



DEVOPS FOUNDATION

PROFESSIONAL CERTIFICATION



DFPC™ Version V072023

CertiProf®

DevOps Foundation Professional Certificate

Syllabus V072023

Introduction	3
Objectives	3
Examination format and duration	3
Eligibility for certification	4
Contents	4



Introduction

The goal is to understand DevOps culture as a catalyst for high-performing teams and to help participants establish a common vision, vocabulary and action plan for DevOps success in their own teams.

Objectives

- Develop a common understanding of DevOps
- Understand how the DevOps culture evolved.
- Get real-world examples that work.
- Learn real-world techniques and tips for implementing DevOps at the leadership level.
- Understand the tools available to your teams for rapid and well-tested continuous delivery of IT applications and services.
- Understand the metrics you should focus on.
- Discover where and how to get started with DevOps in your organization.
- Start scaling agile principles to the next level: End-to-end processes with all IT groups.
- Establish a common expectation of what is required to implement DevOps principles and how long you can expect it to take.

Examination format and duration

This study program has an exam in which the candidate must achieve a passing score to obtain the DevOps Foundation Professional Certification.

- Format: Multiple choice.
- Questions: 40.
- Language: Spanish
- Passing score: 32/40 or 80%.
- Duration: 60 minutes.
- Open book: No.
- Delivery: This exam is available online.
- Supervised: At the Partner's discretion.

Who should attend this certification workshop?

- CIOs and CTOs
- IT directors and managers
- Functional leaders / managers

- Test managers
- Architects
- Project managers
- Program managers and directors
- Development managers
- Team Leaders
- Anyone responsible for leading teams or making IT decisions.

Content

DevOps Foundation Professional Certification v072023

Part 1: What is DevOps and why is it necessary?

- Content
- DevOps Definition
- DevOps
- DevOps Definition
- What is DevOps? Myths about DevOps
- DevOps is a New Profession

What is DevOps in practice?

- Reasons to use DevOps

Part 2: Origins and History of DevOps

- Content
- Origins of DevOps
- Manifesto For Agile Development (2001)
- ...The Wall of Confusion was born
- The Birth of DevOps
- The DevOps Timeline
- DevOps is not a Fad

Agile Adoption Report 2021 by CertiProf

- Agile Adoption Report 2021 by CertiProf

Let's understand the Origin...

- Introduction
- High-Performance IT Organizations
- Global Enterprises DevOps Benchmarking
- Success Stories
- Is DevOps only for Unicorns?

Part 3: Pillars of DevOps

- Content

Precursors of DevOps

What is DevOps?
Precursors of DevOps
DevOps Culture
CALMS in DevOps
DevOps Pillars

DevOps Principles

DevOps
DevOps Principles
The Authors
The Flow Principles
Competencies Needed - Capabilities
The second way: Feedback Loop
Competencies Needed - Capabilities
Learning Objectives
Capabilities

Topologies for DevOps Teams

DevOps Topologies
Team Topologies
1.3.3 Organization
Integrating Ops into Dev
Dev Topologies
DevOps Topologies
Integrating Ops into Dev

Summary: DevOps - Guiding Principles

DevOps - Guiding Principles

Part 4: Key DevOps Concepts

Content

The IT Value Chain

DevOps Basics

Key Concepts of SoR and SoE Bimodal DevOps

Basis Concepts: Bimodal SoR and SoE

DevOps Roadmap Overview

Deployment Pipelines
Deployment Pipeline Basics

Agile Development

Agile Development
What is DevOps?
Agile Development
What is DevOps?

Agile DevOps
Scaled Agile Development

Version Control

GIT Deployment Pipeline Basics
Gitflow Workflow

Deployment Pipelines

DevOps Deployment
Pipelines
CI Deployment Pipeline / CD Pipeline Basics
Basic Concepts of the DevOps Stages

Continuous Integration and Delivery

Deployment Pipeline
CI / CD Pipelines for Deployments
CI / CD Pipeline

Continuous Testing

Test Automation: Its Importance in DevOps
Continuous Testing
Built in Test Strategy
Shift Left Testing
Basic Flow for Secure DevOps

Cloud Computing

Virtualization Cloud
Computing

Infrastructure as Code

TheC: Infrastructure as Code "X"
as Code
TheC: Infrastructure as Code

Part 5: Key Technical Practices, Tools and Metrics to Help Your Teams

Automate Processes

Content

Key DevOps Practices

What is DevOps?
DevOps Practices
DevOps practices Collaboration
DevOps practices Continuous Deployment
DevOps practices Continuous
Improvement
DevOps practices
DevOps Practices Client-Centric Action
DevOps Practices Automation

DevOps Tools - Examples

DevOps Tools
DevOps Tools List

All-in-One Configuration
Management - Demo Tool
Deployments
Containers Version
Control
All in One - Version Control
Artifact Management
Server Deployment and Monitoring (IAC)
CI/Implementation Automation
IT Service Management
Container Management CI/Automation of Deployment Configuration Management
Test Automation
Application Performance Monitoring DevOps
Tools List

Metrics - Software Delivery and Operation Metrics

Efficient Metrics
Accelerate State of DevOps Report 2021
How to select efficient metrics?
Speed (Throughput)
Stability (Stability)
Reliability of Service (Reliability of Service)
Key Metrics for DevOps

Part 6: Find out where and how to Get Started with DevOps in your Organization

Content

Adoption - Start Scaling Agile Principles to the Next Level: Agile Processes

End-to-End with all IT Groups

Accelerate State of DevOps 2021
Gartner DevOps Model
Accelerate State of DevOps Report 2021
DevOps Evolution: The Practices
The 5 Stages of DevOps

Part 7: Continuous Improvement and the Culture of Learning in the Organization

Evolution DevOps Adoption
Content
Keeping Up with DevOps Trends State of Devops Report 2021 - Key Findings

Culture - Changing your Culture to Support DevOps

- Learning Culture
- Organizational Typology Models

Culture - Improving Collaboratively, Evolving Experimentally

- Continuous Improvement

Self Assessment - Measuring DevOps Maturity

- Continuous Improvement: Maturity Models

Part 8: Next Steps on Your Journey to the DevOps World

- Content DevOps
- Courses
- DevOps Days Conferences
- Literature Base
- Additional Literature
- State of DevOps
- Reports

Suggested Practical Workshops

- Hands-on Workshop: Github Lab
- Hands-on Workshop: Docker Lab 101
- Hands-on Workshop: Azure DevOps Lab