Value Processing Behaviors

Animation Value Processing Behaviors

Jump to Animation Keyframe

Expects a Float value between 0 and 1 (inclusive) as an event. Sets a selected animation to a frame corresponding to the value that the AnimationProcessValueBehavior receives.

Common Properties

Property Name	Type	Description
Animation	SharedPointer< Candera::Animation::AnimationPlayer>	The animation controlled. AnimationProcessValueBehavior sets the animation to the frame corresponding to the value it receives.
SequenceStartTime	FeatStd::Optional <Candera::Animation::SequenceTimeType>	The start point of the animation. [ms]
SequenceDurationTime	FeatStd::Optional <Candera::Animation::SequenceTimeType>	The duration of the animation. [ms]
ControlNode	Candera::AbstractNodePointer	

Diagnostics Value Processing Behaviors

Frame Measurement

Class Reference

Outputs Frame Measure information of the specified Render Target. These Measurements can be Frames Per Seconds, Current Frame and Frame Time. This Behavior acts as Source for Process Value Behaviors.

Common Properties

Property Name	Type	Description
RenderTarget	Candera::GraphicDeviceUnit*	The render target which FPS should be monitored.
Output	OutputType::Enum	Specifies which information will be output.
DispatchThreshold	FeatStd::Optional< FeatStd::Variant >	Specifies how much the Output has to change to dispatch an event to its receivers.
Receivers	Candera::ProcessValueBehaviorArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Effects Value Processing Behaviors

Set Alpha Value

Sets the Alpha value of a node (expects a Float value).

Common Properties

Property Name	Type	Description
Target Node	Candera::AbstractNodePointer	The Node which gets the resulting alpha value. If not set, then the node where the behavior is attached to, will be modified.

Switch Image

Sets an image on a Render Node based on a float index received as event.

Supports

- Controls:
  - FlipBook

Example Usage

- Switch Image Example

Common Properties

Property Name	Type	Description
Upload Strategy	Enum (OnInit, OnDemand)	Specifies if images are uploaded on demand or when the behavior is instantiated. OnInit may cause an initial delay and keeps all images loaded. OnDemand avoids an initial delay and only keeps one image loaded. *Possible values: OnInit, OnDemand*
Target Node	RenderNode *	The Render Node SwitchImageProcessValueBehavior will switch images on.
Images	SharedPointer<Candera::Image2D>	A list of images which should be available for selection. *This property is only available for 2D scenes.*
Textures	SharedPointer<Candera::TextureImage>	A list of images which should be available for selection. *This property is only available for 3D scenes.*
OutOfBoundsHandlingMode	OutOfBoundsHandlingMode::Enum	Behavior when an index greater than the number of images is given. *Possible values: Hold, Clamping*

Switch Text

Sets a text on a Render Node based on a float index received as event.

Common Properties

Property Name	Type	Description
Target Node	Candera::AbstractNodePointer	The Render Node SwitchTextProcessValueBehavior will switch the text on.
Texts	ArrayProperty<FeatStd::String>	Use list of texts (strings) and switch between them.

Zoom Effect

Expects a Float value between 0 and 1 (inclusive) as an event. Applies scale and alpha on children of a group.

Common Properties

Property Name	Type	Description
Target Node	Candera::AbstractNodePointer	The node whose children are enabled or disabled by ZoomProcessValueBehavior. If not set, then the node where the behavior is attached to will be considered.
Alpha Factors	Vector2	Min/Max transparency factors

Zoom Factors	Vector2	Min/Max zoom factors
Zoom Distribution	Float	Distribution of Zoom/Alpha to each side of the selection.
ZoomByLayout	bool	Whether the zoom is accomplished by layout size.

Transformation Value Processing Behaviors

Resize Group Node

Expects a Float value as an event, and changes the layout size of a group node it is placed on. When mode is 'Relative' it scales the layout size (expected value is a normalized value). When mode is 'Absolute' the layout size is set in pixels.

Common Properties

Property Name	Type	Description
AffectXAxis	bool	Enables or disables scaling in horizontal direction.
AffectYAxis	bool	Enables or disables scaling in vertical direction.
Mode	Mode::Enum	Determines how the received value will be interpreted.
ScaleVector	Vector2	This vector is multiplied by the received value and specifies the magnitude by which the node is scaled.

Set Node Size

Expects a Float value as an event. Sets the layout size of a node on a given axis by the received value in pixels.

Common Properties

Property Name	Type	Description
Target Node	Candera::AbstractNodePointer	The target node which is modified. if not set, then the node where the behavior is attached to, will be modified.
Size Axis	AxisType2D::Enum	The axis along which the size is set. *Possible values: AxisX, AxisY*

Set Position

Expects a Float value as an event. Translates Position Node along given axis by the received value in pixels.

Example Usage

- Set Position Example

Common Properties

Property Name	Type	Description
Target Node	Candera::AbstractNodePointer	The target node to which the events are routed from the source node.
Translation Axis 2D	AxisType2D::Enum	The axis along which the position is set. *Possible values: AxisX, AxisY* *This property is only available for 2D scenes.*
Translation Axis 3D	AxisType3D::Enum	The axis along which the position is set. *Possible values: AxisX, AxisY,, AxisZ* *This property is only available for 3D scenes.*

Set Rotation

Expects a Float value as an event. Rotates Rotation Node clockwise by the received value in degrees.

Example Usage

- Set Rotation Example

Common Properties

Property Name	Type	Description
Target Node	Candera::AbstractNodePointer	The node which is modified. If not set, then the node where the behavior is attached to, will be modified.
RotationAxis	AxisType3D::Enum	The axis to rotate the node around. *Possible values: AxisX, AxisY,, AxisZ* *This property is only available for 3D scenes.*

Set Scale

Expects a Float value as an event. Scales Scaled Node by the received (scalar) value multiplied by Vector (X value for horizontal scaling, Y value for vertical scaling). Scaling along either axis can be enabled or disabled.

Example Usage

- Set Scale Example

Common Properties

Property Name	Type	Description
TargetNode	Candera::AbstractNode Pointer	The Node which is modified. If not set, then the node where the behavior is attached to, will be modified.
ScaleAlongX	bool	Enables or disables scaling in horizontal direction.
ScaleAlongY	bool	Enables or disables scaling in vertical direction.
ScaleAlongZ	bool	Enables or disables scaling in Z-direction. *This property is only available for 3D scenes.*
ScaleVector2D	Vector2	This vector is multiplied by the received value and specifies the magnitude by which the node is scaled. *This property is only available for 2D scenes.*
ScaleVector3D	Vector3	This vector is multiplied by the received value and specifies the magnitude by which the node is scaled. *This property is only available for 3D scenes.*

Move Node

Expects a Float value as an event. Translates Translated Node by the received (scalar) value multiplied by Vector X Y (Z).

Example Usage

- Move Node Example

Common Properties

Property Name	Type	Description
Target Node	Candera::AbstractNodePointer	The node TranslateProcessBehavior moves.

Multiplied Vector	Vector3	This vector is multiplied by the value TranslateProcessValueBehavior receives and specifies direction and magnitude by which TranslateProcessValueBehavior moves Translated Node. If not set, then the node where the behavior is attached to, will be modified.

AnimationMeter

This behavior is a Behavior Block. It can be dragged&dropped on nodes just like any Behavior. Controls an animation according to the passed value.

Property Name	Type	Description
Animation	Candera::Animation::AnimationPlayer	TThe animation controlled. AnimtionMeter sets the animation to the frame corresponding to a mapped value it receives.
Minimum	FeatStd::Variant	Minimum of the Variant value which will be mapped between 0 and 1.
Maximum	FeatStd::Variant	Maximum of the Variant value which will be mapped between 0 and 1.

Arithmetic Operation

Arithmetic operation behavior allows to perform addition, subtraction, multiplication and division operations on the passed value.

Common Properties

Property Name	Type	Description
Operation	ArithmeticOperationType::Enum	Arithmetic operation to be performed. *Possible values: Addition, Subtraction, Multiplication, Division, Modulo, Absolute*
Operand	FeatStd::Variant	A number to be used as addend/subtrahend/multiplicant/divisor on provided value.
OutputType	VariantValueType::Enum	Type of the Variant forwarded as result. *Possible values: FloatValue, Int32Value, UInt32Value, BoolValue, DoubleValue, Int8Value, Int16Value, Int64Value, UInt8Value, UInt16Value, UInt64Value, StringValue*
Receivers	Candera::ProcessValueBehaviorArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Clock

Converts a time integer into seconds, minutes and hours and passes those values to behavior-properties.

Common Properties

Property Name	Type	Description
SecondsProcessValueBehavior	Candera::ProcessValueBehavior*	The behavior that receives the seconds. *This property can be set in the right side of the Scene Tree panel.*
MinutesProcessValueBehavior	Candera::ProcessValueBehavior*	The behavior that receives the minutes. *This property can be set in the right side of the Scene Tree panel.*
HoursProcessValueBehavior	Candera::ProcessValueBehavior*	The behavior that receives the hours. *This property can be set in the right side of the Scene Tree panel.*
OffsetInMinutes	FeatStd::Int32	Offset in minutes to add to time (i.e. for different time zones).
ShowFull24Hours	bool	If true, hours will be shown from 0-23, otherwise in AM/PM format.
AMText	FeatStd::String	The string of the AM label.
PMText	FeatStd::String	The string of the PM label.
AMPMTextBehavior	Candera::Behavior*	Sets text 'AM' or 'PM'. *This property can be set in the right side of the Scene Tree panel.*
ShowSeconds	bool	If true, seconds will be shown.
SecondsNode	Candera::AbstractNodePointer	The node that will be turned off if showing of seconds is disabled.

Dial

Receives an angle from a ProcessValueEvent or a value in a ChangeValueEvent. The knob changes its rotation according to that angle. The Behavior Transmits the changed value through events (ValueChangedEvent and ProcessValueEvent).

This behavior is available for 2D scenes only.

Common Properties

Property Name	Type	Description

CurrentValue	FeatStd::Int32	Current value for the dial.
MinimumRotation	FeatStd::Float	Minimum rotation of the dial.
MaximumRotation	FeatStd::Float	Maximum rotation of the dial.
StepSize	FeatStd::Float	Step size in degrees.
KnobNode	Candera::AbstractNodePointer	Knob node which will be rotated.
Receivers	Candera::ProcessValueBehaviorArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Filter

Filters the processed value via an attached Condition (e.g. Check processed Value).

Common Properties

Property Name	Type	Description
Condition	Candera::ConditionBehavior*	ConditionBehavior for passing the value to the next process value behavior.
Receivers	Candera::ProcessValueBehaviorArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Forward Value

Forwards a received value to the associated target (associated controls with a value property). Receives a ValueChanged-Event (change notification) and forwards it as a ChangeValue-Event(change request) to the target. The common usecase is to send the Value from a Value behavior to another Value behavior(or Control with a Value).

Emits a ChangeValueEvent which will be received by a Value Behavior.

> Note that the target Value - Behavior must have 'Accept Value Event' property enabled.

Example Usage

- Forward Value Example
- Thermometer Example

Common Properties

Property Name	Type	Description
Event Dispatch Strategy	EventDispatchStrategyType::Enum	The way the event gets sent. *Possible values: Direct, Broadcast, Bubble, Tunnel, DedicatedBehavior*
Target Node	Candera::AbstractNodePointer	The target node to which the events are routed. If this property is not set, the event will be routed to the node of the behavior.
Dedicated Behavior	Candera::ProcessValueBehavior *	The dedicated process value behavior that will receive the change value event. *This property can be set in the right side of the Scene Tree panel.*

Interpolate Value

Expects a Float value as an event. This behavior holds an internal Float value. It changes this internal value with given speed (Units Per Second) until it reaches the received value. Unless received value matches internal value, it sends internal value to a Process Value Behavior every frame.

If the *Animation Mode* property is set to *Instant*, no interpolation will be taking place - the received value will be applied immediately.

Example Usage

- Interpolate Value Example
- Set Scale Example

Common Properties

Property Name	Type	Description
Animation Mode	InterpolationAnimationMode::Enum	Animation mode sets a specific interpolation type. *Possible values: SpeedBased, TimeBased, Instant*
Units Per Second	Float	Speed at which InterpolateProcessValueBehavior changes its internal value. *This property can only be set when AnimationMode is set to "SpeedBased".*
Interpolation Time	UInt32	Time in ms the InterpolateProcessValueBehavior changes its internal value. *This Property can only be set when AnimationMode is set to "TimeBased"*

Filter Time Constant	Float	The moment before InterpolateProcessValueBehavior's internal value reaches the received value, the speed at which the former is changing slows down. This prevents a sudden end of movement that can be felt as artificial in some cases. *This property can only be set when AnimationMode is set to either "SpeedBased" or "Timebased".*
Receivers	Candera::ProcessValueBehaviorArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Map Value

Expects a Float value as an event. Maps the received value from one interval to another.

Common Properties

Property Name	Type	Description
InputMin	FeatStd::Optional< FeatStd::Variant >	[Optional] Smallest value of the interval to check. If Minimum is given as greater than Maximum then the values are internally swapped.
InputMax	FeatStd::Optional< FeatStd::Variant >	[Optional] Largest value of the interval to check. If Maximum is given as smaller than Minimum then the values are internally swapped.
OutputMin	FeatStd::Float	Smallest value of the interval mapped to.
OutputMax	FeatStd::Float	Largest value of the interval mapped to.
OutputType	VariantValueType::Enum	Type of the Variant forwarded as result. *Possible values: FloatValue, Int32Value, UInt32Value, BoolValue, DoubleValue, Int8Value, Int16Value, Int64Value, UInt8Value, UInt16Value, UInt64Value, StringValue*
Receivers	Candera::ProcessValueBehaviorArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Map Value Normalized

Maps the numeric value received via 'ProcessValueEvent' within an arbitrary range to the normalized range from 0.0 to 1.0 and dispatches the result locally to its receivers. Receivers of this Behavior must therefore be value processing behaviors operating on normalized values.

Common Properties

Property Name	Type	Description
Reverse	bool	Toggles the mapping direction. If this property is true, the received value is assumed to be within range from 0.0 to 1.0 and the emitted value is mapped accordingly.
ValueForRange	ValueBehaviorBase*	The input value behavior for defining the mapped range. *This property can be set in the right side of the Scene Tree panel.*
Receivers	Candera::ProcessValueBehaviorArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Process Value Changed Event

This behavior handles ValueChanged events and processes the new value within a set of ProcessValueBehaviors chains. By default ProcessValueChangedBehavior does consume the event, which will result in dispatching the event any further in the dispatching strategy. If further dispatching of the ValueChangedEvent is required set the ConsumeEvent flag to false.

Example Usage

- Process Value Changed Event - Slider Example
- Process Value Changed Event - State Machine Example

Common Properties

Property Name	Type	Description
Sender	Candera::AbstractNodePointer	The node for which the event shall be emitted. If it is not set then the TargetNode or Node (if TargetNode is not set) will be taken instead.
Minimum	Optional<FeatStd::Variant>	Minimum threshold of the processed values.
Maximum	Optional<FeatStd::Variant>	Maximum threshold of the processed values.
ConsumeEvent	bool	Set this flag to false if the event should not be consumed by the trigger. By default it is set to true and if the trigger evaluates to true the event will not be routed to any other behavior.
Receivers	ProcessValueBehaviorArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Render a Range

This behavior is a Behavior Block. It can be dragged&dropped on nodes just like any Behavior. Renders a range of nodes according to the passed value.

Property Name	Type	Description
OperationMode	OperationModeType Enum	When set to MultipleNodes, EnableNodesProcessValueBehavior will enable the first N children of Group Node. When Operation Mode is set to SingleNode, only Nth node is enabled. N is a number from 0 to number of all children nodes of Group Node. It corresponds linearly to the value EnableNodesProcessValueBehavior receives.
Minimum	Optional< FeatStd::Variant >	Minimum of the Variant value which gets mapped between 0 and 1.
Maximum	Optional< FeatStd::Variant >	Maximum of the Variant value which gets mapped between 0 and 1.

Send ChangeValue on receiving ProcessValue event

Sends out a new value. Associated controls with a value property receive the new values.

Common Properties

Property Name	Type	Description
ChangeValue	ChangeValue::Enum	How the event value shall be handled by the receiving behavior
Target Node	Candera::AbstractNodePointer	The target node to which the events are routed. If this property is not set, the event will be routed to the node of the behavior. *This property is only visible if EventDispatchStrategy is set to "Direct", "Broadcast", "Bubble" or "Tunnel".*
EventDispatchStrategy	CgiStudioControl::EventDispatchStrategyType::Enum	The way the event gets sent *Possible values: Direct, Broadcast, Bubble, Tunnel, DedicatedBehavior*
DedicatedBehavior	Candera::ProcessValueBehavior*	The dedicated process value behavior that will receive the change value event. *This property can be set in the right side of the Scene Tree panel.* *This property only visible if EventDispatchStrategy is set to "DedicatedBehavior".*
Receivers	ProcessValueBehavior ArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Set Selected State

This behavior is a Behavior Block. It can be dragged&dropped on nodes just like any Behavior.

Sets the state to selected or deselected according to the passed value.

Smooth Value

Class Reference

Expects a numeric value as an event and applies exponent smoothing to that value and the previous calculated one.

Common Properties

Property Name	Type	Description
SmoothingFactor	FeatStd::Float	The factor how fast the output value should adapt to the input value. Valid values are between 0.0 and 1.0
Receivers	ProcessValue Behavior ArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Render Child Nodes

Enables/Disables Child nodes corresponding to the received value and the behavior settings.

Common Properties

Property Name	Type	Description
TargetNode	Candera::AbstractNodePointer	The Node which is modified. If not set, then the node where the behavior is attached to, will be modified.
OperationMode	OperationMode::Enum	When set to MultipleNodes, EnableChildNodes will enable the first N children of Group Node. When Operation Mode is set to SingleNode, only the Nth node is enabled. *Possible values: MultipleNodes, SingleNode*
Levels	FeatStd::UInt8	Number of levels to step down through groups. Default is zero.
NormalizeValue	bool	If set to true, the received value has to be between 0 and 1 and will be mapped to the number of children. Otherwise the value has to be the index of the child.

Format String

'Format String' modifies the Text of a TextNode Node and provides the Text as property for Controls. It supports formatted text that can display one variable.

Example Usage

- Format String Example
- Interpolate Value Example

Common Properties

Property Name	Type	Description
Text	String	Text that TextBehavior will change the Node to. Supports formatting for one variable that corresponds to the value TextProcessValueBehavior2D receivers.
Style	SharedPointer <Candera::TextRendering::SharedStyle>	The style that will be set to the Text Node.
Alignment	TextNode2DLayouter::TextAlignment	The horizontal text alignment, using the culture text direction, is used to define how text will be horizontally aligned within its layout area. *Possible values: Auto, Left, Center, Right*
Multiline	bool	If multi line is disabled, then the new line control characters will be ignored and text will always be rendered in one line.
Line Spacing	PixelSize (UInt16)	Defines the distance between the baselines of successive lines of type.
Word Wrap	Bool	If word wrapping is enabled then the lines that exceed the client area will be split during arrangement into multiple lines.
Trimming	TextNode2DLayouter::Trimming	Trimming defines the behavior to employ when content overflows the content area. *Possible values: None, Ellipsis, CustomText*
TrimmingText	FeatStd::String	Trimming text defines the text which replaces content overflowing the content area. *This property is only visible if Trimming is set to "CustomText".*
TargetNode	Candera::AbstractNodePointer	The Node which gets the given text. If not set, then the node where the behavior is attached to, will be modified.

Track Angle on Drag

Listens to the touch of the selected node, returns the angle between pressing, moving and releasing.

Common Properties

Property Name	Type	Description
TouchNode	Candera::AbstractNodePointer	A node that is used to collect information about the touch.
Receivers	ProcessValueBehavior ArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Drag on Track to Value

Determines the position of a touch move in relation to the associated node and provides it as value in range from 0.0 to 1.0 (normalized). The horizontal boundary of the associated node is the track. The Dragged Node is used to determine the hit area and to determine the position change relative to its center. This behavior can be used as a source to a Value Behavior. Add a Value Behavior as a receiver.

Common Properties

Property Name	Type	Description
TargetNode	Candera::AbstractNodePointer	The Node which gets the given text. If not set, then the node where the behavior is attached to, will be modified.
UseCenter	bool	If true, the center value defined for the knob bitmap is used to align the knob to the value position, otherwise the calculated center.
TrackDirection	TrackDirection::Enum	Defines if the position will be tracked horizontally or vertically *Possible values: Vertical, Horizontal*
LeftTouchMargin	FeatStd::Float	Defines the size for extending or shrinking the touch-sensitive area at the left border of the knob. The size is given in percentage of the knob width. Positive values extend, negative values shrink the area.
RightTouchMargin	FeatStd::Float	Defines the size for extending or shrinking the touch-sensitive area at the right border of the knob. The size is given in percentage of the knob width. Positive values extend, negative values shrink the area.
TopTouchMargin	FeatStd::Float	Defines the size for extending or shrinking the touch-sensitive area at the top border of the knob. The size is given in percentage of the knob height. Positive values extend, negative values shrink the area.
BottomTouchMargin	FeatStd::Float	Defines the size for extending or shrinking the touch-sensitive area at the bottom border of the knob. The size is given in percentage of the knob height. Positive values extend, negative values shrink the area.
OnKnobDragOnly	bool	The position will only be updated when the Knob gets dragged, otherwise clicking on the control will move the knob to the position.

UseExcclusiveMode	bool	Enabling the option prevents some controls (e.g. Slider) from loosing the touch when leaving the node area.
DraggedNode	Candera::AbstractNodePointer	Defines the node to move along the track, to determine the hit area and to determine the position change relative to its center.
Receivers	ProcessValueBehavior ArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Action on Value

Passes a Process Value to a Condition Behavior and if the response is positive, invokes an Action behavior.

Example Usage

- Thermometer Example

Common Properties

Property Name	Type	Description
Condition	ConditionBehavior*	The ConditionBehavior that TriggerBehavior passes a value to and expect a response from to see if Action needs to be invoked.
Actions	ActionBehaviorArrayProperty	The set of ActionBehaviors that TriggerBehavior invokes in the event that it receives a positive response form Condition.
Consume Event	bool	Set this flag to false if the event should not be consumed by the trigger. By default it is set to true and if the trigger evaluates to true the event will not be routed to any other behavior.

Value

ValueBehavior sends a value to any behavior derived from ProcessValueBehavior type. It supplies an input to process value behaviors via event.

Example Usage

- Thermometer Example
- Format String Example
- Interpolate Value Example
- Move Node Example
- Set Alpha Value Example

- Set Position Example
- Set Rotation Example
- Switch Image Example
- Set Scale Example

Common Properties

Property Name	Type	Description
Minimum	FeatStd::Optional< FeatStd::Variant >	Minimum of the Variant value. If Minimum is given as greater than Maximum then the values are internally swapped.
Maximum	FeatStd::Optional< FeatStd::Variant >	Maximum of the Variant value. If Maximum is given as smaller than Minimum then the values are internally swapped.
IntervalHandling	IntervalHandling::Enum	Select how the behavior should react when the minimum or maximum limit is exceeded. *Possible values: Limit, Cycle, Ignore*
AcceptValueEvent	bool	Set this flag to true to make the value changeable by events/actions.
BroadcastProcessValueEvent	bool	Set this flag to true to broadcast ProcessValue event even if value did not change.
DispatchStrategy	CgiStudioControl::EventDispatchStrategyType::Enum	By default the event that indicates that this value behavior has been changed (ValueChangedEvent) is dispatched only on the node to which the value behavior is attached (CgiStudioControl::EventDispatchStrategyType::Direct). To change this you have to select a different dispatch strategy. *Possible values: Direct, Broadcast, Bubble, Tunnel, DedicatedBehavior*
DedicatedBehavior	Candera::Behavior*	The dedicated behavior that will receive ValueChangedEvent when DedicatedBehavior dispatch strategy is selected. *This property is only visible if DispatchStrategy is set to "DedicatedBehavior".* *This property can be set in the right side of the Scene Tree panel.*
TargetNode	Candera::AbstractNodePointer	The node on which the for which the EventDispatchStrategy will be applied. If it is not set then the Node will be taken instead. *This property is only visible if DispatchStrategy is set to "Direct", "Broadcast", "Bubble" or "Tunnel".*
Variant	Candera::Variant	Specifies the type and the value to pass onto Process Value Behavior.
Receivers	ProcessValueBehavior ArrayProperty	The process value behaviors that will receive the value as next in the value processing chain. *This property can be set in the right side of the Scene Tree panel.*

Value Generator

The Value Generator is a demo behavior. It allows you to configure minimum and maximum values, period, and update interval, and is used for UI verification and simulation purposes. It appears in the tool when CONTROLS_DEMO_BEHAVIORS_ENABLED is enabled via CMake.

> Related page: Control Behaviors Flags

Common Properties

Property Name	Type	Description
GeneratorFunction	Enum	The type of function used to generate values (linear, sin, etc.)
Minimum	Float	The minimum for the generated values.
Maximum	Float	The maximum for the generated values.
OffsetMs	Int	The time offset where the function is evaluated.
PeriodMs	Int	The time period after which the generated values repeat.
SamplerateMs	Int	The update rate of the generated value.
GenerateValues	bool	Set this flag to true to generates values at sample rate. If set to false, no values are generated.
Event Dispatch Strategy	EventDispatchStrategyType::Enum	The way the event gets sent. Possible values: Direct, Broadcast, Bubble, Tunnel, DedicatedBehavior
Dedicated Behavior	Candera::ProcessValueBehavior*	The dedicated process value behavior that will receive the change value event. This property can be set in the right side of the Scene Tree panel.
Target Node	Candera::AbstractNodePointer	The target node to which the events are routed. If this property is not set, the event will be routed to the node of the behavior.

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