the new folder you created.
4. In the Server section of the Interplay Administrator window, click the Licenses icon.
5. Click the Import license button.
6. Browse for the *.nxn file.
7. Select the file and click Open.

You see information about the permanent license in the License Types area.

Note that the Media Composer Cloud Licenses are identified correctly as shown in the table at the start of this section.

Setting MCPS Credentials for Media Composer | Cloud Users

Remote playback for Media Composer Cloud relies on a connection to the Interplay Central Playback Services (ICPS) system. (Starting with the v2.0 release, ICPS is called the MediaCentral Playback Services, or MCPS, system.) You must set user credentials in the Interplay Administrator tool and in MediaCentral UX. You can create any user name and password you want, but the credentials in both locations must be identical and must not match any other user credentials currently licensed in your Interplay configuration.

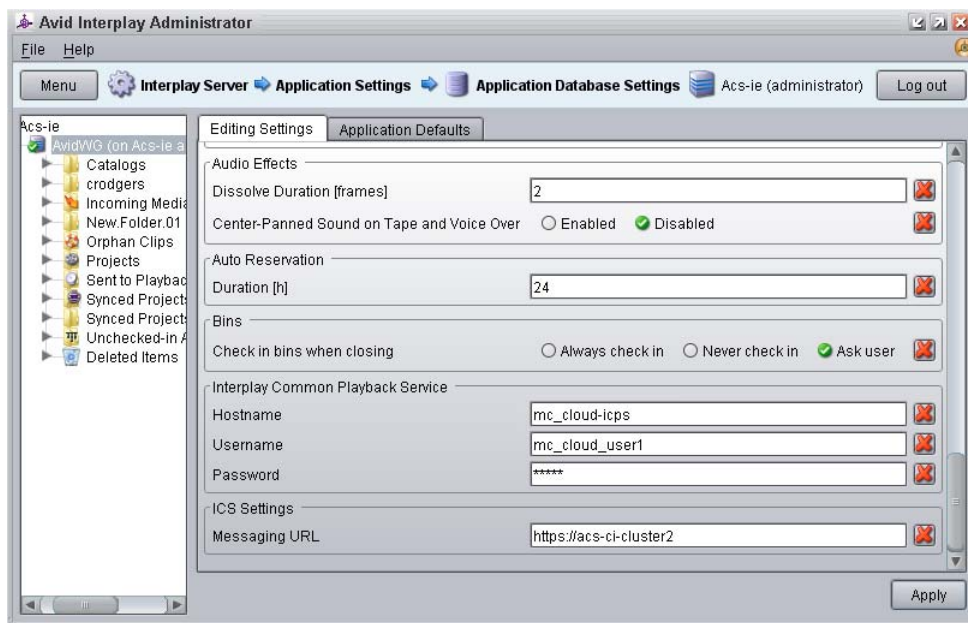


The version of the Avid Interplay Sphere Installation and Configuration Guide that accompanied Interplay v3.0 stated that you should use the administrator credentials when you set up the ICPS (MCPS) system. This has changed and you must create new user credentials.

To set the ICPS (MCPS) Server name and user credentials in Interplay Administrator:

1. Click Start and select Programs > Avid > Avid Interplay Access Utilities > Avid Interplay Administrator.
2. Log in to the Interplay Engine.
3. In the Application Settings area, click Application Database Settings.

4. Select the Interplay workgroup in the left pane, select the Editor Settings tab, and scroll down to the bottom of the window as shown in the following illustration.



5. In the Interplay Common Playback Service area, enter the following information:
 - a. The name of the ICPS (MCPS) server.
 - b. A unique user name and password for the ICPS server.
6. Click Apply at the bottom right of the window.

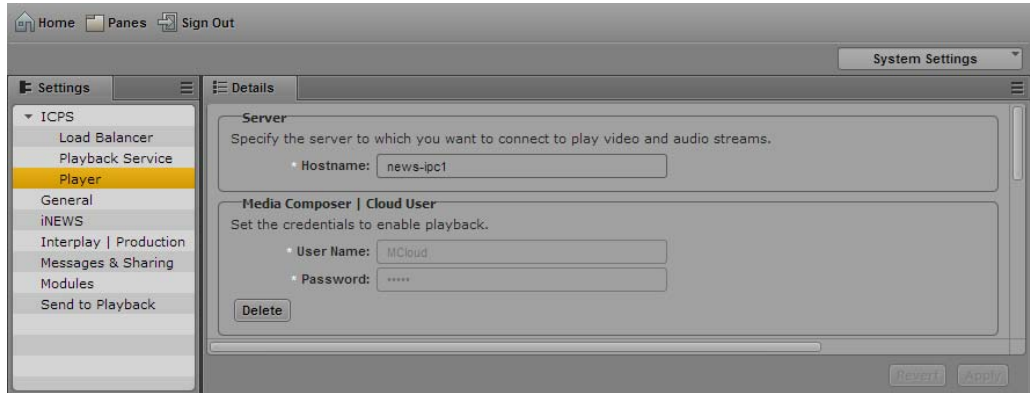
To configure the ICPS Playback Settings in the MediaCentral UX system settings:

1. Sign in to MediaCentral UX as an administrator.
2. Select System Settings from the Layout selector.

The System Settings layout opens.

3. In the Settings pane select ICPS > Player.

The Details pane displays the Player settings.



4. In the Details pane, type a User Name and Password in the Media Composer | Cloud User area. These values must be the same as you entered in the Interplay Administrator.
5. Click Apply to save your new settings or click Revert to replace changed information with the previously saved settings.

A Media Composer Cloud Playback User is created, and automatically assigned a Playback-Only Client role. You can see the new user and role by selecting Users from the Layout selector.

Interplay Services Displayed in Task Manager

Interplay services are displayed as two processes in the Processes tab of the Windows Task Manager. This is as designed. The tool that creates the services automatically creates a second process for each service to ensure that the service shuts down smoothly. This change is visible only in Task Manager.

The following table lists the affected Interplay services and where Task Manager is displayed.

Services	Where Displayed
Interplay Media Services (Archive, Restore, Transcode, Copy, Move, Delivery, Delivery Receiver, STP Encode)	Provider system
Media Composer Cloud services (such as Remote Upload and Transcode)	Avid editing system
Avid System Framework (ASF) services (such as Media Indexer and Time Synchronization)	Installed system



Each service is listed only once in the Services tab.

Stopping and Starting Media Indexer on a Mac OS X System

The command used to stop and restart the Media Indexer service on Mac OS X systems is incorrect in the *Avid Media Composer / Software Editing Guide*. The correct command is included in the following procedure:

To stop and restart the Media Indexer service using the Terminal window:

1. Open a Terminal window by selecting Applications > Utilities > Terminal.
2. At the prompt, type the following and press Return:
`cd /Applications/Avid/Media\ Indexer/bin`
3. The Terminal window might prompt you for your password. Type your administrative password and press Return.

4. To stop the service, type the following and press Return:

```
sudo ./mi.sh remove
```

The Media Indexer service stops.

5. To restart the Media Indexer service, type the following and press Return:

```
sudo ./mi.sh install
```

The Media Indexer service restarts. You might have to wait up to 30 seconds for the service to complete the restart operation.

Limitations

Limitations in the Interplay Environment

- **Bug Number:** PAM-1221. Dynamic relink and Interplay Archive use different methods for determining the highest quality or highest resolution used for video clips. For dynamic relink, “highest quality” is evaluated in relation to the current project or for the target format, and the operation selects the video quality most appropriate to the project or format. Interplay Archive allows you to select the highest resolution to archive. This can result in the dynamic relink clip having a different resolution than the archived clip. This is as designed.
- **Bug Number:** PAM-1292. When you submit a remote upload job that includes only media that has been previously uploaded, the status of the job in Upload/Download Queue window displays the following error: [object HTMLDivElement].” This does not describe the status of the upload, which correctly does not upload previously uploaded media. When you submit a new job, the status updates with the following message: “Completed — Clip already exists.”
- **Bug Number:** PAM-1306. (Macintosh only) Media Composer Cloud Playback v1.2.0 fails to load successfully on Mac OS 10.8.5 after you upgrade your Media Composer Cloud components.

Workaround: The problem only exists on Mac OS 10.8.5. Updating to Mac OS 10.9 fixes the problem.
- **Bug Number:** PAM-1307. (Macintosh only) You cannot not uninstall Media Composer Cloud Playback (MSP_Sphere.avx) using the Media Composer Cloud uninstaller.

Workaround: You can uninstall Media Composer Cloud Playback by manually moving MSP_Sphere.avx from the from its Application Support directory to the trash.
- **Bug Number:** UDevC00185905. (Macintosh only) If you stored AMA clips on a local, non-system disk and tried to remotely upload the files, the operation failed due to a transcode error. This only occurred if the source AMA files were on a Macintosh local disk other than the system disk.

Workaround: Move the source AMA files to the system disk and perform the remote upload operation again.

- **Bug Number:** UDevC00184282. You cannot edit in-progress clips until the capture process completes. If you try to edit the clip into a sequence, an error message displays. Editing with in-progress clips is not supported with Media Composer Cloud.

Workaround: Wait until the capture operation completes and the media database updates. Then you can edit the clip as usual.

- **Bug Number:** UDevC00183563. If you add a voice-over track to a sequence using the Audio Punch-in Tool and then remotely upload the sequence and check it in to Interplay Production, you must perform a dynamic relink operation on a system connected to your Interplay environment with an Ethernet connection before you can transfer the asset to another workgroup using the Delivery service. When you transfer the sequence before performing the dynamic relink, the voice-over audio appears offline at the destination workgroup.

Workaround: On a system at the station or production facility where you uploaded your media, enable dynamic relink in the Dynamic Relink Settings dialog box and open your sequence. The voice-over track links correctly to the media in Interplay and you can transfer the sequence to another workgroup using Interplay Access and the Delivery service.

- **Bug Number:** UDevC00183803, UDevC00183809. You cannot archive or copy a sequence that you remotely checked in until you either upload all referenced media or perform a dynamic relink of the original clips on a system connected to your Interplay environment at your station or production facility. This affects jobs in the Interplay environment, such as archiving and copying sequences, because remote upload only uploads only the parts of the clips that you use in your sequence. Parts of the clips that you do not upload appear offline in Interplay.

For more information, see “Media Composer Cloud and Dynamic Relink” in the Help for your Avid editing application.

Workaround: Do one the following before archiving your media or performing other actions within your Interplay environment:

To remotely upload all referenced clips in a sequence:

1. Select the bin with your sequence, and then select Bin > Set Bin Display.
2. Select “Show reference clips” to automatically display objects that are referenced by sequences in the bin, whether those clips were previously in the bin or not.
3. Click OK.

4. Do one of the following:

- ▶ If you are working on a remote system, select all reference clips, right-click the clips, and then select Remote Upload.
- ▶ If you are working on a system connected to your Interplay environment by an Ethernet connection, check out the sequence, and then once the reference clips are displayed in the bin, check in the sequence again.

To relink your remote media:

1. On a system at the station or production facility where you uploaded your media, enable dynamic relink in the Dynamic Relink Settings dialog box. Set the appropriate target and working settings for your project so that the clips used in your sequence correctly link to the online (uploaded) media.
2. Open your sequence in an Avid Editing application.
3. Check in your sequence to Interplay Production.
4. To update the file paths in Interplay Access, you need to update your media by either right-clicking your clips in your bins and selecting Update from Interplay, or right-clicking your master clips in Access and selecting Update Status from Media Indexer.

- ▶ **Bug Number:** UDevC00183801. Trying to move a sequence created with remotely uploaded clips might fail. If you create a sequence using clips that previously had been remotely uploaded on a system connected to your Interplay environment with an Ethernet connection, and then try to move the sequence, the move operation fails.

Workaround: If you create your sequence with the remotely uploaded clips marked with the .upload suffix, the move completes successfully.

- ▶ **Bug Number:** UDevC00183778. When you upload a remote sequence to Interplay Production and then use MediaCentral UX to send the sequence to playback by a Send-to-Playback (STP) operation, the STP operation fails if the sequence includes only part of one or more clips. Since remote upload only uploads the parts of the clips used in a sequence, MediaCentral UX sees the uploaded clips as partly offline and does not complete the STP operation.

Workaround: You can either consolidate your sequence before the remote upload or send the sequence to a configured playback device from the Avid editing application. For more information on sending sequences to playback, see “Transferring Avid Assets to a Playback Device” in the Help for your editing application.

- ▶ **Bug Number:** UDevC00183721. If you configure a server with an Interplay bundle which includes a Delivery Receiver for Media Composer Cloud, you might receive an error message when you attempt to upload a clip or sequence if your upload service had previously connected

to a different Delivery Receiver. To limit bandwidth requirements, Media Composer Cloud caches the host name of the Delivery Receiver. If the host name changes, your upload service might not be able to communicate with the new Delivery Receiver.

Workaround: Restart your remote system. This refreshes the cache and you can successfully upload using the new Delivery Receiver server.

Limitations When Working with Background Transcode

You cannot use the background consolidate or transcode feature if you have installed the components for Avid Media Composer Cloud. For example, if you use Dynamic Media Folders to transcode your media, the transcode operation does not process the transcoded media in the background as it does in a non-Media Composer Cloud installation.

If you work with an Media Composer Cloud configuration, remote upload automatically consolidates and transcodes clips in the background, but this functionality only applies when you upload media clips to Interplay Production remotely. All other consolidate and transcode operations occur in the foreground as you work on your editing project.

Limitations for Remote Upload

The following limitations apply to remote upload:

- Remote upload supports the following AMA media:
 - Sony XDCAM HD and XDCAM EX
 - Panasonic P2 (DVCPProHD only)
 - AVCHD (all project types except 720p 59.94)
 - QuickTime AMA
- You cannot transcode or upload effects and precomputes for rendered effects and titles. You must render all effects and sequences at the production facility that includes your Interplay environment.
- You cannot transcode and upload titles. However, if you have a sequence with title media, checking in the sequence to Interplay Production does upload metadata for the title with the sequence. Once the operation checks in the sequence, you can check out the sequence at the production facility and use the Re-create Title Media command to restore the title to your sequence.
- You cannot transcode and upload clips and sequences with alpha channels — for example, sequences with matte effects.
- You cannot automatically transcode and upload sequences with mixed frame rates. Before you attempt to remotely upload mixed frame rate sequences, you must manually transcode clips with frame rates different from the project frame rate.

- You can only transcode and upload audio clips in the PCM (MXF) format. WAVE (OMF) and AIFF-C (OMF) audio files are not supported.
- Audio transcode defaults to an audio bit depth of 16 bits. If your audio clips uses a different bit rate you should select the Same As Source setting in the Sphere Upload settings dialog box.
- Audio transcode defaults to an audio sample rate of 48 kHz. If your audio clips uses a different sample rate you should select the Same As Source setting in the Sphere Upload Settings dialog box. You cannot transcode audio clips to a 44kHz sample rate.
- For more information on limitations on remote upload, see the list of supported project types and formats in “Using Your Avid Editing Application with Media Composer Cloud” in the help for your Avid editing system.

Limitations in the Avid Editing Application

- **Bug Number:** UDevC00183753. (Macintosh only) If you try to remotely upload XDCAM AMA clips, the upload might fail and display an error message: Exception: DISK_FILE_NOT_FOUND, filename: *[filename]* (in “transcode in-progress” phase).

Workaround: If you can work with a different resolution, transcode the AMA clip to a different MXF resolution and then perform a Remote Upload.

To transcode AMA clips:

1. Select a clip or sequence in a bin.
2. Select Clip > Consolidate/Transcode.
3. Select Transcode in the upper left corner.
4. Specify your transcode settings. For more information on transcode settings, see “Using the Transcode Command” in your Media Composer Help.
5. Click Transcode in the lower right corner.

Your Avid editing application creates new media files and clips, according to your selections.

- **Bug Number:** UDevC00183751. (Windows only) If you create a sequence that uses remote media and then add a layered effect — for example, a picture-in-picture effect — you might not see the effect when you play the sequence in the Source/Record monitor.

Workaround: Click the Video Quality Menu button in the Timeline and select Best Performance. The effect displays correctly when you play back the sequence.

- **Bug Number:** UDevC00176651. When you remotely upload a clip or sequence, the Remote Sync Progress button in the Timeline might not change to a revolving icon to indicate the remote upload is in progress.

Workaround: You can view the progress of the upload operation by selecting Tools > Upload Queue Window.

- **Bug Number:** UDevC00183726. If you remotely upload AMA clips that link to QT files created with a non-Avid codec — for example, using H.264, Intermediate Codec, MPEG-4, Photo-JPEG, or PNG — the clips might display as audio-only master clips when you view them in Interplay Access. For example, if your QT media file was created using an H.264 or MPEG-4 codec, and then you remotely upload the clips using the proxy resolution, the transcode and upload operations both complete successfully. However, when you open Access and view the checked-in master clip, the clip is listed with an audio icon even if it includes a video track.

- **Bug Number:** UDevC00170645. When you create a subclip, rename it, and then remotely upload the subclip, the segment checked in to Interplay Production uses the name of the original master clip and not the new subclip name.

Workaround: Once you check in the subclips, relink the clips to the uploaded media.

- **Bug Number:** UDevC00171441, UDevC00171442. If you are not connected to the Interplay environment at your broadcast station or your production facility when you start your Avid editing application, you cannot access the Lookup Service and the editing application might fail to launch because it cannot connect to the Media Indexer. Also, if you have not configured the workgroup and lookup services in the Avid Service Framework, the editing application cannot connect to the local Media Indexer. In these instances, the editing application might not start in Interplay mode.

Workaround: Make sure you have a connection to your Interplay environment before you start your Avid editing application for remote editing and that you have properly configured the Avid Service Framework.

- **Bug Number:** UDevC00172191, UDevC00172559. If you load a remote clip into the Source monitor and then click at different locations in the position bar below the monitor, you might see the following error: “ADMConsumer::PreLoad()Error [0] unable to: preload audio.”

Workaround: Allowing the clip to play in the Source monitor or adding the clip to a sequence allows the media to be correctly cached. This improves playback of remote clips.

- **Bug Number:** UDevC00172227. (Windows Only) Clicking Clear All Caches in the Cloud Playback Settings dialog box might not delete the contents of the Caches folder. When this occurs, no error message appears, but you see no change to the cache when you monitor the cache directory. Attempting to explicitly clear the cache again continues to have no effect.

Workaround: Close the Avid editing application and then delete the Caches folder manually. The Caches folder is stored at the following location:

```
C:/Users/[user_name]/AppData/Roaming
/Avid Technology Inc/com.avid.xcorekit/Caches
```

- **Bug Number:** UDevC00172228. If you attempt to use the Reveal File menu option on a remote clip, the application might become temporarily unresponsive. Reveal File is not supported with remote clips.

Workaround: Click Cancel to close the Reveal Next File dialog box.

- **Bug Number:** UDevC00172492. If you change your connection to Interplay by disconnecting an Ethernet cable and activating a wireless connection and then restart your Avid editing application, you cannot connect to the local Media Indexer.

Workaround: Stop and then restart the Interplay Media Indexer. If you work on a Windows system, you can close and then restart the Avid editing application. If you work on a Macintosh system, see “Stopping and Starting Media Indexer on a Mac OS X System” in the Help for your Avid editing application.

- **Bug Number:** UDevC00172501. If your network experiences an unresolved Domain Name System (DNS) error, remote uploads might fail if the Avid editing application uses the Interplay server hostname instead of using the IP address for the server.

Workaround: Use an IP address in the Interplay Server Settings dialog box to log into Interplay instead of the server hostname.

- **Bug Number:** UDevC00172618. When you enable remote sync, the Remote Sync Progress button changes to a revolving icon to indicate the sync is in progress. However, the button icon might stop revolving if you perform editing functions such as rendering while remote sync proceeds, clicking and holding a button or the position indicator, or right-clicking a monitor or the Timeline.

- **Bug Number:** UDevC00172647. If you specify a long path for the Interplay folder in the Interplay Folder Settings dialog box — for example, if the path contains several nested folders — the full Interplay folder path does not fit in the Sphere Upload settings window.

- **Bug Number:** UDevC00172879. If you log in to your local system as a Standard user, the Avid editing application might not be able to connect to the Media Indexer, preventing you from working with Avid Media Composer Cloud. You need to log on to your system with an administrative account to use Media Composer Cloud playback.

Workaround: Log off and then log on as a user with Administrative privileges.

- **Bug Number:** UDevC00172896. If you quit your Avid editing application while a clear cache operation is occurring, the process stops and leaves behind the incompletely cleared cache folder and its remaining contents. Restarting the application creates a new cache folder, but the older folder remains on your system until you manually delete it.
- **Bug Number:** UDevC00175180. If you drag multiple clips from Interplay Access to a bin in the Avid editing application, the mouse pointer might change to an hourglass (Windows) or spinning circle (Macintosh) while the clips populate the bin. The application appears to be unresponsive, but the Interplay Production check out operation is not interrupted. It might take a few moments to complete.
- **Bug Number:** UDevC00175212. If you change the default handle length in the Sphere Upload Settings dialog box, and then later change the handle length back to the default value by clicking “Restore to Default,” the custom value you set earlier does not change.

Workaround: To reset the handle length to the default value of 30 frames, open the Sphere Upload Settings dialog box and manually set the correct value in the Handles text box.

- **Bug Number:** UDevC00175337, MCCET-375. You cannot create a video mixdown to a DNxHD compressed resolution using remote clips. If you try to create a mixdown to one of the DNxHD resolutions, an error message appears and you can either select Discard (which aborts the mixdown) or Keep (which creates a mixdown clip but it displays as Media Offline).
- **Bug Number:** UDevC00177576. You cannot remotely upload an AMA-linked JPEG file.
- **Bug Number:** UDevC00177925. The following problem applies to Sphere clients in an Interplay Production v3.0 environment: If you are using Sphere clients with ASF v1.6, you must run the 64-bit version of ASF on the system running the Lookup Service.
- **Bug Number:** UDevC00177224. If you try to upload a proxy clip in a 1080p29.97 project, an error message displays and the remote upload operation fails. Remote upload for 1080p29.97 projects is not supported.
- **Bug Number:** UDevC00180038. If you uninstall all Media Composer Cloud components (Interplay v2.7) and then install Media Composer v7.0 or NewsCutter v11.0, the editing application does not install Editor Transcode, which is needed in non-Sphere configurations for

background consolidate and transcode operations. Avid editing applications in a non-Interplay Sphere configuration must install Editor Transcode separately after uninstalling the previous version of Sphere components.

Workaround: If you want to use background consolidate and transcode with Media Composer v7.0 or NewsCutter v.11.0 after uninstalling Sphere components, install Editor Transcode from the following location in your Avid installer folder: \ISSetupPrerequisites\Avid Editor Transcode\setup.exe.

- **Bug Number:** UDevC00179950. If you try to remotely upload a clip more than once — for example, if you upload the clip at two different resolutions — and you begin the second upload before the original upload completes, the second upload cancels the first.

Workaround: This is as designed. If you want to upload a clip at multiple resolutions, wait until the first upload for that clip completes before initiating a second remote upload.

Legal Notices

Product specifications are subject to change without notice and do not represent a commitment on the part of Avid Technology, Inc.

This product is subject to the terms and conditions of a software license agreement provided with the software. The product may only be used in accordance with the license agreement.

This product may be protected by one or more U.S. and non-U.S. patents. Details are available at www.avid.com/patents.

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose without the express written permission of Avid Technology, Inc.

Copyright © 2015 Avid Technology, Inc. and its licensors. All rights reserved.

Portions © Copyright 2003-2007 of MOG Solutions.

Attn. Government User(s). Restricted Rights Legend

U.S. GOVERNMENT RESTRICTED RIGHTS. This Software and its documentation are "commercial computer software" or "commercial computer software documentation." In the event that such Software or documentation is acquired by or on behalf of a unit or agency of the U.S. Government, all rights with respect to this Software and documentation are subject to the terms of the License Agreement, pursuant to FAR §12.212(a) and/or DFARS §227.7202-1(a), as applicable.

Trademarks

003, 192 Digital I/O, 192 I/O, 96 I/O, 96i I/O, Adrenaline, AirSpeed, ALEX, Alienbrain, AME, AniMatte, Archive, Archive II, Assistant Station, AudioPages, AudioStation, AutoLoop, AutoSync, Avid, Avid Active, Avid Advanced Response, Avid DNA, Avid DNxcel, Avid DNxHD, Avid DS Assist Station, Avid Ignite, Avid Liquid, Avid Media Engine, Avid Media Processor, Avid MEDIAArray, Avid Mojo, Avid Remote Response, Avid Unity, Avid Unity ISIS, Avid VideoRAID, AvidRAID, AvidShare, AVIDStripe, AVX, Beat Detective, Beauty Without The Bandwidth, Beyond Reality, BF Essentials, Bomb Factory, Bruno, C|24, CaptureManager, ChromaCurve, ChromaWheel, Cineractive Engine, Cineractive Player, Cineractive Viewer, Color Conductor, Command|24, Command|8, Control|24, Cosmonaut Voice, Countdown, d2, d3, DAE, D-Command, D-Control, Deko, DekoCast, D-Fi, D-fx, Digi 002, Digi 003, DigiBase, Digidesign, Digidesign Audio Engine, Digidesign Development Partners, Digidesign Intelligent Noise Reduction, Digidesign TDM Bus, DigiLink, DigiMeter, DigiPanner, DigiProNet, DigiRack, DigiSerial, DigiSnake, DigiSystem, Digital Choreography, Digital Nonlinear Accelerator, DigiTest, DigiTranslator, DigiWear, DINR, DNxchange, Do More, DPP-1, D-Show, DSP Manager, DS-StorageCalc, DV Toolkit, DVD Complete, D-Verb, Eleven, EM, Euphonix, EUCON, EveryPhase, Expander, ExpertRender, Fader Pack, Fairchild, FastBreak, Fast Track, Film Cutter, FilmScribe, Flexevent, FluidMotion, Frame Chase, FXDeko, HD Core, HD Process, HDpack, Home-to-Hollywood, HYBRID, HyperSPACE, HyperSPACE HDCAM, iKnowledge, Image Independence, Impact, Improv, iNEWS, iNEWS Assign, iNEWS ControlAir, InGame, Instantwrite, Instinct, Intelligent Content Management, Intelligent Digital Actor Technology, IntelliRender, Intelli-Sat, Intelli-sat Broadcasting Recording Manager, InterFX, Interplay, inTONE, Intraframe, iS Expander, iS9, iS18, iS23, iS36, ISIS, IsoSync, LaunchPad, LeaderPlus, LFX, Lightning, Link & Sync, ListSync, LKT-200, Lo-Fi, MachineControl, Magic Mask, Make Anything Hollywood, make manage move | media, Marquee, MassivePack, Massive Pack Pro, Maxim, Mbox, Media Composer, MediaFlow, MediaLog, MediaMix, Media Reader, Media Recorder, MEDIAArray, MediaServer, MediaShare, MetaFuze, MetaSync, MIDI I/O, Mix Rack, Moviestar, MultiShell, NaturalMatch, NewsCutter, NewsView, NewsVision, Nitris, NL3D, NLP, NSDOS, NSWIN, OMF, OMF Interchange, OMM, OnDVD, Open Media Framework, Open Media Management, Painterly Effects, Palladium, Personal Q, PET, Podcast Factory, PowerSwap, PRE, ProControl, ProEncode, Profiler, Pro Tools, Pro Tools|HD, Pro Tools LE, Pro Tools M-Powered, Pro Transfer, QuickPunch, QuietDrive, Realtime Motion Synthesis, Recti-Fi, Reel Tape Delay, Reel Tape Flanger, Reel Tape Saturation, Reprise, Res Rocket Surfer, Reso, RetroLoop, Reverb One, ReVibe, Revolution, rS9, rS18, RTAS, Salesview, Sci-Fi, Scorch, ScriptSync, SecureProductionEnvironment, Serv|GT, Serv|LT, Shape-to-Shape, ShuttleCase, Sibelius, SimulPlay, SimulRecord, Slightly Rude Compressor, Smack!, Soft SampleCell, Soft-Clip Limiter, SoundReplacer, SPACE, SPACESHift, SpectraGraph, SpectraMatte, SteadyGlide, Streamfactory, Streamgenie, StreamRAID, SubCap, Sundance, Sundance Digital, SurroundScope, Symphony, SYNC HD, SYNC I/O, Synchronic, SynchroScope, Syntax, TDM FlexCable, TechFlix, Tel-Ray, Thunder, TimeLiner, Titansync, Titan, TL Aggro, TL AutoPan, TL Drum Rehab, TL Everyphase, TL Fauxlder, TL In Tune, TL MasterMeter, TL Metro, TL Space, TL Utilities, tools for storytellers, Transit, TransJammer, Trillium Lane Labs, TruTouch, UnityRAID, Vari-Fi, Video the Web Way, VideoRAID, VideoSPACE, VTEM, Work-N-Play, Xdeck, X-Form, Xmon and XPAND! are either registered trademarks or trademarks of Avid Technology, Inc. in the United States and/or other countries.

Adobe and Photoshop are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. Apple and Macintosh are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. Windows is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. All other trademarks contained herein are the property of their respective owners.

Avid Media Composer | Cloud v3.2 ReadMe • Created January 5, 2016