



Open Source Management & Strategy Program

Program Overview

Open Source Management & Strategy is a 7-module course series that builds on the accumulated wisdom of many previous training modules on open source best practices, while adding fresh and updated content to explain all of the critical elements of working effectively with open source in your enterprise. The courses are designed to be self-paced, and reasonably high-level, but with enough detail to get new open source practitioners up and running quickly.

This program is designed around four main thematic areas: Strategy & Governance, Consume, Contribute and Create. Coursework that covers the Strategy & Governance section (LFC202, LFC203, LFC204, LFC205) should be reviewed first, as this content serves as a solid base for the remaining modules. The rest of the courses will cover topics in the Consume (LFC206), Contribute (LFC207), and Create (LFC208) spaces. They can be taken in any order, though most organizations will find that they consume open source as a first step, contribute to open source after gaining some experience, and eventually create new open source projects of their own.

In the first module (LFC202), you will learn the basic components of open source and open standards. You will also learn about the differences between open source and closed source software, the reasons for the use of each, and how the combination of standards and open source provides increased value to an organization. The second module (LFC203) discusses the various open source business models and how to develop practical strategies and policies for your organization's chosen model. It also explains the value and importance of an Open Source Program Office (OSPO) as well as how the OSPO helps provide assistance in defining ROI and other open source metrics. In the third module (LFC204), you will learn how to build an effective OSPO and articulate the different types of roles and responsibilities needed to run it successfully. Module 4 (LFC205) talks about the role of continuous integration and testing in a healthy open source project, and how you can apply open source development principles to internal projects within your organization to take best advantage of the value these principles bring. In the fifth module (LFC206) you will learn about the importance of effective open source license compliance and how to build programs and processes to ensure safe and effective

consumption of open source in the enterprise. You will also get familiar with the most common open source license types, and their major characteristics, as well as how to choose the most appropriate license for a given situation. Module 6 (LFC207) discusses how to work most effectively with upstream open source projects and how to build sound contribution strategies in organizations to get the maximum benefit from working with project communities. It also describes multiple common upstream project governance models, and explains how these governance practices affect an organization's ability to make effective contributions. Finally, the last module (LFC208) discusses the rationale and value for creating new open source projects as well as the required legal, business and development processes needed to launch new projects.

Upon completion of this program, you should be able to build effective processes and strategies for creating new open source projects from scratch, or from open sourcing previously closed source projects within an organization.

Audience

This course series is designed to help executives, managers, and software developers understand and articulate the basic concepts for building effective open source practices within their organization. It is also helpful for a leadership audience responsible for setting up effective program management of open source in their organization. Before enrolling, students should have a basic understanding of software development and business concepts.

Course Instructor



Guy Martin is the Executive Director of OASIS Open, an internationally recognized standards development and open source projects consortium. He works closely with OASIS staff and the open source community to help the organization realize the tremendous advantage in integrating the best of open standards and open source.

Guy has a unique blend of 25+ years' experience as both software engineer and open source strategist. He has built open source programs for companies like Red Hat, Samsung and Autodesk and was instrumental in founding the Academy Software Foundation while Director of

the Open Source Office at Autodesk. He was also a founding member of the team that built the Open Connectivity Foundation while at Samsung, helping to successfully integrate standards with open source reference implementations. Additionally, he has contributed to several best practices and learning guides from the Linux Foundation's TODO Group, a resource for open source program office personnel.

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Open Source Introduction (LFC202)

Course Overview



This module covers the basic elements of open source, and serves as one of the building blocks within the 'Strategy & Governance' section of the open source framework identified above. Understanding these elements is critical to explaining both the importance of open source in today's business landscape as well as for building the foundation for more advanced learning.

Being able to effectively articulate and utilize these basic concepts within open source gives learners a strong base from which to participate in important discussions and help make informed decisions for their organization.

Course Learning Objectives

By the end of this course, you should be able to:

- Define open source, and explain the differences between it, closed source and open standards.
- Describe some basic open source governance models and their usage.
- Explain how to use open source and the main reasons for doing so.

Course Audience

This course is designed to help executives, managers, and software developers understand and articulate the basic concepts underpinning effective open source practices within their organization.

Knowledge Prerequisites

Basic understanding of software development/business concepts.

System Requirements

Not applicable.

Course Length

Approximately 1-2 hours.

Course Outline

- Chapter 1. Course Introduction
- Chapter 2. Introducing Open Source
A basic definition of what open source is (licensing and a development model), as well a comparison of open source vs. closed source software vs. open standards and the importance of how to integrate open source with closed source software in the enterprise.
- Chapter 3. A Short History of Open Source Software
A description of the roots of free software and the subsequent birth of open source, including a discussion of how pragmatism vs. idealism played into open source becoming a critical component of business and technology strategies in the enterprise. Additional discussion on the role of open standards in supporting modern technology underpinnings.
- Chapter 4. Reasons to Use Open Source
A description of how the community and collaborative model of open source ensures that innovative technology needed by many can be developed efficiently, allowing enterprises to get incredible business value by sharing in the development and maintenance of this software. Also, a short discussion of potential effective ways to marry open source with open standards for increased benefit.
- Chapter 5. Course Completion/Final Exam

Open Source Business Strategy (LFC203)

Course Overview



This module covers an introduction to the business, strategic & programmatic elements of open source, and forms the core content within the 'Strategy & Governance' section of the open source framework identified above. Understanding these elements is crucial for senior leadership because they form the backbone of effective open source utilization and engagement with the open source ecosystem.

Being able to effectively articulate and utilize these strategic concepts gives learners the foundation to make decisions that extract the most business value from their organization's investment in open source.

Course Learning Objectives

By the end of this course, you should be able to:

- Understand and explain the various open source business models.
- Describe how to develop effective open source strategies and policies.
- Articulate the value and importance of building an open source program office (OSPO).
- Understand how to define metrics for effective measurement of open source value.

Course Audience

This module is applicable primarily to a leadership audience (Executives, Program and Engineering Managers).

Knowledge Prerequisites

Basic understanding of software development/business concepts.

System Requirements

Not applicable.

Course Length

Approximately 1-2 hours.

Course Outline

- Chapter 1. Course Introduction
- Chapter 2. Introducing Open Source Business Models
Definitions and explanations of the various types of open source business models with comparisons and evaluations of each of their strengths and weaknesses.
- Chapter 3. Developing an Open Source Strategy
Explaining the need and value of having a coherent strategy for utilizing open source and engaging with the open source ecosystem. Determining considerations for the policy itself as well as phased implementation plans.
- Chapter 4. Developing Open Source Policies
Description of how to develop open source policies that are also effectively implemented. Understanding key considerations that can affect the success and adoption of such policies.
- Chapter 5. Introducing the Open Source Program Office
Explaining the structure and value of a dedicated Open Source Program Office (OSPO) and explaining its role in guiding an organization's open source efforts. Short discussion on the role of the OSPO in helping define metrics for open source success.
- Chapter 6. Course Completion/Final Exam

Effective Open Source Program Management (LFC204)

Course Overview



This module covers an introduction to the business, strategic & programmatic elements of open source, and forms the core content within the 'Strategy & Governance' section of the open source framework identified above. Understanding these elements is crucial for senior leadership because they form the backbone of effective open source utilization and engagement with the open source ecosystem.

Being able to effectively articulate and utilize these strategic concepts gives learners the foundation to make decisions that extract the most business value from their organization's investment in open source.

Course Learning Objectives

By the end of this course, you should be able to:

- Understand and explain the various open source business models.
- Describe how to develop effective open source strategies and policies.
- Articulate the value and importance of building an open source program office (OSPO).
- Understand how to define metrics for effective measurement of open source value.

Course Audience

This module is applicable primarily to a leadership audience (Executives, Program and Engineering Managers).

Knowledge Prerequisites

Basic understanding of software development/business concepts.

System Requirements

Not applicable.

Course Length

Approximately 1-2 hours.

Course Outline

- Chapter 1. Course Introduction
- Chapter 2. Introducing Open Source Business Models
Definitions and explanations of the various types of open source business models with comparisons and evaluations of each of their strengths and weaknesses.
- Chapter 3. Developing an Open Source Strategy
Explaining the need and value of having a coherent strategy for utilizing open source and engaging with the open source ecosystem. Determining considerations for the policy itself as well as phased implementation plans.
- Chapter 4. Developing Open Source Policies
Description of how to develop open source policies that are also effectively implemented. Understanding key considerations that can affect the success and adoption of such policies.
- Chapter 5. Introducing the Open Source Program Office
Explaining the structure and value of a dedicated Open Source Program Office (OSPO) and explaining its role in guiding an organization's open source efforts. Short discussion on the role of the OSPO in helping define metrics for open source success.
- Chapter 6. Course Completion/Final Exam

Open Source Development Practices (LFC205)

Course Overview



This module covers open source best practices for development and governance. This content resides within the 'Strategy & Governance' section of the open source framework identified above. These elements provide developers a common understanding of important development practices in all areas of open source.

Being able to effectively utilize these concepts gives learners the foundation to develop, test, and participate in the open source software community.

Course Learning Objectives

By the end of this course, you should be able to:

- Understand and explain the similarities and differences between development practices in open source and closed source software.
- Articulate the importance of continuous integration, continuous deployment and testing frameworks in open source.
- Describe how to apply open source development principles to 'Inner Source' efforts inside your organization.

Course Audience

This module is applicable primarily to a development audience.

Knowledge Prerequisites

Basic understanding of software development/business concepts.

System Requirements

Not applicable.

Course Length

Approximately 1-2 hours.

Course Outline

- Chapter 1. Course Introduction
- Chapter 2. Effective Open Source Development & Participation
Explanation of open source implementation differences from proprietary software, including: requirements, design, concepts of small changes, frequent releases and working collaboratively with large and distributed development teams.
- Chapter 3. The Role of Continuous Integration & Testing
Definitions for continuous integration, including tools, best practices and costs with implementing these practices. Description of the critical role that unit and integration testing play in open source, especially as it relates to frequent release cycles and working with large distributed teams.
- Chapter 4. Applying Open Source Methodologies Internally
A discussion of how to apply open source development methodologies to internal corporate software projects ('Innersource'). This will cover reasons for this practice as well as practical steps to implement this in support of better open source engagement.
- Chapter 5. Course Completion/Final Exam

Open Source Compliance Programs (LFC206)

Course Overview



This module covers a wide range of topics related to open source license compliance, including how to implement an effective compliance program. This content resides within the ‘Consume’ section of the open source framework identified above. Understanding these concepts is critical for senior leaders and legal staff as they build programs and processes to consume open source strategically in their organization.

Being able to effectively utilize these concepts gives leaders an understanding of the importance of compliance and helps them make effective program implementation decisions.

Course Learning Objectives

By the end of this course, you should be able to:

- Discuss open source license types and their major characteristics.
- Choose the most appropriate open source license for each situation.
- Design an effective license compliance program.
- Evaluate license compliance tool options.
- Discuss role of open source audits for M&A activities.

Course Audience

This module is applicable primarily to leadership and legal audiences.

Knowledge Prerequisites

Basic understanding of software development/business concepts.

System Requirements

- Not applicable.

Course Length

- Approximately 1-2 hours.

Course Outline

- Chapter 1. Course Introduction
- Chapter 2. Open Source Licensing & Compliance Basics
Definition and explanation of how open source licenses work, including discussion of patents and their effects on licensing. Information on how to best choose the right open source license for particular situations.
- Chapter 3. The Role of an Effective Compliance Program
Detailed information on how to design, build and staff an effective compliance program, including the importance of engineering leadership and legal partnerships.
- Chapter 4. Choosing the Right License Compliance Tool
A discussion of the different tool options available to implement automated license compliance scanning and how to choose the best option for your organization's size, budget and complexity. Also includes information on industry initiatives that can provide additional help and information.
- Chapter 5. The Role of Open Source Audits During M&A Activities
An explanation of the role that open source audits play when M&A activities bring in new code to your existing products. Effective audits help both legal compliance as well as identify areas for software reuse.
- Chapter 6. Course Completion/Final Exam

Collaborating Effectively with Open Source Projects (LFC207)

Course Overview



This module covers important topics for working most effectively with upstream open source projects. This content resides within the 'Contribute' section of the open source framework identified above. Understanding these concepts is critical for developers, as these form the basis for productive and streamlined work with open source projects.

Being able to effectively utilize these concepts gives developers and engineering managers the necessary background and information to not only get the most value from their open source engagement but also to understand how to effectively work with upstream open source projects.

Course Learning Objectives

By the end of this course, you should be able to:

- Understand how upstream projects work and their governance types.
- Learn how to effectively develop upstream contribution strategies.
- Understand what behaviors to avoid when working upstream.
- Learn how to work with potentially challenging upstream contributors.

Course Audience

This module is applicable primarily to developer and engineering manager audiences.

Knowledge Prerequisites

Basic understanding of software development concepts.

System Requirements

Not applicable.

Course Length

Approximately 1-2 hours.

Course Outline

- Chapter 1. Course Introduction
- Chapter 2. Understanding Upstream Open Source Projects
Definition and explanation of different types of upstream projects, both from a governance perspective, but also understanding leadership styles and contribution models.
- Chapter 3. Effective Upstream Contribution Strategies
Detailed information on how to work effectively with upstream projects, including determining the best way to engage with development communities, strategies for success, and what behaviors to avoid. Additional discussion on how to setup proper upstream contribution infrastructures.
- Chapter 4. Upstream Development Practices
A discussion of the difference in development styles and processes between closed source projects and upstream open source. Detailed recommendations for effectively implementing development processes to reduce friction and increase chances for successful contributions.
- Chapter 5. Course Completion/Final Exam

Creating Open Source Projects (LFC208)

Course Overview



This module covers topics necessary for successfully creating new open source projects. This content resides within the 'Create' section of the open source framework identified above. Understanding these concepts is critical for developers & business leaders, as these form the basis for getting the most value from new open source projects.

Being able to effectively utilize these concepts gives developers & business leaders the necessary background and processes they need to launch successful open source projects.

Course Learning Objectives

By the end of this course, you should be able to:

- Understand the rationale and value for creating new open source projects.
- Understand the required legal, business and development processes required to launch new projects.
- Articulate a strategy for how to choose which internal technologies to open source.
- Describe how to build effective governance and community models (including explaining the role of Foundations/Consortiums).

Course Audience

This course is designed primarily for developer and business leader audiences.

Knowledge Prerequisites

Basic understanding of software development and business concepts.

System Requirements

Not applicable.

Course Length

Approximately 1-2 hours.

Course Outline

- Chapter 1. Course Introduction
- Chapter 2. Open Source Project Creation Overview
Explanation of good and bad reasons to create new projects, as well as understanding how to evaluate the business value/potential of a new project.
- Chapter 3. New Project Preparations
Detailed information on how to prepare for creating a new open source project, including discussion of legal, business and community considerations. Additional discussion of required processes, tools, and staffing requirements for success.
- Chapter 4. Successful Project Launch & Sustainment
A discussion of final steps required for project launch, as well as additional information on how to sustain and continue to encourage adoption and contribution to the project.
- Chapter 5. Course Completion/Final Exam