Polytomise node

Version 1.0.1, by Giorgio Bianchini

Description: Transforms nodes into politomies.

Module type: FurtherTransformation

Module ID: `19d9a555-07e6-4dac-afc1-d5ffcef35f76`

This module is used to transform a node into a polytomy. It is possible to select either a single node, or to specify a criterion according to which nodes will be transformed into polytomies; this is useful e.g. to collapse nodes with low support values.

Parameters

Mode

Control type: Drop-down list

Default value: Single node

Possible values:

- Single node
- Attribute match

This parameter determines whether a single node is transformed into a polytomy, or whether all nodes matching a search criterion are transformed into polytomies.

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

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.

Node

Control type: Node

This parameter determines the node that will be politomised.

Apply recursively to all children

Control type: Check box

Default value: Unchecked

This parameter determines whether all children of the selected node(s) are transformed into polytomies.
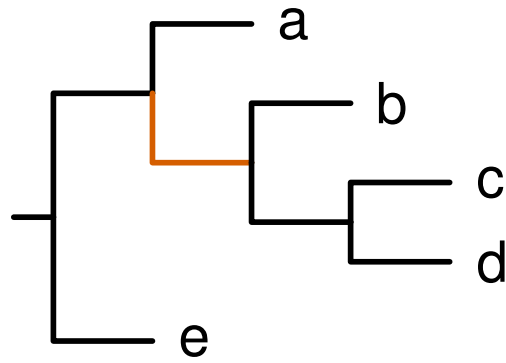
Apply

Control type: Button

Applies the changes to the other parameter values and triggers an update of the tree.

Further information

The module picks the children of the selected node and drafts them on the parent node. For example, consider the tree `((a,(b,(c,d))),e);`:

If the LCA of `b`, `c` and `d` (highlighted in the tree) is selected as the subject of this module, then its two direct children (`b` and `(c,d)`) are pruned off of it and grafted on its parent, so that they become siblings of `a`:
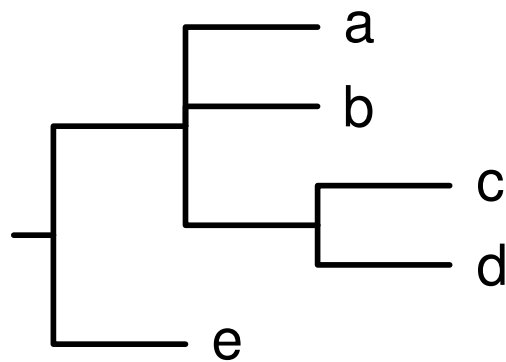
You can imagine this as if the branch leading to the node that is being polytomised were to be compressed until it has length 0.