

Version 1.0.0, by Giorgio Bianchini

Description: Marks a node to be displayed as a "cartoon".

Module type: FurtherTransformation

Module ID: 0c3400fd-8872-4395-83bc-a5dc5f4967fe

This module can be used to "cartoon" a node. This means that the topology below the selected node is hidden, and the node and its descendants are displayed as a triangle.

This module can be enabled manually, or by using the *Cartoon selection* Selection action module.

Parameters

Default cartoon colour

Global setting

Control type: Colour

Default value: #F0F0F0 (opacity: 100%)

This global settings determines the default colour used when this module is enabled. It can be changed from the global settings window accessible from Edit > Preferences... (the change will have no effect on instances of this module that have already been added to the plot, it will only affect new instances). Note that this setting affects both the *Cartoon node* and the *Collapse node* modules.

Node

Control type: Node

This parameter selects the node that should be "cartooned". If only a single node is selected, that node is cartooned. If mode than one node is selected, the last common ancestor (LCA) of all of them is cartooned. Nodes are selected based on their Name. Note that this module will have no effect if the selected node is a tip of the tree.

Equalise lengths

Control type: Check box

Default value: Checked

If this check box is checked, the branch lengths of the descendants of the selected node

are adjusted so that the cartooned node looks like a triangle. Otherwise, the cartoon will have a "spiky" appearance, as the far edge of the shape passes through the points that correspond to the position of each tip in the tree that descends from the selected node.

Fill colour

Control type: Colour

Default value: see Default cartoon colour

The colour to use to fill the triangle when drawing the tree. The default value is determined by the <u>Default cartoon colour</u> global setting. If you have the *Color picker* Menu Action module installed, you can press CTRL+SHIFT+C (CMD+SHIFT+C on macOS) to open a colour picker dialog to choose this colour.

Further information

The difference between this module and the *Collapse node* module is that with this module, the size of triangle is proportional to the number of tips that descend from the cartooned node, while with the *Collapse node* module the size of the triangle is always the same (and corresponds to the size that would be obtained with this module if there were only two descendants.

This module works by adding to the selected node (and its descendants) an attribute whose name corresponds to the Id of this module (i.e.

0c3400fd-8872-4395-83bc-a5dc5f4967fe), and whose value is a representation of the <u>Fill colour</u>. This signals to compliant Coordinates and Plot action modules that the node and its descendants are "cartooned" and should be drawn accordingly.

The same result could be obtained by applying the same attribute using a different module (e.g. *Add attribute* or *Custom script*).