

Version 1.3.1, by Giorgio Bianchini

**Description**: Prunes nodes off the tree.

**Module type**: FurtherTransformation

**Module ID**: ffc97742-4cf5-44ef-81aa-d5b51708a003

This module is used to prune a subtree from the tree.

# **Parameters**

### Action

Control type: Drop-down list

**Default value**: Prune selection

#### Possible values:

Prune selection

Keep only selection

This parameter determines whether node(s) that have been selected (either by directly specifying a node, or through an attribute match) are pruned or if everything else is pruned. This is useful, e.g., if you wish to keep just a small part of the tree while pruning everything else.

#### Mode

Control type: Drop-down list

Default value: Single node

#### Possible values:

Single node

Attribute match

This parameter determines whether a single node is pruned, or whether all nodes matching a search criterion are pruned.

### Node

Control type: Node

This parameter determines the node to prune off the tree. If only a single node is selected, then that node is pruned. If more than one node is selected, the last common ancestor (LCA) of all of them is pruned. Nodes are selected based on their Name.

### **Attribute**

Control type: Text box

This parameter determines the attribute that needs to match the search criterion. If the attribute name entered here does not exist in the tree, the module does nothing.

### Attribute type

Control type: Attribute type

Default value: String

#### Possible values:

- String
- Number

This parameter should correspond to the correct attribute type for the attribute that needs to match the search criterion. If the attribute type is incorrect, the module does nothing.

#### Value

Control type: Text box

This text box is used to enter the value that needs to be matched.

# Comparison type (Number)

Control type: Drop-down list

Default value: Equal

#### Possible values:

- Equal
- Smaller than
- Greater than

If the Attribute type of the attribute that is being matched is Number, the module can

match attributes that are equal, smaller than or greather than the specified Value.

# Comparison type (String)

Control type: Drop-down list

**Default value**: Normal

#### Possible values:

- Normal
- Case-insensitive
- Culture-aware
- Culture-aware, case-insensitive

If the <u>Attribute type</u> of the attribute that is being matched is <u>String</u>, this parameter determines how the strings are compared. If the value is <u>Normal</u>, the strings need to match exactly. If the value is <u>Case insensitive</u>, the case of the strings does not matter (e.g. <u>AaBbCc</u> matches both <u>aabbcc</u> and <u>AABBCC</u>). If the value is <u>Culture-aware</u>, the comparison takes into account culture-specific rules of the current display language of the OS (for example, in Hungarian <u>ddzs</u> would match <u>dzsdzs</u>).

### Regex

Control type: Check box

**Default value:** Unchecked

If this check box is checked, string matches are performed using a regular expression. This makes it possible to search for complicated strings.

# Match leaves only

Control type: Check box

Default value: Unchecked

If this check box is checked, only leaves (tips of the tree) are matched, and not internal nodes. Internal nodes will still be pruned appropriately, if the <u>Leave one-child parent</u> check box is unchecked.

### **Position**

Control type: Slider

Default value: 50 %

Range: [ 0 %, 100 % ]

This parameter determines the relative position along the branch leading to the <u>Node</u> at which the pruning is performed. If the value is 0, the node is completely removed from the tree, including the branch that led to it. If the value is 1, The children of the node are removed from the tree, but the branch leading to the node and the node itself are still kept in the same position. If the value is between 0 and 1, the children of the selected node are removed from the tree and the length of the branch leading to the node is multiplied by this value.

### Leave one-child parent

Control type: Check box

**Default value**: Unchecked

If the <u>Position</u> is 0 and the parent node of the selected node had two children (the selected node, which is being removed, and another node), after the pruning, the parent node should be left with a single children (the other node). If this check box is unchecked, the parent node is also removed from the tree, and the other child node is grafted onto the parent's parent, with its branch length incremented by the branch length of the parent.

## Keep pruned node names

Control type: Check box

**Default value:** Unchecked

If this check box is checked, the Names of nodes that have been pruned are kept as the Names of the stumps (where the stump does not already have a name) and stored in an attribute on the tree. The stump is the surviving ancestor of the node that has been pruned.

#### Attribute name

Control type: Text box

**Default value**: UnderlyingNodes

If the <u>Keep pruned node names</u> checkbox is checked, the names of the nodes that descend from a pruned node are stored on the stump in this attribute.

## Control type: Button

This button applies the changes to the values of the other parameters and triggers a redraw of the tree.