
AZ-400T02-A: Implementing Continuous Integration

This course provides knowledge and skills to implement the DevOps practices of continuous integration. Students will learn how to implement continuous integration in an Azure DevOps pipeline, how to manage code quality and security principles, and how to implement a container build strategy.

Objectives

After completing this course, students will be able to:

- Explain why continuous integration matters
- Implement continuous integration using Azure DevOps
- Configure builds and the options available
- Create an automated build workflow
- Integrate other build tooling with Azure DevOps
- Create hybrid build processes
- Describe what is meant by code quality and how it is measured
- Detect code smells
- Integrate automated tests for code quality
- Report on code coverage during testing
- Add tooling to measure technical debt
- Detect open source and other licensing issues
- Implement a container build strategy

Prerequisites

- Students should have 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.
- It is recommended that you have experience working in an IDE, as well as some knowledge of the Azure portal. However, students who may not have a technical background in these technologies, but who are curious about DevOps practices as a culture shift, should be able to follow the procedural and expository explanations of continuous integration regardless.

Intended Audience

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

Topics

- Implementing Continuous Integration in an Azure DevOps Pipeline
- Managing Code Quality and Security Policies
- Implementing a Container Build Strategy