



GUIDE TO PORT SEQUENCE OPERATION

VERSION 4 FIRMWARE

CONFIDENTIAL DOCUMENT

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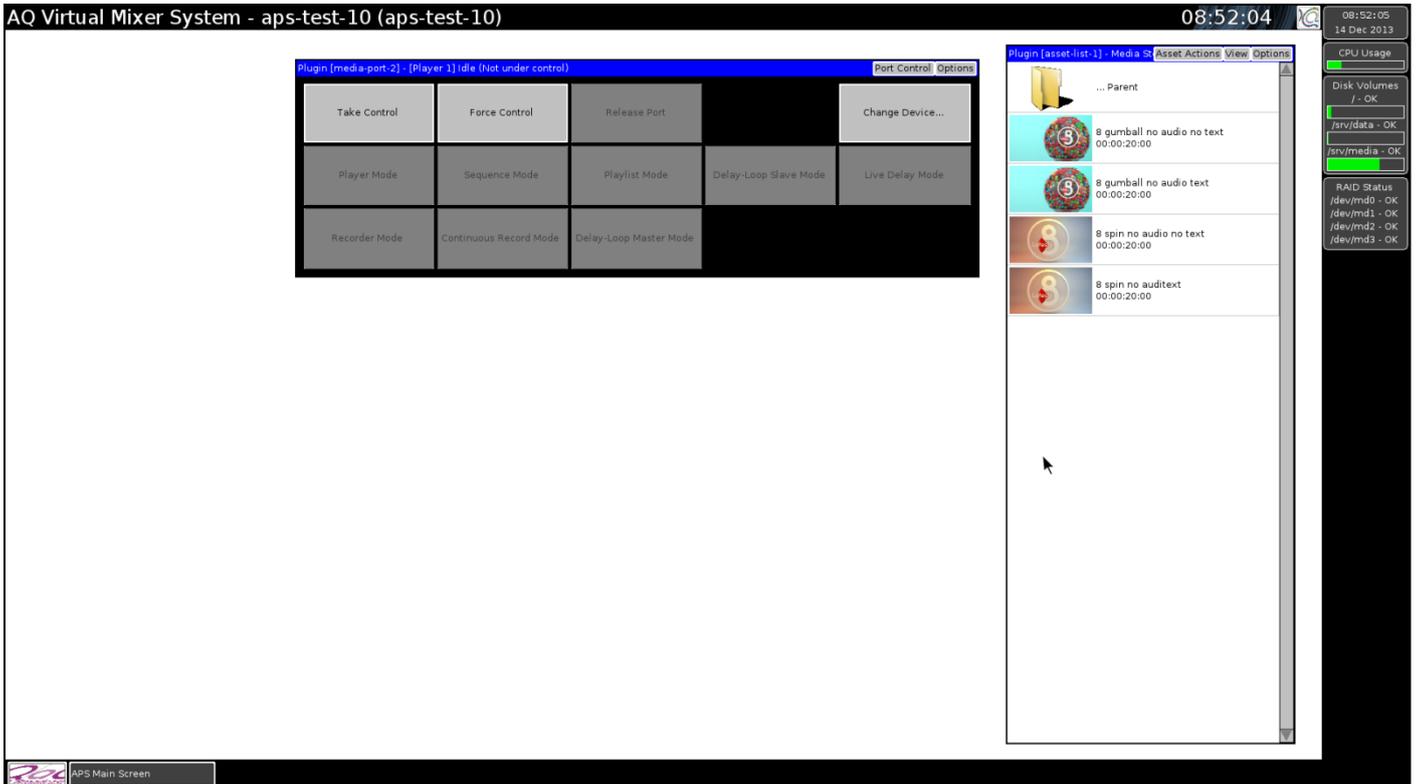
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1 PORT SEQUENCE OPERATION

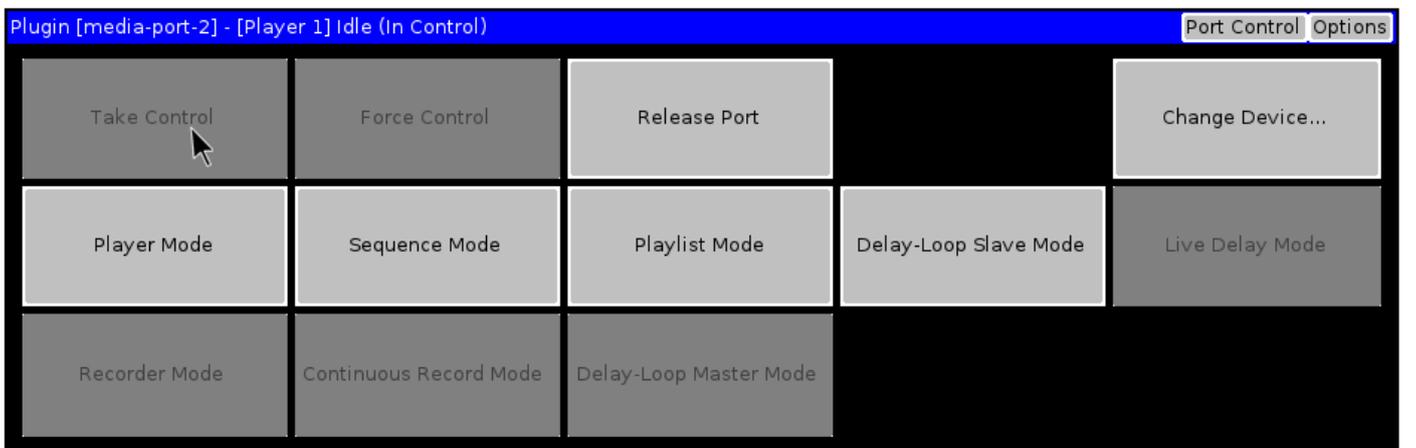
Using Sequence mode allows a list of clips to be played seamlessly back-to-back directly from a server port. The sequence is built by dragging clips from the Media Asset List into the Port window, and can be rearranged (within defined restrictions) by moving clips up and down the list.

1.1 OPEN THE PORT IN SEQUENCE MODE

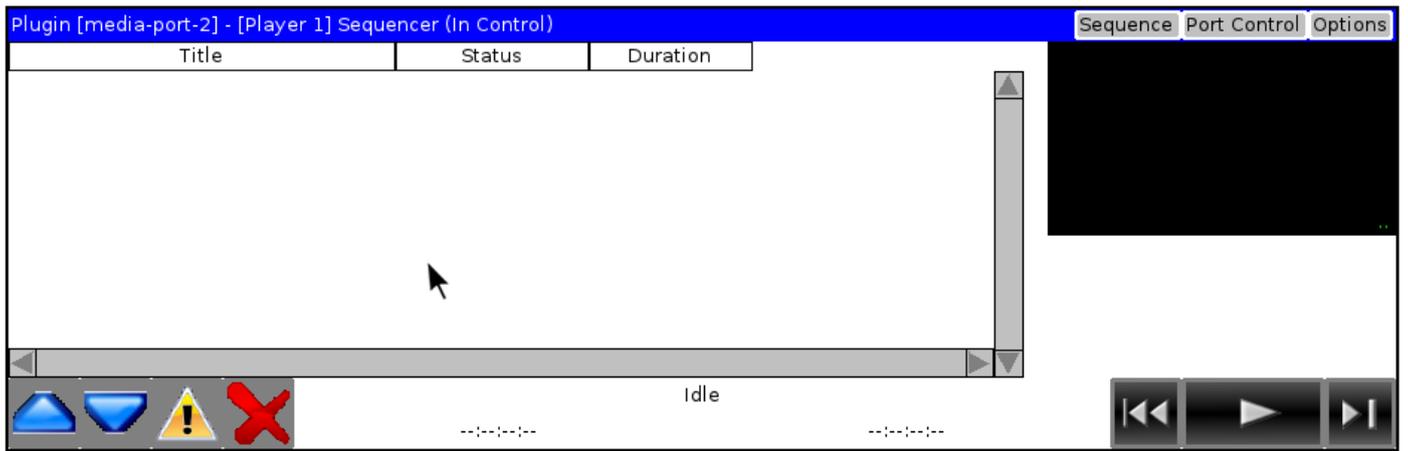
When a port is in Idle Mode, it will be displayed as a series of grey buttons. The lighter ones are enabled, the dark ones are disabled. Only the enabled buttons will have an effect when clicked.



Press the 'Take Control' button to acquire the port. This will cause other buttons to become enabled.

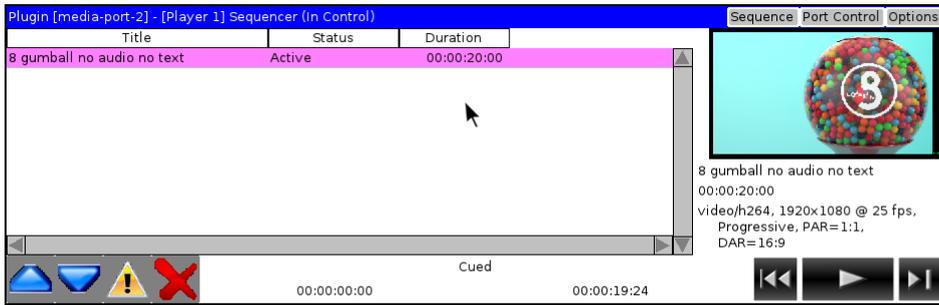


Press the 'Sequence Mode' button to put the port into that mode. It will appear with an empty list.



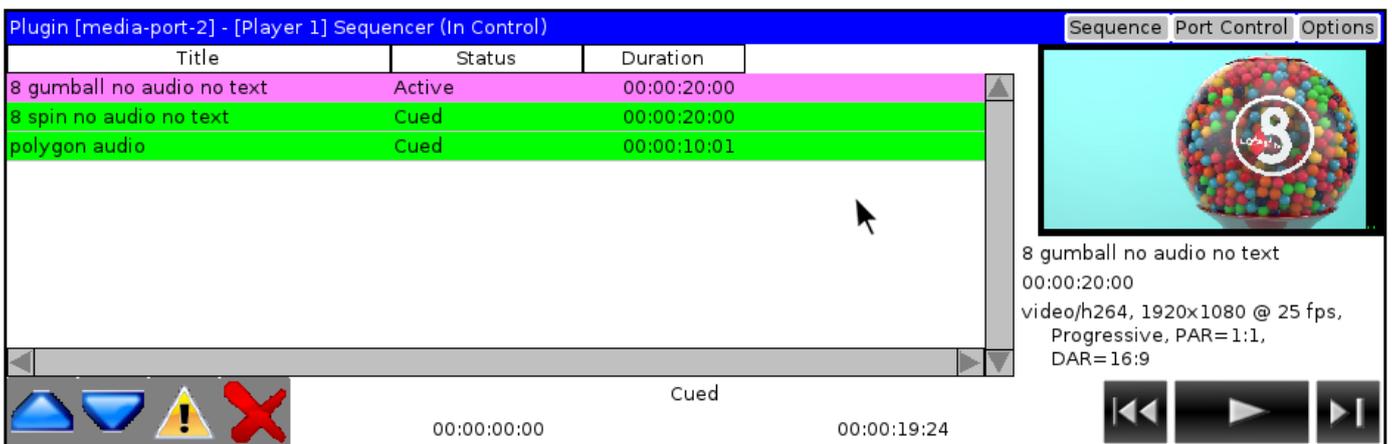
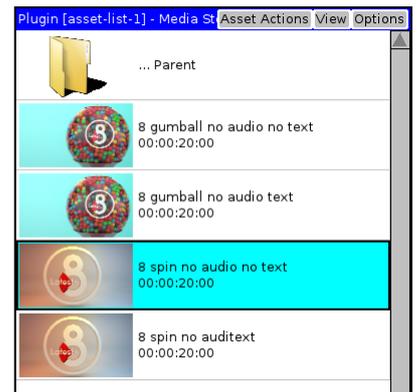
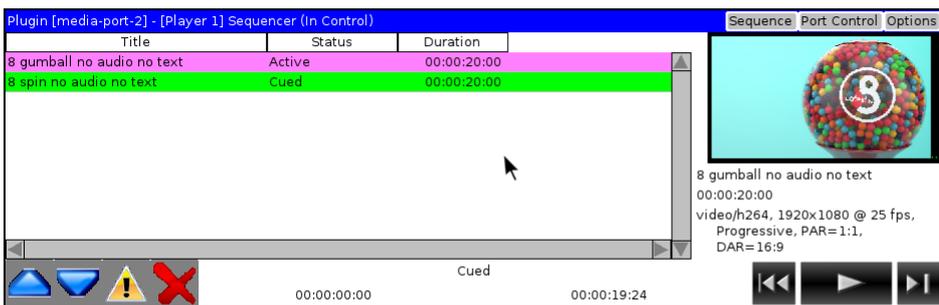
1.2 BUILDING A SEQUENCE OF CLIPS

To start building a new sequence of clips, select the first clip required from the Media Asset list and drag and drop it into the main section of the Port window.



In this example, the clip called '8 gumball no audio no text' has been loaded. Because it is the first clip in the sequence, it has been loaded (so that the first frame is visible on the output of the port) and the clip is shown as 'Active' in the list.

Second and subsequent clips can be added by selecting them from the Media Asset and dragging them into the Port window. Clips are always added to the bottom of the list. Only one clip can be added at a time.

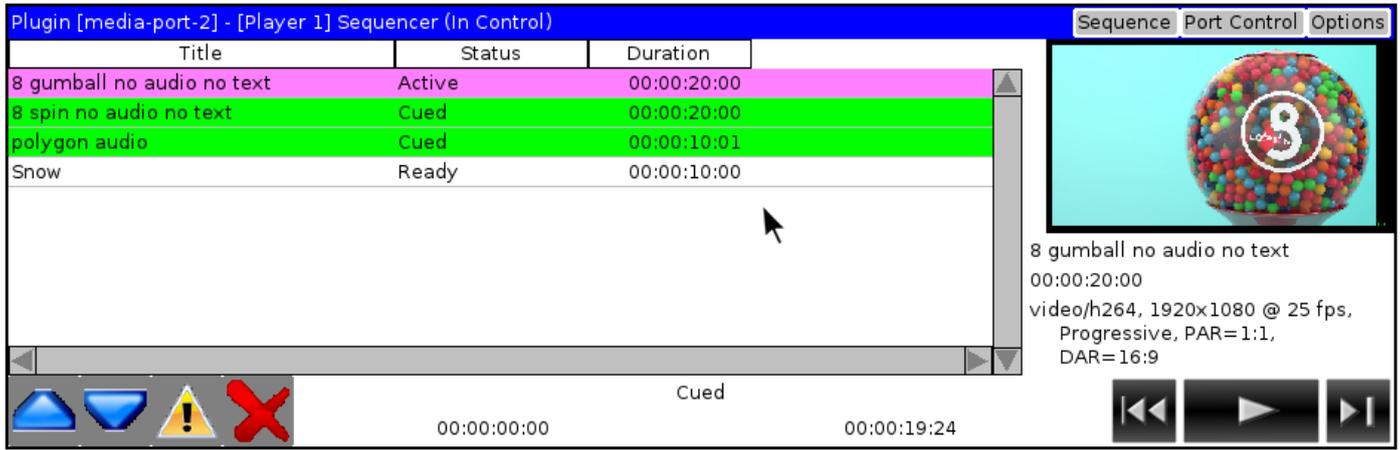


By default, the second and third clips are handled as 'Cued' (i.e. they have been prepared for playback from the port). Subsequent clips are just marked as 'Ready', as they exist in the list but have not been actively loaded in any way. The clips marked as 'Active' and 'Cued' are somewhat restricted in how they can be changed, compared with other clips just marked as 'Ready'

Plugin [media-port-2] - [Player 1] Sequencer (In Control)

Title	Status	Duration
8 gumball no audio no text	Active	00:00:20:00
8 spin no audio no text	Cued	00:00:20:00
polygon audio	Cued	00:00:10:01
Snow	Ready	00:00:10:00

00:00:00:00 Cued 00:00:19:24

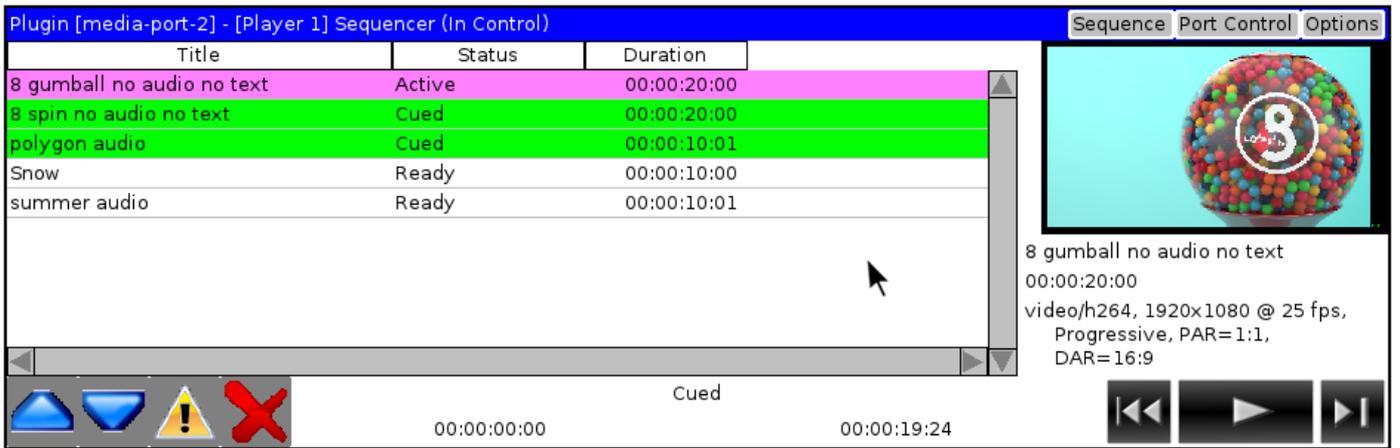


The screenshot shows a video sequencer interface. At the top, there are tabs for 'Sequence', 'Port Control', and 'Options'. Below is a table with columns for 'Title', 'Status', and 'Duration'. The first row is highlighted in pink and labeled 'Active'. The second and third rows are highlighted in green and labeled 'Cued'. The fourth row is labeled 'Ready'. To the right of the table is a preview window showing a colorful gumball machine with a large number '8' on it. Below the preview window, there is text describing the current clip: '8 gumball no audio no text', '00:00:20:00', 'video/h264, 1920x1080 @ 25 fps, Progressive, PAR=1:1, DAR=16:9'. At the bottom, there are playback controls including a play button, a stop button, and a next button, along with a progress bar and time indicators.

Plugin [media-port-2] - [Player 1] Sequencer (In Control)

Title	Status	Duration
8 gumball no audio no text	Active	00:00:20:00
8 spin no audio no text	Cued	00:00:20:00
polygon audio	Cued	00:00:10:01
Snow	Ready	00:00:10:00
summer audio	Ready	00:00:10:01

00:00:00:00 Cued 00:00:19:24



This screenshot is similar to the one above, but with an additional row in the table. The fifth row is labeled 'Ready' and '00:00:10:01'. The preview window and playback controls remain the same.

Five clips have now been added to this sequence.

1.3 MODIFYING A SEQUENCE LIST

The order of clips in a sequence can be changed by selecting an appropriate item and moving it up or down the list.

In this example, the 'summer audio' clip is selected (so that it is highlighted in blue), and then the blue down arrow (bottom left) is clicked once to move it down one position so that it appears beneath 'snow'.

Plugin [media-port-2] - [Player 1] Sequencer (In Control)		
Title	Status	Duration
8 gumball no audio no text	Active	00:00:20:00
8 spin no audio no text	Cued	00:00:20:00
polygon audio	Cued	00:00:10:01
summer audio	Ready	00:00:10:01
Snow	Ready	00:00:10:00

Plugin [media-port-2] - [Player 1] Sequencer (In Control)		
Title	Status	Duration
8 gumball no audio no text	Active	00:00:20:00
8 spin no audio no text	Cued	00:00:20:00
polygon audio	Cued	00:00:10:01
Snow	Ready	00:00:10:00
summer audio	Ready	00:00:10:01

Any clip which is not 'Active' can be moved up the list one position at a time. However, it cannot replace the 'Active' clip at the top of the list, and if there is an attempt to move it into the top position, it will simply be removed from the list completely.

Any clip which is not 'Active' can be moved down the list one position at a time. However, if an attempt is made to move the 'Active' clip down, any clip that it passes will be unloaded and therefore removed from the list completely.

1.4 DELETING A CLIP

A clip can be deleted by selecting it, so that it is highlighted in blue, and then using the red cross (bottom left) to remove it. The selected item will be deleted immediately – there is no warning or confirmation message.

In this example, a new clip 'ident15sec' has been added to the bottom of the list and then immediately removed again.

Plugin [media-port-2] - [Player 1] Sequencer (In Control)

Title	Status
8 gumball no audio no text	Active
8 spin no audio no text	Cued
polygon audio	Cued
summer audio	Ready
Snow	Ready
ident15sec	Ready

00:00:00:00

Plugin [media-port-2] - [Player 1] Sequencer (In Control)

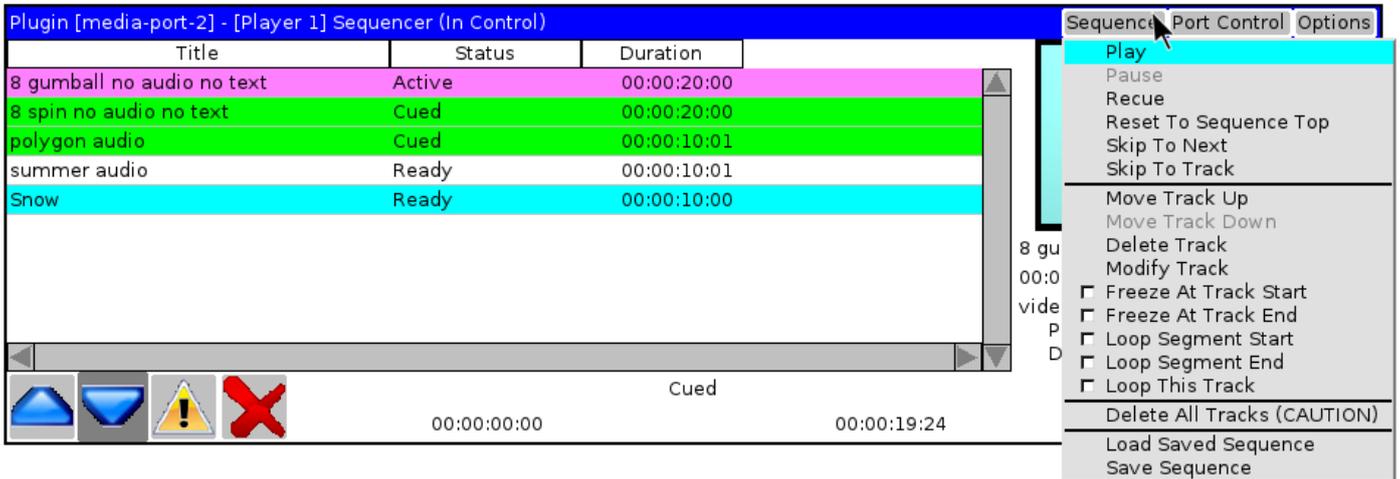
Title	Status
8 gumball no audio no text	Active
8 spin no audio no text	Cued
polygon audio	Cued
summer audio	Ready
Snow	Ready

1.5 LOADING AND SAVING SEQUENCE LISTS

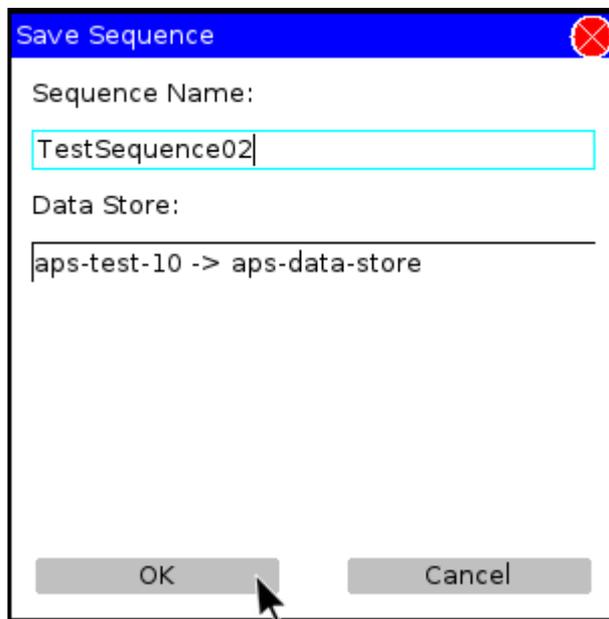
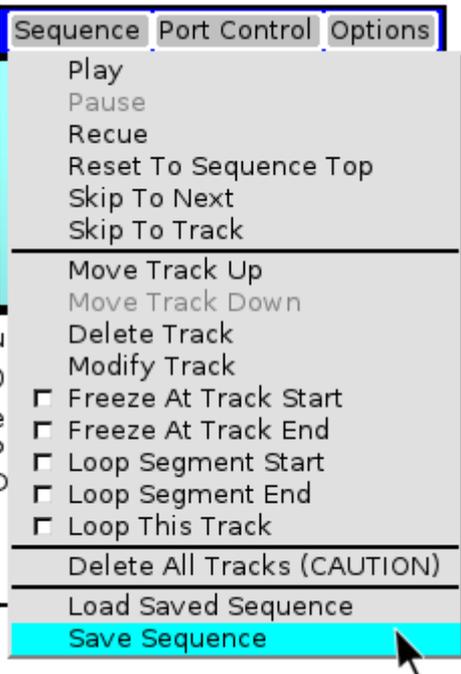
Having built a sequence, it is possible to save it for use again in the future. This is particularly useful since a sequence is gradually unloaded while it is being played back (each clip is unloaded from the port once it has completed and is also removed from the top of the list), so saving a sequence once it has been prepared means that it can be loaded again for subsequent use.

To save the current sequence:

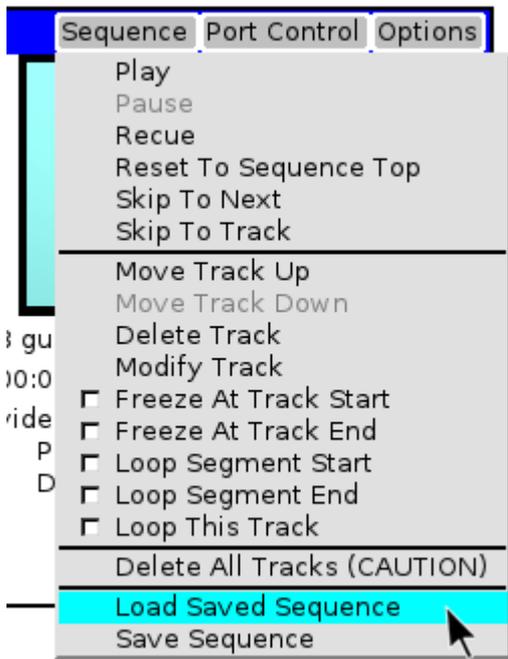
Click the 'Sequence' button in the top right of the Port window, so that the menu appears.



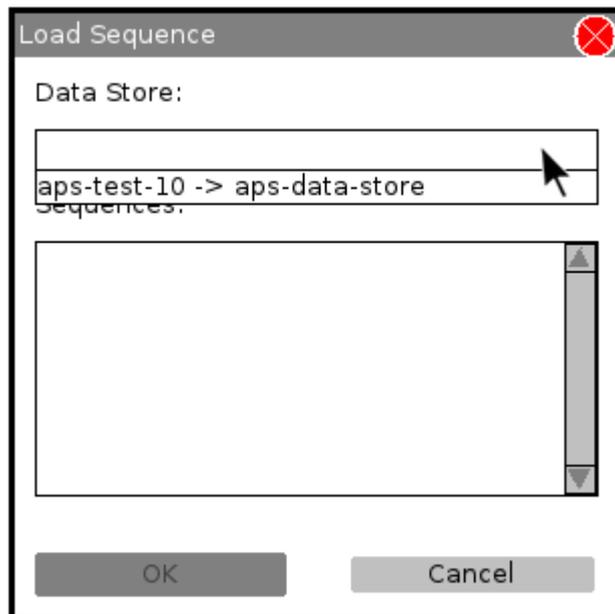
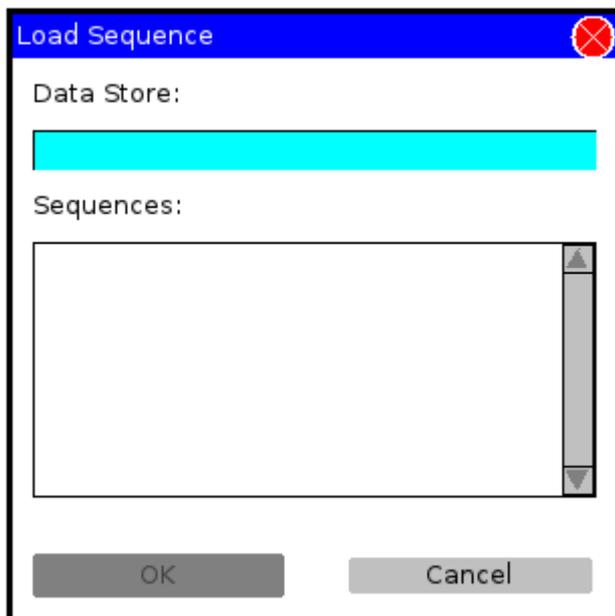
Click on 'Save Sequence', enter the name for the sequence (e.g. 'TestSequence02 in this example') and then click 'OK'. Note that a Data Store entry must be shown – if not, then additional configuration will be required in order for this operation to take place.



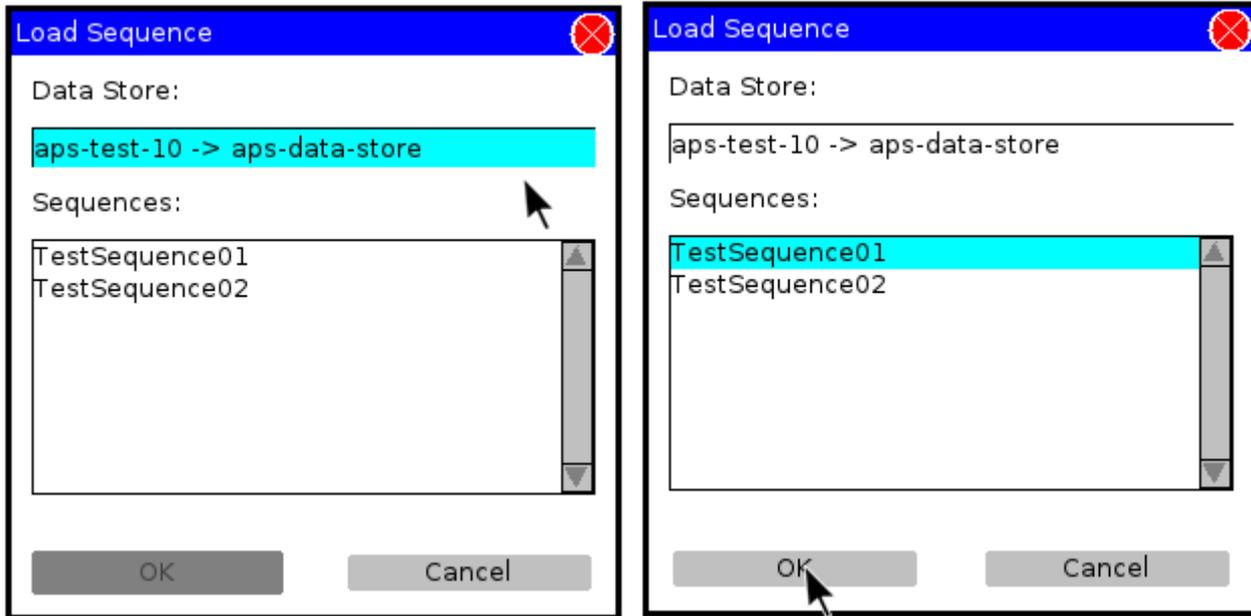
To load a previously saved sequence, click on the 'Sequence' button, and choose 'Load Saved Sequence'



This will display the 'Load Sequence' dialogue. Click on the blue space in the Data Store box, so that the list of data stores is shown as a drop-down list. If none are shown, then additional configuration will be required in order for this operation to take place.



Once the appropriate Data Store is selected, the list of available sequences will be displayed. Choose the required sequence and then click 'OK' to load it.



Note that when a sequence is loaded, it will be appended to the bottom of any existing clips already present in the Sequence list.

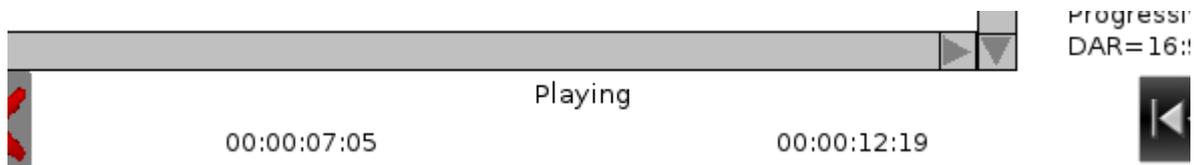
1.6 OPERATING A SEQUENCE

Once a Sequence has been prepared or loaded, it can be controlled for playout using the transport buttons on the bottom right of the port window. These provide:

- Recue to start of current clip (this can be clicked while the clip is playing, but in that case will cause playback to be paused before the clip is recued).
- Play / Pause
- Skip to next clip in the sequence. This will cause the current clip to be unloaded from the port, removed from the top of the sequence list, and will make the next clip in the sequence active.

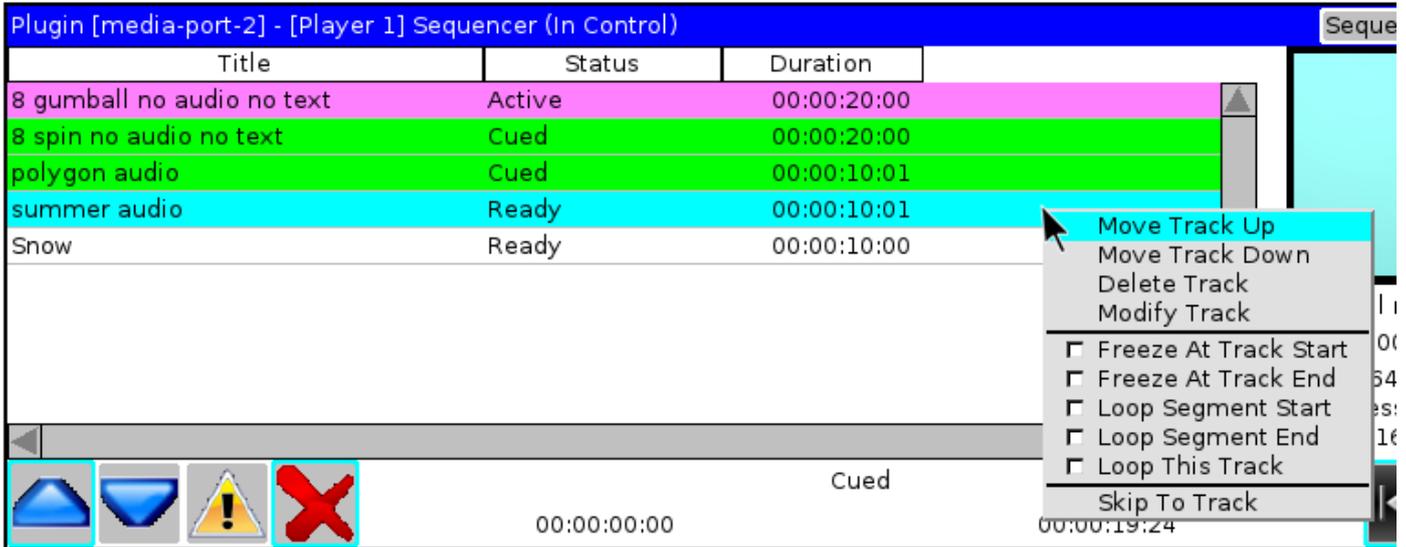


The Status bar in the middle of the bottom of the Port window shows current transport state (e.g. Playing / Cued), the timecode into the current clip and the countdown out of the current clip.

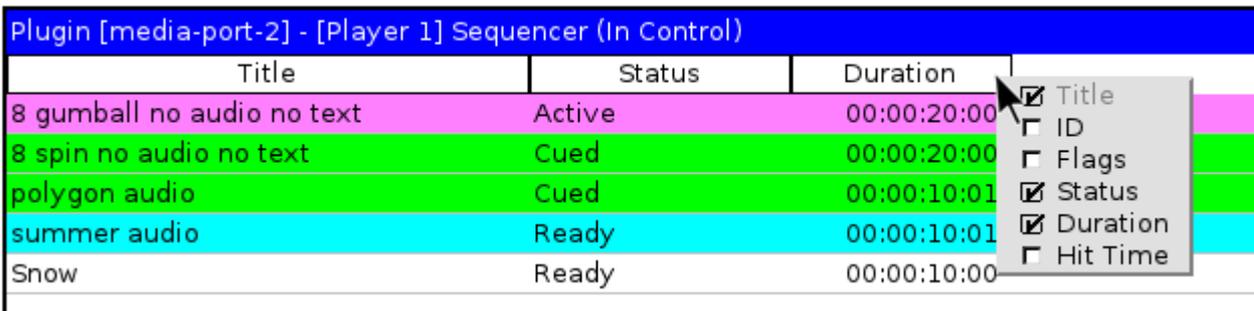


1.7 ADDITIONAL FEATURES

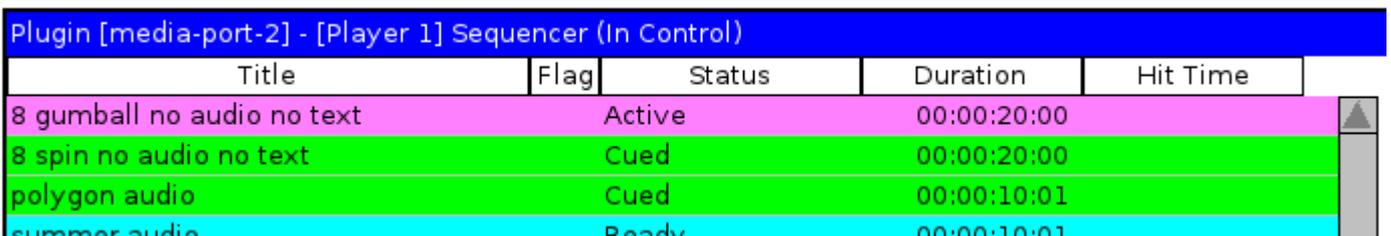
In addition to moving and deleting items via the buttons (bottom left) it is also possible to modify an item in the list by right-clicking it. This will display a context sensitive menu, which includes commands to move the clip up or down the list or to remove it from the list.



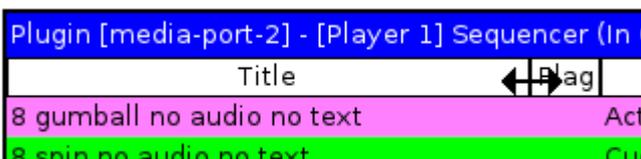
The default column view of Title, Status and Duration can be extended to show other information including Hit Time. To change the displayed columns, right-click one of the column headers and then check the columns which are required.



In this example, the Flags and Hit Time columns have been added.



It is also possible to change the relative widths of the columns. Move the cursor so that it is positioned over one of the column boundaries – it will change to a double-ended horizontal arrow. By clicking and dragging, it will then be possible to change the relative width of the columns either side of that boundary.



Title	Flags	Status
8 gumball no audio no text		Active
8 spin no audio no text		Cued

In this example, both sides of the 'Flags' column have been altered so that it appears wider.

The Hit Time column is useful to be able to see when a particular clip in the sequence will be reached.

Title	Flags	Status	Duration	Hit Time
8 gumball no audio no text		Active	00:00:20:00	
8 spin no audio no text		Cued	00:00:20:00	10:29:47
polygon audio		Cued	00:00:10:01	10:30:07
summer audio		Ready	00:00:10:01	10:30:17
Snow		Ready	00:00:10:00	10:30:27

However, note that it is only populated when the sequence is playing. When the sequence is paused, the Hit Time information is removed.

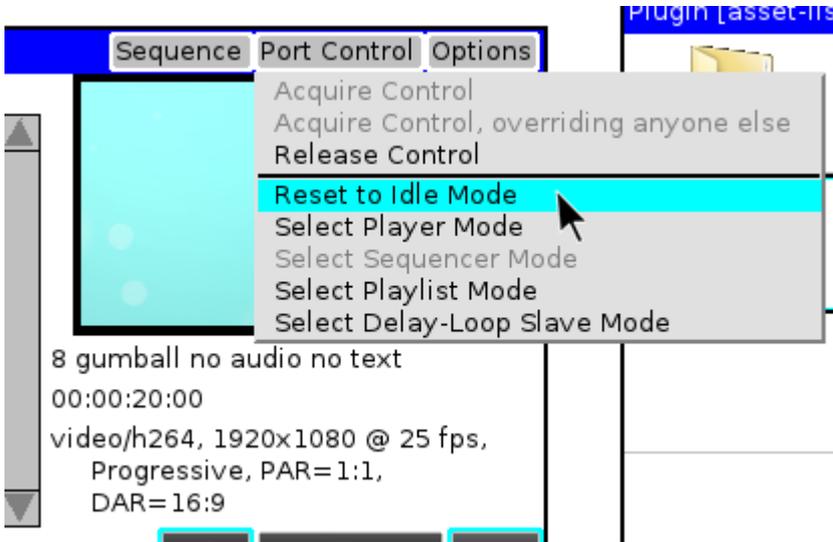
Duration	Hit Time
00:00:20:00	
00:00:20:00	
00:00:10:01	
00:00:10:01	
00:00:10:00	

The hittimes will be recalculated based on current time when the sequence is played again.

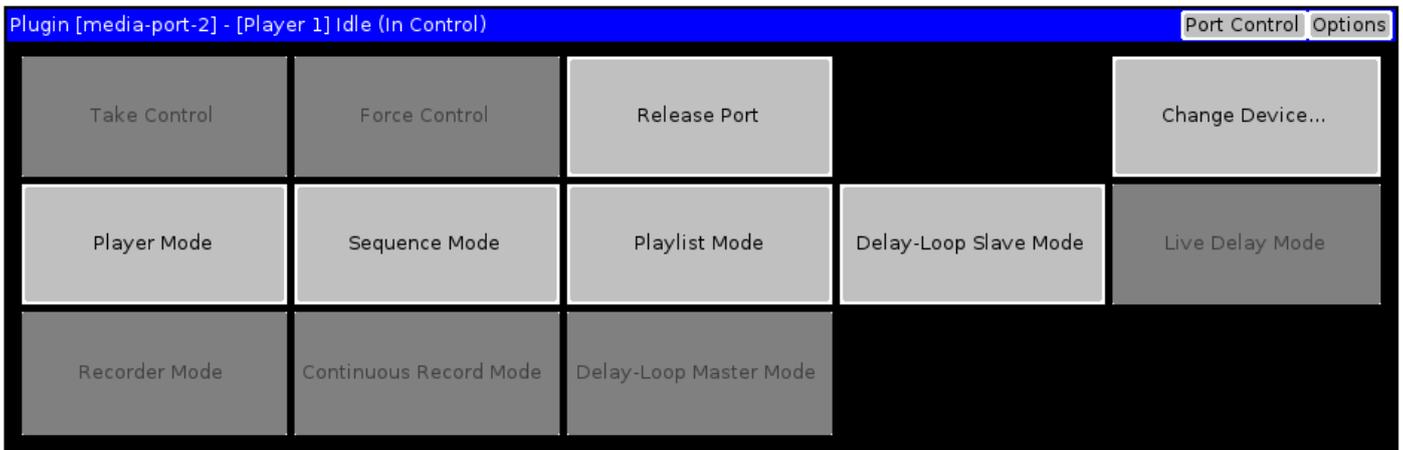
1.8 RELEASING A PORT FROM SEQUENCE MODE

Whilst a port is being used in Sequence Mode, it won't be available for any other use. Once the Sequence playback has finished, the port can be released for other purposes.

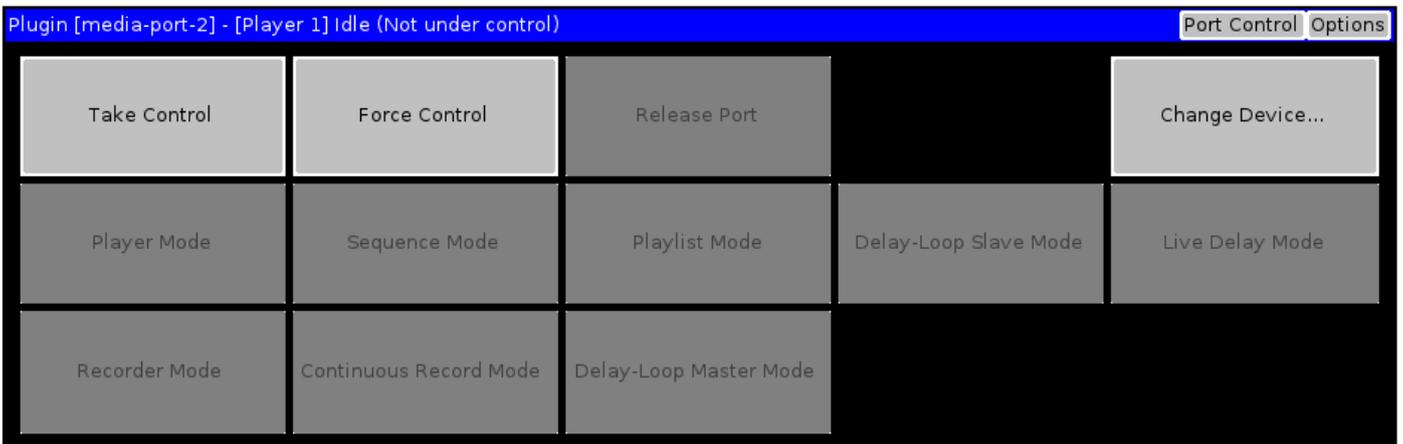
To reset the port to Idle, click the 'Port Control' button (top right hand corner of the Port window) and select 'Reset to Idle Mode'



This will show the original port Mode buttons again. Another mode can be chosen (e.g. Player Mode, to allow playback of a single clip at a time), or the port can be released completely by clicking the 'Release Port' button. This would allow control of the port to be taken by another workstation or another application.



A released port would be displayed as shown below:



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