Immersive for Vega Prime

MultiGen-Paradigm

Enabling Realtime3D Applications In Immersive Display Environments

Immersive for Vega Prime is an optional module for Vega Prime™ specifically designed to facilitate the development and deployment of applications that require a tracked immersive 3D (i3D) display environment. Immersive for Vega Prime can support display systems driven by a single multi-pipe system, or a cluster of PCs when used along with the Vega Prime Distributed Rendering™ module.

Immersive for Vega Prime can be configured for use with almost any Vega Prime application to display on systems with rectangular display surfaces (i.e. walls, tiles, screens) and can display on custom or commercial systems comprised of up to thirty-two (32) projection screens. Applications using Immersive for Vega Prime can also be configured to run on mono, passive stereo, or active stereo displays.

The Immersive for Vega Prime module simplifies the creation of truly immersive 3D visual simulation applications. It couples the well-tested capabilities available in VRCO's CAVELib™ i3D toolkit and Vega Prime's existing trackd® support for input devices. This combination enables the Immersive module to display Vega Prime applications on single or multi-wall i3D display systems, complete with correct viewer centered perspective and 6-degree-of-freedom tracker support. Immersive for Vega Prime fully supports both multi-pipe supercomputers as well as PC clusters.

- Designed specifically for use in environments that require immersive 3D displays
- Active and Passive Stereo Supported
- Cross Platform
- Motion Strategy
- Immersive Display Support
- Configurable Using LynX Prime™

Immersive for Vega Prime Features

Active and Passive Stereo Support
- Applications using Immersive can be configured to run on mono, passive stereo, or active stereo displays

Cross Platform
- Immersive for Vega Prime can support display systems driven by a single multi-pipe system, or a cluster of PCs when used along with the Vega Prime Distributed Rendering module

Motion Strategy
- Immersive provides a "point-and-go" motion strategy as an example on how to create motion using 6DOF tracker data and controller inputs. Source code is provided so that users can extend the module to produce other types of motion strategies.

Immersive Display Support
- Immersive can be configured for use with almost any Vega Prime application to display on systems with any number of rectangular display surfaces (i.e. walls, tiles, screens)

Configurable Using LynX Prime™
- Applications can be configured using the LynX Prime GUI configuration tool or directly through the API
- Immersive for Vega Prime is part of a fully-integrated suite of application-specific Vega Prime modules and can be used with almost any existing Vega Prime application

Productivity
- C++ STL-compliant architecture for increased productivity and performance

Extendable
- Allows a high degree of customization, allowing for users to tailor their application to their own software design, rather than altering their software to fit into a product's constraints

Double Precision
- Fully accurate placement and representation of objects and terrain within the scene

Immersive for Vega Prime Benefits

Flexibility

- A cross-platform, extendable, development environment that delivers a wide range of optimization and functionality specifically for applications utilizing immersive display environments

Performance

- Optimized rendering that is fully customizable and scalable to take advantage of available resources

Productivity

- An intuitive interface, built to address the stringent requirements of cross-platform realtime 3D application development and deployment

Ease Of Use

- The combination of a GUI configuration tool, and advanced API functionality provides an infrastructure ideally suited for realtime 3D software development

Value

- Unmatched experience delivered in a low-cost COTS toolkit

System Requirements (Minimum)

Available for Vega Prime v2.0.x