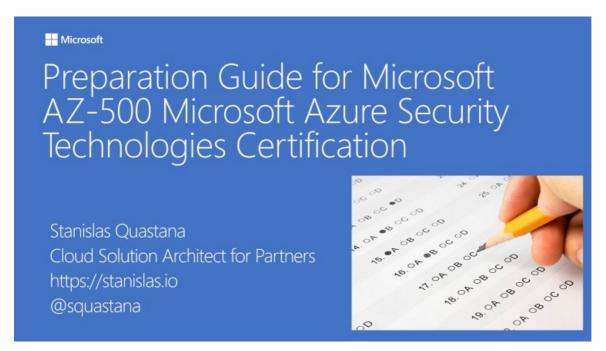🕐 Apr 25 💬 13

Preparation Guide for Microsoft AZ-500 Microsoft Azure Security Technologies Certification

Posted by squastana

I just get my **AZ-500 Microsoft Azure Security Technologies Certification** (and a new badge : **Microsoft Certified: Azure Security Engineer Associate**) and it is time now to share my preparation notes for those who are interested to pass this exam and get certified too.

This article is just **one another preparation guide to Microsoft exam AZ-500** but I hope it will be useful 😃

Even you don't plan to take the exam, all this content is really interesting to read and understand if you want to discover and improve your knowledge on security on Azure.

Before starting studying, **you must know very well what this certification is about and what are the prerequisites.**

The topics included in this exam are the following :

- Manage identity and access (20-25%)
- Implement platform protection (35-40%)
- Manage security operations (15-20%)
- Secure data and applications (30-35%)

Manage identity and access (20-25%)

— **Configure Microsoft Azure Active Directory for workloads** —

How to: Use the portal to create an Azure AD application and service principal that can access resources
https://docs.microsoft.com/en-us/azure/active-directory/develop/howto-create-service-principal-portal

Permissions and consent in the Azure Active Directory v2.0 endpoint
https://docs.microsoft.com/en-us/azure/active-directory/develop/v2-permissions-and-consent

Configure Multi-Factor Authentication settings
https://docs.microsoft.com/en-us/azure/active-directory/authentication/howto-mfa-mfasettings

Enterprise user management documentation – Azure Active Directory
https://docs.microsoft.com/en-us/azure/active-directory/users-groups-roles/

Manage Microsoft Azure AD directory groups
Create a basic group and add members using Azure Active Directory
https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-groups-create-azure-portal

What is guest user access in Azure Active Directory B2B?
https://docs.microsoft.com/en-us/azure/active-directory/b2b/what-is-b2b

— **Configure Microsoft Azure AD Privileged Identity Management** —

Configure Microsoft Azure AD identity protection

What is Azure Active Directory Identity Protection?
https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/overview

Vulnerabilities detected by Azure Active Directory Identity Protection
https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/vulnerabilities

Configure Microsoft Azure AD Privileged Identity Management
Monitor privileged access, configure Access Reviews, activate Privileged Identity Management
https://docs.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-getting-started
https://docs.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-deployment-plan

— **Configure Microsoft Azure tenant security** —

Transfer Microsoft Azure subscriptions between Microsoft Azure AD tenants, manage API access to Microsoft Azure subscriptions and resources

Transfer ownership of an Azure subscription to another account
https://docs.microsoft.com/en-us/azure/billing/billing-subscription-transfer

https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-aad
https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-manager-api-authentication
https://docs.microsoft.com/en-us/azure/active-directory/develop/active-directory-graph-api

Implement platform protection (35-40%)

— **Implement network security** —

What is Azure Virtual Network?
https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-overview

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

Configure Network Security Groups (NSGs)
https://docs.microsoft.com/en-us/azure/virtual-network/manage-network-security-group

Understanding Application Security Groups in the Azure Portal
https://www.petri.com/understanding-application-security-groups-in-the-azure-portal

Create and configure application security groups
https://azure.microsoft.com/en-gb/blog/applicationsecuritygroups/

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

What is Azure Firewall ?
https://docs.microsoft.com/en-us/azure/firewall/overview

Tutorial: Deploy and configure Azure Firewall using the Azure portal
https://docs.microsoft.com/en-us/azure/firewall/tutorial-firewall-deploy-portal

Configure remote access management – Security management in Azure
https://docs.microsoft.com/en-us/azure/security/azure-security-management

Configure baseline – Protect your network resources in Azure Security Center
https://docs.microsoft.com/en-us/azure/security-center/security-center-network-recommendations

Configure Azure Storage firewalls and virtual networks
https://docs.microsoft.com/en-us/azure/storage/common/storage-network-security

Azure SQL Database and SQL Data Warehouse IP firewall rules
https://docs.microsoft.com/en-us/azure/sql-database/sql-database-firewall-configure

— **Implement host security** —

configure VM Security – Security best practices for IaaS workloads in Azure
https://docs.microsoft.com/en-us/azure/security/azure-security-iaas

Manage endpoint protection issues with Azure Security Center
https://docs.microsoft.com/en-us/azure/security-center/security-center-install-endpoint-protection

Manage virtual machine access using just-in-time
https://docs.microsoft.com/en-us/azure/security-center/security-center-just-in-time

Manage Windows updates by using Azure Automation
https://docs.microsoft.com/en-us/azure/automation/automation-tutorial-update-management

Automate resources in your datacenter or cloud by using Hybrid Runbook Worker
https://docs.microsoft.com/en-us/azure/automation/automation-hybrid-runbook-worker

Configure Baseline – Customize OS security configurations in Azure Security Center
https://docs.microsoft.com/en-us/azure/security-center/security-center-customize-os-security-config

— **Configure container security** —

Container Security in Azure
https://azure.microsoft.com/mediahandler/files/resourcefiles/container-security-in-microsoft-azure/Open%20Container%20Security%20in%20Microsoft%20Azure.pdf

Configure network – Enable containers to use Azure Virtual Network capabilities
https://docs.microsoft.com/en-us/azure/virtual-network/container-networking-overview

Configure authentication – Service principals with Azure Kubernetes Service (AKS)
https://docs.microsoft.com/en-us/azure/aks/kubernetes-service-principal

Secure traffic between pods using network policies in Azure Kubernetes Service (AKS)
https://docs.microsoft.com/en-us/azure/aks/use-network-policies

Configure AKS security – Security concepts for applications and clusters in Azure Kubernetes Service (AKS)
https://docs.microsoft.com/en-us/azure/aks/concepts-security

Configure container registry
https://docs.microsoft.com/en-us/azure/container-registry/

Best practices for Azure Container Registry
https://docs.microsoft.com/en-us/azure/container-registry/container-registry-best-practices

Configure container instance security
https://docs.microsoft.com/en-us/azure/container-instances/

Implement vulnerability management
https://www.aquasec.com/solutions/azure-container-security/

— **Implement Microsoft Azure Resource management security** —

Create Microsoft Azure resource locks
https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-lock-resources

Manage resource group security with Azure RBAC
https://docs.microsoft.com/en-us/azure/role-based-access-control/overview

Built-in roles for Azure resources
https://docs.microsoft.com/en-us/azure/role-based-access-control/built-in-roles

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

Configure Microsoft Azure policies
https://docs.microsoft.com/en-us/azure/governance/policy/tutorials/create-and-manage

Configure subscription and resource permissions
https://docs.microsoft.com/en-us/azure/role-based-access-control/role-assignments-portal

Manage security operation (15-20%)

— **Configure Security Services** —

Configure Microsoft Azure Monitor
Azure Monitor overview
https://docs.microsoft.com/en-us/azure/azure-monitor/overview

Configure Azure Log Analytics for data security
https://docs.microsoft.com/en-us/azure/azure-monitor/platform/data-security

Configure Azure diagnostic logs
https://docs.microsoft.com/en-us/azure/security/azure-log-audit#azure-diagnostics-logs

Configure Microsoft Azure Log Analytics
https://docs.microsoft.com/en-us/azure/azure-monitor/platform/manage-access

Configure diagnostic logging and log retention
https://docs.microsoft.com/en-us/azure/azure-monitor/platform/diagnostic-logs-overview

Configure vulnerability scanning
https://docs.microsoft.com/en-us/azure/security-center/security-center-vulnerability-assessment-recommendations

— **Configure Security Policies** —

Working with security policies
https://docs.microsoft.com/en-us/azure/security-center/tutorial-security-policy

Azure security policies monitored by Security Center
https://docs.microsoft.com/en-us/azure/security-center/security-center-policy-definitions

Configure centralized policy management by using Microsoft Azure Security Center
https://docs.microsoft.com/en-us/azure/security-center/tutorial-security-policy

Configure Just in Time VM access by using Microsoft Azure Security Center
https://docs.microsoft.com/en-us/azure/security-center/security-center-just-in-time

— **Managed Security Alerts** —

Create and customize alerts
Custom Alert Rules in Azure Security Center (Preview)
https://docs.microsoft.com/en-us/azure/security-center/security-center-custom-alert

Review and respond to alerts and recommendations
https://docs.microsoft.com/en-us/azure/security-center/security-center-managing-and-responding-alerts
https://docs.microsoft.com/en-us/azure/security-center/security-center-recommendations

Configure a playbook for a security event by using Microsoft Azure Security Center
https://docs.microsoft.com/en-us/azure/security-center/security-center-playbooks

Investigate escalated security incidents
https://docs.microsoft.com/en-us/azure/security-center/security-center-investigation

— **Configure security policies to manage data** —

Achieving Compliant Data Residency and Security with Azure

https://azure.microsoft.com/mediahandler/files/resourcefiles/achieving-compliant-data-residency-and-security-with-azure/Achieving_Compliant_Data_Residency_and_Security_with_Azure.pdf

Configure data sovereignty using Azure Policy

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

Configure Data Retention

https://www.microsoft.com/en-us/trustcenter/privacy/data-management

Configure data retention (Storage Analytics)

https://docs.microsoft.com/en-us/rest/api/storageservices/setting-a-storage-analytics-data-retention-policy

Azure Data Explorer (Retention)

https://docs.microsoft.com/en-us/azure/kusto/management/retention-policy
https://docs.microsoft.com/en-us/azure/kusto/concepts/retentionpolicy

Configure data classification

https://docs.microsoft.com/en-us/azure/information-protection/infoprotect-settings-tutorial

— **Configure security for data infrastructure** —

Enable database authentication

https://docs.microsoft.com/en-us/azure/sql-database/sql-database-aad-authentication

Configure and manage Azure Active Directory authentication with SQL

https://docs.microsoft.com/en-us/azure/sql-database/sql-database-aad-authentication-configure

Get started with SQL database auditing

https://docs.microsoft.com/en-us/azure/sql-database/sql-database-auditing

Azure SQL Database threat detection for single or pooled databases

https://docs.microsoft.com/en-us/azure/sql-database/sql-database-threat-detection

Azure Storage security guide

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

Configure key management for storage accounts

https://docs.microsoft.com/en-us/azure/storage/common/storage-service-encryption-customer-managed-keys

Create and manage Shared Access Signatures (SAS)

https://docs.microsoft.com/en-us/azure/storage/common/storage-dotnet-shared-access-signature-part-1

An introduction to Apache Hadoop security with Enterprise Security Package

https://docs.microsoft.com/en-us/azure/hdinsight/domain-joined/apache-domain-joined-introduction

Configure security for HDInsights

https://docs.microsoft.com/en-us/azure/hdinsight/domain-joined/apache-domain-joined-configure-using-azure-adds

Security in Azure Cosmos DB – overview

https://docs.microsoft.com/en-us/azure/cosmos-db/database-security

Secure access to data in Azure Cosmos DB

https://docs.microsoft.com/en-us/azure/cosmos-db/secure-access-to-data

Data encryption in Azure Cosmos DB

https://docs.microsoft.com/en-us/azure/cosmos-db/database-encryption-at-rest

High availability with Azure Cosmos DB

https://docs.microsoft.com/en-us/azure/cosmos-db/high-availability

Online backup and on-demand data restore in Azure Cosmos DB

https://docs.microsoft.com/en-us/azure/cosmos-db/online-backup-and-restore

Configure security for Microsoft Azure Data Lake

https://docs.microsoft.com/en-us/azure/data-lake-store/data-lake-store-network-security

https://docs.microsoft.com/en-us/azure/storage/common/storage-data-lake-storage-security-guide

— **Configure encryption for data at rest** —-

Implement Microsoft Azure SQL Database Always Encrypted

https://docs.microsoft.com/en-us/azure/sql-database/sql-database-always-encrypted

https://docs.microsoft.com/en-us/azure/sql-database/sql-database-always-encrypted-azure-key-vault

Implement database encryption

https://docs.microsoft.com/en-us/sql/relational-databases/security/encryption/transparent-data-encryption?view=sql-server-2017

Transparent data encryption for SQL Database and Data Warehouse

https://docs.microsoft.com/en-us/azure/sql-database/transparent-data-encryption-azure-sql?view=sql-server-2017

Azure SQL Transparent Data Encryption with customer-managed keys in Azure Key Vault: Bring Your Own Key support

https://docs.microsoft.com/en-us/azure/sql-database/transparent-data-encryption-byok-azure-sql?view=sql-server-2017

How to use Key Vault soft-delete with PowerShell

https://docs.microsoft.com/en-us/azure/key-vault/key-vault-soft-delete-powershell

Azure Storage Service Encryption for data at rest

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

Storage Service Encryption using customer-managed keys in Azure Key Vault

https://docs.microsoft.com/en-us/azure/storage/common/storage-service-encryption-customer-managed-keys

Azure Disk Encryption for IaaS VMs

https://docs.microsoft.com/en-us/azure/security/azure-security-disk-encryption-overview

Implement backup encryption

https://docs.microsoft.com/en-us/azure/backup/backup-azure-backup-faq#encryption

— **Implement security for application delivery** —

Securing PaaS deployments

https://docs.microsoft.com/en-us/azure/security/security-paas-deployments

Monitor availability and responsiveness of any web site

https://docs.microsoft.com/en-us/azure/azure-monitor/app/monitor-web-app-availability

—- **Configure application security** —

App Service and Functions hosted apps can now update TLS versions!

https://blogs.msdn.microsoft.com/appserviceteam/2018/04/17/app-service-and-functions-hosted-apps-can-now-update-tls-versions/

Configure SSL/TLS certs

https://docs.microsoft.com/en-us/azure/app-service/app-service-web-tutorial-custom-ssl

Tutorial: Bind an existing custom SSL certificate to Azure App Service

https://docs.microsoft.com/fr-fr/azure/app-service/app-service-web-tutorial-custom-ssl#enforce-tls-1112

Configure Microsoft Azure services to protect web apps

https://docs.microsoft.com/en-us/azure/application-gateway/create-web-app

Create an application security baseline

https://docs.microsoft.com/en-us/azure/security/security-paas-deployments

— **Configure and manage Key Vault** —

About keys, secrets, and certificates
https://docs.microsoft.com/en-us/azure/key-vault/about-keys-secrets-and-certificates

Secure access to a key vault
https://docs.microsoft.com/en-us/azure/key-vault/key-vault-secure-your-key-vault

Manage certificates, manage secrets, configure key rotation
https://docs.microsoft.com/en-us/azure/key-vault/key-vault-key-rotation-log-monitoring

Azure Storage account key management
https://docs.microsoft.com/en-us/azure/key-vault/about-keys-secrets-and-certificates#azure-storage-account-key-management

Azure Key Vault managed storage account – CLI
https://docs.microsoft.com/en-us/azure/key-vault/key-vault-ovw-storage-keys

Azure Storage Account Keys Automatic Rotation
http://www.wahidsaleemi.com/2017/08/azure-storage-account-keys-automatic-rotation/

Hope this preparation guide will be useful for you. Don't hesitate to post a comment or send me a message on Twitter @squastana or on LinkedIn
https://www.linkedin.com/in/stanislasquastana/

Last but not least, don't forget to spend time on http://microsoft.com/learn where you can find additional materials to prepare your certification.

— Stanislas Quastana —

Share this:

(T) (f) (in) (🖨)

Like this:

Loading...

Related

Preparation Guide for Microsoft AZ-302 Microsoft Azure Solutions Architect Certification Transition
21/12/2018
In "AZ-302"

Preparation Guide for Microsoft AZ-102 Microsoft Azure Administrator Certification Transition
09/10/2018
In "AZ-102"

Preparation Guide for Microsoft AZ-400 Microsoft Azure DevOps Solutions Certification
26/07/2019
In "Certification preparation guide"

📁 Certification preparation guide
🏷 AZ-500, AZ500, az500 guide, az500 training, Azure, Azure Active Directory, Azure Firewall, Azure Policy, Azure Security, Azure Security Center, Certification, Encryption, Microsoft Certification, RBAC, Security

---

← Migration de Datacenter vers Azure – la boite à outils

Azure Kubernetes Service – Some interesting videos from Microsoft Build 2019 →

13 thoughts on "Preparation Guide for Microsoft AZ-500 Microsoft Azure Security Technologies Certification"

Noah James
26/04/2019 at 00:12

Man this is a very good job right here. You made my preparations easier with this. I've got the exam scheduled less than 48 and I'm sure this will help me brush up.

Ankit Sharma
23/05/2019 at 07:42

Hi James, How your exam went? I'm also preparing to appear for this exam if you could help with guiding me.

Below are my contact details, it would be really helpful if you can share your experience.

Email – ankit1767@gmail.com
WhatsApp Contact – +91-9643895235

LG
04/05/2019 at 14:07

Top les powerpoint, ca m'évite de tout lire 😃

gaikwadhemantkumaremant
25/05/2019 at 07:52

Thanks For sharing such great information.

Gary Bushey
20/06/2019 at 14:30

Great job! The PowerPoints are very useful tools

squastana
21/06/2019 at 09:45

Thanks appreciate 😃

Sankar
08/07/2019 at 21:55

Thannk a lot… do we have any video course available for AZ-500?

squastana
25/07/2019 at 15:15

No, just slides & urls

GARY HARDY
09/07/2019 at 10:01

Many thanks for gathering all these useful links into a single page along with the clear slides. It was of a great help for passing this test this morning !
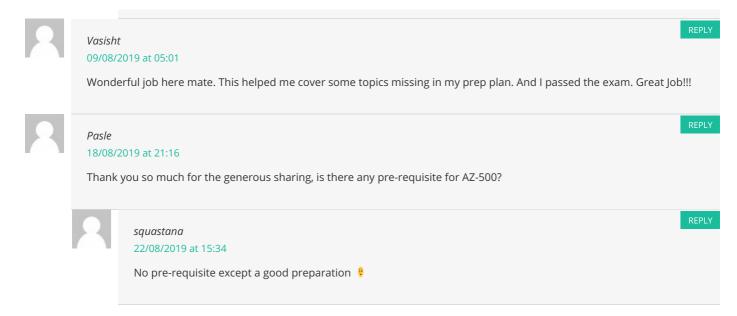I'm now looking fordward to seeing the same for AZ-400 😃

squastana
25/07/2019 at 15:15

AZ 400 preparation guide will be published very soon 😃 stay tuned

Vasisht
09/08/2019 at 05:01

Wonderful job here mate. This helped me cover some topics missing in my prep plan. And I passed the exam. Great Job!!!

Pasle
18/08/2019 at 21:16

Thank you so much for the generous sharing, is there any pre-requisite for AZ-500?

squastana
22/08/2019 at 15:34

No pre-requisite except a good preparation 😉

Leave a Reply

Enter your comment here...

Search ...

Recent Posts

Preparation Guide for Microsoft AI-100 Designing and Implementing an Azure AI Solution – Azure AI Engineer Associate Certification

Networking in Azure – the BIG Picture

Preparation Guide for Microsoft AZ-400 Microsoft Azure DevOps Solutions Certification

[VIDEO] Introduction à HashiCorp Terraform (version >0.12) dans un usage avec Microsoft Azure

Azure Kubernetes Service – Some interesting videos from Microsoft Build 2019

Tags

Android Ansible ARM Azure Azure Active Directory Azure Network Azure Resource Manager Azure Stack Azure Storage Backup CaaS Canonical Certification Cloud Cloud Computing Cloud hybride Containers DevOps Docker Hyper-V Hyper-V Container IaaS Infrastructure as code Juju Kubernetes Linux machine virtuelle Microsoft Azure Microsoft Certification PaaS PowerShell PRA Preparation guide Red Hat SDN Stockage Storage Terraform Ubuntu Virtual appliance Virtual machine Windows 10 Windows Container Windows Server 2012 R2 Windows Server 2016

Recent Comments

squastana on Preparation Guide for Microsoft AZ-500 Microsoft Azure Security Technologies Certification

Ben Malisow on Preparation Guide for ISC2 Certified Cloud Security Professional (CCSP) Certification

Pasle on Preparation Guide for Microsoft AZ-500 Microsoft Azure Security Technologies Certification

Vasisht on Preparation Guide for Microsoft AZ-500 Microsoft Azure Security Technologies Certification

squastana on Preparation Guide for Microsoft AZ-400 Microsoft Azure DevOps Solutions Certification

Archives

August 2019

July 2019

May 2019

April 2019

February 2019

December 2018

November 2018

October 2018

July 2018

February 2018

October 2017

September 2017

April 2017

March 2017

January 2017

October 2016

September 2016

August 2016

July 2016

June 2016

May 2016

April 2016

Categories

Certification preparation guide

Uncategorized

Video

Meta

Log in

Entries RSS

Comments RSS