Designing and Implementing Platform Engineering (AZ-2010)

ID AZ-2010 **Prix** sur demande **Durée** 1 jour

Pré-requis

Successful learners will have prior knowledge and understanding of the following:

- Cloud computing concepts include understanding PaaS, SaaS, and IaaS implementations.
- Azure administration and Azure development with proven expertise in at least one of these areas.
- Intermediate to advanced DevOps concepts, including version control, Agile software development, and core software development principles. It would be helpful to have experience in an organization that delivers software.

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Foundations of Platform Engineering

This module introduces the core concepts and importance of platform engineering. It explores how platform engineering enhances developer productivity, accelerates time-to-value, and supports digital transformation. Learners will understand the strategic value of platform engineering as the foundation for both technical success and alignment with broader business goals.

- Introduction
- The Role of Platform Engineering in Modern Enterprises
- Core Principles of Platform Design
- Platform Engineering Capability Model
- Core Aspects of Platform Implementation
- Knowledge Check
- Summary

Design Secure and Scalable Platform Architectures

In this module, learners will gain insights into designing platform architectures that are secure, scalable, and compliant with regulatory standards. The module covers capacity planning, cost optimization, and the role of automation in maintaining consistency and reducing manual errors. Learners will also explore strategies for building scalable solutions that can handle increasing demand and complex workflows.

- Introduction
- Core Principles of Secure and Scalable Platform Design
- Security Considerations in Platform Architecture
- Scale Platform Architectures for Growth and Adaptability
- Automation and Resiliency for Modern Platforms
- Knowledge Check
- Summary

Implement Developer Self-Service

This module focuses on enabling developers to independently manage their resources and workflows, fostering agility and innovation. Learners will understand the importance of combining flexibility with robust governance to ensure security, compliance, and operational consistency. The module also covers best practices for implementing and managing self-service capabilities within an organization.

- Introduction
- Introduction to Developer Self-Service
- Developer Self-Service Platform Architecture
- Governance and Security in Self-Service Workflows
- Developer Coding Environments
- Automation and Self-Service Tools
- Monitor and Audit Developer Activities
- Implement Microsoft Dev Box
- Knowledge Check
- Summary

Observability and Continuous Improvement

Learners will discover the significance of observability in providing real-time insights into system performance and identifying inefficiencies. This module emphasizes the importance of continuous improvement through feedback loops, performance monitoring, and market analysis. Learners will explore strategies for adapting to market trends and fostering a culture of innovation within platform engineering teams.

- Introduction
- The Importance of Observability in Modern Platforms
- Build Observability into Platform Architecture
- Metrics, Monitoring, and Alerts
- Automation for Incident Detection and Resolution

- Continuous Improvement through Feedback Loops
- Implementing Real-Time Monitoring with Azure Monitor
- Knowledge Check
- Summary

Strategic Platform Road Mapping

This module covers the principles of strategic platform road mapping, including aligning platform initiatives with business objectives, preparing for technological advancements, and fostering innovation. Learners will understand how to develop actionable roadmaps that guide the platform's evolution, ensuring it remains efficient, reliable, and capable of evolving with future innovations.

- Introduction
- Understand the Strategic Importance of Platform Engineering
- Develop a Scalable Platform Architecture
- Future-Proofing the Platform
- Continuous Improvement and Innovation Management
- Roadmap Development and Execution
- Risk Management in Platform Engineering
- Communicate the Roadmap to Stakeholders
- Implementing Self-Service Infrastructure with Bicep
- Knowledge Check
- Summary

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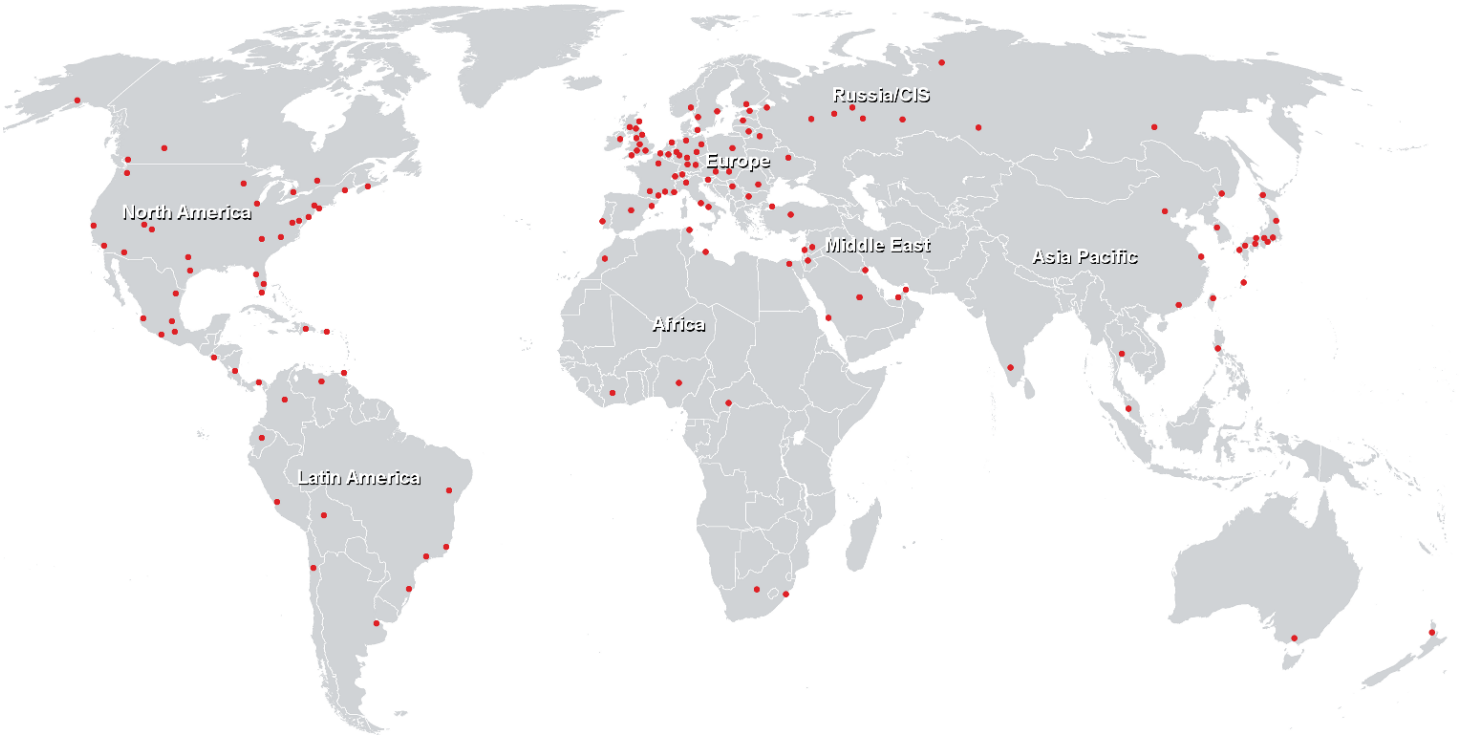

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