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r22.0 Changelog

+------| r22.0 Release - 93419

Release day - 15th September 2022

New Features

Single Large Canvas (SLC) - DSOF-13257, DSOF-12450, DSOF-12958

A Single Large Canvas (SLC) is a practically unlimited canvas that users can operate on without having to manually split canvases (i.e. the displays and mappings) or concern for the mechanics and logic of distributing content over multiple machines or for performance. SLC allows users to focus on the creative side without concern for the practical limitations of large scale projects.

Previously a show going from a small venue with HD screens to a large venue with massive screens had to work around GPU limits - like the max internal resolution of 16384x16384 pixels of GPUs - and manually split content across machines so the increased resolution wouldn't affect performance.

SLC removes these limitations and allows you to operate on massive content as if it was a single large piece of content, while only processing the content that is being output by each individual machine in the session.

SLC works in conjunction with the Media Distribution feature to make working with video at massive resolutions practical.

For any users that had a show where SLC might be a required feature then we'd love to work with you. Please contact us at support@disguise.one.

How-To

The new logic is always enabled, but the SLC configuration is hidden and limited to non-SLC resolutions until explicitly enabled.

- 1. Tick the "enableSLC" option switch in advanced project settings
 - a. The SLC config is now visible under d3->Advanced->SLC configuration
 - b. SLC-aware display types (currently projection surfaces and LED screens) now have their default min/max set to 100,000x100,000 instead of 16384x16384



- 2. Create a display larger than 16384x16384 or reduce the "Resolution threshold" in the SLC configuration to enable SLC splitting for that display
- 3. Create SLC video content
 - a. Split video content into regions smaller than 16384x16384 (most codecs only support 8K) and include a region name into each split in the format "_region<region name>"
 - Ingest the content and specify the regions inside d3 under <video clip>->Video asset->Regions

Usage notes:

- SLC currently only supports projection surfaces and LED screens. Other displays are still limited to 16k.
- SLC does not currently integrate with any other content than video.
- We have also enabled SLC to be combined with mesh projection in order to split large canvases across multiple machines.

Media Distribution - DSOF-11971

The new Media Distribution feature provides a built-in mechanism to easily ensure that the exact required media files are present on each d3 machine involved in a d3 session. There are two parts to the Distribute system:

- 1. Sync/copy missing media copying media used by the d3 project and needed by a machine's feed mapping.
- 2. Delete unused media removing media that is not used by the d3 project.

The power of the Media Distribution feature is its utilisation of the project state for all machines in the session, only distributing video layer media to a machine in the session if the media is mapped to one or more outputs on the machine. e.g. Adding media to a video layer in itself will not make it a candidate media to be distributed to a machine unless the media has been mapped to an output on that machine in the Feed view.

Media Distribution applies to all media types in the d3 project objects folder.

Note that in r22.0, there is no option to use Media Distribution to delete unused media from the Director in case media is later required. We are interested in user feedback as to whether including the Director (or giving the option) would be a useful addition.

Listing missing media and initiating media syncing is also available in r22.0 via a REST HTTP API. Listing unused media and deleting unused media will be available via a REST HTTP API in a subsequent release.



To use the Media Distribution feature

- 1. On the Director machine, right-click on the d3 menu and select "Media Distribution..." to open the Media Distribution Widget.
- 2. Expand both collapsible widgets to see the details of what media files are missing and unused copies.
- 3. "Include Mobile Editors" is defaulted OFF as they may wish to manage their own files, but the option is available.
- 4. Either click on "Sync" or "Delete" next to each item to sync or delete individual files on the target machines, or alternatively click "Sync All" or "Delete All" to action all the items in the respective tables.
 - a. For copying large files, it will display the copy progress as a percentage.
 - b. At the end of a copy, it will display the task state as either "Success" or "Failed". For delete, the item should just disappear from the table.
- 5. Click on "Clear Finished Tasks" above the sync table to remove syncs that completed successfully and reset the status on syncs that failed.

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| objects/mesh/theatre.obj | | z1 | Delete | | | | |
| objects/mesh/woman.obj | | z1 | Delete | | | | |
| objects/mesh/man.obj | | z1 | Delete | | | | |
| objects/mesh/drummer.obj | | z1 | Delete | | | | |
| objects/mesh/dome.obj | | z1 | Delete | | | | |
| objects/mesh/singer.obj | | z1 | Delete | | | | |
| objects/mesh/arena.obj | | z1 | Delete | | | | |
| objects/mesh/cylinder.obj | | z1 | Delete | | | | |
| objects/dxtexture/palettes/hsvpalet | te.png | z1 | Delete | | | | |
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The Media Distribution feature has several planned improvements which are not included in r22.0 but planned for upcoming releases:

- Sync and delete tasks by Media Distribution can only be triggered by the Director. Enabling Media Distribution from Editors is planned.
- Password-protected sharing must be turned off for all machines in the network for remote copying and deleting to work. This is the default configuration for disguise servers but may need to be configured for Editors working on non-disguise PCs or laptops. The requirement for this configuration is planned to be removed.
- Syncing of proxies to be included in the distribution feature.
- Performance improvements including:
 - Distribution from one actor to another is routed via the director. This limitation will be removed.
 - Sync and delete is executed over d3net. In a subsequent release, it will be possible to execute media distribution over alternative network adapters.

RenderStream 1.3

RenderStream 1.3 brings us a host of new features including:

• DSOF-20552 RenderStream: backwards compatibility



We have included built-in backwards compatibility into RenderStream to enable third-party applications to still run effectively if the RenderStream API is updated.

- DSOF-20485 RenderStream: API to release image references
- DSOF-19997 Display UE engine version in the Asset

RenderStream assets now show which graphics engine is being used, in addition to the version of that particular graphics engine. On a RenderStream asset, this is now shown in the Engine Name and Engine version fields as seen in the image below.

| unreal_r213 | 3 | |
|----------------------------|---------------|--------------------------|
| Asset Discovery Name unrea | | |
| Target Engine | Unreal | |
| Engine Name | Unreal Engine | |
| Engine Version | 4.27.2 | |
| Info | | Info reported by this as |

• DSOF-18049 RenderStream: Vulkan API

We have enabled integration of the Vulkan API, which allows for easier integration of RenderStream into applications powered by Vulcan. This also means that applications built with Vulkan can now be used as both compressed and uncompressed RenderStream assets.

• DSOF-14835 RenderStream: custom asset description/readme

RenderStream assets now have an "Info" field which is filled in from data provided by the graphics engine that is being used.

• DSOF-16148 Fast Spatial Calibration

We have reduced spatial calibration time to less than half the amount taken in previous software releases. For studios with multiple cameras for example, this can result in a time saving of several hours. The Fast Spatial Calibration is enabled by default.



Improvements

• DSOF-21620 Update missing media API for r22

In r21.4 we removed the missing media API, but this has now been replaced. API documentation can be found either via 'Open API documentation' under the 'help' section of d3manager, or by accessing http://localhost/docs/v1/index.html on a disguise media server.

• DSOF-21574 Education license should allow 4 VideoIn channels (not just 1)

In previous releases, the education license for Designer only allowed for 1 video capture channel. In r22 we have enabled 4, the same as currently found in standard Designer licenses.

• DSOF-21026 RenderStream: allow pinning of Receive Health widget

We have enabled the Receive Health widget to be pinned when using RenderStream, so that users can see the health status of all RenderStream during a show.

• DSOF-20740 Trigger UE events from d3

In r22 we have enabled support for Unreal Engine events to be triggered from within Designer using the 'Custom Events' tab when running RenderStream. This is populated when users add custom events on their level blueprint within Unreal Engine. Custom events can then be exposed as keyframable sequences that can be triggered from the timeline within Designer.

• DSOF-5762 Ability to add a global delay to Audio

We have added a 'Delay' field within the editor of each AudioOutPatch resource to support audio teams from having to add delay on their side and be able to accommodate for video latency within the production chain without having to add any further delay. The delay is set to 0 by default, and any delay specified is applied to all audio that is being output on the patch. The delay is applied across all machines within a d3Net session. This will not effect external audio engines like Web, Notch and RenderStream.

• DSOF-21331 Hide live action position marker in Camera when not using old virtual camera workflow

We have hidden the 'live action position marker' field in the camera behind the 'enableLegacyVirtualCameraWorkflow' option switch. The reason for this is that most of this work is completed within VirtualCameras.

• DSOF-21242 Skip drawing of Point Cloud grid on an Omnical project if max line length is 0

We have made an improvement to Omnical workflows in r22. In previous releases, the 'Point Cloud max line length' is only checked before drawing individual lines between point neighbours. This would mean that grid points would need to be drawn even if the threshold is set to 0. We have removed this step in r22, meaning that if the threshold is set to 0 then no lines need to be drawn between the grid points.

• DSOF-21208 Layers that do not exist on a track don't say so in their descriptions

In previous releases, the description of a layer tells users where it is on a timeline, but if it was not on a timeline then it's either in the list of saved layers or in a layer stack. This could cause confusion to a user when attempting to remove missing media if it was in use in a layer that isn't on their track, especially if a layer had been exported or removed from a track a long time ago.

In r22 we have added additional logging to a layer to highlight to users where it is located.

• DSOF-21178 Warn user when insufficient overscan used

When using overscan for lenses in a xR workflow, we have enabled a warning to users when the overscan is not sufficient by giving the overscan field a red background, and adding the minimum required overscan values into the overscan tooltip.

• DSOF-21073 Virtual camera: Use live action marker at (0, 0, 0) as default when none selected

In previous releases, when no live action position marker is selected within the Virtual Camera, a reprojection is completed at a constant distance of 3 metres. In r22 we have amended the default distance of a live action position market at (0, 0, 0).

• DSOF-21164 Manual Observations have uninitialised RMS Error field

We have adjusted the Manual Spatial Calibration observation so that its RMS Error field should report as 0.

• DSOF-21088 Make default videoclip input transform utility-sRGB in ACES

In ACES mode, we have enabled the default Input Transform value of every VideoClip resource as being set to 'sRGB - ITU-R BT.709'

• DSOF-21041 HTTPcontrol module should support HTTP PATCH commands

In r22 we have enabled support for HTTP Patch within the HTTPcontrol module to support integration with partner APIs.

• DSOF-20938 Allow multi-layer editing of multiple group layers or group layers mixed with normal layers

We have enabled a multi-edit layer window, enabling users to select multiple group layers with any number of layers and multi-edit any of them. In previous releases, we only supported the ability to multi-edit a single group layer.

If a single group layer is selected, it will be titled as "Group <Name of Group> of N Layers", but a multi-select of multiple groups will not include the group names.

- DSOF-20868 Replace reset keyframe icon with a dedicated icon
- DSOF-20807 Add the ability to filter RenderStream assets by source machine to the ResourceView

We have added check boxes in the ResourceView to make it easier to filter specific machine assets as part of the RenderStream workload.

• DSOF-20794 Separate set extension and LED backplates

In r22 we have made it possible in xR workflows to separate the rendering of the backplate into two separate plates - content that goes to the LED screens, and content that goes to the set extension. We have therefore implemented two new render layer options - 'Back Plate Screens', and 'Back Plate Set Extension'.

• DSOF-20782 String Expressions - enable carriage returns

In r21.1 we added a text module which enables users to make a text layer. This can be used to add notes to an output for a rehearsal for example. Fonts can then be downloaded into objects/textfonts as a .ttf file.

Taking this further with Expressions, right-click on the property you want to control within the Text Module. In r22 we have enabled the ability to add a carriage return - used to reset to the beginning of a line of text - into the string. This can be completed by splitting the expression across multiple lines in the input by hitting the enter key as normal as seen below:

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|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------|--|--|--|
| Expression = Multiline Expression Control 1: {scale::mididevice:oxygen8.c[0]:g} Control 2: {scale::mididevice:oxygen8.c[1]:g} | | Multiline Expression Control 1: 0.0393701 Control 2: -0.464567 100 0 | Multiline Expression Control 1: 0.0393701 | | | |
| Oxygen8 (M) | Position Y Position Y Font Horizontal alignment Vertical alignment | 0 None ment (M) Center (M) | Control 2: -0.464567 | | | |
| | | | | | | |

• DSOF-20731 Report and adjust RenderStream projects folder path inside d3

In previous releases, the only way to adjust the RenderStream Projects Folder - located in the RenderStreamMachine editor - was via manually editing the machine registry.

In r22, the RenderStream Projects folder is where the current folder path is reported, which is when it appears on the remote machine. When providing a new folder path, it should be the same path reported on the remote machine and should also be going to an existing folder.

In order to do this, d3service must be running on the remote machine with admin privileges, as would be the case when using vx machines alongside rx render nodes for example.

If d3 service is not running with admin privileges, everything will succeed except the creation of a network share for the folder. If this fails, users would need to ensure that d3service is running with admin privileges to complete the step again.

If the folder path provided does not exist on the remote machine, no change will occur.

• DSOF-20700 d3manager: ability to compare two project files

In d3manager, we have added the ability to compare two project files. This can be completed by going to Projects / right-click on project/Show History. Right-click on the history file and click on the 'Compare to existing" option to open a new window to display the current project file alongside the selected history file.

• DSOF-20664 d3manager: rollback functionality

In d3manager, we have added the ability to rollback a project. This can be completed by going to Projects / right-click on project/Show History. Double-click on the history file to receive a confirmation of rollback dialogue. Right-click on the history file and click on the 'Rollback' option.

Rolling back a project will replace the current project file with the selected history file, which will be renamed to match the name of the current file. The 'Date Modified' will automatically update according to the selected history file. If an overwrite happens, users will see a backup name <show>rollback<date> appear in the history folder.



In r22 we have enabled

• DSOF-20662 ObjectView: improve subfolder hierarchy UI

In previous releases, when in ObjectView users see a hierarchy of boxes and folders when there are objects in each subfolder. In r22 we have made it clearer that it's a tree view as seen in the new view below:

RenderStreamAsset Image: Stream Asset Image: Stream Asset

• DSOF-20597 RenderStream: use the full asset path

In r22 we have enabled RenderStream assets to use the full asset path within its naming instead of the last directory to avoid assets being overwritten.

• DSOF-20540 VideoClip: ability to preview clip without a layer

Within the GUI, we have enabled users to preview a video without creating a layer in r22. In the VideoClip widget, click on 'edit video clip / Preview'. The widget also has a 'Frame' field that can be used to jump between each frame of the content.

• DSOF-20514 d3manager: dark mode

Dark mode in d3manager is now enabled in r22. Users can change between dark and light modes when selected within the Windows Colours settings.



• DSOF-20482 Add workload-friendly name to RenderStream asset editor

We have added the workload name to the stream editor (located in the Stream widget when starting a RenderStream workload) so that it's possible to see which stream is related to which workload. In previous releases there was no way of seeing this information.

• DSOF-20320 d3preview: standalone application for previewing files/videoclips

In r22 we have created a simple standalone application called d3preview. This enables users to check whether Designer will support playback of that content, without having to ingest it into a temporary project. This can be completed by right-clicking on any file that Designer supports / Open with / Choose another app /C:\Program Files\d3 Production Suite\build\msvc\d3preview.exe.

We have created a dedicated UI that includes the ability to play/pause/scrub the content via the mouse and spacebar, volume via the mouse wheel and the ability to change scaling/clipping. Users can also use multiple instances of d3preview.

• DSOF-20389 Installer: option to associate supported image/video extensions with d3preview

For d3preview, we have enabled users to preview files in a host of media file formats including .d/.dpx/.exr/.mov/.tga/hap. To enable this feature, in the Installation Options of d3installer, we have included an option to 'Associate media files with d3preview'.

When this is enabled, any file with an extension of .d/.dpx/.exr/.mov/.tga/hap will have an option to open with d3preview within its 'Open with' action menu.

• DSOF-19737 CDL API (LiveGrade integration)

We have enabled a REST HTTP API in order to receive CDLs into disguise. This is needed in order to integrate with Pomfort LiveGrade. API documentation can be found either via 'Open API documentation' under the 'help' section of d3manager, or by accessing <u>http://localhost/docs/v1/index.html</u> on a disguise media server.

• DSOF-18892 Upgrade Rivermax to 1.10.20

We have upgraded Rivermax to 1.10.20, which contains performance improvements and Windows GPUDirect support.

• DSOF-9876 Show project version in d3manager

In r22 in the Project view within d3manager we have included an additional column titled 'd3 Version' that displays the d3 version each project file was last modified in.

• DSOF-8922 Ability to specify number of proxy levels generated per file

In r22 we have enabled a 'Settings' feature within the Proxy Maker widget to enable users to dictate what proxies are needed and how many. We have enabled options to select each available proxy level, which are then generated at the specified levels. The 'Rescan' button is then used to rescan internal proxies and determine which need to be created based on the selection.

• DSOF-6784 Ability to reset limits/delete MetaField

In r22 we have included a 'Reset' button within each MetaField widget. This button becomes active if any of the fields within the widget are not equal to their default values. Clicking the button will then restore all fields within the widget to their default values. In previous releases, users would have to type in the expected or remembered values.

• DSOF-3941 Ability to reset keyframes to default values

In r22 we have enabled the ability to reset keyframes to default values. This can be used by clicking on the icon located to the right of all keyframable fields across all modules. The reset keyframe button is only active when the field value does not match its default value at the current playhead position.

Selecting the reset keyframe button should reset the field back to its default value at the current playhead position, and should not affect any keyframes not at the current playhead position.

• DSOF-995 WebModule: Control over audio

In r22 we have created an 'Audio' toggle located within the editor of each WebBookmark resource. The value of this field will be set to True by default, which means that any content presented by the WebBookmark resource that contains audio will be heard.

If the toggle is set to False by default, any content presented by the WebBookmark resource that contains audio will not be heard.

Fixes

- DSOF-21624 Fixed a Rivermax driver mismatch
- DSOF-21608 All languages no longer load when running d3 with "isDeveloper" set
- DSOF-21588 Fixed an issue where ActorStatusWidget did not open when RS layers are present
- DSOF-21579 XR: Fixed a potential hang when running Colour Calibration on non-dedicated Director
- DSOF-21576 Fixed an issue where deleting unused media didnn't work for image sequences
- DSOF-21567 Fixed an error in RenderStreamMachine when ClusterPool with 1+ machine assigned and session is active
- DSOF-21566 Fixed an issue where Setting Director always requested a project restart
- DSOF-21556 Fixed an issue where 0 missing media was reported when using same media repeatedly
- DSOF-21555 Fixed an issue where Mapped Media Domain was not returning all mapped media locations correctly
- DSOF-21538 RenderStream: Fixed an issue where pool incorrectly reported asset is out of sync
- DSOF-21534 RenderStream: Fixed a potential can hang when stopping a workload
- DSOF-21533 Fixed an issue where it was not possible to export OmniCal camera study
- DSOF-21508 Fixed an issue where rotating a camera in visualizer caused d3 to run extremely slowly
- DSOF-21503 Fixed a hang on startup if a project has webmodule
- DSOF-21502 Fixed an exception in Layer Stack
- DSOF-21501 Fixed an issue where unmapping multiple media files consecutively didn't update the UnusedMediaDomain correctly
- DSOF-21498 APIEventTransport is now hidden in the UI
- DSOF-21495 Fixed 'invalid vector subscript' error when using sample RenderStream assets

- DSOF-21494 Fixed an issue where Horizontal Back and Front Plates caused issues with mapping resolution
- DSOF-21493 Fixed an issue where SceneOrigin could have its Scale modified through 3D manipulators
- DSOF-21473 Fixed RenderStream returning invalid scene index
- DSOF-21471 Fixed an issue where CodeMeter error message ended with a single NUL character
- DSOF-21470 Fixed Media Distribution Widget saying >1 of the same media is missing
- DSOF-21463 Fixed a Python exception when changing machine type in d3Net widget to a machine that does not support 10bit
- DSOF-21461 Fixed Export Projector Study
- DSOF-21456 Fixed an issue where Directional Lighting created CPU Lock error
- DSOF-21453 Fixed an issue where DMXPersonality was no longer scrollable
- DSOF-21449 Fixed an invalid memory access from ManipController on shutdown
- DSOF-21445 Fixed an issue where SlcRegionManagement::update used reference to map element after it is erased
- DSOF-21443 Fixed an issue where the OBJReader file buffer wasn't null terminated causing line reading to read uninitialised memory
- DSOF-21406 Fixed AnimateObjectPreset: error in ScreenConfigurationEditor when adding objects to a ScreenConfiguration
- DSOF-21401 RenderStream: Fixed scene tab in RS layer mentioning INVALID
- DSOF-21399 RenderStream: Fixed an issue where Receive Health displayed wrong amount of frames when on Automatic preferred network
- DSOF-21383 Mesh Projection: Fixed an issue where it was possible to create and add a Projector to your Mesh mapping through the Mesh Mapping widget
- DSOF-21372 Fixed an Access Violation when adding a point to a Rigid Body Tracking Source
- DSOF-21371 Mesh Projection: Fixed an issue where changing the res of a display did not change the Bandwidth estimate
- DSOF-21366 Fixed SharedLibLoader setting an error code if DLL load succeeds

- DSOF-21353 Added the same EventTransportMSC to both Remote & Local displays a MulticastDelegate error
- DSOF-21352 Fixed an issue where OSC indirection controllers notify too verbosely when a string is a mis-match
- DSOF-21344 Fixed an issue where the master volume control did not work with legacy video layers
- DSOF-21342- Fixed an issue where the Media Distribution Widget does not update if cache is different but cache size is the same
- DSOF-21330 Fixed an issue where Missing Media Domain reported unused versions of video files as missing
- DSOF-21316 Fixed an issue where adding objects to an Omnical Plan within a session displays a 'multicastDelegate' error
- DSOF-21312 Fixed an issue where opening and closing the d3net manager widget within a session displayed a 'multicastDelegate' error
- DSOF-21308 Fixed Failed RmaxVideoIn instances polluting pool
- DSOF-21298 Fixed unused Media Domain displaying files that are still in use
- DSOF-21275 PureLinkMatrix: Fixed a possible access to freed memory in Callback
- DSOF-21270 Fixed TrackTransitionInfo serialising 'size_t' member (i.e. architecture-dependent size)
- DSOF-21266 Fixed an issue where edits to layers within layer stacks are not guaranteed to be serialized
- DSOF-21262 ColourCal: Fixed an issue where the CameraData move-constructor moved camera from itself
- DSOF-21246 Fixed an issue with Cue Tag selection inaccuracy depending on level of zoom on timeline
- DSOF-21245 Fixed an issue where mesh projection rendered Notch content at 1x1 px resolution
- DSOF-21230 Reinstated support for query strings in generated gRPC HTTP routers

- DSOF-21228 Fixed an issue where opening an Omnical camera widget displayed a 'NoneType' error
- DSOF-21194 Fixed the VideoTrigger layer
- DSOF-21138 Improved the RenderStream asset object picker
- DSOF-21136 Fixed an issue where apostrophes passed into the text module via an expression break rendering
- DSOF-21135 Text Module Fixed an issue where incomplete expressions on text parameter result in strobing content
- DSOF-21132 Text module Fixed an issue where alignment breaks when font size exceeds available space on the mapping
- DSOF-21126 Fixed an "Incorrect shutdown" warning about AssetLauncher channels, when Comms object is destructed
- DSOF-21122 Fixed an error when keywidget was on focus after resource selection widget is closed
- DSOF-21114 Fixed an issue where the console cursor offsets vertically as new input lines were added
- DSOF-21107 Notch blocks no longer create duplicate exposed parameters
- DSOF-21098 Fixed an issue where the queue of "Apply Feed Settings" and "Apply Genlock" commands caused issue in d3service
- DSOF-21092 Fixed an issue where d3 stayed on a black screen after resetting EDIDs on a machine following Applying Feed Settings
- DSOF-21090 Fixed an Invalid Aspect Ratio Console Message
- DSOF-21056 Fixed an issue where tint did not apply to the VideoTrigger layer
- DSOF-21043 Fixed an error calling 'pDXGIAdapter3->QueryVideoMemoryInfo' when running d3 on a VM
- DSOF-21042 Http Response code for NotFound exception is wrong
- DSOF-21034 Fixed an issue when managed workload is on, any new RenderStream layer would cause an Access Violation

- DSOF-21009 Fixed a write error when attempting to save d3 with Colour Calibration widget pinned
- DSOF-21005 Fixed an OmniCal access violation on d3 startup with pinned simulated camera
- DSOF-20999 Fixed an issue where d3service would should down uncleanly
- DSOF-20996 Fixed an issue where creating a new setlist or changing a setlist would display a convert error
- DSOF-20959 Fixed an issue where changing padding while the Cluster Workload widget it's open throws an exception.
- DSOF-20904 Fixed Undo+redo+undo triggering MulticastDelegate: duplicate add
- DSOF-20903 Fixed an issue where resetting keyframe wasn't undoable
- DSOF-20902 Fixed an issue where opening an Omnical camera widget or the capture widget displays a Mulicastdelegate error
- DSOF-20894 Fixed puffersphere warp layer being impossible to access
- DSOF-20889- Fixed an issue where changing EXT refresh rate on blackmagic sync gen sometimes didn't change on D3 unless user do a cold boot
- DSOF-20887 Fixed Colour Workflow not being in : sockpuppetvideomodule
- DSOF-20861 Fixed DX11 test app getting stuck on "starting..."
- DSOF-20855 Fixed an issue where Video Trigger Layer could not arrow into Notch Block
- DSOF-20835 Fixed an issue whereAnimate Object Pre-set was affected by fade on section
- DSOF-20822 RenderStream: Fixed "invalid map<K,T> key" error after changing "Scene" while running workload
- DSOF-20810 Fixed an issue where opening the Audio Output Patch editor displays a MulticastDelegate notification
- DSOF-20808 Fixed an issue where using audio delay doesn't stop audio when the timeline has stopped
- DSOF-20776 Package: Fixed an issue where trials could modify a project on disk
- DSOF-20775 d3manager: Fixed an Access Violation in Display::activate when clearing ingestion history
- DSOF-20774 Fixed the auto-save reporting the wrong d3 version

- DSOF-20758 Fixed an issue where a video file with long a name as new placeholder clip causes input patch editor quick view to crop its width
- DSOF-20715 CUDA binaries now built for all supported platforms
- DSOF-20714 RenderStream UI: Fixed an issue where clicking on "Details" button didn't open monitor and shows error
- DSOF-20711 AudioSystem: Fixed a hang and CTD on project launch
- DSOF-20678 Package: Fixed an issue where there was no way to open read-only
- DSOF-20627 Fixed a d3service offline error on launch despite d3service running
- DSOF-20625 Fixed an error when opening widget for WebCommandKeyboard resource
- DSOF-20623 Fixed web layer not working when chromium cache from previous version exists
- DSOF-20602 AssetLauncher: Fixed custom extensions being broken
- DSOF-20527 Fixed an issue where the feed output shifted 1px to the left when setting SMPTE timing
- DSOF-20525 RecordingSystem: Fixed an issue where onAppStarted was called before project loads
- DSOF-20517 Fixed an issue where users needed to do a cold boot to change between static and dynamic
- DSOF-20489 Fixed an issue where uninitialised data passed to CUDA
- DSOF-20463 Fixed an issue where turning a single version of a video asset off causes all versions to be turned off when EnableSmartGroups option switch is set
- DSOF-20440 Fixed an issue where RenderStream streams intermittently did not work
- DSOF-20394 Fixed an issue where translator/locale used/loaded too early
- DSOF-20358 Fixed an issue where Layer Search sometimes filtered out valid matches
- DSOF-20347 Fixed an issue where clicking on frame replay OFF/ON created output in the widget.
- DSOF-20346 RenderStream: Added better error reporting for RenderStream::Core::getImageFrameParameter
- DSOF-20175 Fixed an issue where DMX surfaces were incorrectly highlighted in red on the stage

- DSOF-20107 Mesh Rendering Fixed an issue where mesh mapping allowed Projectors as a target
- DSOF-20105 Fixed an issue where Play Head Prefetch Loses prefetch key time: []
- DSOF-20079 Fixed an issue where Virtual lineup layer does not work when a live camera is used
- DSOF-20076 Fixed an Invalid map<K, T> key error when mapping a video layer to an MR set via backplate
- DSOF-20062 Fixed an issue where feed mapping mirror flip buttons caused the whole rectangle to turn black
- DSOF-20052 Fixed an issue where holding the output of a single projector while Dynamic Blend is enabled froze the GUI and made every other output turn black
- DSOF-20050 Added NatNet Protocol Improvements for Optitrack
- DSOF-20029 Fixed an issue where precomps did not work
- DSOF-19950 Fixed an issue where scrubbing through the timeline while paused causes video layers to flicker black
- DSOF-19948 Fixed an Access Violation when changing surface type
- DSOF-19778 Fixed an issue where d3 could be launched without d3service running and no notification wwas provided
- DSOF-19643 Fixed LTC disengage / re-engage on editor machines on network
- DSOF-19627 Fixed an issue where list editors field sorting did not work for custom columns without a comparator
- DSOF-19616 Fixed exposure and gamma controls on RenderStream asset
- DSOF-19583 Widget::subscribeAction no longer used in populate
- DSOF-19344 OmniCal: Fixed an issue where ilf a calibration had too many outliers, d3 would hang
- DSOF-19127- SimpleHelp.exe no longer uses port 80, blocking d3 from creating a HTTPContext
- DSOF-18814 Help menu search field is now case insensitive
- DSOF-18185 Fixed an issue where 16-bit EXR was loaded as 32 bits per channel



- DSOF-16571 Fixed an issue adding new Scenes to RenderStream asset causes previously keyframed scenes to offset
- DSOF-15428 Fixed an issue where RenderStream was unable to be used by packaged/cooked UE projects
- DSOF-12656 Sockpuppet video module: Scale.x and scale.y parameters keep the same range as the regular video module