Introduction to FinOps (LFS175x)

Course Overview

Organizations using Cloud and DevOps face challenges to the traditional way IT has been procured, managed and optimized. Traditional siloes of IT, Finance, and Business are breaking down, and traditional procurement and financial management processes are significantly changed by the cloud. Cloud spend is more dynamic, less predictable, and understanding the vast amount of data on the cloud bill can be daunting. Companies want product teams to be more responsive to customer demand, for DevOps teams to build faster and better, and for costs to be managed tightly. FinOps provides a framework to align these groups within an organization to achieve these results.

The FinOps Foundation was formed in 2019 with the goal of helping practitioners learn from one another and develop new practices, concepts and tools needed to both align the work of internal Cloud stakeholders and manage the dynamic services offered by the hyper-scale Cloud providers.

This introductory course describes the basics of FinOps and how it can positively impact an organization. FinOps allows organizations to build a culture of accountability around Cloud use that lets companies make good, timely, data-backed decisions in the Cloud, not just to save money, but to make money.

Course Learning Objectives

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

- Understand the impacts DevOps and Cloud have had on how IT costs are managed.
- Understand what FinOps is and how it can address some of these impacts.
- Understand the Principles of FinOps which guide its practice in an organization.
- Understand the considerations that go into forming a FinOps team within an organization.

- Have an understanding of the scope of the Capabilities a FinOps team would perform to achieve the Cloud use goals of the organization.
- Understand how the FinOps Foundation can help practitioners, cloud users, finance professionals, DevOps engineers and product managers to work with others around the world to learn best practices and support one another.

Prerequisites

We recommend that you have a basic level of working knowledge about at least one of the major cloud providers, understand basic terminology of the cloud, and possess a basic level of understanding of IT finance terminology.

Audience

The audience for this course includes:

- IT, DevOps, Engineers or Architects using Cloud to deliver value who want to understand how FinOps can help them integrate cost management as a metric in their environments.
- Finance, Procurement, and Accounting professionals who want to understand how FinOps can help them negotiate, purchase and manage cash flow for Cloud more effectively.
- Business unit or Product Managers delivering product value with Cloud who want to understand how FinOps can help them innovate more, manage Cloud cost proactively and deliver value to customers more quickly.
- Executives and Managers who oversee environments that depend upon Cloud who want to understand how FinOps can help them build a culture of accountability that leverages Cloud for its strengths while aligning everyone to manage its cost and use.

Course Instructor(s)

J.R. Storment is the Executive Director of the FinOps Foundation (F2)co-author of the O'Reilly Book Cloud FinOps, formerly he was a co-founder of Cloudability prior to its acquisition by Apptio. He has spent the last 20 years solving problems with technology and the last 9 working with some of the largest cloud consumers in the world—like GE, Atlassian and Uber— helping them design strategies to optimize and analyze their cloud expenditures.

Course Length

2 hours

Course Outline

Welcome!

- Welcome!

Chapter 1. What Is FinOps?

- Introduction
- What Is FinOps?
- FinOps Principles
- Knowledge Check (Verified Certificate track only)

Chapter 2. Why FinOps?

- Introduction
- The Rise of the Cloud Economy
- The New Realities of Cloud IT
- Knowledge Check (Verified Certificate track only)

Chapter 3. Culture Change & FinOps Teams

- Introduction
- Who Does FinOps?
- Knowledge Check (Verified Certificate track only)

Chapter 4. FinOps Lifecycle

- Introduction
- FinOps Lifecycle
- FinOps Capabilities
- Inform Phase
- Optimize Phase
- Operate Phase
- Knowledge Check (Verified Certificate track only)

Final Exam (Verified Certificate track only)

edX Platform

If you are using edX for the first time, we strongly encourage you to start by taking a free 'how to use edX' course that the team at edX has made available. In this course, you will learn how to navigate the edX platform, how to connect with other edX learners, how to answer problems on the edX platform, how grades work in edX courses, and how to complete your first course.

Click here to register for "*DemoX*" and you will be on your way. You will find the edX platform simple and intuitive.

Getting Help

For any **technical issues** with the edX platform (including login problems and issues with the Verified Certificate), please use the **Help** icon located on the upper right side of your screen.

One great way to interact with peers taking this course and resolving any **content-related issues** is via the **Discussion Forums**. These forums can be used in the following ways:

- To discuss concepts, tools, and technologies presented in this course, or related to the topics discussed in the course material.
- To ask questions about course content.
- To share resources and ideas related to FinOps.

We strongly encourage you to not only ask questions, but to share with your peers opinions about the course content, as well as valuable related resources. The Discussion Forums will be reviewed periodically by the Linux Foundation staff, but it is primarily a community resource, not an 'ask the instructor' service.

To learn more tips on how to use them, read the following article: *"Getting the Most Out of the edX Discussion Forums"*.

Course Timing

This course is entirely self-paced; there is no fixed schedule for going through the material. You can go through the course at your own pace, and you will always be returned to exactly where you left off when you come back to start a new session. However, we still suggest you avoid long breaks in between periods of work, as learning will be faster and content retention improved.

The chapters in the course have been designed to build on one another. It is probably best to work through them in sequence; if you skip or only skim some chapters quickly, you may find there are topics being discussed you have not been exposed to yet. But this is all self-paced and you can always go back, so you can thread your own path through the material.

Learning Aids

Besides simple exposition through text and figures, this course uses additional methods to present the learning material, including external resources and knowledge check questions (Verified Certificate track only).

Audit and Verified Tracks

You can enroll into an audit or a verified track. In an audit track, you will have access to all ungraded course content: course readings, videos, and learning aids, but no certificates are awarded when auditing. You will not be able to access any graded content (knowledge check questions at the end of each chapter, and the final exam).

In order to receive a certificate, you will need to obtain a passing grade (please refer to the "Grading" section below), verify your identity with edX, and pay a fee. Once all edX requirements have been met, you can download your certificate from the Progress tab.

To learn more about audit and verified tracks, visit edX Help Center > Certificates.

Grading (Verified Certificate track only)

At the end of each chapter, you will have a set of graded **knowledge check questions**, that are meant to further check your understanding of the material presented. The grades obtained by answering these knowledge check questions will represent **20%** of your final grade.

The remaining **80%** of your final grade is represented by the score obtained in the **final exam**. The final exam is located at the end of the course and it consists of 10 questions.

You will have a maximum of two attempts to answer each knowledge check and final exam question (other than True/False questions, in which case, you have only one attempt). You are free to reference your notes, screens from the course, etc., and there is no time limit on how long you can spend on a question. You can always skip a question and come back to it later.

In order to complete this course with a passing grade, you must obtain a passing score (knowledge check and final exam) of minimum 70%.

Course Progress and Completion (Verified Certificate track only)

Once you complete the course (including knowledge check questions and final exam), you will want to know if you have passed. You will be able to see your completion status using the **Progress** tab at the top of your screen, which will clearly indicate whether or not you have achieved a passing score.

Professional Certificate Program

Professional Certificate programs are a series of courses designed by industry leaders and top universities to build and enhance critical professional skills needed to succeed in today's most in-demand fields.

To learn more about our Professional Certificates, visit edX website.

About The Linux Foundation

The Linux Foundation provides a neutral, trusted hub for developers to code, manage, and scale open technology projects. Founded in 2000, The Linux Foundation is supported by more than 1,000 members and is the world's leading home for collaboration on open source software, open standards, open data and open hardware. The Linux Foundation's methodology focuses on leveraging best practices and addressing the needs of contributors, users and solution providers to create sustainable models for open collaboration.

The Linux Foundation hosts Linux, the world's largest and most pervasive open source software project in history. It is also home to Linux creator Linus Torvalds and lead maintainer Greg Kroah-Hartman. The success of Linux has catalyzed growth in the open source community, demonstrating the commercial efficacy of open source and inspiring countless new projects across all industries and levels of the technology stack.

As a result, the Linux Foundation today hosts far more than Linux; it is the umbrella for many critical open source projects that power corporations today, spanning virtually all industry sectors. Some of the technologies we focus on include big data and analytics, networking, embedded systems and IoT, web tools, cloud computing, edge computing, automotive, security, blockchain, and many more.

The Linux Foundation Events

Over 85,000 open source technologists and leaders worldwide gather at Linux Foundation events annually to share ideas, learn and collaborate. Linux Foundation events are the meeting place of choice for open source maintainers, developers, architects, infrastructure managers, and sysadmins and technologists leading open source program offices, and other critical leadership functions.

These events are the best place to gain visibility within the open source community quickly and advance open source development work by forming connections with the people evaluating and creating the next generation of technology. They provide a forum to share and gain knowledge, help organizations identify software trends early to inform future technology investments, connect employers with talent, and showcase technologies and services to influential open source professionals, media, and analysts around the globe.

The Linux Foundation hosts an increasing number of events each year, including:

- Open Source Summit North America, Europe, and Japan
- Embedded Linux Conference North America and Europe
- Open Networking & Edge Summit
- KubeCon + CloudNativeCon North America, Europe, and China
- Automotive Linux Summit
- KVM Forum
- Linux Storage Filesystem and Memory Management Summit
- Linux Security Summit North America and Europe
- Linux Kernel Maintainer Summit
- The Linux Foundation Member Summit
- Open Compliance Summit
- And many more.

To learn more about The Linux Foundation events and to register, click here.

The Linux Foundation Training

The Linux Foundation offers several types of training:

- Classroom
- Online
- On-site
- Events-based.

To get more information about specific courses offered by the Linux Foundation, click here.

The Linux Foundation Certifications

The Linux Foundation certifications give you a way to differentiate yourself in a job market that's hungry for your skills. We've taken a new, innovative approach to open source certification that allows you to showcase your skills in a way that other peers will respect and employers will trust:

- You can take your certification from any computer, anywhere, at any time.
- The certification exams are either performance-based or multiple choice.
- The exams are distribution-flexible.
- The exams are up-to-date, testing knowledge and skills that actually matter in today's IT environment.

For a list of currently offered certifications, click here.

Mission of the FinOps Foundation (F2)

The [FinOps Foundation](#) (F2) is a non-profit trade association that launched with ~30 founding members. It is now made up of over 4,000 industry experts, including Nationwide, Spotify, Nike, MIT, Atlassian, HERE Technologies, Australia Post, UK and US Government groups, Thermo Fisher Scientific, Just Eat, Pearson, Sainsbury's, Middle East Broadcasting Company, Tabcorp, Autodesk, Neustar, etc. The FinOps Foundation joined the Linux Foundation in June 2020.

Its mission is to:

- Serve as a central community for cloud financial management (regardless of cloud or vendor).
- Advance careers of FinOps practitioners (through career development, as well as educational and certification programs).
- Define cloud financial management standards (make them ubiquitous through open source).

To learn more about FinOps, read *"Cloud FinOps: Collaborative, real-time cloud financial management"* by J.R. Storment and Mike Fuller (collaboratively contributed by FinOps Foundation members).

FinOps Membership Growing Fast

As of October 2021, FinOps:

- Has 4000+ members and 500+ companies with over $1bn revenue
- Offered 150+ consultancies
- Connected 800+ members via Slack channels
- Awarded 900+ certifications
- Had 700+ members join monthly calls
- Brings together 40+ vendor partners, including Google, VMWare, Deloitte, Accenture, and McKinsey

Certification Levels

Currently the foundational "FinOps Certified Practitioner" is being offered through monthly instructor-led and self-paced courses. The FinOps Certified Professional will be offered for advanced practitioners of FinOps in Q1 2022.

FinOps Practitioner - basic qualification for FinOps team members (Sep 2019)

- Understands fundamentals of FinOps
- Understands FinOps principles
- Is able to perform basic FinOps capabilities

FinOps Professional (Q1 2022)

- Is an expert on specific capabilities
- Is adept at automation and technical manipulation of systems to perform FinOps functions
- Has hands-on experience with vendor-specific content and experiences

Join the Discussion at FinOps.org

The FinOps Foundation is open to membership from anyone who is a practitioner of FinOps. It is a community where you can work with others who face similar challenges and with whom you can share and grow as you mature your FinOps practice. If you are interested in FinOps, apply to join the Foundation at finops.org. The FinOps Foundation offers:

- A community of FinOps Practitioners.
- Shared Slack channels for discussions for practitioner and community members.
- Monthly mini-summits with over 500 members and practitioners, including break out room discussion time (later rebroadcast on YouTube).
- Snazzy badges for members and certified practitioners and partners.

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