



# 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.

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](#).

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 and secure.

# 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:



[Innovate with AI platform](#)



[Build and modernize AI apps](#)



[Activate data for AI innovation](#)



[Migrate to innovate](#)



[Migrate SAP workloads](#)



[Accelerate software development](#)

# Common scenarios for **existing Azure projects**

Building and managing resilient workloads is key to success in the cloud to address possible issues related to reliability and security, **choose the scenario** that best matches your needs:

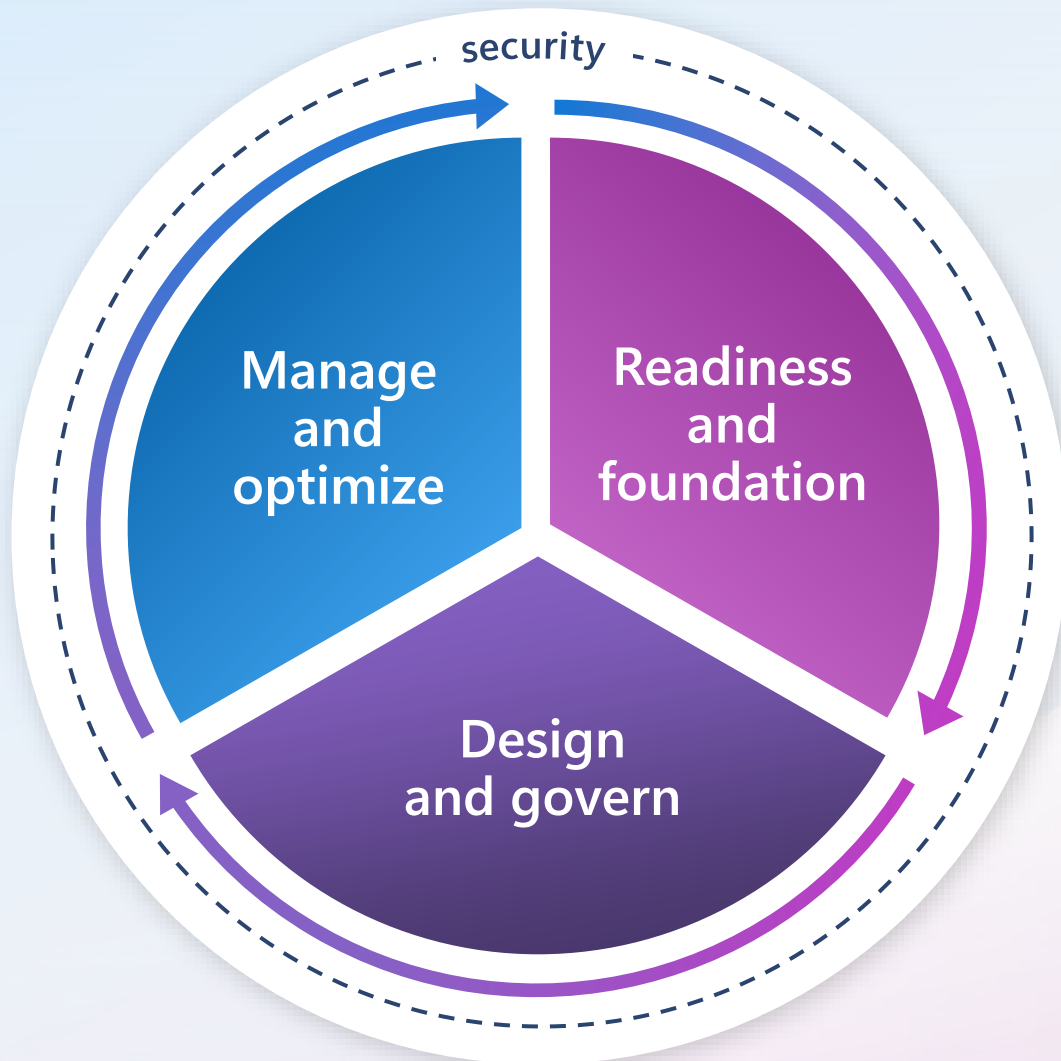




# Innovate with AI Platform

# Best practices for getting AI-ready

Use the concepts in each phase to ensure successful AI adoption on Azure at scale.



- Data collocation
- FinOps adoption
- Pricing
- Platform landing zone
- Skilling and training

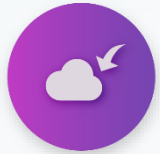
- Responsible AI principles
- Azure AI Content Safety
- Data governance, security, privacy, and compliance
- Architectural guidance
- GenAIOps

- Monitoring and security
- Management and optimization
- Proactive resiliency for critical workloads



# Readiness and foundation

Azure Essentials assists in optimizing your cloud investments during each phase.



## Data collocation

Migrate infrastructure and collocate data and apps.

[Build a business case](#)  
[Azure Migrate overview](#)  
[Migration tools](#)  
[Migration FAQ](#)



## FinOps adoption

Control and manage your Azure and AI spend.

[Cost optimization of AI workloads](#)  
[How to forecast AI services costs in the cloud](#)  
[FinOps Framework](#)  
[FinOps Review](#)



## Pricing

Make pricing decisions with confidence.

[Azure pricing calculator](#)  
[PTU Reservations blog](#)  
[Azure OpenAI capacity calculator](#)  
[Azure pricing overview](#)  
[Pricing blog](#)



## Platform landing zone

Use a pre-configured environment for efficient cloud management.

[Landing zone deployment options](#)  
[ISV considerations](#)  
[Get landing zone help](#)  
[Landing zone FAQ](#)



## Skilling and training

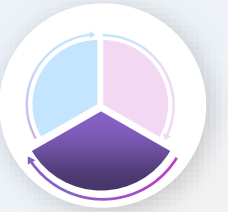
Empower individuals to successfully adopt AI.

[Azure AI fundamentals](#)  
[Azure AI Engineer Associate](#)  
[Azure Data Scientist Associate](#)  
[Transform your business with Microsoft AI](#)



# Design and govern

Azure Essentials assists in optimizing your cloud investments during each phase.



## Responsible AI principles

Empower responsible AI practices.

[Responsible AI Toolbox](#)

[Azure Confidential Computing](#)

[Responsible AI tools and practices](#)

[Tools for Responsible AI](#)



## Azure AI Content Safety

Add guardrails for GenAI and controls for user-generated content.

[Azure AI content safety](#)

[Learn how to build responsible AI](#)

[Responsible AI Impact Assessment](#)

[Azure AI Content Safety pricing](#)



## Data governance, security, privacy, and compliance

Deploy scalable architectures that leverage shared services.

[Introducing modern data governance for the era of AI](#)

[Best practice for data and AI governance](#)

[Unpacking AI governance to shape digital transformation](#)



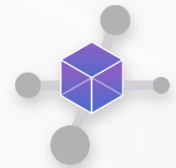
## Architectural guidance

Design with confidence.

[Baseline OpenAI end-to-end chat reference architecture](#)

[Access Azure OpenAI and other language models through a gateway](#)

[Azure OpenAI chat baseline architecture in an Azure landing zone](#)



## GenAIOps

Operationalize AI development with GenAIOps.

[GenAIOps Assessment](#)

[GenAIOps with prompt flow and GitHub](#)

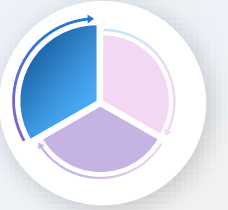
[Designing and developing a RAG solution](#)

[RAG with Azure Machine Learning prompt flow](#)

[Build apps with GenAI](#)

# Manage and optimize

Azure Essentials assists in optimizing your cloud investments during each phase.



## Monitoring and security

Establish monitoring, logging, real-time evaluation, tracing, and debugging.

[Model monitoring for generative AI applications](#)

[Inference data collection from models in production](#)

[Shared responsibility AI](#)



## Management and optimization

Perform benchmarking, sizing, and cost management.

[Optimizing Generative Applications on Azure Open AI](#)

[Azure OpenAI Studio](#)

[Service Benchmarking tool](#)

[Solution sizing tool](#)

[Resource utilization and efficiency](#)

[Understand and optimize costs with the cost optimization workbook](#)

[Azure carbon optimization](#)

[Optimize costs with Azure pricing](#)



## Proactive resiliency for critical workloads

Periodic assessments of architecture aligned with business policies and capability tradeoffs.

[Azure Advisor](#)

[Well-Architected Review - MLOps](#)

[Groundedness tests](#)

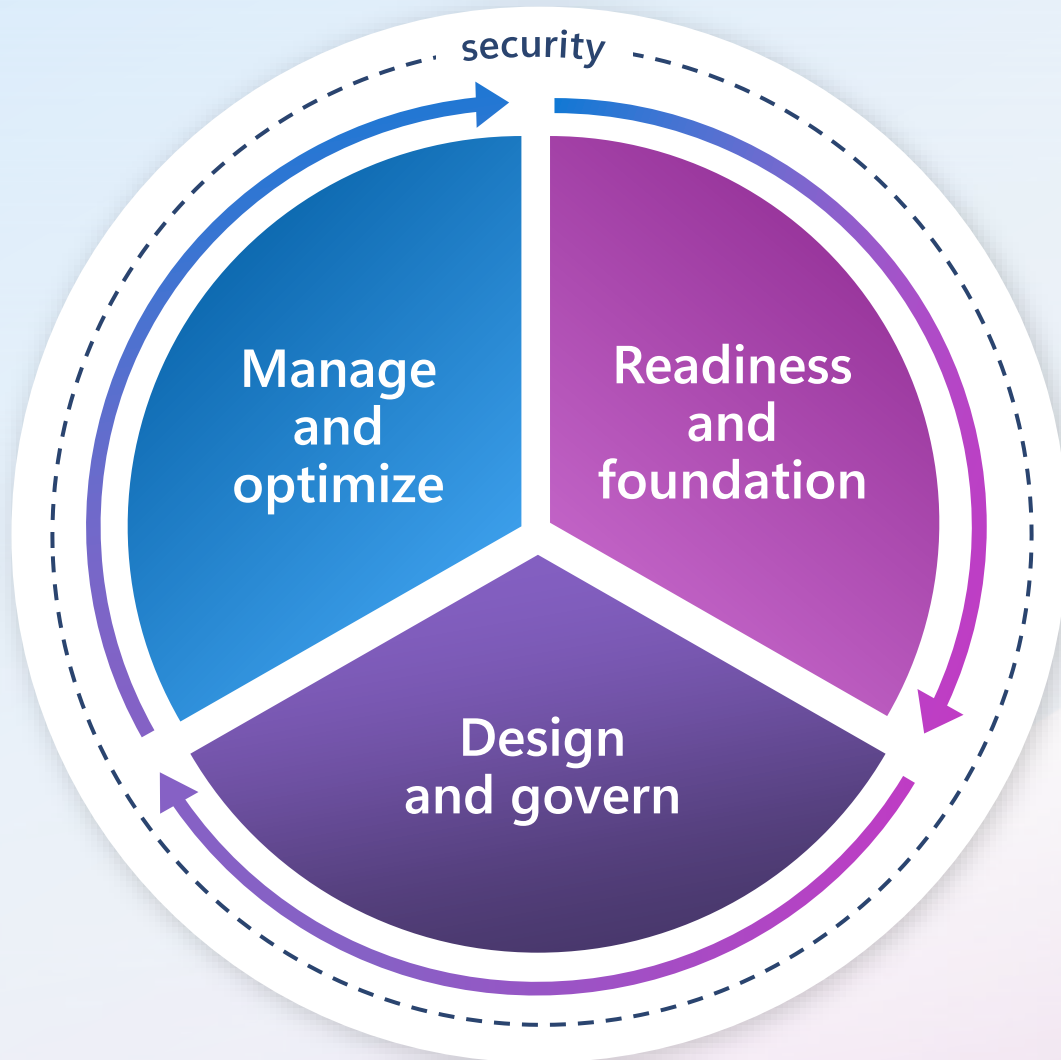
[GovViz Tool](#)



# **Build and modernize AI apps**

# Build and modernize AI apps

Use the concepts in each phase to ensure the successful deployment and operation of AI apps.



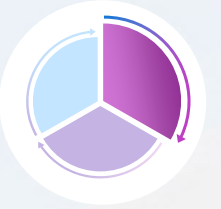
- Migration strategy
- Platform landing zone
- Pricing and FinOps adoption
- Security and compliance planning
- Skilling and training

- App and data estate modernization
- Application patterns
- API management
- Data needs
- AI considerations

- Application testing
- Application health
- Database tuning
- Continued innovation and modernization
- AI apps performance optimization

# Readiness and foundation

Azure Essentials assists in optimizing your cloud investments during each phase.



## Migration strategy

Identify opportunities to drive AI impact with applications.

[Azure Migrate](#)  
[Azure Verified Modules](#)  
[Azure Proactive Resiliency Library](#)  
[Azure Monitor Baseline Alerts](#)  
[Azure Site Recovery](#)  
[Azure Database Migration Service](#)  
[Azure Migrate demo](#)



## Platform landing zone

Use a pre-configured environment for efficient cloud management.

[Prepare your landing zone for migration](#)  
[Azure landing zone](#)  
[Landing zone deployment options](#)  
[ISV considerations](#)  
[Landing zone FAQ](#)



## Pricing and FinOps adoption

Control and manage Azure and AI spend.

[Cost optimization of AI workloads](#)  
[Forecasting AI services costs](#)  
[FinOps Framework](#)  
[FinOps Review](#)  
[Azure pricing overview](#)  
[PTU Reservations blog](#)  
[Azure Hybrid Benefit](#)  
[Azure OpenAI capacity calculator](#)



## Security and compliance planning

Address security and compliance requirements early.

[Azure Security Center](#)  
[Azure Defender for Servers](#)  
[Microsoft Copilot for Security](#)  
[Confidential computing](#)  
[Microsoft Purview](#)  
[Extended Security Updates enabled by Azure Arc](#)  
[GitHub Advanced Security for Azure DevOps](#)  
[Azure Monitor, Azure Backup and Site Recovery](#)



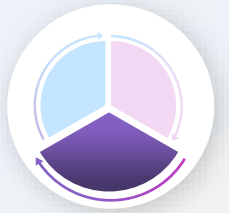
## Skilling and training

Accelerate app modernization and foster AI innovation.

[Plans on Learn: Apps platform and data solutions](#)  
[Plans on Learn: Build AI apps](#)  
[Plans on Learn: Modernize AI apps](#)  
[Azure cost optimization workbook](#)

# Design and govern

Azure Essentials assists in optimizing your cloud investments during each phase.



## App and data estate modernization

Ready your IT estate for AI-powered app solutions.

[Azure Verified Modules](#)  
[The Total Economic Impact™ of Azure PaaS](#)  
[Modernize any application](#)  
[Migrate ASP.NET apps to Azure](#)  
[Modernize apps with Azure apps platform and data solutions](#)



## Application patterns

Leverage proven patterns to build reliable, scalable, and secure applications.

[Cloud monitoring service level objectives](#)  
[Azure Pipelines baseline architecture](#)  
[Azure App Configuration](#)  
[Azure Developer CLI templates](#)



## API management

Scale up your application solution.

[GenAI gateway capabilities in Azure API Management](#)  
[Azure OpenAI Service REST API reference](#)  
[Azure AI Model Inference API](#)  
[Gartner® Magic Quadrant™ for Enterprise Low-Code Application Platforms](#)



## Data needs

Achieve superior database performance and scalability.

[Choose a data storage approach in Azure](#)  
[Microsoft Intelligent Data Platform](#)  
[Choose an Azure data service](#)  
[Choose an Azure service for vector search](#)



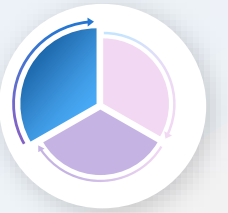
## AI considerations

Infuse AI capabilities and best practices into your application workflows.

[Responsible AI resources](#)  
[Responsible AI standard](#)  
[AI impact assessment template](#)  
[AI impact assessment guide](#)  
[Transparency notes](#)

# Manage and optimize

Azure Essentials assists in optimizing your cloud investments during each phase



## Application testing

Optimize for performance with comprehensive application testing.

[Azure Load Testing](#)  
[Recommendations for performance testing](#)  
[Azure Chaos Studio](#)  
[Workload operations in cloud management](#)  
[Microsoft Playwright Testing](#)



## Application health

Create resilient applications through monitoring and remediation.

[The Total Economic Impact™ Of Microsoft Azure Resilience Guidance](#)  
[Application Health extension- Azure Virtual Machines](#)  
[Monitor Azure Container Instances](#)  
[Application Insights-Azure Monitor](#)



## Database tuning

Build faster and more efficient GenAI solutions and intelligent apps.

[Enable semantic caching](#)  
[Query Performance Insight](#)  
[Query Performance Insight - Azure Database for PostgreSQL](#)



## Continued innovation and modernization

Leverage Azure's advanced services to optimize your server workloads.

[Resource management best practices for Azure Kubernetes Service](#)  
[Build AI apps with Azure services and best practices](#)  
[Multi-tier web application built for HA/DR](#)



## AI apps performance optimization

Explore best practices to enhance your apps.

[Azure Code Optimizations](#)  
[Azure Cache for Redis](#)  
[Performance & latency with Azure OpenAI](#)  
[PTU Management for GenAI](#)  
[Optimizing Azure OpenAI](#)  
[Performance tips - Azure AI Search](#)

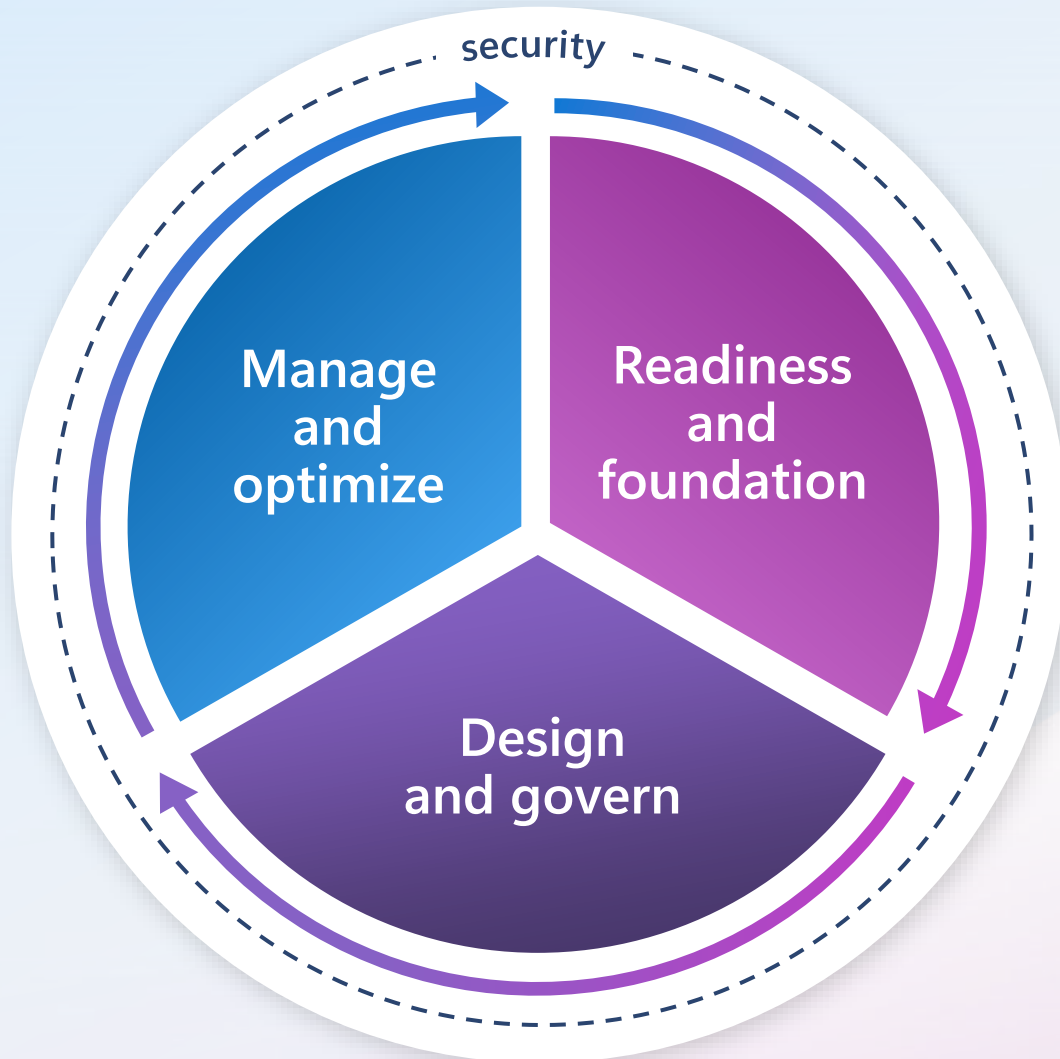




**Activate data  
for AI innovation**

# Activate data for AI innovation

Use the concepts in each phase to ensure successful cloud-scale data analytics.



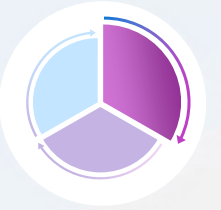
- Cloud-scale analytics strategy
- Secured data analytics estate
- Platform landing zone
- On-premise data consolidation
- Pricing and FinOps adoption
- Skilling and training

- Data analytics architectural best practices
- Analytics governance
- AI-ready data foundation

- Proactive resiliency for critical workloads
- Monitoring and security
- Management and optimization
- Continuous workload improvement

# Readiness and foundation

Azure Essentials assists in optimizing your cloud investments during each phase.



## Cloud-scale analytics strategy

Have a plan in place for your data strategy.

[Roles and teams for cloud-scale analytics](#)

[Integrating cloud-scale analytics into your cloud adoption strategy](#)



## Secured data analytics estate

Address security requirements early in your planning process.

[Microsoft Fabric security](#)

[Microsoft Fabric end-to-end security scenario](#)

[Secure cloud-scale analytics in Azure](#)



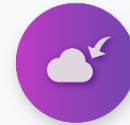
## Platform landing zone

Use a pre-configured environment for compliance and scaling.

[Cloud Adoption Framework enterprise-scale landing zones](#)

[Deploying Azure landing zones](#)

[Azure landing zones for cloud-scale analytics](#)



## On-premise data consolidation

Move and consolidate on-premise data to the cloud.

[OneLake in Microsoft Fabric](#)

[Integrating on-premises data into Fabric using data pipelines in Data Factory](#)

[Accessing on-premises data sources in Data Factory](#)

[Data pipeline connectors in Microsoft Fabric](#)



## Pricing and FinOps adoption

Control and manage your Azure and AI spend.

[FinOps Framework](#)

[FinOps Review](#)

[Azure pricing overview](#)

[Azure Reservations](#)



## Skilling and training

Empower individuals to successfully migrate to innovate on Azure.

[Evaluate an enterprise data scenario](#)

[Create a data product batch](#)

[Set up a data product batch](#)

[Clean up resources](#)

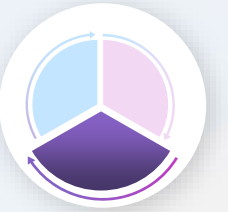
[End-to-end Fabric tutorials](#)

[Azure Data Fundamentals](#)

[Implement a machine learning solution with Azure Databricks](#)

# Design and govern

Azure Essentials assists in optimizing your cloud investments during each phase



## Data analytics architectural best practices

Design with confidence.

[Implement medallion lakehouse architecture in Fabric](#)

[Data architectures overview](#)



## Analytics governance

Establish governance for your data workloads.

[Data governance overview](#)

[Requirements for governing data](#)

[Data catalog](#)

[Data governance processes](#)

[Lineage in Microsoft Fabric](#)

[Microsoft Fabric governance](#)

[Governance and compliance in Microsoft Fabric](#)



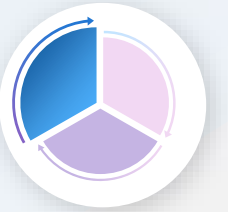
## AI-ready data foundation

Learn about AI-specific considerations.

[Azure Machine Learning as a data product for cloud-scale analytics](#)

# Manage and optimize

Azure Essentials assists in optimizing your cloud investments during each phase.



## Proactive resiliency for critical workloads

Periodic architecture assessments aligned with business policies and capability tradeoffs.

[Azure Advisor](#)

[Azure Well-Architected Review](#)

[Reliability in Microsoft Fabric](#)



## Monitoring and security

Establish monitoring, logging, real-time evaluation, tracing, and debugging.

[OneLake disaster recovery](#)

[Azure Security Center](#)

[Azure Defender for Servers](#)

[Microsoft Copilot for Security](#)

[Confidential computing](#)

[Microsoft Purview](#)

[Extended security updates - Azure Arc](#)

[GitHub Advanced Security - Azure DevOps](#)

[Azure Monitor](#)

[Azure Backup Site Recovery](#)



## Management and optimization

Perform benchmarking, sizing, and cost management.

[Resource utilization and efficiency](#)

[Cost optimization workbook](#)

[Azure carbon optimization](#)

[Optimize spend with savings plan and reserved instance](#)



## Continuous workload improvement

Review and enhance your data analytics workloads.

[Databases: Azure service guidance mapped to Azure Well-Architected Framework](#)

[What's new in the Azure Well-Architected Framework](#)

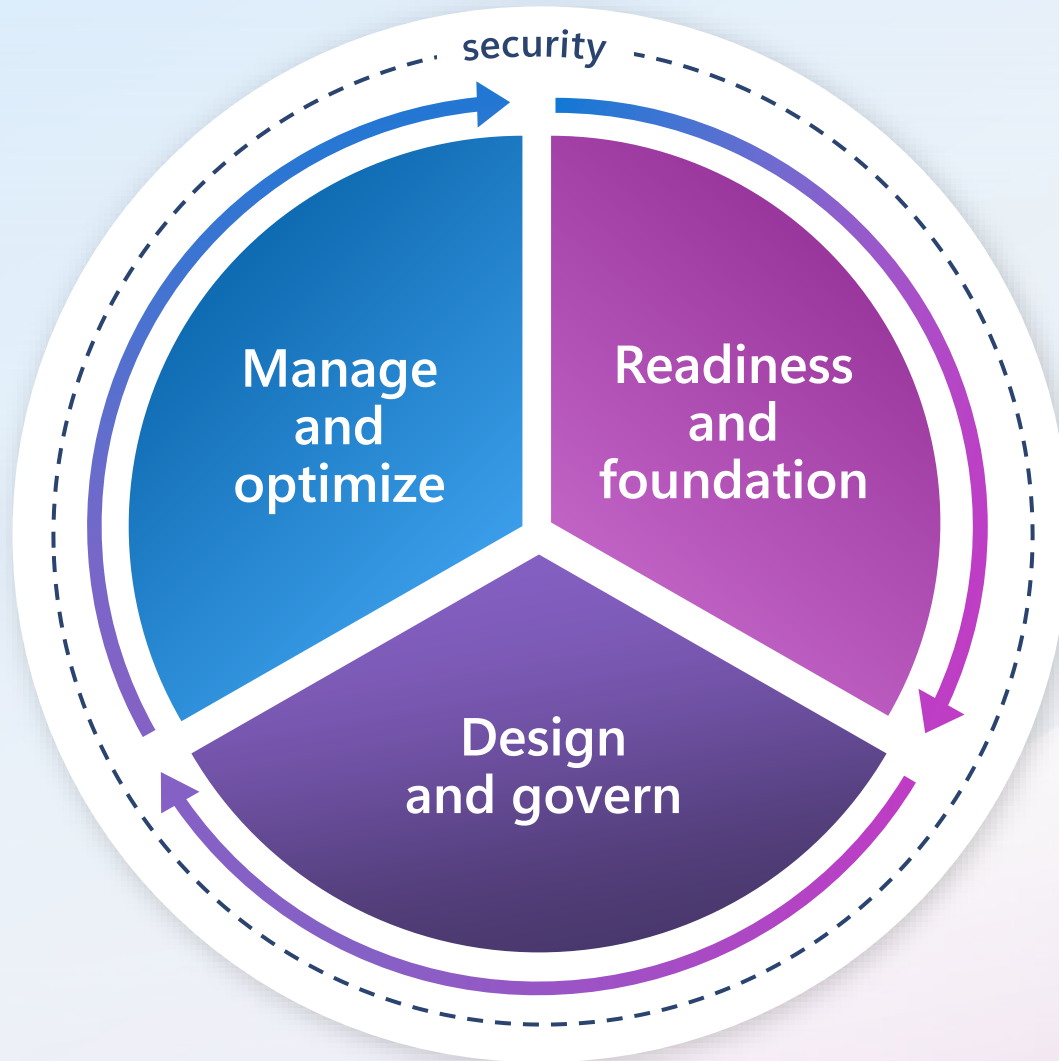
[Azure Well-Architected Framework for data workloads](#)



**Migrate  
to innovate**

# Migrate to innovate

Use the concepts in each phase to ensure successful migration.



- Migration strategy
- Security and compliance training
- Platform landing zone
- Pricing and FinOps adoption
- Skilling and training

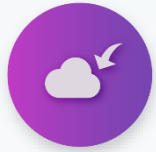
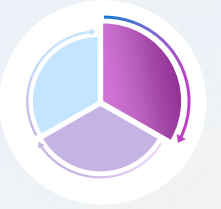
- Architectural best practices
- Cloud workload deployment
- Cloud deployment governance
- AI-ready migration

- Proactive resiliency for critical workloads
- Monitoring and security
- Management and optimization
- Continuous workload improvement



# Readiness and foundation

Azure Essentials assists in optimizing your cloud investments during each phase.



## Migration strategy

Conduct a detailed inventory of IT estate and create a comprehensive migration strategy.

[Migrate overview - Cloud Adoption Framework](#)

[Azure Site Recovery](#)

[Azure Database Migration Service for SQL Server migrations](#)



## Security and compliance planning

Address security and compliance requirements early in the planning process.

[Security overview - Cloud Adoption Framework](#)

[Define a security strategy](#)



## Platform landing zone

Use a pre-configured environment for compliance and scaling.

[Prepare your landing zone for migration](#)

[Landing zone deployment options](#)

[ISV considerations](#)

[Get landing zone help](#)

[Landing zone FAQ](#)



## Pricing and FinOps adoption

Control and manage Azure and AI spend.

[FinOps Framework](#)

[FinOps Review](#)

[Azure pricing overview](#)

[Azure Hybrid Benefit cost calculator](#)



## Skilling and training

Empower individuals to successfully migrate to innovate on Azure.

[Azure Fundamentals](#)

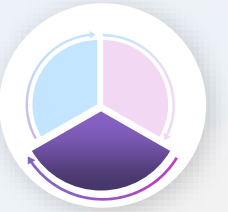
Leverage Plans on Microsoft Learn for [Windows Server](#), [SQL Server](#), and [Linux](#)

[Virtual Training Days](#)

[Azure Credentials](#)

# Design and govern

Azure Essentials assists in optimizing your cloud investments during each phase.



## Architectural best practices

Design with confidence.

[Design workload architecture before migration](#)

[Design migration to Azure](#)

[Deploy Azure SQL Database](#)

[Azure database and analytics services](#)

[Securing Azure SQL](#)

[Azure Cosmos DB](#)

[Azure Database for PostgreSQL](#)

[Azure Database for MySQL](#)

[SQL Server on Azure VMs](#)

[Run a Linux VM on Azure](#)



## Cloud workload deployment

Assess, test, and deploy cloud workloads.

[Migration assessment checklist](#)

[Migration deployment checklist](#)



## Cloud deployment governance

Establish governance for your cloud workloads.

[Cloud Adoption Framework governance overview](#)

[Migration release checklist](#)



## AI-ready migration

Learn about AI-specific considerations for migration.

[Microsoft's Responsible AI principle](#)

[Azure AI Content Safety](#)

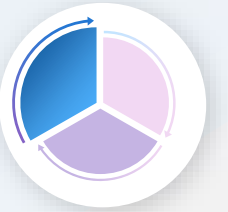
[Learn how to build responsible AI](#)

[Azure AI Content Safety pricing](#)

[Azure AI Content Safety videos](#)

# Manage and optimize

Azure Essentials assists in optimizing your cloud investments during each phase.



## Proactive resiliency for critical workloads

Perform periodic architecture assessments aligned with business policies and capability tradeoffs.

[Azure Advisor](#)

[Azure Well-Architected Review](#)



## Monitoring and security

Establish monitoring, logging, real-time evaluation, tracing, and debugging.

[What is Microsoft Defender for Cloud?](#)

[Azure Security Center](#)

[Azure Defender for Servers](#)

[Microsoft Copilot for Security](#)

[Confidential computing](#)

[Microsoft Purview](#)

[Extended Security Updates enabled by Azure Arc](#)

[GitHub Advanced Security](#)

[Azure Monitor](#)

[Azure Backup Site Recovery](#)



## Management and optimization

Perform benchmarking, sizing, and cost management.

[Resource utilization and efficiency](#)

[Cost optimization workbook](#)

[Azure carbon optimization](#)

[Optimize costs with Azure pricing](#)



## Continuous workload improvement

Review and enhance your cloud workloads.

[Databases: Azure service guidance mapped to Well-Architected Framework](#)

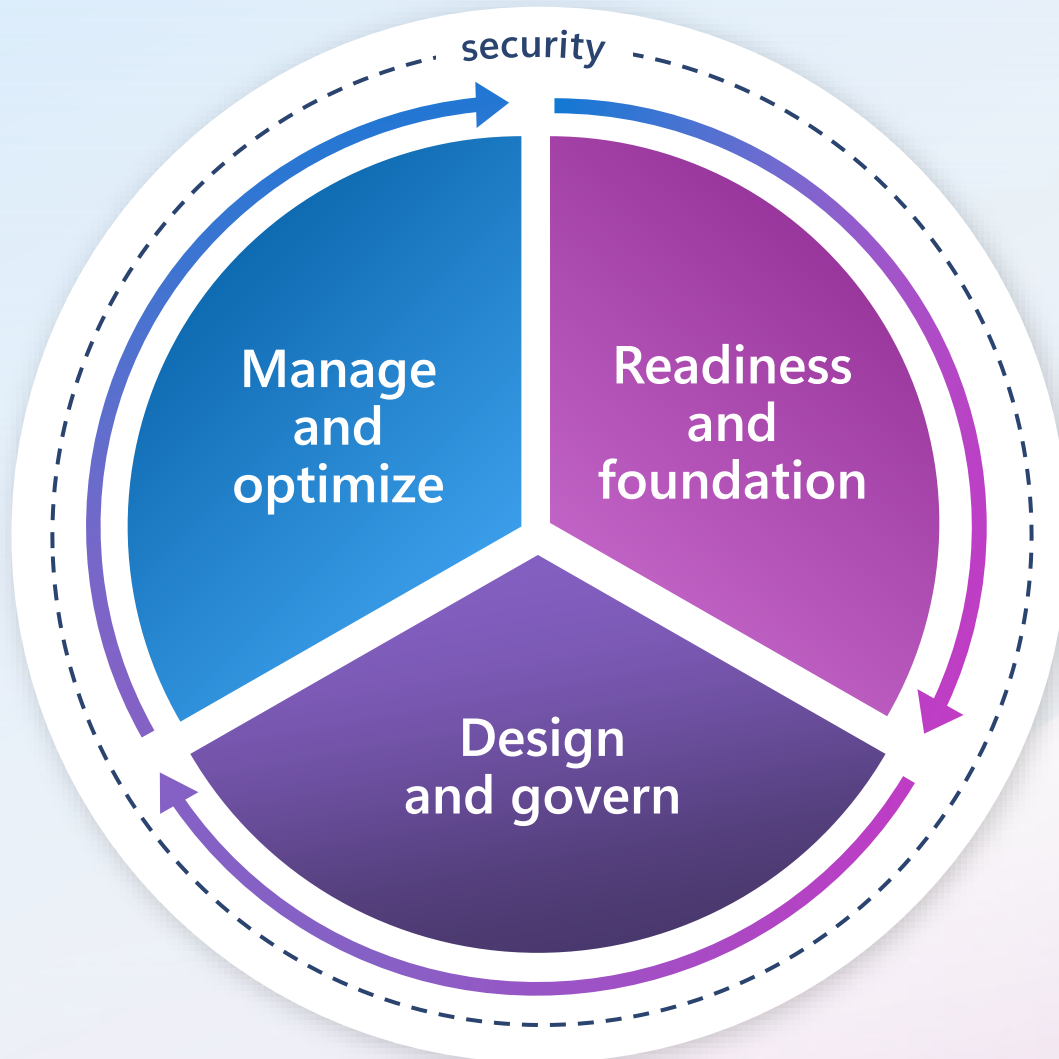
[What's new in the Azure Well-Architected Framework](#)



# Migrate SAP workloads

# Migrate SAP workloads

Use the concepts in each phase to ensure a successful SAP to Azure migration.



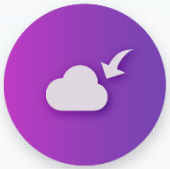
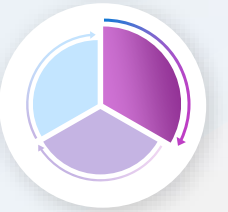
- Deployment model strategy
- Platform landing zone
- Security and compliance planning
- Pricing and FinOps adoption
- Skilling and training

- Architectural best practices
- AI-ready SAP migration
- SAP workload deployment
- SAP cloud deployment governance

- Proactive resiliency for SAP workloads
- Monitoring and security
- Management and optimization
- Continuous workload improvement

# Readiness and foundation

Azure Essentials assists in optimizing your cloud investments during each phase.



## Deployment model strategy

Assess SAP estate, inventory dependencies, and choose a deployment model of RISE with SAP or native SAP on Azure.

[Microsoft and SAP Partnering for Customer Success](#)

[Cloud Adoption Framework for SAP](#)

[Integrating Azure with SAP RISE](#)

[Migration assessment checklist](#)



## Platform landing zone

Use Microsoft and SAP expertise to prepare migration strategy and establish an Azure landing zone.

[Azure landing zones](#)

[Azure landing zone for SAP migration](#)

[Azure Center for SAP solutions](#)



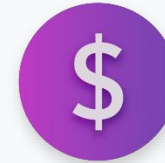
## Security and compliance planning

Plan environment needs for compute, networking, security and database.

[Cloud Adoption Framework security overview](#)

[Microsoft Entra ID Governance](#)

[Plan to deploy the Microsoft Sentinel solution for SAP](#)



## Pricing and FinOps adoption

Control and manage Azure and AI spend.

[FinOps Framework](#)

[FinOps Review](#)

[Azure pricing overview](#)

[Microsoft Azure pricing calculator](#)



## Skilling and training

Empower individuals to successfully migrate SAP on Microsoft Cloud.

[Azure Fundamentals](#)

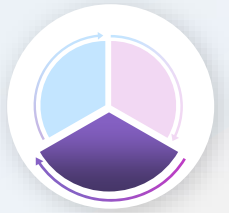
[Skilling Plan on Microsoft Learn for SAP](#)

[SAP on Azure Virtual Training Days](#)

[Azure Credentials](#)

# Design and govern

Azure Essentials assists in optimizing your cloud investments during each phase.



## Architectural best practices

Design with confidence, assess the SAP platform and dependent workloads, and evaluate sizing.

[Foundations of IaaS for SAP on Azure](#)

[Integrating Azure with SAP RISE](#)

[SAP on Azure Architecture Center](#)

[SAP reference architectures](#)

[SAP workload documentation](#)



## AI-ready SAP migration

Use the broad set of Microsoft AI services with SAP workloads to innovate and maximize business outcomes.

[Microsoft's Responsible AI principle](#)

[Azure AI Content Safety](#)

[Joint capabilities from Microsoft and SAP](#)

[Integrate your SAP data into Fabric](#)

[Streamline SAP processes with Microsoft AI services](#)

[Combine SAP and other data](#)

[Connect Power Platform to SAP on Azure](#)

[Import an SAP API using the Azure portal](#)



## SAP workload deployment

Begin technical implementation of the migration aligned with chosen deployment model – Native or RISE.

[Deploy SAP on Azure](#)

[Integrate Azure with SAP RISE](#)

[Explore Azure Center for SAP solutions](#)

[SAP deployment using an Oracle DB](#)

[Migration process of SAP on Azure](#)



## SAP cloud deployment governance

Implement security, compliance, and governance design criteria for enterprise-scale SAP on Azure.

[Governance disciplines for SAP on Azure](#)

[Foundations of identity and governance for SAP on Azure](#)

[Cloud Adoption Framework governance overview](#)

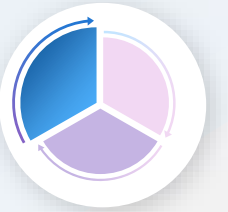
[Migration release checklist](#)

[Microsoft Purview](#)



# Manage and optimize

Azure Essentials assists in optimizing your cloud investments during each phase.



## Proactive resiliency for SAP workloads

Perform periodic assessments of architecture aligned with business policies and capability tradeoffs.

[Ensure stable operations and optimization](#)

[Azure Well-Architected Review - SAP assessment](#)

[Introduction to application resiliency in Azure](#)

[Reliability guidance overview](#)

[Design and architect Azure ExpressRoute for resiliency](#)



## Monitoring and security

Use SAP and Microsoft Security tools help monitor and secure your entire application environment.

[Identity and security in Azure with SAP RISE](#)

[Azure Well-Architected Framework](#)

[Azure Security Center](#)

[Microsoft Purview](#)

[Microsoft Defender for Cloud](#)

[Manage access to your SAP applications - Microsoft Entra ID Governance](#)

[Plan to deploy the Microsoft Sentinel solution for SAP](#)



## Management and optimization

Leverage free native tools to optimize SAP environment.

[Introduction to Azure Advisor](#)

[Resource utilization and efficiency](#)

[Cost optimization workbook](#)

[Azure carbon optimization](#)

[Optimize costs with Azure pricing](#)



## Continuous workload improvement

Ensure workload reliability, security, cost optimization, performance, and operational excellence.

[Well-architected SAP workload](#)

[Databases: Azure service guidance mapped to Well-Architected Framework](#)

[What's new in the Azure Well-Architected Framework](#)

[Azure Advisor resiliency reviews](#)

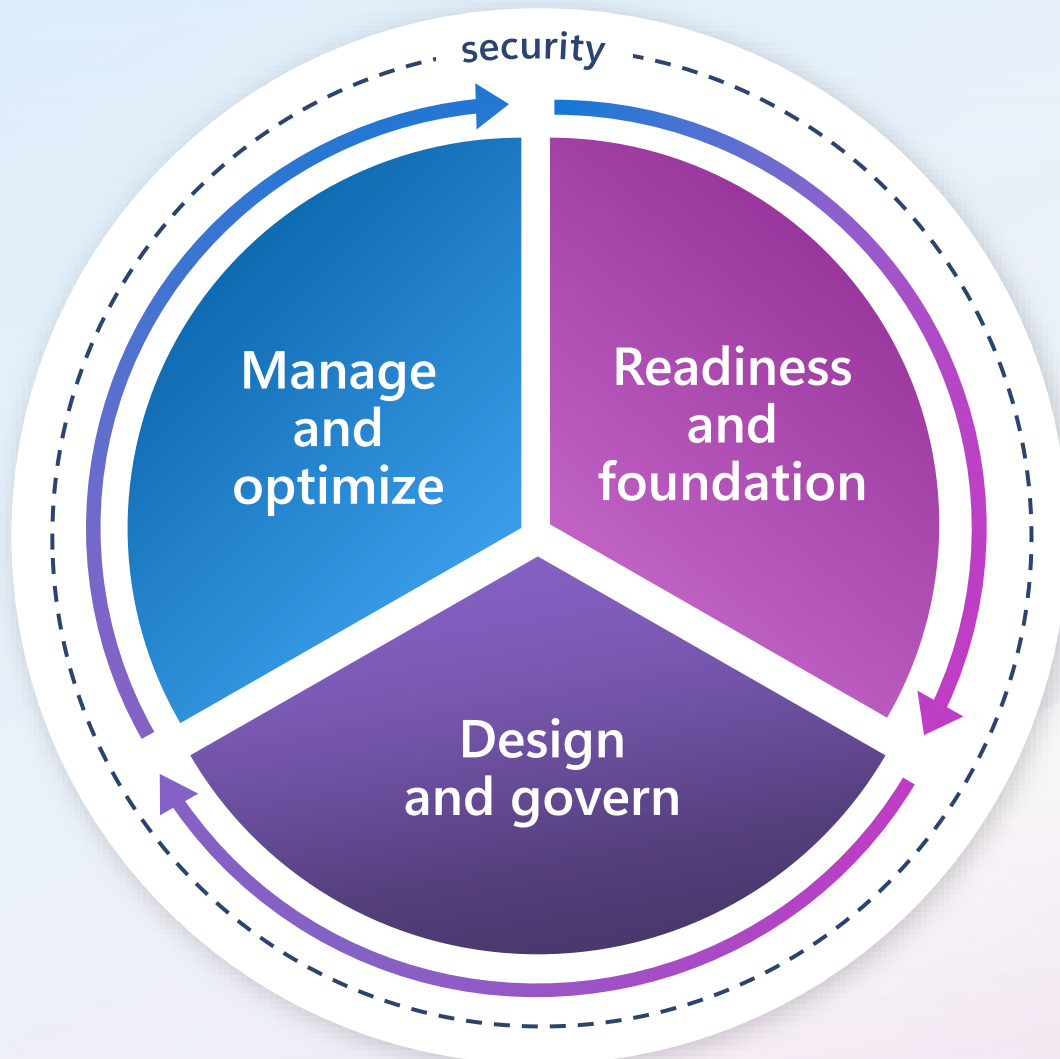
[Azure for SAP workloads Specialty](#)



# Accelerate software development

# Accelerate software development

Use the concepts in each phase to accelerate developer productivity.



- Data sources and infrastructure
- Platform landing zone
- DevOps enablement
- Pricing and FinOps adoption
- Skilling and training

- Operational excellence best practices
- AI-ready app development
- Application landing zones

- Monitoring and security
- Management and optimization
- Emergency response strategy

# Readiness and foundation

Azure Essentials assists in optimizing your cloud investments during each phase.



## Data sources and infrastructure

Access and secure data sources and computing infrastructure.

[Solution architect's checklist](#)



## Platform landing zone

Use a pre-configured environment for compliance and scaling.

[Deploy Azure landing zones](#)

[Bicep modules design considerations](#)

[Terraform module design considerations](#)

[Subscription vending implementation guidance](#)



## DevOps enablement

Set up a modern software development lifecycle to take advantage of Azure.

[DevOps resource center](#)

[Microsoft Dev Box](#)



## Pricing and FinOps adoption

Control and manage Azure and AI spend.

[FinOps Framework](#)

[FinOps Review](#)

[Azure pricing overview](#)

[Azure Hybrid Benefit cost calculator](#)



## Skilling and training

Empower individuals to successfully accelerate development processes.

[Training for DevOps Engineers](#)

[Introduction to GitHub Copilot](#)

[GitHub Copilot fundamentals](#)

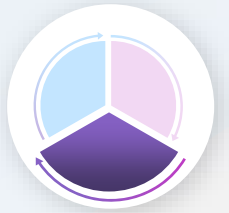
[Accelerate app development using GitHub Copilot](#)

[Use GitHub Copilot with Python](#)

[Add AI-generated code using Copilot](#)

# Design and govern

Azure Essentials assists in optimizing your cloud investments during each phase



## Operational excellence best practices

Design with confidence.

[Cloud design patterns that support operational excellence](#)

[Operational excellence quick links](#)

[Recommendations for designing and creating a monitoring system](#)



## AI-ready app development

Assess, test, and deploy cloud workloads.

[DevOps architecture design](#)

[Azure Well-Architected Review assessment](#)

[Azure Well-Architected Review](#)

[GitHub Actions for Azure](#)

[GitHub Copilot extension overview](#)

[Azure and GitHub integration](#)



## Application landing zones

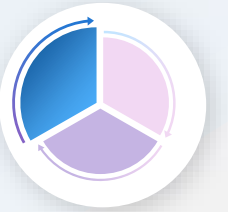
Build environments for specific workloads but leverage shared services across the organization.

[What is infrastructure as code \(IaC\)?](#)

[Azure Verified Modules](#)

# Manage and optimize

Azure Essentials assists in optimizing your cloud investments during each phase.



## Monitoring and security

Establish monitoring, logging, real-time evaluation, tracing, and debugging.

[Get compliance data - Azure Policy](#)

[Azure Governance Visualizer](#)

[Manage Azure Policies with GitHub](#)

[DevOps tooling for Well-Architected Recommendation Process](#)

[Determine causes of non-compliance - Azure Policy](#)

[Remediate non-compliant resources - Azure Policy](#)



## Management and optimization

Perform benchmarking, sizing, and cost management.

[Optimize workload design using flows](#)

[Cost Optimization workbook](#)

[Use Azure Advisor score](#)

[Microsoft Cost Management](#)

[Make resources more secure with Azure Advisor](#)

[Service Retirement workbook](#)

[Workload sustainability](#)

[Sustainability assessment](#)

[Reliability workbook](#)

[Optimize costs with Azure pricing](#)



## Emergency response strategy

Build response strategies that detect and mitigate emergencies

[Designing an emergency response strategy](#)

[Creating an observability framework](#)

[Designing a monitoring and alerting strategy](#)

[Recommendations for self-healing and self-preservation](#)



# Azure proactive resiliency



# Azure proactive resiliency



# Infrastructure resiliency

1

## Identify and document

- Identify a business-critical workload that you would like to assess for its resiliency.
- Understand the [Business critically in cloud management](#).

2

## Assess and recommend

- The Well-Architected Reliability Assessment offers technical analysis of all Azure services 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 shared via Azure Advisor and support needs are documented for regular follow-up.
- Define the workload to be assessed.
- Use the Azure Proactive Resilience Library (APRL) to discover deficiencies.
- Load recommendations into [Azure Advisor](#) for monitoring status.
- Learn about the [overview and usage of APRL Scripts](#) in the APRL v2.

3

## Plan for remediation and execute

- 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.



# Accelerate adoption with expert help and resources

## Azure Innovate

Infuse AI into solutions, advance analytics capabilities, and help to build custom cloud-native applications.

## Azure Migrate and Modernize

Securely and efficiently move existing workloads to Azure, while delivering enhanced application and data experiences.

New

## Azure Essentials

Elevate reliability, security, and ongoing performance of cloud and AI investments with extensive guidance, resources, and tooling.

Ready to begin an innovation or migration project with Azure?  
Get started now with [Azure Innovate](#) or [Azure Migrate and Modernize](#).