VOYAGER RELEASE NOTES

Welcome to the Voyager 5.1.1 Release Notes. Please read this document to find important information on areas of Voyager that may not be covered in the User Guide.

CONTENTS

VERSION HISTORY

VERSION 5.1.1 – JUNE 2023

WHAT'S NEW

- **VOYAGER HAS MIGRATED FROM UNREAL ENGINE 4.27 TO UNREAL ENGINE 5.1.1**

- **NEW ANIMATED SPLASH SCREEN**

- **NVIDIA SYNC POLICY**

  Added support for the NVIDIA Sync policy with VLED+Set Extension.

- **ROSSTALK ADDITION**

  Voyager now supports the RossTalk **NEXT** command for playing a sequence of graphics.

- **NEW LED COLOR CALIBRATION TOOL**

  Added LED Color Calibration in VLED+Set Extension workflows, to apply color correction in nDisplay and constraints on the Extension side when colors are not reproducible.

  Includes HDR support.

- **D3 PLUGIN**

  Added support for a D3 plugin to communicate with the TrueControl API.

- **VOYAGER OPERATOR SHADOW AND REFLECTION OPTIONS**

  Added the following options in the Voyager Operator to control which AR object shadows and reflections are seen on the virtual floor:

  - **Allow Only Planar Reflections On Shadow Catcher**

  - **Disable SSR On Shadow Catcher**

  - **Disable Reflection Captures and Sky Reflections On Shadow Catcher**

- **NEW TONEMAPPING OPTION**

  Added the **Hybrid (no color grading)** tonemapping option which ignores color grading on the virtual set when using Hybrid tonemapping.

IMPROVEMENTS

- **PIERO PLUGIN**

  Version 4 of the PIERO plugin is included in the installer.

- **NDI PLUGIN**

  Support for the latest NDI Plugin, which has been updated to the Newtek NDI SDK 5.5.1.

- **DATALINQ PERFORMANCE IMPROVEMENT**

  To get the most out of the latest performance improvements for DataLinq, including table name notification optimization, version 11.1 (build 5772 or higher) of the DataLinq server is required.

- **AJA SUPPORT**

  Support for version 16.2 of the AJA NTV2 driver and for AJA Io-X3.

- **VOYAGER API PLUGIN**

  The default API key is now uniquely and randomly generated.

- **TEMPORAL SUPER RESOLUTION (TSR) DISABLED AT RUNTIME**

  When using internal compositing or VLED+Set Extension workflows.

- **RVS ENGINE SERVICE**

  Updated to version 1.0.0.107.

VERSION 4.27 R3 – NOVEMBER 2022

WHAT'S NEW

- **SUPPORT FOR THE NEW VOYAGER 1.0 TRACKLESS STUDIO VIRTUAL STUDIO SOLUTION**

  Voyager Trackless Studio can control virtual camera movements and trigger events in a Voyager project.

- **SUPPORT FOR MULTIPLE COMPOSITING LAYERS**

  Added support for multiple **Compositing Layers**, each allowing multiple **Layer Inputs**, in order to support various configurations using multiple compositing actors, in either AR, VS or Trackless workflows. Using layers that each have a single plane actor offers better performance.

- **VOYAGER OPERATOR ACTOR**

  Using a prepare stage configured with **Multi Cam Prepare Delay**, you can achieve clean cuts between cameras in tracked (internal or external compositing) and trackless mode.

  Added support for nonzero blend time in **VoyagerOperatorActor:TracklessCamera** when in trackless mode (as long as you aren't excluding compositing planes form the camera).

  Added an **Allow Occlusion with Custom Depth** option in the **Voyager Operator** asset (in **Project Settings**) to improve performance of heavy sets in internal compositing AR mode, where writing a **Custom Depth Stencil** value is required.

3

- **VOYAGER COMPOSITE PLANE ACTORS**

  Added the option **Exclude from other views** which supports multiple tracked or trackless cameras, each only showing the composite plane and input associated with its tracker.

  Added support for **UV Offset** and **Scale** on the Voyager compositing actors in trackless compositing mode.

  Added support for using a **Custom Static Mesh** on **Voyager Composite Actors** (AR, VS and Trackless); using no **Custom Static Mesh** indicates the standard 16:9 Voyager plane is used.

  Added **Voyager Portrait Planes** (Left and Right) assets to be used as **Custom Static Mesh** to support vertically rotated camera feeds.

- **SUPPORT FOR OBJECT TRACKING**

  In the Voyager Tracker actor, you can assign a number of generic actors to tracking data feeds sharing the same origin as the camera tracker.

- **DATALINQ PLUGIN**

  Added a **Multicast Delegate** (On Update) to the **DataLinq Multi-Value** component to trigger actions on update.

  Prefix and suffic property added to **DataLinq Multi-Value** component.

  Added DataLinq component options for **Text 3D** actors (including in AR).

  Added a toast notification if the plugin is enabled but no license is found.

  Added a new **DataLinq Multi-Value** actor with an **On Update** delegate.

- **VOYAGER API PLUGIN**

  Added endpoints for listing, getting and executing UFunctions — /function/list, /function/get, /function/execute.

  Added a unified endpoint to get Chroma Keyer, Cropping and Feathering values from a specified composite plane — /plane/ccf/get.

  Added an option to capture a downscaled version of the Voyager output and composite plane input (chroma key) — /capture/start, /capture/frame, /capture/stop, /capture/stopall endpoints.

  Support for special characters for the /blueprint/execute and /blueprint/event endpoints.

  The **Media Bundle** mode is now included in the **Get Composite Properties** endpoint.

  Added an optional target fram and loop parameter to the **Level Sequence Playback** endpoint.

  Set a media player video file endpoint, supporting local and remote HTTP video files.

  Added a toast notification and additional output log information if the web server fails to start.

4

- **VOYAGER INSTALLER**

  Includes the new Voyager Trackless plugin and Voyager Trackless template.

  Includes an option to install the RVS Engine Service v. 1.0.0.6 (disabled by default).

- **VOYAGER TRACKLESS PLUGIN**

  Includes support for **Game** mode and for **Focus** in the **Trackless Camera Operations**.

  The **Project Information** endpoint includes the **Media Bundle Mode** for each available composite plane.

  Includes a 1.8m reference mannequin.

  Includes and endpoint to set the **Default Trackless Camera**.

  Includes a **Voyager Trackless Composite** blueprint actor (which always faces the camera) to composite a trackless source, using trackless compositing.

  Includes a **Voyager Source Composite** blueprint actor to composite a live source (or any Media Source) using trackless compositing.

  The level information is included in the project information endpoint.

- **VOYAGER CORE PLUGIN**

  Added **VoyagerApplyImageToActor** and **VoyagerApplyImageToMesh** and **VoyagerApplyVideoToActor** blueprint function nodes for local and http image files.

  Added the **Apply Video to Mesh** blueprint function node.

- **MOSYS**

  Added support for MoSys lens distortion and CCD center via Lucid Track.

- **MATROX MEDIA SOURCE**

  Added a debug option to invert the interlaced fields.

  The default input frame delay now automatically changes between progressive and interlaced.

- **SUPPORT FOR VOYAGER FRAMEBUFFER OUTPUT**

  When playing to "selected viewport" in the editor.

IMPROVEMENTS

- **PIERO PLUGIN**

  Version 3 of the PIERO plugin is included in the installer.

- **NDI PLUGIN**

  NDI Plugin can be used without externally installing the NDI runtime.

- **VOYAGER API PLUGIN**

  Improved CORS setting UI, tooltips and logging and supports vector-based parameters.

  Improved level sequence endpoints (with reverse and force optional playback parameters).

  The **Engine Status** endpoint now includes a list of started plugins.

  Dependency on the Lucid plugin has been removed.

  The **Actor** name parameter is now optional for the **Composite Plane Properties** endpoint and returns a list of all composite planes if not passed.

  The **Composite Plane Properties** endpoint now includes the current key color mode (green or blue).

  The **Engine Status** endpoint now includes whether a project is opened or not.

  The **Project Information** endpoint now includes **File Path** and **File Name** to differentiate projects.

  Added object/transform endpoints to support relative positioning and scale.

  Added a pie/stop endpoint to exit PIE mode.

- **DATALINQ PLUGIN**

  DataLinq component support for DashBoard DataLinq (OID) sources.

- **MODELING TOOL EDITOR MODE PLUGIN**

  The shaders for the **Modeling Tool Editor Mode** plugin are included in the derived data cache.

- **DEFAULT TONEMAPPING**

  The default tonemapping for the VS templates (tracked and trackless) is now **Hybrid** tonemapping.

- **MATROX MEDIA OUTPUTS**

  HDR and **WCG** colorspace options are only available when using 10-bit YUV pixel format.

VERSION 4.27 R2 – JULY 2022

WHAT'S NEW

- **SUPPORT FOR TRACKLESS COMPOSITING**

  You can now use a Voyager Operator and a Virtual Set composite plane without a tracker but with the same benefits as a tracked Virtual Set plane. Options remain for tone-mapping and post-processing.

- **MEDIA BUNDLE USAGE**

  You can now use the same Voyager Media Bundle for both the AR background and the VS keyer plane in an AR + VS set extension workflow.

- **ASSET LOCATING**

    Initialized Voyager Tracker assets are now registering with SLP but can be disabled.

- **DROPPED FRAMES INFO**

    The number of dropped frames during Matrox or AJA output capture can be accessed through the Voyager Media Capture interface.

- **LUCID PLUGIN**

    The Lucid Plugin is compatible with Lucid Studio 6.4 and supports the following new Lucid features:

    - **Send Command to Renderer** (Miscellaneous event action)
    - **Animations** event commands: **Play From Start**, **Play From Start (Loop)**, **Play From End**, **Play From End (Loop)**.

- **SUPPORT FOR TALLY**

    The TSLUMD 5.0 protocol (Ross Acuity) is now supported.

    Added a Tally plugin configuration interface.

    The Tally status is reflected in the Voyager API and in the PIE UMG.

- **TEXT 3D - CUSTOM DEPTH STENCIL VALUE**

    Text 3D components now automatically set the **Custom Depth Stencil** value of the static meshes they generate in internal compositing AR, ensuring that the static meshes will be seen in front of the AR planes.

- **SUPPORT FOR LIVE INPUTS**

    Live inputs are now supported in VLED + Set Extension workflows for Matrox cards only.

- **DATALINQ PLUGIN**

    Added support for a **Browse** feature to verify connection with a data source.

    An OID is used instead of a row identifier for DashBoard sources.

    Added the **DataLinq Multi-Value** component option.

    A static mesh component, 3D text component and point and directional lights can be assigned to the DataLinq component.

    Update in Editor has been renamed to **Editor Live Update**.

    Added an **OnUpdate** event to DataLinq components, that is triggered when a value updates.

- **API PLUGIN**

    The API is now compliant with OpenAPI/Swagger.

    Added the following security features:

    - Cross Domain Origin settings (CORS)

- Random Default API Key (unique key for each system)
- Optional IP Whitelist

Added Voyager performance metrics, which are required when using the RVS Monitoring tool.

- **XPRESSION LICENSE TOOL**

The XPression License Tool is now included as an option in the installer. It is enabled by default.

- **REFLECTION INTENSITY OPTION**

An option has been added in the VS composite plane to dim or boost its reflection intensity (0 to 10, with 1 as the default value).

VERSION 4.27 – JANUARY 2022

WHAT'S NEW

- **UNREAL ENGINE 4.27 SUPPORT**

Voyager 4.27 supports Unreal Engine 4.27.2.

- **NEW TEMPLATES**

Added the following new templates:

- VS + AR Set Extension
- VLED (Virtual LED)
- VLED + Set Extension

  A VS/AR engine can run as part of the nDisplay Cluster for synchronizing virtual extension with nDisplay video walls.
  Simplified workflow allows you to edit, launch and run the VS/AR engine and nDisplay engines using a single project.
  Includes an adjustable delay to synchronize the VS/AR engine and the nDisplay engines, from Lucid or using any nDisplay cluster event.

- **NEW PLUGINS**

  PIERO (Beta)

  Voyager Web API (Beta)

  Menu configuration for the Ross Virtual Solutions plugins (RossTalk, DataLinq and Lucid)

- **INPUTS/OUTPUTS**

  Added Matrox Audio Embedded output

  Added IP NMOS IS-05 support.

- **SLP FOR ENGINE AUTO DISCOVERY**

8

- **RENDERING**

  Added despill options for set extensions.

- **VOYAGER SWITCHBOARD**

  The nDisplay Switchboard Launcher and Switchboard Listener have been replaced by the Voyager Switchboard Launcher and Voyager Switchboard Listener.

IMPROVEMENTS

- **CHROMA KEYER**

  Supports blue and green backgrounds.

- **NEW XPRESSION CODEC SUPPORT**

  Support for version 10.5+.

- **NDI PLUGIN SUPPORT**

  Updated to 1.4 (requires NDI 5 runtime).

- **NCAM LITE SUPPORT**

- **GAME MODE**

  Voyager can now run in **Game** mode.

- **COMPATIBILITY CHANGE LIST FOR PROJECTS**

- **PIPELINE DELAY**

  The delay can now be visualized in PIE.

- **STARTING PIE WITH INCOMPATIBLE PROJECT SETTINGS WILL TRIGGER A WARNING.**

- **LUCID 6.3 SUPPORT**

  Improvement to show proper engine actor names (display names), with internal ID displayed as a tooltip.

  Supports empty actors for **Position Quadrant**.

  Supports actors list filter using metadata.

  Voyager metaData included to set **Movable** and **Target** objects.

VERSION 4.26 – AUGUST 2021

WHAT'S NEW

- **UNREAL ENGINE 4.26 SUPPORT**

  Voyager 4.26 supports Unreal Engine 4.26.2.

- **CAMERA SWITCHING**

  In XR projects, multiple trackers can be configured and assigned to a Voyager Operator Actor, which can then be used to dynamically switch which tracker controls the inner frustum camera, using the **VoyagerOperatorActor > SetActiveTrackerIndex** parameter.

- **LUCID PLUGIN**

  Supports the **Color Correction** panel in XR mode.

  Supports asynchronous blueprint nodes (**Float Async**, **Rotator Async**, **String Async** and **Vector Async**.

  Supports remote assets for StreamLine integration.

- **ADRIENNE PLUGIN**

  Added a plugin supporting General Purpose Inputs and Outputs (GPIOs) on the Adrienne card.

- **COLOR SPACE CONVERSION**

  A cube file (Adobe Color LUT Specification) can be loaded in the Media Source configuration of a Matrox media profile to perform customized color space conversion on the inputs (Type III BCC LUT).

- **SKY LIGHT EXCLUSION**

  Added an option to exclude sky light from the reflection affecting the shadow catcher.

- **AR SHADOW CATCHER**

  Added a **Plane Type** option (**Shadow Catcher & Reflection**) in internal compositing to use an AR shadow catcher as a source for reflection.

- **LIVE SOURCES IN XR**

  A Voyager Media Bundle can be used as a live source in XR mode.

  You can use live sources across clusters synchronized with genlock (Nvidia Quadro Sync II cards required), using the **Custom Time Step** and **Media Sources** from the Voyager framebuffer plugins (Matrox and AJA).

- **TALLY PLUGIN**

  Added a Tally plugin to receive TSL UMD 3.1.

IMPROVEMENTS

- **AR REFLECTION PLANE**

  When ray traced reflections are enabled, an AR reflection plane no longer directly reflects on the AR shadow catcher (it can still indirectly through multiple bounces, e.g. the AR background reflecting on an AR object reflecting back on the shadow catcher). Screen space reflections are not affected.

- **SDI SIGNALS**

  When using 10-bit YUV format for both input and output using a Matrox card, SDI signal values outside narrow SMPTE range can pass through the engine in AR or VS composited video feeds.

- **DATALINQ PLUGIN**

  The version of the DataLinq plugin is now 0.28, providing multi-row XR support and non-ASCII characters.

- **DISTORTION MAP RECREATION**

  If the distortion map asset of a Voyager Tracker is deleted (or wasn't saved after creation), it will be recreated when the project is loaded again.

VERSION 4.1 – JUNE 2021

WHAT'S NEW

- **UNREAL ENGINE 4.25 SUPPORT**

  Voyager 4.1 supports Unreal Engine 4.25.4.

- **MATROX SUPPORT**

  Added support for Matrox DSX D25 and Q25 SMPTE 2110 IP cards (requires Matrox DSX Topology driver 10.1 SP1 or 10.2 beta 2).

- **VOYAGER XR TEMPLATE**

  A Voyager project with content that is rendered on multiple displays simultaneously can now be created from an XR template. This replaces the nDisplay template.

- **VOYAGER XR LAUNCHER**

  Added a new tool to automatically launch and quit Voyager projects on multiple engines simultaneously.

- **VOYAGER XR LISTENER**

  Added a new tool to listen for incoming requests from the Voyager XR Launcher and process those requests on the local engine.

- **VOYAGER XR FEATURES**

  RossTalk and DataLinq commands and Lucid commands from the Position and Router panel are now replicated throughout the XR cluster nodes.

  The Lucid Execution pin is also replicated throughout the XR cluster nodes.

- **VOYAGER MEDIA BUNDLE**

  A Voyager Media Bundle can be used as a live source in XR mode (beta).

- **VOYAGER TRACKER ACTOR**

  Added several new options in the **Voyager Tracker > Tracking** settings:

  Show Visual Helpers

  Measurement Targets - to show the distance between the tracked camera and the selected targets.

  Absolute in the **Tracking Origin** drop-down - to set camera position and rotation relative to the world origin.

  Added options to log tracking variations that are larger than specified thresholds in order to detect anomalies.

- **NDISPLAY CAMERA TRACKING**

  Added support for nDisplay camera tracking in the Voyager Tracker actor (nDisplaySync).

- **VIRTUAL REALITY PERIPHERAL NETWORK (VRPN)**

  Added support for the VRPN (an alternative nDisplay sync method) in the Voyager Tracker actor.

- **NDISPLAY SDI OUPUT**

  Added support for an nDisplay mode that enables SDI output if an output is configured in the Voyager Operator.

- **MATROX DSX TIMECODE**

  Added support for reading the timecode on Matrox DSX inputs.

- **LUCID PLUGIN**

  The former UX Plugin is now called Lucid Plugin.

  Added an option in the plugin to configure the server to use "Any IP" (0.0.0.0).

  Properties from an actor that is no longer found will remain unchanged instead of being reset.

  Added Service Location Protocol (SLP) support.

  If the prefix "TG_" is used in the name of one or several material slots in a mesh, Lucid will only apply a material to those material slots (default is all slots).

- **NUMBER OF MATROX BUFFERS**

  You can now set the value of the this setting to "1" in the Media Profile, as it can be used in interlaced formats.

- **STYPE SUPPORT**

  Added support for Stype lens distortion and CCD offset in Lucid Track.

- **DATALINQ**

  Added an optional DataLinq plugin (beta).

- **NCAM DISTORTION IMAGE**

  Added an option to apply the NCAM distortion image from Lucid Track.

- **APPLY VOYAGER OPERATOR SETTINGS**

  Added an **Apply** button when editing a Voyager Operator asset to directly apply its settings to the project (equivalent to **Update Project Settings** button in the main editor toolbar). The button is greyed out whenever the project settings fully match the operator being edited.

- **MEDIA PLANE OPTION**

  An opaque or masked material intended to show live source content can now use the Media Plane option to indicate that no further depth-of-field effect should apply to it.

- **REFRACTION PLANE OPTION**

  Added a refraction plane type option in AR internal compositing that allows the use of translucent materials with refraction on top of the live background (the refraction materials need to write to the custom depth stencil).

- **INTERNAL COMPOSITING**

  Added an option in internal compositing to use an AR shadow catcher also as a source for reflection (**Shadow Catcher & Reflection** plane type).

- **MULTICAST JOIN TYPE**

  Added the ability to select the multicast join type (IGMP Join) for media sources using a Matrox IP card.

VERSION 4.0 – FEBRUARY 2021

WHAT'S NEW

- **UNREAL ENGINE 4.25 SUPPORT**

  Voyager 4.0 supports Unreal Engine 4.25.3.

- **USE OF MATERIALS WITH ADDITIVE BLEND MODE IN INTERNAL COMPOSITING**

  These materials can now be used over a VS composite plane in internal compositing.

- **FEATHER OPTION FOR THE AR SHADOW CATCHER PLANE**

  This option can be applied to the specular and ambient light intensities.

- **VOYAGER OPERATOR OPTION TO PRESERVE SETTINGS**

  Added an option to preserve the lens and focus settings when setting a trackless camera.

13

- **VOYAGER EDITOR PREVIEW OUTPUT**

  A view of the level from the tracked camera's perspective can be shown in a preview window and captured to SDI in the editor.

  The portal can also be previewed in the **Editor Preview Output**.

  With **Lens Distortion** enabled, the **Editor Preview Output** window shows only the active field of view.

  Selected in the Voyager Operator Actor **Details** tab.

- **TRACK IN EDITOR OPTION**

  Camera tracking can be enabled while in **Editor** mode, in the Voyager Tracker Actor Details.

- **BROADCAST TONEMAPPER OPTION**

  The **Broadcast Tonemapper** can be enabled/disabled or applied only to the composited layers (allowing for distinct post-processing effects on the scene content compared to composite plane live feeds)

  The AR background is also part of the composited layers not affected by the level post-processing when that option is selected in the **Broadcast Tonemapper** (applies to regions of the background not receiving shadows or reflections)

  Internal compositing set extension (AR background and VS composite plane) is now supported with any of the **Broadcast Tonemapper** options.

  When the option to use the **Broadcast Tonemapper** on composited layers only is selected, an object over a VS composite plane can bloom out onto it as per usual bloom post-processing.

- **INTERNAL CHROMA KEYER**

  Added an option to use an internal chroma keyer (in the **Voyager Composite Media Bundle**).

- **CHROMA KEYER PARAMETERS**

  Parameters can be controlled in the Voyager Composite actor **Details** tab.

- **SHOW ALPHA AND SHOW SOURCE PROPERTIES**

  Added properties in the Voyager Composite actor (in the **Debug** section) to show the chroma keyer alpha (including set/get functions for blueprint usage) or show the chroma keyer's original source.

- **TEXT3DACTOR**

  Added support for getting and setting the text of a **Text3DActor**.

14

- **LOOP MOVIE OPTION**

  Added a new "Loop movie based on file name suffix" option. If checked, it overrides Lucid Studio's loop command, setting it to true if the movie file name ends with '_LOOP' or false if it ends with '_NOLOOP'.

- **LIVE BACKGROUND (AR) AND A COMPOSITING PLANE (VS)**

  Can be used in a level (set extension) when using internal compositing.

- **DATASMITHC4DIMPORTER PLUGIN**

  Added support for this plugin.

- **VOYAGER COMPOSITE PLANES CAN BE ASSOCIATED WITH A PHYSICAL MODEL**

  To generate a compositing mask from the perspective of the real-world set viewed through the tracked camera.

- **VOYAGER GREEN SCREEN MODEL BLUEPRINT**

  Added a basic procedural mesh with associated material to be rendered in the physical model view, that also supports static mesh.

- **DATALINQ PLUGIN**

  Added an optional DataLinq plugin (beta).

- **VOYAGER COMPOSITING GARBAGE MATTE**

  With associated material to be rendered in the physical model view.

- **RENDERING ANY MESH IN THE PHYSICAL MODEL VIEW (GREEN SCREENS OR GARBAGE MATTES)**

  An option was added in the primitive component to allow the rendering of any mesh in these physical model views.

- **ABILITY TO TOGGLE THE RENDERING OF THE PHYSICAL MODEL VIEW IN THE EDITOR**

  Added a flag in the engine show flags for visualization purposes.

- **CROPPING OPTION**

  An option to crop the voyager composite plane when not using tracking.

- **ROSSTALK PLUGIN**

  Supports receiving RossTalk GPI and CC messages directly into the engine to trigger actions through blueprints.

  Plugin is enabled by default.

- **VOYAGER INSTALLER CHANGES:**

  Installs the Unreal Engine 4 prerequisites if required (optional).

  Includes the XPression Video codec, supporting video clips with an alpha channel.

  Includes the NDI IO, Megascans and Houdini Engine (for Houdini 18.0.532) plugins.

- **OPTION TO USE COMPOSURE INPUT PASS (MEDIA PLATE)**

  Can be used for internal keying in a VS composite plane if **VS Composure Input** is selected in the Voyager Media Bundle.

- **BLUEPRINT CALLABLE SET AND GET FUNCTIONS FOR THE FOLLOWING PROPERTIES:**

  - Voyager Operator Actor – PortalWindow, TrackerIndex, PreserveTracklessLensFocusSettings
  - Voyager Tracker Actor – CameraActor, TrackInEditor
  - Voyager Composite VS Actor – ComposureInputPass
  - Voyager Composite AR Actor – PlaneType, ShadowColor, SpecularIntensity, AmbientLightingIntensity

- **SERVER IP CONFIGURATION**

  Added an option to configure the server to use "any IP" address (0.0.0.0).

- **MATERIAL APPLICATION**

  If the prefix "TG_" is used in the name of one or several material slots in a mesh, Lucid will only apply a material to those material slots. Default is all slots.

- **VOYAGER TRACKER LOGGING**

  Added options in the Voyager Tracker to log tracking variations that are larger than specified thresholds, in order to detect anomalies.

IMPROVEMENTS

- **INSTALLATION**

  The installer can now be used without an existing UE4 installation.

- **DATA CACHE UPDATING**

  The installed derived data cache is updated with the engine core shaders (before the project is loaded).

- **UPDATE PROJECT SETTINGS**

  The Update Project Settings option in the Voyager toolbar now also disables pre-exposure and the auto exposure bias (their defaults in UE4.25 are incompatible with Voyager's broadcast tonemapper).

- **USE OF TRANSLUCENT MATERIALS**

  Translucent materials set to render after DOF can be used behind the internal composite plane.

- **INTERNAL CHROMA KEYER**

  Despill is now enabled by default.

- **DEBUG INFO DISPLAY**

  The composite source debug info of both the AR background and the composite plane can be shown in the PIE window if using a set extension workflow.

- **TEXT3D PLUGIN**

  The plugin is now enabled by default.

- **PORTAL WINDOW**

  The portal window blueprint now supports non-standard monitor aspect ratios (based on the plane size).

  The portal window can now be previewed in the **Editor Preview Output** window.

- **VOYAGER CATEGORY**

  This can be found under the **Place Actors** menu.

- **FREE ROAMING CAMERA**

  Improved the blueprint for this asset and added an option to blend back.

- **MOVIE ACTIONS**

  Improved the behavior of the "to start" and "to end" actions on movies.

- **GREEN SCREEN BLUEPRINT**

  The procedural mesh green screen blueprint defaults to a negative translucent order so that it remains behind the garbage mattes.

- **NDISPLAY TEMPLATE**

  The **nDisplay** template can be used when creating a new Voyager project.

- **VOYAGER PLUGIN**

  Added an option for setting a default Voyager Operator and options for selecting Internal and External Compositing pipelines.

- **PLUGIN COMPATIBILITY**

  Improved the compatibility of plugins calling FSlateApplication::AddModalWindow.

- **RELOADING SOURCES**

  When reloading sources, only sources that are new or have changed will be reloaded, with a limit on how fast they can be sequentially loaded.

  An option was added to notify Lucid Studio when all media have been loaded after reloading sources, and every loaded source is logged.

- **MATERIALS REFRESHING**

  Lucid Plugin materials are refreshed only after a project is loaded.

- **HOUDINI NIAGARA PLUGIN**

  Updated.

- **PERFORMANCE IMPROVEMENTS**

  Improved the performance of compositing the AR background when no VS composite plane is enabled.

  Improved the performance of rendering the composite plane when "Use Physical Model" is not used.

- **FIELD OF VIEW DISPLAY**

  With lens distortion enabled, the editor preview window now shows only the active field of view (black is shown like in the PIE window to represent the tracker's overscan setting).

- **LOGGING**

  More information is logged on tracking protocol parsing error (including checksum).

VERSION 3.1 – APRIL 2020

WHAT'S NEW

- **10-BIT SUPPORT**

  Added support for 10-bit YUV/YUVA buffers to and from Matrox DSX cards.

- **HDR AND WGR**

  Added support for HDR and WGR inputs and outputs.

- **VOYAGER DESIGNER LICENSE**

  Users can now get a Voyager Designer License that enables use of the Voyager editor without I/O playback or camera tracking.

- **ADDITIONS TO PIE WINDOW DISPLAY**

  A performance meter for percentage of frame time usage is displayed in the **PIE** window.

  The reference status (locked or unlocked) is displayed in the **PIE** window.

- **POPUP MESSAGE**

  A popup message is displayed when launching a second instance of Voyager.

- **LINEAR ALPHA CHECKBOX**

  An option has been added for fill/key inputs (Matrox and AJA) to indicate if the incoming signal should be considered linear (directly usable by the engine) or non-linear (requiring the transfer function to be applied to it, as is done to the video).

- **PORTAL WINDOW**

  Added an option to output a portal window to feed an on-set monitor in a tracked set (no compositing; using BP_VoyagerPortalWindow).

- **COPY TRACKED CAMERA PARAMETERS**

  Added a configuration option in the UX Plugin to copy or not copy some internal tracked camera parameters to trackless cameras.

GETTING HELP

- Voyager's Online Help system opens in your default web browser.

- Our 24-hour hotline service provides access to technical expertise around the clock. After-sales service and technical support is provided directly by Ross Video personnel.

- During business hours (Eastern Standard Time), technical support personnel are available by telephone.

- After hours and on weekends, emergency technical support is available. A telephone-answering device will provide the names and phone numbers of technical support and field service personnel who are on call. These people are available to react to any problem and to do whatever is necessary to ensure customer satisfaction. For serious issues which need urgent attention and tracking, please ensure you are given a ticket number and refer to this in future communications.

- **TECHNICAL SUPPORT: (+1) 613-652-4886**

- **AFTER HOURS EMERGENCY: (+1) 613-349-0006**

- **TOLL FREE TECHNICAL SUPPORT: 1-844-652-0645 (NORTH AMERICA)**

  +800 1005 0100 (International)