

AZ-400 Microsoft Azure DevOps Solutions Fast Track

This seven-MOC packaged set aligned to Azure Exam: Azure Developer Associate contains courseware that helps prepare students for Exam AZ-400. Passing this exam is required to earn the Azure Developer Associate certification.

SEMINARINHALT:

GETTING STARTED WITH SOURCE CONTROL

- What is Source Control?
- Benefits of Source Control
- Types of source control systems
- Introduction to Azure Repos
- Migrating from TFVC to Git
- Authenticating to your Git Repos

SCALING GIT FOR ENTERPRISE DEVOPS

- How to structure your git repo? Mono Repo or Multi-Repo?
- Git Branching workflows
- Collaborating with Pull Requests
- Why care about GitHooks?
- Fostering Internal Open Source
- Git Version
- public projects
- Storing Large files in Git

IMPLEMENT & MANAGE BUILD INFRASTRUCTURE

- The concept of pipelines in DevOps
- Azure Pipelines
- Evaluate use of Hosted vs Private Agents
- Agent pools
- Pipelines & Concurrency
- Azure DevOps loves Open Source projects
- Azure Pipelines YAML vs Visual Designer
- Setup private agents
- Integrate Jenkins with Azure Pipelines
- Integration external source control with Azure Pipelines
- Analyse & Integrate Docker multi stage builds

MANAGING APPLICATION CONFIG & SECRETS

AZ-400 Microsoft Azure DevOps Solutions Fast Track

- Demo: SQL Injection attack
- Implement secure & compliant development process
- Rethinking application config data
- Manage secrets, tokens & certificates
- Implement tools for managing security and compliance in a pipeline

IMPLEMENT A MOBILE DEVOPS STRATEGY

- Introduction to Visual Studio App Center
- Manage mobile target device sets and distribution groups
- Manage target UI test device sets
- Provision tester devices for deployment

IMPLEMENTING CONTINUOUS INTEGRATION IN AN AZURE DEVOPS PIPELINE

- Continuous Integration Overview
- Implementing a Build Strategy

MANAGING CODE QUALITY AND SECURITY POLICIES

- Managing Code Quality
- Managing Security Policies

IMPLEMENTING A CONTAINER BUILD STRATEGY

- Implementing a Container Build Strategy

DESIGN A RELEASE STRATEGY

- Introduction to Continuous Delivery
- Release strategy recommendations
- Building a High Quality Release pipeline
- Choosing a deployment pattern
- Choosing the right release management tool
- Building a release strategy
- 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

AZ-400 Microsoft Azure DevOps Solutions Fast Track

SET UP A RELEASE MANAGEMENT WORKFLOW

- Introduction
- Create a Release Pipeline
- Provision and Configure Environments
- Manage And Modularize Tasks and Templates
- Integrate Secrets with the release pipeline
- Configure Automated Integration and Functional Test Automation
- Automate Inspection of Health
- Building a release management workflow
- 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

IMPLEMENT AN APPROPRIATE DEPLOYMENT PATTERN

- Introduction into Deployment Patterns
- Implement Blue Green Deployment
- Implement Canary Release
- Implement Progressive Exposure Deployment
- Describe deployment patterns
- Implement Blue Green Deployment
- Implement Canary Release
- Implement Progressive Exposure Deployment

HANDS-ON 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

AZ-400 Microsoft Azure DevOps Solutions Fast Track

DESIGNING A DEPENDENCY MANAGEMENT STRATEGY

- Introduction
- Packaging dependencies
- Package management
- Implement versioning strategy
- Recommend artifact management tools and practices
- Abstract common packages to enable sharing and reuse
- Inspect codebase to identify code dependencies that can be converted to packages
- Identify and recommend standardized package types and versions across the solution
- Refactor existing build pipelines to implement version strategy that publishes packages
- Manage security and compliance

MANAGE SECURITY AND COMPLIANCE

- Introduction
- Package security
- Open source software
- Integrating license and vulnerability scans
- Inspect open source software packages for security and license compliance to align with corporate standards
- Configure build pipeline to access package security and license rating
- Configure secure access to package feeds

INFRASTRUCTURE AND CONFIGURATION AZURE TOOLS

- Learning Objectives
- Infrastructure as Code and Configuration Management
- Create Azure Resources using ARM Templates
- Create Azure Resources using Azure CLI
- Create Azure Resources by using Azure PowerShell
- Additional Automation Tools
- Version Control
- Lab Deploy to Azure using ARM templates
- Module Review Questions

AZURE DEPLOYMENT MODELS AND SERVICES

- Learning Objectives
- Deployment Models and Options
- Azure Infrastructure-as-a-Service (IaaS) Services

AZ-400 Microsoft Azure DevOps Solutions Fast Track

Moduel Review Questions

- Azure Automation with DevOps
- Desired State Configuration (DSC)
- Azure Platform-as-a-Service (PaaS) services
- Azure Service Fabric
- Lab Azure Automation - IaaS or PaaS deployment

CREATE AND MANAGE KUBERNETES SERVICE INFRASTRUCTURE

- Learning Objectives
- Azure Kubernetes Service
- Lab Deploy and Scale AKS Cluster
- Module Review Questions

THIRD PARTY AND OPEN SOURCE TOOLS AVAILABLE WITH AZURE

- Learning Objectives
- Chef
- Puppet
- Ansible
- Cloud-Init
- Terraform
- Lab Provision and configure an App in Azure Using X
- Module Review Questions

IMPLEMENT COMPLIANCE AND SECURITY IN YOUR INFRASTRUCTURE

- Security and Compliance Principles with DevOps
- Azure Security Center
- Lab Integrate a scanning extension or tool in an AZ DevOps pipeline/security center
- Module Review Questions

PLANNING FOR DEVOPS

- Transformation Planning
- Project Selection
- Team Structures

PLANNING FOR QUALITY AND SECURITY

- Planning a Quality Strategy
- Planning Secure Development

AZ-400 Microsoft Azure DevOps Solutions Fast Track

MIGRATING AND CONSOLIDATING ARTIFACTS AND TOOLS

- Migrating and Consolidating Artifacts
- Migrating and Integrating Source Control

Seminarübersicht:

- **Dauer:** 5 Tage
- **Preis:** 2.890,00 €
- **Uhrzeit:** 9:00 - 17:00 Uhr
- **Seminarunterlage:** Original Microsoft

Empfohlene Vorkenntnisse: 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.

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

Standorte: Frankfurt, Stuttgart, Düsseldorf, München und Hamburg

Termine & Anmeldung:

<https://seminare.edc.de/seminardetails/az-400-microsoft-azure-devops-solutions-fast-track/>