Start Here

Welcome to the new AZ-104 Study Guide.

You will find a sub-section for each domain of the exam along the top. Each subsection is then broken down into smaller sections which follow the exam layout.

You will find links to LinkedIn videos and Microsoft docs.

Please note not all objectives will have a link.

OneNote will not automatically update therefore it is your responsibility to keep on top of changes. I will be updating this Notebook as I release new courses and videos.

We can work together to all achieve the AZ-104 certification.

Please feel free to modify this guide to best suit your needs, including adding notes and links to other resources.

These are my study notes and is not associated with Microsoft or LinkedIn.

Your Learning Plan!

- [ ] Book your exam, yes, do this first!
- [ ] Mark the exam in your calendar.
- [ ] Build your learning plan starting at the exam and working back to when you are going to start studying. This can be done in Excel, OneNote, Project, a To-List, calendar app or even, paper and pen.
- [ ] Buy yourself a reward for example a book, new video game, gift card for a fancy dinner, etc.
- [ ] Give the reward to some else to hold onto until you pass the exam.
- [ ] Book study time, make is an calendar item. Be greedy with this time. It's your path to your future.

Create your learning plan starting from the scheduled exam date and work back to when you plan on starting your studying…today would be good!

Always be sure to review the objectives on a regularly as the objectives will change over time.
https://docs.microsoft.com/en-us/learn/certifications/exams/az-104

Objectives

Wednesday, February 05, 2020   12:19 PM

- [ ] [Configure network access to storage accounts]
- [ ] [Create and configure storage accounts]
- [ ] [Generate shared access signature]
- [ ] [Manage access keys]
- [ ] [Implement Azure storage replication]
- [ ] [Configure Azure AD Authentication for a storage account]

Notes:

Configure network access to storage accounts

Wednesday, February 05, 2020   12:26 PM

Configure Azure Storage firewalls and virtual networks | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-network-security

Create and configure a storage account

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/create-and-configure-a-storage-account

Create and configure a storage account using PowerShell

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/create-and-configure-a-storage-account-using-powershell

Configure Azure Storage firewalls and virtual networks | Microsoft Docs

Wednesday, February 5, 2020   12:36 PM

Configure Azure Storage firewalls and virtual networks | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-network-security

Configure Azure Storage firewalls and virtual networks | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-network-security

Generate shared access signature

Wednesday, February 05, 2020   12:26 PM

Manage shared access signature

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/manage-shared-access-signature

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

https://docs.microsoft.com/en-us/azure/storage/common/storage-sas-overview#types-of-shared-access-signatures

Manage access keys

Manage storage access keys

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/manage-storage-access-keys

Manage account access keys - Azure Storage | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-account-keys-manage

Implement Azure storage replication

Implement Azure Storage replication

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/implement-azure-storage-replication

Data redundancy in Azure Storage | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy

Configure Azure AD Authentication for a storage account

Wednesday, February 05, 2020   12:26 PM

Authorize access to blobs and queues using Active Directory - Azure Storage | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-auth-aad

Objectives

- ☐ [Export from Azure job](#)
- ☐ [Import into Azure job](#)
- ☐ [Install and use Azure Storage Explorer](#)
- ☐ [Copy data by using AZCopy](#)

Notes:

Export from Azure job

Wednesday, February 05, 2020   12:43 PM

Create an export job into Azure

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/create-an-export-job-into-azure

Using Azure Import/Export to transfer data to and from Azure Storage | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-import-export-service?toc=%2fazure%2fstorage%2fblobs%2ftoc.json

Using Azure Import/Export to export data from Azure Blobs | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-import-export-data-from-blobs?toc=%2fazure%2fstorage%2fblobs%2ftoc.json

Import into Azure job

Create an import job from Azure

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/create-an-import-job-from-azure

Using Azure Import/Export to transfer data to Azure Blobs | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-import-export-data-to-blobs?toc=%2fazure%2fstorage%2fblobs%2ftoc.json

Using Azure Import/Export to transfer data to Azure Files | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-import-export-data-to-files?toc=%2fazure%2fstorage%2fblobs%2ftoc.json

Install and use Azure Storage Explorer

Wednesday, February 05, 2020   12:43 PM

Install and use Azure Storage Explorer

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/install-and-use-azure-storage-explorer

Get started with Storage Explorer | Microsoft Docs

https://docs.microsoft.com/en-us/azure/vs-azure-tools-storage-manage-with-storage-explorer?tabs=windows

Copy data by using AZCopy

Wednesday, February 05, 2020   12:43 PM

The new AzCopy

https://www.linkedin.com/learning/azure-weekly-insights/the-new-azcopy

Copy files with AzCopy

https://www.linkedin.com/learning/azure-for-architects-design-a-storage-strategy/copy-files-with-azcopy

Copy or move data to Azure Storage by using AzCopy v10 | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/common/storage-use-azcopy-v10

Objectives

Wednesday, February 05, 2020   12:43 PM

- [ ] [Create an Azure file share](#)
- [ ] [Create and configure Azure File Sync service](#)
- [ ] [Configure Azure blob storage](#)
- [ ] [Configure storage tiers for Azure blobs](#)

Notes:

Create an Azure file share

Wednesday, February 05, 2020   12:44 PM

Azure File Sync overview

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/azure-file-sync-overview

Create an Azure file share using the portal

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/create-an-azure-file-share-using-the-portal

Create an Azure file share using PowerShell

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/create-an-azure-file-share-using-powershell

Create an Azure file share - Azure Files | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/files/storage-how-to-create-file-share

Create and configure Azure File Sync service

Create an Azure File Sync service and sync group

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/create-an-azure-file-sync-service-and-sync-group

Deploy Azure File Sync | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-files-deployment-guide?tabs=azure-portal

Configure Azure blob storage

Wednesday, February 05, 2020   12:44 PM

Configure and use Azure Blob Storage using the portal

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/configure-and-use-azure-blob-storage-using-the-portal

Configure and use Azure Blob Storage using PowerShell

https://www.linkedin.com/learning/azure-administration-implement-and-manage-storage/configure-and-use-azure-blob-storage-using-powershell

Create a block blob storage account - Azure Storage | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-create-account-block-blob?tabs=azure-portal

Configure storage tiers for Azure blobs

Hot, cool, and archive access tiers for blobs - Azure Storage | Microsoft Docs

https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers?tabs=azure-portal

Objectives

Thursday, March 12, 2020   10:22 AM

- [ ] Create users and groups
- [ ] Manage User and Group Properties
- [ ] Manage Device Settings
- [ ] Perform Bulk User Updates
- [ ] Configure Azure AD Join
- [ ] Configure Self-service Password Reset

Create users and groups

- Create users and groups

  https://www.linkedin.com/learning/office-365-manage-identities-using-azure-ad-connect/create-users-and-groups

- Create and manage users

  https://www.linkedin.com/learning/azure-administration-manage-identities/create-and-manage-users

- Create users and groups using PowerShell

  https://www.linkedin.com/learning/azure-administration-manage-identities/create-users-and-groups-using-powershell

- Add or delete users - Azure Active Directory | Microsoft Docs

  https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/add-users-azure-active-directory

- Creating a new user in Azure AD | Microsoft Docs

  https://docs.microsoft.com/en-us/powershell/azure/active-directory/new-user-sample?view=azureadps-2.0

  - https://docs.microsoft.com/en-us/powershell/module/azuread/new-azureadgroup?view=azureadps-2.0

Manage User and Group Properties

Thursday, March 12, 2020   11:04 AM

- Managing users in Azure AD

https://www.linkedin.com/learning/azure-administration-essential-training/managing-users-in-azure-ad

- Managing groups in Azure AD

https://www.linkedin.com/learning/azure-administration-essential-training/managing-groups-in-azure-ad

- Manage guest accounts

https://www.linkedin.com/learning/azure-administration-manage-identities/manage-guest-accounts

- Users, groups, licensing, and roles overview - Azure AD | Microsoft Docs

https://docs.microsoft.com/en-us/azure/active-directory/users-groups-roles/directory-overview-user-model

Manage Device Settings

Thursday, March 12, 2020   11:05 AM

- Managing devices in Azure AD

https://www.linkedin.com/learning/azure-administration-essential-training/managing-devices-in-azure-ad

Configure device settings

https://www.linkedin.com/learning/azure-administration-manage-identities/configure-device-settings

- How to manage devices using the Azure portal | Microsoft Docs

https://docs.microsoft.com/en-us/azure/active-directory/devices/device-management-azure-portal

Perform Bulk User Updates

Thursday, March 12, 2020   11:05 AM

- Import bulk users

https://www.linkedin.com/learning/azure-administration-manage-identities/import-bulk-users

- Bulk create users (preview) in the Azure Active Directory portal | Microsoft Docs

https://docs.microsoft.com/en-us/azure/active-directory/users-groups-roles/users-bulk-add

- Bulk remove group members by uploading a csv file - Azure Active Directory | Microsoft Docs

https://docs.microsoft.com/en-us/azure/active-directory/users-groups-roles/groups-bulk-remove-members

Configure Azure AD Join

Thursday, March 12, 2020   11:05 AM

- Joining a device to Azure AD

https://www.linkedin.com/learning/azure-administration-essential-training/joining-a-device-to-azure-ad

Azure AD Join overview

https://www.linkedin.com/learning/azure-administration-manage-identities/azure-ad-join-overview

- Join your work device to your organization's network - AD | Microsoft Docs

https://docs.microsoft.com/en-us/azure/active-directory/user-help/user-help-join-device-on-network

- How to plan your Azure Active Directory join implementation | Microsoft Docs

https://docs.microsoft.com/en-us/azure/active-directory/devices/azureadjoin-plan

Configure Self-service Password Reset

Thursday, March 12, 2020   11:06 AM

- Configure self-service password reset

https://www.linkedin.com/learning/azure-administration-manage-identities/configure-self-service-password-reset

- Enable self-service password reset

https://www.linkedin.com/learning/microsoft-cybersecurity-stack-identity-and-endpoint-protection-basics/enable-self-service-password-reset

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- Enable Azure Active Directory self-service password reset | Microsoft Docs

https://docs.microsoft.com/en-us/azure/active-directory/authentication/tutorial-enable-sspr

- Self-service password reset deployment - Azure Active Directory | Microsoft Docs

https://docs.microsoft.com/en-us/azure/active-directory/authentication/howto-sspr-deployment

Objectives

Thursday, March 12, 2020   10:22 AM

- [ ] Create a custom role
- [ ] Provide access to Azure resources by assigning roles
  - [ ] Subscriptions
  - [ ] Resource Groups
  - [ ] Resources
- [ ] Interpret access assignments
- [ ] Manage multiple directories

Create a custom role

Thursday, March 12, 2020   11:09 AM

- Create custom Azure RBAC roles

  https://www.linkedin.com/learning/azure-for-developers-security-best-practices/create-custom-azure-rbac-roles

- Create a custom role

  https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/create-a-custom-role

- Design Azure RBAC custom roles

  https://www.linkedin.com/learning/microsoft-azure-secure-resources/design-azure-rbac-custom-roles

- Custom roles for Azure resources | Microsoft Docs

  https://docs.microsoft.com/en-us/azure/role-based-access-control/custom-roles

Provide access to Azure resources by assigning roles

Thursday, March 12, 2020   11:09 AM

- Assign administrator roles overview

  https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/assign-administrator-roles-overview

- Assign administrator accounts

  https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/assign-administrator-accounts

- Azure Policy overview

  https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/azure-policy-overview

- Configure subscription policies

  https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/configure-subscription-policies

- Create an additional Azure subscription | Microsoft Docs

  https://docs.microsoft.com/en-us/azure/cost-management-billing/manage/create-subscription

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

  https://docs.microsoft.com/en-us/azure/role-based-access-control/overview

- Add or remove role assignments with RBAC and the Azure portal | Microsoft Docs

  https://docs.microsoft.com/en-us/azure/role-based-access-control/role-assignments-portal

Interpret access assignments

Thursday, March 12, 2020   11:09 AM

- List role assignments using Azure RBAC and the Azure portal | Microsoft Docs

https://docs.microsoft.com/en-us/azure/role-based-access-control/role-assignments-list-portal

- Understand deny assignments for Azure resources | Microsoft Docs

https://docs.microsoft.com/en-us/azure/role-based-access-control/deny-assignments

Manage multiple directories

Thursday, March 12, 2020   11:09 AM

- Manage multiple directories

https://www.linkedin.com/learning/azure-administration-manage-identities/manage-multiple-directories

- Characteristics of multiple tenant interaction - Azure AD | Microsoft Docs

https://docs.microsoft.com/en-us/azure/active-directory/users-groups-roles/licensing-directory-independence

Alert-New LinkedIn Course

Wednesday, June 17, 2020   4:20 PM

I haven't had a chance to update this study guide yet. There is an updated Identities and Governance course available on LinkedIn Learning. https://www.linkedin.com/learning/azure-administration-identities-and-governance/manage-azure-identities-and-governance

Objectives

Thursday, March 12, 2020   10:25 AM

- [ ] Configure Azure policies
- [ ] Configure resource locks
- [ ] Apply tags
- [ ] Create and manage resource groups
    - [ ] move resources
    - [ ] remove RGs
- [ ] Manage subscriptions
- [ ] Configure Cost Management
- [ ] Configure management groups

Configure Azure policies

Thursday, March 12, 2020   11:11 AM

- Azure Policy overview

https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/azure-policy-overview

- Create a custom Azure policy

https://www.linkedin.com/learning/azure-weekly-insights/create-a-custom-azure-policy

- Configure subscription policies

https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/configure-subscription-policies

- Overview of Azure Policy - Azure Policy | Microsoft Docs

https://docs.microsoft.com/en-us/azure/governance/policy/overview

- Azure Policy documentation | Microsoft Docs

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

Configure resource locks

Thursday, March 12, 2020   11:11 AM

- Create Microsoft Azure resource locks

  https://www.linkedin.com/learning/azure-security-technologies-implement-platform-protection/create-microsoft-azure-resource-locks

- Configure and apply resource locks

  https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/configure-and-apply-resource-locks

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

  https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/lock-resources

- Locks

  https://www.linkedin.com/learning/azure-weekly-insights/locks

Apply tags

Thursday, March 12, 2020   11:11 AM

- Implement and set tagging on resource groups using PowerShell

https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/implement-and-set-tagging-on-resource-groups-using-powershell

- Configure cost center quotas and tagging

https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/configure-cost-center-quotas-and-tagging

- Tag resources for logical organization - Azure Resource Manager | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/tag-resources

Create and manage resource groups

Thursday, March 12, 2020   11:11 AM

Manage resource groups - Azure portal - Azure Resource Manager | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/manage-resource-groups-portal

Create a resource group

https://www.linkedin.com/learning/planning-a-microsoft-cloud-solution-2/create-a-resource-group

Move resources

Thursday, March 12, 2020   11:11 AM

Moving resources overview

https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/moving-resources-overview

Move resources across resource groups

https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/move-resources-across-resource-groups

Move resources to a new subscription or resource group - Azure Resource Manager | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/move-resource-group-and-subscription

Remove RGs

Remove resource groups

https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/remove-resource-groups

Manage subscriptions

Thursday, March 12, 2020   11:11 AM

Manage Azure subscriptions

https://www.linkedin.com/learning/exam-tips-microsoft-azure-administrator-az-103/manage-azure-subscriptions

Add or change Azure subscription administrators | Microsoft Docs

https://docs.microsoft.com/en-us/azure/cost-management-billing/manage/add-change-subscription-administrator

Cancel your Azure subscription | Microsoft Docs

https://docs.microsoft.com/en-us/azure/cost-management-billing/manage/cancel-azure-subscription

Change Azure subscription offer | Microsoft Docs

https://docs.microsoft.com/en-us/azure/cost-management-billing/manage/switch-azure-offer

Create an additional Azure subscription | Microsoft Docs

https://docs.microsoft.com/en-us/azure/cost-management-billing/manage/create-subscription

Configure Cost Management

Thursday, March 12, 2020   11:11 AM

Azure cost management (preview)

https://www.linkedin.com/learning/azure-weekly-insights/azure-cost-management-preview

Controlling Azure costs

https://www.linkedin.com/learning/azure-administration-essential-training/controlling-azure-costs-2

Overview of Azure Cost Management and Billing | Microsoft Docs

https://docs.microsoft.com/en-us/azure/cost-management-billing/cost-management-billing-overview

Tutorial - Create and manage Azure budgets | Microsoft Docs

https://docs.microsoft.com/en-us/azure/cost-management-billing/costs/tutorial-acm-create-budgets

Quickstart - Explore Azure costs with cost analysis | Microsoft Docs

https://docs.microsoft.com/en-us/azure/cost-management-billing/costs/quick-acm-cost-analysis

Configure management groups

Thursday, March 12, 2020   11:11 AM

- Azure management groups

  https://www.linkedin.com/learning/azure-weekly-insights/azure-management-groups

- Organize your resources with management groups - Azure Governance | Microsoft Docs

  https://docs.microsoft.com/en-us/azure/governance/management-groups/overview

- Create management groups to organize resources - Azure Governance | Microsoft Docs

  https://docs.microsoft.com/en-us/azure/governance/management-groups/create

Objectives

Thursday, March 12, 2020   11:12 AM

- ☐ [Configure high availability](#)
- ☐ [Deploy and configure scale sets](#)

Configure high availability

Thursday, March 12, 2020   11:15 AM

Availability set overview

https://www.linkedin.com/learning/azure-administration-deploy-and-manage-virtual-machines/availability-set-overview

Configure high availability with an availability set

https://www.linkedin.com/learning/azure-administration-deploy-and-manage-virtual-machines/configure-high-availability-with-an-availability-set

Manage the availability of Windows VMs in Azure - Azure Windows Virtual Machines | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/manage-availability

Deploy and configure scale sets

Thursday, March 12, 2020   11:15 AM

Deploy and configure scale sets

https://www.linkedin.com/learning/azure-administration-deploy-and-manage-virtual-machines/deploy-and-configure-scale-sets

Azure virtual machine scale sets overview - Azure Virtual Machine Scale Sets | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/overview?toc=%2Fazure%2Fvirtual-machines%2Fwindows%2Ftoc.json&bc=%2Fazure%2Fvirtual-machines%2Fwindows%2Fbreadcrumb%2Ftoc.json

Quickstart - Create a virtual machine scale set in the Azure portal - Azure Virtual Machine Scale Sets | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/quick-create-portal

Objectives

Thursday, March 12, 2020   11:12 AM

- [ ] Modify Azure Resource Manager (ARM) template
- [ ] Configure VHD template
- [ ] Deploy from template
- [ ] Save a deployment as an ARM template
- [ ] Automate configuration management by using custom script extensions

Modify Azure Resource Manager (ARM) template

Thursday, March 12, 2020   11:16 AM

Azure template overview

https://www.linkedin.com/learning/microsoft-azure-design-and-deploy-arm-templates/azure-template-overview

Using Azure Quickstart Templates

https://www.linkedin.com/learning/microsoft-azure-design-and-deploy-arm-templates/using-azure-quickstart-templates

Templates overview - Azure Resource Manager | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/overview

Azure Quickstart Templates

https://azure.microsoft.com/en-ca/resources/templates/

Configure VHD template

Creating a template from a deployment

https://www.linkedin.com/learning/microsoft-azure-design-and-deploy-arm-templates/creating-a-template-from-a-deployment

Prepare a Windows VHD to upload to Azure - Azure Windows Virtual Machines | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/prepare-for-upload-vhd-image

Deploy from template

Deploying a template using the portal

https://www.linkedin.com/learning/microsoft-azure-design-and-deploy-arm-templates/deploying-a-template-using-the-portal

Deploying a template using PowerShell

https://www.linkedin.com/learning/microsoft-azure-design-and-deploy-arm-templates/deploying-a-template-using-powershell

Deploying a template using CLI

https://www.linkedin.com/learning/microsoft-azure-design-and-deploy-arm-templates/deploying-a-template-using-cli

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

https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/quickstart-create-templates-use-the-portal

Save a deployment as an ARM template

Creating a template from a deployment

https://www.linkedin.com/learning/microsoft-azure-design-and-deploy-arm-templates/creating-a-template-from-a-deployment

Automate configuration management by using custom script extensions

Azure virtual machine extensions and features | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machines/extensions/overview

Learn what Azure VM extensions are and how to use them with Azure virtual machines

Tutorial - Install applications on a Windows VM in Azure - Azure Windows Virtual Machines | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/tutorial-automate-vm-deployment?toc=https%3A%2F%2Fdocs.microsoft.com%2Fen-us%2Fazure%2Fvirtual-machines%2Fextensions%2Ftoc.json&bc=https%3A%2F%2Fdocs.microsoft.com%2Fen-us%2Fazure%2Fbread%2Ftoc.json

Objectives

Thursday, March 12, 2020   11:12 AM

- [ ] Configure Azure Disk Encryption
- [ ] Move VMs from one resource group to another
- [ ] Manage VM sizes
- [ ] Add data discs
- [ ] Configure networking
- [ ] Redeploy VMs

Configure Azure Disk Encryption

Thursday, March 12, 2020   11:17 AM

Azure Disk Encryption for IaaS VMs

https://www.linkedin.com/learning/microsoft-cybersecurity-stack-securing-enterprise-infrastructure/azure-disk-encryption-for-iaas-vms

Enable Azure Disk Encryption for Windows VMs - Azure Windows Virtual Machines | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/disk-encryption-overview

Move VMs from one resource group to another

Move resources across resource groups

https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/move-resources-across-resource-groups

Move resources to a new subscription or resource group - Azure Resource Manager | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/move-resource-group-and-subscription

Manage VM sizes

Thursday, March 12, 2020   11:17 AM

VM sizes in Azure - Azure Windows Virtual Machines | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/sizes

Virtual networks and Windows virtual machines in Azure - Azure Windows Virtual Machines | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/network-overview

Add data discs

Thursday, March 12, 2020   11:17 AM

Add data disks

https://www.linkedin.com/learning/azure-administration-deploy-and-manage-virtual-machines/add-data-disks

Attach a managed data disk to a Windows VM - Azure - Azure Windows Virtual Machines | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/attach-managed-disk-portal

Configure networking

Add network interfaces

https://www.linkedin.com/learning/azure-administration-deploy-and-manage-virtual-machines/add-network-interfaces

Virtual networks and Windows virtual machines in Azure - Azure Windows Virtual Machines | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/network-overview

Redeploy VMs

Thursday, March 12, 2020   11:17 AM

Redeploy virtual machines

https://www.linkedin.com/learning/azure-administration-deploy-and-manage-virtual-machines/redeploy-virtual-machines

Redeploy Windows virtual machines in Azure | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-machines/troubleshooting/redeploy-to-new-node-windows

Objectives

Thursday, March 12, 2020   11:12 AM

- [ ] [Create and configure Azure Kubernetes Service (AKS)](#)
- [ ] [Create and configure Azure Container Instances (ACI)](#)

Create and configure Azure Kubernetes Service (AKS)

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Configure Azure Kubernetes Service (AKS)

https://www.linkedin.com/learning/microsoft-azure-security-technologies-az-500-cert-prep-2-implement-platform-protection/configure-azure-kubernetes-service-aks

Introduction to Azure Kubernetes Service - Azure Kubernetes Service | Microsoft Docs

https://docs.microsoft.com/en-us/azure/aks/intro-kubernetes

Create and configure Azure Container Instances (ACI)

Thursday, March 12, 2020   11:18 AM

Azure Container Service (ACS)

https://www.linkedin.com/learning/developing-container-based-applications-with-visual-studio-and-azure/azure-container-service-acs

Quickstart - Deploy Docker container to container instance - Portal - Azure Container Instances | Microsoft Docs

https://docs.microsoft.com/en-ca/azure/container-instances/container-instances-quickstart-portal

Objectives

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- [ ] [Create and configure App Service](#)
- [ ] [Create and configure App Service Plans](#)

Create and configure App Service

Running WebJobs in Azure Web Apps

https://www.linkedin.com/learning/azure-administration-implement-and-manage-application-services/running-webjobs-in-azure-web-apps

Azure WebJobs allows you to run background tasks in the same computer as the web application. In this video, learn what WebJobs are, explore...

Overview - Azure App Service | Microsoft Docs

https://docs.microsoft.com/en-us/azure/app-service/overview

Learn how Azure App Service helps you develop and host web applications

Create and configure App Service Plans

Controlling Azure costs

https://www.linkedin.com/learning/azure-administration-essential-training/controlling-azure-costs-2

App Service plans - Azure App Service | Microsoft Docs

https://docs.microsoft.com/en-us/azure/app-service/overview-hosting-plans

Objectives

- [ ] Create and configure VNET peering
- [ ] Configure private and public IP addresses
- [ ] Configure network routes
- [ ] Configure network interface
- [ ] Configure Subnets
- [ ] Configure virtual network

Create and configure VNET peering

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Create and configure VNet peering in the portal

https://www.linkedin.com/learning/azure-administration-configure-and-manage-virtual-networks/create-and-configure-vnet-peering-in-the-portal

Azure Virtual Network peering | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-peering-overview

Configure private and public IP addresses

Azure IP addressing overview

https://www.linkedin.com/learning/azure-administration-configure-and-manage-virtual-networks/azure-ip-addressing-overview

Create and configure a public IP address

https://www.linkedin.com/learning/microsoft-azure-networking-concepts-2/create-and-configure-a-public-ip-address

Create a public IP address

https://www.linkedin.com/learning/azure-administration-configure-and-manage-virtual-networks/create-a-public-ip-address?u=104

IP address types in Azure | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-ip-addresses-overview-arm

Configure network routes

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[Route network traffic - tutorial - Azure portal | Microsoft Docs](https://docs.microsoft.com/en-us/azure/virtual-network/tutorial-create-route-table-portal)

https://docs.microsoft.com/en-us/azure/virtual-network/tutorial-create-route-table-portal

Configure network interface

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Create a network interface

https://www.linkedin.com/learning/azure-administration-configure-and-manage-virtual-networks/create-a-network-interface

Create, change, or delete an Azure network interface | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-network-interface

Configure Subnets

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Subnets

https://www.linkedin.com/learning/azure-for-architects-design-a-networking-strategy/subnets

Subnet extension in Azure | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-network/subnet-extension

Configure virtual network

Virtual networks

https://www.linkedin.com/learning/azure-for-architects-design-a-networking-strategy/virtual-networks

Create a virtual network - quickstart - Azure portal - Azure Virtual Network | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-network/quick-create-portal

Create a virtual network - quickstart - Azure PowerShell | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-network/quick-create-powershell

Objectives

- [ ] Configure Azure DNS
- [ ] Configure custom DNS settings
- [ ] Configure a private or public DNS zone

Configure Azure DNS

Azure DNS

https://www.linkedin.com/learning/azure-for-architects-design-a-networking-strategy/azure-dns

Create and configure Azure DNS using PowerShell

https://www.linkedin.com/learning/azure-administration-configure-and-manage-virtual-networks/create-and-configure-azure-dns-using-powershell

Create and configure Azure DNS

https://www.linkedin.com/learning/azure-administration-configure-and-manage-virtual-networks/create-and-configure-azure-dns

Azure DNS overview

https://www.linkedin.com/learning/azure-administration-configure-and-manage-virtual-networks/azure-dns-overview

What is Azure DNS? | Microsoft Docs

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

Configure custom DNS settings

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Integrate Azure DNS with your Azure resources - Azure DNS | Microsoft Docs

https://docs.microsoft.com/en-us/azure/dns/dns-custom-domain

Configure a private or public DNS zone

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What is Azure Private DNS? | Microsoft Docs

https://docs.microsoft.com/en-us/azure/dns/private-dns-overview

Quickstart - Create an Azure private DNS zone using the Azure portal | Microsoft Docs

https://docs.microsoft.com/en-us/azure/dns/private-dns-getstarted-portal

Objectives

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- [ ] [Create security rules](#)
- [ ] [Associate an NSG to a subnet or network interface](#)
- [ ] [Evaluate effective security rules](#)
- [ ] [Deploy and configure Azure Firewall](#)
- [ ] [Deploy and configure Azure Bastion Service](#)

Create security rules

Azure network security groups overview | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-network/security-overview

Azure service tags overview | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-network/service-tags-overview

Associate an NSG to a subnet or network interface

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Evaluate effective security rules

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Diagnose a virtual machine network traffic filter problem | Microsoft Docs

https://docs.microsoft.com/en-us/azure/virtual-network/diagnose-network-traffic-filter-problem

Azure Network Watcher: Network security groups

https://www.linkedin.com/learning/azure-weekly-insights/azure-network-watcher-network-security-groups

Azure Network Watcher: Traffic Analytics

https://www.linkedin.com/learning/azure-weekly-insights/azure-network-watcher-traffic-analytics?

Deploy and configure Azure Firewall

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Azure Firewall

https://www.linkedin.com/learning/azure-weekly-insights/azure-firewall

What is Azure Firewall? | Microsoft Docs

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

Deploy and configure Azure Bastion Service

Bastion

https://www.linkedin.com/learning/azure-weekly-insights/bastion

Azure Bastion | Microsoft Docs

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

Objectives

Wednesday, February 05, 2020   2:12 PM

- [ ] Configure Application Gateway
- [ ] Configure an internal load balancer
- [ ] Configure load balancing rules
- [ ] Configure a public load balancer
- [ ] Troubleshoot load balancing

Configure Application Gateway

Thursday, March 12, 2020   11:19 AM

Azure Application Gateway

https://www.linkedin.com/learning/azure-for-architects-design-a-networking-strategy/azure-application-gateway

Azure load balancers and application gateways

https://www.linkedin.com/learning/azure-administration-load-balancers-and-application-gateways/azure-load-balancers-and-application-gateways

What is Azure Application Gateway | Microsoft Docs

https://docs.microsoft.com/en-us/azure/application-gateway/overview

Quickstart: Direct web traffic using the portal - Azure Application Gateway | Microsoft Docs

https://docs.microsoft.com/en-us/azure/application-gateway/quick-create-portal

Configure an internal load balancer

Thursday, March 12, 2020   11:19 AM

Create and manage a load balancer

https://www.linkedin.com/learning/microsoft-azure-networking-concepts-2/create-and-manage-a-load-balancer

Tutorial: Create an internal load balancer - Azure portal - Azure Load Balancer | Microsoft Docs

https://docs.microsoft.com/en-us/azure/load-balancer/tutorial-load-balancer-basic-internal-portal

Configure load balancing rules

Thursday, March 12, 2020   11:19 AM

Configure load balancing and outbound rules by using the Azure portal - Azure Load Balancer | Microsoft Docs

https://docs.microsoft.com/en-us/azure/load-balancer/configure-load-balancer-outbound-portal

Configure a public load balancer

Thursday, March 12, 2020   11:19 AM

Create and manage a load balancer

https://www.linkedin.com/learning/microsoft-azure-networking-concepts-2/create-and-manage-a-load-balancer

Load balancing

https://www.linkedin.com/learning/azure-for-architects-design-a-networking-strategy/load-balancing

Troubleshoot load balancing

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Troubleshoot Azure Load Balancer | Microsoft Docs

https://docs.microsoft.com/en-us/azure/load-balancer/load-balancer-troubleshoot

Objectives

Wednesday, February 05, 2020   2:13 PM

- [ ] [Monitor on-premises connectivity](#)
- [ ] [Use Network resource monitoring](#)
- [ ] [Use Network Watcher](#)
- [ ] [Troubleshoot external networking](#)
- [ ] [Troubleshoot virtual network connectivity](#)

Monitor on-premises connectivity

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Connection Monitor (Preview) | Microsoft Docs

https://docs.microsoft.com/en-us/azure/network-watcher/connection-monitor-preview

Network Performance Monitor solution in Azure - Azure Monitor | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azure-monitor/insights/network-performance-monitor?toc=%2Fazure%2Fnetwork-watcher%2Ftoc.json

Use Network resource monitoring

Azure Network Watcher | Microsoft Docs

https://docs.microsoft.com/en-us/azure/network-watcher/network-watcher-monitoring-overview#monitor-communication-between-a-virtual-machine-and-an-endpoint

Use Network Watcher

Azure Network Watcher: Monitoring

https://www.linkedin.com/learning/azure-weekly-insights/azure-network-watcher-monitoring

Azure Network Watcher: Diagnostic tools

https://www.linkedin.com/learning/azure-weekly-insights/azure-network-watcher-diagnostic-tools

Azure Network Watcher: Traffic Analytics

https://www.linkedin.com/learning/azure-weekly-insights/azure-network-watcher-traffic-analytics

Azure Network Watcher: Network security groups

https://www.linkedin.com/learning/azure-weekly-insights/azure-network-watcher-network-security-groups

Azure Network Watcher Documentation | Microsoft Docs

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

Troubleshoot external networking

Thursday, March 12, 2020   11:19 AM

Troubleshoot Azure VNet gateway and connections - Azure
PowerShell - Azure Network Watcher | Microsoft Docs

https://docs.microsoft.com/en-us/azure/network-
watcher/network-watcher-troubleshoot-manage-powershell

Troubleshoot and monitor VPN gateways - Azure Automation -
Azure Network Watcher | Microsoft Docs

https://docs.microsoft.com/en-us/azure/network-
watcher/network-watcher-monitor-with-azure-automation

Troubleshoot virtual network connectivity

Thursday, March 12, 2020   11:19 AM

Quickstart: Diagnose a VM network traffic filter problem - Azure portal - Azure Network Watcher | Microsoft Docs

https://docs.microsoft.com/en-us/azure/network-watcher/diagnose-vm-network-traffic-filtering-problem

Objectives

Wednesday, February 05, 2020   2:14 PM

- [ ] Create and configure Azure VPN Gateway
- [ ] Create and configure VPNs
- [ ] Configure ExpressRoute
- [ ] Verify on premises connectivity
- [ ] Configure Azure Virtual WAN

Create and configure Azure VPN Gateway

Thursday, March 12, 2020   11:19 AM

Create a VNet gateway

https://www.linkedin.com/learning/azure-administration-configure-and-manage-virtual-networks/create-a-vnet-gateway

About Azure VPN Gateway | Microsoft Docs

https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-about-vpngateways

Create and configure VPNs

Thursday, March 12, 2020   11:19 AM

Configure VNet-to-VNet connection

https://www.linkedin.com/learning/azure-administration-configure-and-manage-virtual-networks/configure-vnet-to-vnet-connection

Create a virtual-network-to-virtual-network connection

https://www.linkedin.com/learning/microsoft-azure-networking-concepts-2/create-a-virtual-network-to-virtual-network-connection

Create a site-to-site VPN to Azure

https://www.linkedin.com/learning/microsoft-azure-networking-concepts-2/create-a-site-to-site-vpn-to-azure

Connect on-premises network to Azure virtual network: Site-to-Site VPN: Portal - Azure VPN Gateway | Microsoft Docs

https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-howto-site-to-site-resource-manager-portal

Configure ExpressRoute

Configure an ExpressRoute circuit

https://www.linkedin.com/learning/microsoft-azure-networking-concepts-2/configure-an-expressroute-circuit

Deploy connectivity to Azure ExpressRoute

https://www.linkedin.com/learning/microsoft-azure-networking-concepts-2/deploy-connectivity-to-azure-expressroute

Azure ExpressRoute Overview: Connect over a private connection | Microsoft Docs

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

Verify on premises connectivity

Troubleshoot Azure VNet gateway and connections - Azure PowerShell - Azure Network Watcher | Microsoft Docs

https://docs.microsoft.com/en-us/azure/network-watcher/network-watcher-troubleshoot-manage-powershell

Troubleshoot and monitor VPN gateways - Azure Automation - Azure Network Watcher | Microsoft Docs

https://docs.microsoft.com/en-us/azure/network-watcher/network-watcher-monitor-with-azure-automation

Configure Azure Virtual WAN

[Azure Virtual WAN Overview | Microsoft Docs](https://docs.microsoft.com/en-us/azure/virtual-wan/virtual-wan-about)

https://docs.microsoft.com/en-us/azure/virtual-wan/virtual-wan-about

Objectives

Thursday, March 12, 2020   11:20 AM

Configure and interpret metrics
        Analyze metrics across subscriptions
Configure Log Analytics
        Implement a Log Analytics workspace
        Configure diagnostic settings
Query and analyze logs
        Create a query
        Save a query to the dashboard
        Interpret graphs
Set up alerts and actions
        Create and test alerts
        Create action groups
        View alerts in Azure Monitor
        Analyze alerts across subscriptions
Configure Application Insights

Configure and interpret metrics

Thursday, March 12, 2020   11:25 AM

Metrics in Azure Monitor - Azure Monitor | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azure-monitor/platform/data-platform-metrics

Analyze metrics across subscriptions

Thursday, March 12, 2020   11:25 AM

Configure Log Analytics

Thursday, March 12, 2020   11:25 AM

Logs in Azure Monitor - Azure Monitor | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azure-monitor/platform/data-platform-logs

Implement a Log Analytics workspace

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Configure diagnostic settings

Thursday, March 12, 2020   11:25 AM

Query and analyze logs

Thursday, March 12, 2020   11:25 AM

Tutorial: Get started with Log Analytics queries - Azure Monitor | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azure-monitor/log-query/get-started-portal

Create a query

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Save a query to the dashboard

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Interpret graphs

Set up alerts and actions

Thursday, March 12, 2020   11:25 AM

Configure cost center quotas and tagging

https://www.linkedin.com/learning/azure-administration-manage-subscriptions-and-resources/configure-cost-center-quotas-and-tagging

Overview of alerting and notification monitoring in Azure - Azure Monitor | Microsoft Docs

https://docs.microsoft.com/en-us/azure/azure-monitor/platform/alerts-overview

Create and test alerts

Thursday, March 12, 2020   11:25 AM

Create action groups

Thursday, March 12, 2020   11:25 AM

View alerts in Azure Monitor

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Analyze alerts across subscriptions

Thursday, March 12, 2020   11:25 AM

Configure Application Insights

Thursday, March 12, 2020   11:25 AM

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

https://docs.microsoft.com/en-us/azure/azure-monitor/app/app-insights-overview

Objectives

- [ ] [Configure and review backup reports](#)
- [ ] [Perform backup and restore operations by using Azure Backup Service](#)
- [ ] [Create a Recovery Services Vault o use soft delete to recover Azure VMs](#)
- [ ] [Create and configure backup policy](#)
- [ ] [Perform site-to-site recovery by using Azure Site Recovery](#)

Configure and review backup reports

Configure Azure Backup reports - Azure Backup | Microsoft Docs

https://docs.microsoft.com/en-us/azure/backup/configure-reports

Perform backup and restore operations by using Azure Backup Service

Thursday, March 12, 2020   11:21 AM

Azure Backup overview

https://www.linkedin.com/learning/microsoft-azure-backup-and-disaster-recovery/azure-backup-overview

What is Azure Backup? - Azure Backup | Microsoft Docs

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

Create a Recovery Services Vault o use soft delete to recover Azure VMs

Thursday, March 12, 2020   11:21 AM

Create a Recovery Services vault

https://www.linkedin.com/learning/microsoft-azure-backup-and-disaster-recovery/create-a-recovery-services-vault

Create Recovery Services vaults - Azure Backup | Microsoft Docs

https://docs.microsoft.com/en-us/azure/backup/backup-create-rs-vault

Create and configure backup policy

Thursday, March 12, 2020   11:21 AM

Azure virtual machine backup

https://www.linkedin.com/learning/azure-weekly-insights/azure-virtual-machine-backup

Perform site-to-site recovery by using Azure Site Recovery

Thursday, March 12, 2020   11:21 AM

Overview of Azure Site Recovery

https://www.linkedin.com/learning/microsoft-azure-backup-and-disaster-recovery/overview-of-azure-site-recovery