### **Exam Objectives**

November 12, 2021 1:33 PM

# Exam AZ-104: Microsoft Azure Administrator - Skills Measured

This exam was updated on September 24, 2021. Following the current exam guide, we have included a version of the exam guide with Track Changes set to "On," showing the changes that were made to the exam on that date.

## **Audience Profile**

Candidates for this exam should have subject matter expertise implementing, managing, and monitoring an organization's Microsoft Azure environ

Responsibilities for this role include implementing, managing, and monitoring identity, governance, storage, compute, and virtual networks in a cloud environment, plus provision, size, monitor, and adjust resources, when needed.

An Azure administrator often serves as part of a larger team dedicated to implementing an

A candidate for this exam should have at least six months of hands-on experience administering Azure, along with a strong understanding of core Azure services, Azure workloads, security, and governance. In addition, this role should have experience using PowerShell, Azure CLI, Azure portal, and Azure Resource Manager templates.

#### Skills Measured

NOTE: The bullets that follow each of the skills measured are intended to illustrate how we assess that skill. This list is not definitive or exhaustive

NOTE: Most questions cover features that are General Availability (GA). The exam may contain ons on Preview features if those features are commo

### Manage Azure identities and governance (15–20%)

Manage Azure Active Directory (Azure AD) objects

- · create users and groups
- · create administrative units
- manage user and group properties
   manage device settings
   perform bulk user updates

- manage guest accounts
   configure Azure AD join
- · configure self-service password reset

Collections - MSFTofficialCurriculum-4292 | Microsoft Docs

Reimagining the Azure Solutions Architect Expert certification - Microsoft Tech Community

Become Microsoft Certified

https://techcommunity.microsoft.com/t5/fasttrack-for-azure/the-benefits-of-infrastructure-as-code/ba-p/2069350#:~text=What%20is%20infrastructure%20as%20Code%3F%20The%20Azure%20Well-Architected.similar%20to%20what%20is%20used%20for%20source%20code.

#### Manage role-based access control (RBAC)

- · create a custom role
- provide access to Azure resources by assigning roles at different scopes
- · interpret access assignments

### Manage subscriptions and governance

- · configure Azure policies
- configure resource locks
   apply and manage tags on resources
- · manage resource groups manage subscriptions
- manage costs
- configure management groups

### Implement and manage storage (15-20%)

#### Secure storage

- configure network access to storage accounts
   create and configure storage accounts
   generate shared access signature (SAS) tokens
- manage access keys
   configure Azure AD authentication for a storage account
- configure access to Azure Files

### Manage storage

- · export from Azure job
- import into Azure job
   install and use Azure Storage Explorer
- copy data by using AZCopy
   implement Azure Storage replication
   configure blob object replication

#### Configure Azure files and Azure Blob Storage

- create an Azure file share
- create an Azure file snare
   create and configure Azure File Sync service
   configure Azure Blob Storage
   configure storage tiers
   configure blob lifecycle management

# Deploy and manage Azure compute resources (20-25%)

# Automate deployment of virtual machines (VMs) by using Azure Resource Manager templates

- modify an Azure Resource Manager template
   configure a virtual hard disk (VHD) template
   deploy from a template
   save a deployment as an Azure Resource Manager template
   deploy virtual machine extensions

## Configure VMs

- configure Azure Disk Encryption
- move VMs from one resource. rce group to another
- manage VM sizes
   add data disks
- · configure networking
- redeploy VMs
   configure high availability
   deploy and configure virtual machine scale sets

- configure sizing and scaling for Azure Container Instances
   configure container groups for Azure Container Instances
   configure storage for Azure Kubernetes Service (AKS)
- configure scaling for AKS
   configure network connections for AKS
   upgrade an AKS cluster

### Create and configure Azure App Service

- create an App Service plan
- configure scaling settings in an App Service plan
   create an App Service
- · secure an App Service
- configure custom domain names
   configure backup for an App Service
   configure networking settings
- · configure deployment settings

# Configure and manage virtual networking (25-30%)

#### Implement and manage virtual networking

- create and configure virtual networks, including peering
- configure private and public IP addresses
- configure user-defined network routes
- implement subnets
- configure endpoints on subnets
- · configure private endpoints
- configure Azure DNS, including custom DNS settings and private or public DNS zones

#### Secure access to virtual networks

- · create security rules
- associate a network security group (NSG) to a subnet or network interface
- · evaluate effective security rules
- implement Azure Firewall
   implement Azure Bastion

#### Configure load balancing

- configure Azure Application Gateway
- configure an internal or public load balancer
   troubleshoot load balancing

#### Monitor and troubleshoot virtual networking

- monitor on-premises connectivity
   configure and use Azure Monitor for Networks
- use Azure Network Watcher
- troubleshoot external networking
   troubleshoot virtual network connectivity

#### Integrate an on-premises network with an Azure virtual network

- create and configure Azure VPN Gateway
- create and configure Azure ExpressRoute
   configure Azure Virtual WAN

### Monitor and back up Azure resources (10-15%)

#### Monitor resources by using Azure Monitor

- configure and interpret metrics
   configure Azure Monitor logs

- query and analyze logs
   set up alerts and action
- · configure Application Insights

# Implement backup and recovery

- · create a Recovery Services vault
- create a Backup vault
   create and configure backup policy
- · perform backup and restore operations by using Azure Backup
- perform site-to-site recovery by using Azure Site Recovery
   configure and review backup reports

### The exam guide below shows the changes that were implemented on September 24, 2021.

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- create users and groups
- · create administrative units

- · manage user and group properties
- manage device settings
   perform bulk user updates
- · manage guest accounts
- configure Azure AD join
   configure self-service password reset

#### Manage role-based access control (RBAC)

- · provide access to Azure resources by assigning roles at different scopes
- interpret access assignments

#### Manage subscriptions and governance

- configure Azure policies
   configure resource locks
- · apply and manage tags on resources
- manage resource groups
   manage subscriptions

- manage costs
   configure management groups

#### Implement and manage storage (15-20%)

#### Secure storage

- configure network access to storage accounts

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- configure Azure Disk Encryption
   move VMs from one resource group to another
- manage VM sizesadd data disks
- · configure networking

- redeploy VMs
   configure high availability
   deploy and configure <u>virtual machine</u> scale sets

## Create and configure containers

- · configure sizing and scaling for Azure Container Instances
- configure sizing and scaling for Azure Container Instances
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- create an App Service
   secure an App Service
   configure custom domain names

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### Configure and manage virtual networking (25-30%)

#### Implement and manage virtual networking

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- configure endpoints on subnets
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- · create security rules
- associate a network security group (NSG) to a subnet or network interface
   evaluate effective security rules
   implement Azure Firewall
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### Configure load balancing

- configure Azure Application Gateway
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### Monitor and troubleshoot virtual networking

- · monitor on-premises connectivity
- configure and use Azure Monitor for Networks
   use Azure Network Watcher

- troubleshoot external networking
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#### Integrate an on-premises network with an Azure virtual network

- create and configure Azure VPN Gateway
   create and configure Azure ExpressRoute
   configure Azure Virtual WAN

# Monitor and back up Azure resources (10-15%)

### Monitor resources by using Azure Monitor

- configure and interpret metrics
   configure Azure Monitor logs
   query and analyze logs

- set up alerts and actions
   configure Application Insights

### Implement backup and recovery

- create a Recovery Services vault
- create a Backup vault
- create a Backup vault
  create and configure backup policy
  perform backup and restore operations by using Azure Backup
  perform site-to-site recovery by using Azure Site Recovery
  configure and review backup reports

# Other interesting links

November 12, 2021 3:44 PM

<u>MicrosoftLearning/AZ-104-MicrosoftAzureAdministrator</u>: <u>AZ-104 Microsoft Azure Administrator</u> (github.com)

Tools and Weapons: The Promise and the Peril of the Digital Age by Brad Smith (goodreads.com)

AWS to Azure services comparison - Azure Architecture Center | Microsoft Docs

Shared responsibility in the cloud - Microsoft Azure | Microsoft Docs

Preventing Rhino Poaching With Microsoft Azure - CSE Developer Blog

Home Page (ch1-retailappy37ha6.azurewebsites.net)

What is canary test (canary deployment)? - Definition from WhatIs.com (techtarget.com)

Azure Charts - Your Cloud Radar

Payment Card Industry Data Security Standard - Wikipedia

PCI DSS - Azure Compliance | Microsoft Docs

Representational state transfer - Wikipedia

YAML - Wikipedia

Microsoft Cybersecurity Reference Architectures - Security documentation | Microsoft Docs

LinkedIn Emerging Jobs Report <u>Jobs on the Rise Reports | LinkedIn Talent Solutions</u> This is a great resource to learn what roles/jobs are in demand.

Microsoft Certified Trainer | Microsoft Docs

## Additional Study Links

November 18, 2021 3:07 PM

MS Learn (scroll down) - Exam AZ-104: Microsoft Azure Administrator - Learn | Microsoft Docs

Tuesdays with Corey <u>Tuesdays With Corey</u> | Channel 9 (msdn.com)

Azure Fridays Azure Friday | Channel 9 (msdn.com)

https://microsoftlearning.github.io/AZ-900T0x-MicrosoftAzureFundamentals/

Azure Charts - Your Cloud Radar
Browse Azure Architectures - Azure Architecture Center | Microsoft Docs
Microsoft Cloud Adoption Framework for Azure - Cloud Adoption Framework | Microsoft Docs
Microsoft Azure Well-Architected Framework - Azure Architecture Center | Microsoft Docs

Microsoft Cybersecurity Reference Architectures - Security documentation | Microsoft Docs

Become Microsoft Certified

 $\frac{https://techcommunity.microsoft.com/t5/microsoft-learn-blog/new-to-microsoft-certification-exams-we-have-something-you-need/ba-p/3041520$ 

https://docs.microsoft.com/en-us/learn/certifications/exam-duration-question-types

# IaC

January 21, 2022 3:42 PM

Microsoft Learn <u>Explore infrastructure as code and configuration management - Learn | Microsoft Docs</u>

<u>Explore Azure Automation with DevOps - Learn | Microsoft Docs</u> <u>Implement Terraform - Learn | Microsoft Docs</u>

<u>laC on Azure - An introduction of Infrastructure as Code (laC) with Azure Resource Manager (ARM)</u> <u>Template - Microsoft Tech Community</u>

laC - Bicep <u>Introduction to infrastructure as code using Bicep - Learn | Microsoft Docs</u> <u>Fundamentals of Bicep - Learn | Microsoft Docs</u>

# Manage Azure Active Directory (Azure AD) objects

November 12, 2021 1:48 PM

What is Azure Active Directory? - Azure Active Directory | Microsoft Docs
Architecture overview - Azure Active Directory | Microsoft Docs
Sign up your organization - Azure Active Directory | Microsoft Docs
Compare Active Directory to Azure Active Directory | Microsoft Docs
Azure AD Multi-Factor Authentication versions and consumption plans | Microsoft Docs

What is device identity in Azure Active Directory? | Microsoft Docs Service limits and restrictions - Azure Active Directory | Microsoft Docs What is Conditional Access in Azure Active Directory? | Microsoft Docs About admin roles in the Microsoft 365 admin center - Microsoft 365 admin | Microsoft Docs

Azure AD Connect sync: Understand and customize synchronization | Microsoft Docs

### Edition compare

Azure Active Directory Pricing | Microsoft Security

#### ☐ create administrative units

Add and remove administrative units - Azure Active Directory | Microsoft Docs
Add, remove, and list users in an administrative unit - Azure Active Directory | Microsoft Docs
Add, remove, and list groups in an administrative unit - Azure Active Directory | Microsoft Docs
Assign and list roles with administrative unit scope - Azure Active Directory | Microsoft Docs
Administrative units in Azure Active Directory | Microsoft Docs

#### manage user and group properties

https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/add-users-azure-active-directory
https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-users-profile-azure-portal
https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-users-reset-password-azure-portal
Restore or permanently remove recently deleted user - Azure AD | Microsoft Docs
Groups in Microsoft 365 and Azure, and Which is Right for You | Microsoft Docs
Compare External Identities - Azure Active Directory | Microsoft Docs

Assign Azure AD roles to users - Azure Active Directory | Microsoft Docs
Assign or remove licenses - Azure Active Directory | Microsoft Docs
https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-users-restore
Rules for dynamically populated groups membership - Azure AD | Microsoft Docs
Create or edit a dynamic group and get status - Azure AD | Microsoft Docs

#### manage device settings

What are Azure AD registered devices? | Microsoft Docs What is an Azure AD Joined device? | Microsoft Docs What is a hybrid Azure AD Joined device? | Microsoft Docs How Azure AD device registration works | Microsoft Docs

# nerform bulk user updates

Bulk create users in the Azure Active Directory portal | Microsoft Docs

### manage guest accounts

Quickstart: Add guest users in the Azure portal - Azure AD | Microsoft Docs What is B2B collaboration in Azure Active Directory? | Microsoft Docs

### ☐ configure Azure AD join

Plan your Azure Active Directory device deployment | Microsoft Docs
How to plan your Azure Active Directory join implementation | Microsoft Docs
Plan hybrid Azure Active Directory join - Azure Active Directory | Microsoft Docs

# 🗓 configure self-service password reset

password reset

Enable Azure Active Directory self-service password reset | Microsoft Docs Enable Azure Active Directory password writeback | Microsoft Docs Self-service password reset policies - Azure Active Directory | Microsoft Docs Self-service password reset deep dive - Azure Active Directory | Microsoft Docs User admin Assign the User admin role to users who need to do the following for all users:

- Add users and groups
- Assign licenses
- Manage most users properties - Create and manage user views
- Update password expiration policies
- Manage service requests
- Monitor service health

The user admin can also do the following actions for users who aren't admins and for users assigned the following roles: Directory reader, Guest inviter, Helpdesk admin, Message center reader, Reports reader:

- Manage usernames
- Delete and restore users
- Reset passwords
- Force users to sign out
- Update (FIDO) device keys

From <a href="https://docs.microsoft.com/en-us/microsoft-365/admin/add-users/about-admin-roles?view=0365-worldwide">https://docs.microsoft.com/en-us/microsoft-365/admin/add-users/about-admin-roles?view=0365-worldwide</a>

Azure Active Directory integration with MDM - Windows Client Management | Microsoft Docs

What's the difference between Azure roles and Azure AD roles? - Microsoft Tech Community

Identity and access management checklist - Azure Architecture Center | Microsoft Docs

Kerberos constrained delegation for Azure AD Domain Services | Microsoft Docs

Multitenancy and identity
management - Azure Architecture
Center | Microsoft Docs

# Manage role-based access control (RBAC)

November 12, 2021 1:49 PM

Azure AD built-in roles - Azure Active Directory | Microsoft Docs

Delegate roles by admin task - Azure Active Directory | Microsoft Docs

What is Azure role-based access control (Azure RBAC)? | Microsoft Docs

What's the difference between Azure roles and Azure AD roles? - Microsoft Tech Community

### create a custom role

<u>Custom role permissions for app registration - Azure AD | Microsoft Docs</u> <u>App permissions for custom roles in Azure Active Directory | Microsoft Docs</u>

<u>App consent permissions for custom roles in Azure Active Directory | Microsoft Docs</u>

<u>Group management permissions for Azure AD custom roles (Preview) - Azure Active Directory | Microsoft Docs</u>

<u>Create custom roles for Azure resources with Azure role-based access control (Azure RBAC) - Learn | Microsoft Docs</u>

provide access to Azure resources by assigning roles at different scopes

Assign Azure AD roles at different scopes - Azure Active Directory | Microsoft Docs

# interpret access assignments

<u>View, add, and remove assignments for an access package in Azure AD entitlement management - Azure Active Directory | Microsoft Docs</u>

# Manage subscriptions and governance

November 12, 2021 1:49 PM

Microsoft identity platform overview - Azure - Microsoft identity platform | Microsoft Docs

Azure security features that help with identity management | Microsoft Docs

#### □ configure Azure policies

Overview of Azure Policy - Azure Policy | Microsoft Docs
Tutorial: Build policies to enforce compliance - Azure Policy | Microsoft Docs
Understand scope in Azure Policy - Azure Policy | Microsoft Docs
Get policy compliance data - Azure Policy | Microsoft Docs

### ☐ configure resource locks

Lock resources to prevent changes - Azure Resource Manager | Microsoft Docs

Develop your naming and tagging strategy for Azure resources - Cloud Adoption Framework | Microsoft

DocsLock resources to prevent changes - Azure Resource Manager | Microsoft Docs

#### ☐ apply and manage tags on resources

Tutorial: Manage tag governance - Azure Policy | Microsoft Docs
Tag resources, resource groups, and subscriptions for logical organization - Azure Resource Manager |
Microsoft Docs
Resource naming and tagging decision guide - Cloud Adoption Framework | Microsoft Docs

#### ■ manage resource groups

<u>Delete resource group and resources - Azure Resource Manager | Microsoft Docs</u>
<u>Manage resource groups - Azure portal - Azure Resource Manager | Microsoft Docs</u>
<u>Move resources to a new subscription or resource group - Azure Resource Manager | Microsoft Docs</u>

#### manage subscriptions

<u>Create an additional Azure subscription | Microsoft Docs</u>
<u>Change Azure subscription offer | Microsoft Docs</u>
<u>Azure subscription limits and quotas - Azure Resource Manager | Microsoft Docs</u>

#### ■ manage costs

Plan to manage Azure costs | Microsoft Docs
Optimize your cloud investment with Azure Cost Management | Microsoft Docs
Analyze unexpected Azure charges | Microsoft Docs
Introduction to analyzing costs and creating budgets with Azure Cost Management - Learn | Microsoft Docs

## $\ensuremath{\blacksquare}$ configure management groups

Organize your resources with management groups - Azure Governance - Azure governance | Microsoft Docs How to work with your management groups - Azure Governance - Azure governance | Microsoft Docs How to protect your resource hierarchy - Azure Governance - Azure governance | Microsoft Docs Azure Management Overview - Azure Governance | Microsoft Docs Organize your resources with management groups - Azure Governance - Azure governance | Microsoft Docs https://docs.microsoft.com/en-us/azure/governance/management-groups/create-management-group-portal

Azure regions decision guide - Cloud Adoption Framework | Microsoft Docs - this is from Migrate but still relevant.

Choose the Right Azure Region for You | Microsoft Azure Azure Global Infrastructure (microsoft.com)
Global Infrastructure | Microsoft Azure
Ensure business continuity & disaster recovery using Azure
Paired Regions | Microsoft Docs

<u>Azure reservations & server subscriptions - Partner Center |</u> Microsoft Docs

Bicep documentation | Microsoft Docs

Azure Cloud Shell overview | Microsoft Docs

Overview of Azure PowerShell | Microsoft Docs
Resource Explorer (azure.com)
Azure Quickstart Templates (microsoft.com)
Azure/azure-quickstart-templates: Azure Quickstart Templates (github.com)
Deploy Azure infrastructure by using JSON ARM templates Learn | Microsoft Docs
Template structure and syntax - Azure Resource Manager |
Microsoft Docs

https://docs.microsoft.com/en-us/azure/active-directory/hybrid/whatis-azure-ad-connect https://azure.microsoft.com/mediahandler/files/resourcefiles/cloud-identity-and-access-management/Cloud Identity and Access Management infogr

aphic.pdf/

## **Tools**

December 20, 2021 2:22 PM

#### PowerShell

<u>Learn Windows PowerShell in a Month of Lunches: Donald W. Jones, Jeffrey Hicks: 9781617294167: Books-Amazon.ca</u>

https://docs.microsoft.com/en-us/powershell/scripting/learn/ps101/01-getting-started?view=powershell-7.2

CL

Get started with Azure Command-Line Interface (CLI) | Microsoft Docs Pricing - Cloud Shell | Microsoft Azure

Dortal

Manage Azure portal settings and preferences - Azure portal | Microsoft Docs

Templates

Templates overview - Azure Resource Manager | Microsoft Docs |
Introduction to JSON - Microsoft Tech Community |
https://github.com/Azure/azure-quickstart-templates |
azure-quickstart-templates/best-practices.md at master - Azure/azure-quickstart-templates (eithub.com)

<u>Azure Resource Manager overview - Azure Resource Manager | Microsoft Docs</u>

Pricing - Virtual Machine IP Address Options | Microsoft Azure

<u>Develop your naming and tagging strategy for Azure resources - Cloud Adoption Framework | Microsoft Docs</u>

Bicep - not an objective

Get Started With Azure Bicep - Alternative To ARM Templates | Build5Nines Decompile ARM template JSON to Bicep - Azure Resource Manager | Microsoft Docs

# Secure storage

November 12, 2021 1:48 PM

About Blob (object) storage - Azure Storage | Microsoft Docs Introduction to Azure Storage - Cloud storage on Azure | Microsoft Docs Introduction to Blob (object) storage - Azure Storage | Microsoft Docs

- configure network access to storage accounts
  - Use private endpoints Azure Storage | Microsoft Docs
- · create and configure storage accounts
  - o Quickstart: Upload, download, and list blobs Azure portal Azure Storage | Microsoft Docs
  - Quickstart Create a blob with Azure Storage Explorer Azure Storage | Microsoft Docs
  - o Quickstart: Upload, download, and list blobs Azure PowerShell Azure Storage | Microsoft Docs
  - o Create a storage account Azure Storage | Microsoft Docs
- generate shared access signature (SAS) tokens

<u>Grant limited access to data with shared access signatures (SAS) - Azure Storage | Microsoft Docs</u>

- manage access keys
  - Manage account access keys Azure Storage | Microsoft Docs
- configure Azure AD authentication for a storage account
  - o <u>Use the Azure Identity library to get an access token for authorization Azure Storage | Microsoft Docs</u>
- configure access to Azure Files
  - Overview On-premises AD DS authentication to Azure file shares | Microsoft Docs
  - o Managing file locks (FileREST API) Azure Files | Microsoft Docs

Data redundancy - Azure Storage | Microsoft

Azure Storage Blobs Pricing | Microsoft Azure Data lakes - Azure Architecture Center | Microsoft Docs

Azure Data Lake Storage Gen2 Introduction Microsoft Docs SLA for Storage Accounts | Microsoft Azure

Disaster recovery and storage account failover-Azure Storage | Microsoft Docs

Data residency in Azure | Microsoft Azure

Azure Policy Regulatory Compliance controls for Azure Storage | Microsoft Docs Pricing - Bandwidth | Microsoft Azure Azure encryption overview | Microsoft Docs

MD5 hash checks on Azure Blob Storage files (galdin.dev)

Storage account best practices from Build. Refer to slide 24. 3-628.pptx (live.com)

Azure and other Microsoft cloud services compliance offerings - Azure Compliance | Microsoft Docs

Overview of immutable storage for blob data - Azure Storage | Microsoft Docs

# Manage storage

November 17, 2021 9:05 AM

Introduction to Azure Storage - Cloud storage on Azure | Microsoft Docs

<u>Data redundancy - Azure Storage | Microsoft Docs</u> <u>Storage account overview - Azure Storage | Microsoft Docs</u>

Requirements for Azure Import/Export service | Microsoft Docs  $\underline{\sf FAQ} \ \mathsf{for} \ \mathsf{Azure} \ \mathsf{Import/Export} \ \mathsf{service} \ | \ \mathsf{Microsoft} \ \mathsf{Docs}$ 

Overview of immutable storage for blob data - Azure Storage | Microsoft Docs

- export from Azure job
  - o <u>Using Azure Import/Export to transfer data to and from Azure Storage | Microsoft Docs</u>
  - o Tutorial to export data from Azure Blob storage with Azure Import/Export | Microsoft Docs
- · import into Azure job
  - o <u>Tutorial to import data to Azure Blob Storage with Azure Import/Export service | Microsoft</u> Docs
  - o Tutorial to import data to Azure Blob Storage with Azure Import/Export service | Microsoft Docs
- install and use Azure Storage Explorer
  - o Get started with Storage Explorer | Microsoft Docs

- implement Azure Storage replication

Change how a storage account is replicated - Azure Storage | Microsoft Docs

- configure blob object replication
  - o Configure object replication Azure Storage | Microsoft Docs

Criteria for data store choice - Azure Application Architecture Guide | Microsoft Docs

Azure Storage Blobs Pricing | Microsoft Azure

Configure Azure Storage firewalls and virtual networks | Microsoft Docs

SLA for Storage Accounts | Microsoft Azure



Use Azure AD Domain Services to authorize access to file data over SMB | Microsoft Docs

# Configure Azure files and Azure Blob Storage

November 17, 2021 9:05 AM

Introduction to Azure Files | Microsoft Docs
Planning for an Azure Files deployment | Microsoft Docs
SMB file shares in Azure Files | Microsoft Docs
NFS file shares in Azure Files | Microsoft Docs

- create an Azure file share
  - o Create and use an Azure file shares on Windows VMs | Microsoft Docs
  - O Quickstart for managing Azure file shares | Microsoft Docs
- create and configure Azure File Sync service
   <u>Deploy Azure File Sync | Microsoft Docs</u>
- configure Azure Blob Storage
- configure storage tiers
  - o Hot, Cool, and Archive access tiers for blob data Azure Storage | Microsoft Docs
  - o <u>Blob rehydration from the Archive tier | Microsoft Docs</u>
- configure lifecycle management

Optimize costs by automatically managing the data lifecycle - Azure Storage | Microsoft Docs

Choose an Azure solution for data transfer | Microsoft Docs

<u>Tutorial - Extend Windows file servers with Azure File Sync | Microsoft Docs</u>

<u>Frequently asked questions (FAQ) for Azure Files | Microsoft Docs</u>

# Automate deployment of virtual machines

November 12, 2021 1:48 PM

<u>Templates overview - Azure Resource Manager | Microsoft Docs</u>

<u>Best practices for templates - Azure Resource Manager | Microsoft Docs</u>

<u>ARM template frequently asked questions | Microsoft Docs</u>

- modify an Azure Resource Manager template
  - Template structure and syntax Azure Resource Manager | Microsoft Docs
  - o Create and deploy Azure Resource Manager templates Learn | Microsoft Docs
- ② configure a virtual hard disk (VHD) template

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• 2 deploy from a template

Deploy template - Azure portal - Azure Resource Manager | Microsoft Docs

Tutorial - Deploy a local Azure Resource Manager template - Azure Resource Manager | Microsoft Docs

Tutorial - Deploy a linked template - Azure Resource Manager | Microsoft Docs

Deployment modes - Azure Resource Manager | Microsoft Docs

• 🛽 save a deployment as an Azure Resource Manager template

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- ② deploy virtual machine extensions
  - o Deploy VM extensions with template Azure Resource Manager | Microsoft Docs
  - https://docs.microsoft.com/en-us/azure/virtual-machines/extensions/features-windows?toc=%
     2Fazure%2Fvirtual-machines%2Fwindows%2Ftoc.json
  - o https://docs.microsoft.com/en-us/azure/virtual-machines/extensions/dsc-overview

## Configure VMs

vember 17, 2021 9:06 AM

https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/ready/azure-bestpractices/resource-naming

#### · configure Azure Disk Encryption

- Overview of managed disk encryption options Azure Virtual Machines | Microsoft Docs
   Server-side encryption of Azure managed disks Azure Virtual Machines | Microsoft Docs
- Enable Azure Disk Encryption for Windows VMs Azure Virtual Machines | Microsoft Docs
   Enable Azure Disk Encryption for Linux VMs Azure Virtual Machines | Microsoft Docs

#### move VMs from one resource group to another

o Move Azure VMs to new subscription or resource group - Azure Resource Manager | Microsoft Docs

#### · manage VM sizes

VM sizes - Azure Virtual Machines | Microsoft Docs

#### add data disks

- o Attach a managed data disk to a Windows VM Azure Azure Virtual Machines | Microsoft Docs
- o Attach a data disk to a Windows VM in Azure by using PowerShell Azure Virtual Machines | Microsoft
- o Azure Disk Storage overview Azure Virtual Machines | Microsoft Docs

 configure networking
 <u>Virtual networks and virtual machines in Azure | Microsoft Docs</u> Add network interfaces to or remove from Azure VMs | Microsoft Docs

#### · redeploy VMs

- Redeploy Windows virtual machines in Azure Virtual Machines | Microsoft Docs
   Redeploy Linux Virtual Machines in Azure Virtual Machines | Microsoft Docs

#### · configure high availability

- Availability options for Azure Virtual Machines Azure Virtual Machines | Microsoft Docs
- Azure regions and availability zones | Microsoft Docs
   Proximity placement groups Azure Virtual Machines | Microsoft Docs
- Azure regions Azure Virtual Machines | Microsoft Docs Understand VM reboots Azure Virtual Machines | Microsoft Docs
- Availability sets overview Azure Virtual Machines | Microsoft Docs
   Describe core Azure services | Microsoft Press Store

#### deploy and configure virtual machine scale sets

- Azure virtual machine scale sets overview Azure Virtual Machine Scale Sets | Microsoft Docs
- O Quickstart Create a virtual machine scale set in the Azure portal Azure Virtual Machine Scale Sets | Microsoft Docs
- o Quickstart Create a virtual machine scale set with Azure PowerShell Azure Virtual Machine Scale Sets | Microsoft Docs
- Availability options for Azure Virtual Machines Azure Virtual Machines | Microsoft Docs
- Azure virtual machine scale sets FAQs Azure Virtual Machine Scale Sets | Microsoft Docs

Overview of the Azure Compute Unit - Azure Virtual

Microsoft Azure VM Selector

Azure Bastion | Microsoft Docs

Manage updates and patches for your VMs in Azure Automation | Microsoft Docs

Scaling out vs scaling up | Microsoft Azure

SLA for Virtual Machine Scale Sets | Microsoft Azure SLA for Virtual Machines | Microsoft Azure

Overview of Azure Blueprints - Azure Blueprints | Microsoft Docs

https://azure.microsoft.com/en-us/overview/what-is-

https://docs.microsoft.com/en-us/azure/cloudadoption-framework/migrate/azure-bestpractices/multiple-regions

https://azure.microsoft.com/en-us/pricing/vm-

https://docs.microsoft.com/en-us/azure/virtual-machines/linux/endorsed-distros#supporteddistributions-versions

https://docs.microsoft.com/enus/learn/modules/azure-well-architected-reliability/

https://k21academy.com/microsoft-azure/az-303/azure-availability-zones-and-regions/

what is the difference between managed disk and unmanaged disk? - Microsoft Q&A Overview of Azure Dedicated Hosts for virtual machines - Azure Virtual Machines | Mi

# Create and configure containers

November 17, 2021 9:06 AM

Serverless containers in Azure - Azure Container Instances | Microsoft Docs Azure Kubernetes Service (AKS) design - Azure Architecture Center | Microsoft Docs Introduction to Azure Kubernetes Service - Azure Kubernetes Service | Microsoft Docs Azure Kubernetes Service (AKS) documentation | Microsoft Docs Azure Serverless | Microsoft Azure Containers vs. virtual machines | Microsoft Docs

configure sizing and scaling for Azure Container Instances

- o Quickstart Deploy Docker container to container instance Portal Azure Container Instances | Microsoft Docs
- Quickstart Deploy Docker container to container instance PowerShell Azure Container Instances |
   Microsoft Docs
- configure container groups for Azure Container Instances
  - Tutorial Deploy multi-container group template Azure Container Instances | Microsoft Docs
- configure storage for Azure Kubernetes Service (AKS)
  - o Concepts Storage in Azure Kubernetes Services (AKS) Azure Kubernetes Service | Microsoft Docs
- configure scaling for AKS
  - o Kubernetes on Azure tutorial Scale Application Azure Kubernetes Service | Microsoft Docs
- configure network connections for AKS
  - o Concepts Networking in Azure Kubernetes Services (AKS) Azure Kubernetes Service | Microsoft Docs
- · upgrade an AKS cluster
  - o Kubernetes on Azure tutorial Upgrade a cluster Azure Kubernetes Service | Microsoft Docs

<u>Choose an Azure compute service - Azure Architecture Center | Microsoft Docs</u>

Azure Serverless | Microsoft Azure

When to deploy Windows Containers to Azure VMs (laaS cloud) | Microsoft Docs

Mount Azure Files volume to container group - Azure Container Instances | Microsoft Docs

# Create and configure Azure App Service

November 17, 2021 9:06 AM

Overview - Azure App Service | Microsoft Docs App Service Environment overview - Azure App Service Environment | Microsoft Docs Deployment best practices - Azure App Service | Microsoft Docs App Service Pricing | Microsoft Azure

### • create an App Service plan

- o Manage App Service plan Azure App Service | Microsoft Docs
- o <u>App Service plans Azure App Service | Microsoft Docs</u>

configure scaling settings in an App Service plan
 <u>Scale up features and capacities - Azure App Service | Microsoft Docs</u>

Get started with autoscale in Azure - Azure Monitor | Microsoft Docs

#### • create an App Service

- o Configure apps in the portal Azure App Service | Microsoft Docs
- o Configure deployment credentials Azure App Service | Microsoft Docs

# • secure an App Service

- o Add and manage TLS/SSL certificates Azure App Service | Microsoft Docs
- o Azure App Service access restrictions Azure App Service | Microsoft Docs
- o <u>Use Key Vault references Azure App Service | Microsoft Docs</u>
- o Security Azure App Service | Microsoft Docs

### • configure custom domain names

- o <u>Tutorial: Map existing custom DNS name Azure App Service | Microsoft Docs</u>
- configure backup for an App Service
  - o Back up an app Azure App Service | Microsoft Docs

## • configure networking settings

o Enable integration with an Azure virtual network - Azure App Service | Microsoft Docs

### • configure deployment settings

- o <u>Set up staging environments Azure App Service | Microsoft Docs</u>

Azure - Inside the Azure App Service Architecture | Microsoft Docs

Azure DevOps - Status

## Implement and manage virtual networking

November 12, 2021 1:49 PM

Azure Networking architecture documentation | Microsoft Docs Azure Virtual Network - Concepts and best practices | Microsoft Docs Azure Virtual Network FAQ | Microsoft Docs

- create and configure virtual networks, including peering

   Ouickstart: Create a virtual network Azure portal Azure Virtual Network | Microsoft Docs
   Virtual network peering and VPN gateways Azure Reference Architectures | Microsoft Docs

  - Azure Virtual Network peering | Microsoft Docs
     https://www.bing.com/videos/search?q=azure+vnet+peering&view=detail&mid=4445TEABFFEFACS8DB2D44457EABFFEFACS8DB2D&FORM=VIRE
  - o Create an Azure virtual network peering different deployment models -different subscriptions | Microsoft Docs

### configure private and public IP addresses

- Configure IP addresses for an Azure network interface | Microsoft Docs
   Upgrade a public IP address Azure portal | Microsoft Docs
   Configure routing preference for a public IP address Azure portal | Microsoft Docs

- Azure virtual network traffic routing | Microsoft Docs
   Azure virtual network traffic routing | Microsoft Docs

#### implement subnets

o Add, change, or delete an Azure virtual network subnet | Microsoft Docs

#### · configure endpoints on subnets

- Azure virtual network service endpoints | Microsoft Docs
   Azure virtual network service endpoint policies | Microsoft Docs Azure service tags overview | Microsoft Docs

#### · configure private endpoints

What is an Azure Private Endpoint? | Microsoft Docs

# configure Azure DNS, including custom DNS settings and private or public DNS zones <u>What is Azure DNS? | Microsoft Docs</u> <u>What is Azure Private DNS? | Microsoft Docs</u>

- o Add your custom domain Azure Active Directory | Microsoft Docs

Azure Latency Test - Azure Speed Test Azure Global Infrastructure (microsoft.com)

azure-demo-environment/deployments at main · joshuawaddell/azure-demo-environment (github.com)

Exam AZ-700: Designing and Implementing Microsoft Azure Networking Solutions - Learn | Microsoft Docs

#### Private link

What is Azure Private Link? | Microsoft Docs
Quickstart - Create a Private Endpoint using the Azure portal | Microsoft Docs

 $\underline{https://docs.microsoft.com/en-us/azure/expressroute/expressroute-howto-coexist-resource-manager}$ 

# Secure access to virtual networks

November 16, 2021 9:08 AM

Azure Security: Firewall vs NSG - TechNet Articles - United States (English) - TechNet Wiki (microsoft.com)

OWASP Foundation | Open Source Foundation for Application Security

Azure security baseline for Azure DNS | Microsoft Docs
Azure security baseline for Virtual Network | Microsoft Docs
Hybrid connection with 2-tier application | Microsoft Docs
Implement a secure hybrid network - Azure Architecture Center | Microsoft Docs

#### · create security rules

https://docs.microsoft.com/en-us/azure/firewall/featuresCreate, change, or delete an Azure network security group | Microsoft Docs

- associate a network security group (NSG) to a subnet or network interface
  - o <u>Azure network security groups overview</u> | Microsoft Docs
  - o Network security group how it works | Microsoft Docs
  - Azure application security groups overview | Microsoft Docs

#### • evaluate effective security rules

Introduction to Effective security rules view in Azure Network Watcher | Microsoft Docs

• implement Azure Firewall \*\*\*\*\* Please note: This is an expensive service to run. Watch your Azure

# credits/spend\*\*\*\*\*\*

- o What is Azure Firewall? | Microsoft Docs
- o <u>Tutorial: Deploy & configure Azure Firewall and policy using the Azure portal | Microsoft Docs</u>
- o Next-generation firewall capabilities with Azure Firewall Premium | Azure Blog and Updates | Microsoft Azure
- o Azure Firewall Premium features | Microsoft Docs Azure Firewall Standard features | Microsoft Docs
- o Understanding just-in-time virtual machine access in Microsoft Defender for Cloud | Microsoft Docs
- implement Azure Bastion
  - o <u>Azure Bastion | Microsoft Docs</u>
  - o Quickstart: Configure Bastion from VM settings Azure Bastion | Microsoft Docs
  - o <u>Tutorial: Create an Azure Bastion host: Windows VM: portal | Microsoft Docs</u>
  - Azure Bastion FAQ | Microsoft Docs

# Configure load balancing

November 16, 2021 9:09 AM

## • configure Azure Application Gateway

- What is Azure Application Gateway | Microsoft Docs
   Quickstart: Direct web traffic using the portal Azure Application Gateway | Microsoft Docs
- o <u>Tutorial: URL path-based routing rules using portal Azure Application Gateway | Microsoft Docs</u>

### • configure an internal or public load balancer

- What is Azure Load Balancer? Azure Load Balancer | Microsoft Docs
   Quickstart: Create a public load balancer Azure portal Azure Load Balancer | Microsoft Docs
   Quickstart: Create an internal load balancer Azure portal Azure Load Balancer | Microsoft Docs
- o <u>Azure Load Balancer SKUs | Microsoft Docs</u>
- o Azure Load Balancer concepts | Microsoft Docs
- o Health probes to scale and provide HA for your service Azure Load Balancer | Microsoft Docs

### • troubleshoot load balancing

o <u>Troubleshoot common issues Azure Load Balancer | Microsoft Docs</u>

#### Routes

Route network traffic - tutorial - Azure portal | Microsoft Docs

Prevent Denial of Inventory Attacks - Cequence Security

## Azure Front Door

Azure Front Door | Microsoft Docs

https://www.ntweekly.com/2021/06/27/list-all-azure-regions-using-powershell/

# Monitor and troubleshoot virtual networking

November 16, 2021 9:09 AM

- monitor on-premises connectivity
  - o Connection Monitor in Azure | Microsoft Docs
- configure and use Azure Monitor for Networks
  - Azure Monitor | Microsoft Docs
- use Azure Network Watcher
  - o Introduction to IP flow verify in Azure Network Watcher | Microsoft Docs
  - Introduction to Network Configuration Diagnostics in Azure Network Watcher | Microsoft Docs
  - o Introduction to next hop in Azure Network Watcher | Microsoft Docs
  - Introduction to Azure Network Watcher Connection Troubleshoot | Microsoft Docs
  - o Introduction to resource troubleshooting Azure Network Watcher | Microsoft Docs
  - Tutorial: Diagnose a VM network routing problem Azure portal Azure Network Watcher | Microsoft Docs
- · troubleshoot external networking
- troubleshoot virtual network connectivity

# Integrate an on-premises network with an Azure virtual network

November 16, 2021 9:10 AM

### • create and configure Azure VPN Gateway

- Azure VPN Gateway topologies and design | Microsoft Docs.
   Tutorial Create and manage a VPN gateway: Azure portal Azure VPN Gateway | Microsoft
- o <u>Tutorial Connect on-premises network to virtual network: Azure portal Azure VPN</u> Gateway | Microsoft Docs

  Azure VPN Gateway FAQ | Microsoft Docs
- o About BGP with VPN Gateway Azure VPN Gateway | Microsoft Docs
- About VPN devices for connections Azure VPN Gateway | Microsoft Docs
- Tutorial Connect on-premises network to virtual network: Azure portal Azure VPN Gateway | Microsoft Docs
- About VPN devices for connections Azure VPN Gateway | Microsoft Docs
  - o About Highly Available gateway configurations Azure VPN Gateway | Microsoft Docs

### • create and configure Azure ExpressRoute

- Azure ExpressRoute Overview: Connect over a private connection | Microsoft Docs
- Quickstart: Create and modify a circuit with ExpressRoute Azure portal | Microsoft Docs
- FAQ Azure ExpressRoute | Microsoft Docs
- o Configure ExpressRoute and S2S VPN coexisting connections: Azure PowerShell | Microsoft

### • configure Azure Virtual WAN

- Azure Virtual WAN Overview | Microsoft Docs
- O Azure Virtual WAN FAQ | Microsoft Docs

Azure Latency Test - Azure Speed Test Implement a secure hybrid network - Azure Architecture Center | Microsoft Docs

# Monitor resources by using Azure Monitor

November 12, 2021 1:49 PM

Azure Monitor overview - Azure Monitor | Microsoft Docs
What is monitored by Azure Monitor - Azure Monitor | Microsoft Docs
Azure Monitor FAQ - Azure Monitor | Microsoft Docs
Azure Activity log - Azure Monitor | Microsoft Docs
Overview of Log Analytics in Azure Monitor - Azure Monitor | Microsoft Docs

#### • configure and interpret metrics

o Tutorial - Analyze metrics for an Azure resource - Azure Monitor | Microsoft Docs

#### · configure Azure Monitor logs

o <u>Tutorial - Collect resource logs from an Azure resource - Azure Monitor | Microsoft Docs</u>

#### · query and analyze logs

- o <u>Tutorial Create a log query alert for an Azure resource Azure Monitor | Microsoft Docs</u>
- o Samples for Kusto Queries Azure Data Explorer | Microsoft Docs

### set up alerts and actions

- o Tutorial Create a metric alert for an Azure resource Azure Monitor | Microsoft Docs
- Azure Monitor best practices Alerts and automated actions Azure Monitor | Microsoft Docs

### • configure Application Insights

o What is Azure Application Insights? - Azure Monitor | Microsoft Docs

<u>Kusto Query overview- Azure Data Explorer |</u> <u>Microsoft Docs</u>

What is Microsoft Sentinel? | Microsoft Docs

Exam SC-200: Microsoft Security Operations Analyst - Learn | Microsoft Docs

Azure Network Watcher | Microsoft Docs

<u>Create diagnostic settings to send Azure Monitor</u> <u>platform metrics and logs to different destinations -</u> Azure Monitor | Microsoft Docs

Azure Activity log - Azure Monitor | Microsoft Docs

Introduction to IP flow verify in Azure Network Watcher | Microsoft DocsMicrosoft Defender for Cloud - an introduction | Microsoft Docs View Azure virtual network topology | Microsoft Docs

Monitoring Azure Blob Storage | Microsoft Docs

Sources of data in Azure Monitor - Azure Monitor | Microsoft Docs

Azure Monitor Workbooks Overview - Azure Monitor | Microsoft Docs

https://azure.microsoft.com/en-us/pricing/details/network-watcher/

https://docs.microsoft.com/en-us/azure/azure-monitor/policy-reference

## Implement backup and recovery

November 17, 2021 4:30 PM

What is Azure Backup? - Azure Backup | Microsoft Docs <u>Pricing - Cloud Backup | Microsoft Azure</u> Architecture Overview - Azure Backup | Microsoft Docs Guidance and best practices - Azure Backup | Microsoft Docs Azure Backup support matrix - Azure Backup | Microsoft Docs

About Azure Site Recovery - Azure Site Recovery | Microsoft Docs General questions about the Azure Site Recovery service | Microsoft Docs

About Azure VM backup - Azure Backup | Microsoft Docs

#### · create a Recovery Services vault

- Overview of Recovery Services vaults Azure Backup | Microsoft Docs
- o Create and configure Recovery Services vaults Azure Backup | Microsoft Docs

#### · create a Backup vault

- Overview of Backup vaults Azure Backup | Microsoft Docs
   Soft delete for Azure Backup Azure Backup | Microsoft Docs

#### create and configure backup policy

Auto-Enable Backup on VM Creation using Azure Policy - Azure Backup | Microsoft Docs Tutorial - Back up multiple Azure virtual machines - Azure Backup | Microsoft Docs

#### · perform backup and restore operations by using Azure Backup

- Tutorial Restore a VM with Azure CLI Azure Backup | Microsoft Docs
- o <u>Tutorial Restore files to a VM with Azure Backup Azure Backup | Microsoft Docs</u>

### perform site-to-site recovery by using Azure Site Recovery

- Set up Azure VM disaster recovery to a secondary region with Azure Site Recovery Azure Site Recovery | Microsoft Docs
- o About recovery plans in Azure Site Recovery Azure Site Recovery | Microsoft Docs
- Set up failover/failback to a secondary Hyper-V site with Azure Site Recovery Azure Site Recovery | Microsoft Docs
- Monitor Azure Site Recovery Azure Site Recovery | Microsoft Docs
   https://docs.microsoft.com/en-us/azure/site-recovery/site-recovery-create-recovery-plans

### configure and review backup reports

- Configure Azure Backup reports Azure Backup | Microsoft Docs
- o <u>Use diagnostics settings for Recovery Services vaults Azure Backup | Microsoft Docs</u>

https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/azure-subscriptionservice-limits#site-recovery-limits

 $\underline{https://stackoverflow.com/questions/36497468/trigger-a-sql-server-job-from-another-job}$ 

https://support.microsoft.com/en-us/windows/file-history-in-windows-5de0e203-ebae-05ab-db85d5aa0a199255

About Azure file share backup - Azure Backup | Microsoft Docs

About Azure VM backup - Azure Backup | Microsoft Docs

Back up Windows machines by using the MARS agent - Azure Backup | Microsoft Docs

Create an Azure snapshot of a virtual hard disk -Azure Virtual Machines | Microsoft Docs

Manage recovery points - Azure Backup | Microsoft Docs

Back up and restore encrypted Azure VMs -Azure Backup | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azuresql/database/automated-backups-overview?

https://cloudblogs.microsoft.com/sqlserver/20 20/03/24/azure-sql-database-managedinstance-vs-sql-server/#:~:text=%20Azure% 20SQL%20Database%20managed%20instance% 20vs.%20SQL,Azure%20Virtual%20Network% 20%28VNET%29%20on%20a...%20More%20

https://docs.microsoft.com/en-us/azure/azure-

# Additional Resources

January 21, 2022 1:25 PM

 $\underline{https://support.microsoft.com/en-us/windows/file-history-in-windows-5de0e203-ebae-05ab-db85-d5aa0a19925\underline{5}$ 

 $\frac{\text{https://techcommunity.microsoft.com/t5/azure-monitor/help-with-disk-query-in-log-analytics/m-p/160239}$ 

https://stackoverflow.com/questions/42853392/monitor-free-disk-space-on-azure-vm

Monitor your servers available disk space using Azure Log Analytics - Pixel Robots.

# Create a Vnet & Subnet

January 19, 2022 5:03 PM

#Create a Resource Group

New-AzResourceGroup -Name RG01 -Location "EastUS"

#create the network

\$myVNet2 = New-AzVirtualNetwork -ResourceGroupName RG01 -Location EastUS -Name myVNet2 - AddressPrefix 10.0.0.0/16

#view network

Get-AzVirtualNetwork -Name myVNet2

#Create subnet

\$mySubnet2 = Add-AzVirtualNetworkSubnetConfig -Name mySubnet2 -AddressPrefix 10.0.0.0/24 - VirtualNetwork \$myVNet2

**#View Subnet** 

Get-AzVirtualNetworkSubnetConfig -Name mySubnet2 -VirtualNetwork \$myVNet2

#Associate subnet

\$myvnet2 | Set-AzVirtualNetwork

#Delete Resource Group

Remove-AZResourceGroup -Name RG01 -Force

# Create a Basic default VM

January 19, 2022 5:05 PM

# #Create a Basic default VM

#Variables

\$ResourceGroup = "AZ104\_Jan20" \$location = "CanadaCentral"

\$VMName = "vm1"

#Create a Resource Group

New-AzResourceGroup -Name \$ResourceGroup -Location \$location

# #Create a VM

New-AzVm `

- -ResourceGroupName \$ResourceGroup`
- -Name \$VMName `
- -Location \$location`
- -VirtualNetworkName "myVnet" `
- -SubnetName "mySubnet" `
- -SecurityGroupName "myNetworkSecurityGroup" `
- -PublicIpAddressName "myPublicIpAddress"

#Delete the Resource Group

Remove-AZResourceGroup -Name \$ResourceGroup -Force

# Create a storage account

January 20, 2022 2:30 PM

# #Create a storage account

#Variables
\$resourceGroup = "AZ104\_Jan20"
\$location = "CanadaCentral"

# #Create a RG

New-AzResourceGroup -Name \$resourceGroup -Location \$location

# #Create the storage account

New-AzStorageAccount -ResourceGroupName \$resourceGroup`

- -Name az104sbennettlsa`
- -Location \$location`
- -SkuName Standard\_RAGRS `
- -Kind StorageV2

# #Remove RG

Remove-AZResourceGroup -Name \$resourceGroup -Force

# Create a New Group & User

January 23, 2022 3:24 PM

#Create a Group
New-AzADGroup -DisplayName Developers -MailNickname Devs

#Get the Group ID Get-AzADGroup

#Get the User ID Get-AzADUser

#Add the user to the group

Add-AzADG roup Member-Member User Principal Name "email@domain.com" - Target Group Display Name "MyGroup Display Name" - Target Group Display Name - Target Group -

Add-AzADG roup Member-Member User Principal Name "lucy@az500sbl.onmicrosoft.com" - Target Group Display Name "Devs" - Target Group Display Name - Target Group - Target Group Display Name - Target Group - Tar

#Verify the members

Get-AzADGroupMember -GroupDisplayName "MyGroupDisplayName"