

# Multiplexer Element

Construct an output data flow using two input data flows a multiplexing rule.

There are the following multiplexing rules:

- 1 to 1 – for every message from the first input data flow it gets only one message from the second input data flow and puts them to the output.
- 1 to many, Many to 1 – for every message from the first input data flow it gets every message from the second input data flow and puts them to the output.
- Streaming mode – puts every message from the first and the second input data flows to the output.

Also see the [Find Substrings at Sequences](#), [Search for TFBS](#) examples with *Multiplexer* element.

## Parameters in GUI

Parameter	Description	Default value
<b>Multiplexing rule</b>	<p>How to multiplex the input data flows.</p> <p>Available values are:</p> <ul style="list-style-type: none"> <li>• 1 to 1</li> <li>• 1 to Many</li> <li>• Many to 1</li> <li>• Streaming mode</li> </ul>	1 to 1
<b>If empty input</b>	<p>Specifies how to multiplex the data if one of input ports produces no data. It can be used for 1 to 1 multiplexing rule.</p> <p>Available values are:</p> <ul style="list-style-type: none"> <li>• Fill by empty values (if one of input ports produces no data, get data from another port only and put them to the output.)</li> <li>• Truncate (if one of input port produces no data, then do not output anything.)</li> </ul>	Fill by empty values

## Parameters in Workflow File

Type: multiplexer

Parameter	Parameter in the GUI	Type
<b>multiplexing-rule</b>	<b>Multiplexing rule</b>	<i>string</i>
<b>empty-input-action</b>	<b>If empty input</b>	<i>string</i>

## Input/Output Ports

The *Multiplexer* has ports but has not slots, because its use the whole data flow.

The element has 2 *input port*.

**Name in GUI:** First input data flow

**Name in Workflow File:** input-data-1

**Name in GUI:** Second input data flow

**Name in Workflow File:** input-data-2

The element has 1 *output port*.

**Name in GUI:** Multiplexed output data flow

**Name in Workflow File:** output-data