


# 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](#).

**Element type:** mafft

## Parameters

Parameter	Description	Default value	Parameter in Workflow File	Type
Offset	Works like gap extension penalty.	0	gap-ext-penalty	numeric
Gap open penalty	Gap open penalty.	1.53	gap-open-penalty	numeric
Max iteration	Maximum number of iterative refinement.	0	iterations-max-num	numeric
Tool path (default)	Path to the ClustalW tool. The default path can be set in the UGENE application settings.	default	path	string
Temporary directory	Directory to store temporary files.	default	temp-dir	string

## 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
MSA	msa	msa

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
MSA	msa	msa