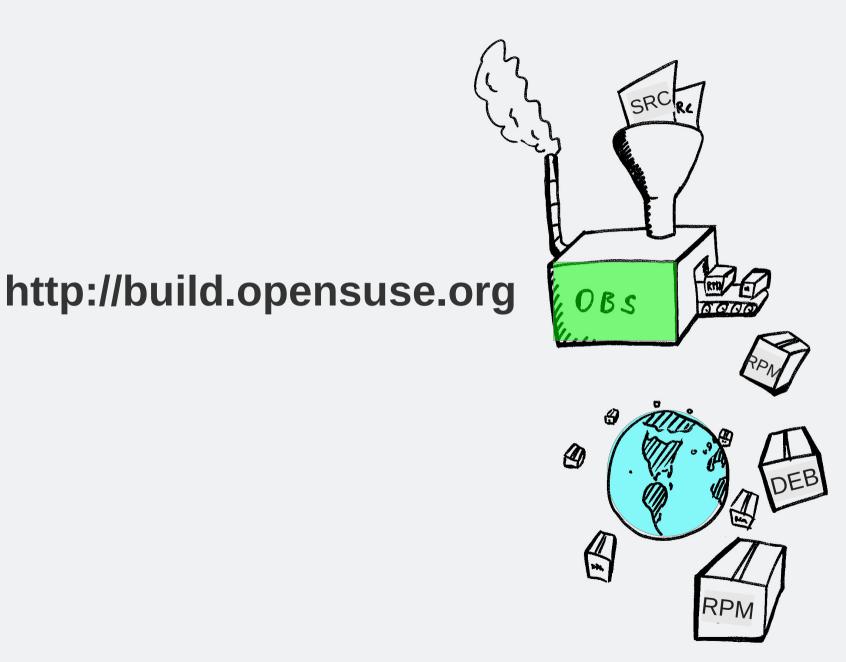


#### Jürgen Weigert

(Ex-)Legal team jw@suse.de







# Checks, Tests, Reviews, ...



## Checks, Tests, Reviews, ...

# → 'Quality'

· At checkin time

```
*.changes ? Source-validation, ...
```

At build time
 rpmlint, brp-scripts, ...

At submit time

License check, security audit, project management, policies, ...



## Checks, Tests, Reviews, ...

At checkin time

```
*.changes ? Source-validation, ...
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# Implementation of Submission Reviews

- Extra stuff, that gets in my way!
- Apparently designed to make things harder ...





# Implementation of Submission Reviews

- Extra stuff, that gets in my way!
- Apparently designed to make things harder ...

$$\rightarrow$$
 How?

 It helps to know how the review processes are implemented!



# 'Why' and 'How' of Submission Reviews

Apply when moving packages between projects.
 "when passing into somebody else's area of control"

- Strict. Cannot be worked around.
- Blocking. Requests are blocked until reviewed.
- Project specific.
   Project Managers can add reviewers to a project, applying to all incoming requests.
- Request specific.
   Sending and receiving party both can add additional reviewers.



# **Logic of OBS Submission Reviews**

 AND logic for approval.
 All listed reviewes must approve. Request waits for missing approvals. All reviewers are notified; they (can) work in parallel.

OR logic for decline. The first disapproval rejects a request.

• **OR** logic for group members. Reviewers can be users or groups. In case of a group, any member can approve/decline on behalf of the group.



# Example?



## Users of openSUSE:Factory

User ▲	Roles				
	Maintainer	Bugowner	Reviewer	Downloader	Reader
Stephan Kulow (coolo)					

### Groups

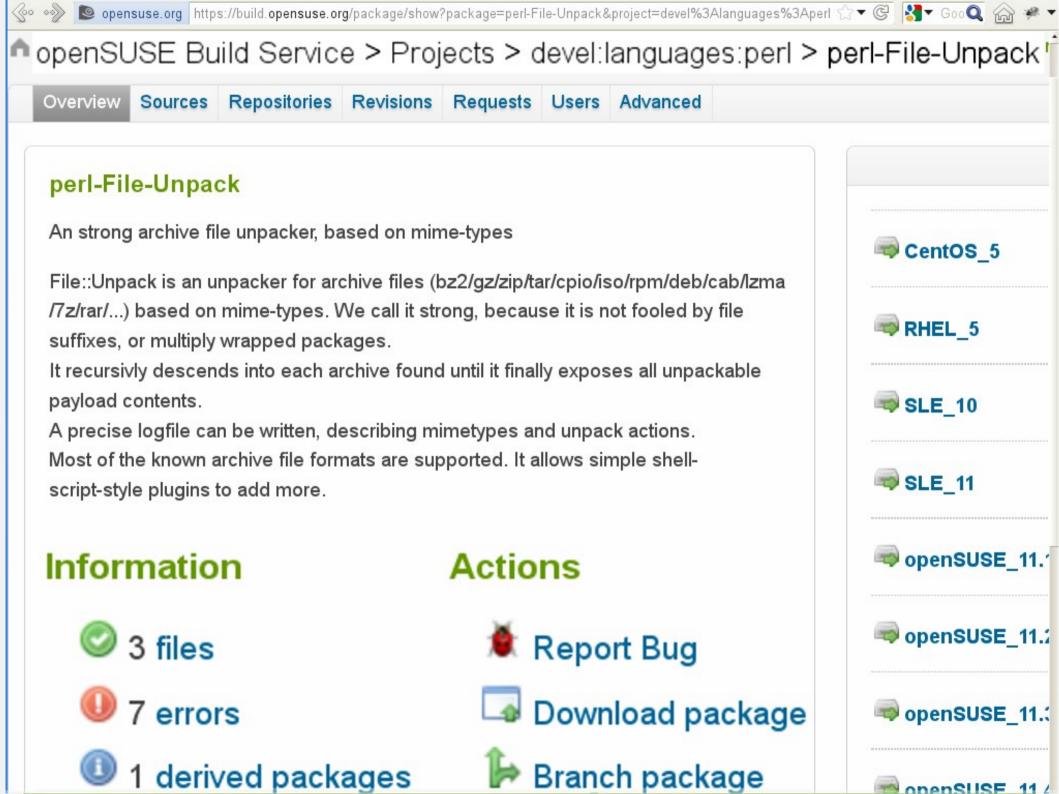
Group 🔺		Roles				
	#			Downloader	Reader	
autobuild-team						
factory-auto						
legal-auto						

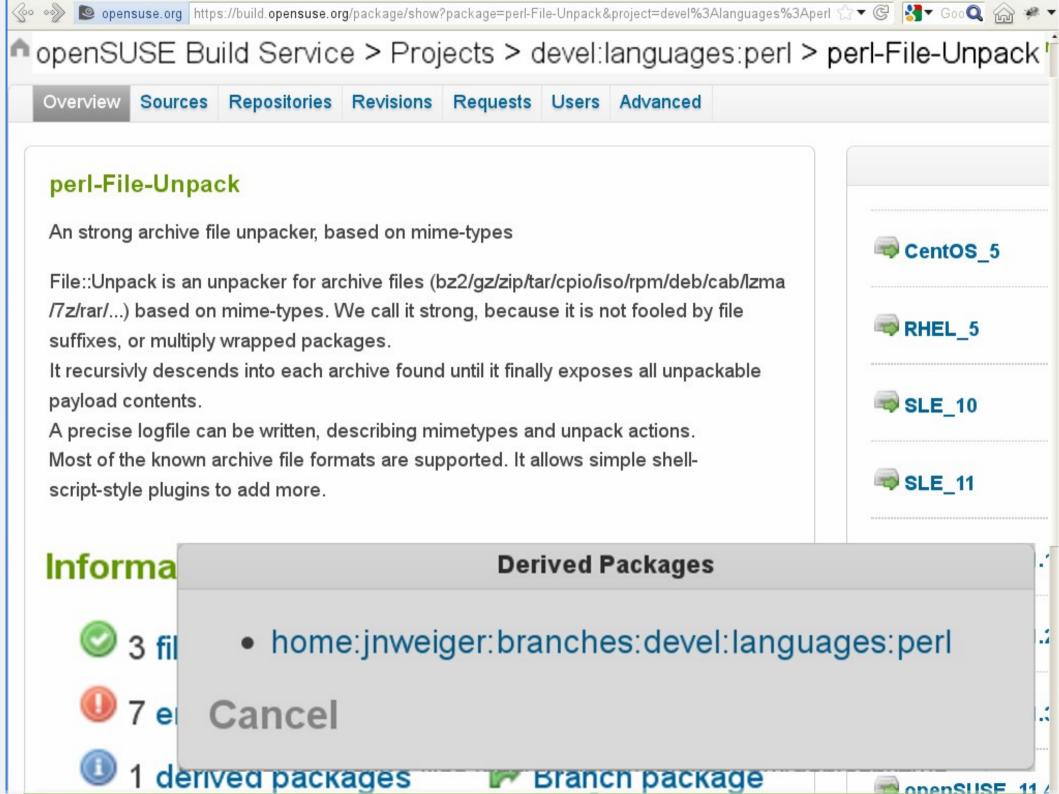
- Projects
- Search

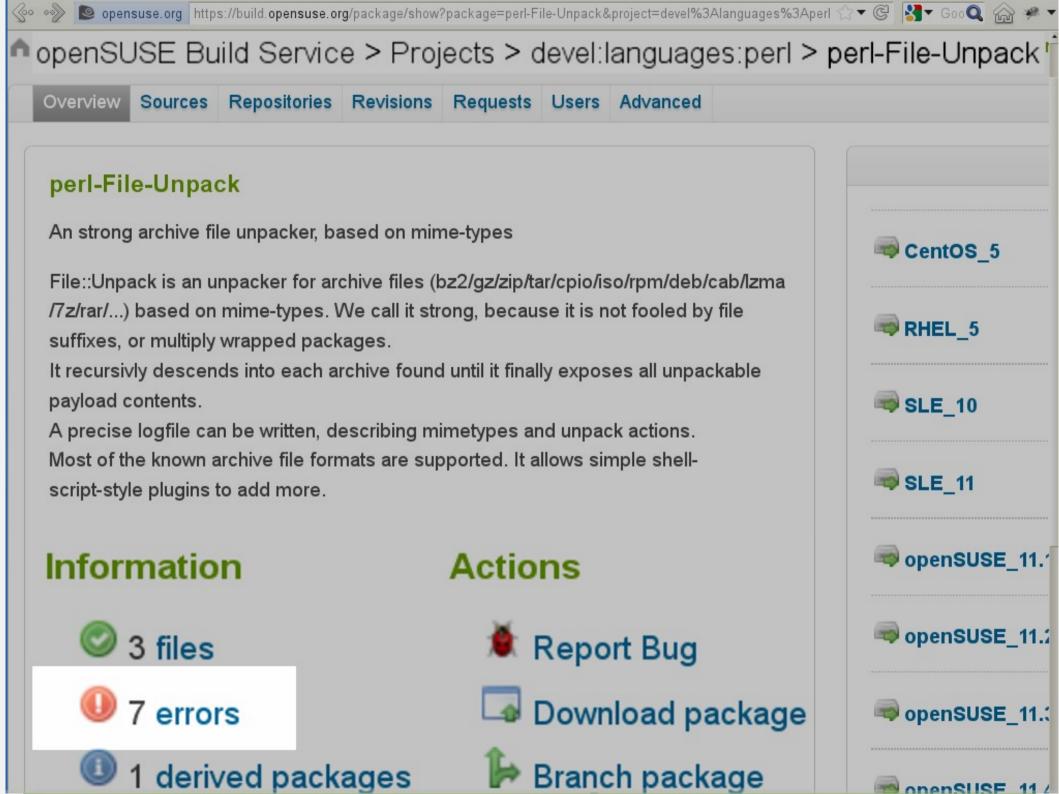
- Open Build Service Portal
- Building Packages

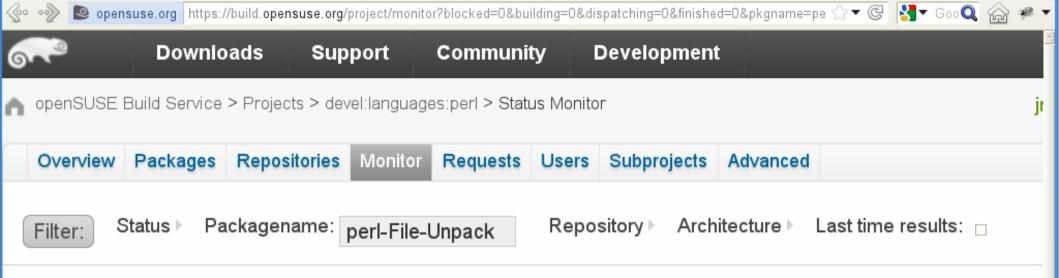


# ...when I try to submit ...







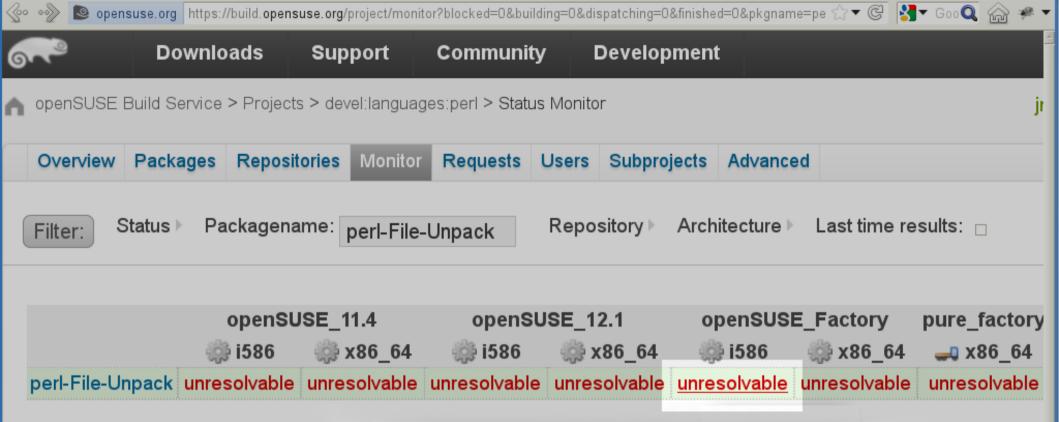




Updated at: 2012-02-02 17:26:48+01:00

#### Legend

- succeeded: Package has built successfully and can be used to build further packages.
- failed: The package does not build successfully. No packages have been created. Packages that depend on this
  created packages, if they exist.
- unresolvable: The build can not begin, because required packages are either missing or not explicitly defined.
- broken: The sources either contain no build description (e.g. specfile), automatic source processing failed or a n
- blocked: This package waits for other packages to be built. These can be in the same or other projects.
- scheduled: A package has been marked for building, but the build has not started yet.
- dispatching: A package is being copied to a build host. This is an intermediate state before building.
- · building: The package is currently being built.



Legend

Updated at: 2012-02-02 17:26:48+01

# nothing provides upx

- succeeded: Package has built successfully and can be used to build further packages.
- failed: The package does not build successfully. No packages have been created. Packages that depend on this created packages, if they exist.
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Overview Sources Repositories Revisions Requests Users Advanced

#### Source Files

Filename ▼	Size <b>♦</b>	Changed <b>♦</b>	Actions
perl-File-Unpack.spec	7.3 KB	1 day ago	
perl-File-Unpack.changes	9.5 KB	1 day ago	
File-Unpack-0.52.tar.gz	79.8 KB	1 day ago	



#### **Latest Revision**

- Luergen Weigert (jnweiger) committed 1 day ago (revision 47)
  - 0.52 logfile: input menitoned on 'passed' items.
  - Makefile.PL now actually installs file\_unpack (rt#73670).



Overview Sources Repositories Revisions Requests Users Advanced

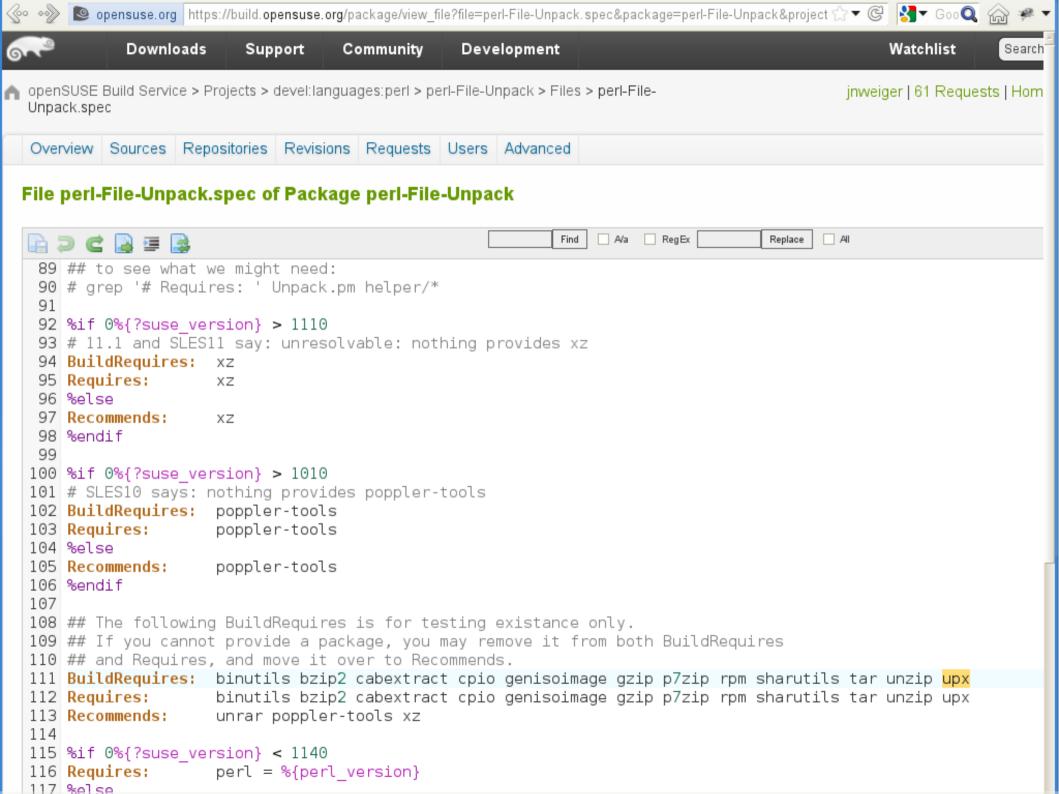
#### Source Files

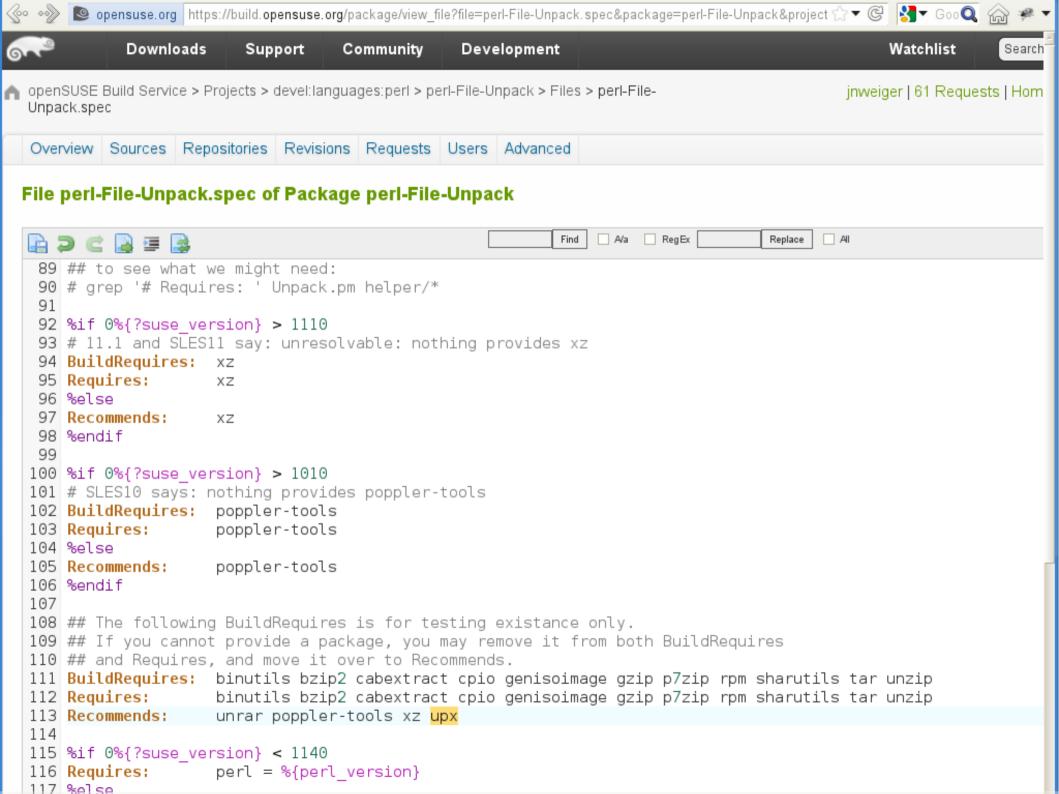
Filename <b>v</b>	Size <b>♦</b>	Changed \$	Actions
perl-File-Unpack.spec	7.3 KB	1 day ago	
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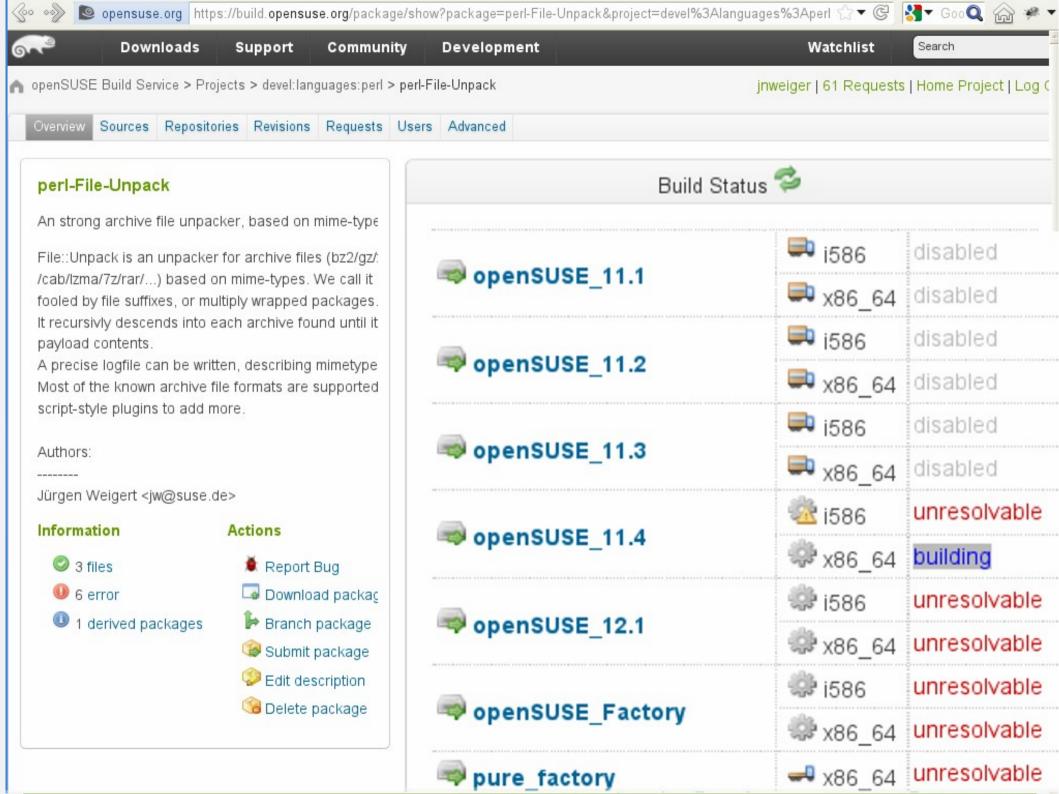


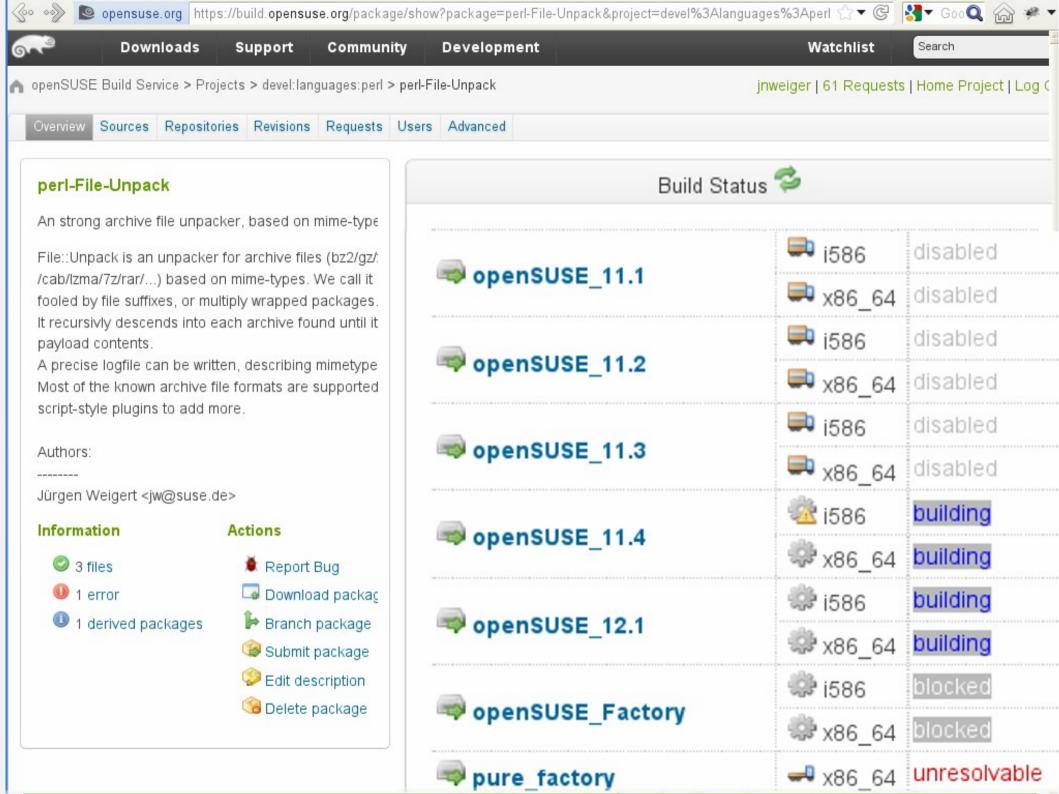
#### **Latest Revision**

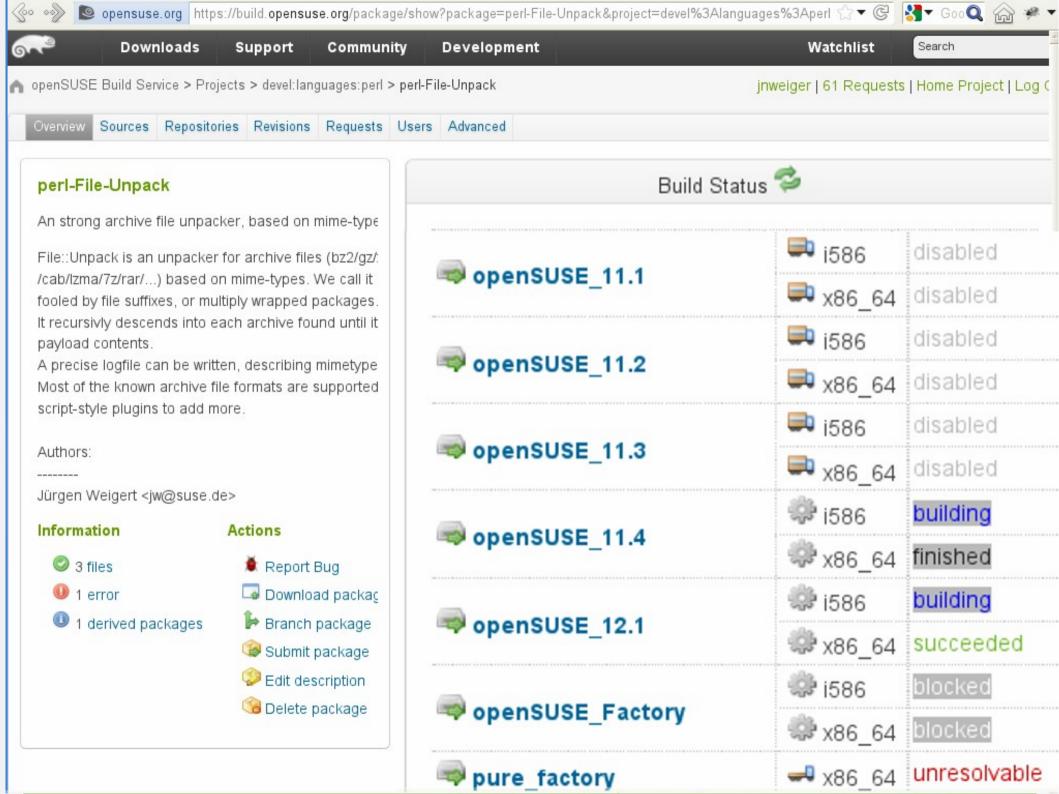
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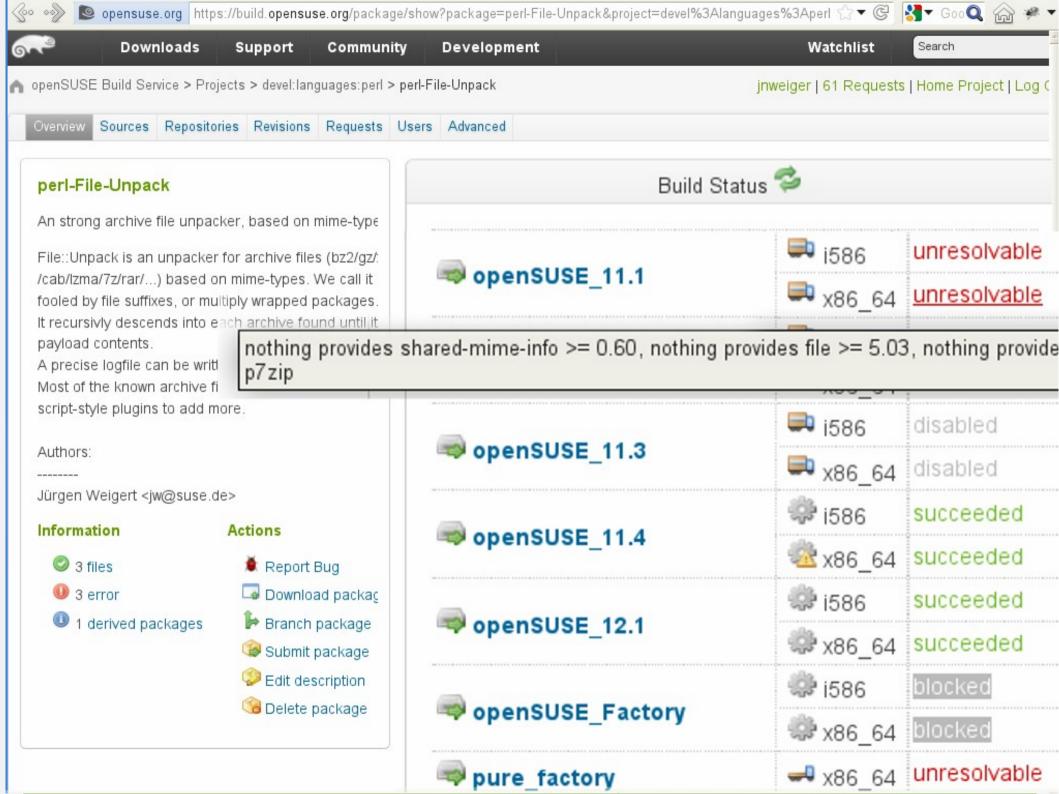


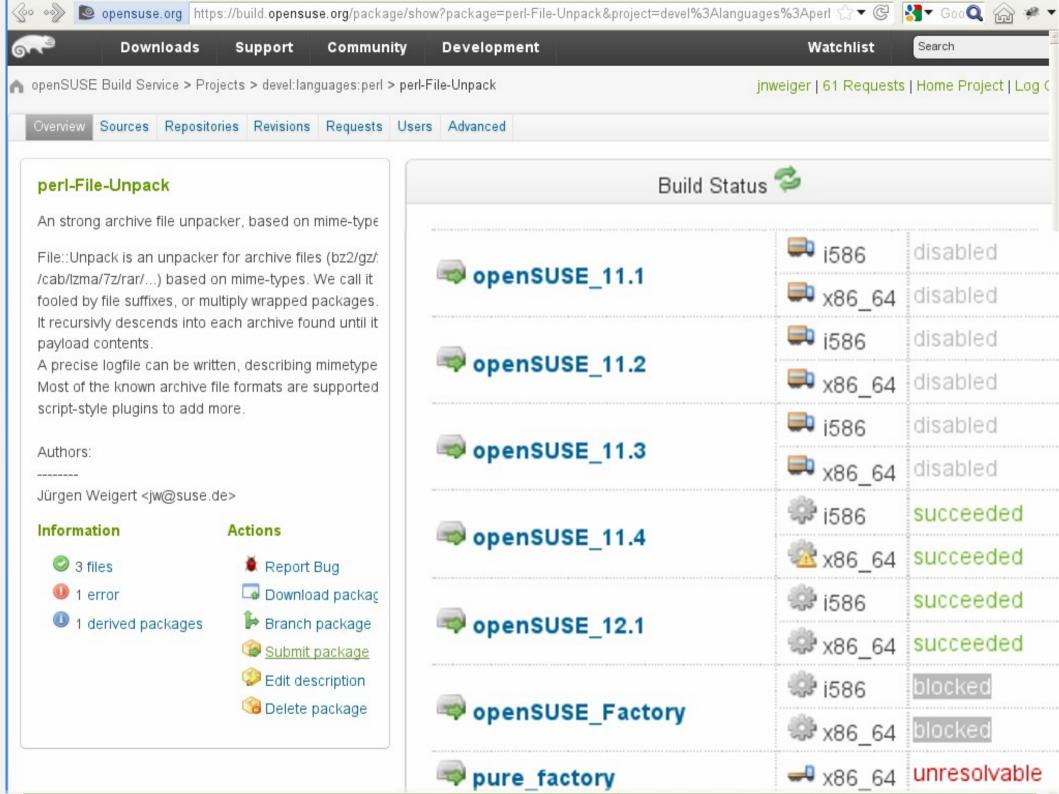


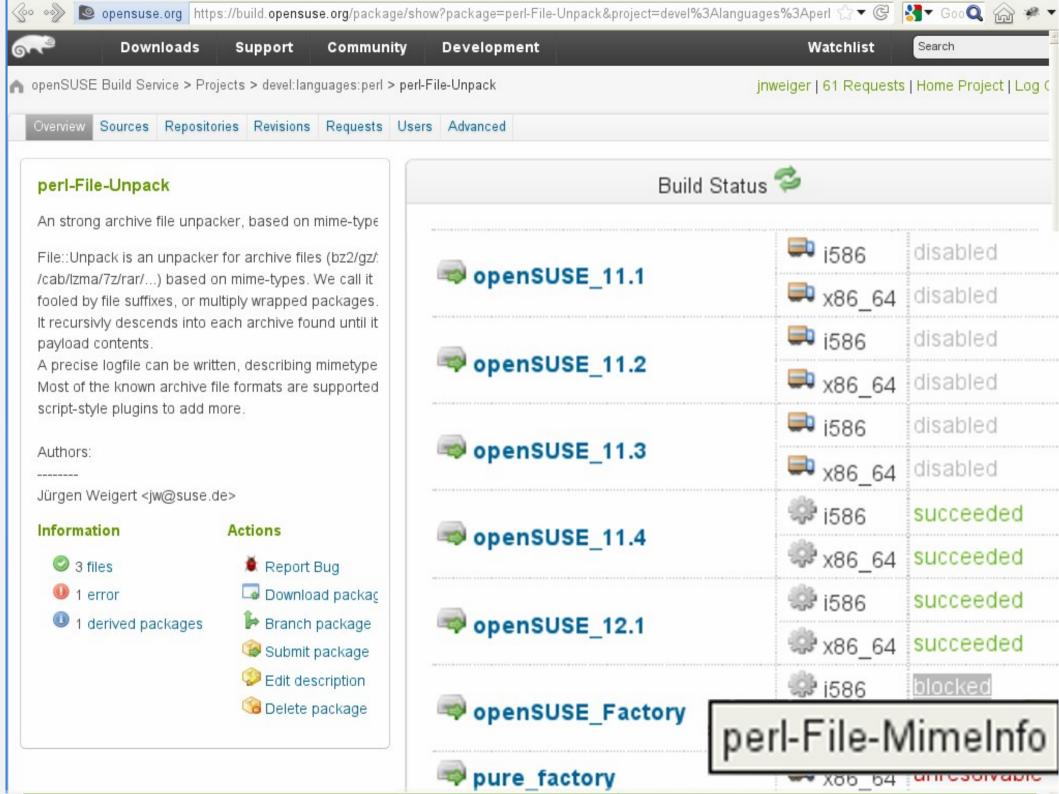


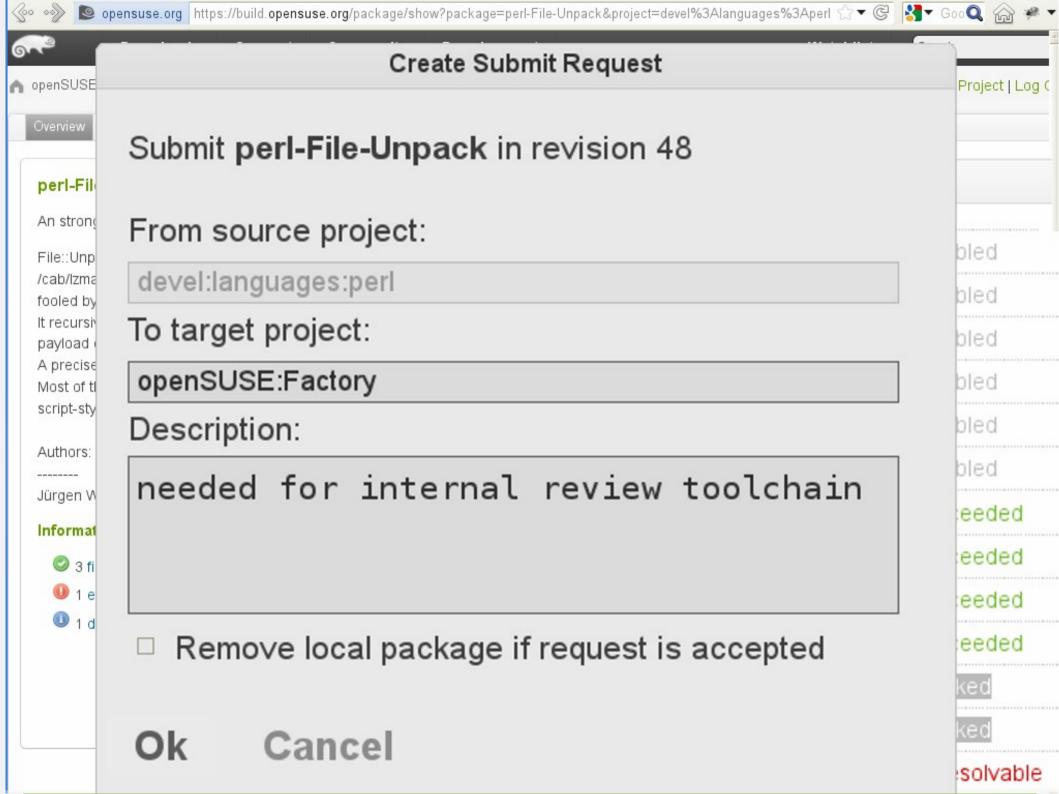


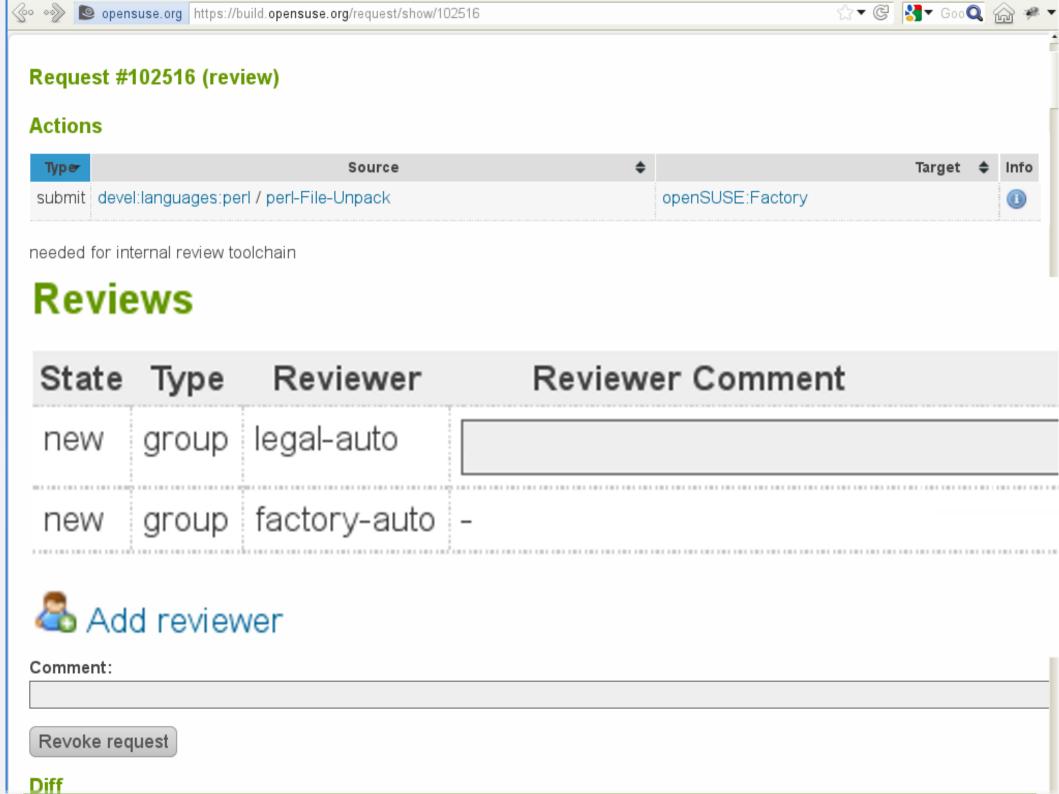


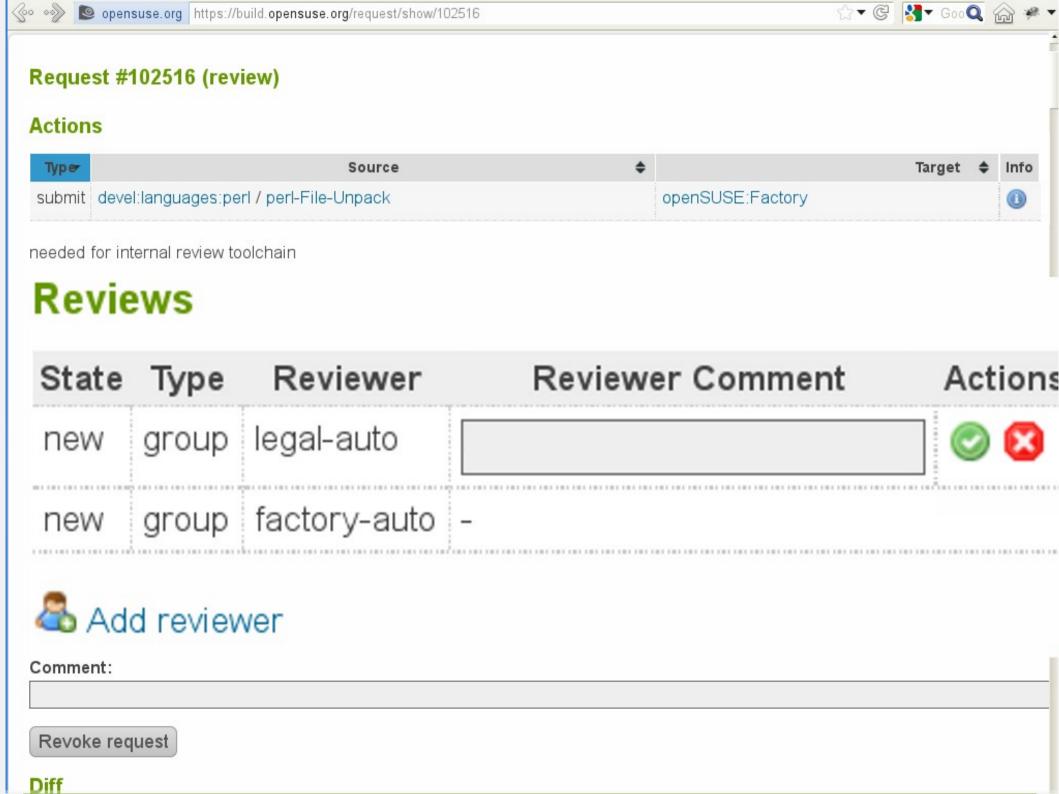


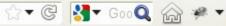


















#### Request #102516 (review)

#### **Actions**

Туре	Source	<b>\$</b>		Target	<b>\$</b>	Info
submit devel:lang	guages:perl / perl-File-Unpack		openSUSE:Factory			0

needed for internal review toolchain

# Reviews

State	Туре	Reviewer	Reviewer Comment
new	group	legal-auto	{"delegate": "new package r>3"} [+]
new	group	factory-auto	_
new	group	legal-team	{"delegate": "new package r>3"}



Revoke request









#### Request #102516 (review)

#### Actions

Турет	Source	<b>\$</b>	Target <b>♦</b>	Info
submit devel:language	s:perl / perl-File-Unpack	openSUSE:F	actory	0

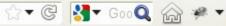
needed for internal review toolchain

# Reviews

State	Туре	Reviewer	Reviewer Comment
accepted	group	legal-auto	{"delegate": "new package r>3"} [+]
new	group	factory-auto	_
new	group	legal-team	{"delegate": "new package r>3"}



Revoke request











#### **Actions**

Туре	Source	<b>\$</b>		Target	<b>\$</b>	Info
submit devel:la	nguages:perl / perl-File-Unpack		openSUSE:Factory			0

needed for internal review toolchain

# Reviews

State	Type	Reviewer	Reviewer Comment
accepted	group	legal-auto	{"delegate": "new package r>3"} [+]
new	group	factory-auto	package is still building for openSUS
new	group	legal-team	{"delegate": "new package r>3"}



Revoke request

# ...automated review?!

#### **Rules for automated Review**

- Provide comments.
   All 'reasoning' should be made transparent.
- Do not decline.
   An automated decline is frustrating for users. Even with a perfectly sound explanation: do not decline.
- Possible actions are:
  - Wait (give hints, provide facts).
  - Approve
  - Delegate

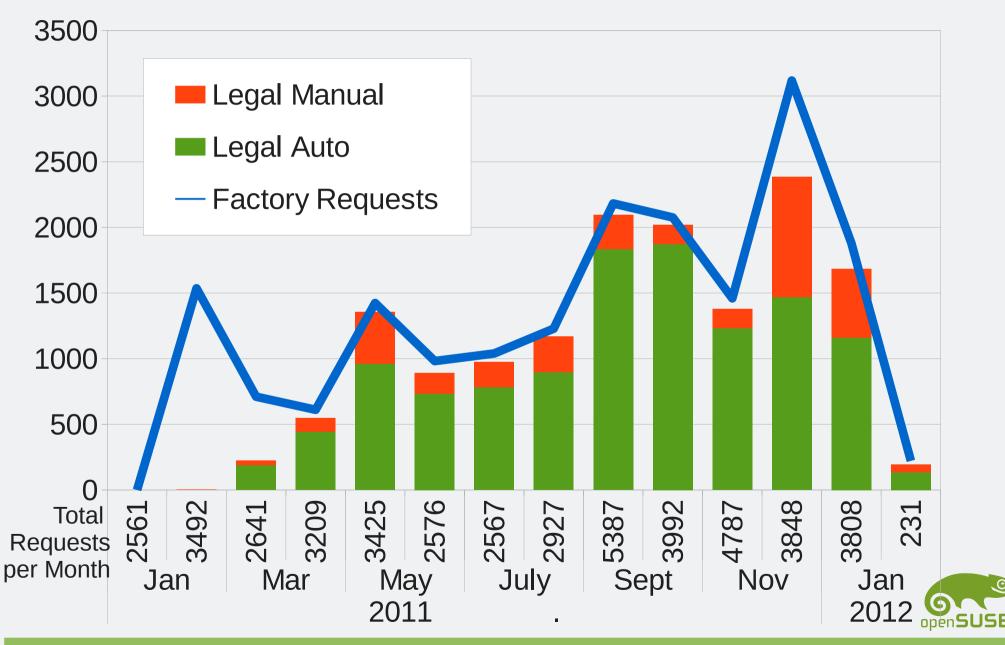


#### Use cases for automated Review

- Weed out broken packages. (This does reject!)
   While waiting, a request could become invalid. E.g.
  - package removed. Broken link. Merge conflict.
- Approve trivial cases.
   Reduce load on humans. Avoid boredom. E.g.
  - License name rewrite, because we join a standard SPDX naming scheme (e.g. GPLv2 → GPL-2.0)
  - no code change compared to earlier approval
- Provide results of automated tests to human reviewer.

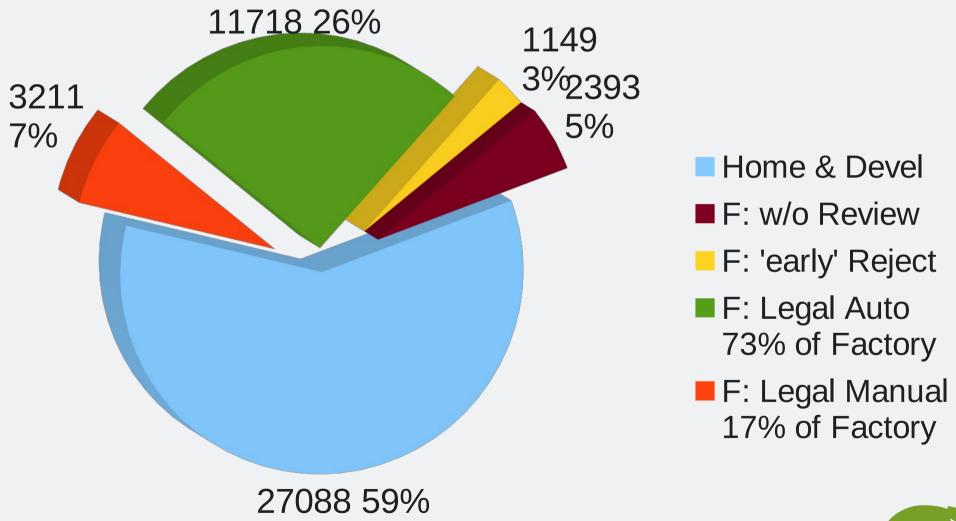


# Legal Reviews for openSUSE:Factory



#### **Distribution of all Reviews**

build.opensuse.org Jan.2011 - Feb.2012





# Are you a reviewer?

- Do you want to help?
   Tell the project managers.
- You never know.
   Somebody might think you should review something.
   Subscribe to My incoming Review Tasks on hermes!









# https://hermes.opensuse.org

#### openSUSE Build Service: Request Notifications My incoming Requests **OBS Request Create** All requests where you Receive a notification when a E-mail are listed in the target request is created. project. No digest / in OBS Request Change My created Requests Receive a notification when a All requests you are E-mail the author of request state is changed. No digest / in My incoming Requests All requests where you E-mail are listed in the target project. No digest / in **OBS Review Requests** My incoming Review Tasks All reviews of requests E-mail Receive a notification when where you are involved. somebody asks you for a review of a request. No digest / in



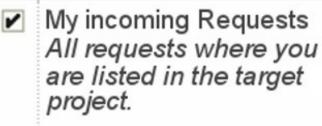




# https://hermes.opensuse.org

#### openSUSE Build Service: Request Notifications

OBS Request Create
Receive a notification when a
request is created.



E-mail No digest / in

OBS Request Change

Receive a notification when a request state is changed.



My created Requests All requests you are the author of.

E-mail

No digest / in

My incoming Requests All requests where you are listed in the target project.

No digest / in

**OBS Review Requests** 

Receive a notification when somebody asks you for a review of a request.

My incoming Review Tasks All reviews of requests where you are involved.

E-mail

E-mail

No digest / in



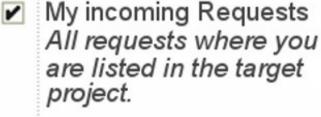




# https://hermes.opensuse.org

#### openSUSE Build Service: Request Notifications

OBS Request Create
Receive a notification when a
request is created.



E-mail

No digest / in

#### OBS Request Change

Receive a notification when a request state is changed.



My created Requests All requests you are the author of.

E-mail

No digest / in

My incoming Requests All requests where you are listed in the target project.

E-mail

No digest / in

#### **OBS Review Requests**

Receive a notification when somebody asks you for a review of a request.

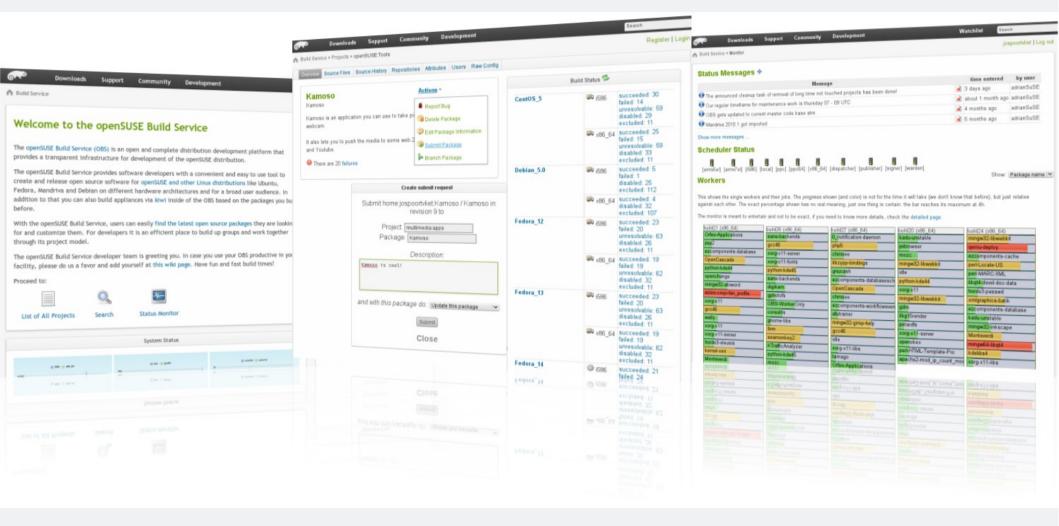


✓ My incoming Review Tasks All reviews of requests where you are involved.

E-mail

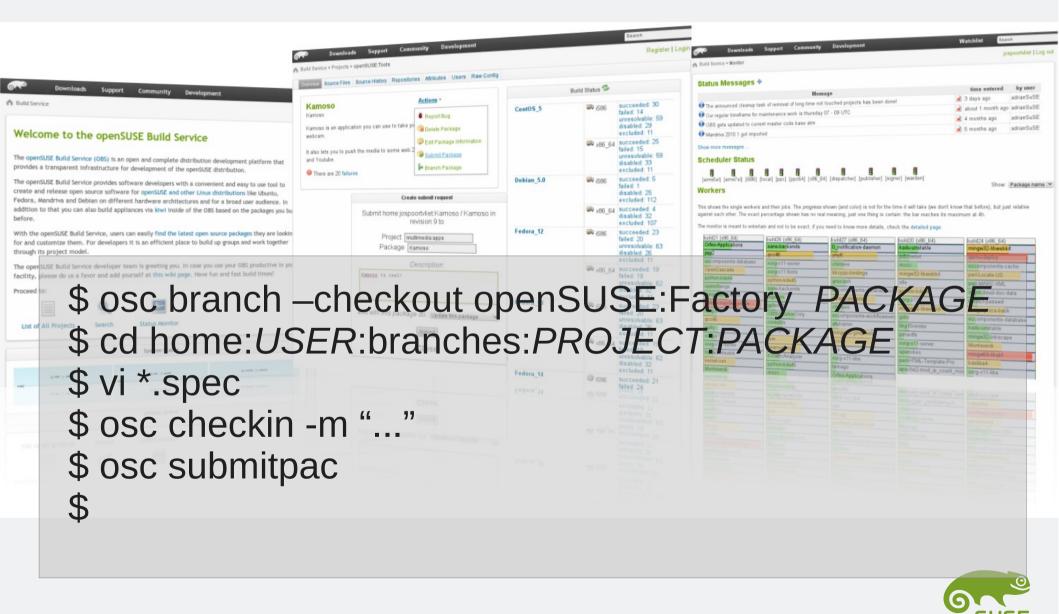
No digest / in

#### Interfaces ...





#### Interfaces ...



# ... enough web GUI, try the shell ...

# Reviewing on the command line Request handling

```
sudo zypper install osc

osc request list [-M] [-U USER] [-D DAYS] [...] [PRJ [PKG]]
osc my requests

osc request show [-d] [-b] ID
osc request ACTION ...

frequently used ACTIONs:
    accept, decline, revoke, checkout, ...
```

osc help review



# Reviewing on the command line Managing reviews

```
osc review list [-U USER] [-G GROUP] [-P PRJ [-P PKG]] [...]
osc review ACTION ...
frequently used ACTIONs:
   add, accept, decline, reopen, ...
```

osc help review



# Legal review interface

```
sudo zypper install osc-legal-plugin
osc legal list [-manual]
osc legal auto [-n]
osc legal checkout [-d DIRECTORY]
```

osc help legal



# \$ osc legal logic

```
if src.package == '_product':
        return r('approve', 'innocent meta package')
   if src.version == 'unknown':
        return r('delegate', 'failed to read version number
from build service')
   if src.error: return r('reject', 'source: '+src.error)
   if dest.error: return r('reject', 'target: '+dest.error)
   if src.package != dest.package:
       hint.append("src('%s') and dest('%s') package names
differ" % (src.package, dest.package))
   if src.version != dest.version:
       hint.append("src('%s') and dest('%s') version
numbers differ" % (src.version, dest.version))
   if src.license_diff is not None:
       hint.append("license change: %s"
           % src.license_diff)
```

### Notes on writing auto review code

- legal auto reviews are done by user 'licensedigger', which is registered with OBS as a regular user.
- A group 'legal-auto' was created, including licensedigger and also all the members of 'legal-manual' (this helps debugging...)
- osc legal auto
  is run as a cron job. It needs to authenticate against the
  buildservice API. Where to store the credentials?
- The osc-legal plugin allows members of the legal-manual group to switch role to the licensedigger user, when running osc legal auto.
- Powered by the osc plugin API, thanks!





planet.opensuse.org

opensuse.org/Portal:How\_to\_participate

opensuse.org/Junior\_jobs

features.opensuse.org

build.opensuse.org

#opensuse-project





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# **Kitty Image Credits**

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To be found on Flickr under the above names with a Creative Commons license. Thanks all!

