AZ-140

Tag 2

Configuring and Operating Azure Virtual Desktop

Guten Morgen!

AZ-140 Agenda

github.com/www42/az-140

Learning Path 1

1. Azure Virtual Desktop Architecture
2. Design the Azure Virtual Desktop architecture ←
3. Design for user identities and profiles

Learning Path 2

4. Implement and manage networking for AVD
5. Implement and manage storage for AVD
6. Create and configure host pools and session hosts for AVD
7. Create and manage session host image for AVD

Learning Path 3

8. Manage access for AVD
9. Manage security for AVD

Learning Path 4

10. Implement and manage FSLogix
11. Configure user experience settings
12. Install and configure apps on a session host

Learning Path 5

13. Plan for disaster recovery
14. Automate Azure Virtual Desktop management tasks
15. Monitor and manage performance and health

RDS $\xrightarrow{?}$ (WVD)
AVD

On Prem   Azure

Design the Azure Virtual Desktop architecture

Introduction

1 Assess network capacity and speed requirements for Azure Virtual Desktop.

2 Determine the connection round-trip time (RTT) from a location through the Azure Virtual Desktop service.

3 Recommend an operating system for a Azure Virtual Desktop implementation.

4 Describe the two load-balancing methods for Azure Virtual Desktop.

5 Recommendation subscriptions and management groups for Azure Virtual Desktop.

6 Recommend a configuration for performance requirements.

7 Knowledge check and Summary

AZ-140: Plan an Azure Virtual Desktop architecture (10-15%)

Design the Azure Virtual Desktop architecture

- Conceptual knowledge of Azure compute solutions.

- Working experience with virtual machines, virtual networks, and app service.

Assess network capacity and speed requirements for Azure Virtual Desktop

Minimum recommended bandwidths for a smooth user experience for using applications:

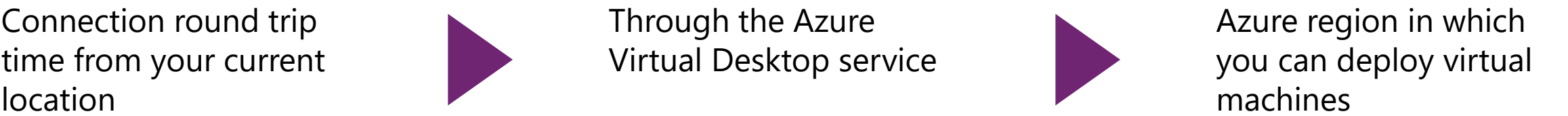| Workload type	Recommended bandwidth
Light	1.5 Mbps
Medium	3 Mbps
Heavy	5 Mbps
Power	15 Mbps

Bandwidth recommendations for a smooth user experience for display resolutions:

Typical display resolutions at 30 fps	Recommended bandwidth
About 1024 × 768 px	1.5 Mbps
About 1280 × 720 px	3 Mbps
About 1920 × 1080 px	5 Mbps
About 3840 × 2160 px (4K)	15 Mbps

Azure Virtual Desktop Experience Estimator

Use the [Azure Virtual Desktop Experience Estimator](#) to determine the connection RTT from your location to each Azure region you can deploy VMs

Connection round trip time from your current location

▶

Through the Azure Virtual Desktop service

▶

Azure region in which you can deploy virtual machines

Azure Region*	Round Trip Time (ms)
West US 2	410
West US	427
West Central US	431
Central US	446
North Central US	452

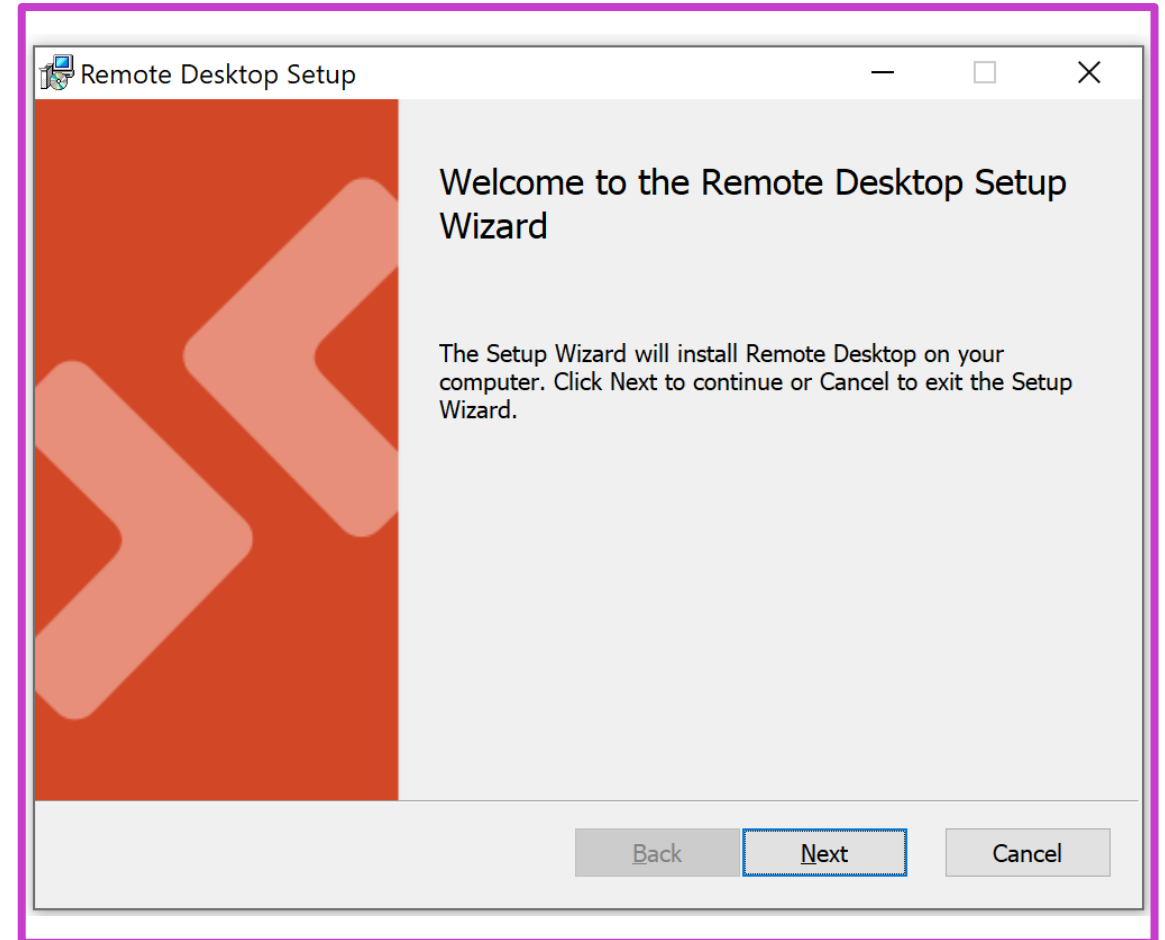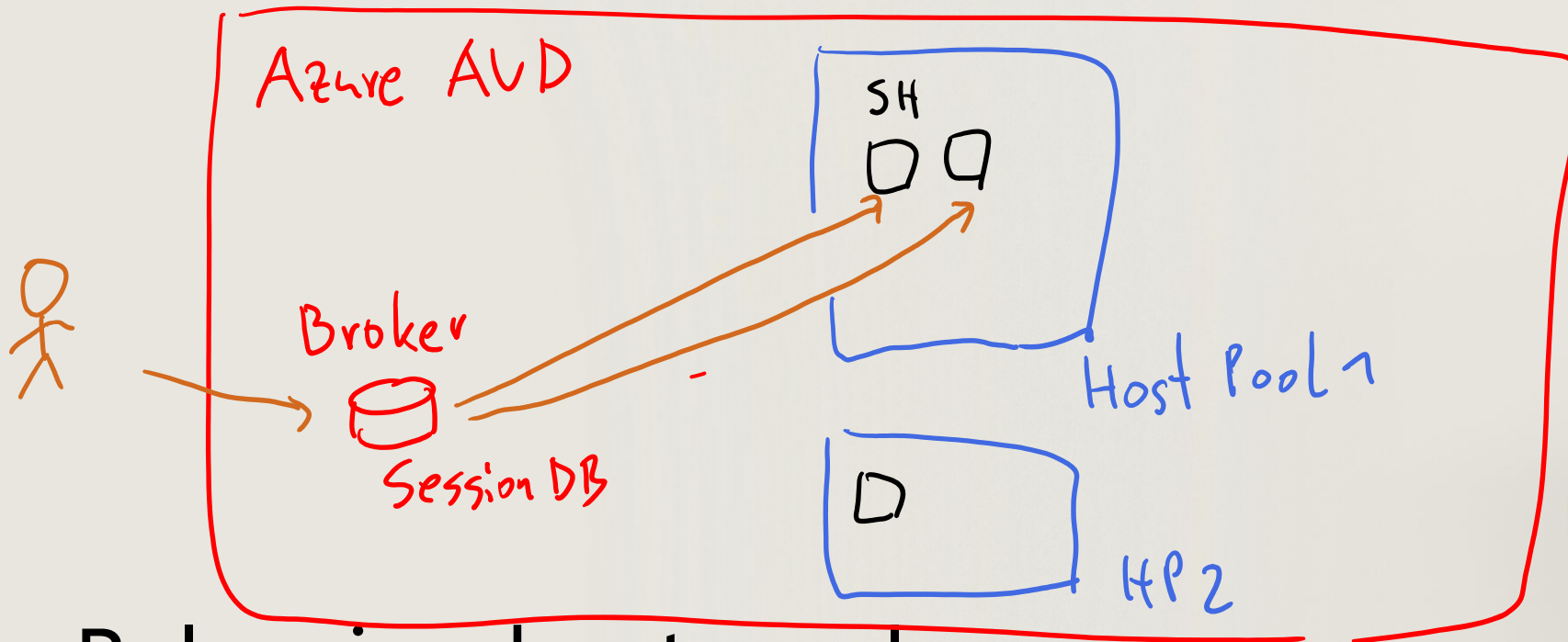# Recommend an operating system for an Azure Virtual Desktop implementation

Access Azure Virtual Desktop resources on devices with Windows 10, Windows 10 IoT Enterprise, and Windows 7 using the Windows Desktop client.

Choose the client that matches your version of Windows:

- Windows 64-bit
- Windows 32-bit
- Windows ARM64

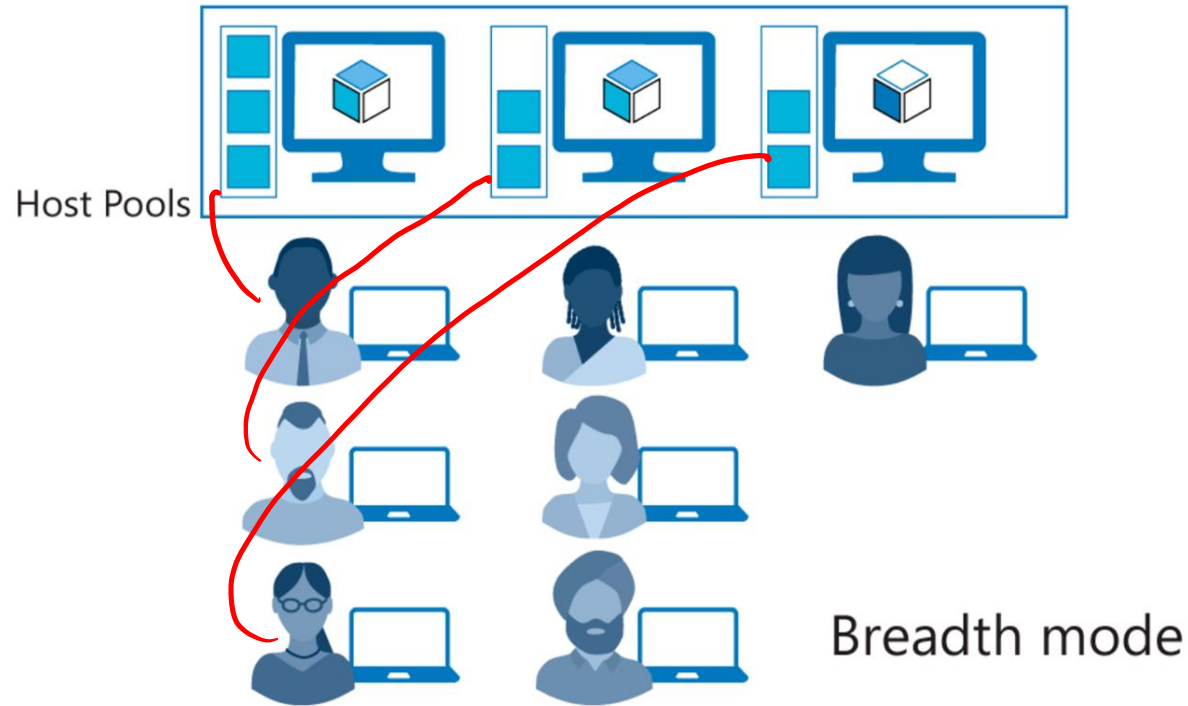**NOTE:** The client doesn't support Windows 8 or Windows 8.1.

Remote Desktop Setup

Welcome to the Remote Desktop Setup Wizard

The Setup Wizard will install Remote Desktop on your computer. Click Next to continue or Cancel to exit the Setup Wizard.

Back   Next   Cancel

Balancing host pools

Breadth-first load-balancing method

Host Pools

Breadth mode

Ideal for providing the best experience for users connecting to their pooled virtual desktop environment.

Depth-first load-balancing method

Host Pools

SH

max 3 Sessions

Depth mode
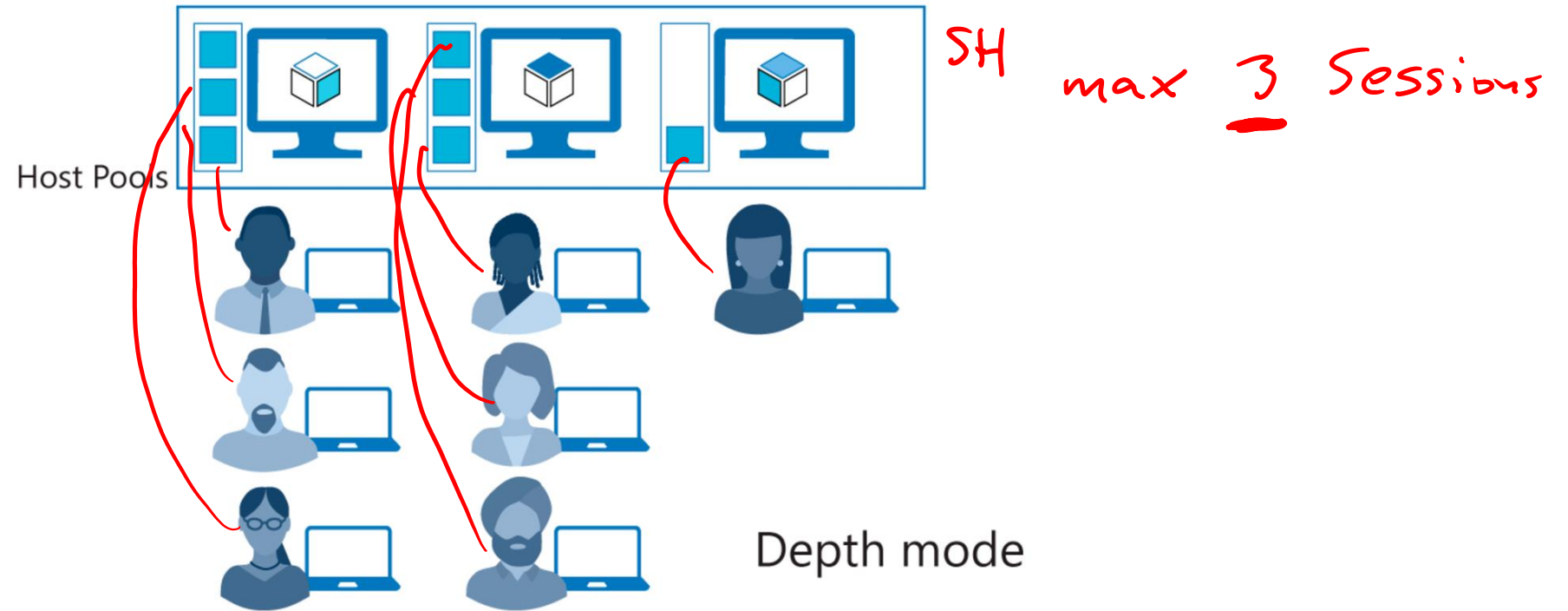
Ideal for cost-conscious organizations that want more granular control on the number of virtual machines they've allocated for a host pool.
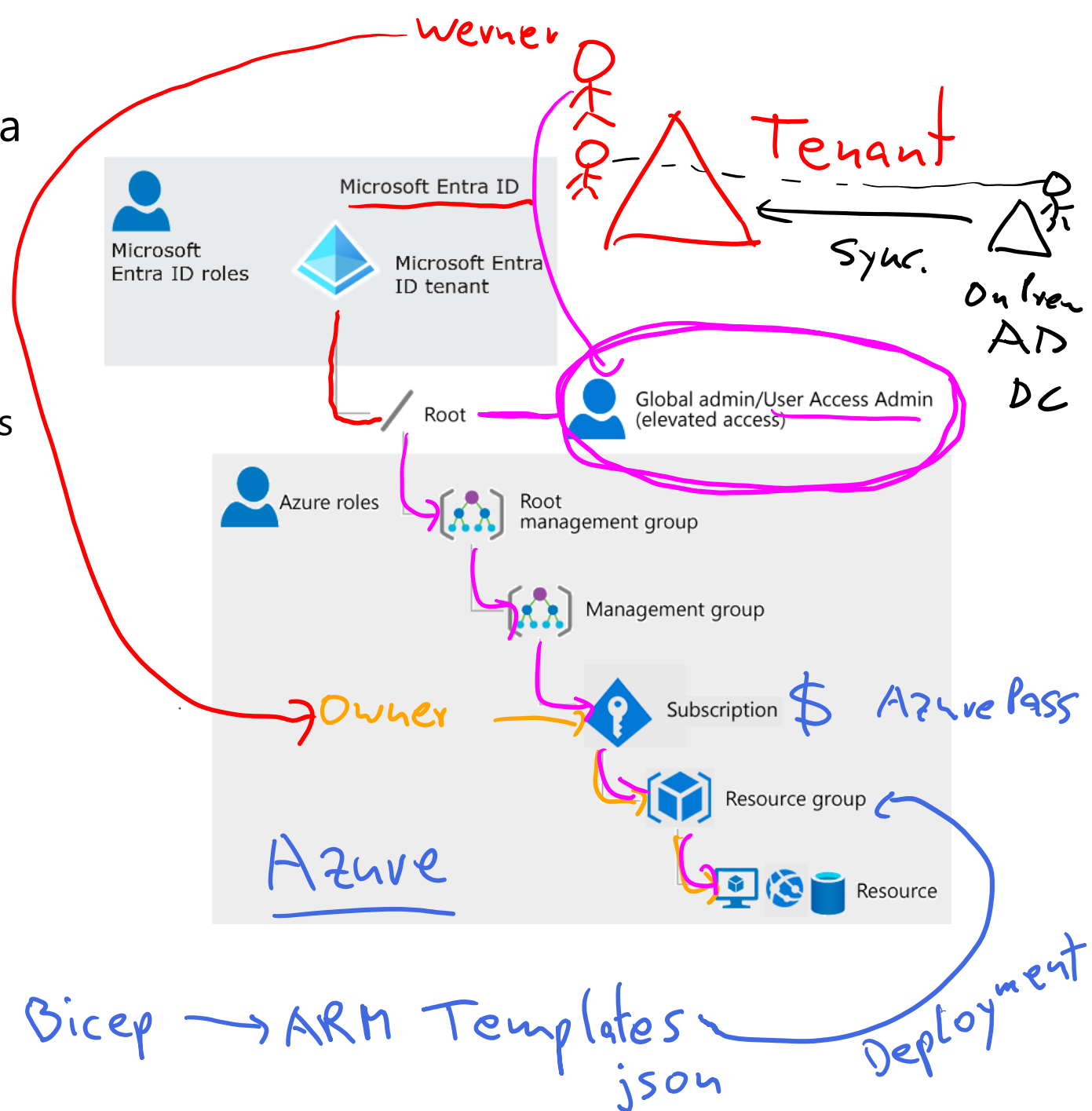
Recommendations for using subscriptions and management groups

A Global Administrator in Microsoft Entra ID may need to elevate access to access subscriptions and management groups, such as:

- Regain access to an Azure subscription or management group when a user has lost access

- Grant another user access to an Azure subscription or management group

- See all Azure subscriptions or management groups in an organization

- Allow an automation app to access all Azure subscriptions or management groups

- Region = Location

  z.B. westenrope

Werner

Tenant

Sync.

On Prem AD

DC

Microsoft Entra ID roles

Microsoft Entra ID tenant

Microsoft Entra ID

Global admin/User Access Admin (elevated access)

Root

Azure roles

Root management group

Management group

Owner

Subscription

$ Azure Pass

Resource group

Azure

Resource

Bicep → ARM Templates

json

Deployment

# Configure a location for the Azure Virtual Desktop metadata

Azure Virtual Desktop metadata

Azure Virtual Desktop stores global metadata information (tenant names, host pool names, app group names, and user principal names) in a datacenter.

- Whenever a customer creates a service object, they must enter a location for the service object

- The location entered determines where the metadata for the object will be stored

- The customer will choose an Azure region and the metadata will be stored in the related geography

Currently support for storing metadata in the following geographies:

- United States (US) (generally available)

- Europe (EU) (generally available)

- United Kingdom (UK) (public preview)
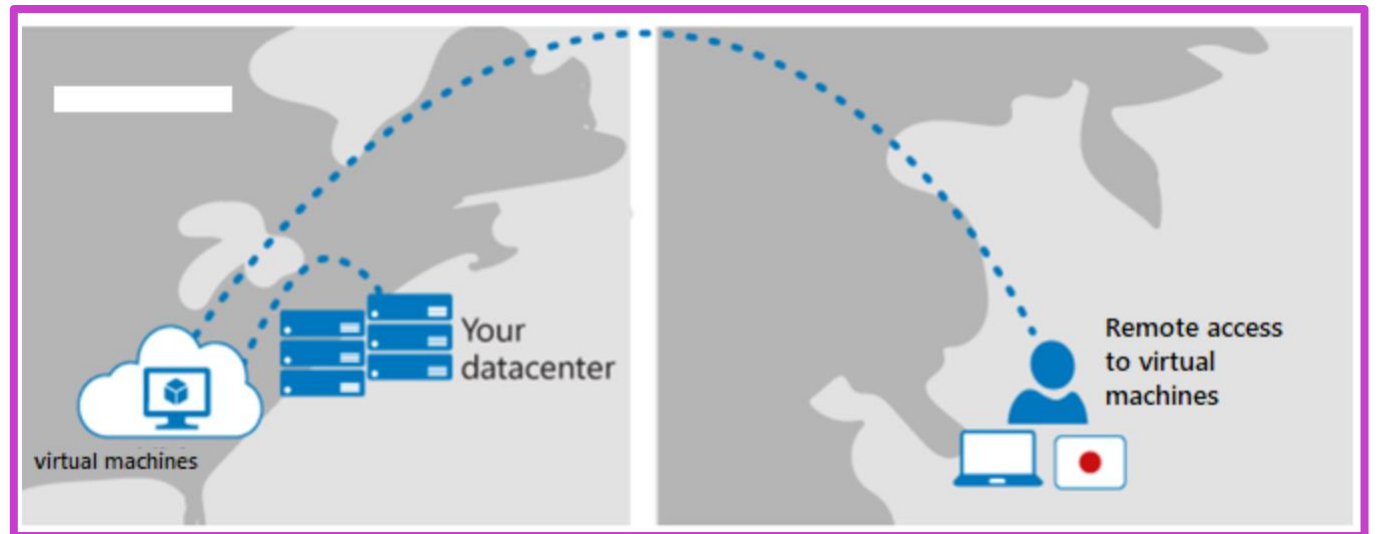
# Recommend a configuration for performance requirements

- Platform metrics are collected automatically for the virtual machine host

- You need an agent to collect performance data from the guest operating system

- Use an agent to collect log data from the guest operating system

- You can create diagnostic settings for a virtual machine to send platform metrics to other destinations
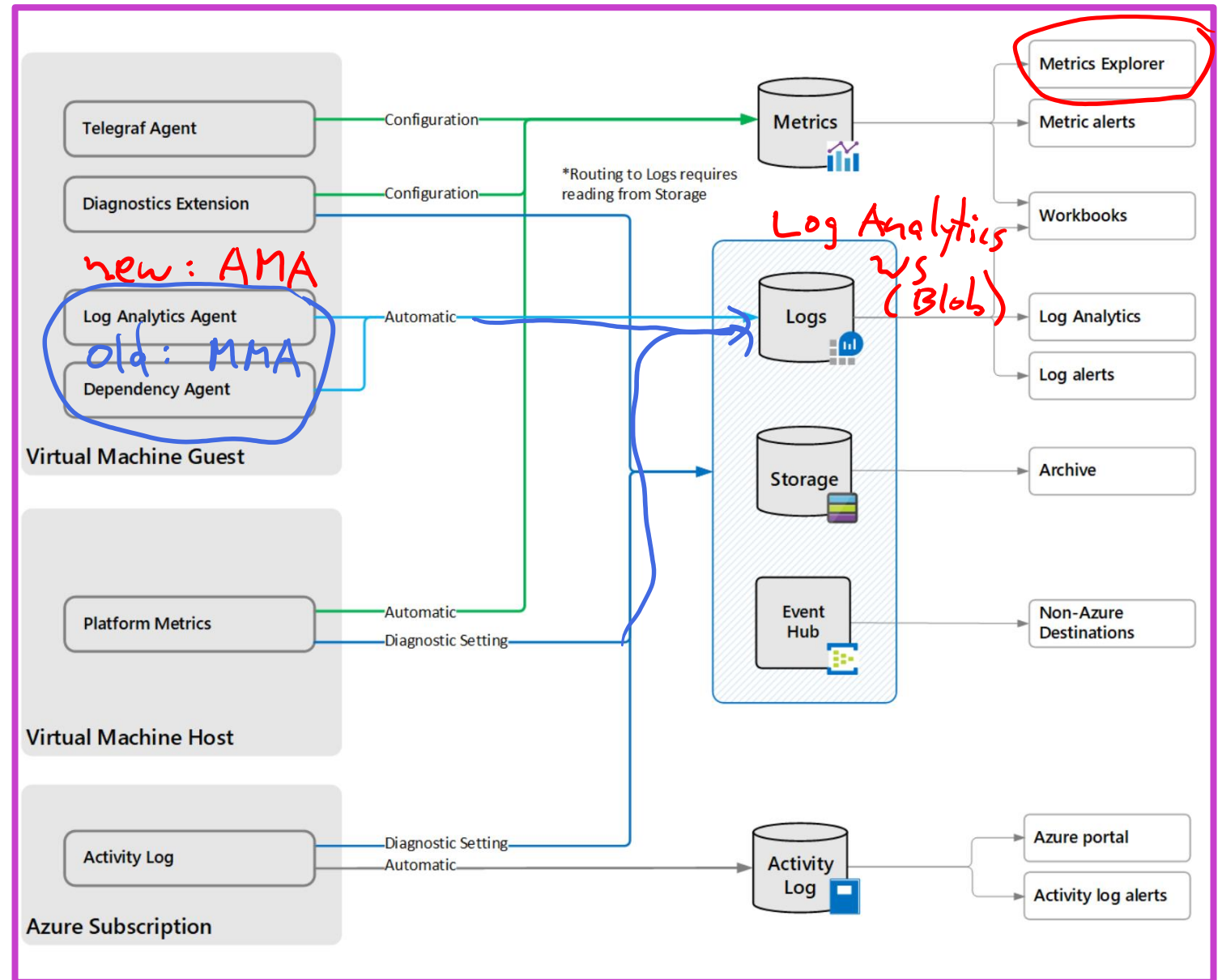
Knowledge check and Summary

Check your knowledge
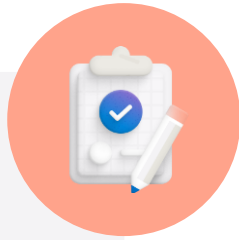
What you learned:

- Assess network capacity and speed requirements for Azure Virtual Desktop.

- Determine the connection round-trip time (RTT) from a location through the Azure Virtual Desktop service.

- Recommend an operating system for an Azure Virtual Desktop implementation.

- Describe the two load-balancing methods for Azure Virtual Desktop.

- Recommendation subscriptions and management groups for Azure Virtual Desktop.

- Recommend a configuration for performance requirements.

Microsoft