ProMessenger 1

PROM NEWSLETTER

AUGUST 2015

Xixi Lu

PROM PIZZA NIGHTS

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PROM 6.5.1

A new release!

▸ P2

DID YOU KNOW…

… that many staff members of our group meet occassionaly for a so-called **ProM Pizza Night**?

Many nice features, see the list to the left, have been developed by our **ProM Pizza Knights** during these ProM Pizza Nights.

The structure of a ProM Pizza Night is simple. First we eat pizza (possibly over some beers), then we develop and implement useful features in ProM that we wouldn't develop or implement otherwise, as it is not directly related to the research we're doing.

In case you want to contribute in some way to these ProM Pizza Night, please contact the organizer, **Xixi Lu**. See https://svn.win.tue.nl/trac/prom/wiki/Pizza for details.

CSV Import

Drag and drop

Hide old packages

Hide unavailable packages

Log checker

Plug-in info

Plug-in categories

Resource renaming

Responsive GUI

Selecting multiple plug-in inputs (on-going)

Log filtering (on-going)

Transitions ids

TIMEBAR

A new view on resources

▸ P3

IVY

Managing dependencies

▸ P4

Eric Verbeek   EDITOR

Welcome to the first ProMessenger, the newsletter on ProM. Many things happen in and around ProM that we thought you might be interested to hear about. For that reason, we started this newsletter, which we hope will appear regularly. The newsletter will be send over the ProM mailing lists:

PROM-DEVELOPERS@LISTSERVER.TUE.NL
PROM-USERS@LISTSERVER.TUE.NL

and will be added on the ProM website:

WWW.PROMTOOLS.ORG

Your input is also welcome for next editions of this newsletter. As you might like to hear what we have done and are doing, we would like to hear what you have done and are doing with ProM.

HELP US WITH THIS NEWSLETTER BY PROVIDING US WITH INPUT

Please send your input for the following newsletter to me before October 1, 2015.

Eric Verbeek,

PROM 6.5.1

A NEW RELEASE FOR PROM.

On August 22, 2015, ProM 6.5.1 has been released. Apart from many bug fixes, this release also includes new features, which includes a **new dotted chart** (by Boudewijn van Dongen, see below), an **improved CSV import** (by Felix Mannhardt et al.), and **dot visualizers** for many graphs (like Petri nets and transition systems, by Eric Verbeek).

Downloads are available at www.promtools.org and include **Windows installers** (with or without JRE7, 32-bit or 64-bit) and **extractable archives** (tar.gz and zip). For **Mac users** we also have a bundle download. On request, we will add a VM running Windows with ProM 6.5.1 installed

The Process Mining Toolkit
www.promtools.org/prom6

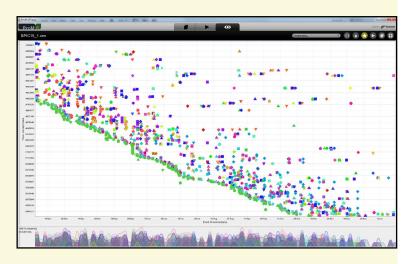ProM 6.5.1
Revision 23506
"SilvR+"

A NEW DOTTED CHART

ProM 6.5.1 comes with a new and improved Dotted Chart. This Dotted Chart not only allows you to select arbitrary attributes for your axes, but it also allows you to zoom in to some part of the log and export the visible events to a new event log. By default, this new Dotted Chart will be installed when you install the default RunnerUpPackages. If needed, it can be installed manually by installing the LogProjection package. The old Dotted Chart, from the DottedChart package, has been removed from ProM.

SOME RELEASE NOTES

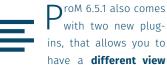**FRAMEWORK.** The **Export button** is only selectable if export plug-ins exist. For some known resource types (like Petri nets), **default exporters** are now provided. As a result, for example the default exporter for a Petri net with data will now also export the data. Before, some exporter would be preselected, which might not export this data. The Action view can now filter plug-ins on several **categories**, like Discovery, Filter, or Conformance. **Start scripts** (.bat and .sh files) are now updated when the memory setting is changed instead of replaced. As a result, any changes you made to these files will not be thrown away.

XESAME. Fixed **major bug** preventing successful event log conversion . Added option to determine when only events for known trace IDs are retrieved. Added feature that reports **intermediate progress** at configurable time interval. **Empty traces** are now included in the event log.

LOG PACKAGE. Improved **CSV importer** with improved usability. **Auto-detection** of data types before import. **Expert configuration** with added possibilities.

TIMEBAR

A NEW VIEW ON RESOURCES

ProM 6.5.1 also comes with two new plug-ins, that allows you to have a **different view on resources** These plug-ins are available in the Time-Bar package, that needs to be installed manually using the Package Manager. Among other things, the first plug-in allows you to see the **distribution of work** over weekdays and day times. See the small screen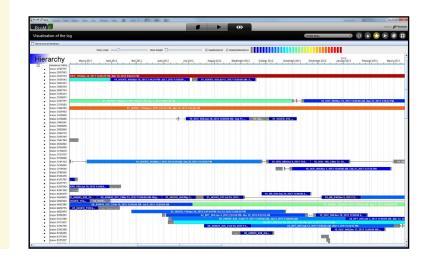shot for an example. The second plug-in allows you to visualize **work items done by resources** in different ways. For example, the big screen-

shot below shows all cases being worked on by a single resource. This view shows that the resource has worked on many cases at the same time, and that some work items have taken much longer than other work items (this is also indicated by the color).

IMPROVE YOUR HISTORY

For future work more options can be added to both plug-ins. Furthermore, additional customization options can be added as well. Finally, support could be added for life cycle transitons other that **start** and **complete**

PROM SUPPORT

In case you experience problems with ProM, be it with a release or with a nightly build, please contact our support team. You can do so by visiting the ProM forum at http://www.win.tue.nl/promforum or by sending a mail to prom-users@listserver.tue.nl.

If you contact us with a problem, please try to be specific. Please mention the version of ProM you are using and provide us with the necessary input to reproduce the problem, which includes the steps to take and the files to import.

IVY

A NEW WAY TO MANAGE PACKAGE DEPENDENCIES

Managing package dependencies has been a problem for ProM 6 developers right from the start. Compile-time dependencies had to be added as SVN externals in the **packagelib** folder, while run-time dependencies had to be added separately in the **build.xml** file. As a result of this, run-time depedencies were often forgotten, leading to problems for end users of ProM.

vy solves this problem for you, and some other problems as well. Package dependcies now only need to be added to the **ivy.xml** file, which is in the root of your package project. When needed, you right-click your project, and select **Ivy / Resolve** Ivy then downloads the necessary files for you, puts them in a specific Ivy folder, and makes sure that these libraries are added to your build path. As you do not have to add the libraries explicitly to your build path,

YOU NEED TO INSTALL IVYDE IN YOUR ECLIPSE TO BE ABLE TO USE IVY

changes (like a new version) of these libraries are much easier to make. As an example, consider **OpenXES** This library is used by many packages, and before, many package projects had to explicitly mention the current OpenXES library in their build path. As a result, if we would change the name of the library, almost all developers needed to change their build path. Ivy simplifies this by downloading the latest version of the OpenXES library and adding that to the build path.

vy also allows you to use libraries directly from the **Maven repository** (see http://search.maven.org/). Instead of having to download the library from somewhere yourself and adding it to your **lib** folder, you declare the library in your **ivy.xml** file, and Ivy will download the library for you. The only thing you do need to do is to copy the downloaded library to the **lib** folder, as end users of ProM need the library as well.

Apache Ivy™ is a very powerful dependency manager oriented toward Java™ dependency management, although it can be used to manage dependencies of any kind.

Apache Ivy is integrated with Apache Ant, the most popular Java build management system, so Apache Ivy follows Apache Ant design principles. If you have Apache Ant skills, you already have Apache Ivy skills! The plugin mechanism in Apache Ivy follows the Apache Ant model. Also like Apache Ant, Apache Ivy supports macrodefs and file imports from configuration.

For simple cases, Apache Ivy is easy to use. Declare your dependencies, and that's all.

Imagine a component that's often reused by a software team, and that this component has dependencies of its own. Without a good dependency management tool, each time this component is reused, all its dependencies must be repeated. With Apache Ivy, it's different: simply write a dependency file once for the component, and benefit from the work already done anytime this component is reused.

These texts were taken from the Apache Ivy website, see below, which also contains additional information.

See http://ant.apache.org/ivy/index.html.

PROM DEVELOPMENT

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process mining workbench