

# Skills Measured

October 20, 2021 11:56 AM

## Skills measured

- The content of this exam was updated on September 24, 2021. Please download the exam skills outline below to see what changed.
- Implement and monitor an Azure infrastructure (50-55%)
- Implement management and security solutions (25-30%)
- Implement solutions for apps (10-15%)
- Implement and manage data platforms (10-15%)

[Download exam skills outline](#)

From <<https://docs.microsoft.com/en-us/learn/certifications/exams/az-303>>

Update

## Exam AZ-303: Microsoft Azure Architect Technologies

THIS EXAM WILL RETIRE ON MARCH 31, 2022 AT 11:59 PM CENTRAL STANDARD TIME. A new exam, [Exam AZ-305](#), will be available in November 2021.

The [Microsoft Certified: Azure Solutions Architect Expert](#) certification will be earned by completing the following requirements:

- Pass Exam AZ-303 (*before it retires on March 31, 2022*) and [Exam AZ-305](#) (*beta releasing in November 2021*) or
- Pass Exam AZ-303 and [Exam AZ-304](#) (*before they retire on March 31, 2022*)

Please refer to [this blog post](#) for more details on certification pathways.

The content of this exam was updated on September 24, 2021. Please download the skills measured document below to see what changed.

NOTE: Passing score: 700. Learn more about exam scores [here](#).

From <<https://docs.microsoft.com/en-us/learn/certifications/exams/az-303>>

# Microsoft Azure Well-Architected Framework - Azure Architecture Center | Microsoft Docs

Wednesday, October 20, 2021 4:10 PM

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Microsoft Azure Well-Architected Framework

Overview

Reliability

Security

Cost Optimization

Operational Excellence

Performance Efficiency

Workloads

Design Patterns

Industry solutions with Azure

Retail

Finance

Healthcare

Government

Manufacturing

Media and entertainment

Energy and environment

Game development

Automotive and transportation

Azure categories

AI + Machine Learning

Analytics

Blockchain

Compute

Containers

Databases

Developer Options

DevOps

High Availability + Disaster Recovery

Hybrid + Multicloud

Identity

Integration

Internet of Things


Mainframe + Midrange

Management + Governance

Media

Migration

# Microsoft Azure Well-Architected Framework

09/10/2021 • 4 minutes to read •  +15

## In this article

- Overview
- Reliability
- Security
- Cost optimization
- Operational excellence
- Performance efficiency
- Next steps

The Azure Well-Architected Framework is a set of guiding tenets that can be used to improve the quality of a workload. The framework consists of five pillars of architectural excellence:

- Reliability
- Security
- Cost Optimization
- Operational Excellence
- Performance Efficiency

Incorporating these pillars helps produce a high quality, stable, and efficient cloud architecture:

Pillar	Description
Reliability	The ability of a system to recover from failures and continue to function.
Security	Protecting applications and data from threats.
Cost Optimization	Managing costs to maximize the value delivered.
Operational Excellence	Operations processes that keep a system running in production.
Performance Efficiency	The ability of a system to adapt to changes in load.

I Management + Governance  
 T Media  
 T Migration  
 T Mixed Reality  
 T Mobile  
 T Networking  
 T SAP  
 T Security  
 T Storage  
 T Virtual Desktop  
 T Web  
 Cloud Adoption Framework

Performance  
 Efficiency

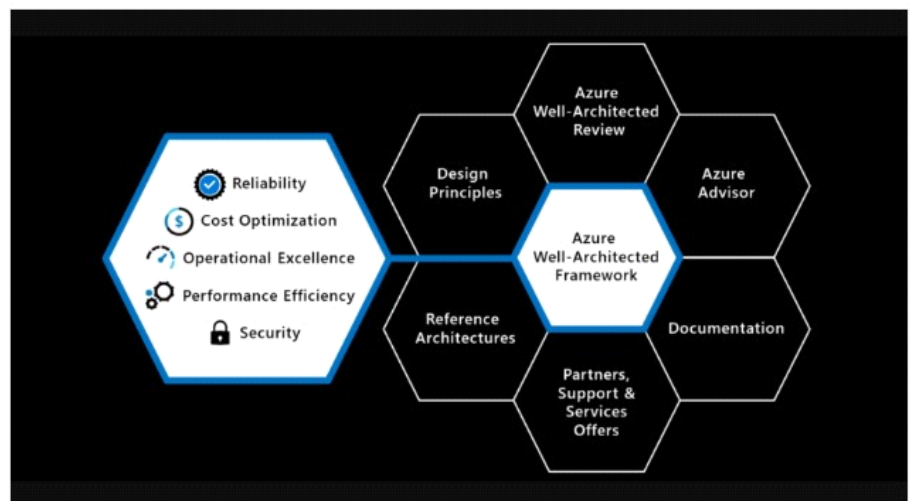
The ability of a system to adapt to changes in load.

Reference the following video about how to architect successful workloads on Azure with the Well-Architected Framework:



## Overview

The following diagram gives a high-level overview of the Azure Well-Architected Framework:

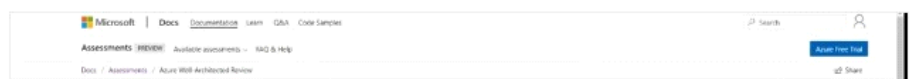


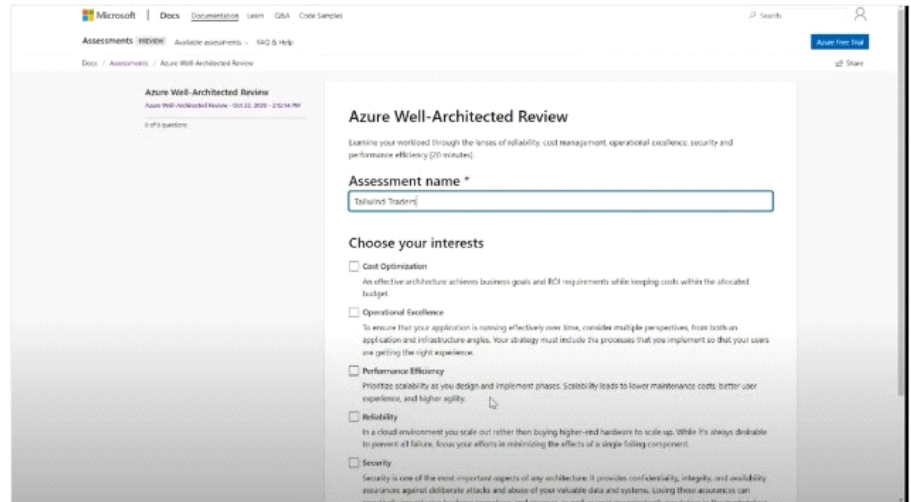
In the center, is the Well-Architected Framework, which includes the five pillars of architectural excellence. Surrounding the Well-Architected Framework are six supporting elements:

- [Azure Well-Architected Review](#)
- [Azure Advisor](#)
- [Documentation](#)
- [Partners](#), [Support](#), and [Services Offers](#)
- [Reference Architectures](#)
- [Design Principles](#)

## Assess your workload

To assess your workload using the tenets found in the Microsoft Azure Well-Architected Framework, see the [Microsoft Azure Well-Architected Review](#).





We also recommend you use Azure Advisor and Advisor Score to identify and prioritize opportunities to improve the posture of your workloads. Both services are free to all Azure users and align to the five pillars of the Well-Architected Framework:

- **Azure Advisor** is a personalized cloud consultant that helps you follow best practices to optimize your Azure deployments. It analyzes your resource configuration and usage telemetry. It recommends solutions that can help you improve the reliability, security, cost effectiveness, performance, and operational excellence of your Azure resources. Learn more about [Azure Advisor](#).
- **Advisor Score** is a core feature of Azure Advisor that aggregates Advisor recommendations into a simple, actionable score. This score enables you to tell at a glance if you're taking the necessary steps to build reliable, secure, and cost-efficient solutions, and to prioritize the actions that will yield the biggest improvement to the posture of your workloads. The Advisor score consists of an overall score, which can be further broken down into five category scores corresponding to each of the Well-Architected pillars. Learn more about [Advisor Score](#).

## Reliability

A reliable workload is one that is both resilient and available. **Resiliency** is the ability of the system to recover from failures and continue to function. The goal of resiliency is to return the application to a fully functioning state after a failure occurs. Availability is whether your users can access your workload when they need to.

For more information about resiliency, reference the following video that will show you how to start improving the reliability of your Azure workloads:



## Reliability guidance

The following topics offer guidance on designing and improving reliable Azure applications:

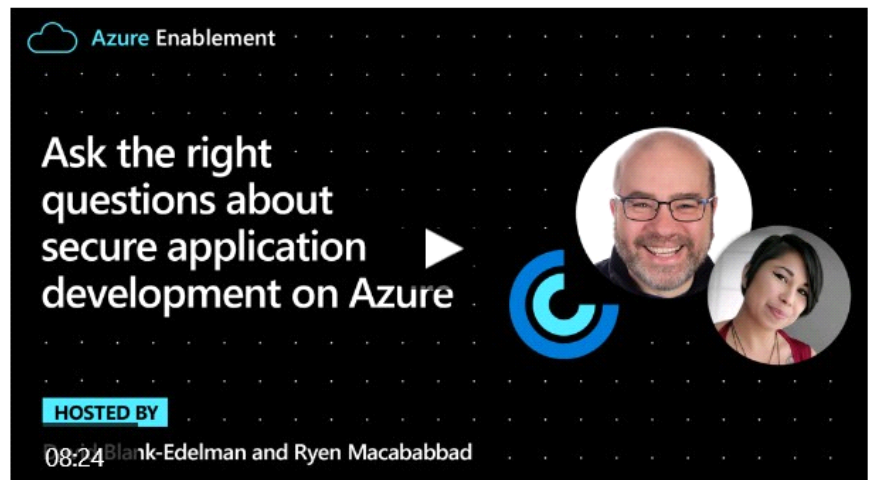
- [Designing reliable Azure applications](#)
- [Design patterns for resiliency](#)
- Best practices:
  - [Transient fault handling](#)
  - [Retry guidance for specific services](#)

For an overview of reliability principles, reference [Principles of the reliability pillar](#).

## Security

Think about [security](#) throughout the entire lifecycle of an application, from design and implementation to deployment and operations. The Azure platform provides protections against various threats, such as network intrusion and DDoS attacks. But you still need to build security into your application and into your DevOps processes.

Ask the right questions about secure application development on Azure by referencing the following video:



## Security guidance

Consider the following broad security areas:

- [Identity management](#)
- [Protect your infrastructure](#)
- [Application security](#)
- [Data sovereignty and encryption](#)
- [Security resources](#)

For more information, reference [Overview of the security pillar](#).

## Cost optimization

When you're designing a cloud solution, focus on generating incremental value early. Apply the principles of [Build-Measure-Learn](#), to accelerate your time to market while avoiding capital-intensive solutions.

For more information, reference [Cost optimization](#) and the following video on how to



Apply the principles of [Build-Measure-Learn](#), to accelerate your time to market while avoiding capital-intensive solutions.

For more information, reference [Cost optimization](#) and the following video on how to start optimizing your Azure costs:



## Cost guidance

The following topics offer cost optimization guidance as you develop the Well-Architected Framework for your workload:

- Review [cost principles](#)
- [Develop a cost model](#)
- Create [budgets and alerts](#)
- Review the [cost optimization checklist](#)

For a high-level overview, reference [Overview of the cost optimization pillar](#).

## Operational excellence

[Operational excellence](#) covers the operations and processes that keep an application running in production. Deployments must be reliable and predictable. Automate deployments to reduce the chance of human error. Fast and routine deployment processes won't slow down the release of new features or bug fixes. Equally important, you must quickly roll back or roll forward if an update has problems.

For more information, reference the following video about bringing security into your DevOps practice on Azure:



## Operational excellence guidance

## Operational excellence guidance

The following topics provide guidance on designing and implementing DevOps practices for your Azure workload:

- [Design patterns for operational excellence](#)
- Best practices: [Monitoring and diagnostics](#)

For a high-level summary, reference [Overview of the operational excellence pillar](#).

## Performance efficiency

[Performance efficiency](#) is the ability of your workload to scale to meet the demands placed on it by users in an efficient manner. The main ways to achieve performance efficiency include using scaling appropriately and implementing PaaS offerings that have scaling built in.

For more information, tune in to [Performance Efficiency: Fast & Furious: Optimizing for Quick & Reliable VM Deployments](#) [↗](#):



## Performance efficiency guidance

The following topics offer guidance on how to design and improve the performance efficiency posture of your Azure workload:

- [Design patterns for performance efficiency](#)
- Best practices:
  - [Autoscaling](#)
  - [Background jobs](#)
  - [Caching](#)
  - [CDN](#)
  - [Data partitioning](#)

For a high-level synopsis, reference [Overview of the performance efficiency pillar](#).

## Next steps

Learn more about:

- [Azure Well-Architected Review](#)
- [Well-Architected Series](#) [↗](#)
- [Introduction to the Microsoft Azure Well-Architected Framework](#)
- [Azure Security Center](#)
- [Cloud Adoption Framework](#)

- [Cloud Adoption Framework](#)

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☐ Yes ☐ No

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# AZ-303 Learning Path

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[Browse all - Learn | Microsoft Docs](#)

# Azure Enablement Show

October 20, 2021 4:13 PM

[Architect successful workloads on Azure | Azure Enablement Show | Channel 9 \(msdn.com\)](#)

# GitHub Repo

October 20, 2021 4:13 PM

[MicrosoftLearning/AZ-303-Microsoft-Azure-Architect-Technologies \(github.com\)](#)

# Enterprise Skills Initiative: Welcome

Thursday, October 21, 2021 9:48 AM

Clipped from: <https://esi.microsoft.com/>



We will be performing scheduled maintenance from Friday, Oct 22, 2021, at 7:30 PM PST, through Friday, Oct 22, 2021, at approximately 11PM PST. During this time, the Learning Experience portal will be unavailable.



## Welcome Enterprise Skills Initiative

Welcome to the Enterprise Skills Initiative. Microsoft and your organization are working together to help you learn the skills you need to be successful with Azure and other Microsoft technologies.

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# Notes

October 21, 2021 11:05 AM

Included are the links to the Microsoft Docs.

When possible review and/or do the QuickStarts

Review the CLI and PowerShell

Review the Tutorials

Use this guide in conjunction with the Learning Path [Browse all - Learn | Microsoft Docs](#)

# Implement cloud infrastructure monitoring

October 20, 2021 12:01 PM

## 🔍 monitor security

[Azure infrastructure monitoring | Microsoft Docs](#)

[What is Azure Security Center? | Microsoft Docs](#)

[Using the regulatory compliance dashboard in Azure Security Center | Microsoft Docs](#)

[Alert response tutorial - Azure Security Center | Microsoft Docs](#)

## 🔍 monitor performance

[How to chart performance with VM insights - Azure Monitor | Microsoft Docs](#)

## 🔍 monitor health and availability

[Service Health overview - Azure Service Health | Microsoft Docs](#)

## 🔍 monitor cost

[Monitor usage and estimated costs in Azure Monitor - Azure Monitor | Microsoft Docs](#)

[Quickstart - Create a budget with an Azure Resource Manager template | Microsoft Docs](#)

[What are Azure Reservations? | Microsoft Docs](#)

[Optimize your cloud investment with Azure Cost Management | Microsoft Docs](#)

## 🔍 configure advanced logging

[Azure security logging and auditing | Microsoft Docs](#)

Check the deck

## 🔍 initiate automated responses by using Action Groups

[Create and manage action groups in the Azure portal - Azure Monitor | Microsoft Docs](#)

## 🔍 configure and manage advanced alerts

[Overview of alerting and notification monitoring in Azure - Azure Monitor | Microsoft Docs](#)

## Activity Logs

[Azure Activity log - Azure Monitor | Microsoft Docs](#)

Know the difference between Application logs and diagnostic logs

## Application Insights

[What is Azure Application Insights? - Azure Monitor | Microsoft Docs](#)

<https://docs.microsoft.com/en-us/azure/azure-monitor/app/nodejs>

## Azure Workbooks

[Azure Monitor Workbooks Overview - Azure Monitor | Microsoft Docs](#)

[Pricing - Azure Monitor | Microsoft Azure](#)

[Azure Network Watcher | Microsoft Docs](#)

Review the QuickStarts and Tutorials

Know what each tool does

[Introduction to Effective security rules view in Azure Network Watcher | Microsoft Docs](#)



# Implement storage accounts

October 20, 2021 12:01 PM

[Introduction to Blob \(object\) storage - Azure Storage | Microsoft Docs](#)

☑ select storage account options based on a use case

[Introduction to Azure Storage - Cloud storage on Azure | Microsoft Docs](#)

[Create a storage account - Azure Storage | Microsoft Docs](#)

☑ configure Azure Files and Azure Blob storage

[Quickstart: Upload, download, and list blobs - Azure portal - Azure Storage | Microsoft Docs](#)

[Quickstart - Create a blob with Azure Storage Explorer - Azure Storage | Microsoft Docs](#)

[Quickstart: Upload, download, and list blobs - Azure PowerShell - Azure Storage | Microsoft Docs](#)

[Quickstart: Upload, download, and list blobs - Azure CLI - Azure Storage | Microsoft Docs](#)

[Create and use an Azure file shares on Windows VMs | Microsoft Docs](#)

[Quickstart for managing Azure file shares | Microsoft Docs](#)

☑ configure network access to the storage account

[Configure Azure Storage firewalls and virtual networks | Microsoft Docs](#)

☑ implement Shared Access Signatures and access policies

[Grant limited access to data with shared access signatures \(SAS\) - Azure Storage | Microsoft Docs](#)

☑ implement Azure AD authentication for storage

[Use the Azure Identity library to get an access token for authorization - Azure Storage | Microsoft Docs](#)

☑ manage access keys

[Use the Azure Identity library to get an access token for authorization - Azure Storage | Microsoft Docs](#)

☑ implement Azure storage replication

[Data redundancy - Azure Storage | Microsoft Docs](#)

☑ implement Azure storage account failover

[Disaster recovery and storage account failover - Azure Storage | Microsoft Docs](#)

# Implement VMs for Windows and Linux

October 20, 2021 3:54 PM

## ☑ configure high availability

[Availability options for Azure Virtual Machines - Azure Virtual Machines | Microsoft Docs](#)  
[Quickstart: Use the Azure CLI to create a Linux VM - Azure Virtual Machines | Microsoft Docs](#)  
[Quickstart - Create a Linux VM in the Azure portal - Azure Virtual Machines | Microsoft Docs](#)  
[Quickstart - Create a Linux VM with Azure PowerShell - Azure Virtual Machines | Microsoft Docs](#)  
[Quickstart: Use a Resource Manager template to create an Ubuntu Linux VM - Azure Virtual Machines | Microsoft Docs](#)

[Quickstart - Create a Windows VM using the Azure CLI - Azure Virtual Machines | Microsoft Docs](#)  
[Quickstart - Create a Windows VM in the Azure portal - Azure Virtual Machines | Microsoft Docs](#)  
[Quickstart - Create a Windows VM with Azure PowerShell - Azure Virtual Machines | Microsoft Docs](#)  
[Quickstart: Use a Resource Manager template to create a Windows VM - Azure Virtual Machines | Microsoft Docs](#)

## ☑ configure storage for VMs

[Azure Disk Storage overview - Azure Virtual Machines | Microsoft Docs](#)  
[Select a disk type for Azure IaaS VMs - managed disks - Azure Virtual Machines | Microsoft Docs](#)  
  
[Attach a managed data disk to a Windows VM - Azure - Azure Virtual Machines | Microsoft Docs](#)  
[Attach a data disk to a Windows VM in Azure by using PowerShell - Azure Virtual Machines | Microsoft Docs](#)  
[Add a data disk to Linux VM using the Azure CLI - Azure Virtual Machines | Microsoft Docs](#)  
[Attach a data disk to a Linux VM - Azure Virtual Machines | Microsoft Docs](#)  
[Redundancy options for Azure managed disks - Azure Virtual Machines | Microsoft Docs](#)

## ☑ select virtual machine size

[VM sizes - Azure Virtual Machines | Microsoft Docs](#)

## ☑ implement Azure Dedicated Hosts

[Overview of Azure Dedicated Hosts for virtual machines - Azure Virtual Machines | Microsoft Docs](#)

## ☑ deploy and configure Virtual Machine Scale Sets

[Azure virtual machine scale sets overview - Azure Virtual Machine Scale Sets | Microsoft Docs](#)  
[Tutorial - Autoscale a scale set with Azure PowerShell - Azure Virtual Machine Scale Sets | Microsoft Docs](#)

## ☑ configure Azure Disk Encryption

[Overview of managed disk encryption options - Azure Virtual Machines | Microsoft Docs](#)

# Automate deployment and configuration of resources

October 20, 2021 3:56 PM

📄 save a deployment as an Azure Resource Manager template

[Export template in Azure portal - Azure Resource Manager | Microsoft Docs](#)

[Templates overview - Azure Resource Manager | Microsoft Docs](#)

[Deploy template - Azure portal - Azure Resource Manager | Microsoft Docs](#)

[Template structure and syntax - Azure Resource Manager | Microsoft Docs](#)

📄 modify Azure Resource Manager template (JSON and Bicep)

[Bicep language for deploying Azure resources - Azure Resource Manager | Microsoft Docs](#)

📄 evaluate location of new resources

[Template resource location - Azure Resource Manager | Microsoft Docs](#)

📄 configure a VHD image

[Prepare a Windows VHD to upload to Azure - Azure Virtual Machines | Microsoft Docs](#)

📄 deploy from an image

[Create VM from a managed image in Azure - Azure Virtual Machines | Microsoft Docs](#)

📄 manage an image library

📄 create and execute an Azure Automation runbook

[Manage runbooks in Azure Automation | Microsoft Docs](#)

# Implement virtual networking

October 20, 2021 3:56 PM

📄 implement VNet to VNet connections

[Configure a VNet-to-VNet VPN gateway connection: Azure portal - Azure VPN Gateway | Microsoft Docs](#)

📄 implement VNet peering

[Azure Virtual Network peering | Microsoft Docs](#)

# Implement Azure Active Directory

October 20, 2021 3:59 PM

## ☐ add custom domains

[Add your custom domain - Azure Active Directory | Microsoft Docs](#)

## ☐ configure Azure AD Identity Protection

<https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/overview-identity-protection>

## ☐ implement self-service password reset

[Enable Azure Active Directory self-service password reset | Microsoft Docs](#)

[Enable Azure Active Directory password writeback | Microsoft Docs](#)

## ☐ implement Conditional Access including MFA

[Conditional Access - Require MFA for all users - Azure Active Directory | Microsoft Docs](#)

[Conditional Access - Require MFA for all users - Azure Active Directory | Microsoft Docs](#)

## ☐ configure fraud alerts

[Configure Azure AD Multi-Factor Authentication - Azure Active Directory | Microsoft Docs](#)

## ☐ configure verification methods

[Authentication methods and features - Azure Active Directory | Microsoft Docs](#)

## ☐ implement and manage guest accounts

<https://docs.microsoft.com/en-us/azure/active-directory/external-identities/what-is-b2b>

[What is Azure Active Directory B2C? | Microsoft Docs](#)

## ☐ manage multiple directories

[Characteristics of multi-tenant interaction - Azure AD | Microsoft Docs](#)

# Implement and manage hybrid identities

October 20, 2021 3:59 PM

## ❏ install and configure Azure AD Connect

[What is Azure AD Connect and Connect Health. | Microsoft Docs](#)

## ❏ identity synchronization options

[What is password hash synchronization with Azure AD? | Microsoft Docs](#)

[Azure AD Connect: Pass-through Authentication | Microsoft Docs](#)

[What is federation with Azure AD? | Microsoft Docs](#)

## ❏ configure and manage password sync and password writeback

[Implement password hash synchronization with Azure AD Connect sync | Microsoft Docs](#)

[Enable Azure Active Directory password writeback | Microsoft Docs](#)

## ❏ configure single sign-on

[Azure AD Connect: Seamless Single Sign-On | Microsoft Docs](#)

## ❏ configure Azure AD Connect cloud sync

[Azure AD Connect sync: Understand and customize synchronization | Microsoft Docs](#)

## ❏ use Azure AD Connect Health

[Install the Connect Health agents in Azure Active Directory | Microsoft Docs](#)



# Manage workloads in Azure

October 20, 2021 12:01 PM

## 🔗 migrate workloads using Azure Migrate

[About Azure Migrate - Azure Migrate | Microsoft Docs](#)

<https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/migrate/azure-migration-guide/?tabs=MigrationTools>

Review Discovery support

Know what workloads need agents

## 🔗 implement Azure Backup for Azure workloads

[What is Azure Backup? - Azure Backup | Microsoft Docs](#)

Review the Tutorials

<https://azure.microsoft.com/en-us/pricing/details/backup/>

## 🔗 implement disaster recovery

[Backup and disaster recovery for apps - Azure Architecture Center | Microsoft Docs](#)

[About Azure Site Recovery - Azure Site Recovery | Microsoft Docs](#)

[Network Security Groups with Azure Site Recovery - Azure Site Recovery | Microsoft Docs](#)

[Assign public IP addresses after failover with Azure Site Recovery - Azure Site Recovery | Microsoft Docs](#)

## 🔗 implement Azure Automation Update Management

[Azure Automation Update Management overview | Microsoft Docs](#)

# Implement load balancing and network security

October 20, 2021 4:00 PM

## ☑ implement Azure Load Balancer

[What is Azure Load Balancer? - Azure Load Balancer | Microsoft Docs](#)

Do the QuickStarts

Pay attention to the differences between public and private

## ☑ implement an Azure Application Gateway

[What is Azure Application Gateway | Microsoft Docs](#)

## ☑ implement Web Application Firewall

[What is Azure Web Application Firewall on Azure Application Gateway? - Azure Web Application Firewall | Microsoft Docs](#)

## ☑ implement Azure Firewall

[What is Azure Firewall? | Microsoft Docs](#)

If deploying watch costs, as the FW service can be expensive

## ☑ implement Azure Firewall Manager

[What is Azure Firewall Manager? | Microsoft Docs](#)

## ☑ implement Azure Front Door

<https://docs.microsoft.com/en-us/azure/frontdoor/front-door-overview>

Do the QuickStarts

## ☑ implement Azure Traffic Manager

[Azure Traffic Manager | Microsoft Docs](#)

[How Azure Traffic Manager works | Microsoft Docs](#)

## ☑ implement Network Security Groups and Application Security Groups

[Azure network security groups overview | Microsoft Docs](#)

[Azure service tags overview | Microsoft Docs](#)

[Azure virtual network service endpoint policies | Microsoft Docs](#)

Do the QuickStarts

[Azure application security groups overview | Microsoft Docs](#)

## ☑ implement Bastion

<https://docs.microsoft.com/en-us/azure/bastion/bastion-overview>

Do the Quickstart

[Connect to a Windows VM using SSH - Azure Bastion | Microsoft Docs](#)

# Implement and manage Azure governance solutions

October 20, 2021 4:01 PM

❏ create and manage hierarchical structure that contains management groups, subscriptions and resource groups

❏ assign RBAC roles

[Steps to assign an Azure role - Azure RBAC | Microsoft Docs](#)

Review the PS and CLI

[Elevate access to manage all Azure subscriptions and management groups | Microsoft Docs](#)

❏ create a custom RBAC role

[Azure custom roles - Azure RBAC | Microsoft Docs](#)

❏ configure access to Azure resources by assigning roles

[Assign Azure roles using the Azure portal - Azure RBAC | Microsoft Docs](#)

❏ configure management access to Azure

[Manage access to Azure management with Conditional Access in Azure AD | Microsoft Docs](#)

[Best practices for Azure RBAC | Microsoft Docs](#)

❏ interpret effective permissions

[List Azure role assignments using the Azure portal - Azure RBAC | Microsoft Docs](#)

❏ set up and perform an access review

[What are access reviews? - Azure Active Directory | Microsoft Docs](#)

[What is identity lifecycle management with Azure Active Directory? | Microsoft Docs](#)

❏ implement and configure Azure Policy

[Overview of Azure Policy - Azure Policy | Microsoft Docs](#)

Do the QuickStarts

Know the difference between an Initiative, Definitions and Policies

❏ implement and configure Azure Blueprints

[Overview of Azure Blueprints - Azure Blueprints | Microsoft Docs](#)

# Manage security for applications

October 20, 2021 4:01 PM

## 📌 implement and configure Key Vault

[What is Azure Key Vault? | Microsoft Docs](#)

[Azure Key Vault Overview - Azure Key Vault | Microsoft Docs](#)

[Azure Key Vault Keys, Secrets, and Certificates Overview | Microsoft Docs](#)

Do the QuickStarts

[Assign an Azure Key Vault access policy \(CLI\) | Microsoft Docs](#)

[Grant permission to applications to access an Azure key vault using Azure RBAC | Microsoft Docs](#)

## 📌 implement and configure Managed Identities

[Managed identities for Azure resources | Microsoft Docs](#)

[Best practice recommendations for managed system identities | Microsoft Docs](#)

Do the QuickStart

## 📌 register and manage applications in Azure AD

[Quickstart: Register an app in the Microsoft identity platform | Microsoft Docs](#)

[Microsoft identity platform overview - Azure - Microsoft identity platform | Microsoft Docs](#)

# Implement an application infrastructure

October 20, 2021 4:02 PM

## ❏ create and configure Azure App Service

[Overview - Azure App Service | Microsoft Docs](#)

[App Service Environment overview - Azure App Service Environment | Microsoft Docs](#)

Do the QuickStarts

## ❏ create an App Service Web App for Containers

[Quickstart: Run a custom container on App Service - Azure App Service | Microsoft Docs](#)

## ❏ create and configure an App Service plan

[App Service plans - Azure App Service | Microsoft Docs](#)

[Manage App Service plan - Azure App Service | Microsoft Docs](#)

## ❏ configure App Service

Review the Manage App links from the link above

[Buy a custom domain name - Azure App Service | Microsoft Docs](#)

## ❏ configure networking for App Service

[Networking features - Azure App Service | Microsoft Docs](#)

## ❏ create and manage deployment slots

[Set up staging environments - Azure App Service | Microsoft Docs](#)

Know what is swapped and what is not

Know the tiers and number of slots

## ❏ implement Logic Apps

[Azure Logic Apps documentation | Microsoft Docs](#)

Do the QuickStarts

Review the Tutorials

[B2B enterprise integration workflows - Azure Logic Apps | Microsoft Docs](#)

[Connectors overview for Azure Logic Apps - Azure Logic Apps | Microsoft Docs](#)

## ❏ implement Azure Functions

[Azure Functions Overview | Microsoft Docs](#)

Review the QuickStart

Review the Samples

<https://docs.microsoft.com/en-us/samples/azure-samples/azure-functions-python-list-resource-groups/azure-functions-python-sample-list-resource-groups/>

[Durable Functions Overview - Azure | Microsoft Docs](#)

Function App vs running a function in App Service Plan - ASP is more cost effective

<https://www.serverlesslibrary.net/>

# Implement container-based applications

October 20, 2021 4:02 PM

## 📌 create a container image

[Managed container registries - Azure Container Registry | Microsoft Docs](#)

[Tutorial - Quick container image build - Azure Container Registry | Microsoft Docs](#)

## 📌 configure Azure Kubernetes Service

[Azure Kubernetes Service \(AKS\) documentation | Microsoft Docs](#)

Do the Deploy an AKS Cluster Quickstarts

Know when to use AKS vs Containers

## 📌 push container images

[Push & pull container image - Azure Container Registry | Microsoft Docs](#)

## 📌 deploy a solution on an Azure Container Instance

[Serverless containers in Azure - Azure Container Instances | Microsoft Docs](#)

Do the QuickStarts

<https://docs.docker.com/get-started/overview/>



# Implement NoSQL databases

October 20, 2021 4:03 PM

## 📌 configure Azure Storage tables

[Introduction to Table storage - Object storage in Azure | Microsoft Docs](#)

[Quickstart - Create an Azure Storage table in the Azure portal | Microsoft Docs](#)

[Authorize data operations - Azure Storage | Microsoft Docs](#)

[Manage account access keys - Azure Storage | Microsoft Docs](#)

## 📌 select appropriate Cosmos DB APIs

[Azure Cosmos DB | Microsoft Docs](#)

[Choose an API in Azure Cosmos DB | Microsoft Docs](#)

## 📌 set up replicas in Cosmos DB

[Distribute data globally with Azure Cosmos DB | Microsoft Docs](#)

[Consistency levels in Azure Cosmos DB | Microsoft Docs](#)

[High availability in Azure Cosmos DB | Microsoft Docs](#)

# Implement Azure SQL databases

October 20, 2021 4:03 PM

## 🔖 configure Azure SQL database settings

[Azure SQL Database documentation - Azure SQL Database | Microsoft Docs](#)

Do the QuickStarts

[Connectivity settings for Azure SQL Database and Azure Synapse Analytics - Azure SQL Database and Azure Synapse Analytics | Microsoft Docs](#)

[Manage multiple databases with elastic pools - Azure SQL Database | Microsoft Docs](#)

## 🔖 implement Azure SQL managed instances

[Azure SQL Managed Instance documentation - Azure SQL Managed Instance | Microsoft Docs](#)

[Getting started content reference - Azure SQL Managed Instance | Microsoft Docs](#)

## 🔖 configure HA for an Azure SQL database

[Azure SQL Server replication to Azure SQL Database - Azure SQL Database | Microsoft Docs](#)

[Types of Replication - SQL Server | Microsoft Docs](#)

## 🔖 deploy an Azure SQL database

[Single database quickstart content reference - Azure SQL Database | Microsoft Docs](#)

Know there 3 SQL Choices

Azure VM with SQL [SQL Server on Azure VM documentation - SQL Server on Azure VM | Microsoft Docs](#)

Azure SQL Instance

Azure SQL Managed