r23.0 Changelog

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|   r23.0 Release - 96398   |
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Release day - December 7th 2022

New Features

- DSOF-21736 Live Action Volume

Live Action Volume allows users to define a region of an XR stage which contains 'live action', e.g. performers and props. All areas outside this volume will be covered with virtual set extension, rather than exposing the filmed LED screens.

The reasons for doing this include:
1. To mask on-stage objects outside the performance region (e.g. cameras, lights).
2. To make more of the frame be taken up by virtual content, which seamlessly blends with the filmed screens within the live action volume.

How-To

To add a live action volume to an XR setup:

1. Create an object (e.g prop, screen etc.)

2. Change the object's render layer to 'Live action volume'

3. Set the object's mesh and more it to the desired location on the stage to contain all the live action

4. Multiple live action objects can be created to cover disconnected regions of live action

Usage notes:

Live action volume objects (along with set extension mask and addition objects) apply globally. All objects in the stage in these layers will automatically modify the set extensions of all MR sets, without needing to be added to the MR set 'On-stage' object list.

On-Stage objects positioned behind or in front of a Live Action Volume won't make them covered by the Set Extension unless they are on the side of it as we only render the Live Action Volume in 2D.
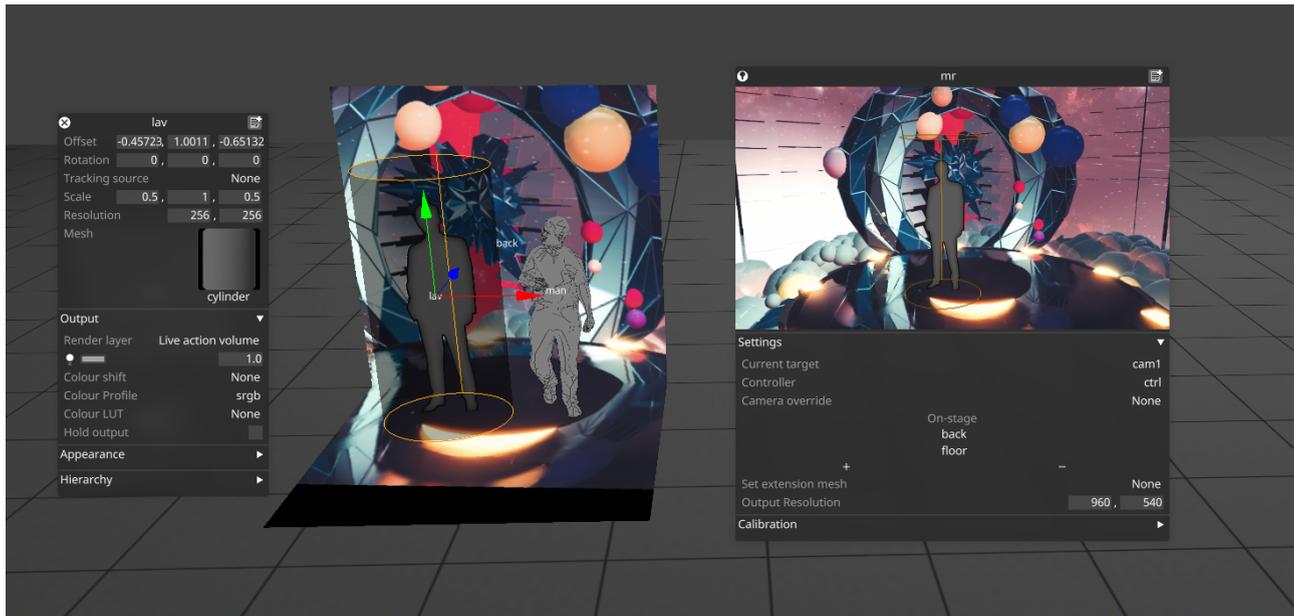
Improvements

- DSOF-3606 Ability to set non-SMPTE timecode for frame accurate sequencing in any frame rate

We have created an option to set Custom Timeline FPS to support frame accurate sequencing. This is made available in the Timecode Collapsible widget found in the right-click menu for Transport.

- DSOF-11343 Debug log window resize

It is now possible to resize the debug log window, which makes it much more user friendly.

- DSOF-12624 Notify user of new or mismatching VFC firmware

If the VFC firmware is found to be old or mismatching, this is now flagged with a notification stating "Found old VFC firmware".

- DSOF-15168 All objects should be able to be used as set extension masks/additions without adding as an on-stage object in the MR set

In order to add set extension masks or set extension additions, it is no longer necessary for these to be part of the MR set. All objects in the relevant layers can work as masks or additions, without needing to be in the MR set.

- DSOF-19189 Show film strip of a clip in the key frame editor

The film strip for a video is now available in the key frame editor. This is useful to get an overview of the content without having to play it through. This feature is disabled by default, and can be enabled by unchecking the "Disable key frame editor film strip" option in the Project Settings.
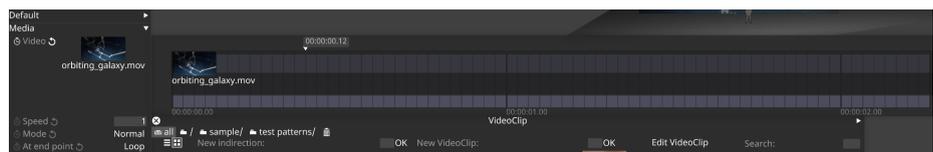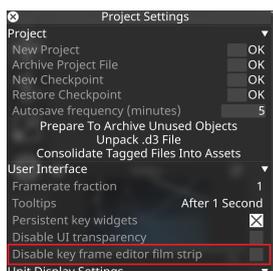
Without the film strip

With the film strip

- DSOF-20495 Add mellanox dumps to system diagnostics

Mellanox crash dumps are now included in the system diagnostics.

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- DSOF-20669 Remove blue flash watermark from feed view

The Feed view has been modified so that both the Feed Rectangle and Feed Output behaviour is consistent. In previous releases, the Feed Rectangle would fade to blue while the Feed Output would not fade

For a non-server Designer machine, the Feed rectangle will fade to blue (on gold release) or purple (on a beta release) every 10 mins. The Feed Output will exhibit the same behaviour.

For any disguise server, the Feed Rectangle shall never fade on a gold release but fade to purple on a beta release. The Feed Output will exhibit the same behaviour.

- DSOF-20844 Indicate which machine is the local machine in d3manager

In d3manager, the local machine is now highlighted in bold. As a user, this is useful when accessing multiple machines via a KVM and needing to know which of the machines listed is the one you are logged onto.

- DSOF-21987 Cloud login improvements

The disguise cloud login functionality within Designer which was released in r22.2 has undergone several quality improvements.

- DSOF-21196 Add ability to customise the API endpoint
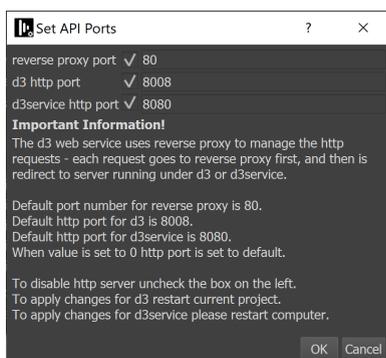
The HTTP API port settings are now configurable via d3manager under Machine Settings -> Set API Ports.

Care should be taken when changing settings in this dialog to restart the project or the machine, depending on what settings have been changed, as per the instructions in the setting dialog.

- DSOF-21322 MTC layer does not support 29.97 drop frame

The MTC layer for outputting MIDI timecode now supports 29.97 Drop Frame (DF) timecode.
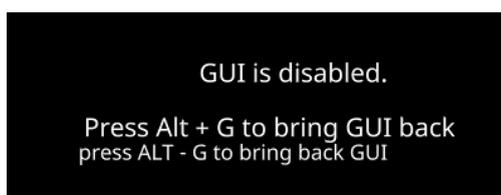
- DSOF-21618 'Cue table exported' pop-up added
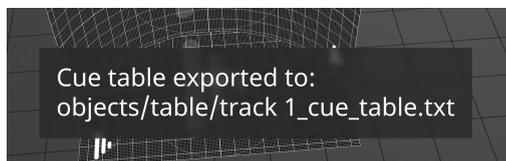
When exporting a cue table, a pop up message now indicates that the cue table has been exported, consistent with the behaviour of other export features.

- DSOF-21623 Remove 'HDMI 3840X2160 10bit' warning

A confusing warning message in Notifications has been removed.

- DSOF-21633 Allow ALT+G to toggle GUI on all machine roles

The key combination ALT+G now toggles GUI rendering on or off on all machine roles. When ALT+G has been used, this is indicated with text on screen.

- DSOF-21652 Don't render set extension mask when set extension alpha = 0

If the set extension alpha is set to zero, the software no longer renders the set extension mask as it is wasted effort. This performance improvement is applicable to VP setups where set extensions are not used.

- DSOF-21738 Virtual object camera visibility setting

The "Virtual Object Alpha" setting in a Camera enables objects which define regions of interest to be displayed in the visualiser with a specified level of alpha. This is useful for objects such as set extension mask/addition layers, live action volumes or 2.5D layers.

In previous releases, these objects were not rendered to the camera which could make them difficult to interact with. This setting is now enabled by default in the visualiser camera, but not in other cameras.

The example screenshot below shows layers of a 2.5D scene which have been output to the StageRender layer being displayed as translucent layers with this setting enabled. The setting is found in the Camera object under Stage Render / Render Settings / Object Visibility.
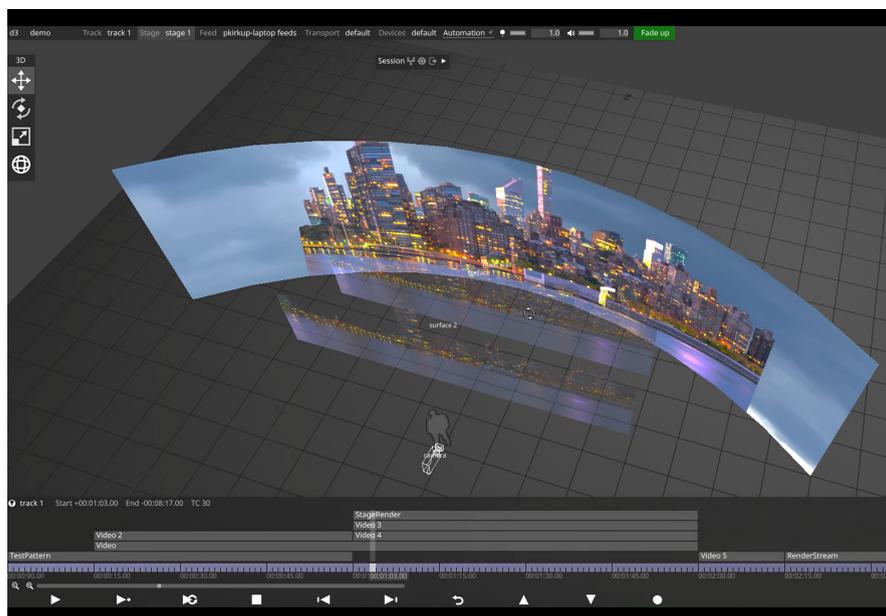
- DSOF-21785 Tidy up camera visibility settings

The settings of a Camera object have been tidied up in order to take up less space on the GUI, and makes it easier to manage.

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- DSOF-21971 RenderStream assets which crash on startup leave no information for fault finding

In previous releases, if a RenderStream asset crashed on startup (before even renderstream.dll loads), there was no way to report why it crashed. In r23, this is now captured, and log files are placed in the %LOCALAPPDATA%\d3\renderstream_workloads folder, with a subfolder for the asset name, then "friendly" workload name.

Each instance is stored into an instance_n.txt file, where n is the instance number within the workload. The log viewer in Designer is able to view the file via the Designer Logs share on the render machine, so access to all logs from assets which failed to start will be available too.

- DSOF-21984 RenderStream host memory applications need to be able to specify pixel format

This improvement is relevant for developers of RenderStream plugins. The pixel format was limited to BGRA8 pixel formats only on all versions of RenderStream up to 1.30.

From RenderStream 1.31, the engine can now specify the memory it provides in the same way dx apps can use a reasonable selection of pixel formats in the textures they provide to the API.

- DSOF-22039 Add the ability to render 3D content from spherical mappings

Spherical mapping supports a new property called Content Mode which is set to 2D or 3D. When set to 2D, the behaviour is the same as previous releases. When set to 3D, RenderStream and other 3D layer types (StageRender, Notch and Renderstream) will render 6 views of their world in order to build the 6 tiles of a cube in order to generate 360 degree content.

The cube mapping viewpoints will be automatically created for render engines, resulting in 6 workloads - one for each side of the cube - and the resulting content is mapped for 360 degree coverage, i.e. a 360 degree arc around the spherical focal point. This achieves the same observed behaviour as equirectangular content which spherical mappings normally use.

- DSOF-22454 Run -NoVerifyGc Command on RenderStream Launch

RenderStream layers for Unreal Engine now pass through the -NoVerifyGc option by default for Unreal Engine RenderStream workloads. This significantly speeds up the launching of these workloads, without having to put this config in custom configuration.

Fixes

- DSOF-4472 - Fixed an issue where it was not possible to unsockpuppet tint or access individual RGB values

- DSOF-16022 - Fixed the object selection outline being incorrect in the camera view with overscan

- DSOF-17699 - Video Input textures are now included in the bandwidth estimates

- DSOF-19158 Fixed an issue where it was not possible to add observation while acting as a dedicated director

- DSOF-19378 - Fixed an issue where the RenderStream log was not always copied to Director

- DSOF-19945 [ACES] - Fixed an issue where the VideoIn Preview failed to preview Input Transforms

- DSOF-19965 - Fixed an issue that occurred when transitioning between two pre-comps in Bitmap layer using "Transition time" causes fade from black instead of crossfade

- DSOF-19968 - Fixed an issue where jumping into the currently running RenderStream layer caused a stutter between 50-500ms

- DSOF-20351 - Fixed an issue that occurred when a showfile was transferred between different GUI resolutions, the widget may have drawn off screen

- DSOF-20522 - Fixed an issue where groups of layer starts could jitter when being selected and resized

- DSOF-20524 - Fixed an issue where Designer received invalid comms messages and crash to desktop

- DSOF-20565 - Fixed overscans on RenderStream content creating a clear visual difference to non-overscanned content

- DSOF-20627 - Fixed an issue where d3service presented an offline error on launch despite d3service running

- DSOF-20726 - Fixed issue where Designer issued warning that a Bluefish driver on a Solo is newer than required

- DSOF-20754 - Renamed Automation in the device monitor icons

- DSOF-20867 - Status UI now handles lost device errors during rendering

- DSOF-21007 - Fixed the debug window text is overflowing

- DSOF-21149 - Fixed an issue where previews were not rendered after a restart in VideoIn patch panel

- DSOF-21200 - Setting UI transparency to off is now represented on Understudies

- DSOF-21201 - Designer could crash if using precomps as texture parameters when switching maps in Unreal

- DSOF-21205 - Fixed an issue where UnusedMediaDomain didn't detect media on remote machines on the first project startup

- DSOF-21250 - Fixed an error in CameraCalibrationObservationEditor when undoing creation of a Manual Observation while editor is open

- DSOF-21269 - Fixed an error in the Colour Picker when undoing colour selection

- DSOF-21277 - Improved performance when using multiple videoins and RenderStreams on vx 4 and vx 4+ due to OCL queue synchronisation

- DSOF-21279 - Fixed an issue where RenderStream 'receive health' did not report issues with packet receipt

- DSOF-21281 - Fixed an issue where deleting a keyframe 'before/after' when using [] as selector did not work correctly

- DSOF-21282 - Fixed an issue where multi-select on parameters, keyframe modified levels together, but deleting before/after only affected the parameters right clicked on

- DSOF-21294 - Spatial Calibration Object - Fixed an issue when selecting a new calibration object the calibration wasn't applied

- DSOF-21312 - Fixed an issue where opening and closing the d3net manager widget within a session displayed a 'multicastDelegate' error

- DSOF-21319 - Fixed an issue where changing API ports resulted in API documentation not being accessible

- DSOF-21347 - Fixed an issue where ACES input transform options were available on RenderStream assets regardless of Colour Management

- DSOF-21356 - Improved console notifications around dedicated directors applying group feeds

- DSOF-21406 - AnimateObjectPreset: Fixed an error in ScreenConfigurationEditor when adding objects to a ScreenConfiguration

- DSOF-21476 - When restarting a RenderStream, "!fragment.streams.empty()" is no longer shown

- DSOF-21525 - Fixed an issue where GUI Update was sluggish on showfile

- DSOF-21538 RenderStream: Fixed an issue where the pool incorrectly reported asset were out of sync

- DSOF-21539 XR: Spatial Calibration "MulticastDelegate: Fixed 'startup error'"

- DSOF-21572 - Fixed an issue where API Query Parameters were not displayed in the Swagger documentation

- DSOF-21576 - Fixed an issue where deleting unused media didn't work for image sequences

- DSOF-21578 - Fixed an issue where removing fields within an Open layer created a Multicast Delegate error

- DSOF-21593 - Fixed an issue where GPU could lose access when playing 1 x 12k and 1 x 8k Notch LC files at the same time

- DSOF-21597 - Fixed an issue where arrows ended up in a wrong state when removed on remote machine

- DSOF-21598 - Layers no longer cause crash on exit

- DSOF-21619 - Fixed an issue where cue table import on section would break when a project is set to 59.94

- DSOF-21635 - Using a 'StageRender' layer with a perspective mapping in 3D content mode no longer fails

- DSOF-21661 - Feeds no longer have a red border in designer mode

- DSOF-21691 - Fixed an issue where pressing CTRL + 1 with a keyframe timeline open caused an Access Violation

- DSOF-21706 - 'Spatial map' now behaves like '3D perspective map' when reprojection distance is zero

- DSOF-21732 Fixed a potential Access Violation when undoing undo colour selection in a Palette

- DSOF-21748 - Fixed issue where SLC Region Updates can no longer be called multiple times.

- DSOF-21755 - Mesh Mapping now supports Vulkan image formats

- DSOF-21783 - Fixed an issue where the overscan field was green when tracking system was used

- DSOF-21790 - Fixed an issue where the text layer text font didn't change to imported fonts

- DSOF-21808 - Console no longer spammed when 'Configure' separator is open inside RS workload

- DSOF-21831 - Fixed a d3Manager crash when renaming project folder

- DSOF-21832 - Fixed an issue where SLC regions were available for all videoclips, even when SLC was not enabled for the project

- DSOF-21836 - Fixed an issue where d3Manager crashed on startup if the current project no longer exists in debug

- DSOF-21841 - Fixed an issue where with "enableWebGL"on, web still reports WebGL disabled

- DSOF-21847 - Fixed an issue where ALt Drag DMX values resulted in incorrect number assignment

- DSOF-21850 - Fixed an issue where props did not work as live action volumes

- DSOF-21851 - Fixed an issue where the media ingestion history window was blank upon opening

- DSOF-21857 - Fixed an issue where importing the FeedRect setting was not available

- DSOF-21873 - Delete All Unused Media API is now more reliable

- DSOF-21897 _ Fixed an issue where the OpticalCalibrator could hang

- DSOF-21899 - OmniCal: Fixed an issue where projector lens distortion did not update if only 3rd order coefficient is set

- DSOF-21934 - Fixed an issue where Unreal exposed Custom Events didn't behave like any other keyframe in d3

- DSOF-21969 - Fixed an issue where links to RenderStream assets using custom extensions didn''t get launched correctly.

- DSOF-21970 - RenderStream shortcut asset now respects the working folder option

- DSOF-21973 - Fixed an issue where d3Manager licence check didn't account for developer authorisation and blocked d3 from running

- DSOF-21977 _ fixed an issue where there was no way to save & load a RenderStream asset metadata effectively when using shortcuts

- DSOF-22011 - Export Output Frame from Feeds now export as expected

- DSOF-22032 - OmniCal: Fixed an Access violation when closing Check Cameras window

- DSOF-22033 - Fixed anissue that occurred when a virtual camera points 180 degrees behind the physical camera, the physical view appeared upside down

- DSOF-22037 - Tracking Marker Module - brightness and colour adjustment now work on the markers

- DSOF-22050 API: Fixed an issue the custom d3service http port was not respected

- DSOF-22061 - Fixed an issue where virtual camera positions would reset on restart

- DSOF-22071 - Fixed an issue where d3 start-up was stuck with a black window sometimes

- DSOF-22085 _ Projectors in blank projects are no longer set to be Hidden

- DSOF-22092 - Fixed an issue where set extension content was disconnected from screens when backplate reprojection distance is zero

- DSOF-22101 - Camera frustum size no longer increases when virtual camera moves

- DSOF-22118 RenderStream: Improved compressed workloads

- DSOF-22126 - Camera visibility settings - upgrading old project now makes virtual objects visible in the visualiser

- DSOF-22132 - Fixed an issue where Workload Status Widget on the RenderStream layer has the wrong scaling for it's list views.

- DSOF-22133 - Fixed an issue where it was not possible to remove MR sets and Mesh Projections from Hierarchy once added

- DSOF-22136 - Fixed an issue where the tracking marker module didn'tn't clip properly for 2D perspective and feed maps

- DSOF-22164 - RenderStream New Mappings are are now visible

- DSOF-22165 - Fixed an issue wher eit was not possible to Adjust Texture Streaming Assigners when Scene Name is too long

- DSOF-22208 - D3NetManager instance is once again static

- DSOF-22213 - Fixed an Access Violation when trying to access the cue list

- DSOF-22233 - Fixed an issue where the incorrect RenderStream Version was reported

- DSOF-22245 - Fixed an issue where DMX lights with fixtures quickly degraded performance

- DSOF-22304 - Fixed an error in IdentityDomain after clearing ingestion history

- DSOF-22372 - Fixed an issue where DSE did not apply correctly to automated screens using tracking sources

- DSOF-22379 - Fixed an issue where the bitmap module displayed the previous keyframe (instead of the current keyframe) when transition time was set to 0

- DSOF-22384 - RenderStream: Fixed an 'Attempt to allocate more than DX_MAXTRISTRIPS' error when Details widget was open with running workload

- DSOF-22387 - MR set output resolution now affects camera plate mapping resolution

- DSOF-22393 - 'Apply genlock button' should be greyed out when genlock is applied as it becomes non functional

- DSOF-22413 - Fixed an issue where scaling the grid spacing down on the testpattern layer produced an exception

- DSOF-22433 - Fixed an issue where Go To Timecode did not work with custom (non-SMPTE) FPS when the frame value wass higher than 29

- DSOF-22445 - Fixed an Access Violation when using profiler on local machine

- DSOF-22488 - Fixed Errors when creating / deleting tags and notes on the timeline

- DSOF-21722 - Fixed an issue where vx4's could lose access to the GPU during NotchLC playback