Putting Principle into Practice: A case study on building a diverse open source community

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Are you excited about #DevRel?

DEVELOPER RELATIONS = BUILD RELATIONSHIPS + EMPOWER DEVELOPERS
Open source is eating the world

OSS creates partnerships that push the limits of what’s possible by expanding the number voices at the table and sharing resources.
Things are changing...

The rise of better, **cheaper hardware** and **easier access** to all the disparate pieces of information needed to build a smart, connected device is **rapidly changing** the embedded ecosystem.
Confession time!
“I may not have gone where I intended to go, but I think I have ended up where I needed to be.”

- Douglas Adams, The Long Dark Tea-Time of the Soul
Curiosity drove experimentation
The grass was greener ya’ll!
Everything was great until...
... I had to start making choices
As a new developer it was difficult

- Fragmented market.
- Many vendor specific tools and software
- High barrier to entry
- Many solutions that worked, but not for me.
- I knew I needed help but couldn’t find it.
Technology gave me the destination.

The Zephyr Community gave me the rocket, fuel, map and owners manual.
Zephyr Project:

- **Open source** real time operating system
- **Vibrant Community** participation
- Built with **safety and security** in mind
- **Cross-architecture** with growing developer tool support
- **Vendor Neutral** governance
- **Permissively** licensed - Apache 2.0
- **Complete**, fully integrated, highly configurable, **modular** for **flexibility**, better than roll-your-own
- **Product** development ready with LTS
- **Certification** ready with Auditable

Open Source, RTOS, Connected, Embedded
Fits where Linux is too big

Zephyr OS

- 3rd Party Libraries
- Application Services
- OS Services
- Kernel
- HAL

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**THE LINUX FOUNDATION PROJECTS**
#1 Be Intentional
Why Zephyr?

The Zephyr OS addresses broad set of embedded use cases across a broad set of platforms and architectures using a modular and configurable infrastructure. It addresses the need for RTOS consolidation.

Address Fragmentation
- No single RTOS addresses broad set of embedded use cases across a broad set of platforms and architectures
- Disjoint use cases have led to fragmentation in RTOS space
- Existing commercial solutions force roll your own solutions and duplication of software components

Modular Infrastructure
- Modular and configurable infrastructure allows creation of highly compact and optimal solutions for different products from a common origin
- Reuse allows NRE costs to be amortized across multiple products and solutions
- Multi-architecture support reduces platform switching costs and vendor lock-in concerns

Open-Source
- Roll your own is expensive & difficult to develop & maintain
- Permissively licensed corresponds to ease of adoption
- Corporate sponsorship assures long term commitment and longevity
- Community innovation has proven faster for progression and project development is a collaboration of industry experts

Feature Richness
- Need for a solution rather than just an ingredient.
- Lowers entry level barrier for new products, speeds software delivery using existing feature support
- Encourages adherence to standards and promotes collaboration on complex features in the project
- Developers focus on the end-user facing interfaces instead of re-inventing low level interfaces

Reduce costs and improve efficiency through reuse
Knowing a solution exists is different than being able to implement that solution.
# 2 Documentation Opens Doors
Thank you Zephyr Community

Orientation:
• https://www.zephyrproject.org/community/how-to-contribute
• https://www.zephyrproject.org/doc/contribute/contribute_guidelines.htm

Mail Lists:
• https://lists.zephyrproject.org/g/main

IRC:
• #zephyrproject on freenode.net

YouTube:
• https://www.youtube.com/channel/UCohVfwDfzCZ_gh3DvlZ4fJA
Open source is more than code and documentation.
# 3 Governance Matters
Zephyr Project Governance

**Governing Board**
- Decides project goals
- Sets business, marketing and legal decisions
- Prioritizes investments and oversees budget
- Oversees marketing such as PR/AR, branding, others
- Identifies member requirements

**Technical Steering Committee**
- Serves as the highest technical decision body.
- Sets technical direction for the project
- Coordinates X-community collaboration
  - Sets up new projects
  - Coordinates releases
  - Enforces development processes
  - Moderates working groups
- Oversees relationships with other relevant projects

**Community**
- Code base open to all contributors, need not be a member to contribute.
- Path to committer and maintainer status through peer assessed merit of contributions and code reviews
- Ecosystem enablement

**Goal:** Separate business decisions from meritocracy, technical decisions
Successful collaborations don’t just happen on their own.
# 4 Community Needs Cultivation
# Meeting Information

Join Today: [https://www.zephyrproject.org/join/](https://www.zephyrproject.org/join/)

<table>
<thead>
<tr>
<th>Meeting Schedule</th>
<th>Frequency</th>
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<tr>
<td>Technical Steering Committee</td>
<td>Weekly, Wednesdays</td>
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<tr>
<td>Release Readiness</td>
<td>Weekly, Tuesdays</td>
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<tr>
<td>Marketing Working Group</td>
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<td>Testing Working Group</td>
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<td>Networking Working Group</td>
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<td>API’s Working Group</td>
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<td>Security Working Group</td>
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<tr>
<td>Governing Board</td>
<td>Monthly (members only)</td>
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But wait, there’s more!

- Events
- Webinars
- How-to guides
- Contests
- Product spotlights
- Conferences
- Social media
# 5 Don’t Limit Diversity
“Diversity” in the Zephyr Project

- Supported boards
- Architectures
- Use cases
- Member companies
- Features
- Board Members
- Goals
- Type of contributions
Join Us!

@ZephyrIoT
@TheaClay