

Xcos Automatic Layout

Xcos

Name: Chenfeng Zhu
Mentor: Mr. David Clément
Mentor: Mr. Paul Bignier

1 Overview

1.1 Relative Packages

`org.scilab.modules.xcos.block`
`org.scilab.modules.xcos.graph`
`org.scilab.modules.xcos.link`
`org.scilab.modules.xcos.port`

1.2 Detailed Class

`org.scilab.modules.xcos.port.BasicPort`

This is an abstract Port which is used for any kinds of ports including input and output ports.

`org.scilab.modules.xcos.port.Orientation`

This is an enum which represents a port orientation related to the associated block.

`org.scilab.modules.xcos.block.SplitBlock`

This is a node extends Block which is used for a junction of links.

`org.scilab.modules.xcos.link.actions.StyleAction`

This sub-sub-sub class of AbstractAction is a base action which is used for changing the style of links.

2 Implementation

2.1 Smart Routing

2.1.1 Design

2.1.2 Relative Files

Create:

org.scilab.modules.xcos.link.actions.StyleOptimalAction.java
org.scilab.modules.xcos.utils.XcosRoute.jav

Modify:

org.scilab.modules.xcos.XcosTab.java
org.scilab.modules.xcos.link.BasicLink.java
org.scilab.modules.xcos.link.actions.StyleAction.java
org.scilab.modules.xcos.utils.XcosMessages.java
modules/xcos/locales/*.pot

2.2 Automatic Layout