



# The Ultimate AZ-500 Exam Prep Guide

Resource links, reading, video, and training resources

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## Introduction

This guide includes Microsoft documentation and study resources for [skills tested](#) in all four domains of the AZ-500 exam, including exam updates effective **January 27, 2021**, which are highlighted in **red**. If you follow the recommendations in this guide, including reading, video, and some hands-on practice, I am confident you will be ready to crush it on exam day! While I can share with you the material that will enable you to ensure you are well-prepared, I am forbidden from sharing details of the exam itself. Therefore, my focus is to help you prepare quickly and effectively for anything you might encounter.

## FREE AZ-500 Exam Training Resources

To help AZ-500 candidates prepare faster and more effectively, I have made additional free AZ-500 preparation resources available with two new AZ-500 video series on Youtube. Read on!

### AZ-500 Exam Cram Series + Video Practice Exams (Youtube)

Here are some new AZ-500 preparation resources designed to improve your prep strategy and focus. Hearing a lot of positive feedback from candidates leveraging these resources together with my LinkedIn Learning content.

#### AZ-500 Exam Cram Series

This 4-part series is 75 minutes of exam info, tips, and guidance designed to shorten your preparation with targeted information. It is a great use of the NEXT 75 minutes you spend preparing for the exam.

#### AZ-500 Video Practice Exams

These 4 exams of 30 questions each give you a narrated practice quiz complete with explanations.

Both these series are available in this video playlist at “Inside Azure Management” on YouTube:  
[https://www.youtube.com/playlist?list=PL7XJSuT7Dq\\_WwvvTjQZxma9xGyN1Yrpkf](https://www.youtube.com/playlist?list=PL7XJSuT7Dq_WwvvTjQZxma9xGyN1Yrpkf)

Add to this with Microsoft Learn material for AZ-500, which includes FREE.

## AZ-500 on Microsoft Learn

You can find FREE self-paced, hands-on training from Microsoft, which includes FREE Azure access for hands on labs using a feature called **Azure Sandbox**. This free training is available at the URL below.

<https://docs.microsoft.com/en-us/learn/certifications/exams/az-500?tab=tab-learning-paths>

## AZ-500 Exam Prep Training Series (LinkedIn Learning)

The following links will give you free access to each course for 24 hours after you click the link! So, only click the link when you are ready to take the course, and you should be fine, even if you do not have LinkedIn Premium access. I created a course for each of the five courses.

The series is designed to get you ready FAST! The courses are comprised of a single 3-5 min session for each skill tested on the exam. That just over 6 hours, 15 minutes of content! If you want, you can get through this entire series in a day!

Course Title	Length	Access Link
AZ-500 Cert Prep: 1 Manage Identity and Access <b>(Domain 1)</b>	1 hour, 3 min	<a href="#">HERE</a>
AZ-500 Cert Prep: 2 Policy and Data Infrastructure <b>(Domain 2)</b>	1 hour, 37 min	<a href="#">HERE</a>
AZ-500 Cert Prep: 3 Manage Security Operations <b>(Domain 3)</b>	44 minutes	<a href="#">HERE</a>
AZ-500 Cert Prep: 4 Policy and Data Infrastructure <b>(Domain 4, Part 1)</b>	57 minutes	<a href="#">HERE</a>
AZ-500 Cert Prep: 5 Data at Rest, App Security, and Key Vault <b>(Domain 4, Part 2)</b>	49 minutes	<a href="#">HERE</a>

## Quick Exam Strategy Guidance

There are a couple of Youtube videos to give you a head start on how to prepare, especially if you have limited budget or no Azure subscription.

**Microsoft AZ-500 Exam Cram Series (4 parts)** - <https://youtu.be/jdsBolMxhiw>  
**5 Tips and FREE Resources for Better Microsoft AZ-500 Exam Prep** - [https://youtu.be/231p\\_-M1kqM](https://youtu.be/231p_-M1kqM)  
**Azure Certification – FREE Azure Access for Microsoft Exam Prep** - <https://youtu.be/KjaQzkwSt9k>

You will find more and more Azure tutorials and Microsoft exam prep videos on our “**Inside Azure Management**” Youtube channel over time. Be sure to Subscribe and get notifications by clicking [HERE](#).

## Lab setup

To get the most from this guide you need the following trial subscriptions or equivalent access:

- An Azure subscription
- An EMS E5
- Azure Security Center Standard
- Azure Sentinel
- Access to LinkedIn Learning (*Connect with me on LinkedIn for a free trial if you need one!*)

If you are missing any of the above, do not worry. There is ample reading and learning material, as well as several free video links throughout this guide.

## What to expect on the exam

There are a few things that will help you better prepare for the exam:

- **Plan for 3 ½ hours (210 minutes).** The exam is 180 minutes, with up to 30 minutes for various surveys and exam tutorial items. **HOWEVER, with adaptive exams being the norm, you may well finish much sooner if you are well-prepared.**
- **Know the solutions hands-on.** You may encounter simulations on the exam that test your knowledge of feature configuration.

I hate to state the obvious, but it bears repeating. Remember to get plenty of rest the night before the exam. For a potentially long exam experience, you want to have a clear head.

## Should I just use a practice exam?

Practice exams can help you determine where you need to focus your study time. You can find AZ-500 practice exam material in a few places:

- My video practice quizzes on YouTube [HERE](#)
- 5 days free access to AZ-500 practice quizzes at Starweaver (<https://learning.starweaver.com/>)
- Udemy.com has many quizzes, though quality varies widely

Now let's get started.

## Domain 1: Manage Identity and Access (20-25%)

**LinkedIn Learning Course:** [AZ-500 Exam Prep – Manage Identity and Access](#)

[Back to ToC](#)

This domain is all about managing identity and access in Azure. You will want EMS E5, which includes Azure AD Plan 2 and all the advanced features covered in this domain. *Links to relevant reading, tutorials, and training for each skill tested are listed below.*

### 1. Manage Azure Active Directory identities

#### 1. Configure security for service principals

- [Application and service principal objects in Azure Active Directory](#)

#### 2. Manage Microsoft Azure AD Groups

- [Manage Microsoft Azure AD directory groups](#)

#### 3. Manage Microsoft Azure AD Users

- [Manage Microsoft Azure AD users](#)

#### 4. Configure password writeback

- [How does self-service password reset writeback work in Azure Active Directory?](#)
- [Tutorial: Enable Azure Active Directory self-service password reset writeback to an on-premises environment](#)

#### 5. Configure authentication methods including password hash and Pass Through Authentication (PTA), OAuth, and passwordless (not ADFS)

- [Choose the right authentication method for your Azure Active Directory hybrid identity solution](#)
- [Azure AD Passthrough Authentication](#)
- **VIDEO:** Choose the right authentication method - <https://youtu.be/YtW2cmVqSEw>

#### 6. Transfer Azure subscriptions between Azure AD tenants

- [Transfer Microsoft Azure subscriptions between Microsoft Azure AD tenants](#)

### 2. Configure secure access by using Azure AD

#### 1. Monitor privileged access for Azure AD Privileged Identity Management (PIM)

- [Monitor privileged access](#)
- 2. Configure access reviews**
  - [Configure access reviews](#)
- 3. Activate and configure PIM**
  - [Activate Privileged Identity Management](#)
- 4. Implement Conditional Access policies including Multi-Factor Authentication (MFA)**
  - [Implement conditional access policies](#)
  - **VIDEO:** [Configure per-application access rules](#) from the [Microsoft Cybersecurity Stack: Identity and Endpoint Basics](#) course on LinkedIn Learning.
  - **VIDEO:** [Configure device-based access rules](#) from the [Microsoft Cybersecurity Stack: Identity and Endpoint Basics](#) course on LinkedIn Learning.
  - **VIDEO:** [Configure location-based access rules](#) from the [Microsoft Cybersecurity Stack: Identity and Endpoint Basics](#) course on LinkedIn Learning.
  - **VIDEO:** [Configure risk-based access rules](#) from the [Microsoft Cybersecurity Stack: Identity and Endpoint Basics](#) course on LinkedIn Learning.
- 5. Configure Azure AD Identity Protection**
  - [What is Azure AD identity protection?](#)
  - [Identity Protection policies](#)
  - **VIDEO:** [Configure Risk-based Policies](#) from the [Microsoft Cybersecurity Stack: Identity and Endpoint Basics](#) course on LinkedIn Learning.
  - **VIDEO:** [Configure risk-levels and policies](#) from the [Microsoft Cybersecurity Stack: Advanced Identity and Endpoint Protection](#) course on LinkedIn Learning.

### 3. Manage application access

- 1. Create app registrations**
  - [Create App registration](#)
- 2. Configure App Registration permission scopes**
  - [Configure App registration permission scopes](#)
- 3. Manage App Registration permission consent**

- [Manage App registration permission consent](#)

#### 4. Manage API access to Azure subscriptions and resources

- [Manage API access to Microsoft Azure subscriptions and resources](#)

### 4. Manage access control

#### 1. Configure subscription and resource permissions

- [Configure subscription and resource permissions](#)

#### 2. Manage resource group permissions

- [Manage resource group security with Azure RBAC](#)

#### 3. Configure custom RBAC roles

- [Configure custom RBAC roles](#)
- [Built-in roles for Azure resources](#)

#### 4. Identify the appropriate role

- [Administrator role permissions in Azure Active Directory](#)

#### 5. Apply principle of least privilege

- [Administrator roles by admin task in Azure Active Directory](#)
- [Best practices for Azure RBAC](#)

#### 6. Interpret permissions

- [Administrator role permissions in Azure Active Directory](#)

#### 7. Check access

- [Quickstart: View the access a user has to Azure resources](#)



## Domain 2: Implement Platform Protection (35-40%)

**LinkedIn Learning Course:** [AZ-500 Exam Prep – Implement Platform Protection](#)

[Back to ToC](#)

This domain is focuses on infrastructure, application, and network in Azure. There is a vast array of tech in this section, so you will want access to an Azure trial so you can spend hands-on time with the areas you are unfamiliar.

### 1. Implement advanced network security

#### 1. Secure the connectivity of virtual networks (VPN authentication, Express Route encryption)

- [Configure a VNet-to-VNet VPN gateway connection by using the Azure portal](#)
- [Virtual Network Peering](#)
- [Plan Virtual Networks](#)
- [ExpressRoute encryption](#)

#### 2. Configure Network Security Groups (NSGs) and Application Security Groups (ASGs)

- [Network Security Groups](#)
- [Enable Network Security Groups in Azure Security Center](#)
- [Create and configure application security groups](#)
- [Services Tags](#)

#### 3. Create and configure Microsoft Azure Firewall

- [What is Azure Firewall?](#)
- [Azure Firewall documentation](#)
- [Deploy and configure Azure Firewall using the Azure portal](#)
- [Monitor Azure Firewall logs and metrics](#)

#### 4. Implement Azure Firewall Manager

- [What is Azure Firewall Manager?](#)
- [Tutorial: Secure your virtual hub using Azure Firewall Manager](#)

#### 5. Create and configure Azure Front Door service as an Application Gateway

- [Azure Front Door Service](#)

## 6. Configure a Web Application Firewall (WAF) on Azure Application Gateway

- [Quickstart: Create an Azure WAF v2 on Application Gateway using an ARM template](#)

## 7. Configure Azure Bastion

- [Create an Azure Bastion host using the portal \(tutorial\)](#)

## 8. Configure a firewall on a storage account, Azure SQL, Key Vault, or App Service

- [Configure Azure Storage firewalls and virtual networks](#)
- [Azure SQL Database and SQL Data Warehouse IP firewall rules](#)

## 9. Implement Service Endpoints

- [Virtual Network service endpoints](#)

## 10. Implement DDoS protection

- [Azure DDoS Protection Standard overview](#)

## 2. Configure advanced security for compute

### 1. Configure endpoint protection

- [Manage endpoint protection issues with Azure Security Center](#)

### 2. Configure system updates for VMs

- [Manage updates and patches for your Azure VMs](#)

### 3. Configure authentication for container registry

- [Authenticate with an Azure container registry](#)
- [Best practices for Azure Container Registry](#)
- [Configure authentication – Service principals with Azure Kubernetes Service \(AKS\)](#)
- [Configure container registry](#)

### 4. Configure security for different types of containers

- [Configure AKS security – Security concepts for applications and clusters in Azure Kubernetes Service \(AKS\)](#)
- [Security considerations for Azure Container Instances](#)

## 5. Implement vulnerability management

- [Implement vulnerability management](#)

## 6. Configure isolation for AKS

- [Isolation Modes](#)

## 7. Configure security for container registry

- [Configure container registry](#)
- [Best practices for Azure Container Registry](#)

## 8. Implement Azure Disk Encryption

- [QUICKSTART: Create and encrypt a Windows virtual machine with the Azure portal](#)

## 9. Configure authentication and security for Azure App Service

- [Protect your Azure App Service web apps and APIs](#)

## 10. Configure SSL/TLS certs

- [Add an SSL certificate in Azure App Service](#)
- [Configuring the free TLS/SSL certificates on Azure App Service](#)

## 11. Configure authentication

- [Sign into Windows virtual machine in Azure using Azure Active Directory authentication \(Preview\)](#)
- [Preview: Log in to a Linux virtual machine in Azure using Azure Active Directory authentication](#)

## 12. Configure automatic updates

- [VM agents and extensions](#)

## Domain 3: Manage Security Operations (15-20%)

**LinkedIn Learning Course:** [AZ-500 Exam Prep – Manage Security Operations](#)

[Back to ToC](#)

This domain focuses on Azure Security Center, Azure Sentinel, and Azure Governance.

### 1. Monitor security by using Azure Monitor

#### 1. Create and customize alerts

- [Create, view, and manage activity log alerts by using Azure Monitor](#)

#### 2. Monitor security logs by using Azure Monitor

- [Data collection in Azure Security Center \(#data collection tier\)](#)

#### 3. Configure diagnostic logging and log retention

- [Enable diagnostics logging for apps in Azure App Service](#)
- [Changing the log data retention period](#)

### 2. Monitor security by using Azure Security Center

#### 1. Evaluate vulnerability scans from Azure Security Center

- [Integrated vulnerability scanner for virtual machines \(standard tier only\)](#)

#### 2. Configure Just in Time VM access by using Azure Security Center

- 13. [Configure Just in Time VM access by using Azure Security Center](#)

#### 3. Configure centralized policy management by using Azure Security Center

- 14. [Configure centralized policy management by using Azure Security Center](#)
- 15. [Working with security policies](#)

#### 4. Configure compliance policies and evaluate for compliance by using Azure Security Center

- 16. [Tutorial: Regulatory compliance checks – Azure Security Center](#)

- 17. [Customizing the set of standards in your regulatory compliance dashboard](#)
- 18. [Using custom security policies](#)

### 3. Monitor security by using Azure Sentinel

#### 1. Create and customize alerts

- [Tutorial: Create custom analytic rules to detect suspicious threats](#)

#### 2. Configure data sources to Azure Sentinel

- [Quickstart: On-board Azure Sentinel](#)
- [Connect data sources](#)

#### 3. Evaluate results from Azure Sentinel

- [Create incidents from alerts in Azure Sentinel](#)
- [Tutorial: Investigate incidents with Azure Sentinel](#)

#### 4. Configure workflow automation by using Azure Sentinel

- [Tutorial: Set up automated threat responses in Azure Sentinel](#)

### 5. Configure security policies

#### 1. Configure security settings by using Azure Policy

- [Working with security policies](#)

#### 2. Configure security settings by using Azure Blueprint

- [Create a blueprint in the Azure portal](#)

#### 3. Configure a playbook by using Azure Sentinel

- [Tutorial: Set up automated threat responses in Azure Sentinel](#)

## Domain 4: Secure Data and Applications (25-30%)

**LinkedIn Learning Course:** [AZ-500 Exam Prep – Policy and Data Infrastructure](#)

**LinkedIn Learning Course:** [AZ-500 Exam Prep – Data at Rest, App Security, and Key Vault](#)

[Back to ToC](#)

This domain is focuses on Azure Storage, Azure SQL, and Key Vault.

### 1. Configure security for storage

#### 1. Configure access control for storage accounts

- [Authorizing access to data in Azure Storage](#)

#### 2. Configure key management for storage accounts

- [TUTORIAL: Set up Azure Key Vault with key rotation and auditing](#)

#### 3. Configure Azure AD authentication for Azure Storage

- [Azure Storage support for Azure Active Directory-based access control generally available](#)

#### 4. Configure Azure AD Domain Services authentication for Azure Files

- [Overview of Azure Files identity-based authentication support for SMB access](#)

#### 5. Create and Manage Shared Access Signatures (SAS)

- [Create SAS tokens and integrate with Azure Key Vault](#)

#### 6. Create a shared access policy for a blob or blob container

- [Grant limited access to Azure Storage resources using shared access signatures \(SAS\)](#)

#### 7. Implement Storage Service Encryption

- [Azure Storage Encryption for data at rest](#)

#### 8. Configure Azure Defender for Storage

- [Introduction to Azure Defender for Storage](#)

## 2. Configure security for databases

### 1. Enable database authentication

- [Configure centralized policy management by using Azure Security Center](#)

### 2. Enable database auditing

- [Azure SQL Auditing for Azure SQL Database and Azure Synapse Analytics](#)

### 3. Configure Azure Defender for SQL

- [Introduction to Azure Defender for SQL](#)

### 4. Configure Azure SQL Database Advanced Threat Protection

- [Configure Azure SQL Database Advanced Threat Protection for single or pooled databases](#)

### 5. Implement database encryption

- [Transparent data encryption for SQL Database and Azure Synapse](#)

### 6. Implement Azure SQL Database Always Encrypted

- [Always Encrypted: Protect sensitive data and store encryption keys in the Windows certificate store](#)

## 3. Configure and manage Key Vault

### 1. Manage access to Key Vault

- [Provide Key Vault authentication with an access control policy](#)
- [Secure access to a key vault](#)
- [Tutorial: Use a Windows VM system-assigned managed identity to access Azure Key Vault](#)

### 2. Manage permissions to secrets, certificates, and keys

- [Manage access and permissions to secrets, certificates, and keys to Key Vault](#)
- [Do you have an idea or a suggestion for Azure Key Vault based on your experience?](#)

- [Key and Secret Management in 'Azure'](#)
- [Tutorial: Use a managed identity to connect Key Vault to an Azure Web App with .NET](#)

### 3. Configure RBAC usage in Azure Key Vault

- [Azure Key Vault security](#)
- [ARM Template to create Azure Key Vault and Key](#)

### 4. Manage certificates

- [Get started with Key Vault certificates](#)

### 5. Manage secrets

- [About keys, secrets, and certificates](#)
- [Manage keys and secrets](#)

### 6. Configure key rotation

- [Set up Azure Key Vault with key rotation and auditing](#)

### 7. Backup and restore of Key Vault items

- [Azure Key Vault: Step-by-Step Backup and Restore Process](#)

### 8. Configure Azure Defender for Key Vault

- [Introduction to Azure Defender for Key Vault](#)

## Conclusion

I hope you have found this guide valuable. Have an exam tip you'd like to see included in this document? Provide feedback through the LinkedIn Learning site or connect with me on Twitter at [@pzerger](#).