

Azure Pipelines #050101

Das Trainings findet sich vom 16.06.2025 bis zum 27.06.2025 statt
und wird auf Englisch gehalten.

Es läuft von 08:30 bis 17:00.

Das Training findet sich nur Online statt.

Key Learnings

- Entwerfen und Implementieren von Prozessen und Kommunikation
- Entwerfen und Implementieren einer Strategie zur Quellcodekontrolle
- Entwerfen und Implementieren von Build- und Release-Pipelines
- Entwickeln eines Sicherheits- und Compliance-Plans
- Implementieren einer Instrumentierungs-Strategie

Anforderungen

- Verständnisses von PaaS-, SaaS- und IaaS-Implementierungen.
- Azure Vorkenntnisse.
- Es wäre hilfreich, Erfahrungen in einer Organisation zu haben, die Software liefert.

Key Learnings

- Design and implement processes and communication
- Design and implement a source code control strategy
- Design and implement build and release pipelines
- Develop a security and compliance plan
- Implement an instrumentation strategy

Requirements

- Understanding of PaaS, SaaS and IaaS implementations.
- Basic knowledge of Azure.
- It would be helpful to have experience in an organization that delivers software.

Azure Pipelines	
Module	Material
1. Github: (day1) - Installing and Configuring - Intro, Concepts, Commands - Using Git (Command Line, Editor, GUI Tools) - Workflow - Diff Tools	
2. Define Enterprise DevOps for Company (day2)	
3. Implement CI with Azure Pipelines and Github Actions This learning path introduces the concept of continuous integration using Azure Pipelines and GitHub Actions. It contains instructions for configuring these services and creating applications	
4. Design and implement Release Strategy (day3)	
5. Create a build Pipeline with Azure Pipelines - Introduction - What is Azure Pipelines? - Exercise - Get the sample application - Plan your build tasks - Exercise - Set up your Azure DevOps environment - Exercise - Create the pipeline - Exercise - Publish the result to the pipeline - Exercise - Build multiple configurations by using templates - Exercise - Clean up your Azure DevOps environment - Pipeline tasks, variables and triggers	Required knowledge and skills: - Familiarity with forking and cloning a GitHub repo Account requirements: - An Azure DevOps organization - To use Microsoft-hosted agents, your Azure DevOps organization must have access to Microsoft-hosted parallel jobs. <u>Check your parallel jobs and request a free grant.</u> - You can use GitHub Codespaces to complete the module, even if your Azure DevOps organization doesn't have any parallel jobs. - A GitHub account Software Requirements: - Visual Studio Code .NET 6.0 SDK - Git

6. Create a build Pipeline with Azure Pipelines (day4) • Introduction • What is Azure Pipelines? • Exercise - Get the sample application • Plan your build tasks • Exercise - Set up your Azure DevOps environment • Exercise - Create the pipeline • Exercise - Publish the result to the pipeline • Exercise - Build multiple configurations by using templates • Exercise - Clean up your Azure DevOps environment • Pipeline tasks, variables and triggers	Required knowledge and skills: • Familiarity with forking and cloning a GitHub repo Account requirements: • An Azure DevOps organization ○ To use Microsoft-hosted agents, your Azure DevOps organization must have access to Microsoft-hosted parallel jobs. <u>Check your parallel jobs and request a free grant.</u> ○ You can use GitHub Codespaces to complete the module, even if your Azure DevOps organization doesn't have any parallel jobs. • A GitHub account Software Requirements: • Visual Studio Code • .NET 6.0 SDK • Git
7. Implement CI with Azure Pipelines and GitHub Actions (day 5) • Describe the anatomy of a pipeline • Understand the pipeline Structure • Detail Templates • Explore Yaml Resources • Use multiple repositories in your pipeline • Migrate a pipeline from classic to YAML in Azure Pipelines • Knowledge Check • Summary	
8. Implement secured Continuous Deployment with Azure Pipelines (day 6)	
9. Implement secured Continuous Deployment with Azure Pipelines (day 7)	
10. manage Infrastructure-as-Code with Azure and DSC (day 8)	

11. Implement security and check codebases for compliance (day 9)	
12. Design and implement a dependency Management strategy (day 10)	
13. Implement continuous feedback	