

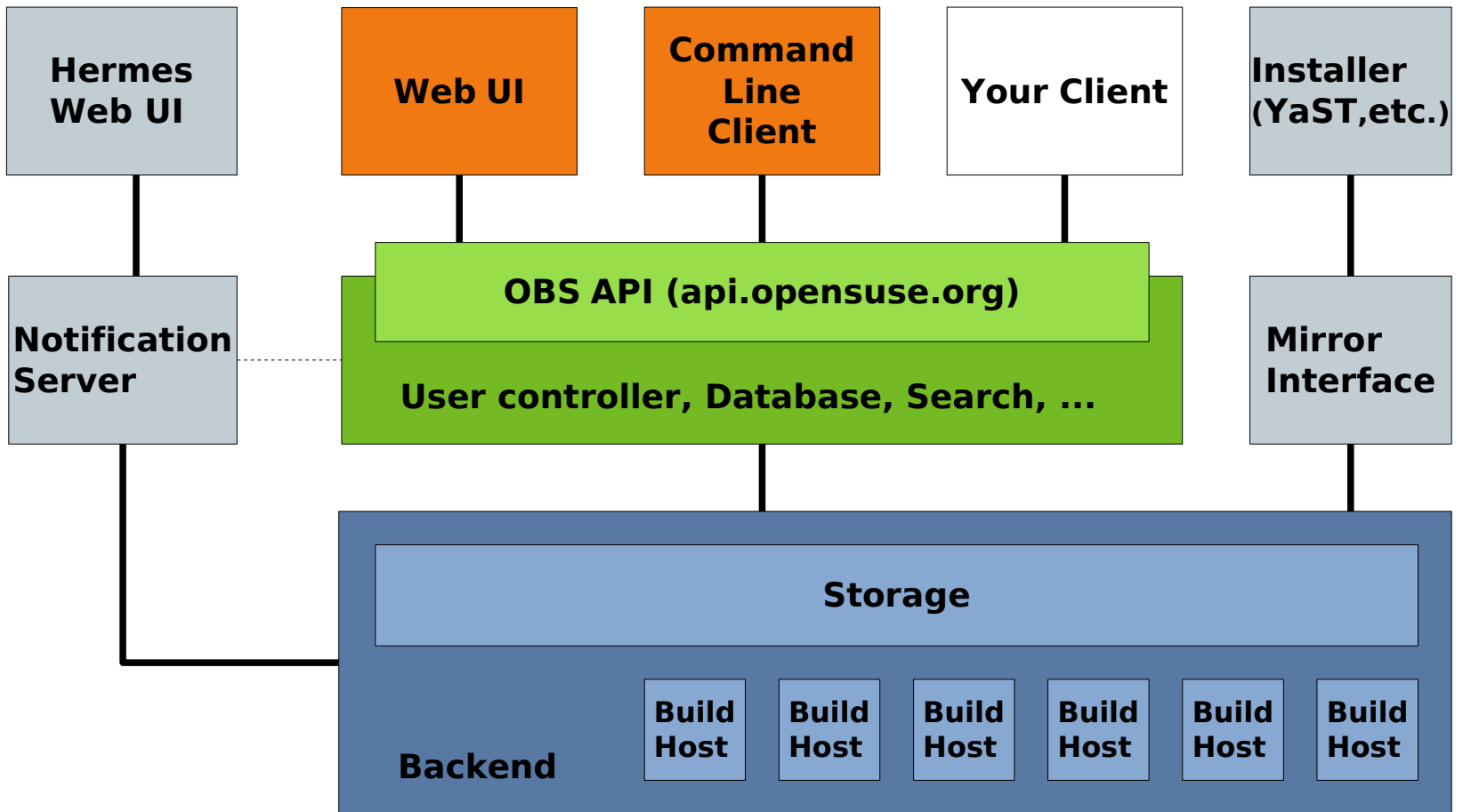
Open Build Service (OBS)

Packager Workshop

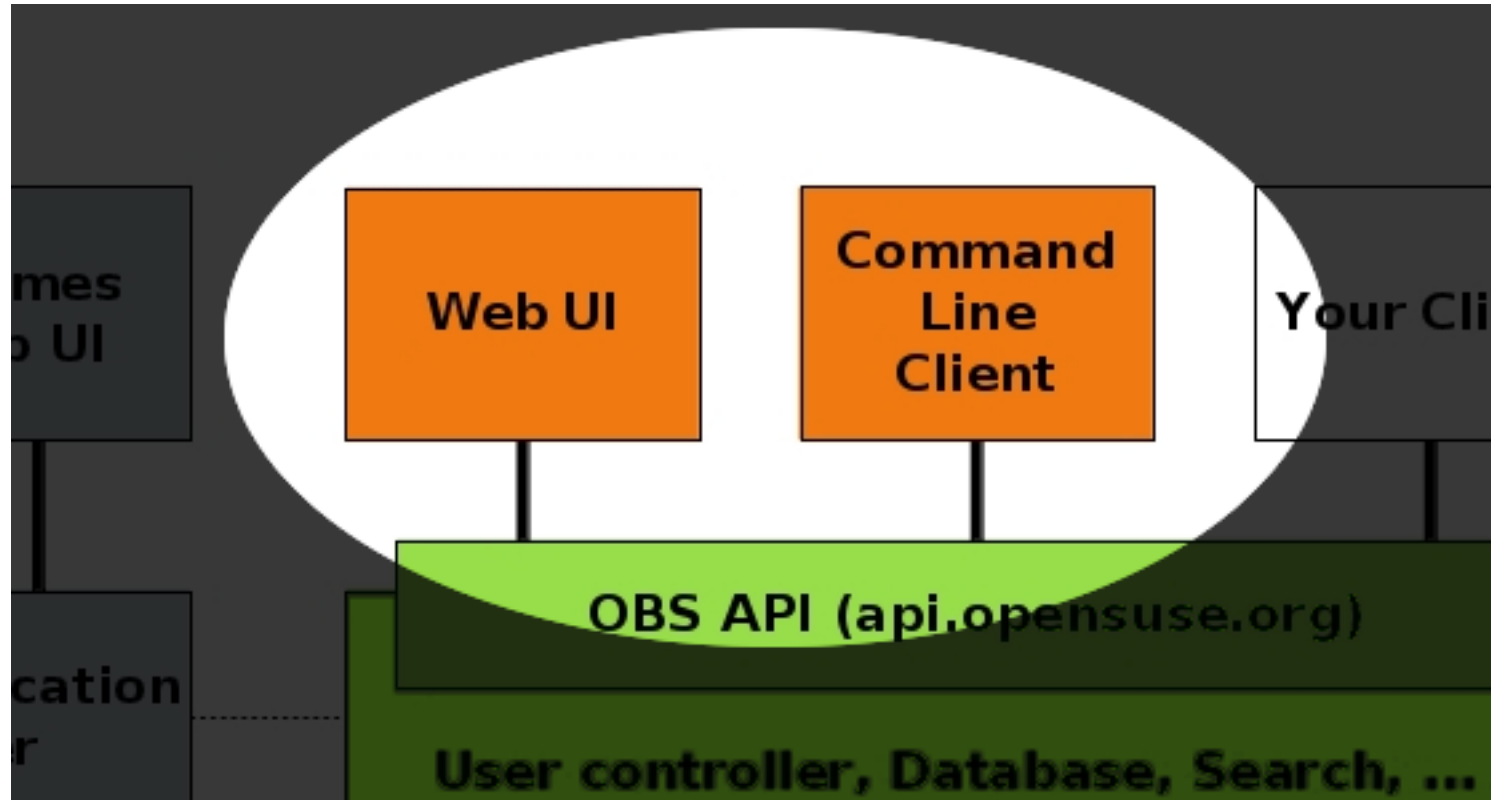


A Packagers OBS Tools

Components Overview



A Packagers OBS Tools



A Packagers OBS Tools Reference Server



A Packagers OBS Tools Web Client

The screenshot displays the OBS web client interface for the package `python-titlecase` in the `home:hennevogel` project. The browser address bar shows the URL `https://build.opensuse.org/package/show?package=python-titlecase&project=home%3Ahennevogel`. The navigation menu includes `Downloads`, `Support`, `Community`, `Development`, `Watchlist`, and a search bar. The breadcrumb trail is `openSUSE Build Service > Projects > home:hennevogel > Packages > python-titlecase`. The user `hennevogel` has 12 requests, and there are links for `Home Project` and `Logout`. The main content area has tabs for `Overview`, `Sources`, `Repositories`, `Revisions`, `Requests`, `Users`, and `Advanced`. The `Overview` tab shows the package name `python-titlecase` with the note `No description set`. Under the `Information` section, it indicates `3 files` and `2 errors`. The `Build Results` section shows a table of build attempts for `openSUSE_12.2` on `i586` and `x86_64` architectures, both of which failed. The `My Actions` section provides links for `Branch package`, `Submit package`, `Edit description`, and `Delete package`. The footer contains navigation links for the user `hennevogel` (My Projects, My Work, Home Project, Logout), Locations (Projects, Search, Status Monitor), Help (Open Build Service Portal, Building Packages, Writing spec Files, Reporting a Bug, Forums), and the Sponsor logo for `B SYSTEMS`. A small note at the bottom states `Open Build Service (OBS) is an openSUSE project.`

A Packagers OBS Tools

osc

```
hvogel@g124: ~/Development/Packaging/obs/home:hennevogel/python-titlecase
hvogel@g124 $ ls
python-titlecase-ez_setp_remove.patch  python-titlecase.spec  titlecase-0.5.1.tar.gz
hvogel@g124 $ osc build openSUSE_12.2
Building python-titlecase.spec for openSUSE_12.2/i586
Getting buildinfo from server and store to /home/hvogel/Development/Packaging/obs/home:hennevogel/python-titlecase/.osc/_buildinfo-openSUSE_12.2-i586.xml
Getting buildconfig from server and store to /home/hvogel/Development/Packaging/obs/home:hennevogel/python-titlecase/.osc/_buildconfig-openSUSE_12.2-i586
Updating cache of required packages
0.0% cache miss. 113/113 dependencies cached.

Skipping verification of package signatures
Writing build configuration
Running build
logging output to /home/hvogel/.tmp/osc/openSUSE_12.2-i586/.build.log...
[ 0s] Memory limit set to 6719176KB
█
```

<http://openbuildservice.org/download>

Creating Packages

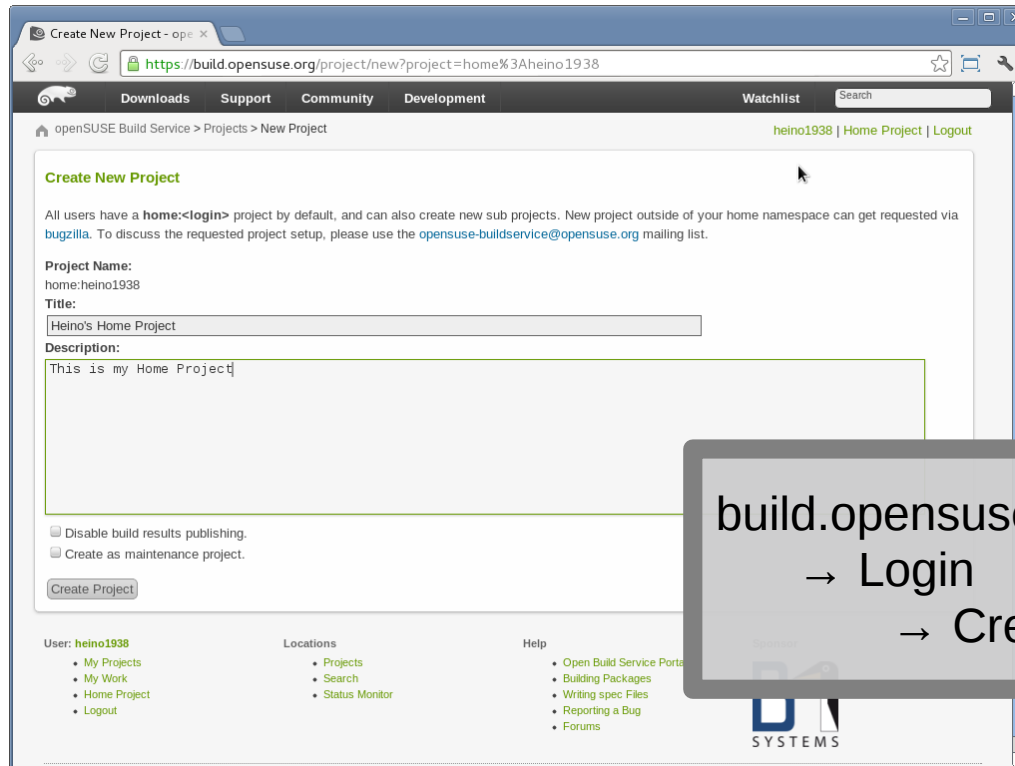
Creating Packages

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- ✓ Create a package
- ✓ in your own home project
- ✓ on the reference server

Creating Packages

Create your home project



build.opensuse.org

→ Login

→ Create your home project

Creating Packages

Create a new package

```
Terminal X
you@laptop $ osc co home:you
A   home:you
you@laptop $ cd home:you

you@laptop $ osc mkpac ctris
A   ctris
you@laptop $ cd ctris

you@laptop $ vi ctris.spec
```

Creating Packages

Write a specfile

```
Name:                ctris
Summary:             Console based Tetris clone
URL:                 http://www.hackl.dhs.org/ctris/
License:             GPL
Group:               Amusements/Games/Action/Arcade
Version:             0.42
Release:             1
Source:              %{name}-%{version}.tar.bz2
BuildRoot:           %{_tmppath}/%{name}-%{version}-build
BuildRequires:      ncurses-devel
Requires:            ncurses

%description
An ASCII version of the well known game Tetris

%prep
%setup -q

%build
make

%install
make install DESTDIR=$RPM_BUILD_ROOT
%debug_package

%clean
rm -rf $RPM_BUILD_ROOT;

%files
%defattr (-,root,root)
%doc AUTHORS COPYING README TODO
%doc %{_mandir}/man6/ctris.6.gz
/usr/games/ctris
```

Creating Packages

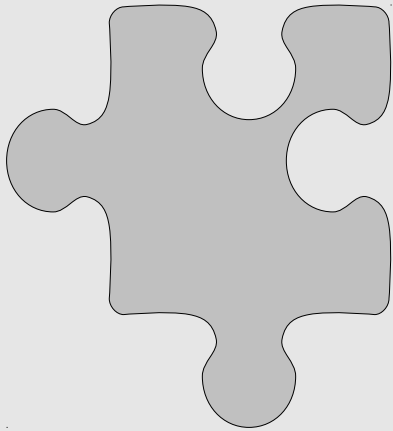
Create a new package

```
Terminal X
you@laptop $ wget -q http://www.hackl.dhs.org/data/download/download.php?file=ctris-0.42.tar.bz2 -O ctris-0.42.tar.bz2

you@laptop $ osc addremove
A   ctris.spec
A   ctris-0.42.tar.bz2
you@laptop $ osc ci -m "First checkin of the ctris package"
```


Creating Packages

Playtime



Try some stuff on your own:

Import an RPM package with
`osc importsrcpkg`

Copy an existing package with
`osc copypac`

Building Packages

Building Packages

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- ✓ Build a package
- ✓ locally on your laptop
- ✓ and on the reference server

Building Packages

Add Repositories

The screenshot shows a web browser window titled "Add Repository - openSU". The address bar contains the URL: https://build.opensuse.org/project/add_repository_from_default_list?project=home%3Ahennevogel. The page header includes navigation links: Downloads, Support, Community, Development, Watchlist, and a search bar. The breadcrumb trail is: openSUSE Build Service > Projects > home:hennevogel > Add Repository. The page title is "Add Repositories to Project home:hennevogel". Below the title, there is a sub-header "Add Repositories to Project home:hennevogel" and a paragraph: "Please choose the repositories that your packages will be built for by following default list. Or [pick one via advanced interface](#)." The page lists four distribution categories with their respective logos and available repositories:

- openSUSE distributions**
 - openSUSE Factory
 - openSUSE 12.2
 - openSUSE 12.1
 - openSUSE 11.4
 - openSUSE Tumbleweed
- SUSE distributions**
 - SUSE SLE-11 SP 2
 - SUSE SLE-11 SP 1
 - SUSE SLE-11
 - SUSE SLE-10
- Debian distributions**
 - Debian 6.0
- Fedora distributions**
 - Fedora 17
 - Fedora 16

On the right side of the page, there is a grey box with the following text:

```
home:you  
→ Repositories  
→ Add repositories
```

Building Packages

Local Builds

```
Terminal X
you@laptop $ osc build
Building ctris.spec for openSUSE_12.2/i586
Getting buildinfo from server and store to /home/you/home:you/ctris/.osc/_buildinfo-
openSUSE_12.2-i586.xml
Getting buildconfig from server and store to /home/you/home:you/ctris/.osc/_buildconfig-
openSUSE_12.2-i586
Updating cache of required packages
0.0% cache miss. 109/109 dependencies cached.

Verifying integrity of cached packages
using keys from openSUSE:12.2
Writing build configuration
Running build
logging output to /var/tmp/build-root/.build.log...
```


Building Packages

Local Builds for foreign distributions

```
Terminal X
you@laptop $ osc build Fedora_17
Building ctris.spec for Fedora_17/i586
Getting buildinfo from server and store to /home/heino/home:heino1938/ctris/.osc/_buildinfo-
Fedora_17-i586.xml
Getting buildconfig from server and store to /home/heino/home:heino1938/ctris/.osc/_buildconfig-
Fedora_17-i586
Updating cache of required packages
0.0% cache miss. 204/204 dependencies cached.

Verifying integrity of cached packages
using keys from Fedora:17
Writing build configuration
Running build
logging output to /var/tmp/build-root/.build.log...
```

Building Packages

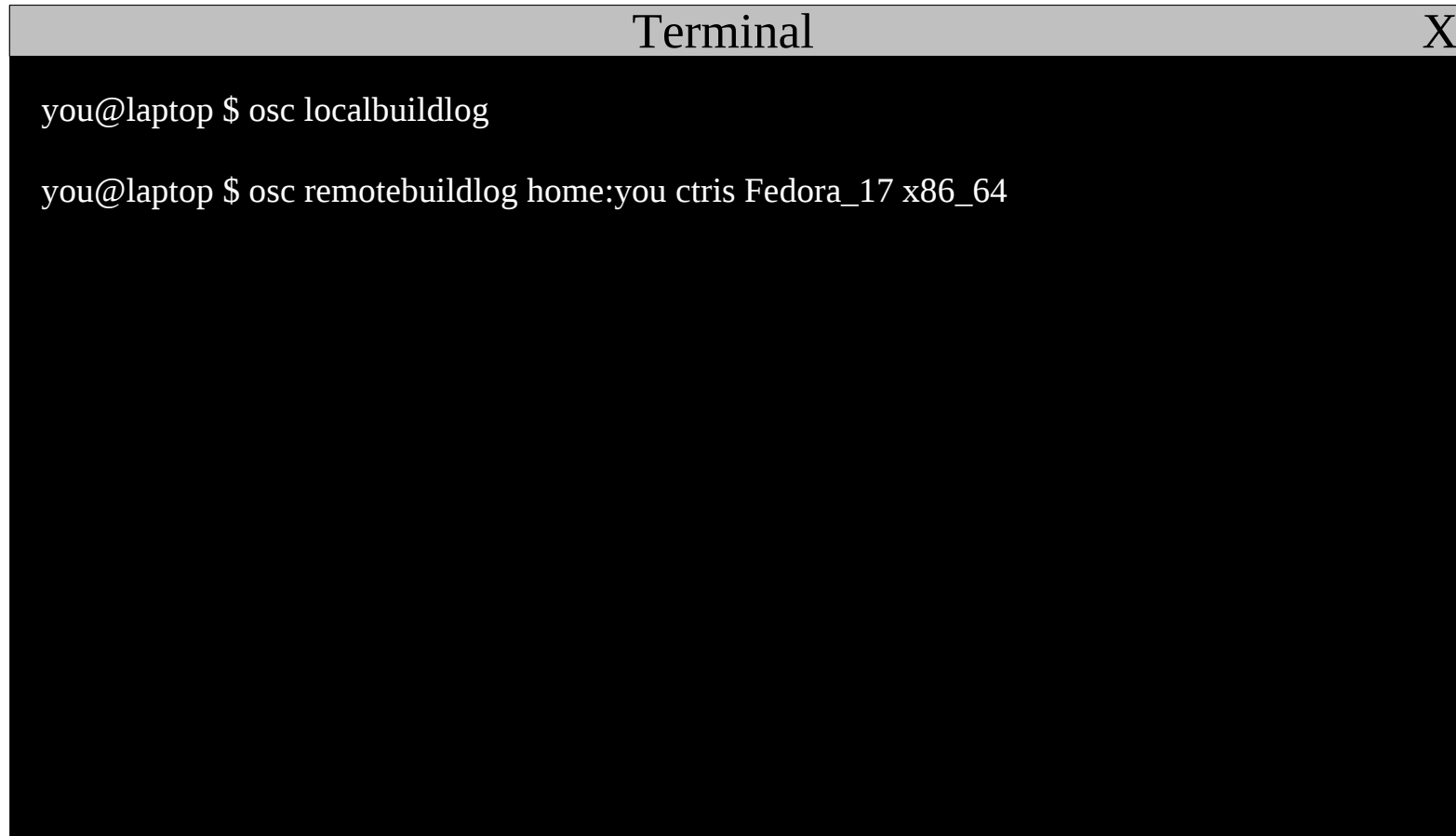
Checking build results

```
Terminal X
you@laptop $ osc results
Fedora_17 i586      failed
Fedora_17 x86_64   failed
openSUSE_12.2 i586  succeeded
openSUSE_12.2 x86_64 succeeded

you@laptop $ osc prjresults
ctris
F Fedora_17 i586 (published)
F Fedora_17 x86_64 (published)
. openSUSE_12.2 i586 (published)
. openSUSE_12.2 x86_64 (published)
```

Building Packages

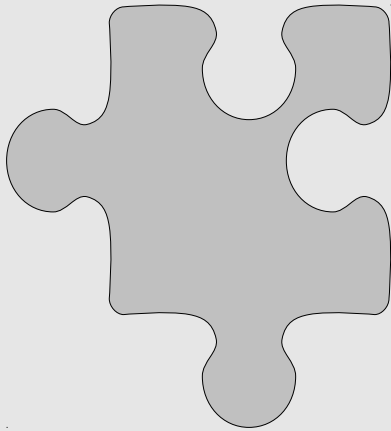
Checking build logs

A terminal window titled "Terminal" with a close button "X" in the top right corner. The terminal background is black with white text. It shows two commands entered at the prompt: "you@laptop \$ osc localbuildlog" and "you@laptop \$ osc remotebuildlog home:you ctris Fedora_17 x86_64".

```
Terminal X  
you@laptop $ osc localbuildlog  
you@laptop $ osc remotebuildlog home:you ctris Fedora_17 x86_64
```

Building Packages

Playtime



Try some stuff on your own:

Examine other projects with
`osc pr some:project`

Examine the build root with
`osc chroot`

Collaborating on Packages

Collaborating on Packages

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- ✓ Branch a package
- ✓ Submit a merge request
- ✓ Review a merge request

Collaborating on Packages

Branching

Terminal

X

```
you@laptop $ osc branch home:hennevogel ctris  
A working copy of the branched package can be checked out with:
```

```
osc co home:you:branches:home:hennevogel/ctris
```

```
you@laptop $ osc co home:you:branches:home:hennevogel/ctris
```

```
A home:you:branches:home:hennevogel
```

```
A home:you:branches:home:hennevogel/ctris
```

```
A home:you:branches:home:hennevogel/ctris/ctris-0.41.tar.bz2
```

```
A home:you:branches:home:hennevogel/ctris/ctris.changes
```

```
A home:you:branches:home:hennevogel/ctris/ctris.spec
```

```
At revision 2e6f2aea1a884fda8c6e9564c9323ab3.
```

```
you@laptop $ cd home:you:branches:home:hennevogel
```

Collaborating on Packages

Updating

```
Terminal X
you@laptop $ vi ctris.spec

you@laptop $ wget -q http://www.hackl.dhs.org/data/download/download.php?file=ctris-0.42.tar.bz2 -O ctris-0.42.tar.bz2

you@laptop $ rm ctris-0.41.tar.bz2

you@laptop $ osc addremove
D  ctris-0.41.tar.bz2
A  ctris-0.42.tar.bz2
```

Collaborating on Packages

Testing your changes

```
Terminal X
you@laptop $ osc build
you@laptop $ osc ci -m "Update to version 0.42"
you@laptop $ osc results
you@laptop $ osc remotebuildlog home:you:branches:home:hennevogel openSUSE_12.2 i586
```

Collaborating on Packages

Submitting changes

```
Terminal X
you@laptop $ osc submitreq
created request id 0815

you@laptop $ osc request -M
0815 State:new      By:you   When:2012-08-16T13:21:35
      submit:      home:you:branches:home:hennevogel/ctris -> home:hennevogel
      Descr: Update to version 0.42
```

Collaborating on Packages

Assess Requests

```
Terminal X
hennevogel@work $ osc request list home:hennevogel
0815 State:new    By:you    When:2012-08-16T13:21:35
    submit:      home:you:branches:home:hennevogel/ctris -> home:hennevogel
    Descr: Update to version 0.42

hennevogel@work $ osc request accept 0815 -m "Thank you for your contribution :-)"
Result of change request state: ok
```

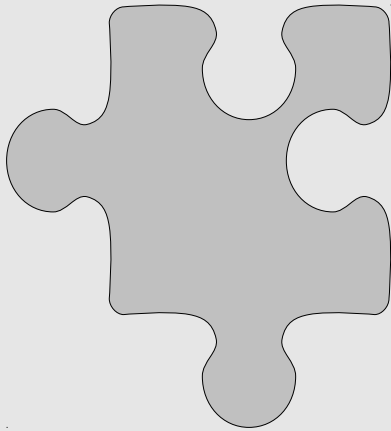
Collaborating on Packages

Tracking request

```
Terminal X
you@laptop $ osc request -M
0815 State:accepted By:hennevogel When:2012-08-16T13:43:04
submit:      home:you:branches:home:hennevogel/ctris -> home:hennevogel
From: new(you)
Descr: Update
Comment: Thank you for your contribution :-)
```


Collaborating on Packages

Playtime



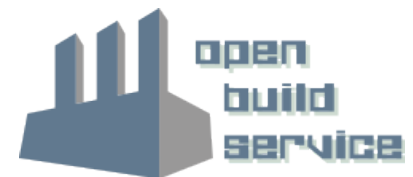
Try some stuff on your own:

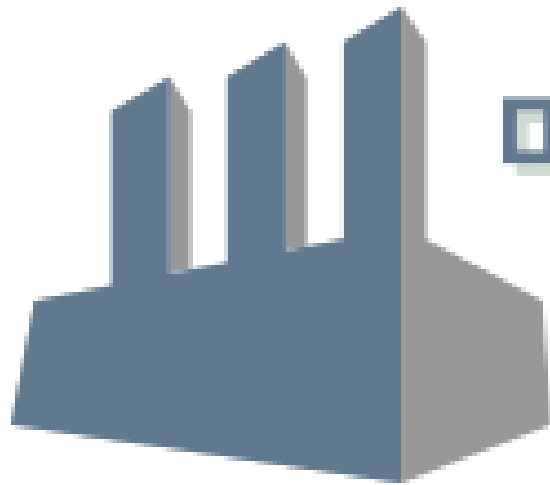
Branch/submit a new package with
`osc branch -N`

Track a request for openSUSE
`osc request list openSUSE:Factory`

Learn more about the
Open Build Service
www.openbuildservice.org

Thank you.





**open
build
service**