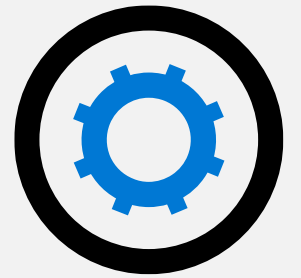


# AZ-140

## Configuring and Operating Azure Virtual Desktop



# Design the Azure Virtual Desktop architecture



# Introduction

- 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 a 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.
- 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



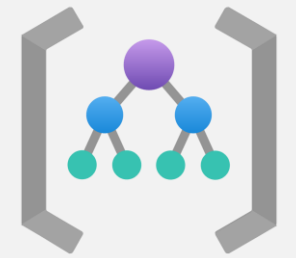
Minimum recommended bandwidths for a smooth user experience for using applications:

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

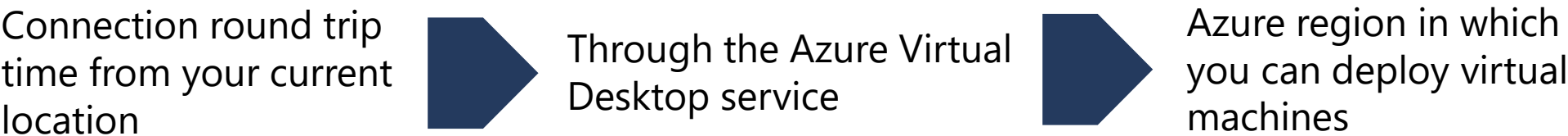
Bandwidth recommendations for a smooth user experience for display resolutions:

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



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

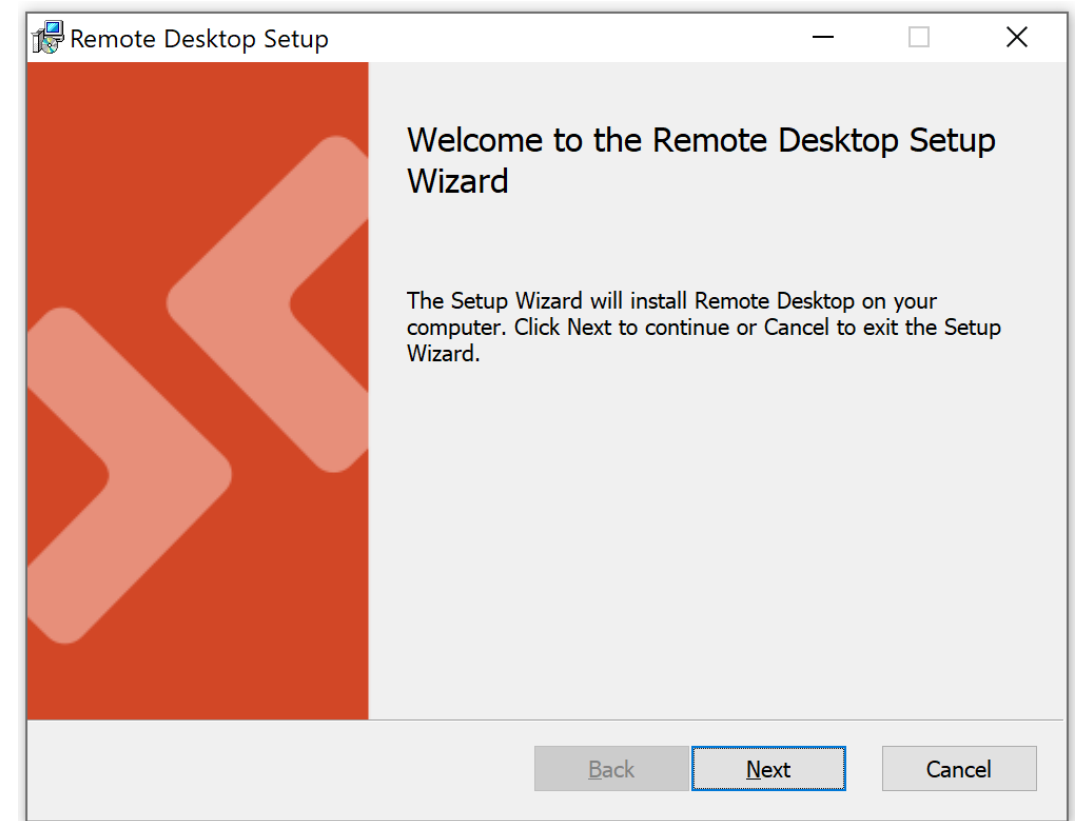




Access Azure Virtual Desktop resources on devices with Windows 10, Windows 10 IoT Enterprise, and Windows 7 using the Windows Desktop client.

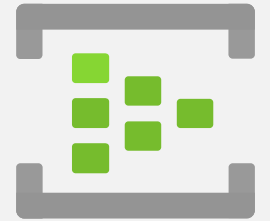
Choose the client that matches your version of Windows:

- [Windows 64-bit](#)
- [Windows 32-bit](#)
- [Windows ARM64](#)



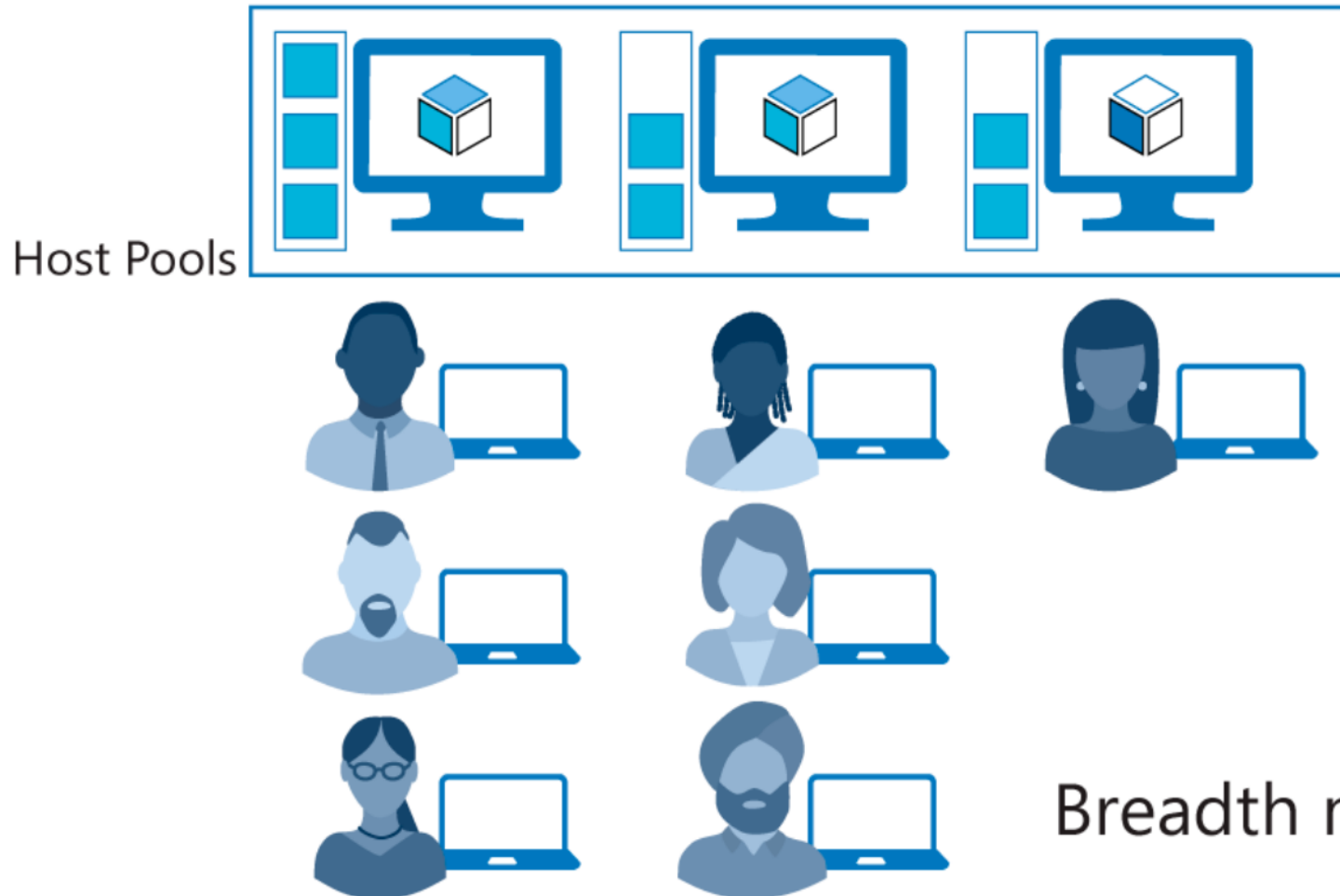
**NOTE:** The client doesn't support Windows 8 or Windows 8.1.

# Balancing host pools



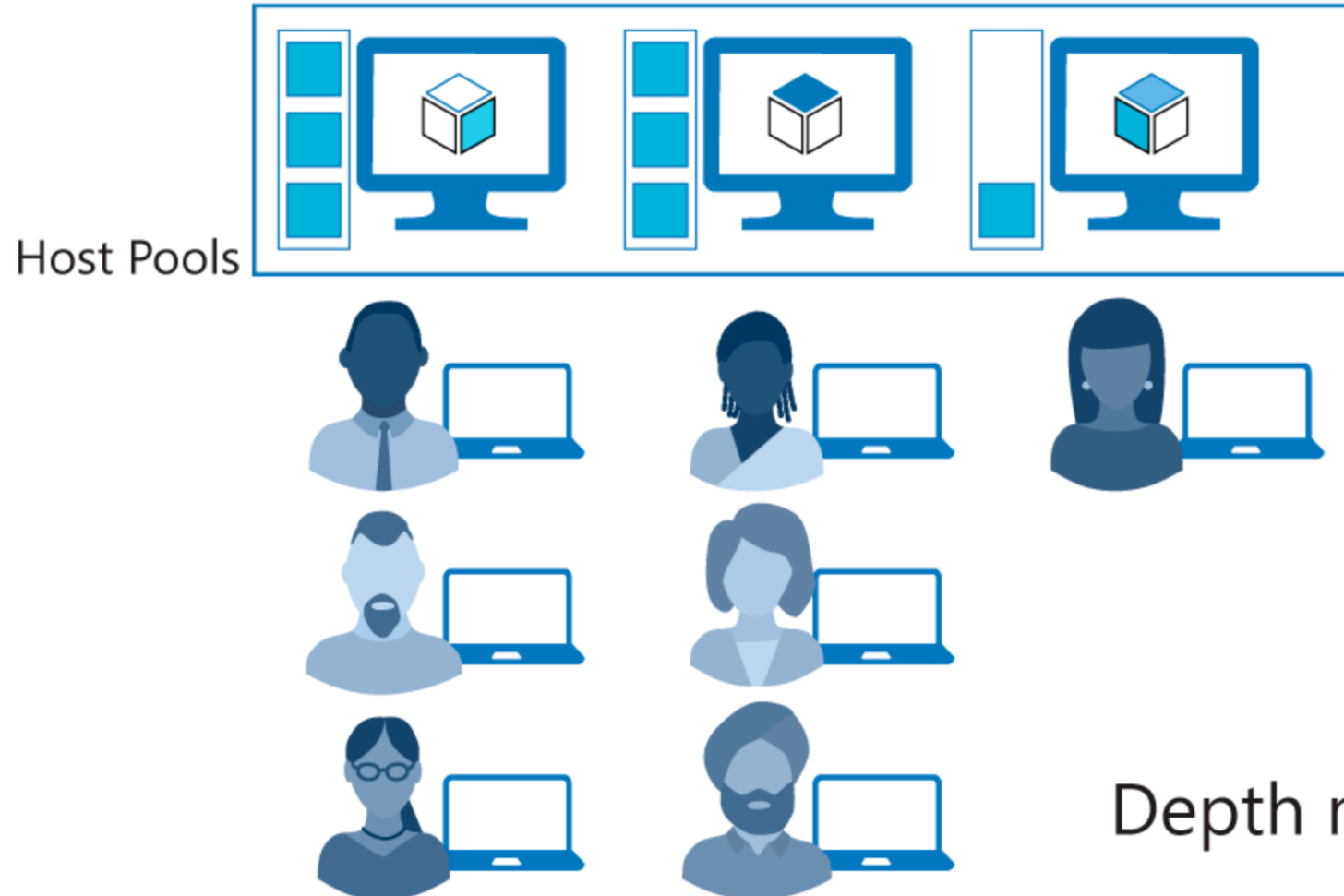
# Breadth-first load-balancing method

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

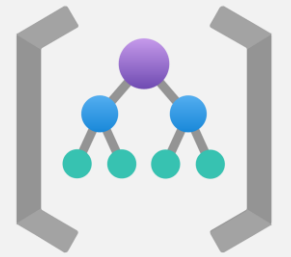


# Depth-first load-balancing method

Ideal for cost-conscious organizations that want more granular control on the number of virtual machines they've allocated for a host pool.

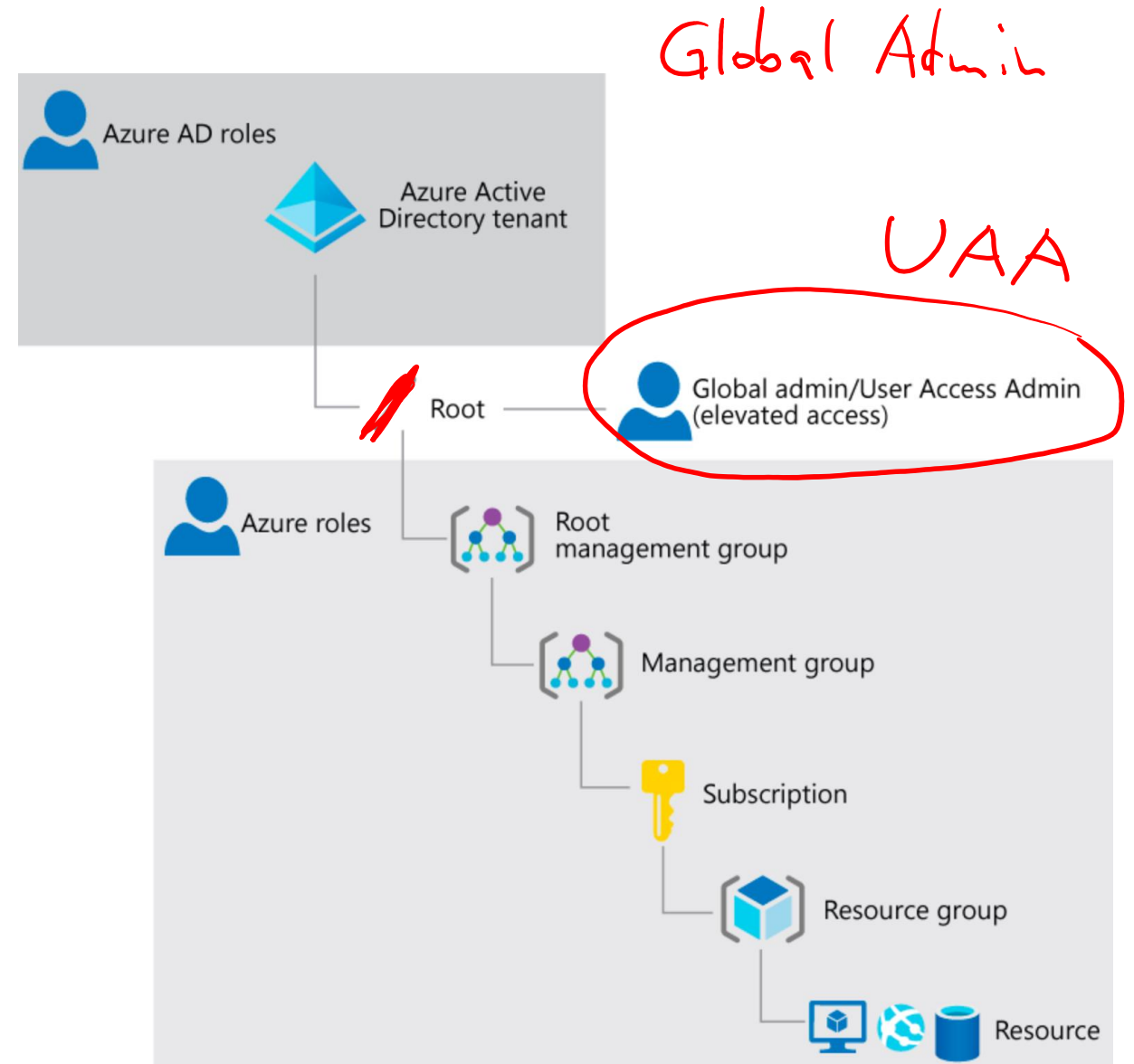


# Recommendations for using subscriptions and management groups



A Global Administrator in Azure AD 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



# Configure a location for the Azure Virtual Desktop metadata



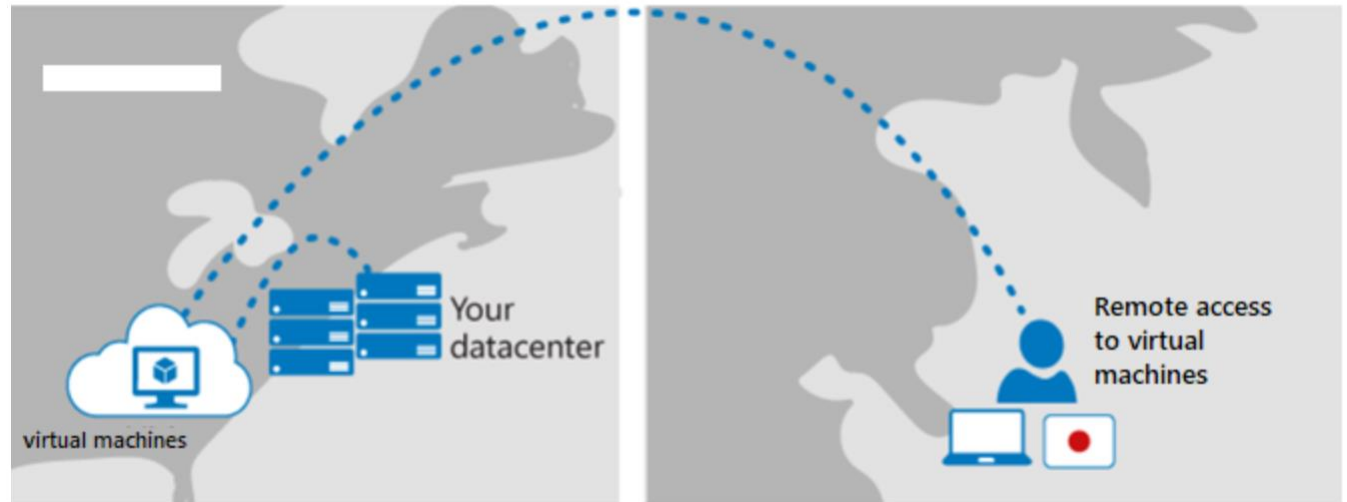
# Azure Virtual Desktop metadata

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)





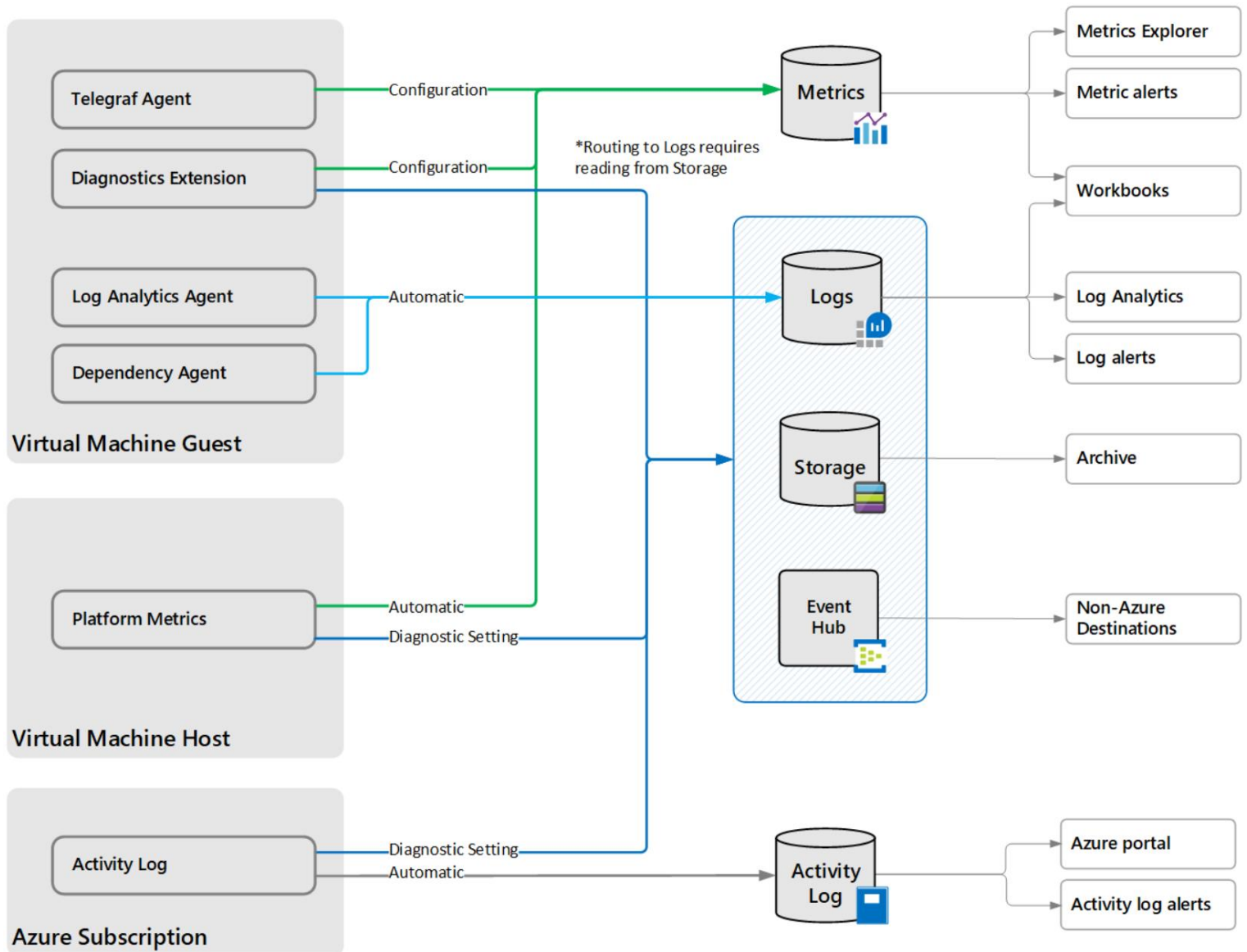
# Recommend a configuration for performance requirements



Agents: Legacy MMA

new ANA

- 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.
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- Recommend a configuration for performance requirements.

# End of presentation

