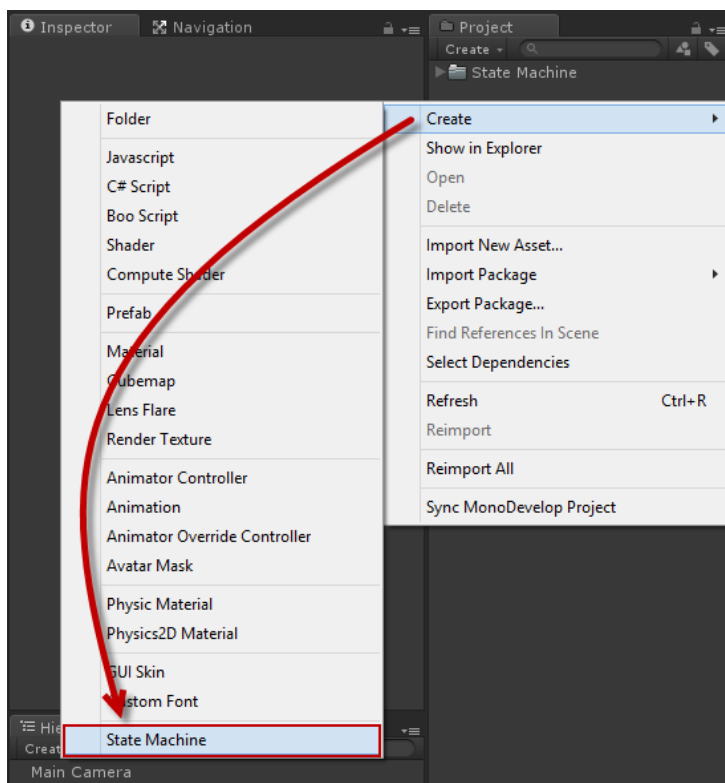


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How to create a state machine?

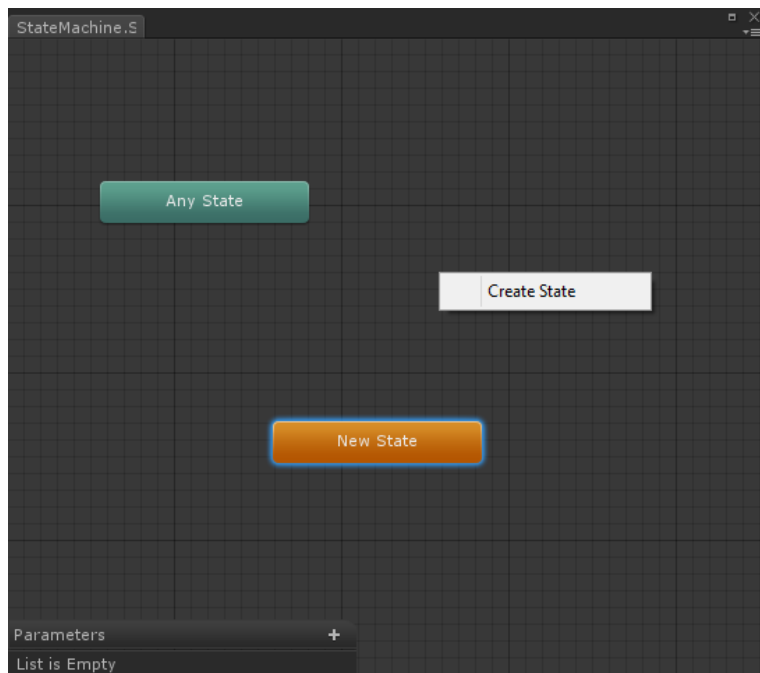


The creation of a new State Machine works the same way as you create an Animator Controller.

Just right click in the Project window, go to Create ➡ State Machine.

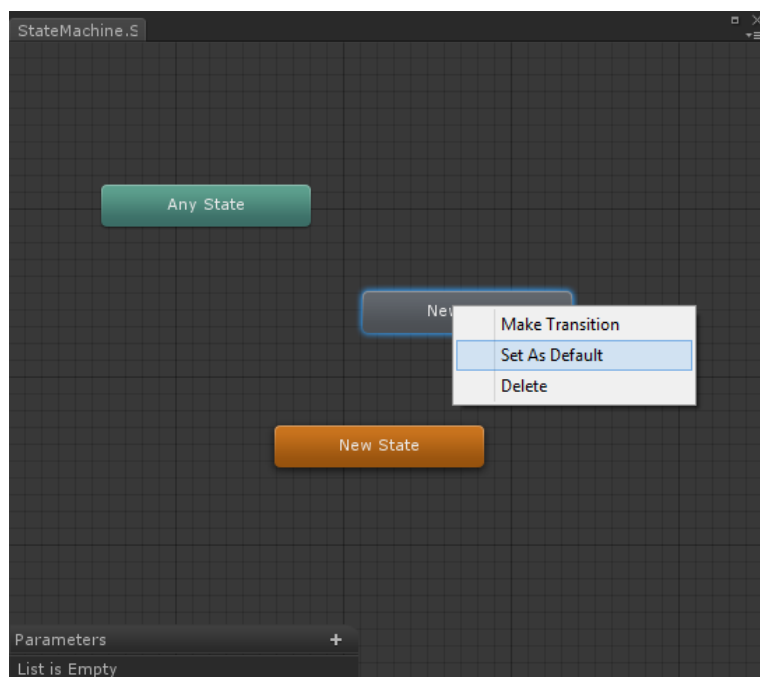
You can now rename the state machine and double click it to open the Graph-Window. In the Graph-Window you can add states, that will execute actions and make transitions from one state to another based on conditions.

How to create a state?



To create a new state: Click right on an empty place in the Graph-Window.

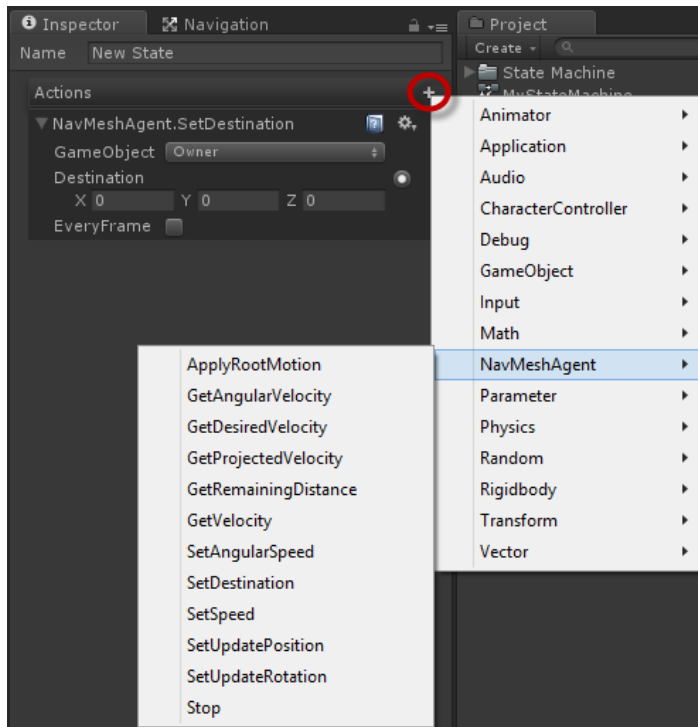
Any State is created automatically and is executed parallel. This means that you can not create a transition to Any State, however it is possible to make a transition from Any State. The conditions added in the transition from Any State will override the conditions of a default state transition. The yellow colored state is the starting state and can be changed by clicking right on the state and selecting „SetAsDefault“.



Change the starting state by setting it as default.

How to add actions?

To add actions to a state, select the state and you will see a list of actions in the Inspector. This list is empty at the beginning. Click on the plus icon and a drop down menu will be shown. The actions are in order by their category.

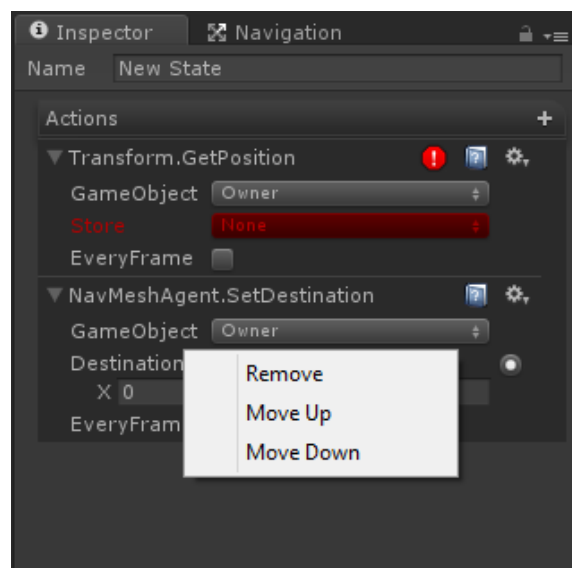


The action fields have tooltips, that will describe what parameters to use.

You can read more about the action clicking on the blue book with the question mark. This will open up the unity scripting reference link.

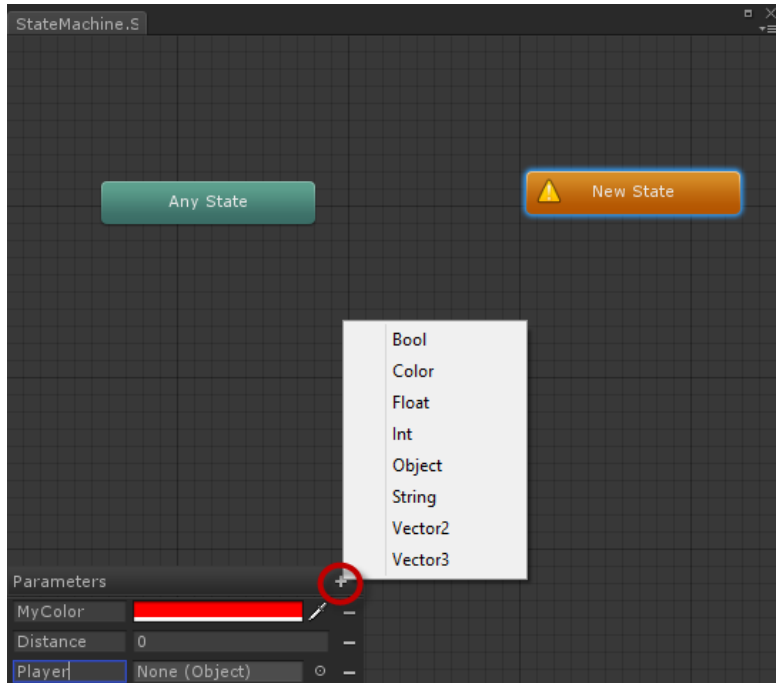
Actions that are not properly configured will show a warning icon and the missing configuration field will be marked red.

To reorder the action list, please click right on the action and a drop down menu will popup.



Global parameters

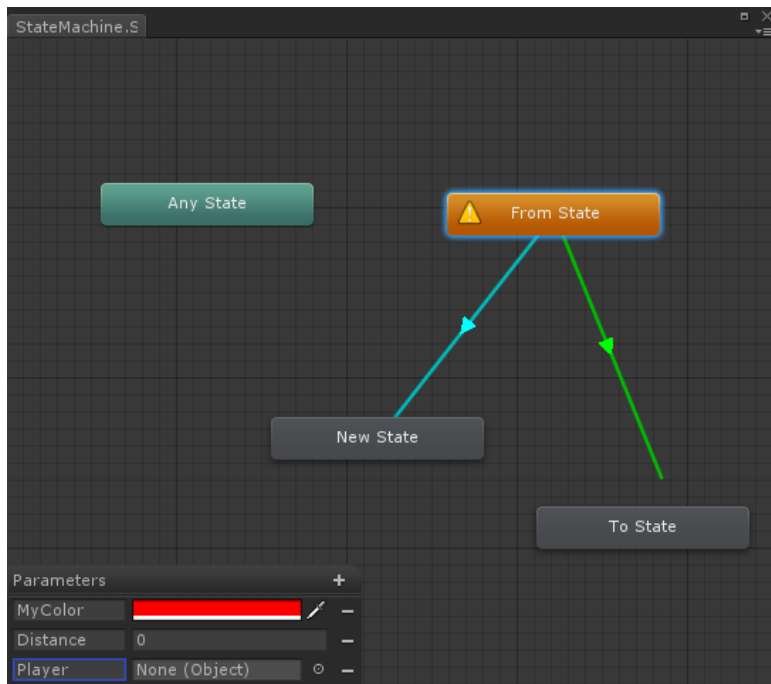
Global parameters are used to save a referenced parameter value. If you want to use the same parameter value in different states, use global parameters. Some actions require a global parameter to store the result of the action.



To create a new global parameter, click on the plus icon and select the type of the parameter.

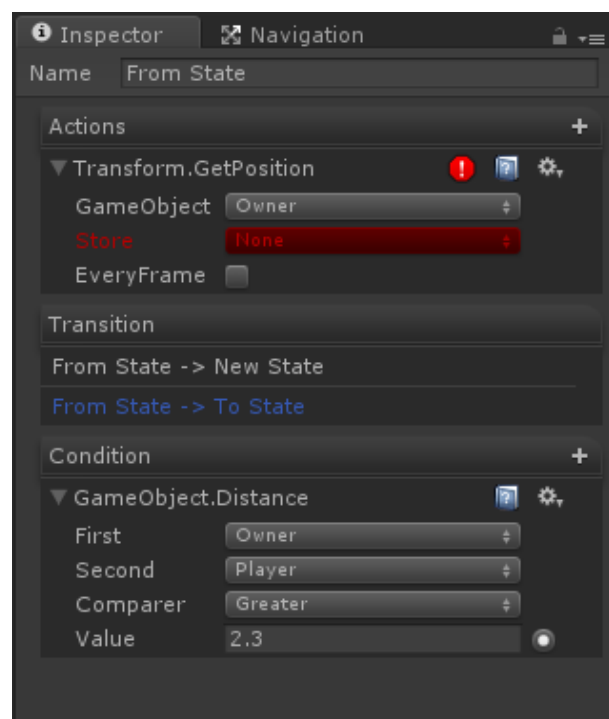
How to make a transition?

To make a transition from one state to another, click right on the state and select "Make Transition". A line from your state to the mouse position will be shown. Click on the state, which you would like to transition to. All transitions are displayed as lines with an arrow, so you know where your transitions belong to. Furthermore you can see the transition of a state in the Inspector. Those transitions can be selected to add conditions.



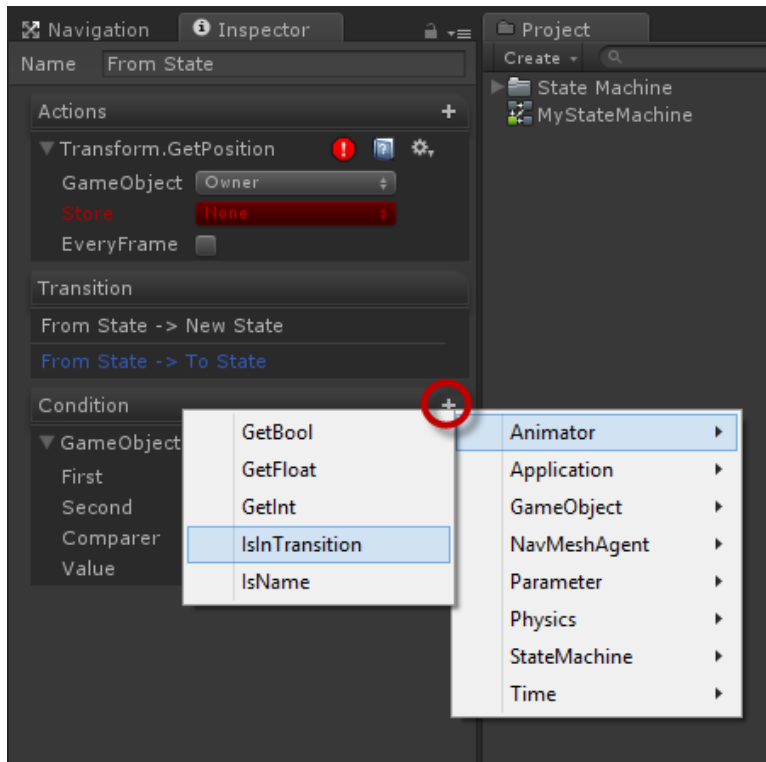
Click right on a state to make a transition.

Select the transition to add conditions to it.



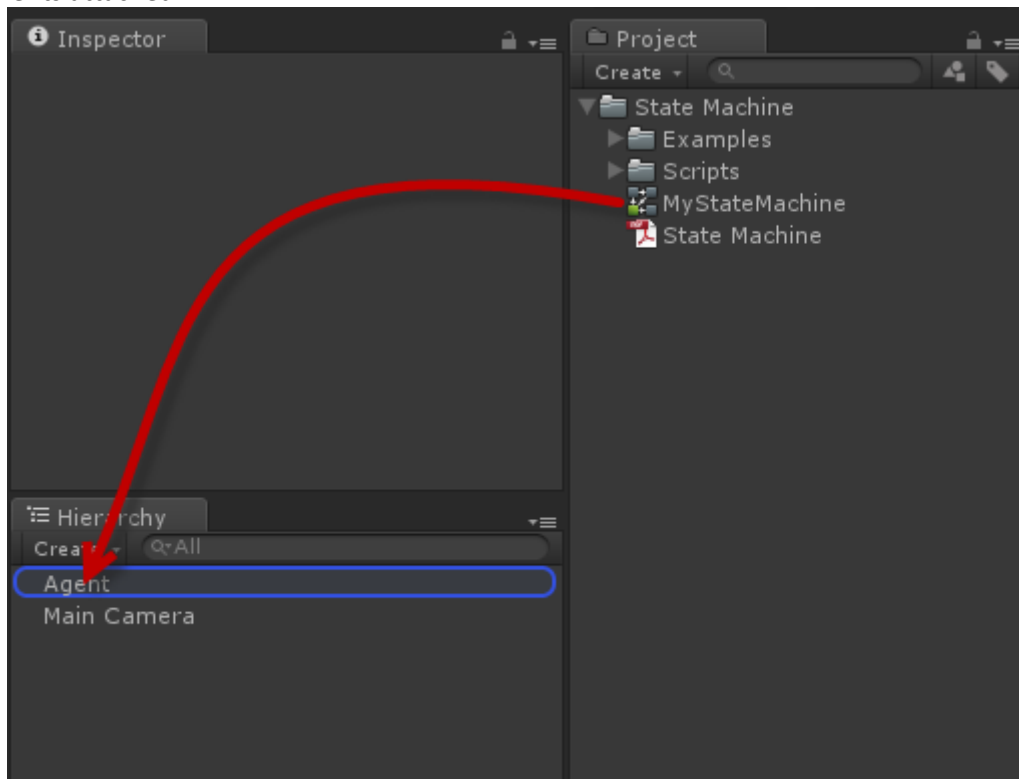
How to add a condition ?

Conditions can be used to validate a transition from one state to another. To add a new condition, select the transition and click on the plus button in the conditions list. A drop down menu will popup, where you can select a condition. Only if all conditions in this list are true, the state machine will transition to the new state. Some conditions have an equals field. This is used to check if the result equals true or false.



Execution

To execute a state machine, drag and drop your state machine to the “owner”. If you are using NavMeshAgent, Rigidbody or CharacterController actions, please ensure that your agent has those components attached.



Video tutorials

Overview:

https://www.youtube.com/watch?v=DV8txie0JE4&list=UURMrFd9EBHo4Z-srjw_khyQ

Random Walk:

https://www.youtube.com/watch?v=q2jPWOOMFzk&list=UURMrFd9EBHo4Z-srjw_khyQ

Meele Attack:

https://www.youtube.com/watch?v=8WtHdx6i16U&list=UURMrFd9EBHo4Z-srjw_khyQ

Player Animation:

https://www.youtube.com/watch?v=O4ko6SzFtmM&list=UURMrFd9EBHo4Z-srjw_khyQ

Script Integration:

https://www.youtube.com/watch?v=_VOuRvCxxhQ&list=UURMrFd9EBHo4Z-srjw_khyQ

Switch State Machine:

https://www.youtube.com/watch?v=LIKI25zO9PA&list=UURMrFd9EBHo4Z-srjw_khyQ

Contact

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