
A Best Practices Handbook for Open Source Governance and Compliance

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Executive Summary

This is a handbook of best practices for establishing and managing open source governance and compliance at a company. It is in draft status and probably will keep evolving for some time.

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1 Introduction

This handbook provides best practices for establishing and managing open source software governance and compliance at a company. It starts with the assumption that the company has decided that denying itself the benefits of open source software is counterproductive and that it would like to engage. What to do next?

This handbook provides an answer in the form of interlinked best practice descriptions. A best practice is presented as a pattern, that is, in the form of a context, problem, solution triple as known from the patterns community. All best practices thereby show how, why, where and by who they are applicable and what might come next.

In this way, the handbook is more than a passive list of best practices: It provides active guidance for establishing and managing open source software governance and compliance at a company.

1.1 Structure of the Handbook

The handbook is structured into sections and subsections of arbitrary depth. Each section has a descriptive name that captures the domain of best practices it collects. The section hierarchy represents a hierarchical breakdown of the overall domain of interest. Sections can only be the top node or intermediate nodes in the hierarchy. All leaf nodes are best practice descriptions.

A best practice description is part of a domain, captured under a heading. A best practice description follows a pattern format and consists at least of the three sections context, problem, and solution. There may also be references, examples, and other sections. A best practice description abstracts from a single example, it always aims to represent a general truth applicable widely within its context.

Best practices link to each other. Ideally, a user of the handbook starts with the first best practice and from there works his or her way through the handbook, applying one practice after another. This sequence of applications represents the establishment of the desired processes at the company.

The handbook structure and the section hierarchy allow a user of the handbook to orient themselves and jump into the middle of where they last left off.

Not all best practices need to be applied in order to achieve the company's goals. In fact, many times the best practice application is more like a decision tree where an analysis of the context and problems at hand indicate which of several possible best practices is to be used next.

Ideally, all links between best practices are forward links, implying that if a best practice A precedes another best practice B in the handbook, it should be applied before it.

2 Handbook Overview

2.1 General Terminology

We use the following terms, which may vary between companies:

- A or the **company** is a company which provides context and scope for inner source projects. A company may have more than one business unit.
- A **business unit** of a company is a large organizational unit of the company tasked with providing products and services to its customers within the company or outside.
- An **organizational unit** (short: org. unit) is a managerial entity within line reporting within a business unit. While a business unit may be its own legal entity, an org. unit is not.

A business unit may be its own legal entity, in case of which the company is a holding company. If a business unit is not a legal entity of its own, it is just a large org. unit of the company.

2.2 Open Source Terminology

To avoid confusion, we distinguish between an open source project community and an open source component.

- The term **open source project** is a shorthand for open source project community.
- An **open source project community** is a group of people interested in and involved in one or more open source components.
- An **open source component** is a software component (artifact) developed publicly using an open source development approach.
- **Open source software** is another term for either a single open source component or a set of open source components. In any case, it is an artifact, not a community.

There are no open source projects in a project sense, because this would be a misnomer. By definition, a project has a start date and an end date. An open source project (the community) and its components (the artifacts) have a life-cycle, but they do not have a set end date. They are better viewed as products in the software product sense as they are intended to provide their service for as long as possible.

2.3 Open Source Project Roles

The main roles of actors involved in open source projects are:

- A **foundation member** is a member of an open source foundation.

An open source project is managed by a **project management committee (PMC)**. This committee either exists explicitly, typically if the project is being developed under the guidance of an open source foundation, or implicitly, if it is an open source project without such a home.

- The **PMC leader** is the person leading the PMC.
- A **PMC member** is a member of a PMC.
- An **(open source) developer** is an engineer working within an open source project.

The developer role can further be detailed into two more specific roles:

- A **contributor** is a developer contributing code to a component but not integrating it.
- A **committer** is a developer integrating contributed code to a component.

In the Linux context, a committer is also called a maintainer. These are synonyms.

2.4 Firm-internal Product Roles

The main roles of actors involved with product development in companies are:

- The **CEO** has final responsibility for the company and thereby for best open source governance and compliance; typically he or she delegates this task to a program officer.
- The **program officer** is responsible for establishing and evolving best open source governance and compliance at the company; they may be on their own or lead a team.
- The **legal counsel** is responsible for providing legal advice including license interpretation, but they are not (or should not) be responsible for business risk assessment.
- An **engineering manager** is responsible for the development and delivery of a software product or of a component thereof.
- A **software architect** is responsible for the overall structure and behavior of a software product or a component thereof. This includes open source components embedded in the product.
- A **developer** is an engineer working on a product or component thereof.

None of these roles should be surprising; however there are clear responsibilities that have to be allocated to them as part of best open source governance and compliance.

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3.2 Forbid all ungoverned use

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4.13.2 Repeat education in regular intervals

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5.1.1 Distribution Preparation

5.1.1.1 Generate compliance artifacts

5.1.2 Distribution Enactment

5.1.2.1 Provide compliance artifacts

6 Capabilities

6.1 Capabilities Analysis

6.2 Capabilities Building

A. Example Documents

A.1 Request for Component Approval

B. References

[1] Riehle, D. (2015). The Five Stages of Open Source Volunteering. In Crowdsourcing. Li, Wei; Huhns, Michael N.; Tsai, Wei-Tek; Wu, Wenjun (Editors). Springer-Verlag, 2015, 25–38. Republished from The Five Stages of Open Source Volunteering. Friedrich-Alexander-Universität Erlangen-Nürnberg, Dept. of Computer Science, Technical Report, CS-2014–01, March 2014. Erlangen, Germany, 2014.