# jInfer TreeRuleDisplayer Module Description

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Target audience: developers willing to extend jInfer, looking for ways to visualize grammars.

Responsible developer:	Michal Švirec
Required tokens:	none
Provided tokens:	cz.cuni.mff.ksi.jinfer.base.interfaces.RuleDisplayer
Module dependencies:	Base
_	JUNG
Public packages:	none

## 1 Introduction

This rule displayer uses JUNG graph implementation to draw rules as forest of trees, where each tree represents one rule of whole set. In each tree, root vertex represents left side of the rule, inner vertices represents concatenation, alternation or permutation and leafs are elements, attributes or simple data. As in basic rule displayer it creates a component with multiple tabs: each one for a new grammar to display.

#### 2 Structure

The main class implementing RuleDisplayer inference interface and simultaneously registered as its service provider is TreeRuleDisplayer. Main method of this class is createDisplayer(), which looks up the component, adds a new panel to it and renders the specified grammar in it.

Main window of rule displayer may have multiple tabs in it: each contains its own RuleDisplayer responsible for rendering specified grammar using JUNG library.

All the trees representing rules are created in the GraphBuilder class with method buildGraphPanel(). While the code itself is a nice recursion programming exercise, there is nothing of a special interest in it.

All graphics used by *TreeRuleDisplayer* is contained in the cz.cuni.mff.ksi.jinfer.treeruledisplayer. graphics package.

## 2.1 Settings

All settings provided by <code>TreeRuleDisplayer</code> are NetBeans-wide. The options panel along with all the logic is in the <code>cz.cuni.mff.ksi.jinfer.treeruledisplayer.options</code> package. Available options include setting the color of the background, horizontal and vertical distance between vertices. Also for each type of vertex is possible to set the size, the shape and the color.

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