

Open Build Service

Cross-Distribution Packaging

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Intro

- The Open Build Service
 - Formerly known as the '*openSUSE Buildservice*'
 - It's a cross-distribution collaboration platform to build
 - > Packages for all major distros,
 - > Distributions (like openSUSE),
 - > ISO's, appliances or VM's
 - Currently 29100 registered developers 149000 packages in 30800 repositories
 - Logo (WIP):



Features

- Takes care of dependency changes, rebuild as needed
- Automagically creates download repositories
- Publish to world-wide mirroring infrastructure
- Can pull from Git, SVN, ...
- Supports semi-automatic package generation and update
- Allows local development

Build Status 		
 Debian_5.0	 i586	succeeded
	 x86_64	succeeded
 Debian_6.0	 i586	succeeded
	 x86_64	succeeded
 Fedora_12	 i586	succeeded
	 x86_64	succeeded
 Fedora_13	 i586	succeeded
	 x86_64	succeeded
 Fedora_14	 i586	succeeded
	 x86_64	succeeded
 Mandriva_2009.1	 i586	succeeded
	 x86_64	succeeded
 Mandriva_2010	 i586	succeeded
	 x86_64	succeeded
 Mandriva_2010.1	 i586	succeeded
	 x86_64	succeeded
 SLE_11	 i586	succeeded
	 x86_64	succeeded
 ScientificLinux_6	 i586	succeeded
	 x86_64	succeeded
 openSUSE_11.2	 i586	succeeded
	 x86_64	succeeded
 openSUSE_11.3	 i586	succeeded
	 x86_64	succeeded
 openSUSE_11.4	 i586	succeeded
	 x86_64	succeeded
 openSUSE_Factory	 i586	succeeded
	 x86_64	succeeded
 openSUSE_Tumbleweed	 i586	succeeded
	 x86_64	succeeded
 xUbuntu_10.04	 i586	succeeded
	x86_64	succeeded

Features

- Instances can connect
- Consists of
 - a web interface
 - command-line client (osc)
 - public API interface
 - > HTTP, XML, REST, ...
- Android client
- (Mostly) test driven
- Something for everyone:
 - *Perl, Python, Ruby (Rails), Shell, C, HTML, CSS, JavaScript, SQL, XML, XPath, ...*

Revision Log of libopenvas (Project

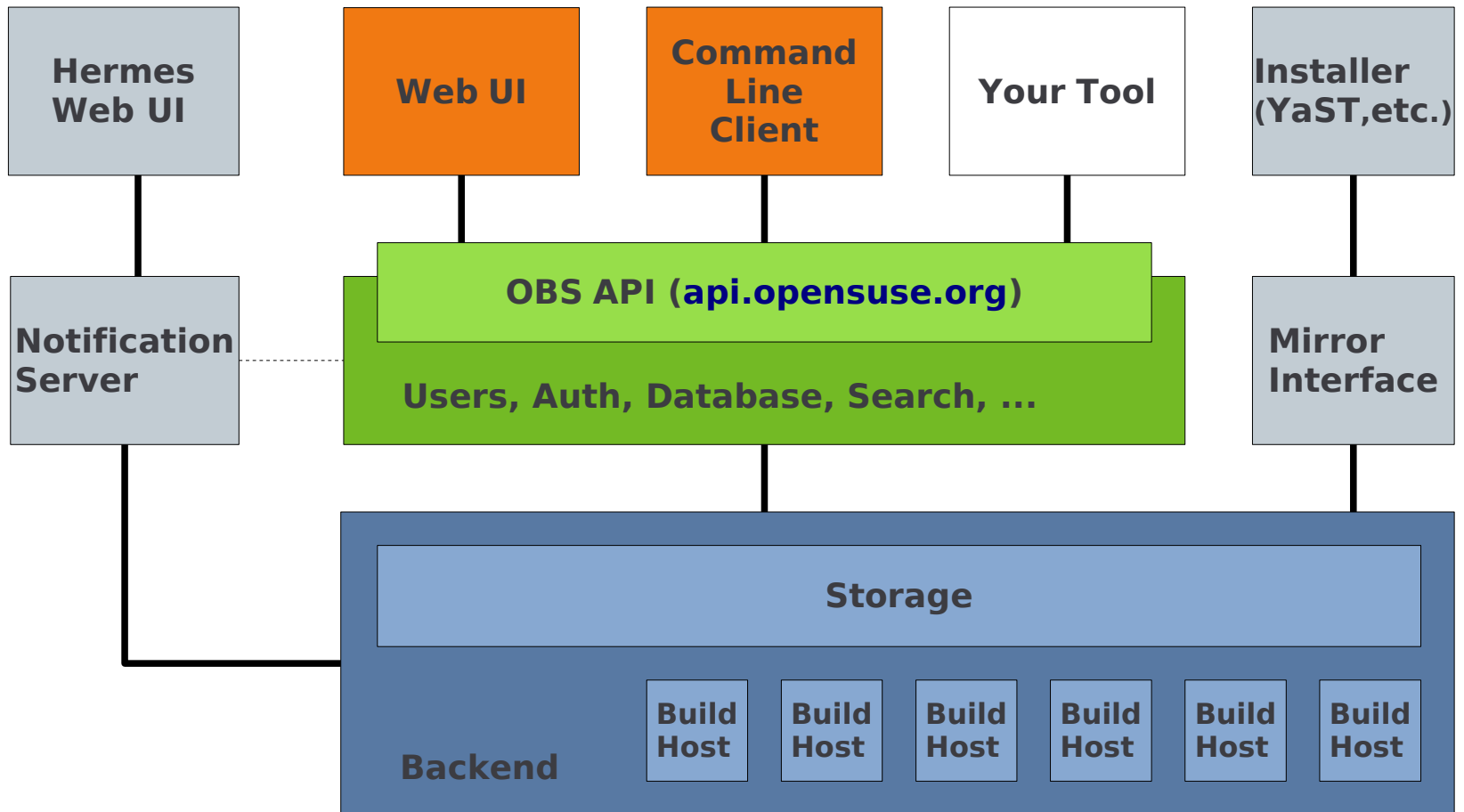
 [redacted] accepted [request](#)
baserev update by copy to link target
 [Show this commit](#)  [Show sources](#)

 [redacted] accepted [request](#)
- Update to 4.0.4
* The handling of internal dependencies in
parallel builds of openvas-libraries sh
* Two potential resource leaks reported h
been fixed.
* The setting "unscanned_closed" is now ;
 [Show this commit](#)  [Show sources](#)

 [redacted] committed 5
initialized devel package after accept.
 [Show this commit](#)  [Show sources](#)



The big picture



Web interface

Welcome to openSUSE Build Service

The openSUSE Build Service is the the public instance of the [Open Build Service \(OBS\)](#) development of the openSUSE distribution and to offer packages from same source for Fedora, Ubuntu, SUSE Linux Enterprise and other distributions..

Please find further details of this service on our [wiki pages](#)

This instance offers a special [package search interface](#). Users of any distribution can search for packages for their distribution. For developers it is an efficient place to build up groups and projects through its project model.



My Projects



All Projects



Search



New Project



Status Monitor

Latest Updates

 ibus-table-others	5 min ago
 PTSerif-fonts	7 min ago
 vala-0.12	8 min ago
 atheme	9 min ago
 darktable	11 min ago
 root	20 min ago

News

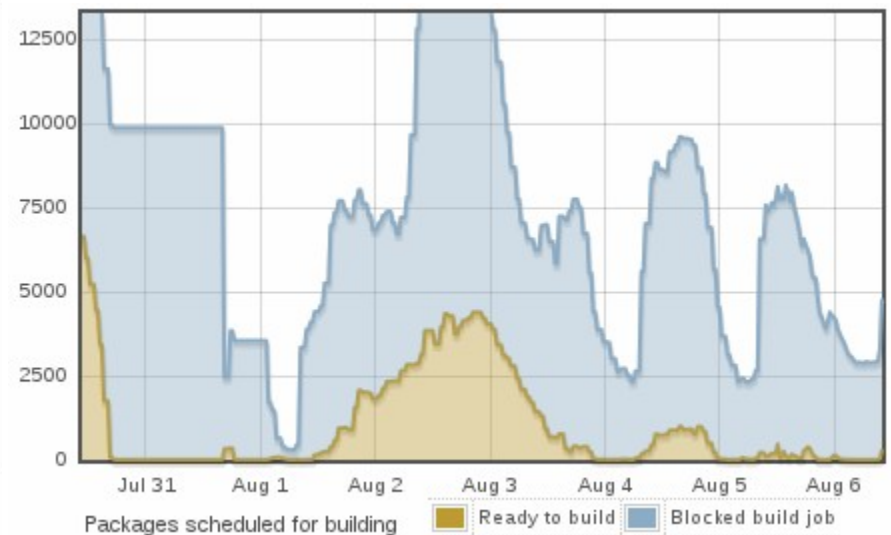
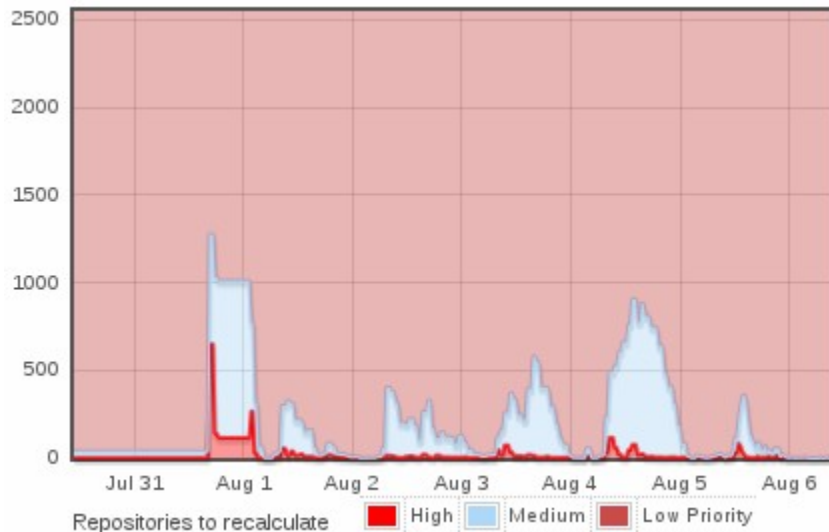
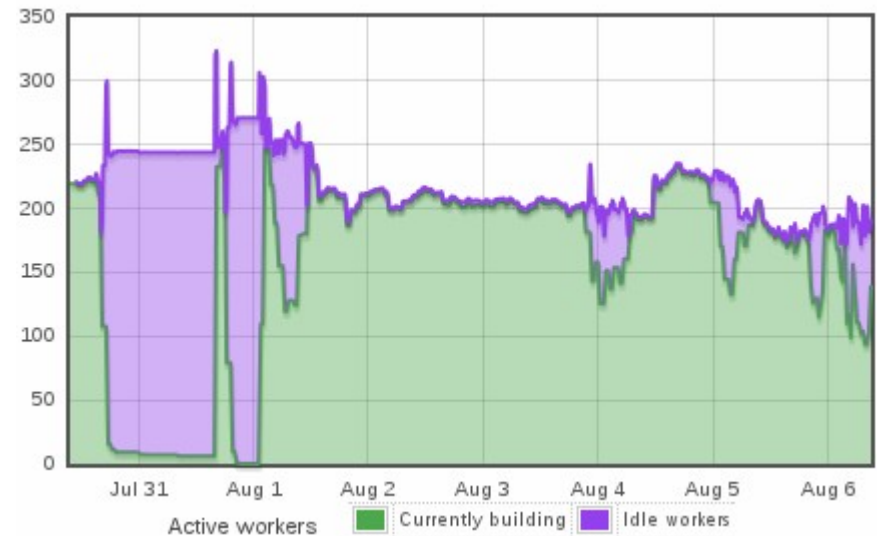
 CentOS 6 got added	2 weeks ago	 adrianSuSE
 Fedora 12 and 13 have been moved to DISCONTINUED	6 weeks ago	 adrianSuSE
 Schedulers have caught up the backlog. Normal operation.	6 weeks ago	 adrianSuSE
 Scheduler re-read all sources, no jobs get currently started, but submissions can be done anyway.	6 weeks ago	 adrianSuSE
 OBS means "Open Build Service" from now on: http://news.opensuse.org/2011/05/26/opensuse-renames-obs/	2 months ago	 adrianSuSE

Web interface - Statistics

Options

Architecture: x86_64 ▾

Timeframe: 1 month ▾



Creating a package

- Want to package an *awesome app*TM
- Let's take *choqok* as an example!

Create New Package for home: ~~source~~

Name:

choqok

Title:

Description:

Choqok is an open source microblogging client for KDE for social networking websites such as Twitter and Identic.

☐ Disable build results publishing.

Save changes

Package 'choqok' was created successfully

Overview Sources Repositories Revisions Requests Users Advanced

choqok

Choqok is an open source microblogging client for KDE for social networking websites such as Twitter and Identic

Information

0 files

Action

- Report Bug
- Download package
- Edit description
- Delete package

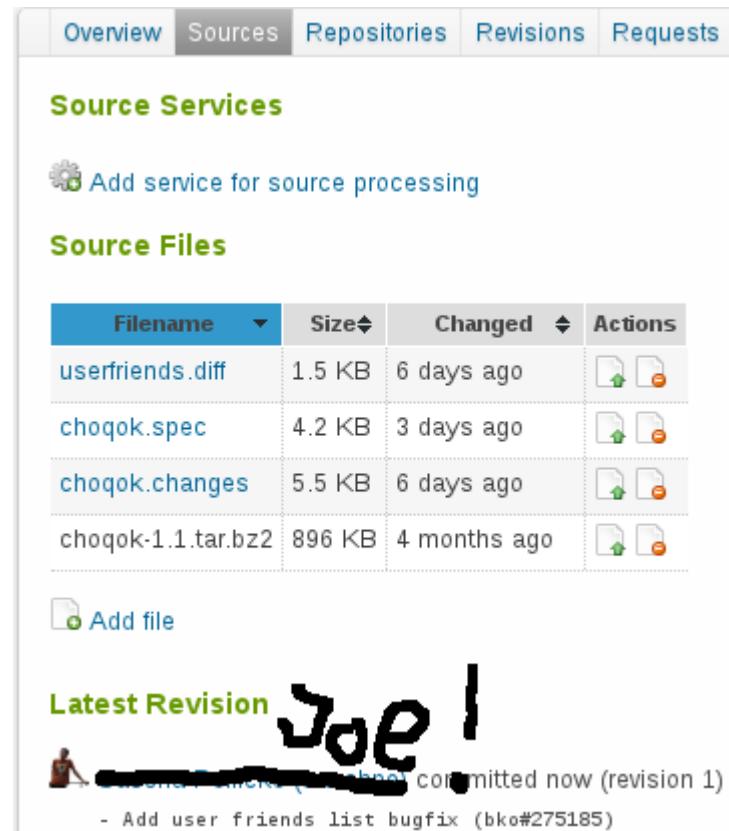
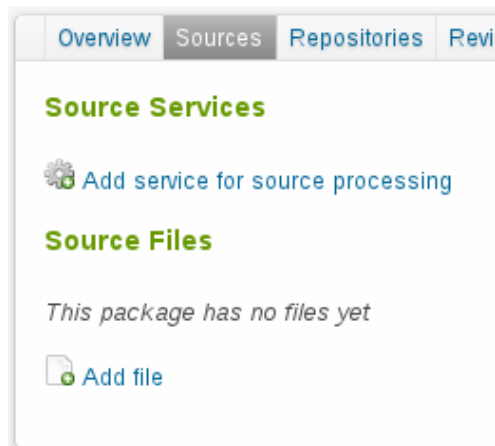
Build Status

No build result available

Huh? It's empty!

Creating a package - Files

- Requirements:
 - Source tarball (ha, easy!)
 - Build recipe (balls needed...)
 - > Spec file for RPMs
 - > Debian control files
 - Patience



Creating a package – The inevitable

- You have to write spec files
- Can be automated:
 - cpanspec
 - gem2rpm
 - py2pack
 - obs generator
(blogs.kde.org/node/4177)
- Helpful tools:
 - spec cleaner
 - rpmlint

```
Name:      choqok
Version:   1.1
Release:   8
License:   GPLv3
Summary:   Micro-Blogging Client
Url:       http://choqok.gnufolks.org
Group:     Productivity/Networking/Other
Source:    %{name}-%{version}.tar.bz2
Patch0:    userfriends.diff
BuildRequires: libkde4-devel qoauth-devel
```

%description

A Free/Open Source micro-blogging client for KDE.

%prep

```
%setup -q
%patch0 -p1
```

%build

```
%cmake_kde4
%make_jobs
```

%install

```
%kde4_makeinstall
```

%files

```
%doc AUTHORS COPYING README
%{_bindir}/choqok
%{_libdir}/libchoqok.so.*
...
```

%changelog

Creating a package – Waiting

- Once built locally, upload to OBS...
- Wait for dependencies or other packages...
- Find some bugs locally...

Build Status 		
 SLE_11_SP1	i586	disabled
	x86_64	disabled
 openSUSE_11.3	i586	blocked
	x86_64	blocked
 openSUSE_11.4	i586	blocked
	x86_64	blocked
 openSUSE_Factory	i586	blocked
	x86_64	blocked

Build Status 		
 SLE_11_SP1	i586	disabled
	x86_64	disabled
 openSUSE_11.3	i586	scheduled
	x86_64	scheduled
 openSUSE_11.4	i586	building
	x86_64	building
 openSUSE_Factory	i586	finished
	x86_64	building

Build Status 		
 SLE_11_SP1	i586	disabled
	x86_64	disabled
 openSUSE_11.3	i586	succeeded
	x86_64	succeeded
 openSUSE_11.4	i586	succeeded
	x86_64	succeeded
 openSUSE_Factory	i586	succeeded
	x86_64	succeeded

Creating a package – Fetch it, use it

- Finally, the masterpiece compiled
- So, you wanna download and distribute it...

Select Your Operating System



Install using One Click Install



Add repository and install manually

Grab binary packages directly

go

A compiled, garbage-collected, concurrent programming language

Go is an expressive, concurrent, garbage collected systems programming language that is type safe and memory safe. It has pointers but no pointer arithmetic. Go has fast builds, clean syntax, garbage collection, methods for any type, and run-time reflection. It feels like a dynamic language but has the speed and safety of a static language.

Information

- ✓ 8 files
- ✗ 2 errors
- i Devel package for openSUSE:Factory
- i 2 derived packages

Actions

- 🐛 Report Bug
- 📄 Download package
- 🌿 Branch package
- 📦 Submit package
- 📝 Edit description
- 🗑️ Delete package

Go here



More download options...

Select Your Operating System



Add repository and install manually

(hide)

For **Fedora 15** run the following as **root**:

```
cd /etc/yum/repos.d/  
wget http://download.opensuse.org/repositories/devel:languages:go/Fedora_15/devel:languages:go.repo  
yum install go
```

For **Fedora 14** run the following as **root**:

```
cd /etc/yum/repos.d/  
wget http://download.opensuse.org/repositories/devel:languages:go/Fedora_14/devel:languages:go.repo  
yum install go
```

Grab binary packages directly

(hide)

Packages for **Fedora 15**:

- [go-0.0.r59-2.1.i386.rpm](#)
- [go-0.0.r59-2.1.src.rpm](#)
- [go-0.0.r59-2.1.x86_64.rpm](#)
- [go-doc-0.0.r59-2.1.i386.rpm](#)
- [go-doc-0.0.r59-2.1.x86_64.rpm](#)
- [go-emacs-0.0.r59-2.1.i386.rpm](#)
- [go-emacs-0.0.r59-2.1.x86_64.rpm](#)
- [go-kate-0.0.r59-2.1.i386.rpm](#)
- [go-kate-0.0.r59-2.1.x86_64.rpm](#)
- [go-vim-0.0.r59-2.1.i386.rpm](#)
- [go-vim-0.0.r59-2.1.x86_64.rpm](#)

Creating a package – Sharing

- You should send it somewhere:
 - BTW. how about **openSUSE:Factory**?
 - Has fierce reviewers...
 - Gets you lot'sa cudos
 - (Actually a devel project is needed first)

choqok

Choqok is an open source microblogging client for KDE for social networking websites such as Twitter and Identica.

Information	Actions
4 files	Report Bug
11 errors	Download package
	Branch package
Naah, who cares, just	Submit package
	Edit description
	Delete package

Create Submit Request

Submit **choqok** in revision 1

From source project:

To target project:

Description:

☐ Remove local package if request is accepted

Ok **Cancel**

How it ends up – A request

openSUSE Build Service > Requests > Request #77854

[saschpe](#) | 28 Requests | [Home Project](#) | [Log Out](#)

Request 77854 accepted and forwarded to [openSUSE:Factory / python-Shed_Skin](#) (request 78047)

Request #77854 (accepted)

Actions

Type ▾	Source ▾	Target ▾	Info ⓘ
submit	home:babelworx:ldig:bra...devel:languages:python / python-Shed_Skin	devel:languages:python / python-Shed_Skin	

license update: GPL-3.0+

has an or later clause

History

Date ▲	State ▾	User ▾	Comment
1 day ago	new	 Ciaran Farrell (babelworx)	
now	accepted	 Sascha Peilicke (saschpe)	

Diff View

File python-Shed_Skin.changes:

```
1 --- python-Shed_Skin.changes (revision 2)
2 +++ python-Shed_Skin.changes (revision 2)
3 @@ -1,4 +1,10 @@
4 -----
5 +Wed Aug 3 10:23:31 UTC 2011 - cfarrell@novell.com
6 +
7 +- license update: GPL-3.0+
8 + has an or later clause
9 +
10 +-----
11 +Fri Jul 1 08:27:11 UTC 2011 - saschpe@suse.de
12 +
13 - Initial version
```

File python-Shed_Skin.spec:

```
1 --- python-Shed_Skin.spec (revision 2)
2 +++ python-Shed_Skin.spec (revision 2)
3 @@ -22,7 +22,7 @@
4  Release:
5  Url: http://shedskin.googlecode.com
6  Summary: An Optimizing (restricted) Python-to-C++ Compiler
7  -License:
8  +License:
9  Group: Development/Languages/Python
10 Source: http://shedskin.googlecode.com/files/shedskin-0.8.tgz
11 Source99: shedskin-rpmlintrc
```

Piles of packages - “My Work”

openSUSE Build Service > My Work

saschpe | 31 Requests | Home Project | Log Out

My Work

This page summarizes all requests where immediate action is required from you. [You can also use your complete list of requests.](#)

Open Reviews

No requests.

New Requests

Modified	Source	Target	Requester	Type	State	Actions
3 weeks ago	server:dns / sshfp	openSUSE:Factory	jengelh	chgdev	new	
2 weeks ago	devel:openSUSE:Factory / pciutils-ids	openSUSE:Factory	autobuild	submit	new	
2 weeks ago	home:openttdcoop:server / rubygem-unicorn	devel:languages:ruby:extensions	ammler	submit	new	
2 weeks ago	zypp:Code11_2-Branch / zypper	SUSE:SLE-11:SP1	mlandres	submit	new	
6 days ago	devel:openSUSE:Factory / arpwatch-ethercodes	openSUSE:Factory	autobuild	submit	new	
2 days ago	security:netfilter / shorewall	openSUSE:Factory	toganm	submit	new	
1 day ago	filesystems / cloop	openSUSE:Factory	jengelh	submit	new	
1 day ago	filesystems / ntfs-3g_ntfsprogs	openSUSE:Factory	prusnak	submit	new	
12 hours ago	multimedia:libs / fftw3	openSUSE:Factory	elvigia	submit	new	
5 hours ago	mozilla:Factory / npapi-sdk	openSUSE:Factory	wrosen	submit	new	
5 hours ago	Archiving:Backup / backintime	openSUSE_11.3	Master	submit	new	
4 hours ago	server:proxy / tinyproxy	openSUSE_11.3	jengelh	submit	new	
4 hours ago	devel:tools:scm:svn / fsvs	openSUSE_11.4	dirkmue	submit	new	
4 hours ago	security / intel-SINIT	openSUSE_11.4	coolo	submit	new	
4 hours ago	home:gabi2 / yast2-fcoe-client	openSUSE_Factory	gabi2	submit	new	
3 hours ago	Java:openjdk6:Factory / java-1_6_0-openjdk	openSUSE:Factory	mviskocil	submit	new	

Build results of security:netfilter / shorewall

Kernel_HEAD	x86_64	succeeded
Kernel_HEAD	i586	succeeded
Kernel_stable	x86_64	succeeded
Kernel_stable	i586	succeeded
openSUSE_11.3	x86_64	succeeded
openSUSE_11.3	i586	succeeded
openSUSE_11.4	x86_64	succeeded
openSUSE_11.4	i586	succeeded
openSUSE_Factory	x86_64	succeeded
openSUSE_Factory	i586	succeeded

KDE and Gnome in the OBS

openSUSE Build Service > Projects > KDE > Subprojects

Overview Packages Repositories Requests Users Subprojects Advanced

Subprojects of KDE

- [Active](#) (Plasma Active development)
- [Apps](#) (KDE Apps maintained by their upstream)
- [Apps:KMyMoney](#) (KMyMoney)
- [Distro:Factory](#) (KDE 4.7.x Packages)
- [Distro:Stable](#) (KDE 4.6.0 packages)
- [Extra](#) (Additional packages maintained by the KDE team)
- [KDE3](#) (Official KDE 3.5.10 release and associated software)
- [KDE3:NonFree](#)
- [Medias](#) (KDE Based Medias)
- [Netbook](#) (Plasma Netbook Reference)
- [Qt](#) (Current Qt 4.x packages)
- [Qt45](#) (Qt 4.5.x development snapshots)
- [Qt46](#) (Qt 4.6.x development snapshots)
- [Qt47](#) (Qt 4.7.x development snapshots)
- [Qt48](#) (Qt 4.8.x development snapshots)
- [Qt50](#) (Qt 5.x packages)
- [Qt:STABLE](#) (This project provides the latest stable Qt 4.6.x release)
- [Release:45](#) (KDE Release 4.5 Stable Repository)
- [Release:46](#) (KDE 4.6 Releases)
- [Release:46:kdepim46](#) (KDE 4.6.x for KDE:Release:46)
- [Release:47](#) (KDE 4.7 Release Packages)
- [Unstable](#) (KDE unstable repositories)
- [Unstable:Playground](#) (Unstable KDE Applications)
- [Unstable:SC](#) (KDE SC 4.8 development snapshots)
- [Unstable:SC:kdepim46](#) (Unstable KDE PIM Packages)
- [UpdatedApps](#) (Backports of latest application releases to stable openSUSE n

openSUSE Build Service > Projects > GNOME > Subprojects

Overview Packages Repositories Requests Users Subprojects Advanced

Subprojects of GNOME

- [Apps](#) (GNOME Applications)
- [Apps:F-Spot](#)
- [Apps:F-Spot:Unstable](#)
- [Apps:Tasque](#)
- [Apps:Tomboy](#)
- [Apps:Tomboy:Unstable](#) (Tomboy Development Releases)
- [Apps:pidgin-sipe](#)
- [Ayatana](#) (Packages for the Ayatana project)
- [Ayatana:11.4](#) (GNOME:Ayatana for openSUSE 11.4)
- [Backports](#) (GNOME:Backports contains packages required to build new versio
- [Backports:2.24](#) (Packages needed to run GNOME 2.24 on openSUSE 11.1)
- [Backports:2.26](#) (Packages needed to run GNOME 2.26 on openSUSE 11.1)
- [Backports:2.28](#) (Packages needed to run GNOME 2.28 on openSUSE 11.1)
- [Backports:2.30](#) (Packages needed to run GNOME 2.30 on openSUSE 11.2)
- [Backports:2.32](#) (Packages needed to run GNOME 2.32 on openSUSE 11.3)
- [Backports:Factory](#) (Bleeding-edge packages from other projects (ie, not in oS.
- [Community](#) (Open repository for GNOME related packages)
- [Contrib](#) (The development branch of GNOME packages living in Contrib.)
- [Evolution](#)
- [Evolution:Backports](#) (some backports for building the latest evolution)
- [Evolution:mapi](#) (Evolution mapi plugin)
- [Evolution:snapshot-2.32](#) (Evolution stable 2.32)
- [Evolution:snapshot-3.0](#) (snapshot for evolution 3.0)
- [Evolution:snapshot-master](#) (Provides latest evolution)
- [Evolution:snapshots](#) (nightly builds)
- [Evolution:snapshots:evolution-3.0](#) (evolution-3.0)
- [Factory](#) (Development branch of GNOME)
- [GNOME1](#) (GNOME1/GTK+1 Libraries and Applications)
- [Medias](#) (GNOME Based Medias)
- [Next](#) (Next version of GNOME (this is not for end-users!))
- [STABLE](#) (Stable branch of GNOME)
- [STABLE:2.24](#) (Stable branch of GNOME 2.24)
- [STABLE:2.26](#) (GNOME 2.26 (openSUSE_11.1))
- [STABLE:2.28](#) (GNOME 2.28)
- [STABLE:2.30](#) (GNOME 2.30)
- [STABLE:2.32](#) (GNOME 2.32)
- [STABLE:3.0](#) (GNOME 3.0)

Coming up next...

- OBS 2.3 (beta2)
 - Maintenance
 - Groups
 - Reviews
 - Security improvements
 - (Issue tracker integration)
- (Hot) Summer of Code
 - Arch Linux support
 - More (browser) testing!
 - Android client
 - New CLI

Users of network:messaging

User	Roles					Actions
	Maintainer	Bugowner	Reviewer	Downloader	Reader	
 [redacted]	☒	☐	☐	☐	☐	 
 [redacted]	☒	☒	☐	☐	☐	 

 Add user

 Add group

Add Reviewer

Add a reviewer to **request #70127**

Type:

Group:

factory-maintainers

Ok Cancel

Want more?

- build.opensuse.org
 - The most prominent Build Service instance. Also contains links to documentation and source code
- en.opensuse.org/Build_Service
 - OBS wiki portal
- features.opensuse.org
 - Feature tracker
- opensuse-buildservice@opensuse.de
 - The mailing list for discussing the Build Service.
- [#opensuse-buildservice](#) on Freenode
 - Our IRC channel

