



AZ-104 Crash Course – Azure administrator certification

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AZ-104 – Microsoft Azure Administrator

- Always review the latest skills measured - <https://docs.microsoft.com/learn/certifications/exams/az-104>
- Exam covers a **lot** of topics
- You may get hands-on labs and / or scenarios
- Take your time
- If possible, schedule on-site exam



This crash course

- Doesn't cover everything in the exam
- Provides lots of hands-on labs to build up for additional study
- Covers the following exam topics:
 - a) Virtual networking
 - b) Core VM tasks
 - c) Storage
 - d) Identity and resource management



**Objective: Configure and
manage virtual networks**



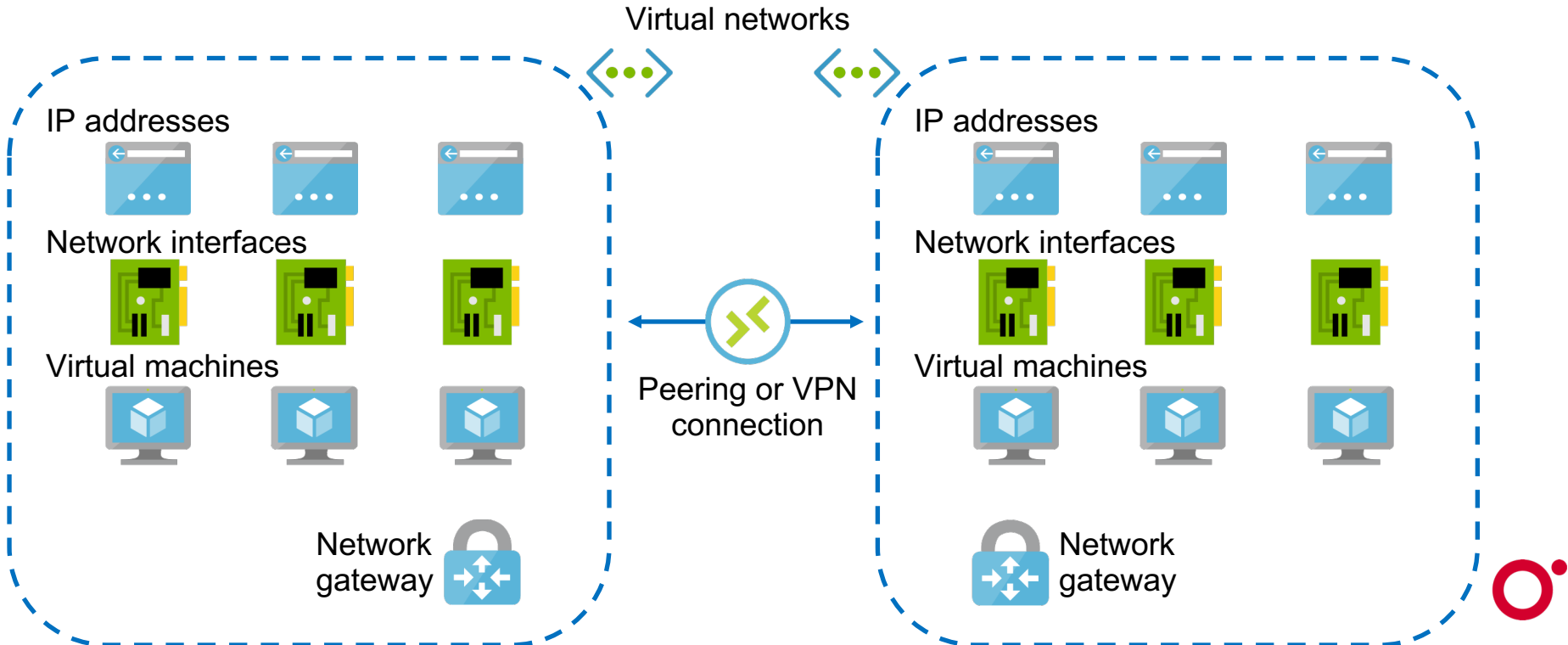
Presentation

Objective: Implement and manage virtual networking

Objective: Create connectivity between virtual networks



Virtual network components





Exercise – Lab 01 worksheet

Objective: Implement and manage virtual networking

Objective: Create connectivity between virtual networks





Poll

How do you secure network access to resources?

- a) Firewall and access rules
- b) Virtual private network (VPN)
- c) Demilitarized zone (DMZ)
- d) Other – discuss in chat



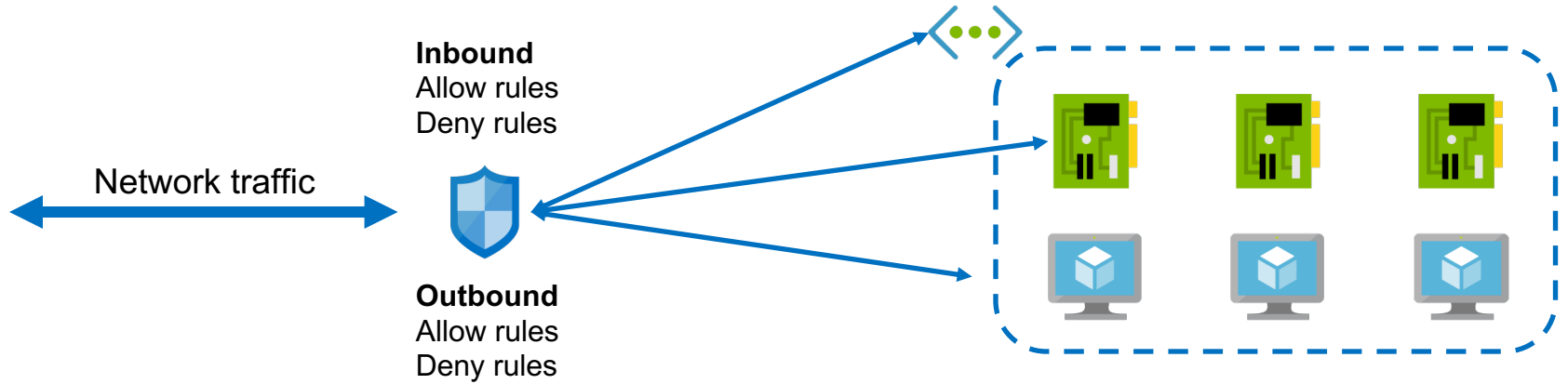


Presentation

Objective: Create and configure a Network Security Group (NSG)



Network security groups





Exercise – Lab 02 worksheet

Objective: Create and configure a Network Security Group (NSG)





Pulse check

Virtual network basics and security



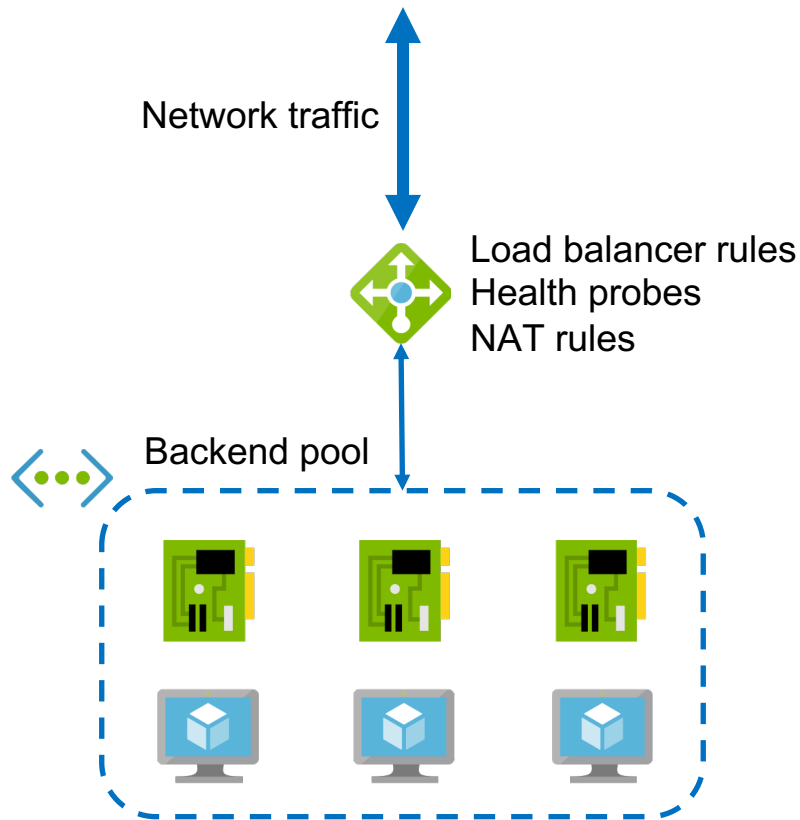


Presentation

Objective: Implement Azure load balancer



Azure load balancer





Exercise – Lab 03 worksheet

Objective: Implement Azure load balancer





Presentation

Objective: Configure name resolution





Exercise – Lab 04 worksheet

Objective: Configure name resolution





Questions?





5-minute break



**Objective: Deploy and
manage Azure compute
resources**



Presentation

Objective: Create and configure a VM for Windows and Linux

Objective: Automate deployment of VMs



Creating Azure virtual machines

VM image



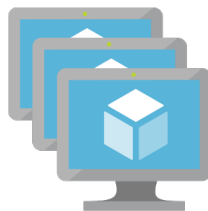
Virtual disk



Network interface



Availability Set or
Availability Zone



Scale set





Exercise – Lab 05 worksheet

Objective: Create and configure a VM for Windows and Linux

Objective: Automate deployment of VMs





Poll

What is your preferred management tool?

- a) Web-based portal
- b) Azure PowerShell
- c) Azure CLI
- d) Other – discuss in chat





Presentation

Objective: Manage Azure VM





Exercise – Lab 06 worksheet

Objective: Manage Azure VM





Pulse check

Core VM configuration tasks



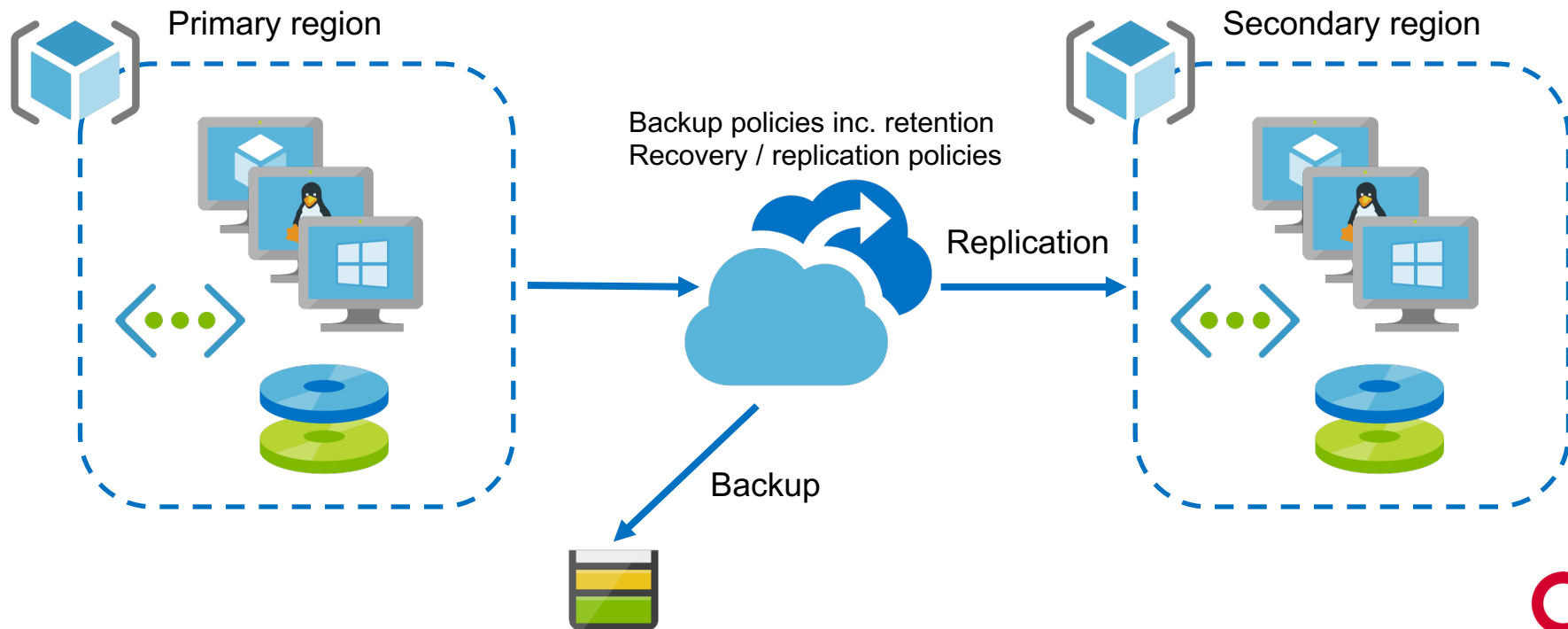


Presentation

Objective: Manage VM backups



Recovery Services Vault





Exercise - Lab 07 worksheet

Objective: Manage VM backups





Presentation

Bringing together compute and networking





Exercise - Lab 08 worksheet

Test network security group rules
Test load balancer and NAT rules





Questions?





5-minute break



**Objective: Implement and
manage storage**



Presentation

Objective: Create and configure storage accounts

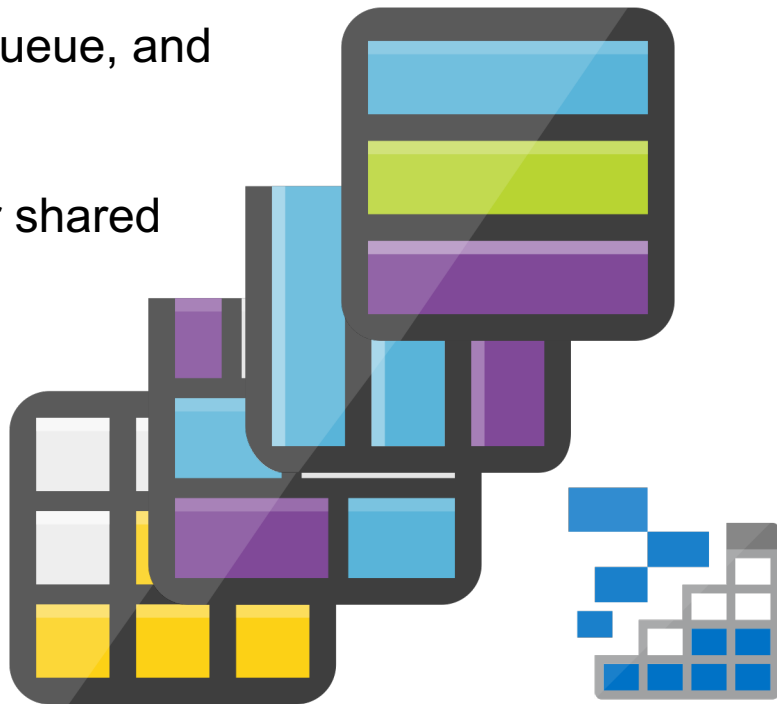


Azure Storage

Azure Storage provides Blob, Table, Queue, and File storage.

Access to storage is by access keys or shared access signatures (SAS).

You can use Azure Storage Explorer to browse - especially useful for Tables and Queues.





Exercise - Lab 09 worksheet

Objective: Create and configure storage accounts



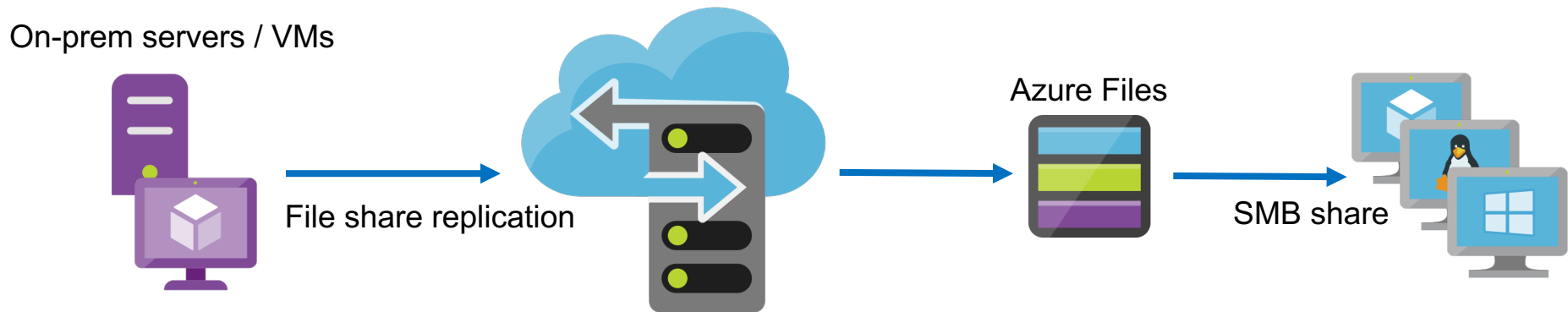


Presentation

Objective: Configure Azure files



Azure Files and Sync Service





Exercise - Lab 10 worksheet

Objective: Configure Azure files





Questions?



**Objectives: Manage
identities, and subscriptions
and resources**



Poll

What is your involvement with identity management in your environment?

- a) I'm an administrator – I can create, edit, and delete users or groups
- b) I have helpdesk permissions – I can create users or reset passwords
- c) I have no permissions other than to my own data
- d) Other – share in the chat





Presentation

Objective: Manage Azure Active Directory (AD)

Objective: Manage Azure AD objects (users, groups, and devices)



Azure Active Directory (Azure AD)

Users, groups, guests, B2C



Domain Services, Identity
Protection, Conditional
Access



Self-service password reset,
Azure Multi-Factor
Authentication, password
protection





Exercise - Lab 11 worksheet

Objective: Manage Azure Active Directory (AD)

Objective: Manage Azure AD objects (users, groups, and devices)





Presentation

Objective: Manage resource groups

Objective: Manage role-based access control (RBAC)



Subscription and resource management

Management groups,
alerts, Advisor, RBAC,
locks



Tags, Policy, Azure
Monitor, Cost
Management + Billing





Exercise - Lab 12 worksheet

Objective: Manage resource groups

Objective: Manage role-based access control (RBAC)





Questions?





Final questions?





Course survey



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Thank you

