

Continuous Testing Foundation

Overview

This comprehensive course addresses testing in a DevOps environment and covers concepts such as the active use of test automation, testing earlier in the development cycle, and instilling testing skills in developers, quality assurance, security, and operational teams. The course is relevant for every modern IT professional involved in defining or deploying a DevOps testing strategy for their organization, as test engineering is the backbone of DevOps and the primary key for successful DevOps pipeline to support digital transformation. This course prepares you for the Continuous Testing Foundation(CTF)[™] certification.

Prerequisites

- DevOps Foundation

Prerequisite Comments

The DevOps Foundation certification is a prerequisite for DevOps Test Engineering to ensure participants are aligned with the baseline DevOps definitions and principles.

Target Audience

The target audience for the DevOps Test Engineering course is anyone involved in defining a DevOps Testing strategy, such as:

Delivery Staff
DevOps Engineers
IT Managers
Project Managers
Lab Staff
Maintenance and Support Staff
Quality Assurance Managers
Quality Assurance Teams
Release Managers
Testers
Software Engineers

Course Objectives

The learning objectives for DTE include a practical understanding of:
The purpose, benefits, concepts and vocabulary of DevOps testing
How DevOps testing differs from other types of testing
DevOps testing strategies, test management and results analysis
Strategies for selecting test tools and implementing test automation
Integration of DevOps testing into Continuous Integration and Continuous Delivery workflows
How DevOps testers fit with a DevOps culture, organization and roles

Course Outline

1 - Course Objectives and Modules, Logistics

2 - What is DevOps Testing and its Business Benefits?

3 - Relation of DevOps Testing in other Test Methodologies

4 - DevOps Testing Best Practices

- DevOps Testing Terminology
- Culture changes
- Organization changes
- Process and team friction
- Motivation strategies
- Measuring Success
- Continuous Evolution
- Troubleshooting

5 - What is the DevOps pipeline?

- DevOps Testing on the pipeline
- Test strategy choices
- Pre-Flight strategies
- Continuous Integration Testing
- System, Delivery and Customer Testing
- Test Environments
- Lab Management
- Topology orchestration

6 - Test Automation Frameworks

- Test Tools
- Selection criterion
- Automated metrics
- Key concepts

7 - Test Case Best Practices & Design Exercise

8 - Test Suite Best Practices & Design Exercise

9 - Principles of DevOps Management

10 - DevOps Test Management Metrics

11 - DevOps Management Tools

12 - DevOps Test Results Analysis

13 - Integrating DevOps Results Analysis

14 - Test Management Exercise

15 - Fictitious Product Test Requirements

16 - Individual Exercise

17 - Class discussion

18 - Exam Preparation

Related Courses, Certifications, Exams

- DevOps Foundation
 - Certified DevOps Test Engineer (DTE)
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