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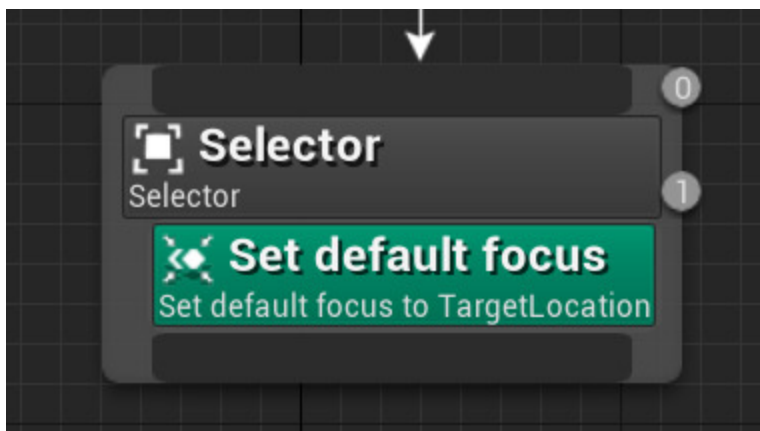
Behavior Tree Node Reference: Services

Reference information for the Behavior Tree Service nodes.



Services attach to [Composite](#) or [Task](#) nodes and will execute at their defined frequency as long as their branch is being executed. These are often used to make checks and to update the Blackboard. These take the place of traditional Parallel nodes in other Behavior Tree systems.

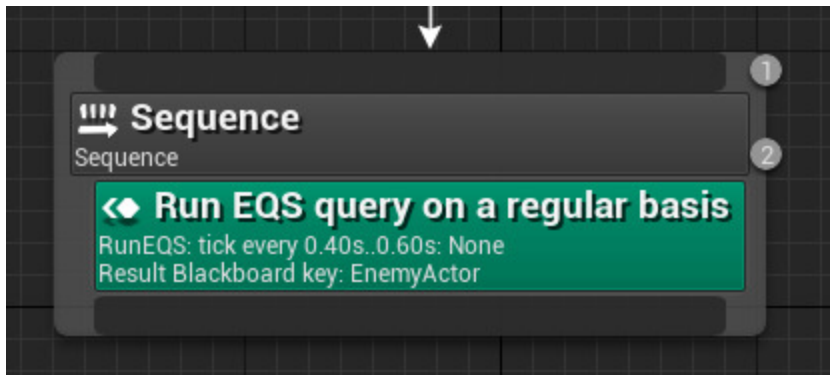
Default Focus



The **Default Focus** creates a shortcut to accessing an Actor in your **Blueprints** and Code by setting the focus of the AI Controller. By setting the focus of the AI Controller to an Actor, you can directly access it from the AI Controller instead of accessing a Blackboard key.

Property	Description
Blackboard Key	This takes in an Actor Key (an Object Key with its base class set to Actor) to be quickly referenced by the AI Controller using <code>GetFocusActor</code> .
Node Name	The name the node should display in the Behavior Tree graph.

Run EQS

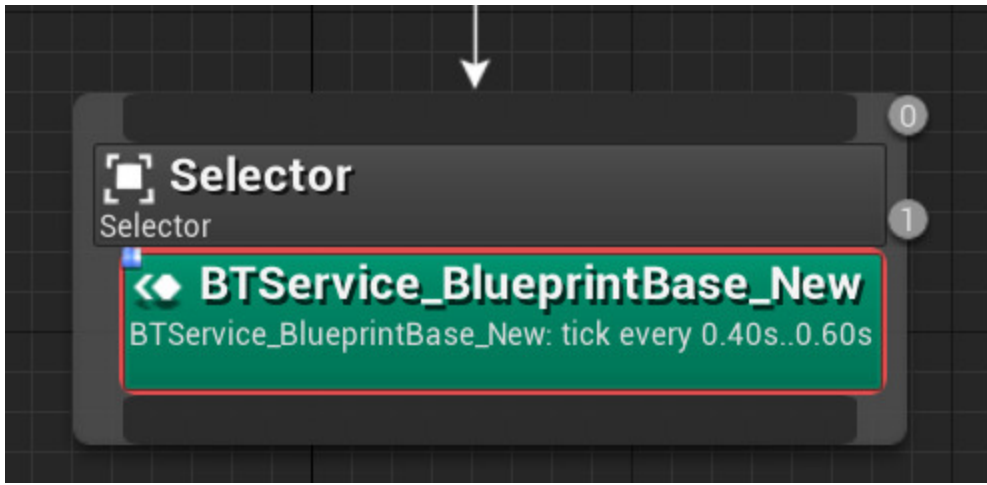


The **Run EQS** Service node can be used to regularly execute an [Environmental Query System \(EQS\)](#) template at assigned intervals and can update a specified Blackboard Key.

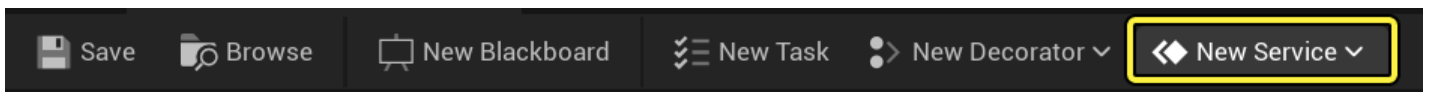
Property	Description
Query Template	The EQS asset to run.
Query Config	Optional array of additional parameters to include in the query.
EQSQuery Blackboard Key	Option to use a Blackboard Key that stores an EQS Query Template instead of a specified EQS Query Template.
Run Mode	<ul style="list-style-type: none"> • Single Best Item: Pick the first item with the best score.

Property	Description
	<ul style="list-style-type: none"> • Single Random Item from Best 5%: Pick a random item with a score <input type="text" value="95%"/> to <input type="text" value="100%"/> of max. • Single Random Item from Best 25%: Pick a random item with a score <input type="text" value="75%"/> to <input type="text" value="100%"/> of max. • All Matching: Get all items that match conditions.
Update BBO on Fail	Updates the Blackboard when the EQS query fails.
Blackboard Key	The Blackboard Key the Service will write results into - either an FVector or an Actor.
Interval	Defines the time span between subsequent ticks of the Service.
Random Deviation	Adds a random range value to the Service's Interval value.
Call Tick on Search Start	Call Tick Event when Task search enters this node (Search Start will be called as well).
Restart Timer on Each Activation	If set, the next Tick time will be always reset to Service's Interval value when the node is activated.
Node Name	The name the node should display in the Behavior Tree graph.

Custom Services



You can create **Services** by clicking the **New Service** button from the toolbar that contains Blueprint logic and (or) parameters.



Blueprint Services are less performant than C++ Services. If optimization is a concern, you may want to use native Services.

The following properties are also available when creating a Service.

Property	Description
Show Property Details	Shows detailed information about properties when enabled.
Show Event Details	Shows detailed information about implemented Events when enabled.
Node Name	The name the node should display in the Behavior Tree graph.
Interval	Defines the time span between subsequent ticks of the Service.
Random Deviation	Adds a random range value to the Service's Interval value.

Property

Description

Call Tick on Search Start	Call Tick Event when Task search enters this node (Search Start will be called as well).
Restart Timer on Each Activation	If set, the next Tick time will be always reset to Service's Interval value when the node is activated.