

Designing and Implementing Platform Engineering (AZ-2010)

Duration: 1 day

Audience: Professionnel TI

Who is this training for?

Engineers, architects, and IT professionals who want to design secure, scalable platforms that align with business goals, while optimizing operations and driving innovation.

Training objectives

- Understand the fundamentals of platform engineering.
- Design secure, scalable, and sustainable platforms tailored to the needs of modern businesses.
- Align platforms with organizations' strategic and operational goals.
- Implement solutions to improve productivity and operational excellence.
- Foster continuous innovation through robust, high-performance platforms.
- Master the tools and best practices to build sustainable infrastructures.

Summary

This official Microsoft AZ-2010 course offers a comprehensive guide to designing and implementing platform engineering in modern enterprises. It covers the fundamentals, strategic alignment with business goals, and the practicalities of building secure, scalable, and sustainable platforms. Upon completion of this course, participants will improve productivity, ensure operational excellence and encourage continuous innovation.

Course outline

Foundations of Platform Engineering

- The Role of Platform Engineering in Modern Enterprises.
- Fundamentals of platform design.
- Platform Engineering Capability Model.
- Essential aspects of platform implementation.

Designing Secure and Scalable Platform Architectures

- Fundamentals of designing secure and scalable platforms.
- Security considerations in platform architecture.
- Adapt platform architectures for growth and flexibility.
- Automation and resiliency for modern platforms.

Implementing Self-Service for Developers

- Introduction to Self-Service for Developers.
- Self-service platform architecture for developers.
- Governance and security in self-service workflows.
- Coding environments for developers.
- Automation and self-service tools.
- Monitoring and auditing of developer activities.
- Microsoft Dev Box implementation.

Observability and Continuous Improvement

- The importance of observability in modern platforms.
- Embed observability into platform architecture.
- Metrics, monitoring, and alerts.
- Automation for incident detection and resolution.
- Continuous improvement through feedback loops.
- Implement real-time monitoring with Azure Monitor.

Strategic Platform Planning

- Understand the strategic importance of platform engineering.
- Develop a scalable platform architecture.
- Future-proof the platform
- Continuous improvement and innovation management.
- Development and execution of the roadmap.
- Risk management in platform engineering.
- Communicate the roadmap to stakeholders.

Approach and methodology

The training is based on a conceptual and strategic approach focused on understanding the principles of platform engineering. It combines theoretical talks, real-world case studies, workshops on designing secure and scalable platform architectures, and guided discussions on Microsoft best practices. The pedagogical approach emphasizes architecture, governance, strategic alignment and continuous improvement.

Recommendations

- Prior knowledge of cloud computing concepts, including PaaS, SaaS, and IaaS implementations.
- Experience in Azure administration and Azure development with proven expertise in at least one of these areas.
- Proficiency in intermediate to advanced DevOps concepts, including version control, Agile software development, and software development fundamentals.
- Experience in a software delivery organization is an asset.