Open source governance and development model for Tizen 3.0

Thiago Macieira, Software Architect & Community Manager, Intel
Tokyo, May 29, 2013
Work in progress

• The governance and development model are not finished
  – Discussions ongoing
  – Many items not decided fully yet

• We welcome input, suggestions, criticism, and participation

• The models are intended for Tizen 3.0
Current state
Moving from **in-out** to **out-in** development

- **Until now**, code was released at milestones and moved to Tizen.org as public releases
- Only Tizen release spins and development on top of releases is happening on tizen.org
- Core and Platform development is happening elsewhere!
- No continuity and transparency
Moving from **in-out** to **out-in** development

- **Now**, the main area of development and contributions is Tizen.org (out).
  - For productisation/commercialization and depending on profile policies and rules, main code tree can be pulled and built anywhere by anyone
- Tizen.org is becoming the primary development hub for Tizen

**Tizen.org is now the primary development hub for the Tizen Platform**
Objective

• Model by which the Tizen developer community makes changes to Tizen
• Community members will know what to expect
• Companies know how to get their contributions accepted
Tizen codebase

• Keep code as close to upstream as possible
• Upgrades driven by requirements
• Goal is to have 1 project run on multiple profiles
  – Same code base but with different build options and enabled features
  – Maintainers have to be Tizen focused rather than profile specific
  – Avoid hardcoding
What makes a profile?

• Majority of code comes from the Tizen branch, the main development code line (platform/*)
• Profile specific projects (profile/*)
• Optional profile specific stabilization branch with changes related to a release (i.e. weekly release)
Overall governance guidelines

• All community members **must:**
  – Be respectful of one another
  – Refrain from engaging in flame wars or personal attacks
  – Ensure Tizen community rules are followed
  – Follow general direction set by the TSG

• All community members **should:**
  – Contribute to improve Tizen
  – Help out new contributors and users
  – Approach the TSG with important matters

Disrespect of the rules may be sanctioned
Organisation and tooling

• Roles distributed per package in Tizen
• Tools used:
  – Gerrit, for code and contribution reviews
  – JIRA, for reporting bugs and keeping track of tasks
  – Email and mailing lists
Project roles

- Maintainer
- Reviewers
- Developers
- Release engineers
- QA engineers
Developers

• Role: develops code or other contributions

• Rights and duties:
  – Can participate in mailing lists
  – Can report bugs and suggestions
  – Can submit code changes to appropriate branches
  – Can (and are encouraged to) participate in the review process (-1 and +1 reviews)
  – Should participate in relevant discussions in mailing lists
  – Should offer constructive advice to other developers
  – Should behave as a Reviewer in all aspects
Reviewers

• Role: makes decisions on contributions

• Rights and duties:
  – All of a Developer’s rights and duties
  – Can make decisions on code contributions (-2 and +2 reviews)
  – Should pro-actively participate in the review process
  – Should participate in the release process
  – **Must not** approve own contributions
  – **Must** offer constructive comments when rejecting a contribution
  – **Must** ensure contributions are ready for the production tree
Maintainer

• Role: maintains a package and ensures progress

• Rights and duties
  – All of a Reviewer’s rights and duties
  – Can make more invasive changes to a Tizen package (e.g., create branches, rebase, etc.)
  – Can approve own contributions in exceptional cases, such as when no other reviewer was available
  – Interprets TSG medium- and long-term goals into short-term ones
  – **Must not** abuse maintenance rights to bypass the review process
  – **Must** ensure all contributions to the maintained package are reviewed
  – **Must** ensure quality of the package
  – **Must** participate in the Tizen quality and release process when required
Intermediate step between Reviewer and Maintainer

• For high-activity projects
• Maintainer can allow certain Reviewers to integrate changes
  – “Integrator”
Release engineer

• Role: create pre-release and release images
• Rights and duties:
  – All of a Developer’s rights and duties
  – Should report bugs and regressions
  – **Must** manage Tizen’s build system
  – **Must** approve or reject submissions to the build system
  – **Must** create Tizen images and smoke-test them
  – **Must** participate in the release process
QA engineer

• Role: ensure the overall quality of Tizen releases

• Rights and duties:
  – All of a Developer’s rights and duties
  – **Must** test Tizen images
  – **Must** report bugs and regressions
  – **Must** participate in the release verification process
Flow of a contribution

- Developer:
  - Write code
  - Submit to Gerrit

- Reviewer:
  - Offer suggestions
  - Not ok
  - Ok
  - Review
  - Approve contribution

- Maintainer:
  - Integrate contribution

- Release engineer:
  - Not ok
  - Create image
  - Smoke-test
  - Ok
  - Release image
## Decision-making

<table>
<thead>
<tr>
<th>Who</th>
<th>Where</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day-to-day decisions</strong></td>
<td><strong>Where</strong></td>
</tr>
<tr>
<td>(Operational)</td>
<td>Tizen Reviewers &amp; Maintainers</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium-sized decisions</strong></td>
<td>All, by consensus, meritocratic rules</td>
</tr>
<tr>
<td>(Tactic)</td>
<td>Tie-breaking by TSG</td>
</tr>
<tr>
<td><strong>Long-term decisions</strong></td>
<td>TSG</td>
</tr>
<tr>
<td>(Strategic)</td>
<td></td>
</tr>
</tbody>
</table>

Exception: security vulnerability discussions may be held in an invitation-only group
Open questions

• Coordination between Maintainers
• Participation in TSG activities like the Architecture Forum
• How does one become Reviewer or Maintainer?
Thiago Macieira
thiago.macieira@intel.com

Intel Open Source Technology Center is hiring
http://01.org/jobs