A Practical Guide to Open Sourcing Proprietary Source Code

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- **High level process**
- **Preparations**
  - Business
  - Legal
  - Technical
  - Marketing
- **Project governance**

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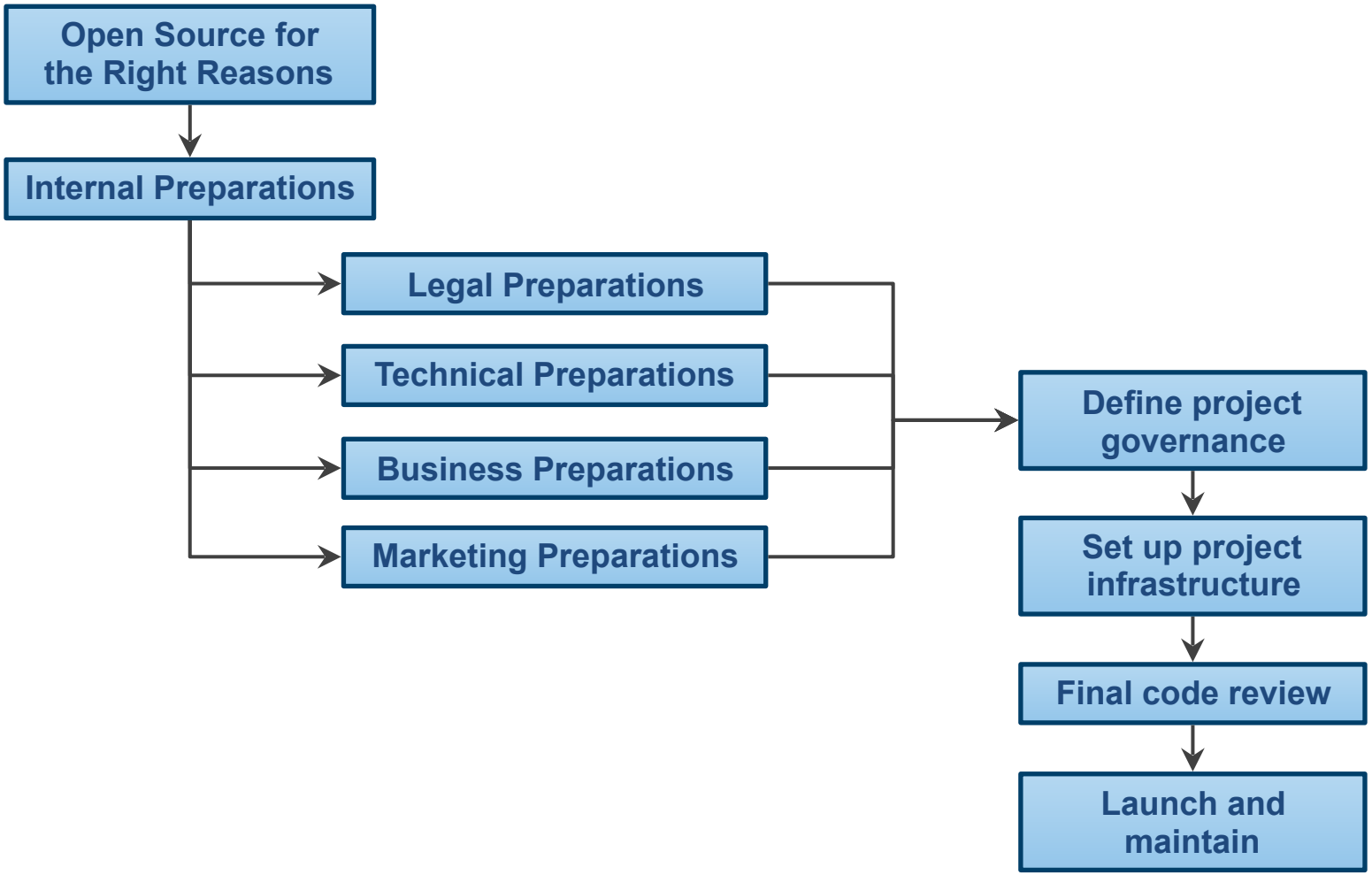
High Level Process Overview



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Preparations: Process Walkthrough

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Business Preparations

- **Determine the overall strategy**
  - Defend the “Why are we doing this?” question
  - Explain the business case/value proposition
- **Ensure there is an internal corporate champion for the project**
  - Ensure there is a commitment for resources (developers)
  - Ensure there is a commitment for funding open source project infrastructure

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Legal Preparations

- **Legal due diligence:**
  - Patent scrub to identify IP areas in the source code
  - License/copyright
    - Decide on the license to release under
    - Provide license information to embed in source code
    - Provide standard copyright notice to embed in source code
  - Decide on a contributor agreement [if starting a new open source project]
  - Decide on trademark use, requirements, and process
  - Run a source code scanning tool on the internal code
    - Ensure clean bill of materials
    - Identify all source code originating from outside your company
  - Other items as necessary

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License Selection Considerations

- **Use a mainstream OSI-approved license (http://opensource.org)**
- **Some factors to consider in choosing a license:**
  - Do you want to relinquish any control over how your code is used and distributed?
  - Do you want to allow people to use your code in non open-source programs?
  - If somebody uses your code in their program and sells their program for money, do you want some of that money?
  - Do you want to ensure all future derivatives distribute source code?
  - Do you want your code to be usable in both open source and proprietary products?
  - If it's a library, should non-open source code be allowed to link to it?
  - Etc.

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Technical Preparations

- **Clean up the code**
  - Ensure coding style is consistent
  - Remove internal comments, references to other internal code, etc.
  - Remove any code not part of open sourcing plan
  - Remove dependencies on non-public components

- **Add license and copyright notices**
  - Add license notice in source code files
  - Add license text as a file in the root directory
  - Update copyright notices in source code files

- **Prepare the code for new external users**
  - Provide documentation and use case examples
  - Ensure it compiles and builds on target platforms
  - Fully document all APIs
  - Etc.

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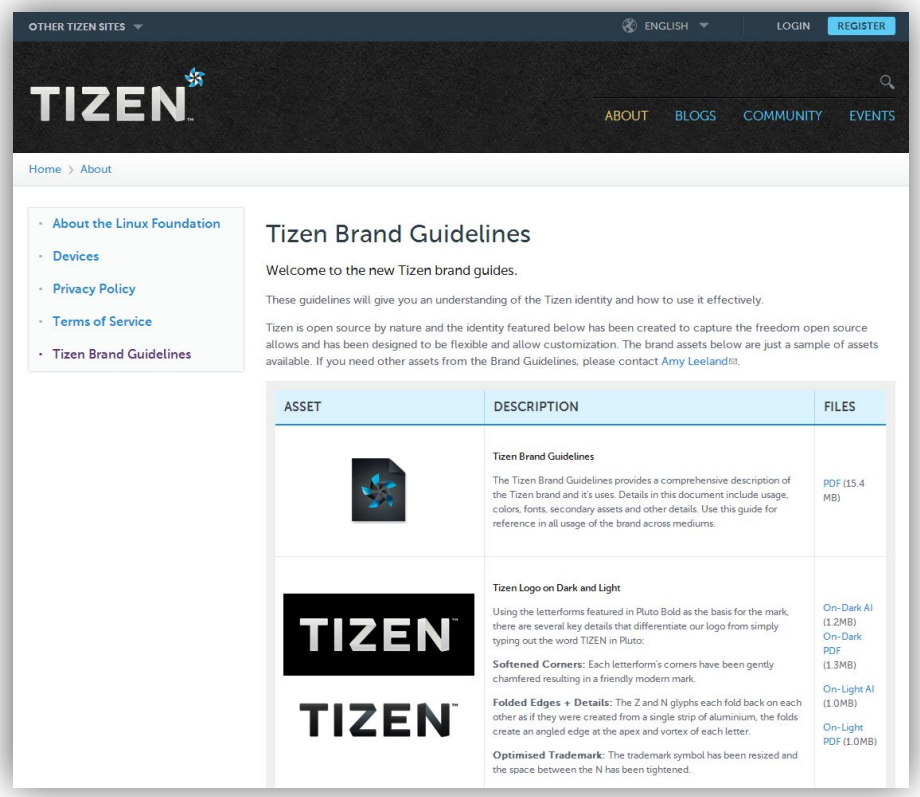
Marketing Preparations

- Design project logo, color scheme, website, collateral, etc.
- Formalize branding guidelines (compliance program?)
- Register social media accounts for the project
- Register domain names
- Etc.



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Define Project Governance

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Project Governance

- **What is governance?**
  - The structure around a project that enables decisions on:
    - Participation guidelines and requirements
    - Architectural changes
    - Nominating maintainers
    - Final arbiter on disputes
    - Suspension of participants
    - Etc.
  - Often similar to a board of directors
    - Typically represents mix of project contributors

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Governance Decisions

- **All projects should define and communicate, at minimum:**
  - Processes for submitting code, patches, feature ideas, etc.
  - Process for technical conflict resolution
  - Release management process
- **A multi-company project may need more formal governance**
  - Decide on how governance is structured, who can participate, for how long, etc.
- **Example roles of a steering group**

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Recommendations for formal governance

- Governing body should represent various participating entities
- Democratic system
- Clear decision-making process
- Clear path to resolve disputes
- Flexibility to adapt to changing project needs
- Clear means to add new or replace members

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Project Maintainer

- **A formal position of leadership within the project**

- **Responsibilities include**
  - Setting the criteria for accepted / rejected code
  - Reviewing submitted code / accept and reject based on pre-defined rules
  - Tracking dependency issues
  - Notifying developers of source code changes that may affect their packages
  - Managing source code security issues

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Setup Project Infrastructure

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Setup Project Infrastructure

- **Essential components**
  - Web site
  - Source code repository system
  - Mailing lists
  - IRC
  - Bug and feature tracking

- **Nice to have**
  - Wiki
    - User contributed documentation
    - How-tos
    - Works-for-me platform testing results
    - Team collaboration
  - Milestone and release tracking
  - Forums
    - Support requests, community discussion, and bar talk
  - Branding
    - Logo, style guide, graphics, official colors or fonts
  - Automated build and test system

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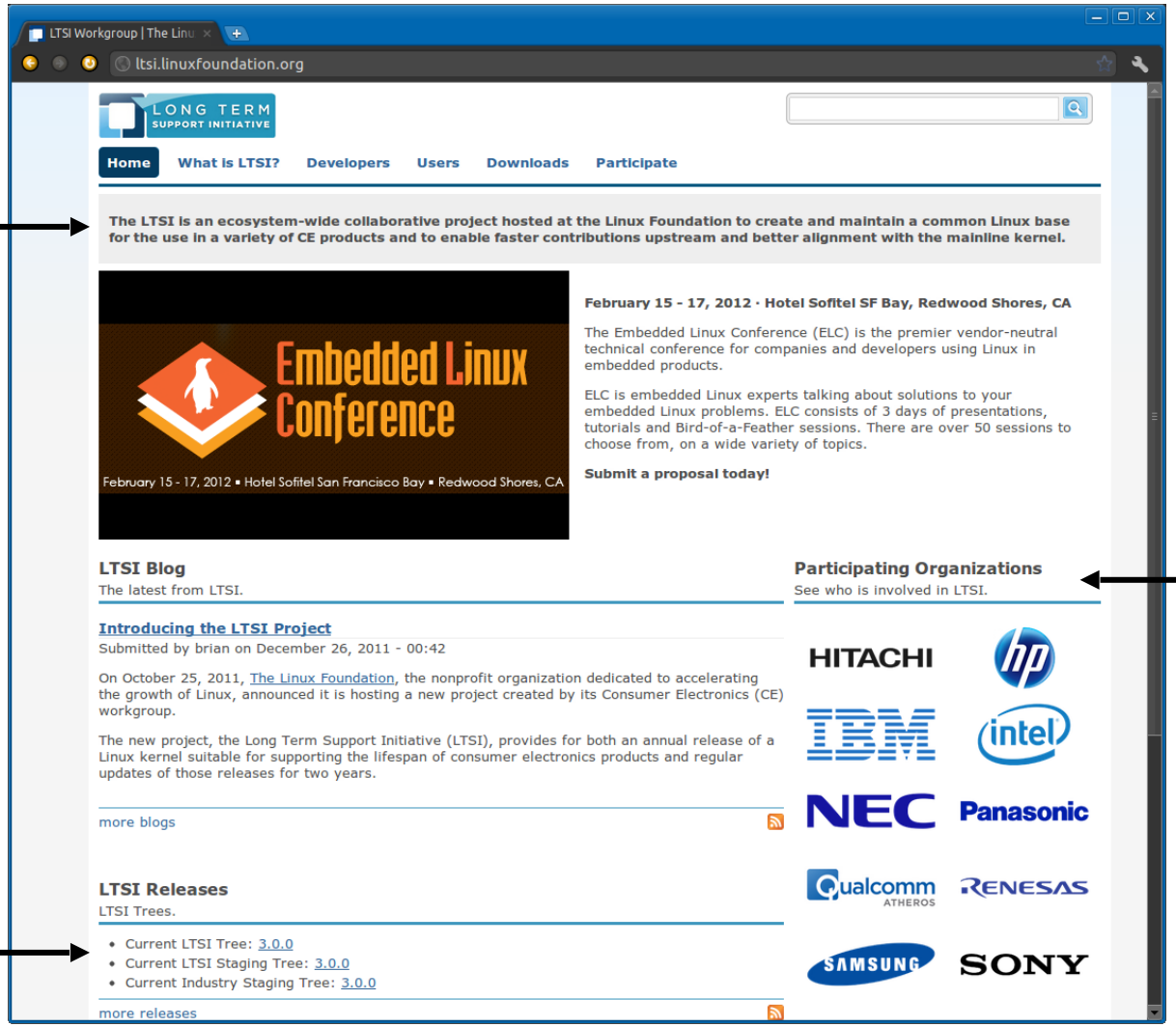
Project Infrastructure Examples: Front Page

What the project does

Where to find the code

Who is involved



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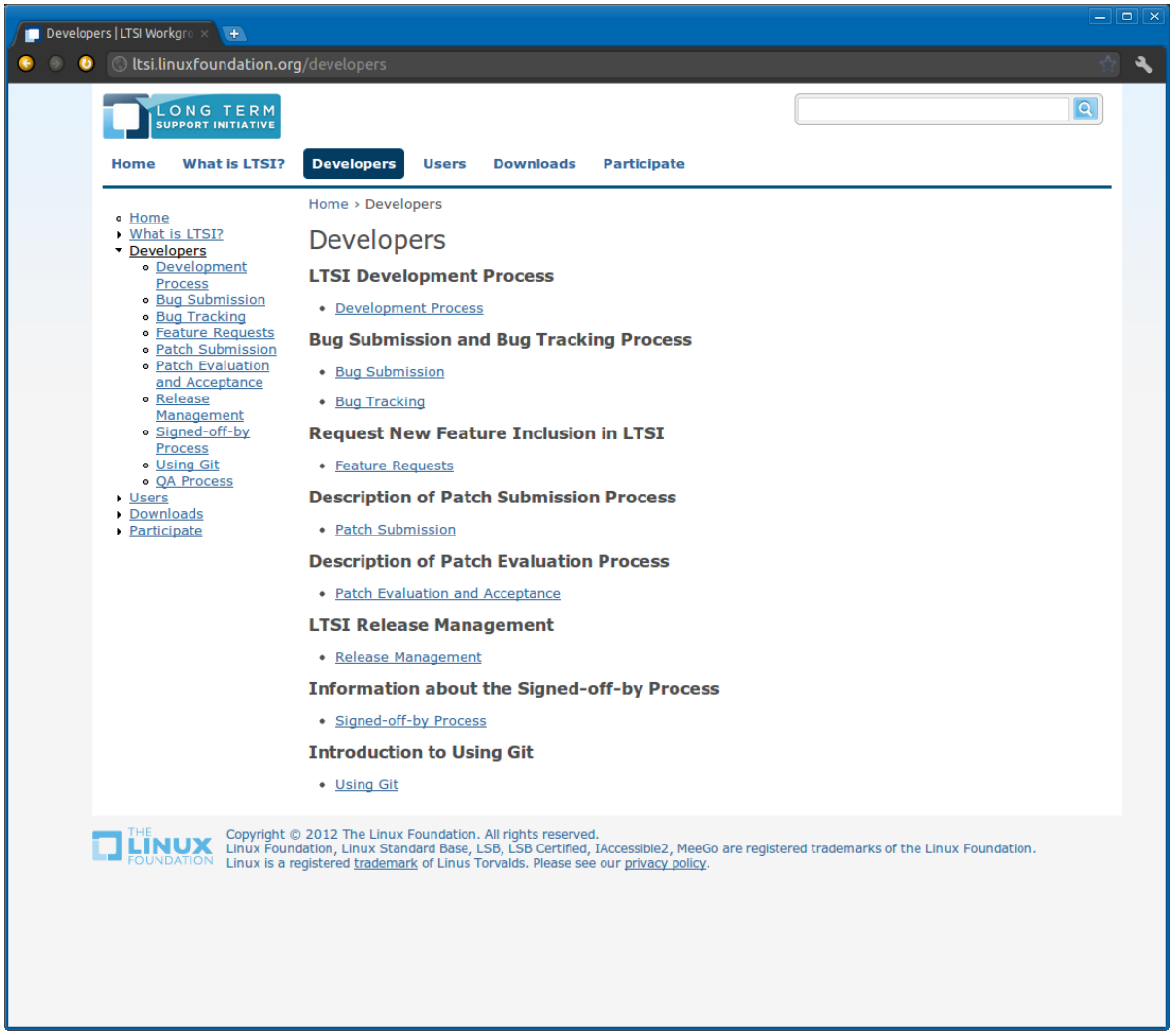
Project Infrastructure Examples: For Developers



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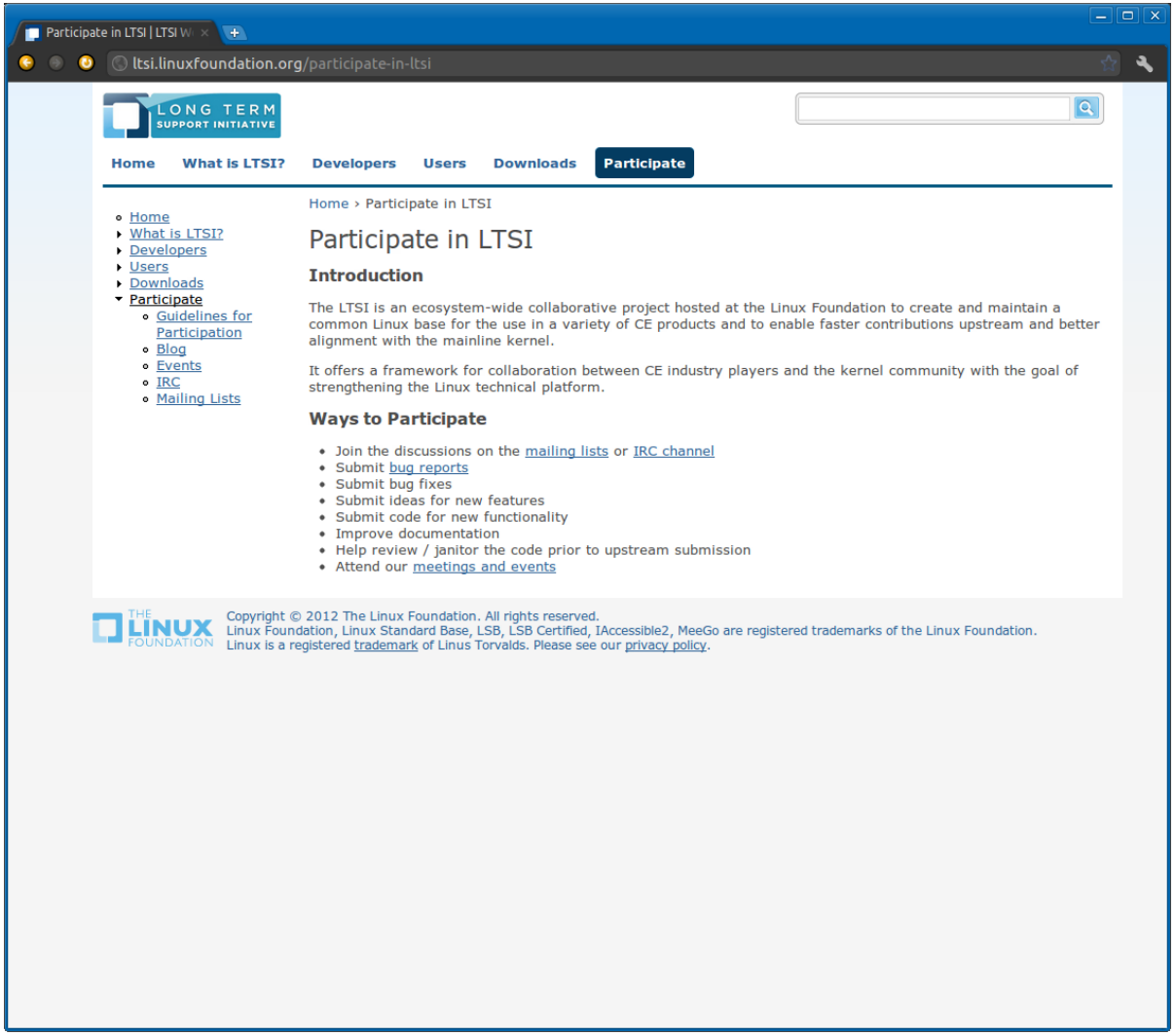
Project Infrastructure Examples: Get Involved



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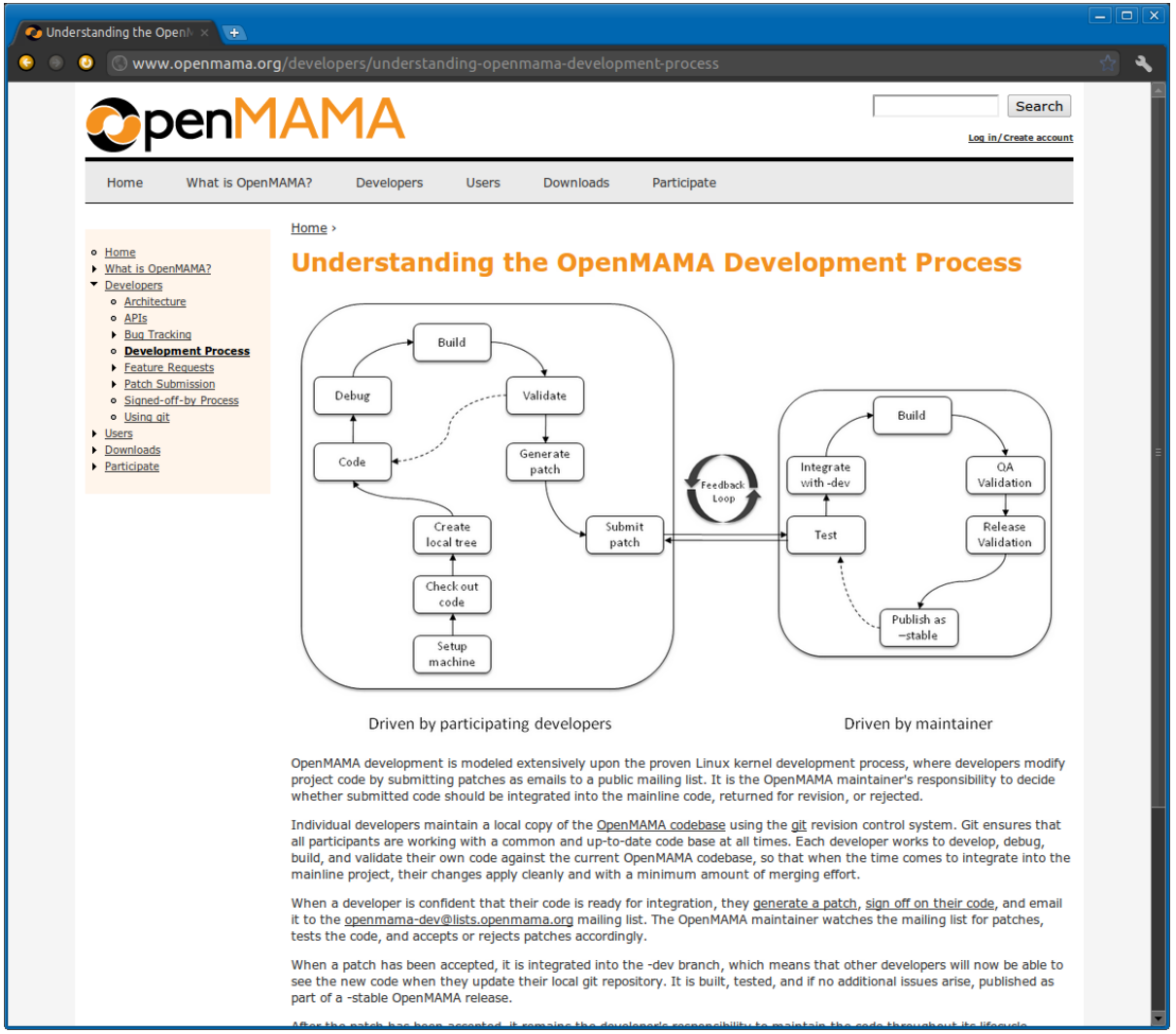
Project Infrastructure Examples: Processes



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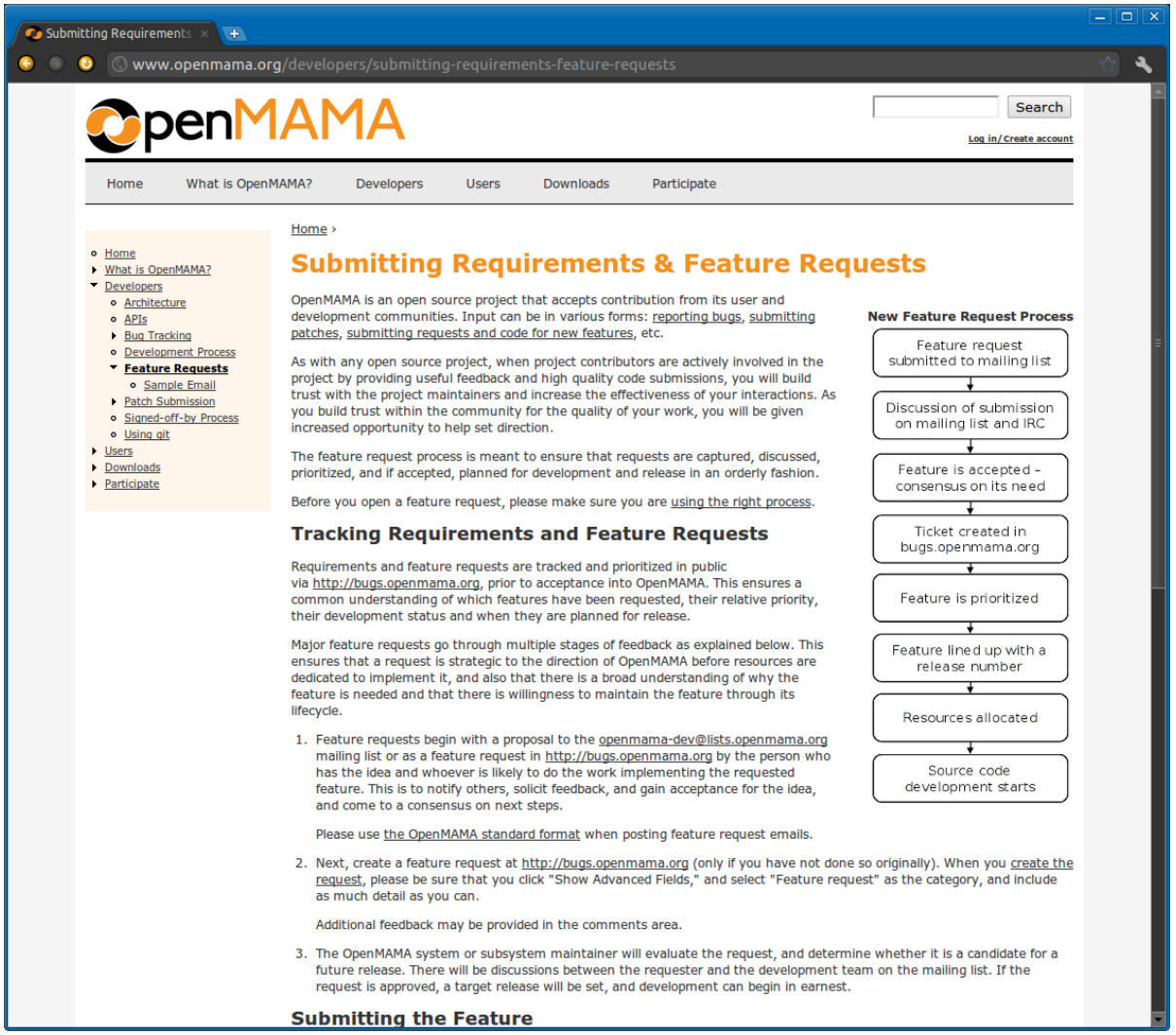
Project Infrastructure Examples: Processes



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Project Infrastructure Examples: Sign-off-by

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Final Code Review Before Release

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The final code review

- **Ensures all requirements identified by the business, legal, technical, and marketing reviews are completely met**

- **Examples:**
  - License, attribution, and copyright texts are all complete and in place
  - Source code scanner reports clean bill of materials
  - Every line of code is licensed appropriately for release
  - Comments are sanitized of casual or unrelated language
  - Source code does not inadvertently reveal internal projects

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Project Launch

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Prior To Launch

- **Build critical mass before launching**
  - Provide preview to customers and partners so they can begin to work with the code
  - Lobby for launch-day participants among your existing business partners
- **Train your employees to follow open source methods and processes**
- **Ensure that all project infrastructure is running, secure, and scalable**
- **Ensure internal developers join and continually monitor IRC channel, mailing lists, etc.**

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Is This Your First?

- **Train your employees and managers**
  - Open source development methods and processes
  - Working with the open source community
  - Your company's open source policies and compliance rules
  - Integrating open source software within your software development model
- **Follow open source practices internally**
  - Context switching between development practices is difficult

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Be a Good Open Source Citizen

- **Have conversations and make decisions in the open**
  - Builds goodwill, but also reduces overhead in documenting decisions
  - Streamlines onboarding process for new participants
  - Archives ensure continuity if participants change
- **Listen to the community**
  - They know what they are doing, particularly on integration and testing
  - Encourage generalized implementations that extend what you need, particularly if someone else volunteers

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After the launch

- **Work on building a developer community**
  - Is it easy to find and join as an outsider?
  - Does the community have the documentation they need, and a means to update it?
  - Is the process for accepting community code working?
- **Follow open source development model & practices**
- **Remain visible**

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Closing

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Thank you.

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