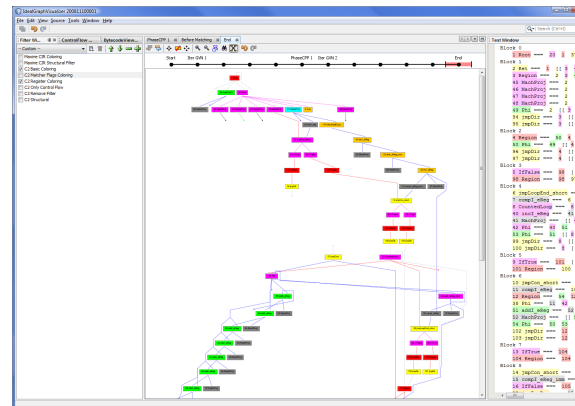




NetBeans Visual Library



Institute for System Software
Johannes Kepler University Linz, Austria
<http://ssw.jku.at>

Thomas Wuerthinger
wuerthinger@ssw.jku.at

Introduction



- Visualization library
- Light-weight window system
- Based on Java2D

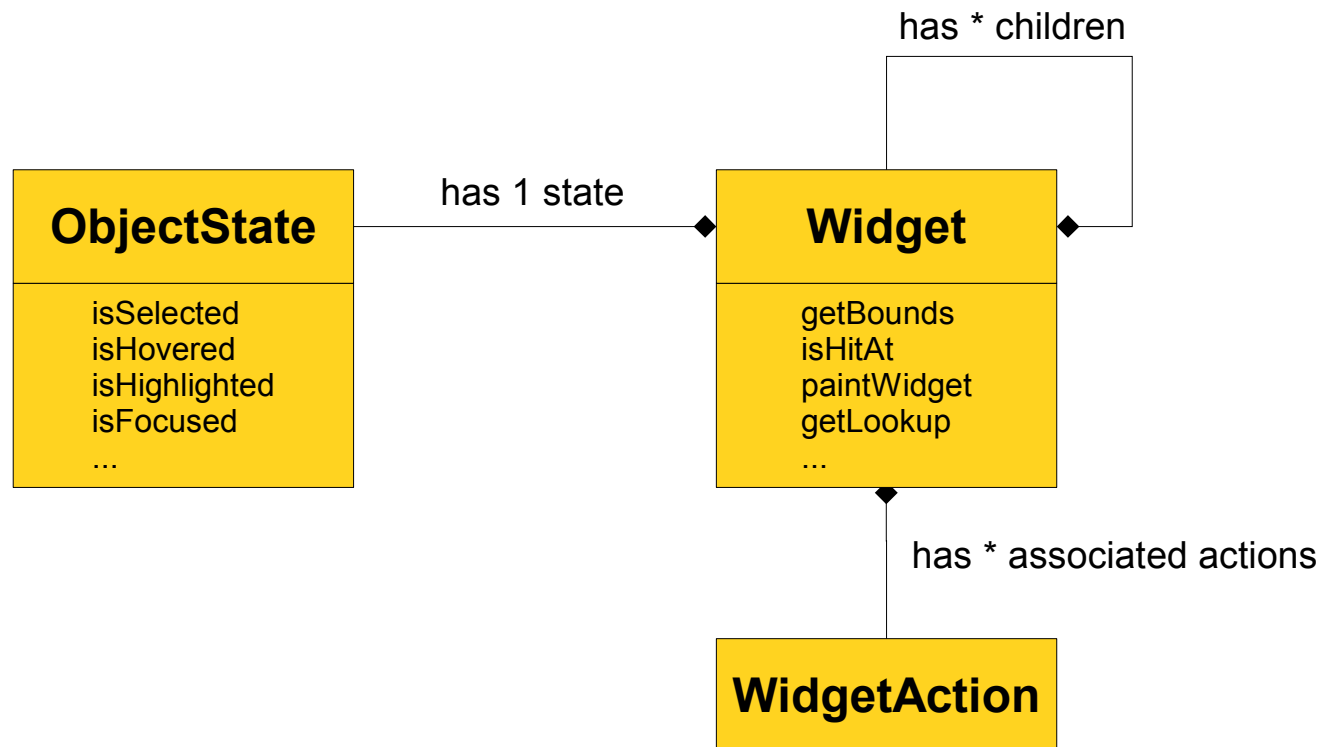
Important concepts:

- Widget
- WidgetAction
- ConnectionWidget and Anchor
- Specialized Scene

Widget



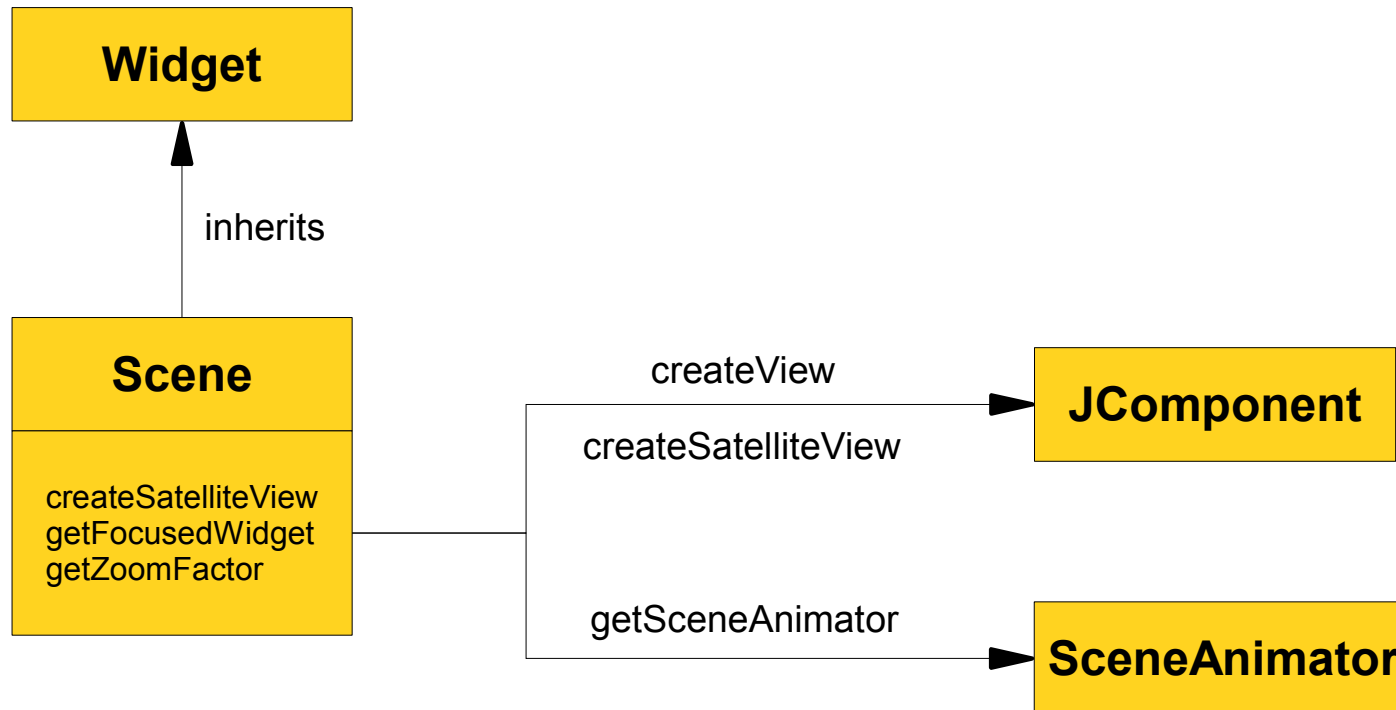
- Light-weight graphical component
- Tree hierarchy similar to Swing components
- Efficient validation / repaint mechanisms



Scene



- Top-level widget
- Displayed in Swing component



WidgetAction



- WidgetAction chain associated with component

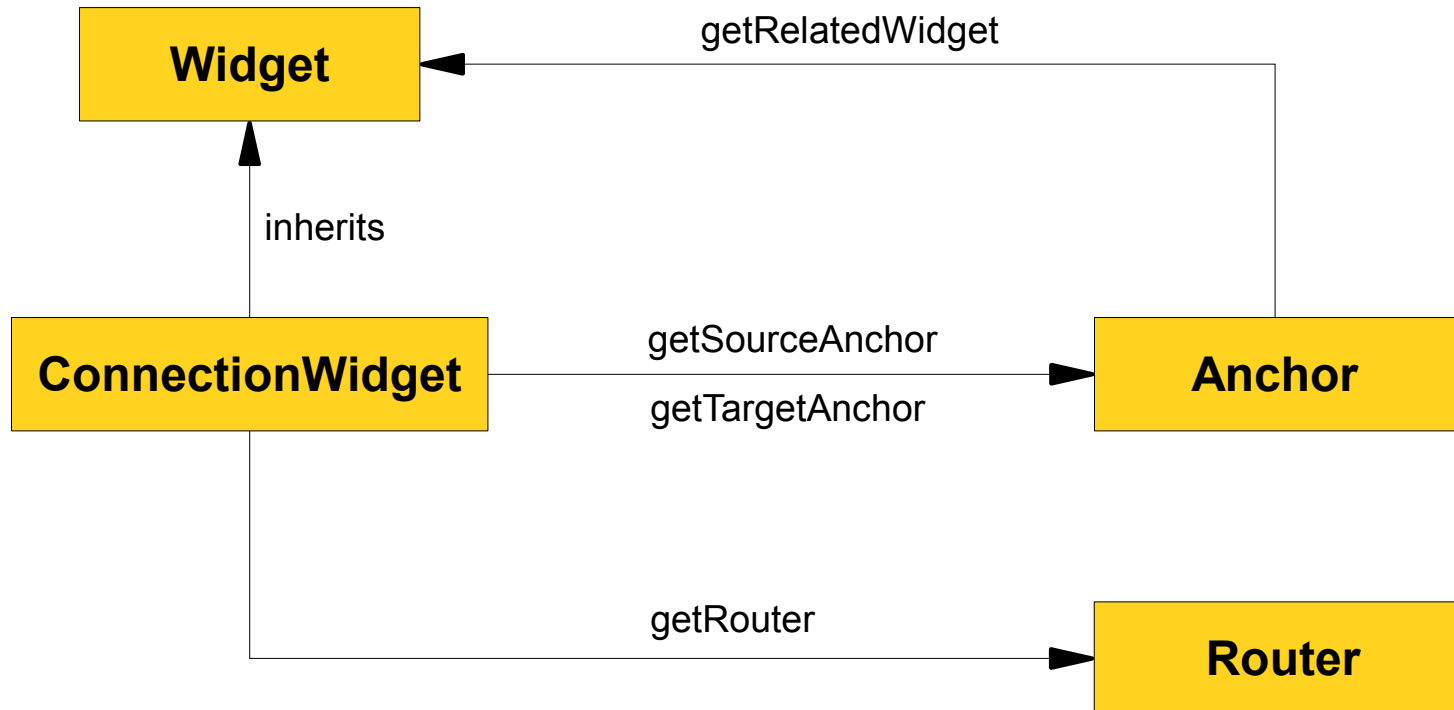


- ActionFactory for creating predefined actions:
 - createZoomAction
 - createPanAction
 - createWheelPanAction
 - createSelectAction
 - createResizeAction
 - createMoveAction
 - ...

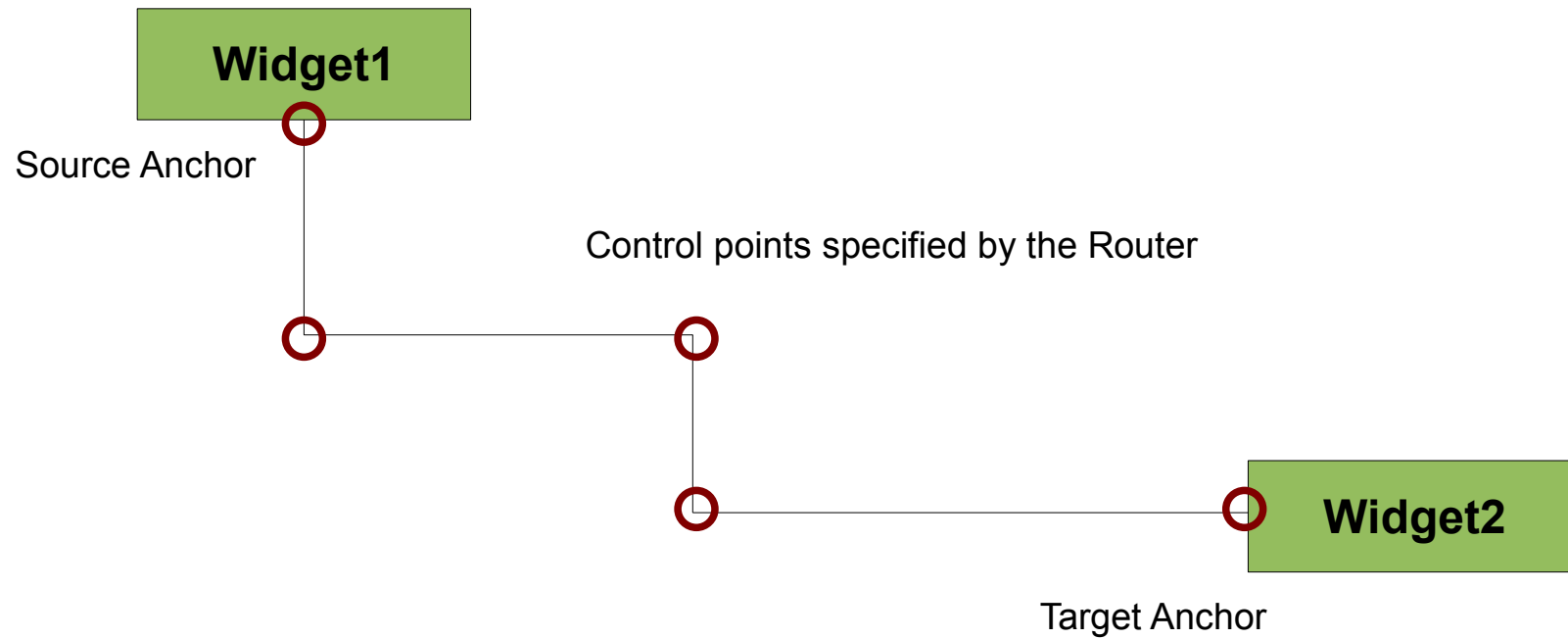
Connection



- Top-level widget
- Displayed in Swing component



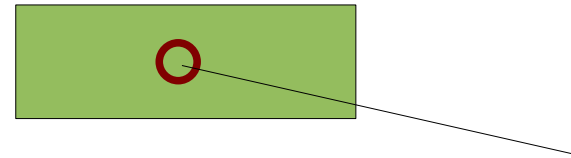
Connection Example



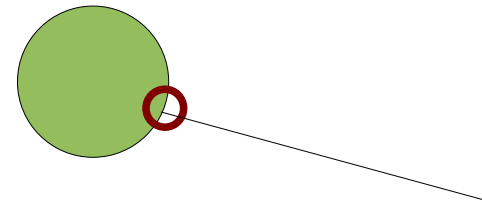
Anchor Types



- Center Anchor



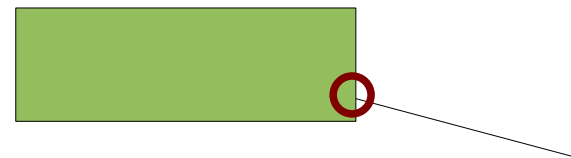
- Circular Anchor



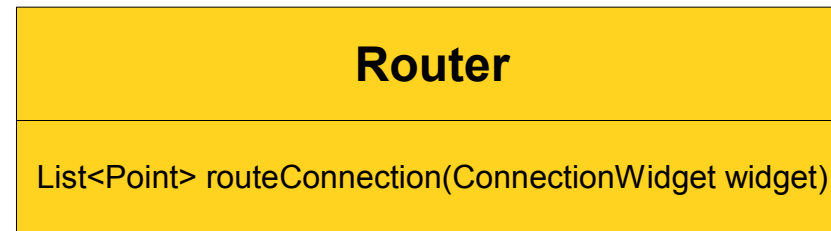
- Fixed Anchor



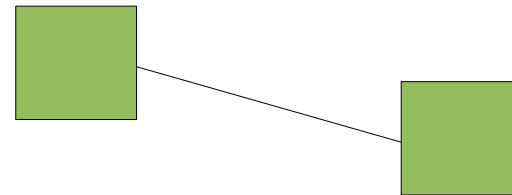
- Rectangular Anchor



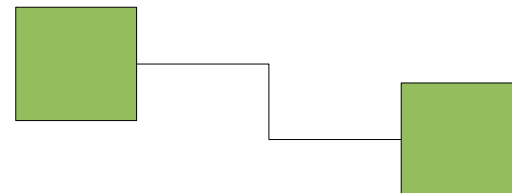
Router Types



- Direct Router



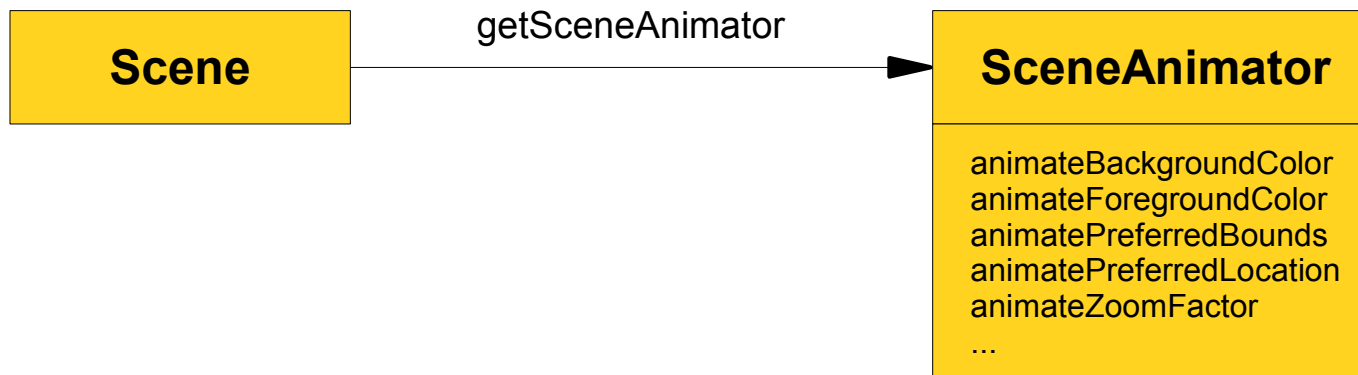
- Orthogonal Router



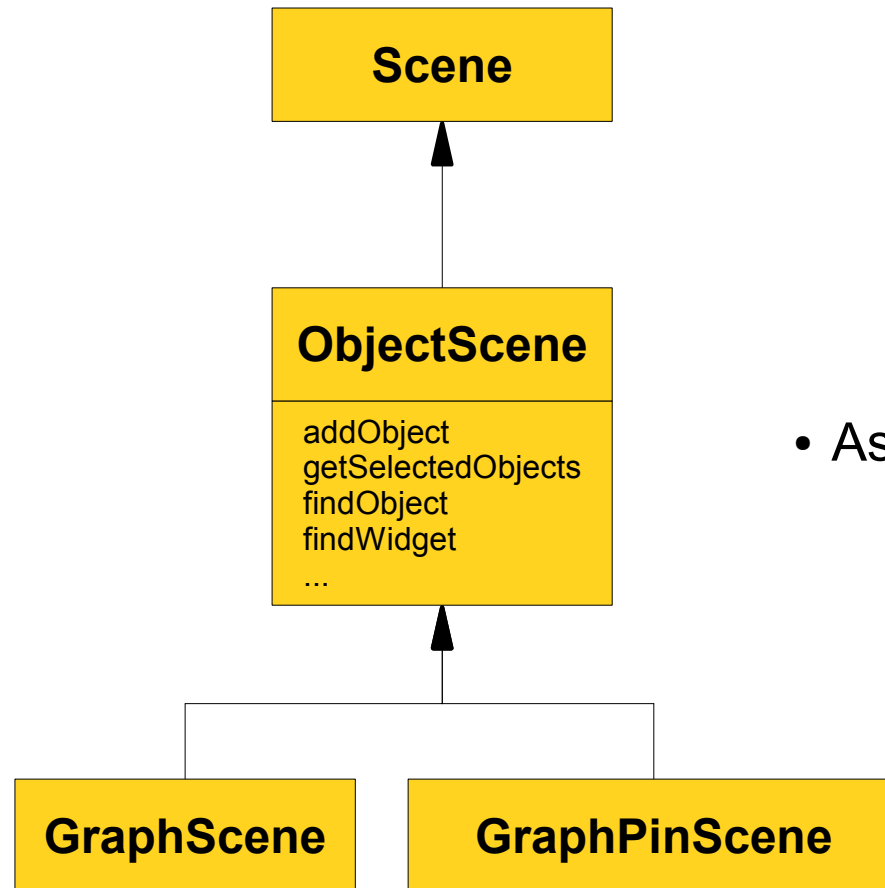
SceneAnimator



- Create animations on widgets



Specialized Scene



- Associate a Java object with a widget

- Graph model