

Mixed Reality

VideoStream

A control that makes it possible to render a video source into a texture.

Properties

Property Name	Type	Description
Video Source	String	URI to video resource (e.g. path to file or URL). Please also see example strings below.
Scale To Video Source	bool	If enabled the texture will be resized to the video size, otherwise the size of the current texture will persist.
Flip Vertically	bool	Flips video vertically.
Timestamp	UInt32	Can be used to bind the timestamp of the video to an external timestamp data (e.g. a camera tracker that needs to be synchronized with the video).
Target Node	Node	The node on which the video will be displayed. If nothing is selected, the node on the anchor will be used.
Blend Type	BlendType::Enum	The blend type that will be set.

Examples of valid Video Source strings

Source	Example Video Source String
From asset	asset:///Resources#Videos#VideoSourceSample1.mp4
From website	http://www.cgistudio.at/VideoSourceSample2.mp4
From file	file:///C:/Videos/Streaming/VideoSourceSample3.mp4

NavigationPath3D

Visualizes the proposed route of the navigation system. Input points are received via data binding. This control is available for 3D scenes.

Properties

Property Name	Type	Description
Mesh Appearance	AppearanceType	The appearance used for the navigation path mesh.
Color Mode	ColorMode::Enum (Color, RGBA)	Select how color is displayed.
Color	Candera::Color	Determines the color of the mesh.
Path Width	Float	Determines the width of the mesh.
Path Length	Float	Determines the length of the mesh.
Y Offset	Float	Applies y-offset to the mesh.
Input Points	InputPointsType	This property is used to bind input points.
Input Point Handling	InputPointHandling::Enum (Attach, Replace)	Determines how new input points are used for the mesh.
Interpolation Type	InterpolationType::Enum (Linear, Bezier, Spline, None)	Determines which interpolation method is used.
Path Mesh Type	MeshType::Enum (Solid, Points)	Determines which primitive type is used.
Advanced	bool	Enables advanced settings of the behavior. (see next 6 properties in this table)
Input Point Min Distance	Float	Minimum distance of two control points. Input points that are closer together will be rejected.
Req Fragment Size	SizeType	Size of the fragment that is requested from the input point list.
Req Threshold Distance	Float	If the distance between camera and the last point is below this threshold, request a new fragment of input points.

Num Of Rows Per Input Point	UInt32	Determines how many vertex rows are used to interpolate between two input points. Increasing this value makes the mesh smoother, but will also shorten the distance of the overlay, as number of vertices per row remain constant.
Num Of Vertex Rows	UInt32	Amount of vertical vertices in the mesh.
Num Of Vertex Columns	UInt32	Amount of horizontal vertices in the mesh.
Blend Type	BlendType::Enum	The blend type that will be set.

PoiManager3D

The PoiManager handles the creation and destruction of POIs. It receives the camera position via event and uses that information to request all POIs in a certain perimeter from the model. The model responds with a list POIs from a dictionary.

For each type of POI, a custom control that serves as a template has to be created and configured with a valid Asset ID. The PoiManager can then instantiate the correct control according to the dictionary from the Asset ID as a child node. However, the PoiManager does not handle the metadata of its children, but simply forwards metadata messages to them. (For more information on metadata handling see [Poi Metadata Handler](#))

This control is available for 3D scenes.

Properties

Property Name	Type	Description
Street Points	StreetPointsType	List of points of the street. Used to align the rotation of POIs.
Street Points Min Distance	Float	Minimum distance between two street points. Street points that are closer together will be rejected.
Req Distance	Float	The distance in which POIs are requested from the model.
Req Threshold Distance	Float	Once the camera has moved this specified distance a new request will be sent.
PoiMetaData	PoiMetaDataType	Use databinding to receive metadata updates for the POIs

Poi Street Name	String	Name of this poi.
Street Control Id	Candera::Id	ID of the control that is associated with PoiName.
Poi Parking Name	String	Name of this poi.
Parking Control Id	Candera::Id	ID of the control that is associated with PoiName.
Poi Building Name	String	Name of this poi.
Building Control Id	Candera::Id	ID of the control that is associated with PoiName.
Blend Type	BlendType::Enum	The blend type that will be set.

VideoStream3D

This Control makes it possible to render a video source into a texture. The VideoStream3D Control is available for 3D scenes.

It is similar to the [VideoStream](#) Control, offering the same properties.