Microsoft

Azure Essentials resource kit

Elevate **reliability**, **security**, and ongoing **performance of workloads** for your cloud and AI investments to **maximize value** and **empower transformation**.

Accelerate business outcomes - Azure Essentials resource kit

In this resource kit, you'll discover Microsoft's best practices for approaching key business priorities from AI to resiliency with guidance to help you maximize your business value on Azure with Azure Essentials.

This kit provides step-by-step guidance for you to enhance your cloud and AI investments across common scenarios to help you:

- Successfully adopt AI and build new AI-infused apps.
- Migrate your SAP workloads, infrastructure, and databases.
- Unify your data platform and empower your developers.
- Proactively keep critical workloads reliable.

For expert support powered by Azure Essentials with migration-related projects, try Azure Migrate and Modernize; for support with AI and analytics projects, try Azure Innovate

Curated guidance to help you improve your stance on Azure

Azure offers a solution to support your end-to-end cloud journey:

Azure Essentials helps you elevate reliability, security, and ongoing performance of workloads for your cloud and AI investments to maximize value and empower transformation. It provides comprehensive resources in one place, extensive coverage, and expert help from Microsoft or partners.

This offering includes:

Comprehensive resources in one place

- Take advantage of guidance and free training to design and build secure, reliable workloads.
- Get insights and recommendations from products, tools, and interactive assessments.
- Manage your cloud investments efficiently by choosing the pricing offers that best meet your needs.

Direct access to experts

- Receive assistance from Microsoft experts or specialized partners.
- Benefit from Microsoft-led delivery of engagements for Microsoft Unified customers.

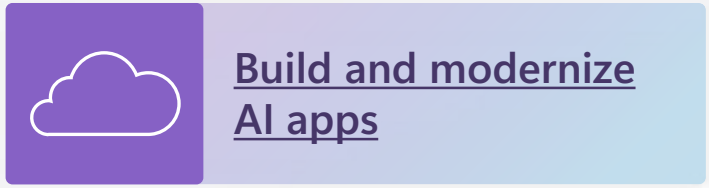
Extensive coverage—from migration to innovation

- Cover all your cloud journey needs from reliability and security to ongoing performance management and AI.
- Design for resiliency and performance proactively from the start.
- Enhance your existing deployments to address core business priorities.

Common scenarios for new Azure projects

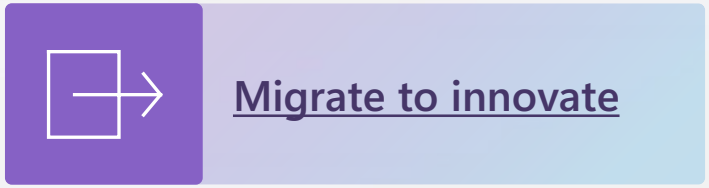
From transforming your stance on Azure to cloud management, choose the scenario that best matches your needs:

Adopt AI



Build and modernize AI apps

Migrate SAP workloads



Migrate to innovate

Activate data for AI innovation

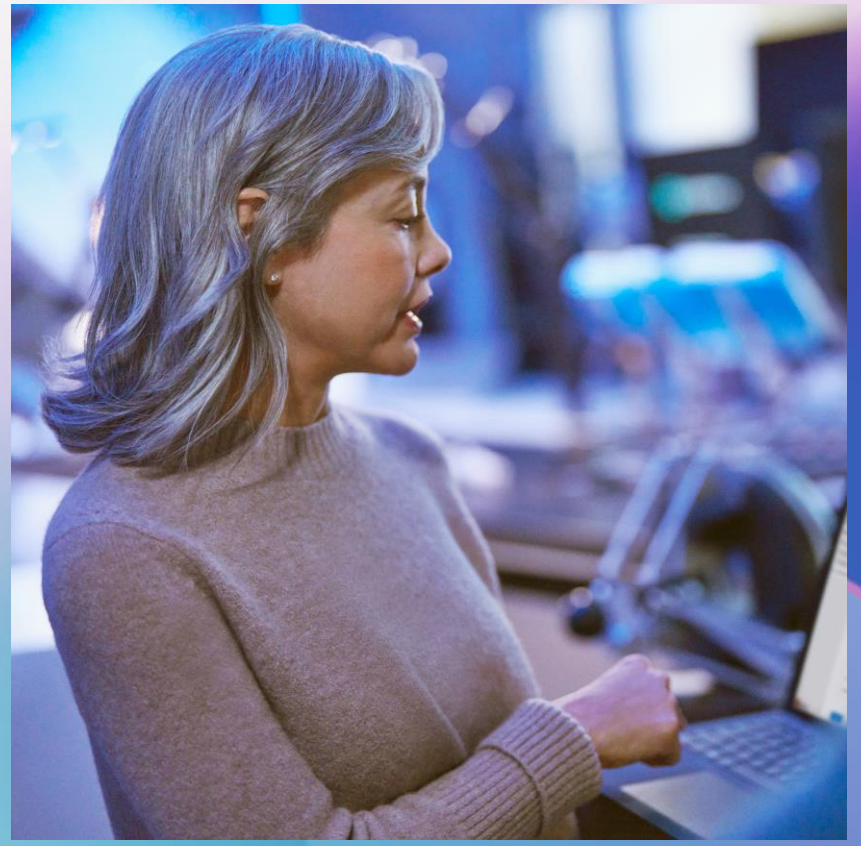
Accelerate software development

Common scenarios for existing Azure workloads

From transforming your stance on Azure to cloud management, choose the scenario that best matches your needs:

Workload Resiliency

Adopt AI



Adopt AI

1 Assess your Azure AI readines

- Determine your organization's gaps and identify recommendations to maximize business value.
- Complete the Technical Assessment for Generative AI in Azure.

2 Explore Azure AI pricing

- Estimate your next Azure AI project cost and discover cost-saving opportunities using pricing tools and resources.

3 Prepare your AI environment

- Build your cloud AI environment with Azure landing zones to manage security and reliability.
- Azure OpenAI chat baseline architecture.
- Azure OpenAI chat baseline architecture in an Azure landing zone.

4 Design your AI workloads

- Choose from AI reference architectures and solution ideas in the Azure Architecture Center.
- Learn about AI concepts and architecture design.

5 Develop Well-Architected AI workloads

- Explore best practices to help you make informed decisions that improve the quality of your AI workload.
- Explore Azure Well-Architected Framework perspective on Azure OpenAI Service.

6 Deploy, manage, and operate your AI workloads

- Deploy, manage, and operate your AI workloads.
- Use best practices for deploying, managing, and operating your AI workloads.
- Check out the latest updates on Empowering responsible AI practices.

Build your team's skills: https://aka.ms/AzureAIServices-Plan | https://aka.ms/AzureAIFundamentalsPlan

Build and modernize AI apps

Build and modernize AI apps

1 Assess your organizational readiness and prioritize AI scenarios

- Determine your organization's gaps and get recommendations to maximize business value.
- Learn about AI concepts and architecture design.

2 Explore Azure AI pricing

- Estimate your next Azure AI project cost and discover cost-saving opportunities using pricing tools and resources.

3 Prepare your AI environment

- Build your cloud AI environment with Azure landing zones to manage security and reliability.

4 Design your AI workloads

- Choose from AI reference architectures and solution ideas in the Azure Architecture Center.
- Explore best practices for application developers to manage resources in Azure Kubernetes Service (AKS).

5 Develop Well-Architected AI workloads

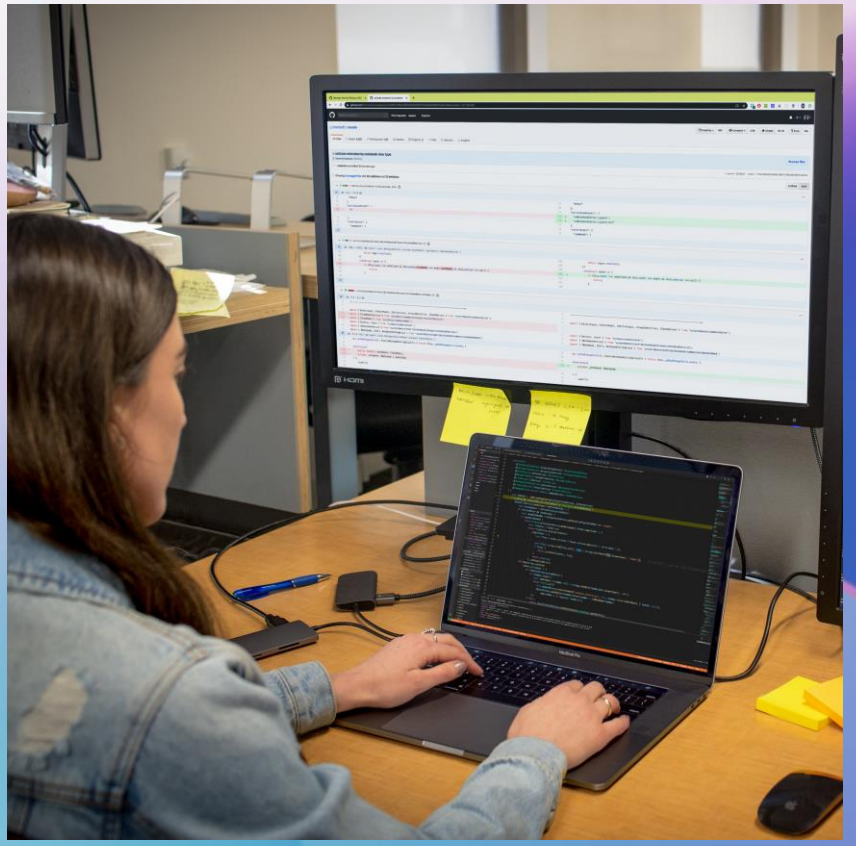
- Explore best practices on GitHub to help you make informed decisions that improve the quality of your AI workload.

6 Deploy, manage, and operate your AI workloads

- Use best practices for deploying, managing, and operating your AI workloads.
- Discover workload operations in cloud management on Microsoft Learn.

Build your team's skills: https://aka.ms/AzureCosmosDBPlan | https://aka.ms/PostgreSQLAIApps | https://aka.ms/AAqosyo

Migrate SAP workloads



Migrate SAP workloads

1 Assess your organizational readiness and prioritize SAP scenarios

- Determine your organization's gaps and get recommendations to maximize business value.
- Use FinOps guidance to access your organization's capability gaps.

2 Explore Azure SAP pricing

- Estimate the cost of your next SAP project on Azure and discover cost-saving opportunities using pricing tools and resources.

3 Prepare your SAP environment

- Build your cloud SAP environment with Azure landing zones to manage security and reliability.

4 Design your SAP workloads

- Choose from SAP reference architectures and solution ideas in the Azure Architecture Center.
- Dive into SAP workload documentation on Microsoft Learn.

5 Develop Well-Architected SAP workloads

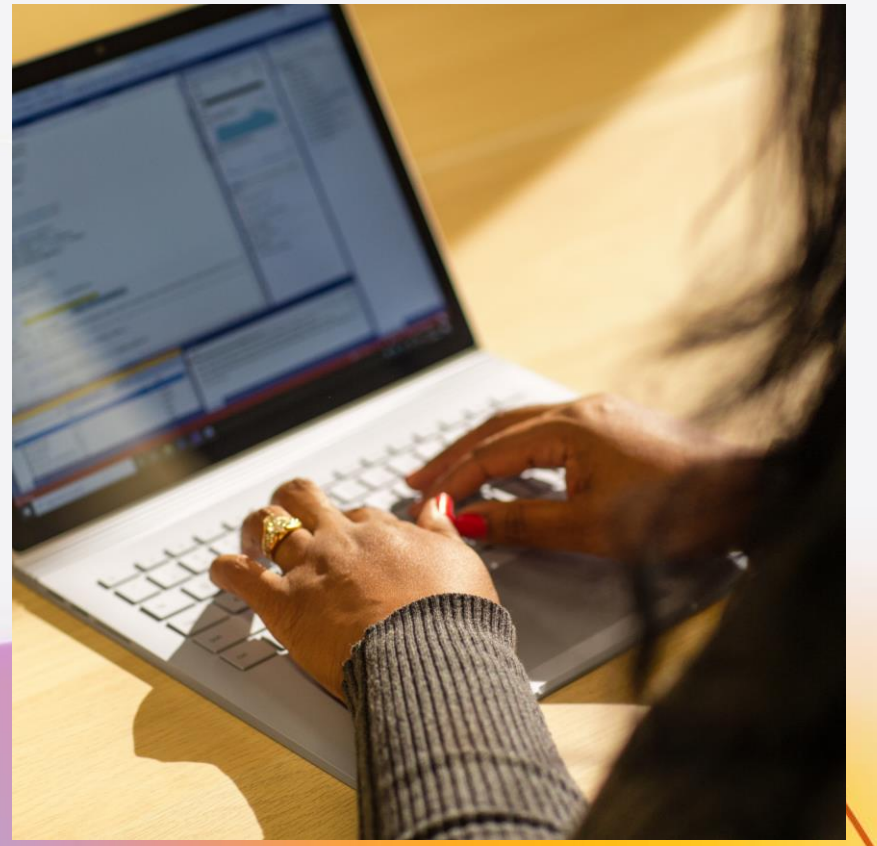
- Explore best practices to help you make informed decisions that improve the quality of your SAP workload.
- Get started with SAP on Azure architecture center.

6 Deploy, manage, and operate your SAP workloads

- Use best practices for deploying, managing, and operating your SAP workloads.
- Manage SAP in Azure.

Build your team's skills: https://aka.ms/MigrateSAPPlan

Migrate to innovate



Migrate to innovate

1 Assess your organizational readiness and prioritize infrastructure scenarios

- Determine your organization's capability gaps and get recommendations to maximize business value.
- Use FinOps guidance to access your organization's capability gaps.

2 Explore Azure infrastructure pricing

Estimate your next Azure infrastructure project cost and discover cost saving opportunities using pricing tools and resources.

3 Prepare your infrastructure environment

- Build your cloud infrastructure environment with Azure landing zones to manage security and reliability.
- Prepare your landing zone for migration.

4 Design your infrastructure workloads

- Choose from infrastructure reference architectures and solution ideas in the Azure Architecture Center.
- Learn more about considerations for Azure SQL Database and operational excellence.

5 Develop Well-Architected infrastructure workloads

- Explore best practices to help you make informed decisions that improve the quality of your infrastructure workload.
- Apply guidance for databases architecture design.

6 Deploy, manage, and operate your infrastructure workloads

- Use best practices for deploying, managing, and operating your infrastructure workloads.
- Manage modern application platform clusters.

Build your team's skills: https://aka.ms/AzureSQLPlan | https://aka.ms/azurevmwareplan | https://aka.ms/WSPlan | https://aka.ms/LinuxPostgreSQLPlan

Activate data for AI innovation

Activate data for AI innovation

1 Assess your organizational readiness and prioritize cloud analytics scenarios

- Determine your organization's capability gaps and get recommendations to maximize business value.
- Use FinOps guidance to access your organization's capability gaps.

2 Explore Azure cloud analytics pricing

- Estimate your next Azure Cloud Analytics project cost and discover cost saving opportunities using pricing tools and resources.

3 Prepare your cloud analytics environment

- Build your Cloud Analytics environment with Azure landing zones to manage security and reliability.

4 Design your cloud analytics workloads

- Choose from Cloud Analytics reference architectures and solution ideas in the Azure Architecture Center.
- Learn how to apply the five architectural constructs detail in the Azure Well-Architected Framework for your data workloads.

5 Develop Well-Architected cloud analytics workloads

- Explore best practices to help you make informed decisions that improve the quality of your Cloud Analytics workload.
- Discover analytics end-to-end with Azure Synapse.

6 Deploy, manage, and operate your infrastructure workloads

- Use best practices for deploying, managing, and operating your Cloud Analytics workloads.
- Manage cloud-scale analytics.

Build your team's skills: https://aka.ms/FabricPlan

Accelerate software development

Accelerate software development

1 Assess your organizational readiness and prioritize developer productivity scenarios

- Determine your organization's capability gaps and get recommendations to maximize business value.
- Use FinOps guidance to access your organization's capability gaps.

2 Explore Azure developer productivity pricing

- Estimate your next Azure developer productivity project cost and discover cost saving opportunities using pricing tools and resources.

3 Prepare your developer productivity environment

- Use infrastructure as code and accelerators to deploy environments quickly and at scale.
- Develop digital inventions in Azure.

4 Design your developer productivity workloads

- Choose from developer productivity reference architectures and solution ideas in the Azure Architecture Center.
- Explore Azure Well-Architected Framework tools and resources.

5 Develop Well-Architected developer productivity workloads

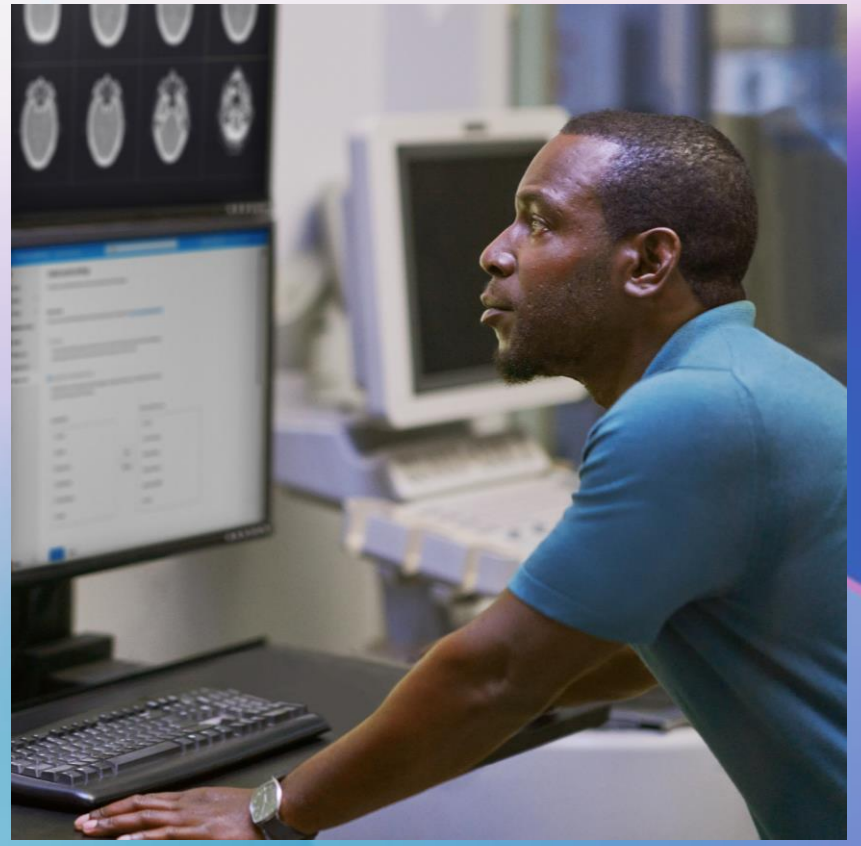
- Explore best practices to help you make informed decisions that improve the quality of your developer productivity workload.
- Get started with DevOps architecture design.

6 Deploy, manage, and operate your developer productivity workloads

- Take advantage of best practices for deploying, managing, and operating your developer productivity workloads.
- Discover architectural guidance and reference implementation to accelerate deployment of Azure App Service at scale.

Build your team's skills: https://aka.ms/GitHubDeveloperPlan

Azure workload resiliency



Azure workload resiliency

Identify and document

1

- Identify and document workloads
  - Identify a business-critical workload that you would like to assess for its resiliency.
  - Understand the Business criticality in cloud management.

Assess and recommend

2

- The Well-Architected Reliability Assessment offers a thorough technical analysis of all Azure services used in critical workloads, including shared services. It covers high availability, backup and recovery, disaster recovery, monitoring, alerting, maintenance control, outage history, performance, and security. The results are documented and shared via Azure Advisor, promoting accountability between Microsoft and customers and support needs are documented for regular follow-up.
- Define the workload to be assessed.
- Utilize Azure Proactive Resiliency Library (APRL) and its scripts to automatically discover deficiencies.
- Load recommendations into Azure Advisor for monitoring status.
- Learn about the overview and usage of APRL Scripts in the APRL v2.

Plan for remediation and execute

3

- Communicate findings and discuss potential remediation with all relevant stakeholders.
- Focus on highest risk areas, select services aligned to the remediation recommendations.
- Execute recommendations to reduce gaps.
- Explore how to use the Reports Generator PowerShell script.

Key gaps to address

Single availability zone deployments – multi-zonal deployment of services can prevent customer impact during outages, ExpressRoute Gateways should be deployed across multiple availability zones.

Azure workload resiliency

Build your team's skills

[Start improving the reliability of Azure workloads]

Understand how to start improving the reliability of an Azure workloads.

[Diving deeper into Azure workload reliability (Part 1)]

Deep-dive discussion on improving the reliability of Azure workloads. (Part 1 of 2)

[Diving deeper into Azure workload reliability (Part 2)]

Deep-dive discussion on improving the reliability of Azure workloads. (Part 2 of 2)

[Total Economic Impact™ of Microsoft Azure resilience guidance]

Read a commissioned study conducted by Forrester Consulting to learn how to evaluate the potential financial impact of improving your workload resiliency.

[Armchair Architects: Resiliency in the Cloud - Core Patterns]

Discussion on core patterns of cloud architectural such as throttling, caching, and bulkhead patterns.

[Introduction to the Microsoft Azure Well Architected Framework]

Use key principles throughout your architecture, regardless of technology choice, can help you design, build, and continuously improve your architecture.

[Microsoft Azure Well-Architected Reliability]

Learn how to apply resiliency principles to your architecture to ensure an application returns to a fully functioning state after a failure occurs. A reliable workload is both resilient and available.

[Build great solutions with the Microsoft Azure Well-Architected Framework - Training | Microsoft Learn]

Learn how to design and build secure, scalable, high-performing solutions in Azure using the pillars of the Microsoft Azure Well-Architected Framework.

[Total Economic Impact for improving workload resiliency]

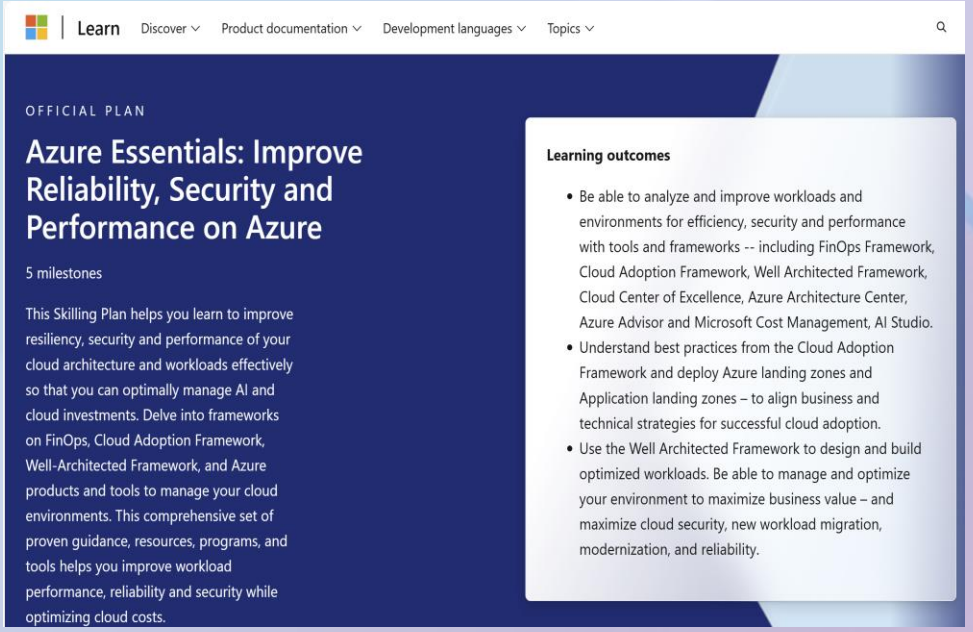
This paper describes in detail how customers see economic benefits from investing in resiliency for their critical workloads.

Azure Essentials Skilling overview

Access skilling resources and a comprehensive set of proven guidance and tools to improve resiliency, security, and performance while optimizing cloud costs of Azure and AI investments.

Build a plan for cloud optimization and understand the value of skilling your organization on key optimization topics.

Purpose	Get trained with free self-directed Skilling. • Access free self-paced learning plans with milestones, objectives, and modules aligned to roles and technologies. • Access Azure virtual workshops and events to dive deeper into learning
Level	Fundamentals, Intermediate, Advanced, and Expert (100–400)
Audience	ITDM, IT Pros
Approach	Step-by-step training modules, knowledge checks, and virtual workshops.
Duration	Varies by topic. Modules range from 10 minutes long, to 2-day workshops



Learn more at: learn.microsoft.com/training | Microsoft Learn Plan on Learn

Azure Essentials Skilling overview

Objective: Understand cloud best practices to improve reliability, security, and performance of your cloud and AI investments.

Skilling Outcome: Be able to optimize workloads and environments on Azure with tools and frameworks, including FinOps Framework, Cloud Adoption Framework, Well Architected Framework, Cloud Center of Excellence, Azure Architecture Center, Azure Advisor and Microsoft Cost Management, AI Studio.

1 Skilling on the value of cloud reliability and security

Understand cloud best practices and learn about preparing for a successful cloud adoption, designing for reliability, security, cloud cost management, and Azure pricing.

- Prepare for successful cloud adoption with a well-defined strategy
- Get started with FinOps on Azure
- Microsoft Cost Management in Azure
- Pricing: Purchase Azure savings plan for compute
- Pricing: Save money with Azure Reserved Instances

2 Skilling on adopting the cloud, FinOps and designing for well-architected workloads

Confidently prepare to successfully adopt the cloud for efficiency and productivity with Cloud Adoption Framework (CAF) and FinOps on Azure.

- Adopt FinOps on Azure
- Getting started with CAF for Azure
- Ready: Choose the best Azure landing zone to support your requirements for cloud operations
- Accelerate your migration, modernization, and innovation journey to Azure

3 Skilling to design well-architected workloads

Learn to develop a workload architecture designed for optimization with the core tenets of the Well-Architected Framework (WAF).

- Introduction to Well-Architected Framework
- WAF - Cost Optimization
- WAF- Performance efficiency
- WAF- Operational excellence
- Plan: Prepare for cloud adoption with a data-driven plan

4 Skilling to build and deploy for quality, cost, scale and security

Design and build cloud environment and workloads for quality and scale. Prioritize projects, design and build Landing Zones.

- **CAF: Manage:**
  - Manage: Ensure stable operations and optimization across all supported workloads deployed to the cloud
  - Describe features and tools for managing and deploying Azure resources
  - Describe features and tools in Azure for governance and compliance
- Get Started with Azure Advisor

5 Skilling to ensure reliability, security and continuous improvement

Manage and ensure reliability and security of environments and workloads for continuous improvement and innovation.

- CAF – Organize Use CAF to manage organizational alignment
  - Govern: Address tangible risks with the CAF Govern methodology
- WAF:
  - WAF- Reliability
  - WAF- Security

Virtual workshop

Azure Virtual Training Day: Optimization (VTD)

Learn to improve resiliency of Azure architecture and workloads with tools, best practices and resources

(2 days, 4 hours /day)

> Skilling Plan on Learn

Microsoft

Discover more possibilities with Azure Essentials

Connect with your Microsoft representative or a Microsoft partner to continue your cloud and AI journey with Azure Migrate and Modernize and Azure Innovate