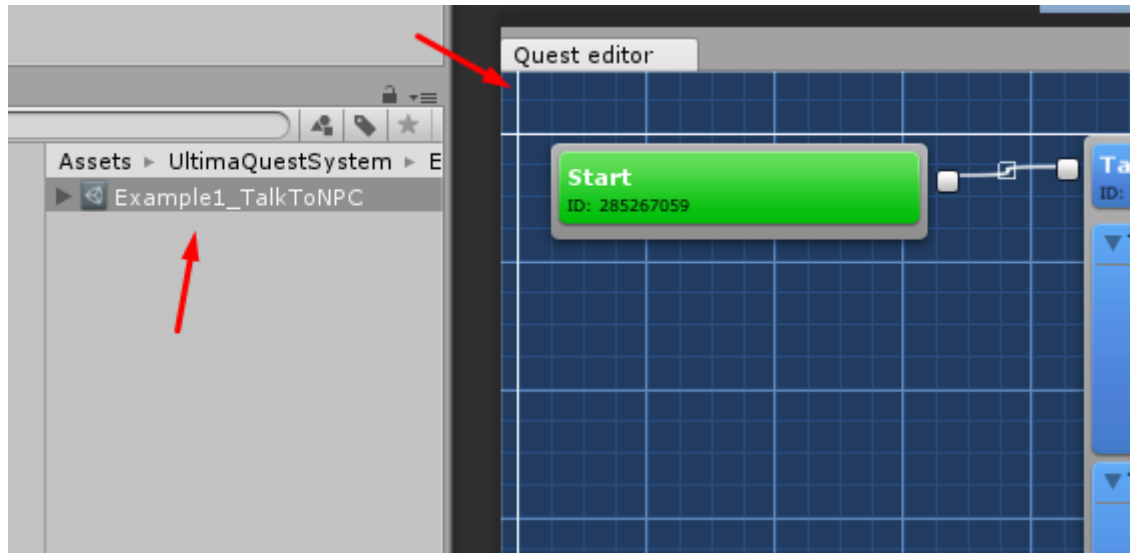


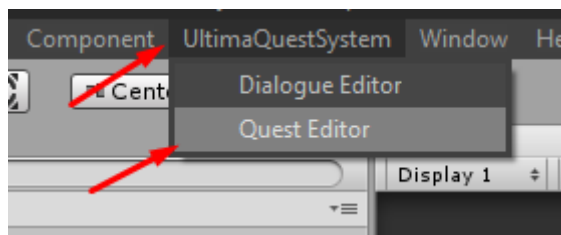
Quest Editor

In this chapter we'll review how to work with the quest editor. There are several ways how to open the editor.

- Double click on **ScriptableObject** of the quest

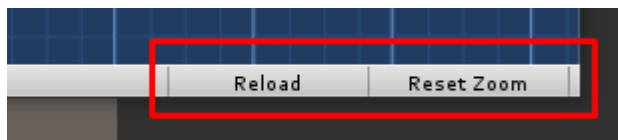


- Via upper menu: **UltimaQuestSystem > Quest Editor**



Status string

In the lower right corner there are two buttons:

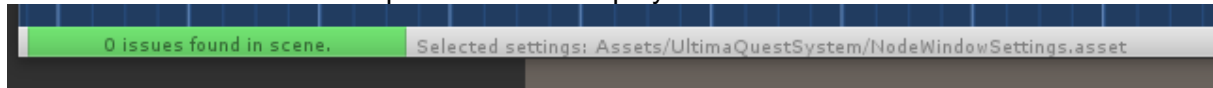


Buttons	Action
Reload	Rebuilds and reloads data
Reset Zoom	Zooms back to original state

Also above the buttons the editor displays prompts for current events, for example, when you change the scale, the editor displays the current scale value for a short time.



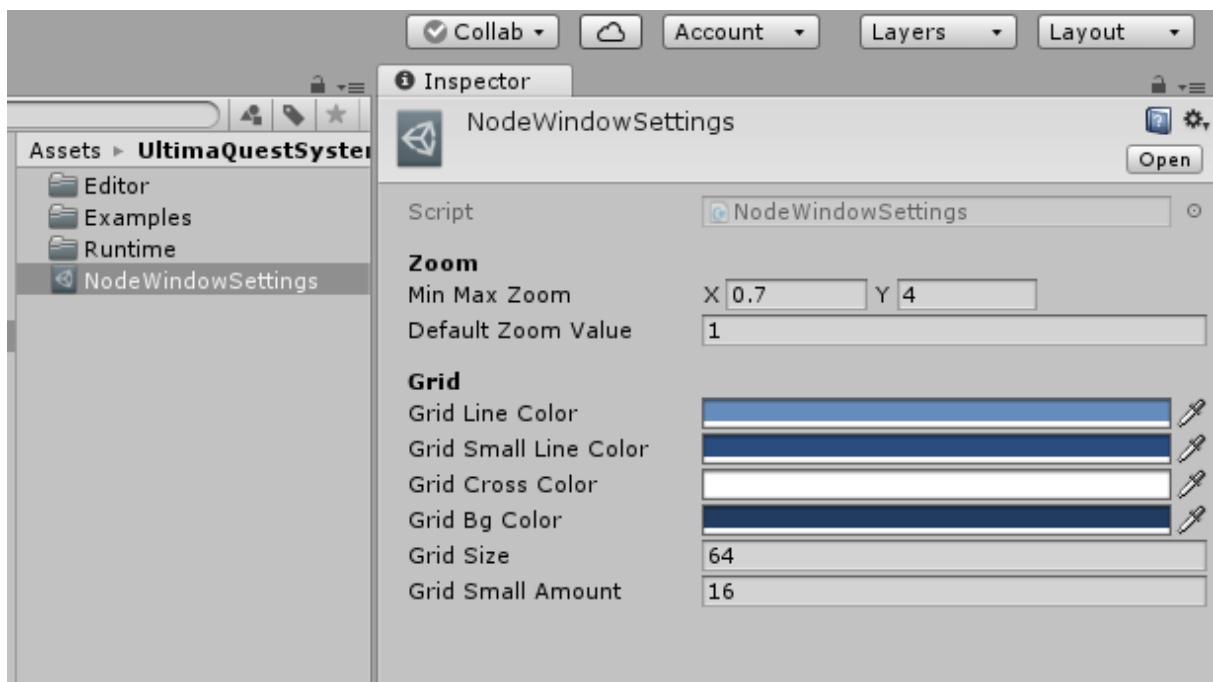
In the bottom left and middle part the editor displays the current state of the editor.



On the left side the information about errors in the work and logic of the editor is displayed. If there are no errors, this part is highlighted in green.

Further in the middle the path to the editor settings is displayed. This file contains the visual settings for the canvas tuning.

Visual tunings



- **Zoom:**

Min Max Zoom	Minimum and maximum possible values for canvas scaling
Default Zoom Value	The default value for resetting the scale

- **Grid:**

Grid Line Color	Large square grid line color
Grid Small Line Color	Small square grid line color
Grid Cross Color	Color of the central cross indicating the center of the canvas
Grid Bg Color	Canvas background color
Grid Size	Grid size (large square)
Grid Small Amount	Internal grid size (small square)

The changed settings will take effect after you restart the editor window or click the **Reload** button.

Navigation

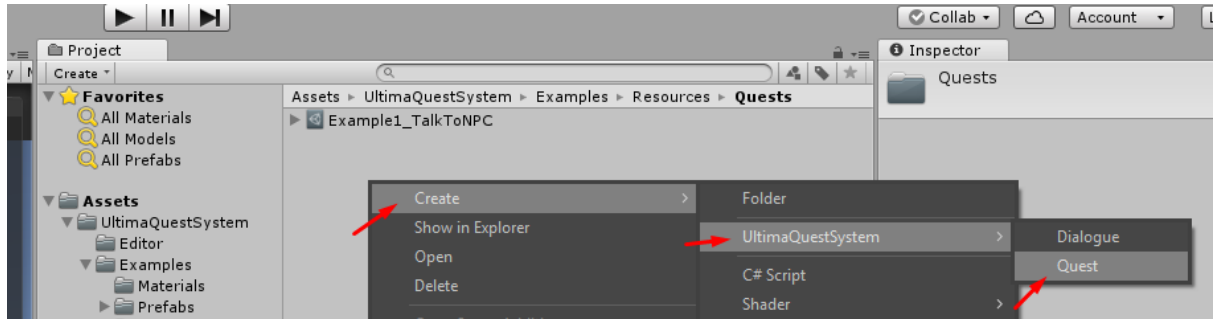
Navigation in the editor consists mainly of the events performed by the mouse.

Event	Action
The left mouse button click on the node	Node highlight
The right mouse button click	Context menu for creating nodes
Click and hold the middle button of the mouse	Moving through canvas
Click and hold the left button of the mouse on the canvas	Several node highlight
Click and hold the left button of the mouse on the node	Node moving
Click and hold the left button of the mouse + hold down the left CTRL button	Creating of comment
Mouse wheel scroll	Viewport canvas Zoom

Creation of the quest

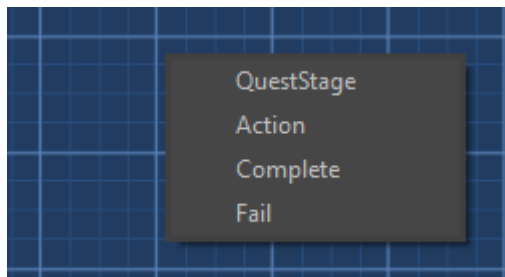
To create a new quest just open the desired menu in the project hierarchy.

Create > UltimaQuestSystem > Quest



Context menu

After clicking the right button of the mouse the editor will display a context menu that will allow you to create new nodes for building quest logic.

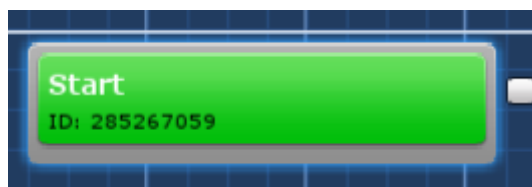


After the necessary element was selected, a necessary node is created in this place. All created nodes can be deleted via the context menu.

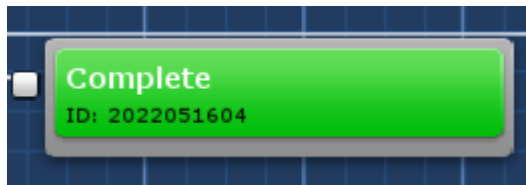
Nodes

The quest by default contains 3 nodes that always exist and cannot be deleted.

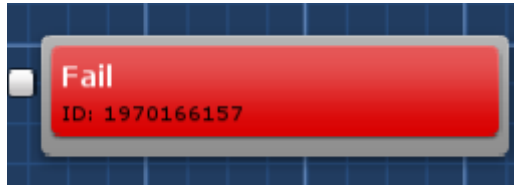
- **Start** - is responsible for the initialization of the quest, the starting point of the quest



- **Complete** - reports on the completion of the quest

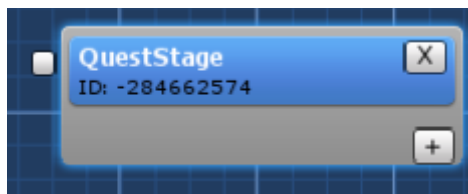


- **Fail** - informs about the failure of the quest

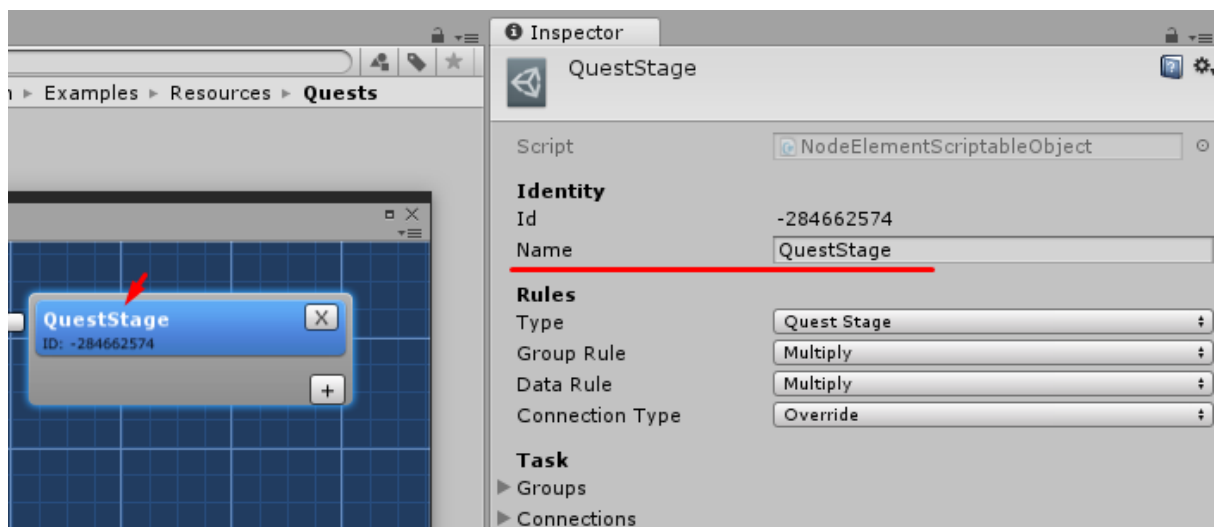


The quest editor contains additional 2 types of nodes.

- **QuestStage** - is a quest condition



This node has a unique ID, as well as a name that can be changed in the inspector.

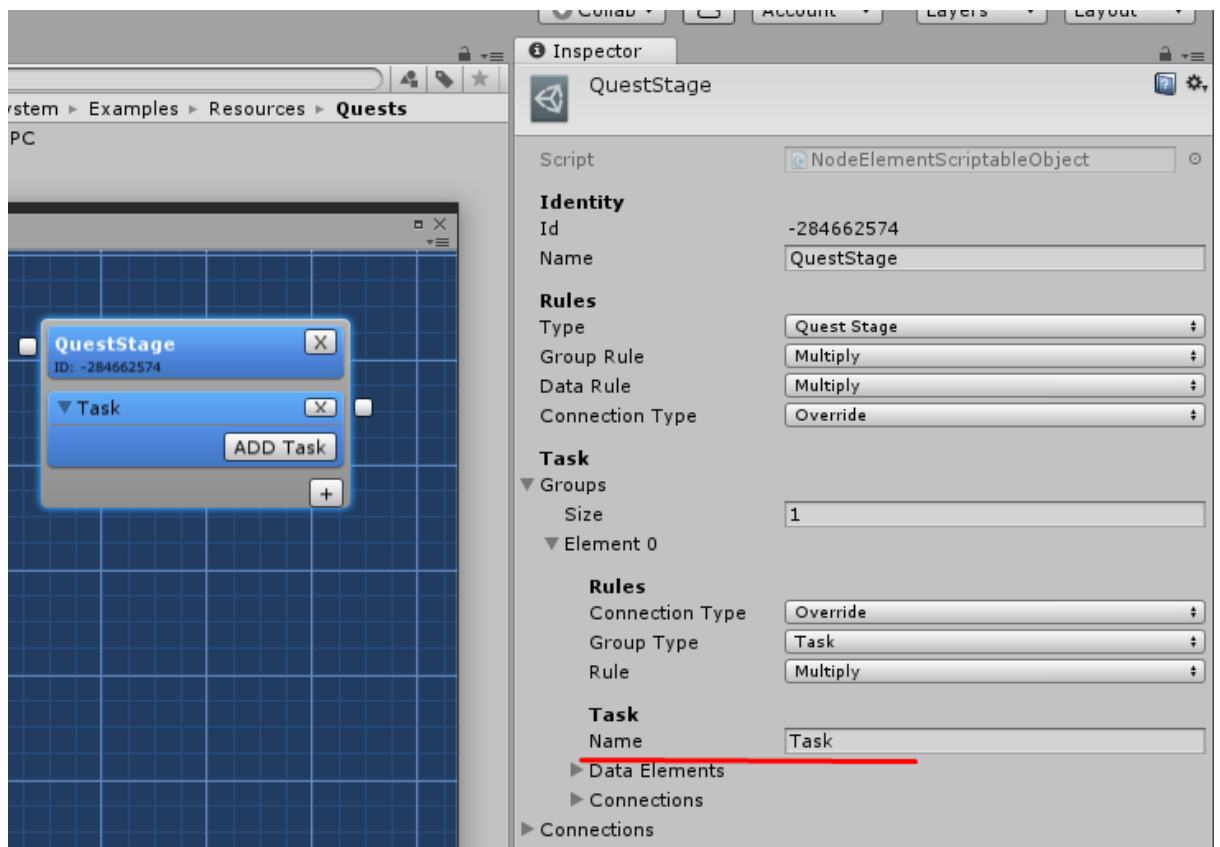


When you point the node by the mouse, the “X” button appears next to the name, and removes the node when clicked.

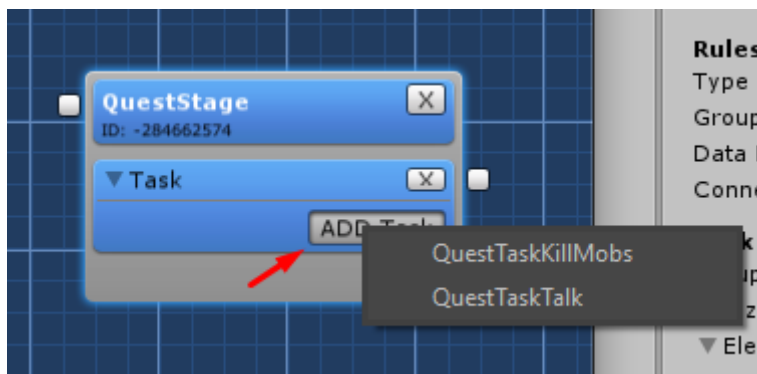
Also in the selection state the node will display the “+” button which will display a context menu for adding a task block when clicked.



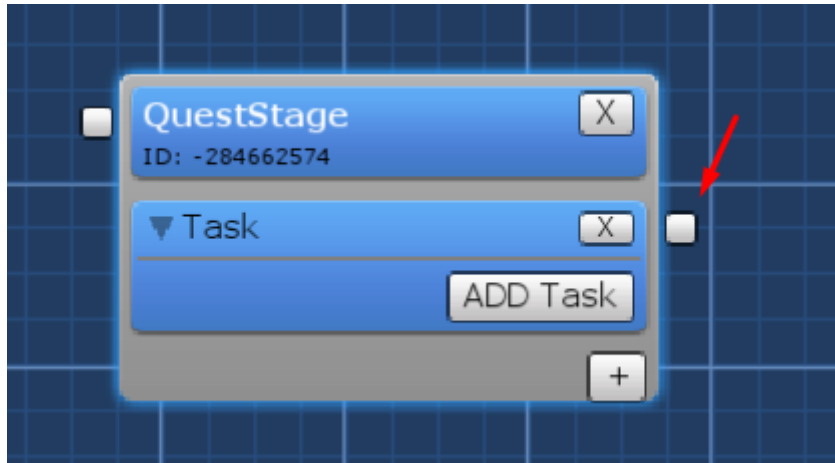
The task block also has a name and a delete button for the entire block. You can change the block name in the inspector.



The block contains the “ADD Task” button inside it which adds the necessary conditions for the execution of the current block of tasks. When you click on the button, a context menu appears where you can select a condition.



Also each block has an output pin for logic connection

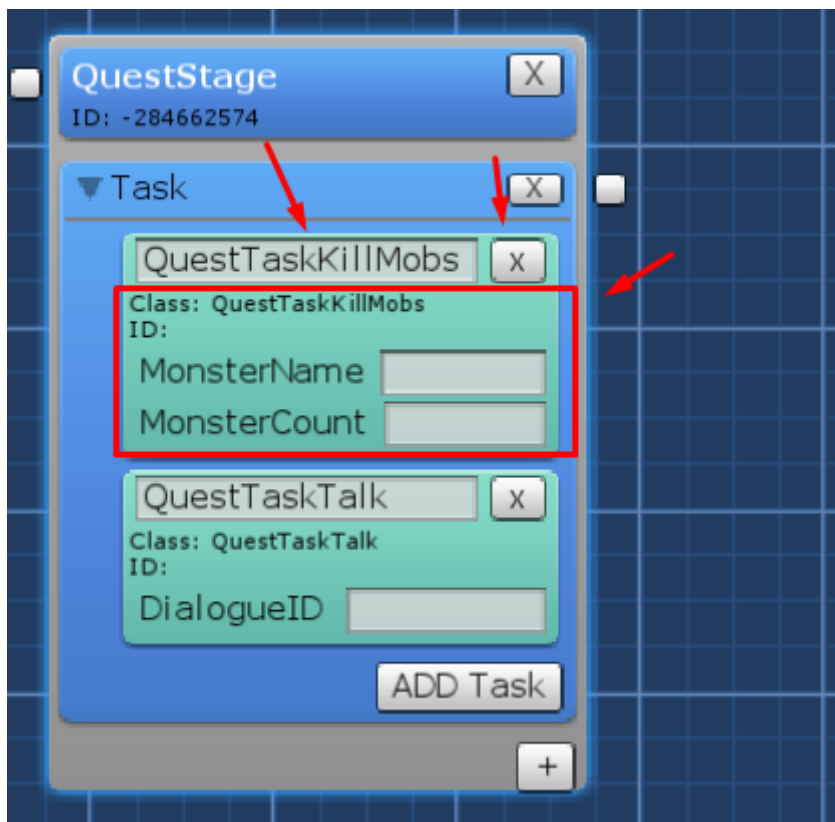


This pin will give a signal to the connected node only if the entire task block is executed.

Condition - class, behavior model that will process your behavior in the current task block.

There can be an unlimited amount of such conditions.

A condition consists of a condition name, a condition removal button, and a condition configuration body.



The list of conditions in the context menu is built dynamically and can be expanded. To do this you need to create a script inherited from **QuestTask** with the **IEventListener** interface.

```

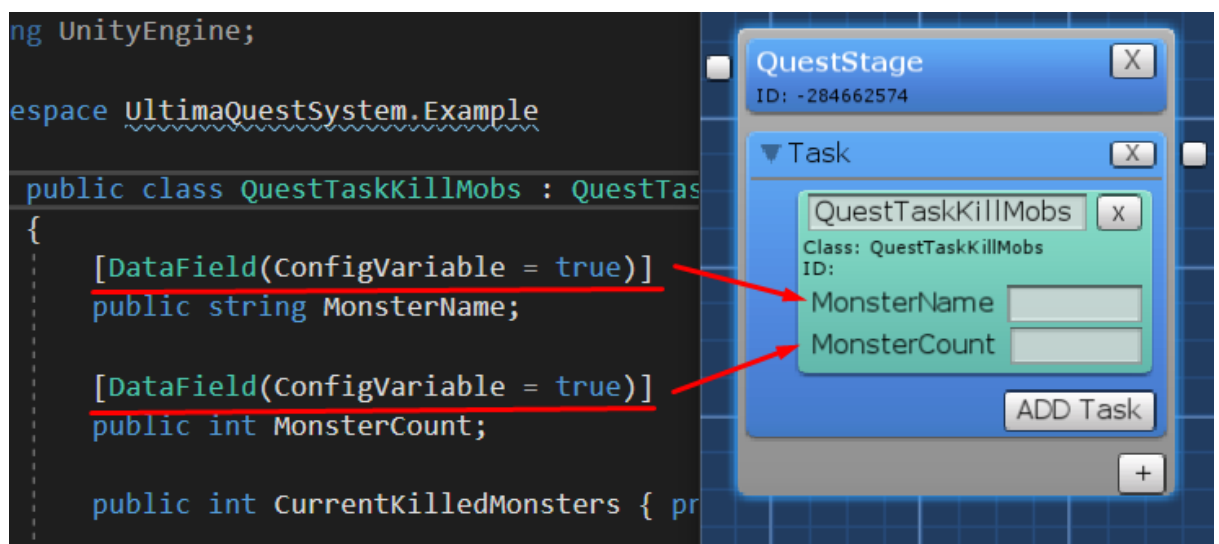
1 using System;
2 using System.Collections;
3 using System.Collections.Generic;
4 using UnityEngine;
5
6 namespace UltimaQuestSystem.Example
7 {
8     public class QuestTaskKillMobs : QuestTask, IEventListener<EventDataMonsterKill>
9     {
10         [DataField(ConfigVariable = true)]
11         public string MonsterName;
12
13         [DataField(ConfigVariable = true)]
14         public int MonsterCount;
15
16         public int CurrentKilledMonsters { private set; get; }
17
18         public override bool Check()
19         {
20             return CurrentKilledMonsters >= MonsterCount;
21         }
22
23         void IEventListener<EventDataMonsterKill>.HandleEvent(EventDataMonsterKill eventData)
24         {
25             if (MonsterName == eventData.MonsterName)
26                 CurrentKilledMonsters++;
27         }
28     }
29 }

```

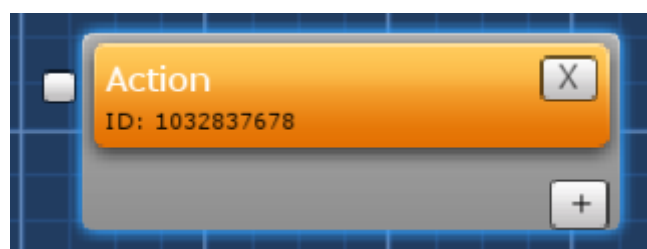
The **Check ()** method implements the logic of condition fulfillment or not.

The **HandleEvent (EventData event)** method processes the event linked to this condition.

The special attribute **[DataField]** allows you to put to editing in the node field.



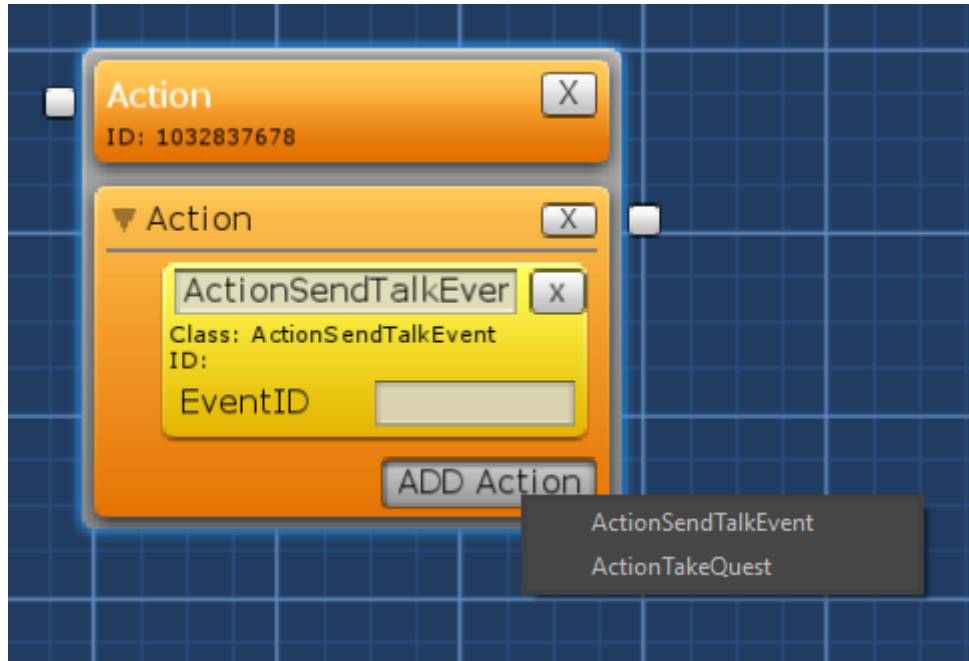
- **Action** - node of the event.



This node, like a **QuestStage**, has the name of the node, the delete button “X” and the addition of the block “+”.

In this node there can be only one block of tasks but there can be an unlimited amount of internal events.

After clicking on the “**ADD Action**” button a context menu with a list of available events is displayed in the block.



An event consists of a name, an “X” delete button and an event body.

The list of events in the context menu, as well as in the **QuestStage**, is built dynamically. To add a new event to the list, you must create a new script inherited from **UltimaActionBase**.

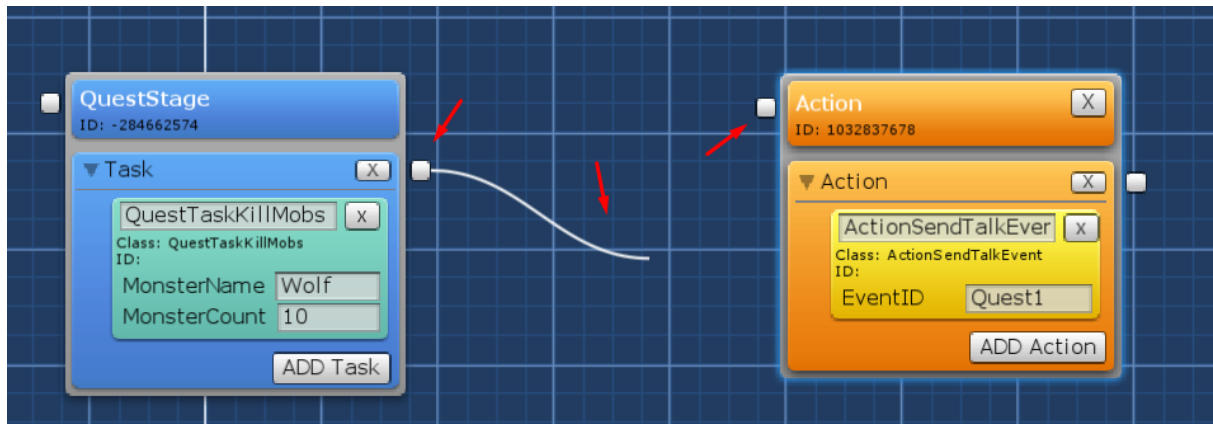
```
1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4
5 namespace UltimaQuestSystem.Example
6 {
7     public class ActionSendTalkEvent : UltimaActionBase
8     {
9         [DataField] public string EventID;
10
11         public override void ExecuteAction()
12         {
13             UltimaQuestSystem.SendEvent(new EventDataTalk(EventID));
14         }
15     }
16 }
```

The **ExecuteAction ()** method will be executed when the signal arrives at the node.
The **[DataField]** attribute allows you to bring this field to the editor.

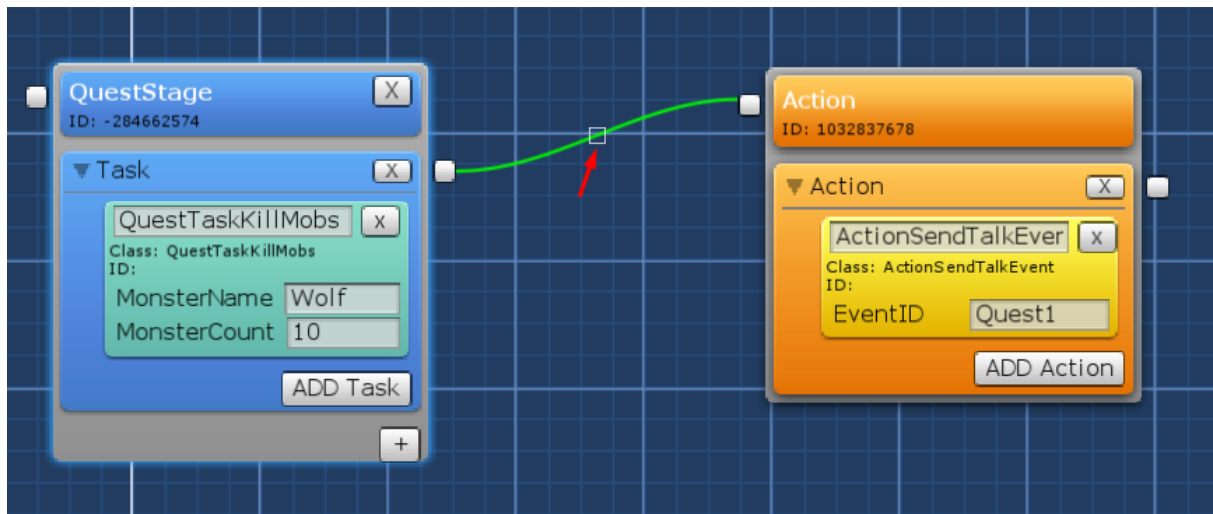
Connections

Nodes with other nodes form connections that build logic and set the quest's behavior.

To create a connection, you must click on the output pin at the node, and a line showing the connection will appear and connect this line to the input pin of the other node.



If the connection is successfully created, the line is fixed and a square is displayed over the line.

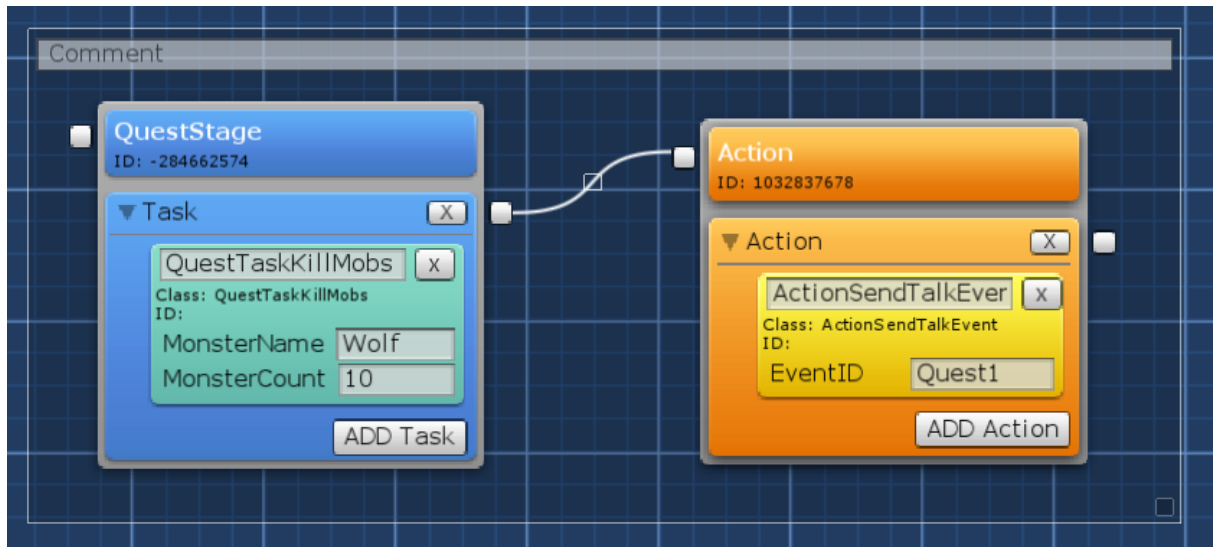


This small square is a connection removal button. The connection will also be automatically deleted if one of the binding nodes is deleted.

While pointing, as well as the selection, the node and all output connections will be automatically highlighted in green.

Comment block

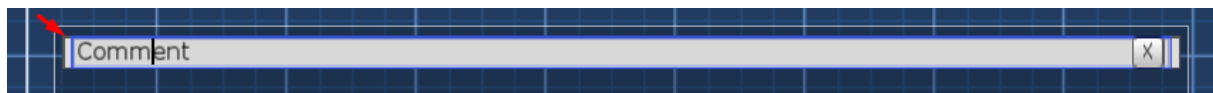
This block is an informative visual tool. It allows you to add comments to the developer on the desired zone.



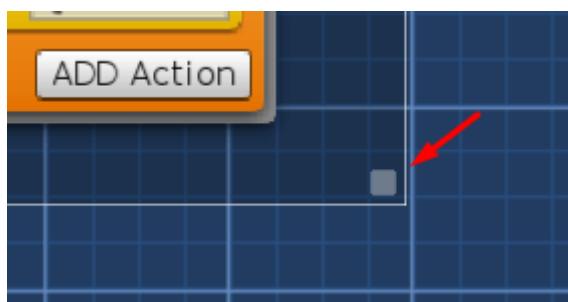
This block can be created by pressing and holding the left button of the mouse, while the **CTRL** button must be pressed on the keyboard.

The block contains a header zone, when you point on it, the "X" button is highlighted and when you press the button, this block is deleted.

A comment can be edited by clicking on the text in the block header.



And also the size of the block can be changed, for this in the lower right corner there is a small square, when pointing on it, it is highlighted. When you click and hold the left button of the mouse on this square, you can change the size of this block.



Also to move this block you need to press and hold the left button of the mouse anywhere on the block except for the title and resize square.