AZ-140 Agenda

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

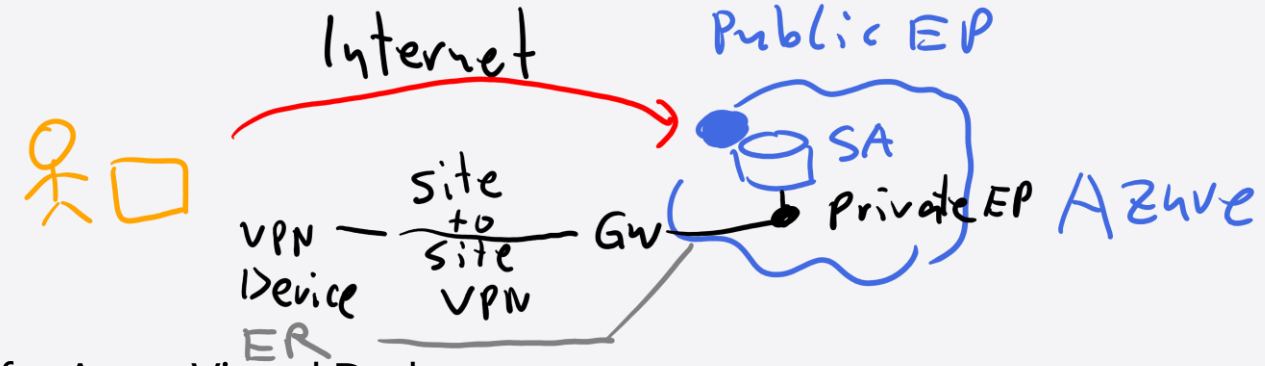
Learning Path 5

13. Monitor and manage performance and health
14. Plan and implement updates, backups, and disaster recovery

Microsoft

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.

Assess network bandwidth and latency 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 network round trip latency statistics

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

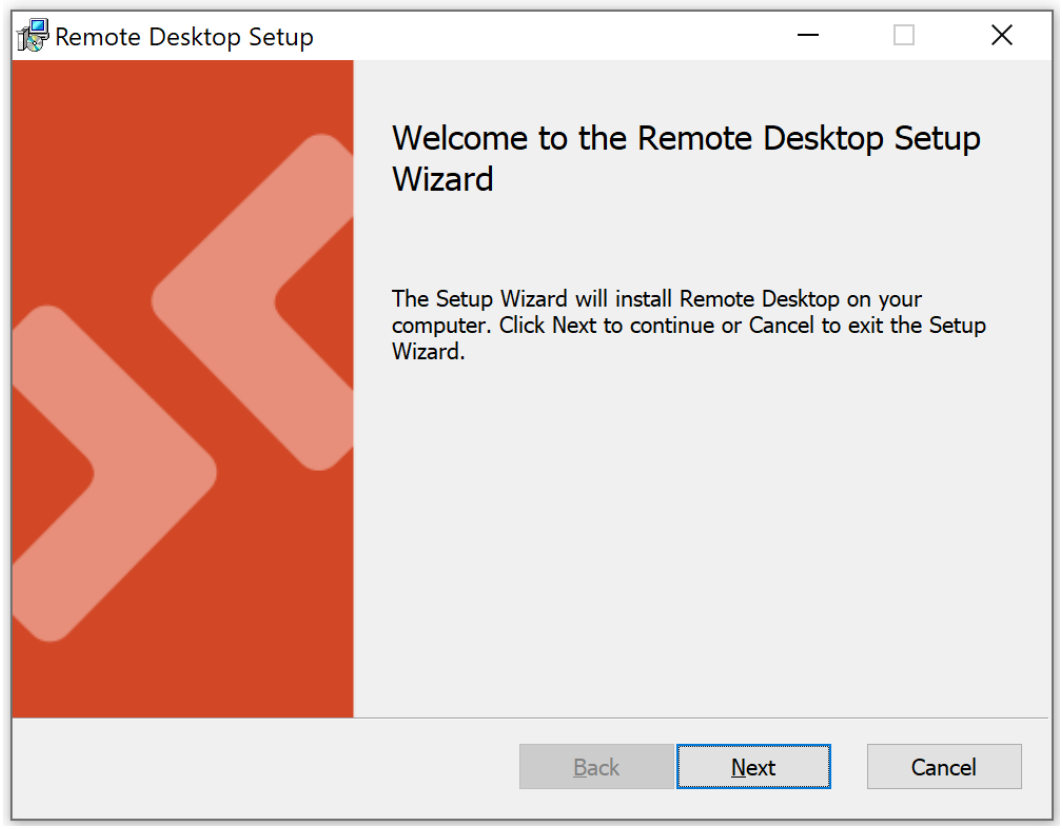
Metric	Bad	Okay	Good
Percentage of dropped frames with low frame rate (less than 15 fps)	Greater than 15%	10%–15%	less than 10%
Percentage of dropped frames with high frame rage (greater than 15 fps)	Greater than 50%	20%–50%	Less than 20%
End-to-end delay per frame	Greater than 300 ms	150 ms–300 ms	Less than 150 ms

Recommend an operating system for an Azure Virtual Desktop implementation

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

Choose the client that matches your version of Windows:

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



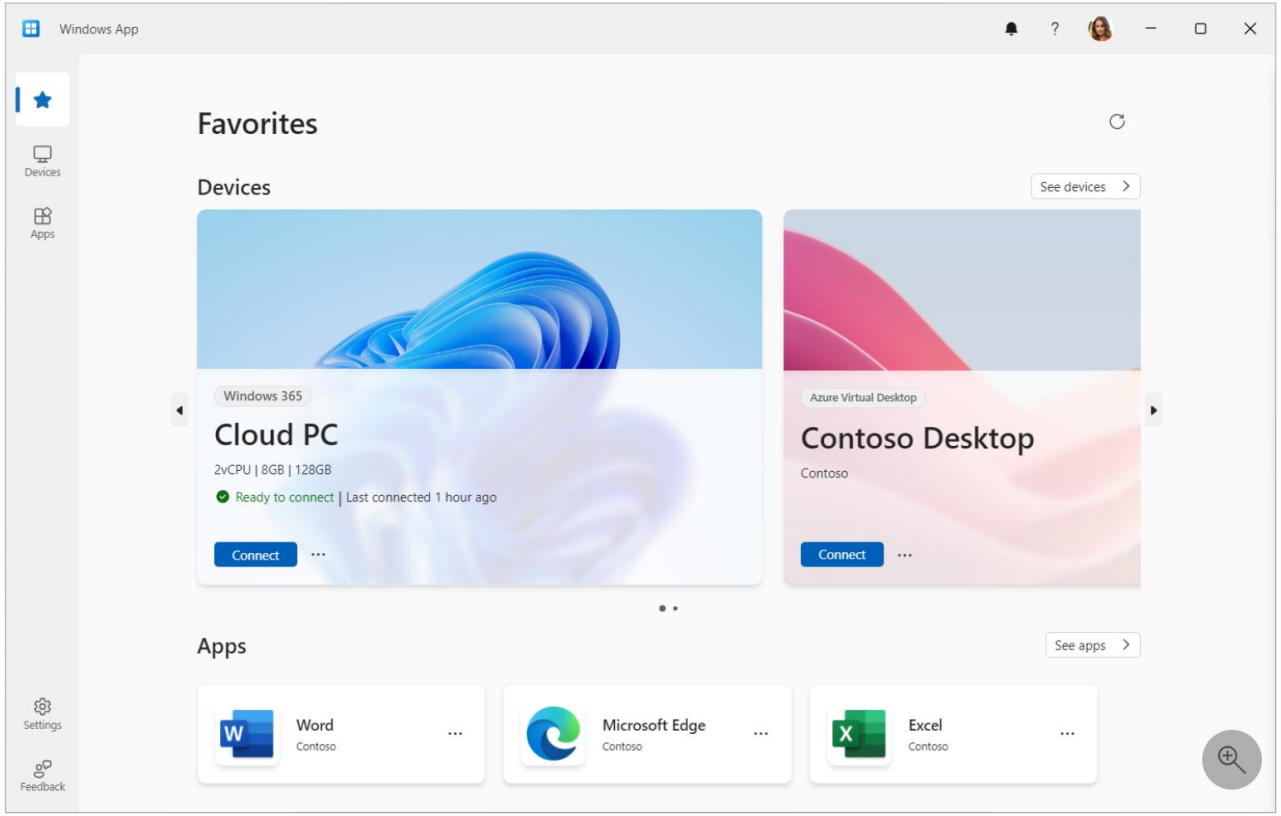
NOTE: The client doesn't support Windows 8 or Windows 8.1.

Windows App

Windows App is a gateway to Azure Virtual Desktop, Windows 365, Microsoft Dev Box, Remote Desktop Services, and remote PCs, securely connecting to Windows devices and apps.

Windows App is available for the following:

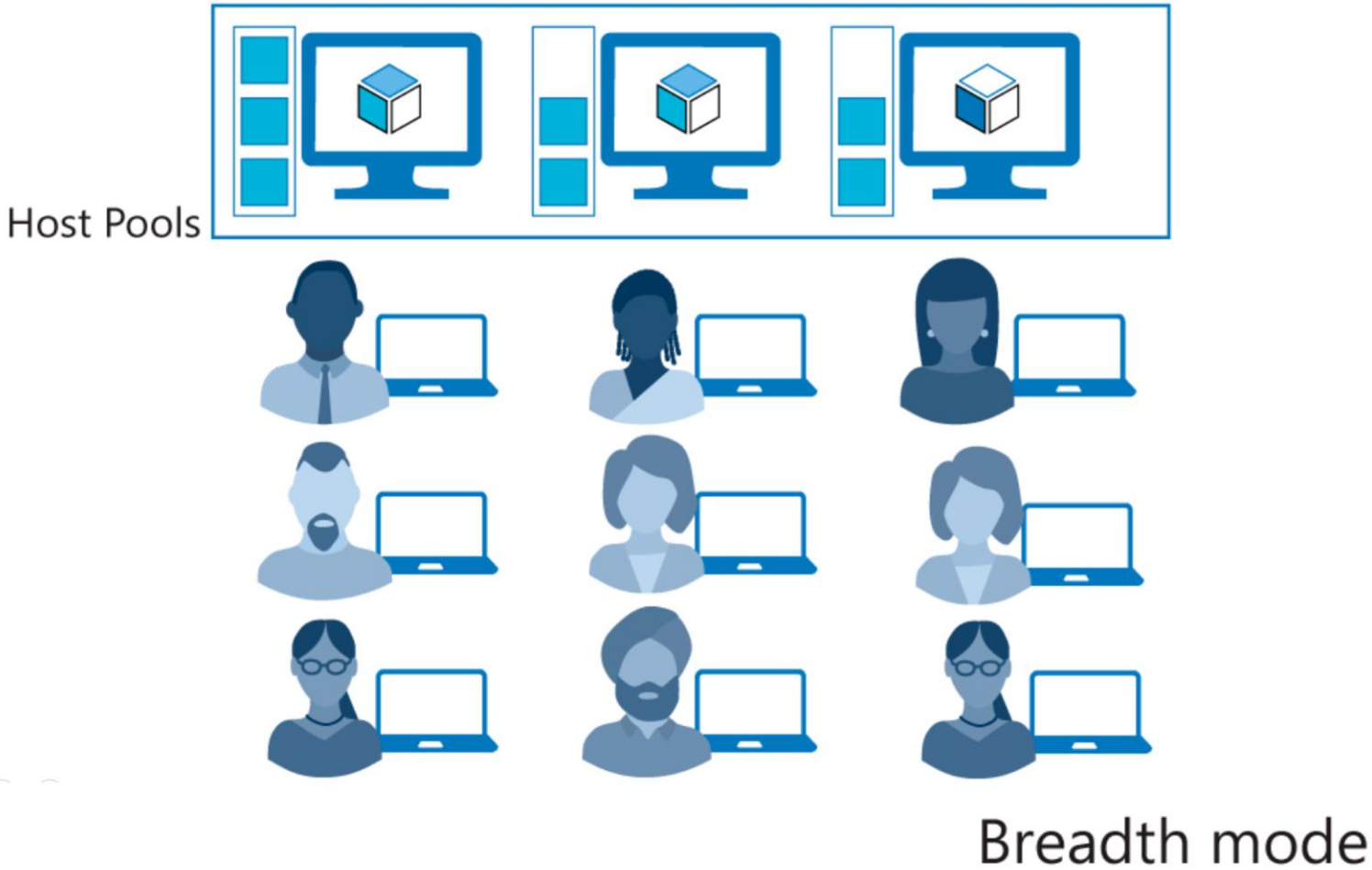
- Windows
- macOS
- iOS/iPadOS
- Android/Chrome OS (preview)
- Web browsers
- Meta Quest VR headset (preview)



Balancing host pools

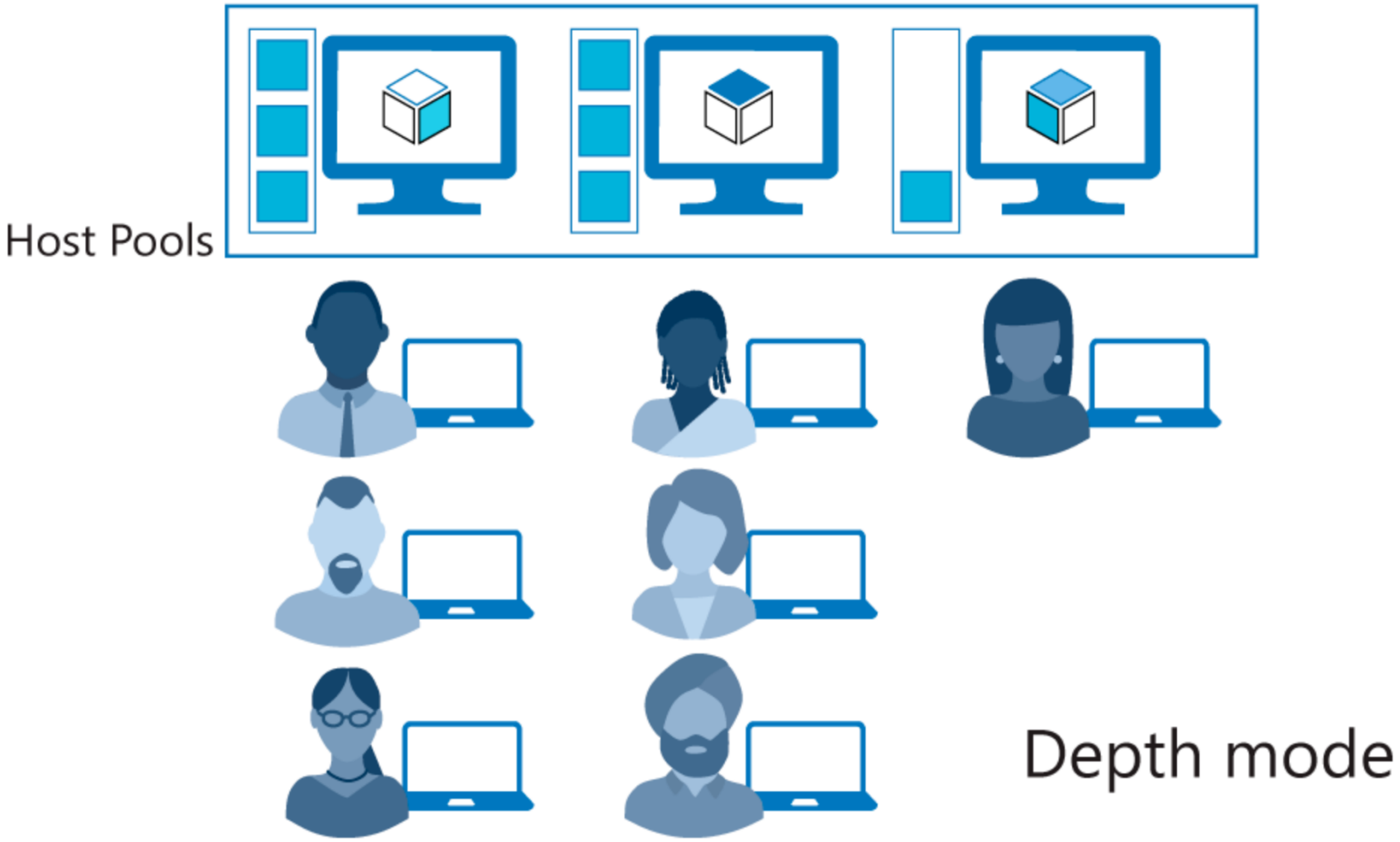
Breadth-first load-balancing method

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



Depth-first load-balancing method

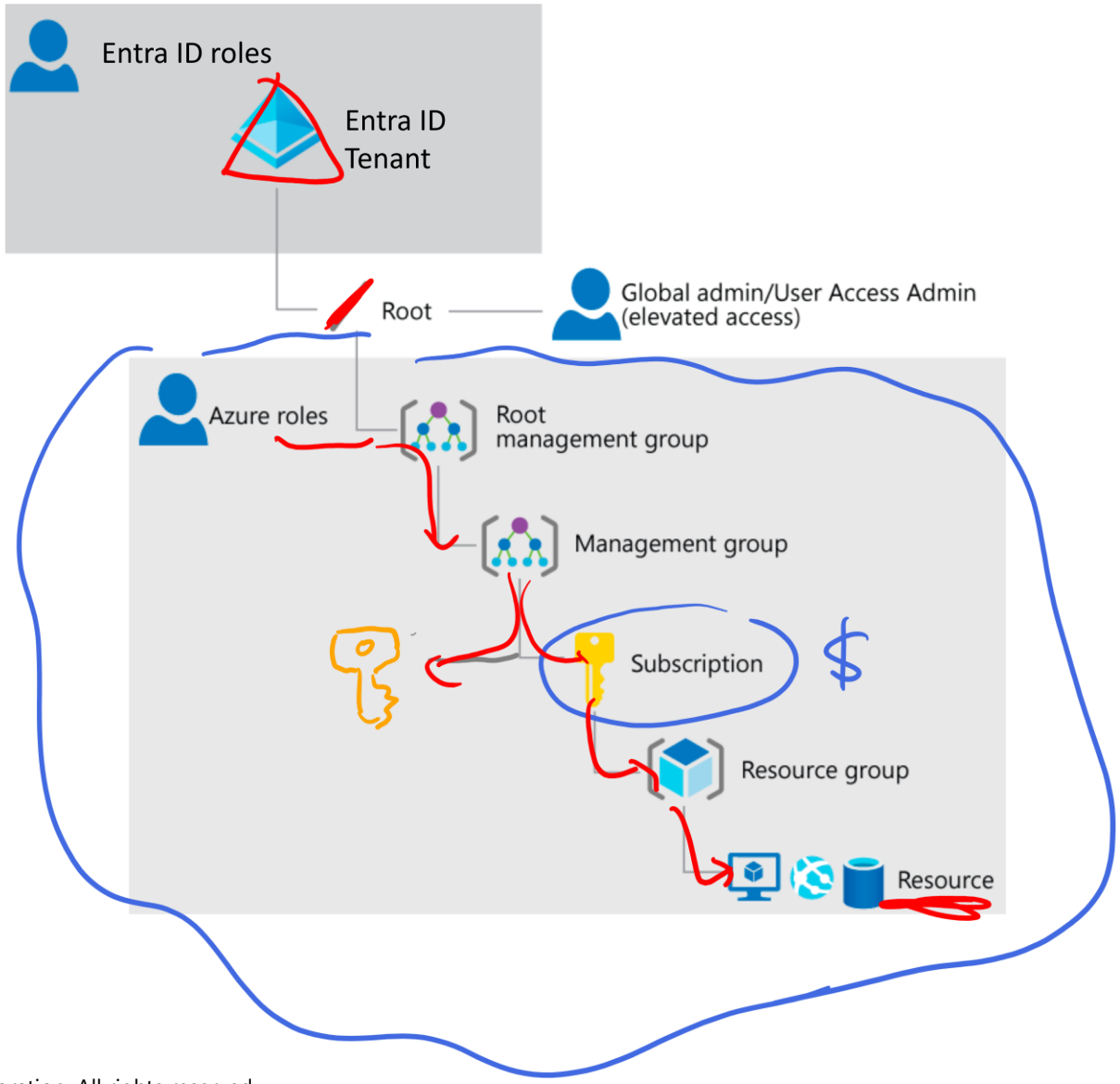
Ideal for cost-conscious organizations that want more granular control on the number of virtual machines they've allocated for a host pool.



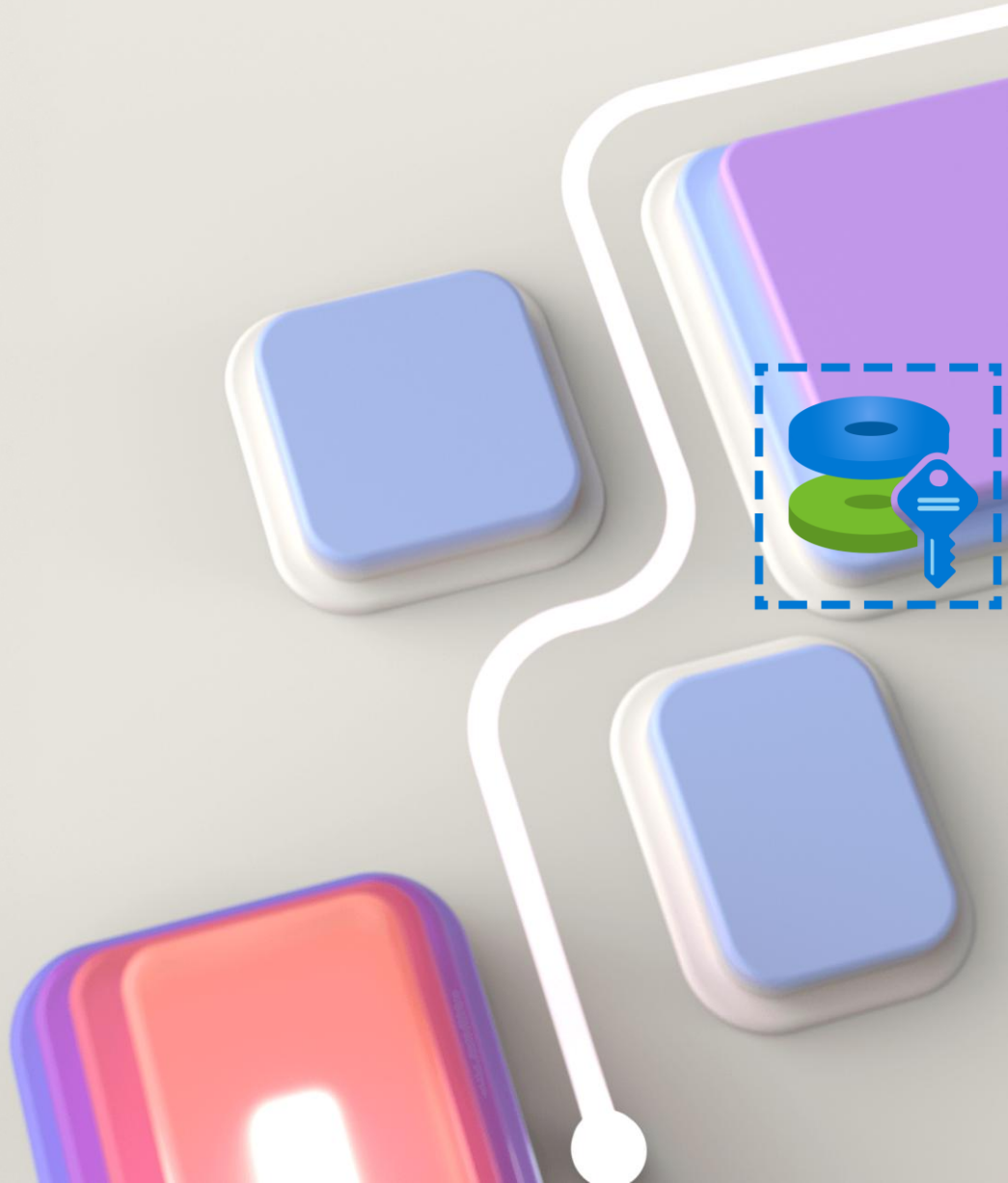
Recommendations for using subscriptions and management groups

A Global Administrator in 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



Configure a location for the Azure Virtual Desktop metadata



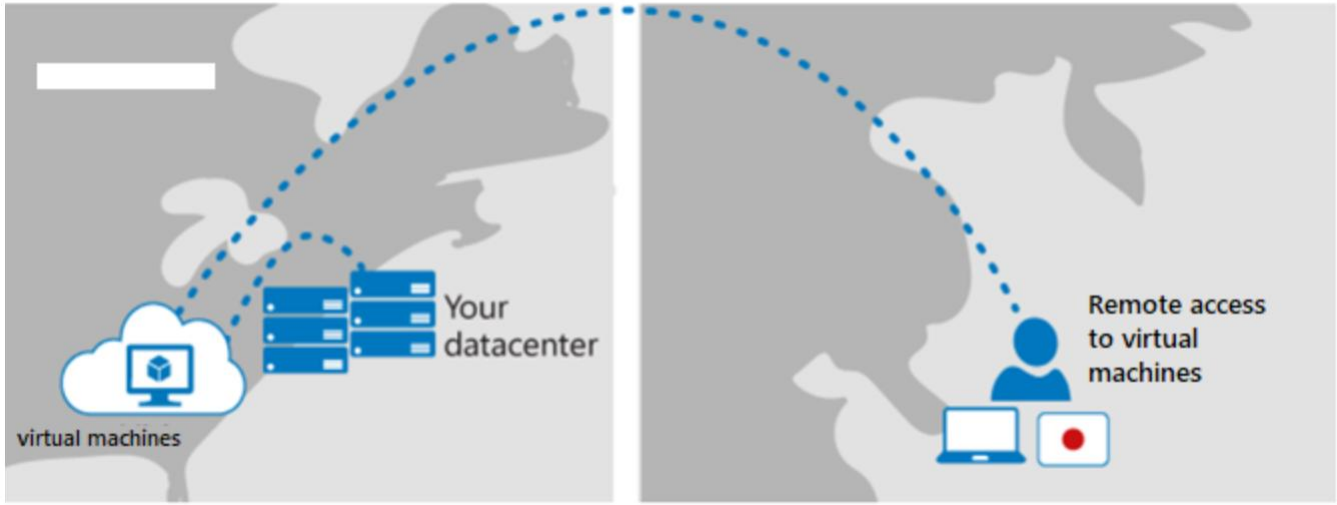
Azure Virtual Desktop metadata

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

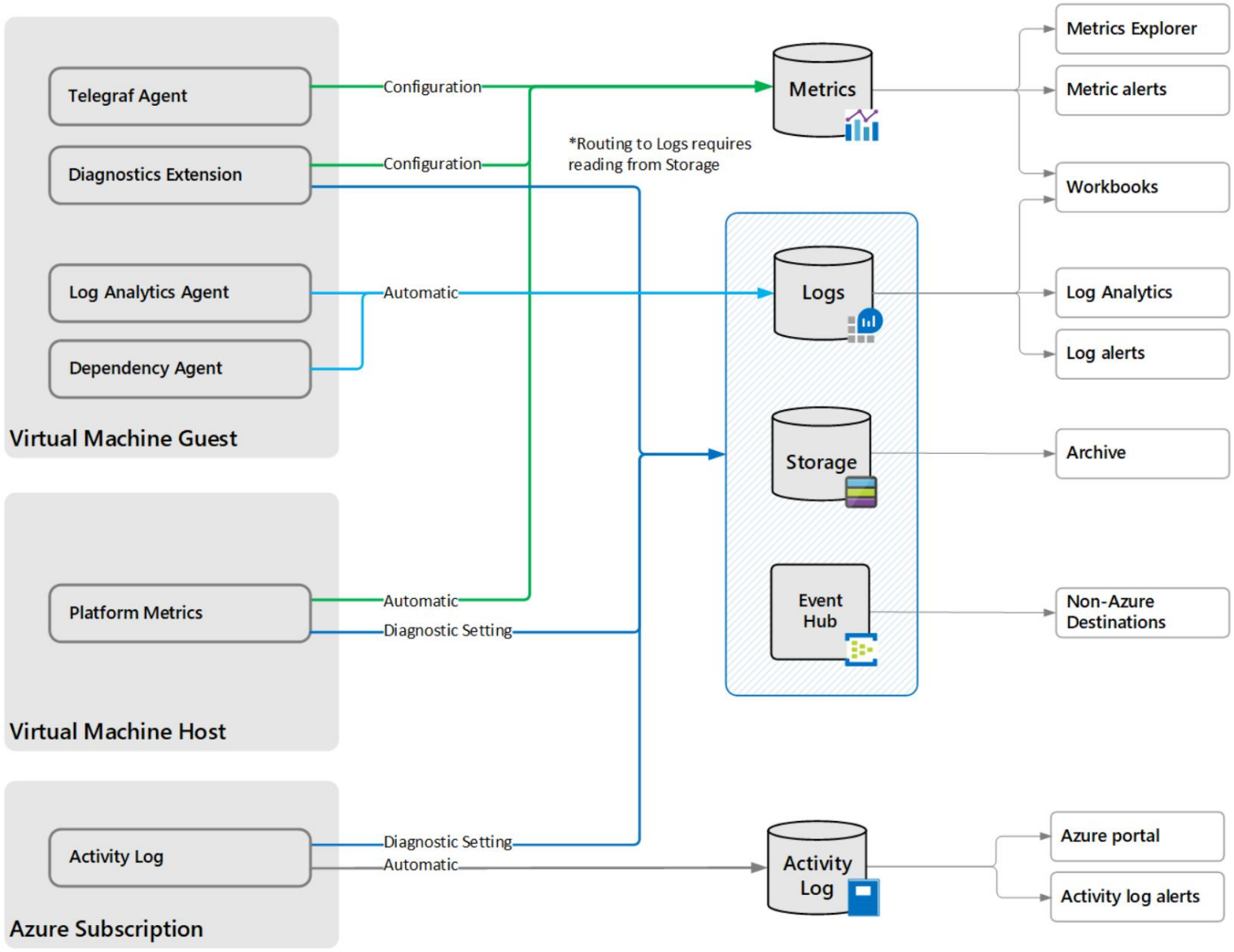
Currently support for storing metadata in the following geographies:

- United States (US)
- Europe (EU)
- United Kingdom (UK)
- Canada (CA)
- Japan (JP)
- Australia (AU)
- India (IN)
- South Africa (ZA)



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



Summary

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.

End of presentation