

# KIELER Pragmatics Release 2015/02

## KIELER Pragmatics 2015/02

- [Official Project Website](#)
- Built on Eclipse 4.4 "Luna"

We are happy to provide release 2015/02 of the **KIELER Pragmatics Project**! KIELER Pragmatics is a framework for enhanced user interaction in graphical modeling that builds on the Eclipse platform. This document describes how to install the release and highlights the most exciting new features.

As a bonus, we are co-releasing our KLighD-based **KIELER Ptolemy Browser**.

- [Installation](#)
- [Release Notes](#)
  - [API Changes in 2015/02](#)
  - [New Features Included in 2015/02](#)
  - [Important Bugs Fixed in 2015/02](#)
- [Quickstart](#)
  - [Diagram Layout](#)
  - [Viewing Ptolemy Models](#)
- [Known Problems and Limitations](#)
- [Bug Reports, Comments](#)

## Installation

KIELER Pragmatics 2015/02 is provided as a set of features, available to be added to your Eclipse installation via an update site. KIELER Pragmatics 2015/02 was tested on [Eclipse 4.4 "Luna"](#), but may also be compatible with other versions of Eclipse.

- See the [KIELER Downloads](#) site for download details.
- KIELER Pragmatics requires an installed Java Runtime Environment >= version 1.5.
- The layout components of KIELER can make use of the layout algorithms provided by the [Graphviz](#) library. You may want to install that.

Also refer to the [KIELER Downloads](#) page to download the KIELER Ptolemy Browser and the KIELER Web Service.

## Release Notes

You can find a list of solved tickets for this release at [our issue tracking system](#). Release notes of older releases can be found at our [Release Notes](#) page.

If you're wondering where components have gone that were traditionally a part of KIELER, you might not know yet that the KIELER was split into two separate projects, KIELER Pragmatics and KIELER Semantics, which release pretty much independently.

## API Changes in 2015/02

This is a summary of the API changes introduced with version 2015/02:

- [KIELER Infrastructure for Meta Layout](#)
  - We reworked our support for the GML graph format. It is not based on Xtext anymore but on a dedicated internal format and lightweight parser and serializer.  
Existing KLighD diagram syntheses can be migrated using the following 4 steps:
    1. Adapt the imports `de.cau.cs.kieler.kiml.formats.gml.gml.*` to `de.cau.cs.kieler.kiml.formats.gml.*`.  
Note that there are new subclasses `CollectionElement`, `StringElement`, `NumberElement`.
    2. The root element changed from `de.cau.cs.kieler.kiml.formats.gml.gml.GmlModel` to `de.cau.cs.kieler.kiml.formats.gml.GMLModel`
    3. Add the following extension to your synthesis

```
private def Iterable<Element> getElements(Element e) {  
    switch(e) {  
        CollectionElement: return (e as CollectionElement).getElements()  
        default: return Collections.emptyList  
    }  
}
```

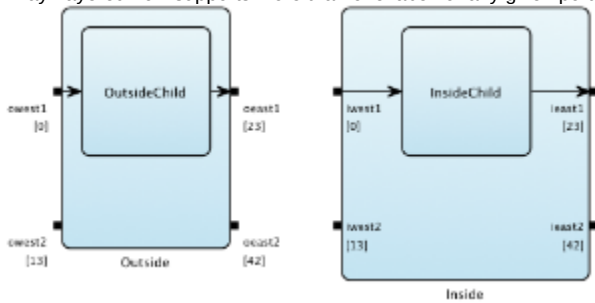
4. Change any call of the `getEContainer` method to `getContainer`. Note that in Xtend this might read `e.eContainer` and should be changed to `e.container`

## New Features Included in 2015/02

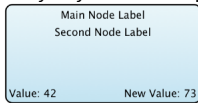
Here's a few highlights of what's new in version 2015/02:

- [KIELER Layout Algorithms](#)

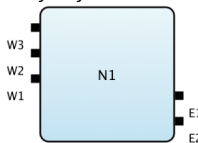
- KLay Layered now supports more than one label for any given port.



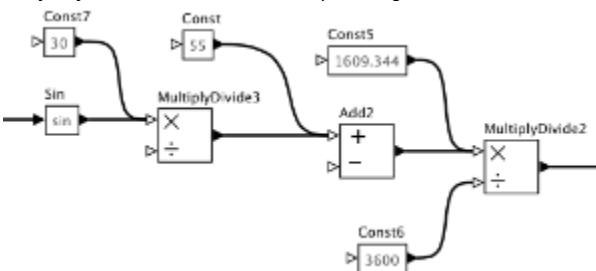
- KLay Layered now supports separate node label placements for each node label.



- KLay Layered can now place ports more flexibly through the layout options [Port Alignment](#) and [Additional Port Space](#).



- KLay Layered now features a new spline edge router. *This is still experimental code – use at your own risk!*



- [KIELER Lightweight Diagrams](#)

- [KIPRA-1531](#) - Getting issue details... [STATUS](#)
- [KIPRA-1545](#) - Getting issue details... [STATUS](#)

## Important Bugs Fixed in 2015/02

Among others, the following bugs were fixed in version 2015/02:

- [KIELER Layout Algorithms](#)
  - Under certain conditions, the Graphviz Layout Provider failed to find the Graphviz executables on Windows even though they were already in the Path. While fixing this, we also improved the automatic detection of the installation location of Graphviz executables on Windows.
  - Layout of hierarchical diagrams could lead to broken edge routing.
- [KIELER Lightweight Diagrams](#)
  - [KIPRA-1512](#) - Getting issue details... [STATUS](#)
  - [KIPRA-1527](#) - Getting issue details... [STATUS](#)
  - [KIPRA-1536](#) - Getting issue details... [STATUS](#)
  - [KIPRA-1551](#) - Getting issue details... [STATUS](#)
  - [KIPRA-1555](#) - Getting issue details... [STATUS](#)
  - See the full list of [related issues](#)

## Quickstart

### Diagram Layout

One of the core features of KIELER Pragmatics is the KIELER Infrastructure for Meta-Layout (KIML). It provides the glue between diagram editors and layout algorithms. If you have installed layout support for GMF editors, you may want to try the following:

- Open a diagram using a GMF editor.
- Press the Layout button in the toolbar:
- Open the *Layout View* by clicking *Window -> Show View -> Other...* and choosing *Layout* from the *KIELER Layout* category.
- Change some of the values and press the Layout button again.

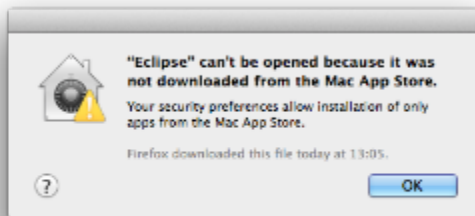
## Viewing Ptolemy Models

If you have a Ptolemy installation, try the following:

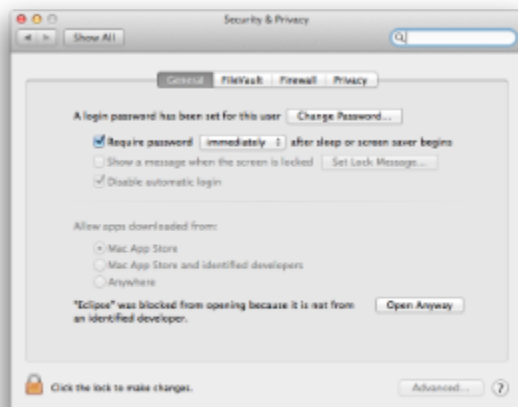
- Save a Ptolemy model as a .moml file somewhere.
- Download and start our [Ptolemy Model Browser](#).
- Open your moml file.
- Double-click actors that have further models inside them. Also double-click modal model states that have refinements. Use the sidebar on the right to influence how your model is displayed.

## Known Problems and Limitations

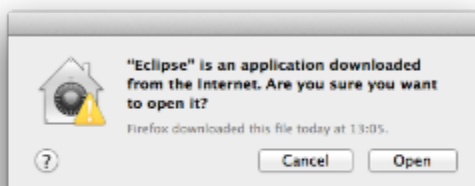
- Starting with Mac OS X Mountain Lion, trying to start our software may give you an error message similar to this:



The solution is to open your system preferences and navigate to the *Security & Privacy* settings. Therein, either click on *Open Anyway* if available or change *Allow apps downloaded from* to *Anywhere*.

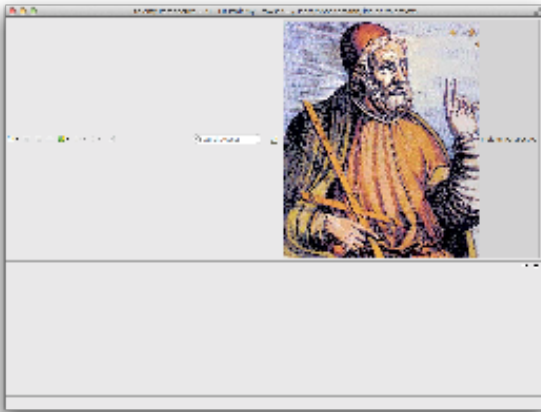


Starting our software will now result in the following message:



Simply click *Open* and you're good to go.

- Upon starting the Ptolemy Model Browser, you may get something like this:



The solution is to exit the application, remove your existing workspace, and restart the Ptolemy Model Browser. Your workspace can be found in your home folder and is called `kielerPtolemyws`.

- The Ptolemy Model Browser can properly display only a limited set of actors. Other actors may look a lot different than they do in Ptolemy.
- Currently there is no full-blown user documentation integrated. See our [KIELER Project](#) for more information.

## Bug Reports, Comments

We're working hard to make the graphical modeling user experience as convenient as possible. However, bugs can still remain in the code and some things might not be as you would expect them. Please don't hesitate to send in bug reports or give other comments like feature requests.

Send bug reports to [kieler@...](mailto:kieler@...), please. For news or general questions subscribe to the [rt-kieler mailing list](#).