OBS introductionary course for **SUSE** people



Tomáš Chvátal tchvatal@suse.com Maintenance/L3-Packaging

2016/01/11

Introduction

Explanation of few shortcuts used in the slides

- isc = alias for osc -A IBS
- ibs = build.suse.de
- obs = build.opensuse.org
- SR# = submit request in any of the above instances
- bnc = bug on bugzilla.novell.com

What is buildservice

- provider for reproducable build results
- VCS for our packages
- collaboration tools using SR#s

How do I communicate with the tool

- Using web interface on the ibs or obs locations
- Using commandline interface called osc (osc is provided on most distributions as package too)

CLI Configuration tips

Configuration suggestions

\$HOME/.oscrc

```
build-jobs = 16 # value for buildjobs
extra-pkgs = vim gdb strace mc less unzip # some tools
no_verify = 1 # local verification only
```

Configuration suggestions - cont.

```
[https://api.suse.de]
user = bugzillausername
pass = bugzillapw
email = guessyourself
aliases = ibs

[https://api.opensuse.org]
user = bugzillausername
pass = bugzillapw
email = guessyourself
aliases = obs
```

Configuration suggestions - cont.

\$HOME/.bashrc

As few commands will be called quite often it is easier to alias them.

```
export COMP_WORDBREAKS=${COMP_WORDBREAKS/:/}
alias isc="osc -A ibs"
alias oscb="osc build --ccache"
alias oscsd="osc service localrun download_files"
```

Basic CLI usage

Sample worload

```
$ osc co Archiving/rsnapshot
$ cd Archiving/rsnapshot
$ vi rsnapshot.spec # hackyhacky
$ osc vc -m "Fix something. Resolves bnc#1234"
$ oscb
$ osc ci
```

Some handy tips

osc build options

Build debuginfo packages localy:

\$ osc build --debuginfo/-d

Skip the pesky post-build-checks:

\$ osc build --nochecks

Add extra rpms from local system rather than from O/IBS:

\$ osc build --preffer-pkgs /my/directory/withrpms/

Add extra packages on the chroot environment:

\$ osc build -x gdb

osc tips continued

Get the buildlog from the local build:

\$ osc lbl project eg. openSUSE_13.2>

Avoid password request prior each build:

echo "yourlogin ALL = (root) NOPASSWD: /usr/bin/build" >> /etc/sudoers

${\sf Collaboration/maintenance}$

openSUSE Factory

```
https:
//progress.opensuse.org/workflow/factory-proposal.html
https://en.opensuse.org/openSUSE:
Factory_development_model
```

openSUSE Factory cont.

```
$ osc develproject openSUSE:Factory rsnapshot
Archiving
$ osc branch Archiving rsnapshot
A working copy of the branched package can be checked out with:
osc co home:scarabeus_iv:branches:Archiving/rsnapshot
$ osc oc home:scarabeus_iv:branches:Archiving/rsnapshot
$ cd home:scarabeus_iv:branches:Archiving/rsnapshot
$ vi rsnapshot.spec # hackyhacky
$ osc build
$ osc vc -m "Fix something. Wrt bnc#2345"
$ osc osc osc ci
$ osc sr -m "Finally got around to fix bnc#2345 so enjoy"
```

openSUSE Releases

- Forwarding fixes from devel project to released distributions are always up to maintainer (your) decision
- You should forward only smaller things (ie. no huge version updates that could break too much)
- One should be MORE careful when creating the maint. update than when submitting to Factory itself
- https://en.opensuse.org/openSUSE: Build_Service_Concept_Maintenance

openSUSE Releases cont.

```
$ osc maintained rsnapshot
openSUSE: 12.3: Update/rsnapshot
openSUSE:13.1:Update/rsnapshot
$ osc mbranch rsnapshot
A working copy of the maintenance branch can be checked out with:
osc co home:scarabeus_iv:branches:OBS_Maintained:rsnapshot
$ cd home:scarabeus_iv:branches:OBS_Maintained:rsnapshot
$ 1s
rsnapshot.openSUSE 12.3 Update/ rsnapshot.openSUSE 13.1 Update/
$ vi rsnapshot.openSUSE_12.3_Update/rsnapshot.spec
$ vi rsnapshot.openSUSE_13.1_Update/rsnapshot.spec
% for each folder now
$ osch
$ osc vc -m "I did fancy maintenance changes, I am great"
$ osc ci
% back one level
$ osc mr -m "Maintenance update wrt bnc#something"
created request id 1234
```

SLE

- For SLE all updates are requested by Maintenance DPT and you recieve notification with deadline
- All of the submissions are to adhere to Maintenance SLA (ask your boss to provide it to you)
- If you do something wrong people from QAM will report bugs to you and frown:)
- You always recieve list of bnc#s you are supposed to fix, note that you can nominate additional fixes
- SLE does use new maintenance model from SLE-11 as openSUSE

SLE cont.

```
$ isc maintained vsftpd
SUSE:SLE-10-SP3:Update:Test/vsftpd
SUSE:SLE-11:Update:Test/vsftpd
$ isc mbranch vsftpd
$ isc co home:scarabeus_iv:branches:OBS_Maintained:vsftpd
$ cd home:scarabeus_iv:branches:OBS_Maintained:vsftpd
$ ls
vsftpd.SUSE_SLE-10-SP3_Update_Test/ vsftpd.SUSE_SLE-11_Update_Test/
% for each folder
$ vi vsftpd.spec
$ oscb
$ osc ci
$ osc sr <RESPECTIVE_PROJECT>/<EXACT_PKG_NAME> -> osc sr SUSE:SLE-10-SP3:Update:Test/vsftpd
```

Webinterface

Practical example

Lets go over to http://build.opensuse.org

Endnote

Further reading/Contact points

- https://en.opensuse.org/openSUSE:Packaging_guidelines
- opensuse-packaging@opensuse.org
- pack@suse.cz
- #opensuse-factory@freenode.net
- #pack@irc.suse.cz

Thanks/Questions

Thank you for your attention. Are there any questions?