Mixed Reality Behaviors

Internal

Poi Metadata Handler

Behavior that handles the meta data of a single poi.

This behavior is available for 3D scenes only.

Common Properties

Property Name	Type	Description
IconNodes	ArrayProperty<Candera::AbstractNodePointer>	A process value event is sent to this nodes, if a respective poi update event arrives.
NameNodes	ArrayProperty<Candera::AbstractNodePointer>	A process value event is sent to this nodes, if a respective poi update event arrives.
OpenNowNodes	ArrayProperty<Candera::AbstractNodePointer>	A process value event is sent to this nodes, if a respective poi update event arrives.
RatingNodes	ArrayProperty<Candera::AbstractNodePointer>	A process value event is sent to this nodes, if a respective poi update event arrives.
PriceLevelNodes	ArrayProperty<Candera::AbstractNodePointer>	A process value event is sent to this nodes, if a respective poi update event arrives.
InfoTextNodes	ArrayProperty<Candera::AbstractNodePointer>	A process value event is sent to this nodes, if a respective poi update event arrives.

Distance Alpha Fading

Description

Distance Alpha Fading is a Behavior Building Block available in Construction Kit.

It receives a value representing the camera position and performs arithmetic operations on it to calculate target node alpha value.

The following operations are performed on input value:

- Map (scale) value from initial range (default 0.00..100.00) to target range (default 0.00..1.00)

- Negate scaled value (changes the range to 0.00..-1.00) by multiplication (default multiplicand is -1.00)
- Increase negated value (changes the range to 1.00..0.00) by addition (default addend is +1.00)
- Sets calculated alpha value on target node using Set Alpha Value

Common Properties

Property Name	Type	Description
Input Min	FeatStd::Optional<FeatStd::Variant>	This minimum value has to be set for input value scaling to take effect. *FeatStd::Float expected.*
Input Max	FeatStd::Optional<FeatStd::Variant>	This maximum value has to be set for input value scaling to take effect. *FeatStd::Float expected.*
Multiplication Value	FeatStd::Variant	Multiplies received value by this number (after scaling). *FeatStd::Float expected.*
Addition Value	FeatStd::Variant	Adds this number to received value (after multiplication). *FeatStd::Float expected.*
Target Node	Candera::AbstractNodePointer	Target node that will have its alpha value set.

Navigation Path

Registers to navigation points and displays them as mesh in world space.

This behavior is available for 3D scenes only.

Common Properties

Property Name	Type	Description
ColorMode	ColorMode::Enum	Select how color is displayed. *Possible values: Color, RGBA*
Color	Candera::Color	Determines the color of the mesh.
Width	FeatStd::Float	Determines the width of the mesh.
Length	FeatStd::Float	Determines the length of the mesh

YOffset	FeatStd::Float	Applies y-offset to the mesh.
InputPoints	ListPropertyType< CgiStudioControl::Internal::AR::ArPoint>	This property is used to bind input points.
InputPointHandling	InputPointHandling::Enum	Determines how new input points are used for the mesh. *Possible values. Attach, Replace*
InterpolationType	InterpolationType::Enum	Determines which interpolation method is used. *Possible values: Linear, Bezier, Spline, None*
MeshType	MeshType::Enum	Determines which primitive type is used. *Possible values: Solid, Points*
IsAdvanced	bool	Enables advanced settings of the behavior.

Advanced Properties

Property Name	Type	Description
Red	FeatStd::UInt32	Red color channel. *This property is only available if 'ColorMode' is set to 'RGBA'.*
Green	FeatStd::UInt32	Green color channel. *This property is only available if 'ColorMode' is set to 'RGBA'.*
Blue	FeatStd::UInt32	Blue color channel. *This property is only available if 'ColorMode' is set to 'RGBA'.*
Alpha	FeatStd::UInt32	Alpha color channel. *This property is only available if 'ColorMode' is set to 'RGBA'.*
InputPointMinDistance	FeatStd::Float	Minimum distance of two control points. Input points that are closer together will be rejected. *This property is only available if 'IsAdvanced' is checked.*
ReqFragmentSize	FeatStd::SizeType	Size of the fragment that is requested from the input point list. *This property is only available if 'IsAdvanced' is checked.*
ReqThresholdDistance	FeatStd::Float	If the distance between camera and the last point is below this threshold, request a new fragment of input points. *This property is only available if 'IsAdvanced' is checked.*
PointSize	FeatStd::Float	Determines the point size. *This property is only available if 'MeshType' is set to 'Points'.*
NumOfRowsPerInputPoint	FeatStd::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. *This property is only available if 'IsAdvanced' is checked and 'InterpolationType' is set to 'None'.*

NumOfVertexRows	FeatStd::UInt32	Amount of vertical vertices in the mesh. *This property is only available if 'IsAdvanced' is checked.*
NumOfVertexColums	FeatStd::UInt32	Amount of horizontal vertices in the mesh. *This property is only available if 'IsAdvanced' is checked.*

Poi Configuration

Behavior that configures the mapping of a name to a assetId, such that it can be found by the PoiFactory.

This behavior is available for 3D scenes only.

Common Properties

Property Name	Type	Description
PoiName	FeatStd::UInt32	Name of this poi.
PoiControlAssetId	FeatStd::UInt32	ID of the control that is associated with PoiName.

Poi Manager

Manager of the poi control nodes.

This behavior is available for 3D scenes only.

Common Properties

Property Name	Type	Description
StreetPoints	ListPropertyType<CgiStudioControl::Internal::AR::ArPoint>	List of points of the street. Used to align the rotation of POIs.
StreetPointsMinDistance	FeatStd::Float	Minimum distance between two street points. Street points that are closer together will be rejected.
ReqDistance	FeatStd::Float	The distance in which POIs are requested from the model.
ReqThresholdDistance	FeatStd::Float	Once the camera has moved this specified distance a new request will be sent.
PoiMetaData	ArrayProperty<FeatStd::String>	Use databinding to receive metadata updates for the POIs

Pose Tracking

Behavior that sets the pose of a target node.

This behavior is available for 3D scenes only.

Common Properties

Property Name	Type	Description
Position	Candera::Vector3	Position on the target node.
Rotation	Candera::Vector3	Rotation on the target node.
EnableUserControl	bool	Enable to use WASD control to navigate the camera instead of databinding.
EventReceivers	ArrayProperty<Candera::AbstractNode Pointer>	List of nodes that will receive position and rotation update events.

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