Voyager is Ross Video's latest graphics platform, powered by Epic Games' Unreal Engine 4.27. Voyager leverages the world's most powerful and realistic renderer, enabling its use for Augmented Reality and XR Virtual LED Studio environments. It helps users create stunning, complex virtual environments designed for use in broadcast television, corporate events, Esports and Entertainment alike, built with flexibility and speed of operation in mind.

Voyager uses the Lucid Studio control platform as an operator-friendly front end, so operators are not required to know the Unreal 4.27 engine to use the system. Voyager supports customization, flexibility, and scalability in terms of the number of cameras and graphics engines through the integration of Lucid and Lucid Track applications.

**FLEXIBLE WORKFLOW**

With Lucid Studio and Lucid Track, any combination of tracking devices, tracking protocols, camera mounts, and engines is achievable within the same environment enabling customers to preserve their investments with existing technologies. We support whatever technology is right for your production.

**WORKFLOW AND CONNECTIVITY**

Through Lucid, Voyager supports external device control, data connectivity and enables triggering from studio automation systems. Seamless integration with MOS based newsroom systems allows producers / journalists to easily integrate virtual elements into their news productions.

**REAL-TIME REACTIVENESS**

Lucid enables complete control over the production and offers a toolset to modify and tweak assets and textures from a simple GUI with no need to package your project. Real-time changes to the set and exposure of items are easy to implement straight from the gallery to the show. This seamless control unlocks better storytelling as all these elements can be easily tweaked up until the last minute.
Voyager 4.27 migrated to Unreal Engine version 4.27, and enjoys all of its features.

**NEW AND POWERFUL HARDWARE**
The most recent hardware platform features an NVidia RTX A6000 GPU for enhanced rendering performance as well as a Quadro Sync II card allowing multiple engines to be synchronized in XR Virtual LED Studio environments.

**XR VIRTUAL LED STUDIO**
Voyager now supports XR Virtual LED Studio eliminating the need for content creators to build and modify physical sets and reducing the need for post-production providing savings in time and money. It also gives actors visual cues and stimuli in a way that an empty green screen environment does not, enabling them to produce a better and more believable performance.

**UNREAL ENGINE 4.27**
Voyager 4.27 migrated to Unreal Engine version 4.27, and enjoys all of its features.

**NDISPLAY SUPPORT**
Voyager 4.1 integrated nDisplay technology as part of its default feature set. Voyager 4.27 built on that development and enhanced the tool set offered for the user. In particular, Voyager now provides a new set of templates for extended reality.

**PROPAGATING DATA**
Voyager uses the Cluster node in Unreal to propagate data to all connected engines. Tracking data, Lucid commands, triggers, textures – all are passing through the cluster.

**ROSSTALK SUPPORT**
As part of the nDisplay implementation, we added support for Rosstalk commands to be used in an nDisplay workflow. This means that you can now synchronize actions across multiple Ross and 3rd party devices. In addition, the configuration of Rosstalk and Datalinq - Ross’ powerful data management tool - was made easier which facilitates the integration with the wider Ross solution.

**HELPER WIDGETS**
We added helper objects to Voyager to make the XR Virtual LED Studio stage calibration process easier.

**MULTI-CAMERA WORKFLOW IN XR VIRTUAL LED STUDIO**
Voyager 4.27 offers a complete multi-camera workflow for XR Virtual LED Studio stages. Use as many tracked cameras as you need for the production and tie them to a single engine chain feeding the stage.

Camera switching is seamless and transparent for your vision switcher.

**LENS DISTORTION SHADERS**
To better support NCam and Stype tracking systems, we have implemented a lens distortion shader in Voyager that takes the lens data directly from the tracking device. That allows the user to choose either to use the lens curve provided by Lucid, or the raw data arriving from the tracking device.

**TIME CODE SUPPORT**
Voyager 4.1 and above supports Time Code input from the video card. This allows the user to trigger events and behaviors in Unreal based on the incoming time code. AJA and Matrox cards are supported.

**ST2110 SUPPORT**
Voyager now support two new video I/O cards – Matrox X.mio5 D25, and Matrox X.mio5 Q25.

**PTZ CAMERA SUPPORT**
We keep adding support for new tracked PTZ cameras which can be selected from Lucid Studio’s mount drop-down list. New PTZ models from Sony and Panasonic in particular are now supported. Please contact us to get the full list of supported cameras.