

Packaging Made Easy with Fedora Packager for Eclipse

FSOSS Toronto
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Steve



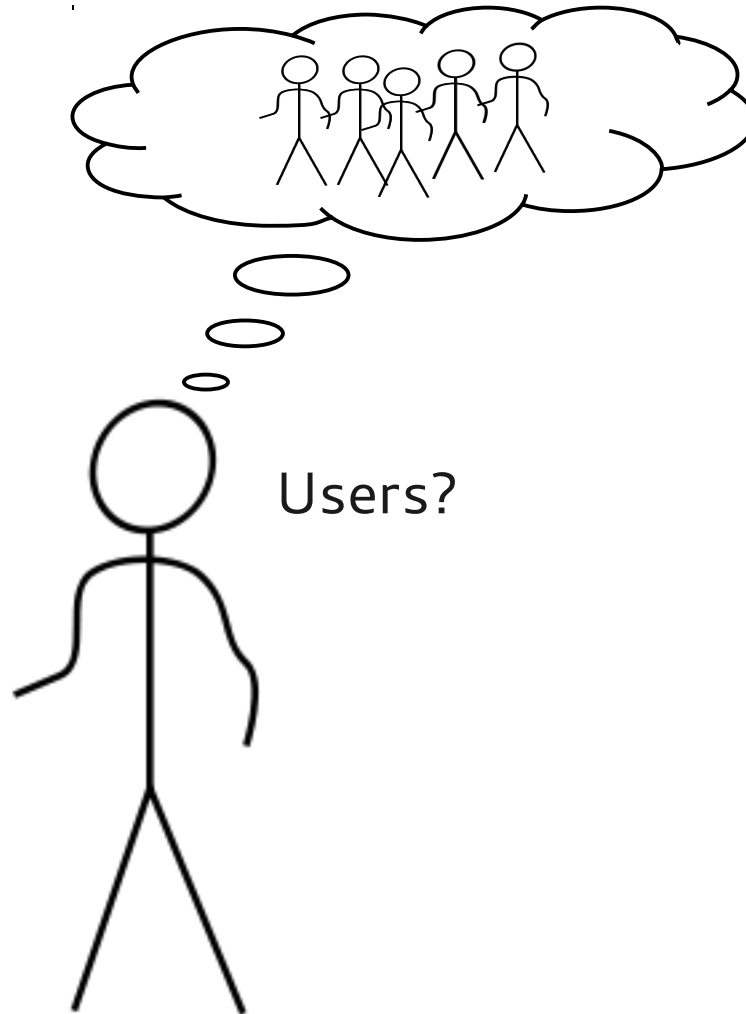
Software



Steve



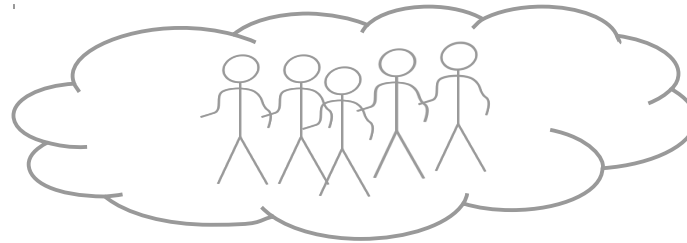
Software



Steve



Software



Users?



Ship it in Fedora



Eclipse

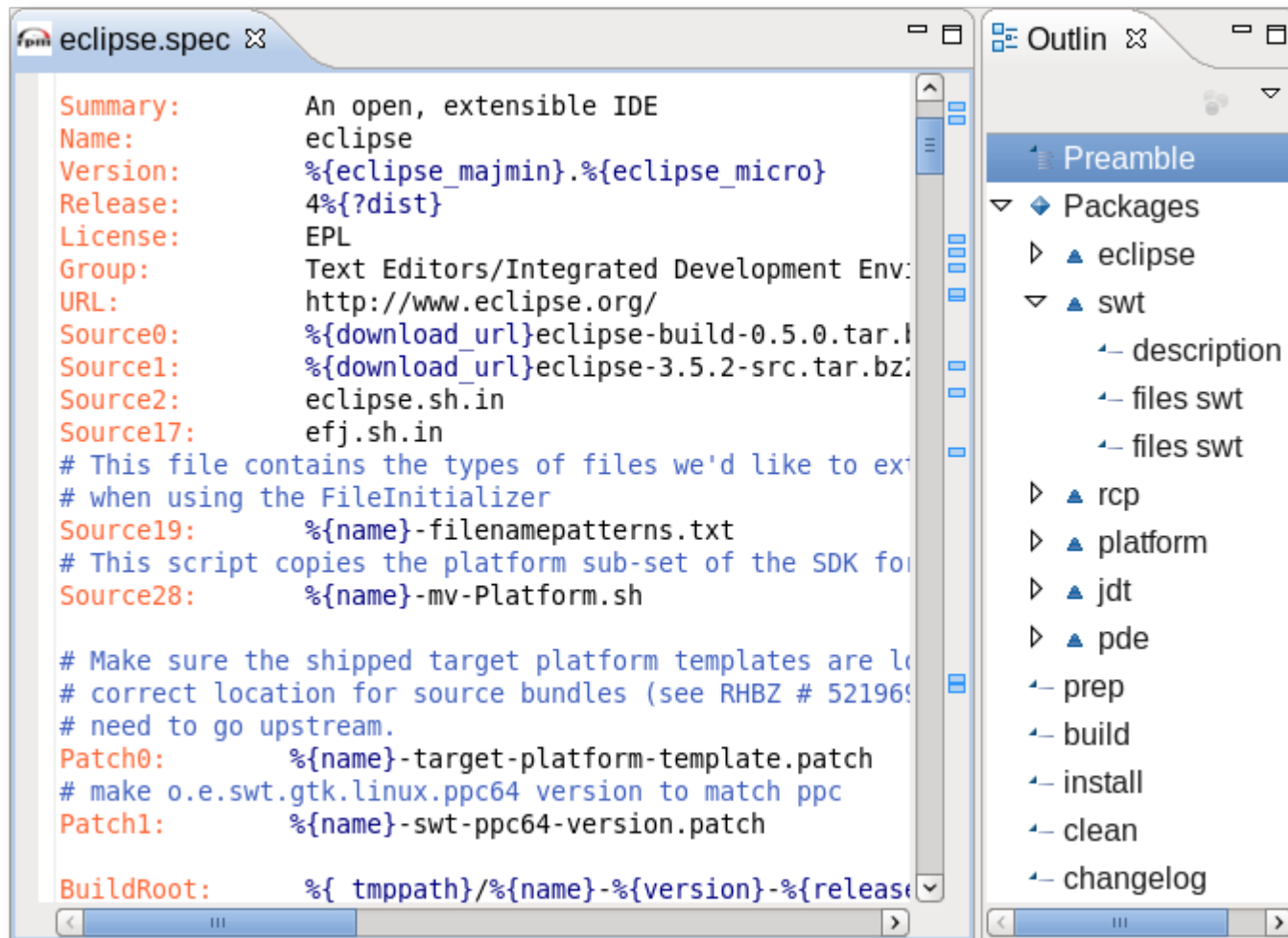
IDE (Java, C/C++, etc.)

Bugzilla

RPM .spec files



.spec File Editor



The screenshot displays the Eclipse .spec File Editor interface. The main editor window shows the content of the `eclipse.spec` file, which includes metadata such as Summary, Name, Version, Release, License, Group, URL, and Source information. The Outlin view on the right shows a hierarchical structure of packages and files, including `eclipse`, `swt`, `rcp`, `platform`, `jdt`, `pde`, `prep`, `build`, `install`, `clean`, and `changelog`.

```
Summary:      An open, extensible IDE
Name:         eclipse
Version:      %{eclipse_majmin}.%{eclipse_micro}
Release:      4%{?dist}
License:      EPL
Group:        Text Editors/Integrated Development Env:
URL:          http://www.eclipse.org/
Source0:      %{download_url}eclipse-build-0.5.0.tar.l
Source1:      %{download_url}eclipse-3.5.2-src.tar.bz
Source2:      eclipse.sh.in
Source17:     efj.sh.in
# This file contains the types of files we'd like to ext
# when using the FileInitializer
Source19:     %{name}-filenamepatterns.txt
# This script copies the platform sub-set of the SDK fo
Source28:     %{name}-mv-Platform.sh

# Make sure the shipped target platform templates are lo
# correct location for source bundles (see RHBZ # 52196
# need to go upstream.
Patch0:       %{name}-target-platform-template.patch
# make o.e.swt.gtk.linux.ppc64 version to match ppc
Patch1:       %{name}-swt-ppc64-version.patch

BuildRoot:   %{ tmppath }/%{name}-%{version}-%{releas
```



.spec File Editor

<pre>BuildRequires: xulrunner-devel BuildRequires: java- %if !%{bootstrap} BuildRequires: icu4 BuildRequires: tomc BuildRequires: tomc BuildRequires: ant-a BuildRequires: ant-j BuildRequires: jsch BuildRequires: jakar BuildRequires: jakar BuildRequires: jakar BuildRequires: jakar BuildRequires: jetty BuildRequires: lucen</pre>	<ul style="list-style-type: none">rpm java-1.6.0-openjdkrpm java-1.5.0-gcj-javadocrpm java-1.6.0-openjdk-srcrpm java-1.5.0-gcjrpm java-1.6.0-openjdk-javadocrpm java-1.6.0-openjdk-develrpm java-1.5.0-gcj-develrpm java-1.6.0-openjdk-plugin	<p>Name: java-1.6.0-openjdk Version: 1.6.0.0 Release: 37.b17.fc12 Summary: OpenJDK Runtime Environment License: GPLv2 with exceptions Group: Development/Languages URL: http://icedtea.classpath.org/ Installation Date: Fri 16 Apr 2010 08:49:20 AM EDT Vendor: Fedora Project Size: 83807713 bytes Build Date: Tue 06 Apr 2010 07:49:09 AM EDT SRPM: java-1.6.0-openjdk-1.6.0.0-37.b17.fc12.src.rpm</p>
--	--	---



.spec File Editor

```
⊖ %changelog
* Wed Oct 19 2011 Severin Gehwolf <sgehwolf@redhat.com> 0.2.2-1
- |
* Mon Oct 3 2011 Andrew Robinson <arobinso@redhat.com> 0.2.2-1
- Update to upstream 0.2.2 release.
```



.spec File Editor

```
%package      swt
Summary:      SWT Library for GTK+-2.0
Group:        Text Editors/Integrated Development Environments (IDE)
non-standard-group: The value of the Group tag in the package is not valid. Valid groups are:
"Amusements/Games", "Amusements/Graphics", "Applications/Archiving",
"Applications/Communications", "Applications/Databases",
"Applications/Editors", "Applications/Emulators", "Applications/Engineering",
"Applications/File", "Applications/Internet", "Applications/Multimedia",
"Applications/Productivity", "Applications/Publishing", "Applications/System",
"Applications/Text", "Development/Debug", "Development/Debuggers",
"Development/Languages", "Development/Libraries", "Development/System",
"Development/Tools", "Documentation", "System Environment/Base", "System
Environment/Daemons", "System Environment/Kernel", "System
Environment/Libraries", "System Environment/Shells", "User
Interface/Desktops", "User Interface/X", "User Interface/X Hardware Support".
```



All of this is great, but I still have to **switch back and forth** between Eclipse and the command line to get my Fedora work done!



Not anymore!



Fedora Packager for Eclipse

The screenshot shows the Eclipse IDE interface for the Fedora Packager plugin. The main editor displays the 'eclipse-fedorapackager.spec' file with the following content:

```
%description
Fedora Packager for Eclipse is an Eclipse plug-in
that allows Fedora contributors to interact with Fedora infrastructure
such as Koji, Bodhi and Git.

%prep
%setup -q -n eclipse-fedorapackager-%{version}
mkdir orbit
pushd orbit
%{ _ln_s } %{ javadir }/xmlrpc3-client.jar
%{ _ln_s } %{ javadir }/xmlrpc3-common.jar
%{ _ln_s } %{ javadir }/google-gson.jar
for i in %{ javadir }/httpcomponents/*
do
%{ _ln_s } %{ javadir }/ws-commons-util.jar
%{ _ln_s } %{ javadir }/not-yet-commons-logging.jar
done
popd

%install
%{ _ln_s } %{ javadir }/xmlrpc3-client.jar
%{ _ln_s } %{ javadir }/xmlrpc3-common.jar
%{ _ln_s } %{ javadir }/google-gson.jar
%{ _ln_s } %{ javadir }/httpcomponents/*
%{ _ln_s } %{ javadir }/ws-commons-util.jar
%{ _ln_s } %{ javadir }/not-yet-commons-logging.jar
```

The context menu is open, showing the following actions and their shortcuts:

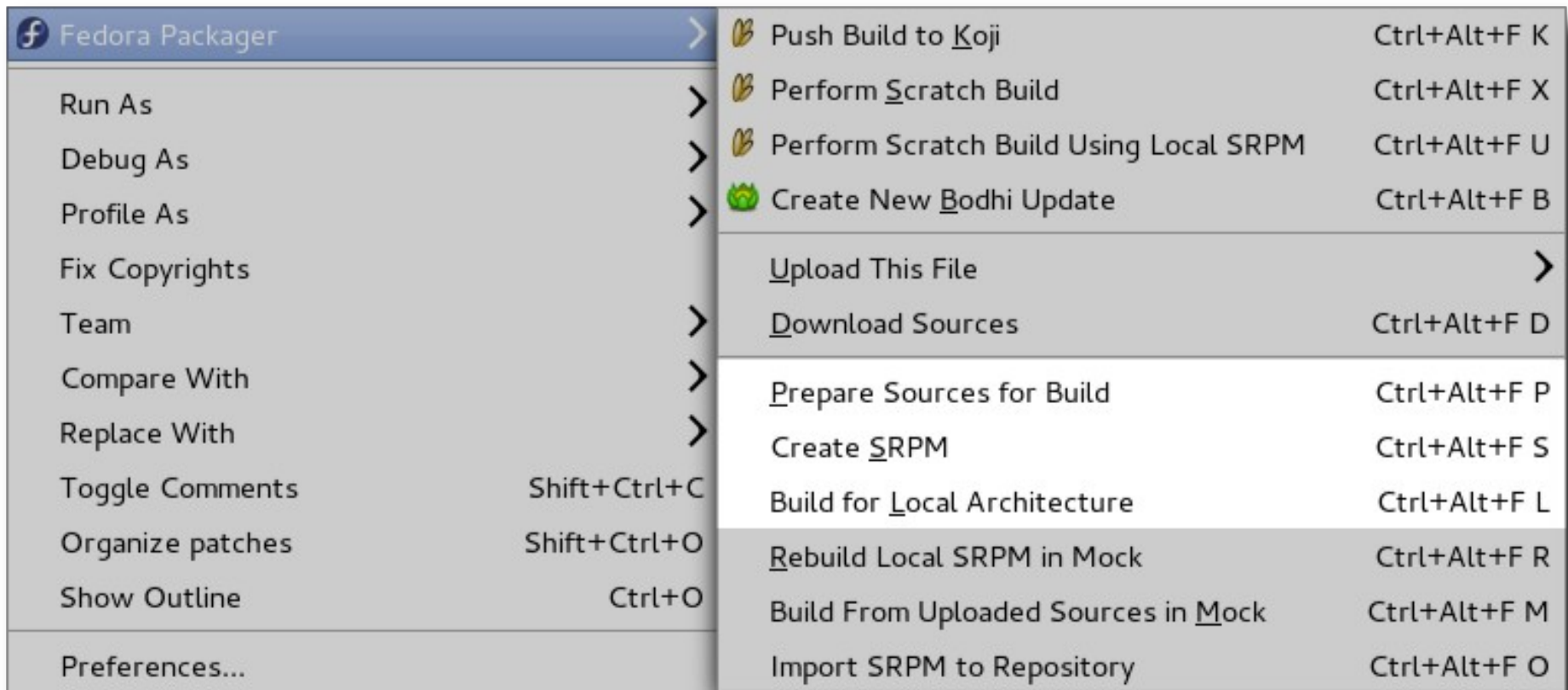
Action	Shortcut
Bodhi Update	Ctrl+Alt+F B
Download	Ctrl+Alt+F D
Import from Fedora Git Wizard	Ctrl+Alt+F I
Koji Build	Ctrl+Alt+F K
Koji SRPM Scratch Build	Ctrl+Alt+F U
Koji Scratch Build	Ctrl+Alt+F X
Local Build	Ctrl+Alt+F L
Mock Build	Ctrl+Alt+F R
Prep Sources	Ctrl+Alt+F P
SCM Mock Build	Ctrl+Alt+F M
SRPM Build	Ctrl+Alt+F S
SRPM Import	Ctrl+Alt+F O

The secondary menu is also open, showing the following actions and their shortcuts:

Action	Shortcut
Push Build to Koji	Ctrl+Alt+F K
Perform Scratch Build	Ctrl+Alt+F X
Perform Scratch Build Using Local SRPM	Ctrl+Alt+F U
Create New Bodhi Update	Ctrl+Alt+F B
Upload This File	
Download Sources	Ctrl+Alt+F D
Prepare Sources for Build	Ctrl+Alt+F P
Create SRPM	Ctrl+Alt+F S
Build for Local Architecture	Ctrl+Alt+F L
Rebuild Local SRPM in Mock	Ctrl+Alt+F R
Build From Uploaded Sources in Mock	Ctrl+Alt+F M
Import SRPM to Repository	Ctrl+Alt+F O



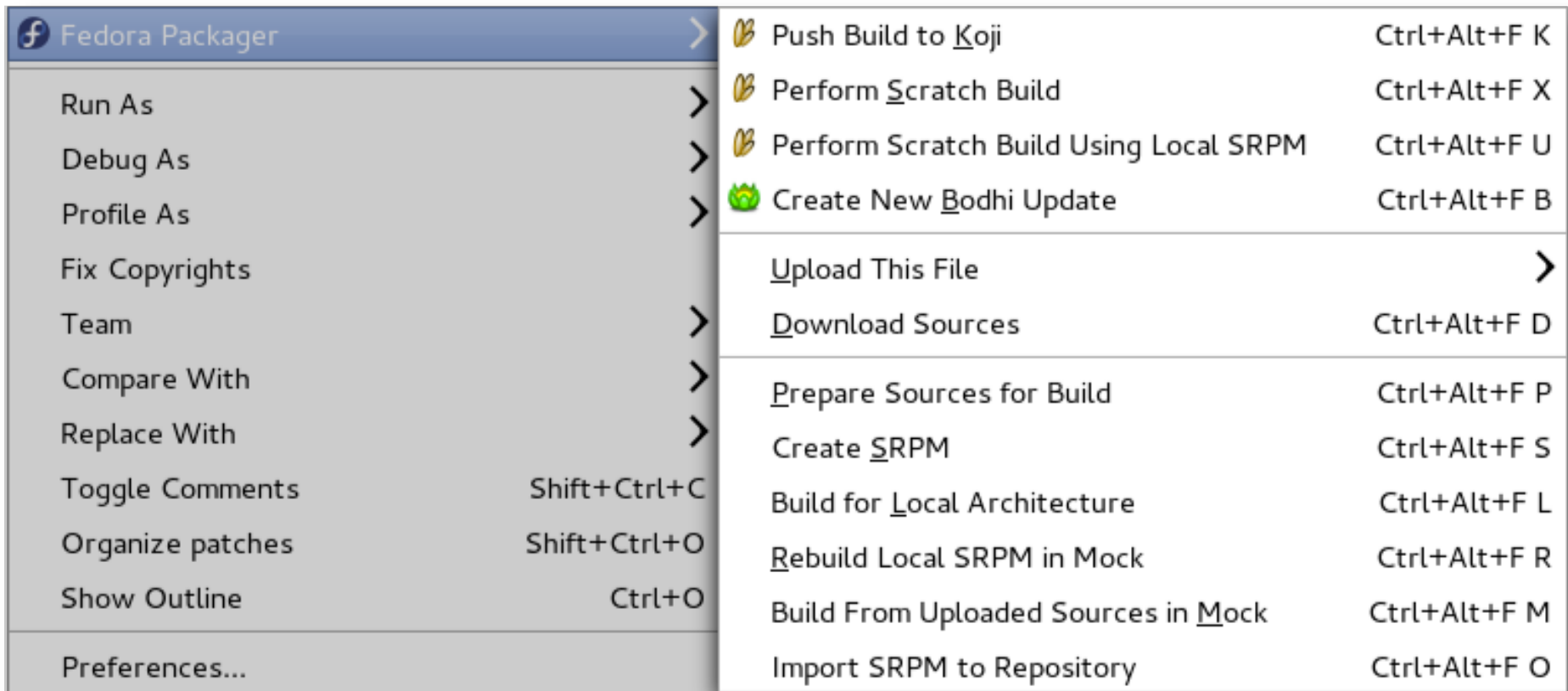
Fedora Packager for Eclipse



For all of us!



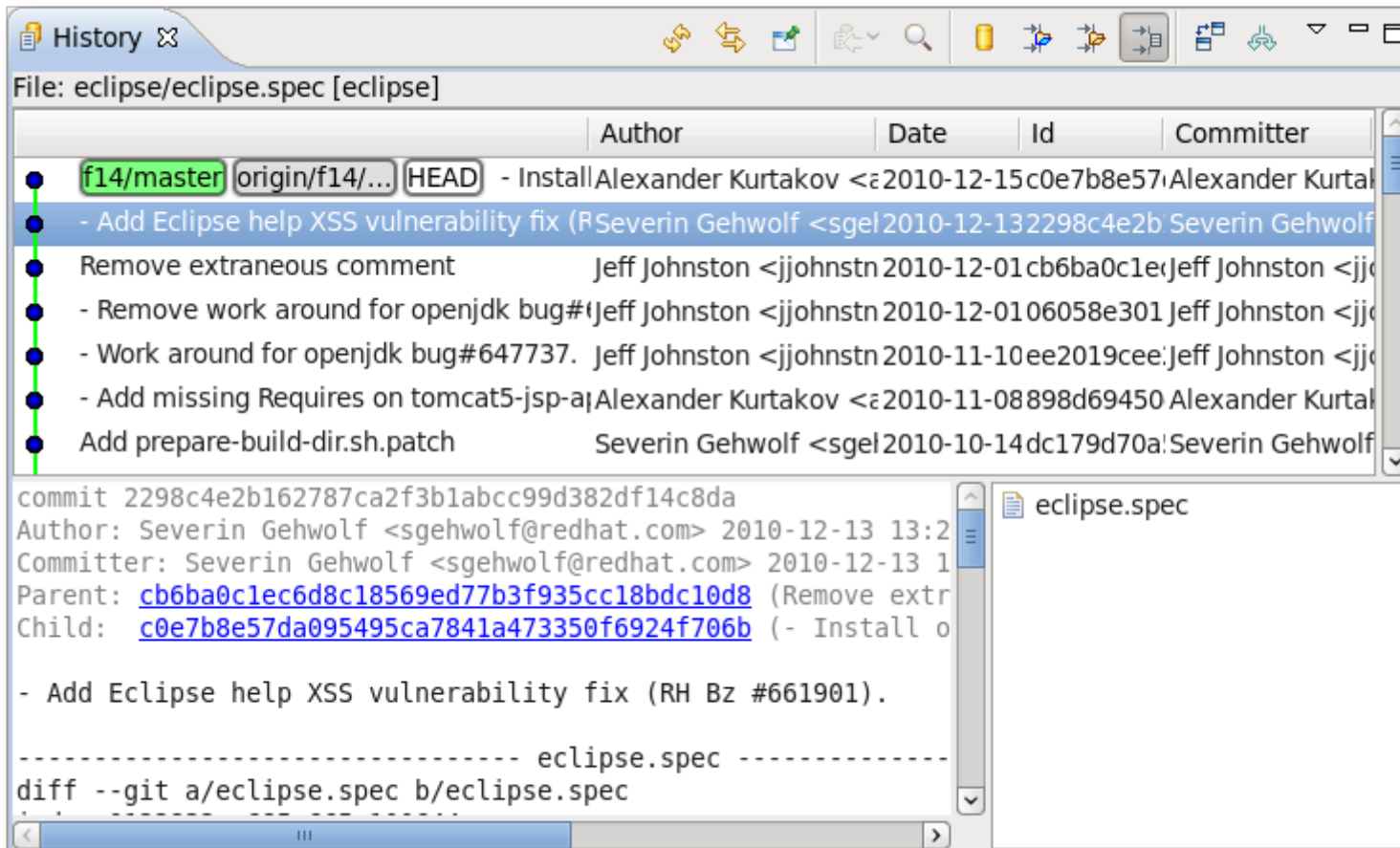
Fedora Packager for Eclipse



For some of us!



Git



History

File: eclipse/eclipse.spec [eclipse]

	Author	Date	Id	Committer
● f14/master origin/f14/... HEAD	Alexander Kurtakov	2010-12-15	c0e7b8e57	Alexander Kurtakov
● - Add Eclipse help XSS vulnerability fix (RH Bz #661901)	Severin Gehwolf	2010-12-13	2298c4e2b	Severin Gehwolf
● Remove extraneous comment	Jeff Johnston	2010-12-01	cb6ba0c1e	Jeff Johnston
● - Remove work around for openjdk bug#647737	Jeff Johnston	2010-12-01	06058e301	Jeff Johnston
● - Work around for openjdk bug#647737	Jeff Johnston	2010-11-10	ee2019cee	Jeff Johnston
● - Add missing Requires on tomcat5-jsp-api	Alexander Kurtakov	2010-11-08	898d69450	Alexander Kurtakov
● Add prepare-build-dir.sh.patch	Severin Gehwolf	2010-10-14	dc179d70a	Severin Gehwolf

```
commit 2298c4e2b162787ca2f3b1abcc99d382df14c8da
Author: Severin Gehwolf <sgehwolf@redhat.com> 2010-12-13 13:2
Committer: Severin Gehwolf <sgehwolf@redhat.com> 2010-12-13 1
Parent: cb6ba0c1ec6d8c18569ed77b3f935cc18bdc10d8 (Remove extr
Child: c0e7b8e57da095495ca7841a473350f6924f706b (- Install o

- Add Eclipse help XSS vulnerability fix (RH Bz #661901).

----- eclipse.spec -----
diff --git a/eclipse.spec b/eclipse.spec
```



Local Builds

eclipse-mylyn.spec

```
# This patch is not suitable for upstream.  
Patch0: %{name}-nojaxb.patch  
# Our xmlrpc packages are split into JARs differently than Orbit  
# This patch is not suitable for upstream
```

Fedora Packager

Building for local architecture

Calling rpmbuild on eclipse-mylyn.spec

Always run in background

Cancel Details >> Run in Background

BuildRequires: ws-commons-util >= 1.0.1-5

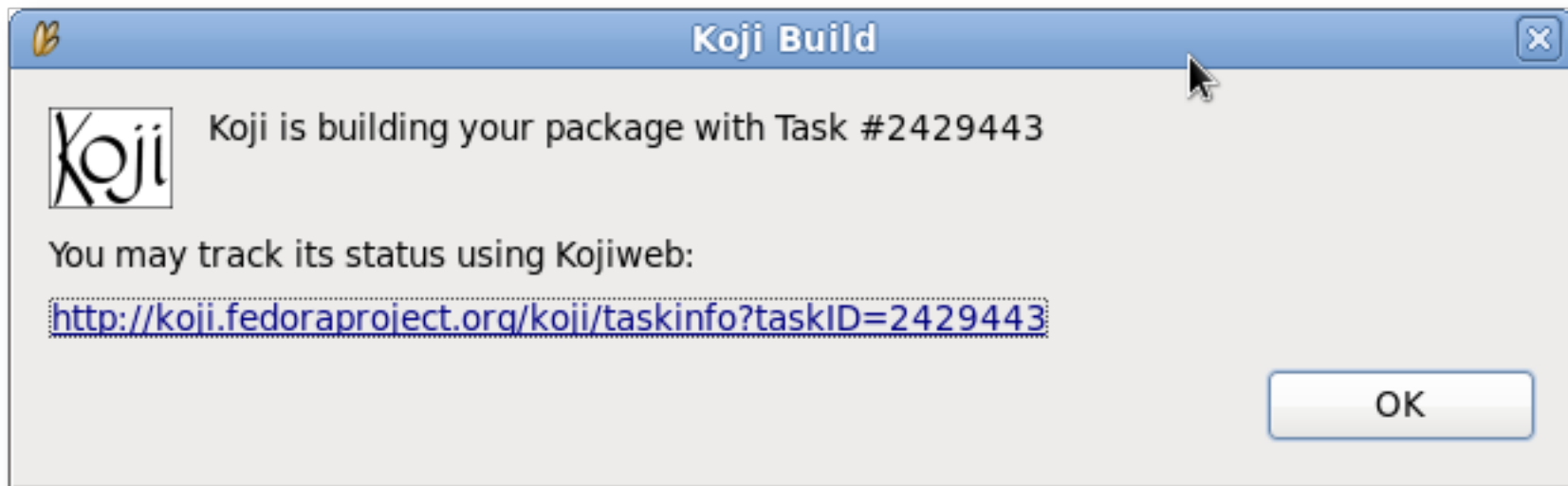
Console

Fedora Packager

```
/bin/sh /usr/lib64/eclipse/buildscripts/copy-platform /home/overholt/workspace/eclipse-my  
ls: cannot access plugins/*cdt*: No such file or directory  
ls: cannot access features/*cdt*: No such file or directory  
ls: cannot access plugins/*rse*: No such file or directory  
ls: cannot access features/*rse*: No such file or directory  
ls: cannot access *rse*: No such file or directory  
Starting build:
```



Build Packages in Koji



Pushing Updates (Bodhi)

Create New Bodhi Update

Package

Type

Request

Bugs Close bugs when update is stable

Notes

Suggest Reboot

Enable Karma Automatism

Threshold for pushing to stable

Threshold for unpushing



Who this is for?

- Existing and future IDE users
- New packagers
- You?



Who this is not for?

- Those who use runlevel 3
- IDE-haters
- You?



Getting Involved

User Guide:

https://fedoraproject.org/wiki/Fedora_Packager_For_Eclipse_User_Guide

Web/Trac:

<https://fedorahosted.org/eclipse-fedorapackager/>

Mailing list:

<https://admin.fedoraproject.org/mailman/listinfo/eclipse-packager-devel>

Git:

<git://git.fedorahosted.org/git/eclipse-fedorapackager.git>



Setup

Not a Fedora packager:

```
$ sudo yum install \  
eclipse-fedorapackager
```



Setup

Packager, already set up for Fedora packaging:

```
$ sudo yum install \
  eclipse-fedorapackager
```

In Eclipse:

*Window -> Preferences -> General -> Network
Connections -> SSH2*



Demo

