

AZ-400T03 Implementing Continuous Delivery

Course Summary

Description

This 1-day course provides the knowledge and skills to implement continuous delivery. Students will learn how to design a release strategy, set up a release management workflow, and implement an appropriate deployment pattern.

This class is part of the following 4-day comprehensive class: <https://www.protechtraining.com/az-400-azure-devops-engineer-part-1-pt21918>

Objective

After completing this course, students will be able to:

- Differentiate between a release and a deployment
- Define the components of a release pipeline
- Explain things to consider when designing your release strategy
- Classify a release versus a release process, and outline how to control the quality of both
- Describe the principle of release gates and how to deal with release notes and documentation
- Explain deployment patterns, both in the traditional sense and in the modern sense
- Choose a release management tool
- Explain the terminology used in Azure DevOps and other Release Management Tooling
- Describe what a Build and Release task is, what it can do, and some available deployment tasks
- Classify an Agent, Agent Queue and Agent Pool
- Explain why you sometimes need multiple release jobs in one release pipeline
- Differentiate between multi-agent and multi-configuration release job
- Use release variables and stage variables in your release pipeline
- Deploy to an environment securely, using a service connection
- Embed testing in the pipeline
- List the different ways to inspect the health of your pipeline and release by using, alerts, service hooks and reports
- Create a release gate
- Describe deployment patterns
- Implement Blue Green Deployment
- Implement Canary Release
- Implement Progressive Exposure Deployment

Topics

- Design a Release Strategy
- Set up a Release Management Workflow
- Implement an appropriate deployment pattern
- Hands-On Lab

Audience

Students in this course are interested in implementing DevOps processes or in passing the Microsoft Azure DevOps Solutions certification exam.

Prerequisite

Fundamental knowledge about Azure, version control, Agile software development, and core software development principles. It would be helpful to have experience in an organization that delivers software.

Duration

One Day

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Course Outline

- I. **Design a Release Strategy**
 - A. Introduction to Continuous Delivery
 - B. Introduction to Continuous Delivery
 - C. Release strategy recommendations
 - D. Building a High Quality Release pipeline
 - E. Choosing a deployment pattern
 - F. Choosing the right release management tool
 - G. Building a release strategy
 - H. Differentiate between a release and a deployment
 - I. Define the components of a release pipeline
 - J. Explain things to consider when designing your release strategy
 - K. Classify a release versus a release process, and outline how to control the quality of both
 - L. Describe the principle of release gates and how to deal with release notes and documentation
 - M. Explain deployment patterns, both in the traditional sense and in the modern sense
 - N. Choose a release management tool
- II. **Set up a Release Management Workflow**
 - A. Introduction
 - B. Create a Release Pipeline
 - C. Provision and Configure Environments
 - D. Manage And Modularize Tasks and Templates
 - E. Integrate Secrets with the release pipeline
 - F. Configure Automated Integration and Functional Test Automation
 - G. Automate Inspection of Health
 - H. Building a release management workflow
 - I. Explain the terminology used in Azure DevOps and other Release Management Tooling
 - J. Describe what a Build and Release task is, what it can do, and some available deployment tasks
- K. Classify an Agent, Agent Queue and Agent Pool
- L. Explain why you sometimes need multiple release jobs in one release pipeline
- M. Differentiate between multi-agent and multi-configuration release job
- N. Use release variables and stage variables in your release pipeline
- O. Deploy to an environment securely, using a service connection
- P. Embed testing in the pipeline
- Q. List the different ways to inspect the health of your pipeline and release by using, alerts, service hooks and reports
- R. Create a release gate
- III. **Implement an appropriate deployment pattern**
 - A. Introduction into Deployment Patterns
 - B. Implement Blue Green Deployment
 - C. Implement Canary Release
 - D. Implement Progressive Exposure Deployment
 - E. Describe deployment patterns
 - F. Implement Blue Green Deployment
 - G. Implement Canary Release
 - H. Implement Progressive Exposure Deployment
 - I.
- IV. **Hands-On Lab**
 - Lab : Microsoft 365 Tenant and Service Management
 - Exercise 1: Set up a Microsoft 365 trial tenant
 - Exercise 2: Managing Microsoft 365 users, groups, and administration
 - Exercise 3: Configuring Rights Management and compliance
 - Exercise 4: Monitor and troubleshoot Microsoft 365