

# Align with MAFFT Element

Originally, MAFFT is a multiple sequence alignment program for unix-like operating systems. Currently, Windows version is also available.



MAFFT is used as an external tool from UGENE and it must be installed on your system. To learn more about the external tools, please, read main [UGENE User Manual](#).

MAFFT is used as an external tool from UGENE and it must be installed on your system. To learn more about the external tools, please, read main [UGENE User Manual](#).

## Parameters in GUI

Parameter	Description	Default value
<b>Offset</b>	Works like gap extension penalty.	0
<b>Gap open penalty</b>	Gap open penalty.	1.53
<b>Max iteration</b>	Maximum number of iterative refinement.	0
<b>Tool path</b> (default)	Path to the ClustalW tool. The default path can be set in the UGENE application settings.	default
<b>Temporary directory</b>	Directory to store temporary files.	default

## Parameters in Workflow File

**Type:** mafft

Parameter	Parameter in the GUI	Type
<b>gap-ext-penalty</b>	<b>Offset</b>	<i>numeric</i>
<b>gap-open-penalty</b>	<b>Gap open penalty</b>	<i>numeric</i>
<b>iterations-max-num</b>	<b>Max iteration</b>	<i>numeric</i>
<b>path</b>	<b>Tool path</b>	<i>string</i>
<b>temp-dir</b>	<b>Temporary directory</b>	<i>string</i>

## Input/Output Ports

The element has 1 *input port*:

**Name in GUI:** *Input MSA*

**Name in Workflow File:** in-msa

**Slots:**

Slot In GUI	Slot in Workflow File	Type
<b>MSA</b>	<b>msa</b>	<i>msa</i>

And 1 *output port*:

**Name in GUI:** *Multiple sequence alignment*

**Name in Workflow File:** out-msa

**Slots:**

Slot In GUI	Slot in Workflow File	Type
<b>MSA</b>	<b>msa</b>	<i>msa</i>