

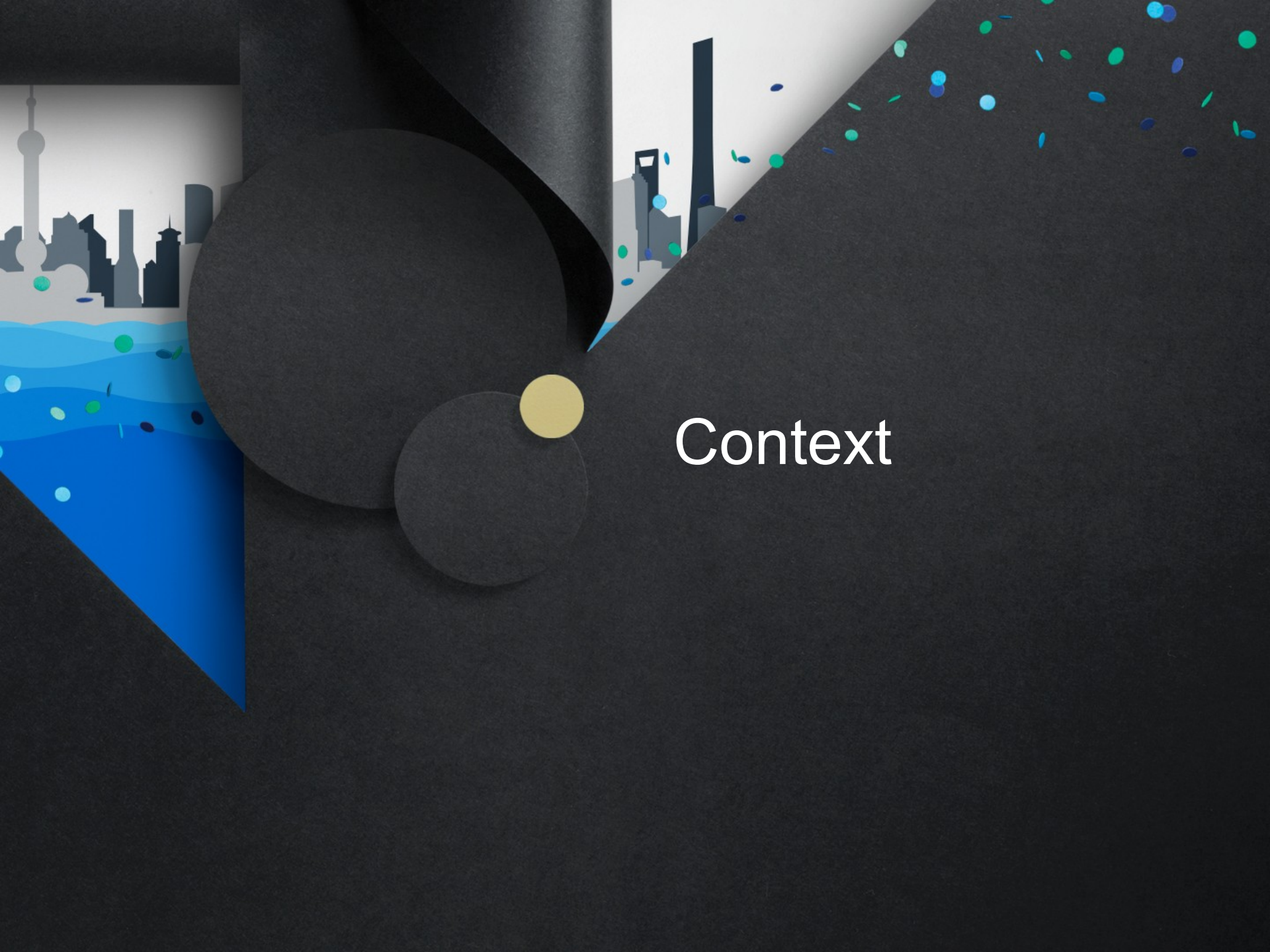
Tizen platform development

Be part of Tizen:Common platform development or community contribs !

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[<https://wiki.tizen.org/wiki/User:Pcoval>](https://wiki.tizen.org/wiki/User:Pcoval)





Context

Who am I ?

- FLOSS enthusiast
 - DIY, Maker Communities
 - Projects :
 - MeeGo/Harmattan, Debian, Qt, gnome, maemo ...
- Tizen co-maintainer :
 - Domains : Automotive, Graphics, System Config
 - Worked on hardware configuration too
- Works for Eurogiciel Open Source Dept
 - Intel contractor for 3 years
 - Located in France (Brittany)

Agenda

- **Tizen:Common**
 - **Install and use It**
- **Setup tools**
 - **Join tizen**
 - **Sources**
 - **Build**
 - **Test**
- **Contributing**
 - **Making and sharing changes**
- **Resources**
- **Q&A**



Tizen:Common



What is Tizen:Common ?

- Free and Libre Open Source Linux Distribution :
 - SPDX Licenses + **Open** development model
- Integration point for Tizen profiles
 - I.e: Tizen:IVI based on Tizen:Common (90%)
- Features :
 - Security, Connectivity, Multimedia, AppFw, WebApps
 - Inclusive for shared components : EFL, Qt ...
- Different Flavors :
 - Supported Arch : Intel (ia32, x64) or ARMv7l
 - Supported Devices : pc (i7+) , MinnowMax etc
 - Supported Features : **Wayland** vs x11 , MBR vs EFI ...
 - More to come ...

Install and use Tizen:Common

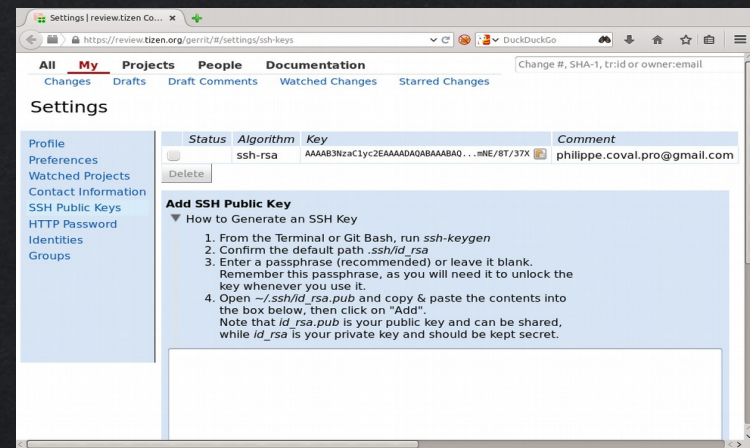
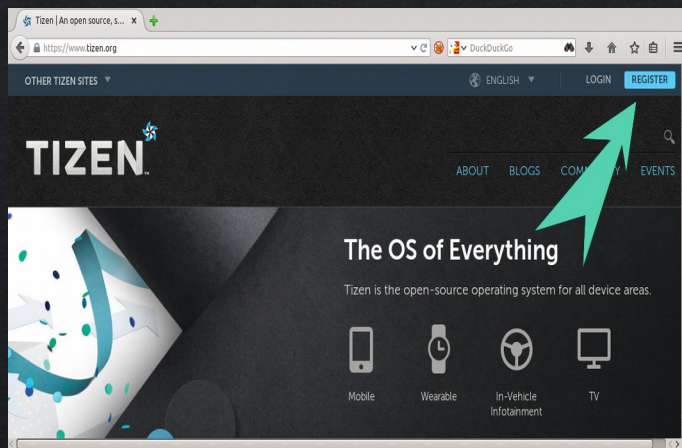
- Download image
 - <http://download.tizen.org/releases/daily/tizen/common>
- Install :
 - Dump released image to disk
 - Or use installer image (NUC)
- Use :
 - Log in : **root:tizen**
 - Update, install **RPM** packages using zypper tool
 - Webapps using pkgcmd *.wgt

The background is a dark charcoal grey. On the left, a stylized city skyline is visible, featuring a prominent tower with a sphere (resembling the Oriental Pearl Tower) and several other skyscrapers. Below the skyline are three wavy horizontal bands of blue, representing water. Scattered across the dark background are numerous small, colorful confetti-like shapes in shades of blue, teal, and green. In the lower-left foreground, there are two overlapping circles: a larger dark grey one and a smaller light blue one.

Setup Tools

Join Tizen

- 1. Register your account at :
 - <https://www.tizen.org/user/register>



- 2. Generate a ssh key and upload public key
 - `ssh-keygen && cat ~/.ssh/*.pub`
 - <https://review.tizen.org/gerrit/#/settings/ssh-keys>

Fetch tizen's sources with git

- Edit ~/.ssh/config :

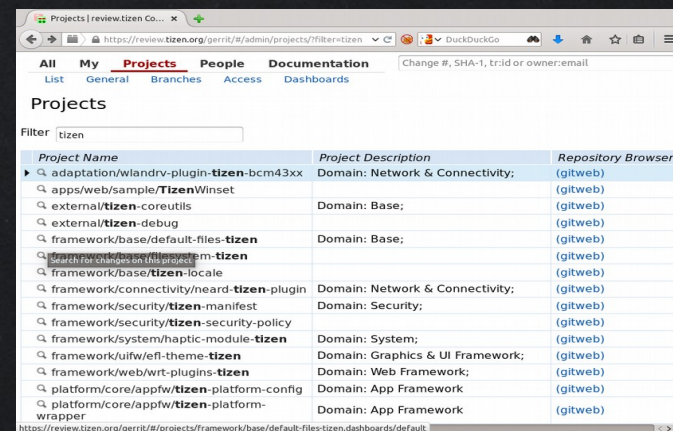
```
Host review.tizen.org
Hostname review.tizen.org
IdentityFile ~/.ssh/id_rsa
Port 29418
User $USER # <=== EDIT WITH YOURS
```

- Gerrit : projects / List

<https://review.tizen.org/gerrit/#/admin/projects/>

- Select one project

- git clone review.tizen.org :/\$project
- git branch -a
- git checkout -b [tizen](#)



Building sources

- **Configure repos : ~/gbs.conf**
 - <https://gitorious.org/tizen/tizen-helper/raw/master:config/gbs.conf>
 - Add new **profiles** and associated **repos** if needed
 - We prefer common snapshot x86_64 wayland repos
- **Build from sources (git) to binaries (rpm)**

```
gbs build \  
  -P "profile.tizen_common_x86_64" \  
  --arch x86_64  
  
find ~/tmp-GBS-tizen_common_x86_64/local/repos/ -iname "*.rpm"
```

Deploy & Test

- Copy **RPM** files to target
 - `scp *.rpm root@$targethost:/tmp`
 - `sudo zypper in /tmp/*.rpm`
- Or better setup your **own repo** from your host
 - Setup local httpd server (apache's `mod_user_dir`)

```
url=http://$host/~$user/.../tmp-GBS-tizen_common_x86_64//tizen/x86_64/
```

```
zypper ar $host $user # Add your repository
```

```
zypper ref -r $user   # Refresh it
```

```
zypper up -r $user    # Upgrade system from it
```

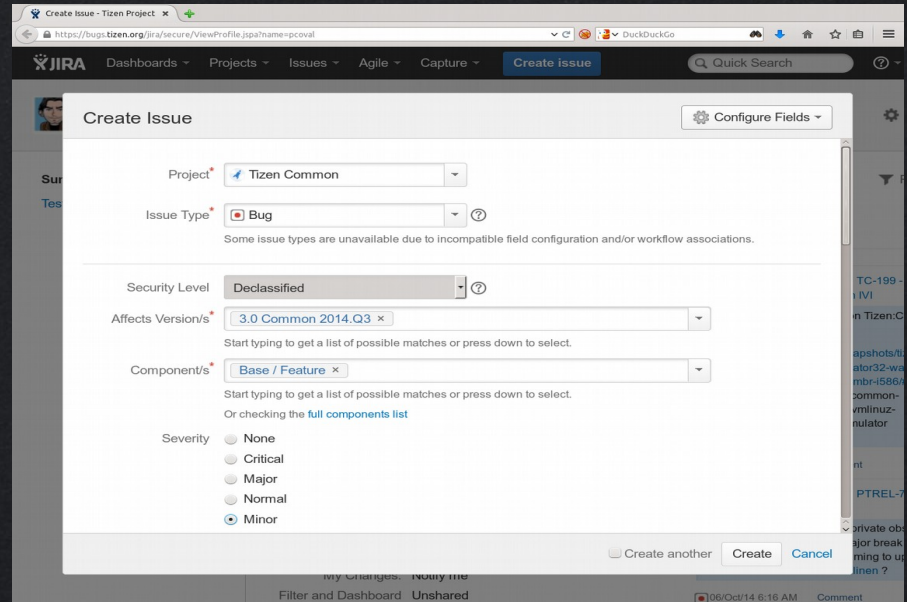
```
zypper in -r $user $package # Or install single package (+deps)
```


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Contributing

Bug reporting

- Entry point is : <http://bugs.tizen.org>
 - JIRA bug tracker



The screenshot shows the 'Create Issue' form in the JIRA bug tracker for the 'Tizen Common' project. The form is titled 'Create Issue' and includes a 'Configure Fields' button. The 'Project' field is set to 'Tizen Common'. The 'Issue Type' field is set to 'Bug'. The 'Security Level' is set to 'Declassified'. The 'Affects Version/s' field is set to '3.0 Common 2014.Q3'. The 'Component/s' field is set to 'Base / Feature'. The 'Severity' field has radio buttons for 'None', 'Critical', 'Major', 'Normal', and 'Minor', with 'Minor' selected. At the bottom of the form, there are buttons for 'Create another', 'Create', and 'Cancel'. The browser address bar shows the URL 'https://bugs.tizen.org/jira/secure/ViewProfile.jspa?name=pcoval'.

- Find or create new bugs
 - Tell version , see `/etc/os-release`
- Be **proactive** then ask on **mailing lists** to attract attention

Fixing problems

- Make changes :
 - Rebuild : gbs build
 - Test : zypper
 - Check : gbs export, git diff
- Make a patch :
 - Mention **context in** commit message :
- Sharing patch
 - <https://review.tizen.org/gerrit/#/>
 - **Improve** it until maintainer merge it
- Expect it to be released in repos and image

```
gbs build \  
-P "profile.tizen_common_x86_64" \  
--arch x86_64 \  
--include-all
```

```
git commit -sam \  
"packaging: fix that  
  
Bug-Tizen: TC-42  
"
```

```
git push origin \  
HEAD:refs/for/tizen
```

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Resources

Resources

- Entry points
 - <https://developer.tizen.org/>
 - <https://wiki.tizen.org/wiki/OSDev>
 - <https://wiki.tizen.org/wiki/Common>
- Support
 - <http://lists.tizen.org>
 - <irc://irc.freenode.net/#tizen>
- Tools
 - <https://source.tizen.org/documentation/reference/git-build-system>
- More :
 - <http://www.slideshare.net/rzrfreefr/tizen-upstreamcoop2014pcoval>

Thanks

- **Tizen Community**
 - Inside : Intel, Samsung, Tizen Association
 - Outside : Qt, mono-for-tizen, tizen-sunxi
 - Others : MeeGo, TizenExperts ...
- **Sponsorship**
 - Linux Foundation
 - Eurogiciel
- **You and all FLOSS developers**



Q & A

Ask me online too !

<<https://wiki.tizen.org/wiki/User:Pcoval>>



Open source development and integration :

- Several Maintainers for tizen.org
 - Embedded systems for real-time multimedia:
 - Widi/Miracast stack,
 - Wayland/Weston,
 - Webkit2 browser with HW acceleration
 - Linux base port
 - Application: HTML5/CSS3, jquery, jqmobi, Cordova
- Location : Brittany - France

TIZEN™

APACHE
CORDOVA™



jQuery
write less, do more.

MeeGo™

DLNA®



jqMobi



TIZEN™ DEVELOPER SUMMIT 2014



SHANGHAI
TIZEN开发者峰会 (上海)