Microsoft 365

Praca zdalna na stacjach w Chmurze. Windows Virtual Desktop w Microsoft Azure

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Virtualization scenarios

Security and regulation

Financial Services

Healthcare

Government

Elastic workforce

Mergers and acquisition

Short term employees

Contractor and partner access

Specific employees

BYOD and mobile

Call centers

Branch workers

Specialized workloads

Design and engineering

Legacy apps

Software dev test

Virtualization hosts of the future

Windows Server RD Session Host

Scalable multi-session **legacy** Windows environment

Windows Server

Multiple sessions

Win32

Office 2019 Perpetual

Long-Term Servicing Channel

Windows 10 Enterprise multi-session

Scalable multi-session **modern** Windows user experience with Windows 10 Enterprise security

Windows 10

Multiple sessions

Win32, UWP

Office 365 ProPlus

Semi-Annual Channel

Windows 10 Enterprise

Native single-session **modern** Windows experience

Windows 10

Single session

Win32, UWP

Office 365 ProPlus

Semi-Annual Channel

Windows Virtual Desktop Benefits

Enables a multi-session Windows 10 experience, optimized for Office 365 ProPlus

Supports Windows Server (2012R2 +)

Most flexible service allowing you to virtualize both desktops and apps

Windows 7 virtual desktop with free Extended Security Updates

Integrated with the security and management of Microsoft 365

Supported OS

Windows 10 Enterprise Multi-session

Windows 10 Enterprise Single-Session

Windows 7 Single-Session

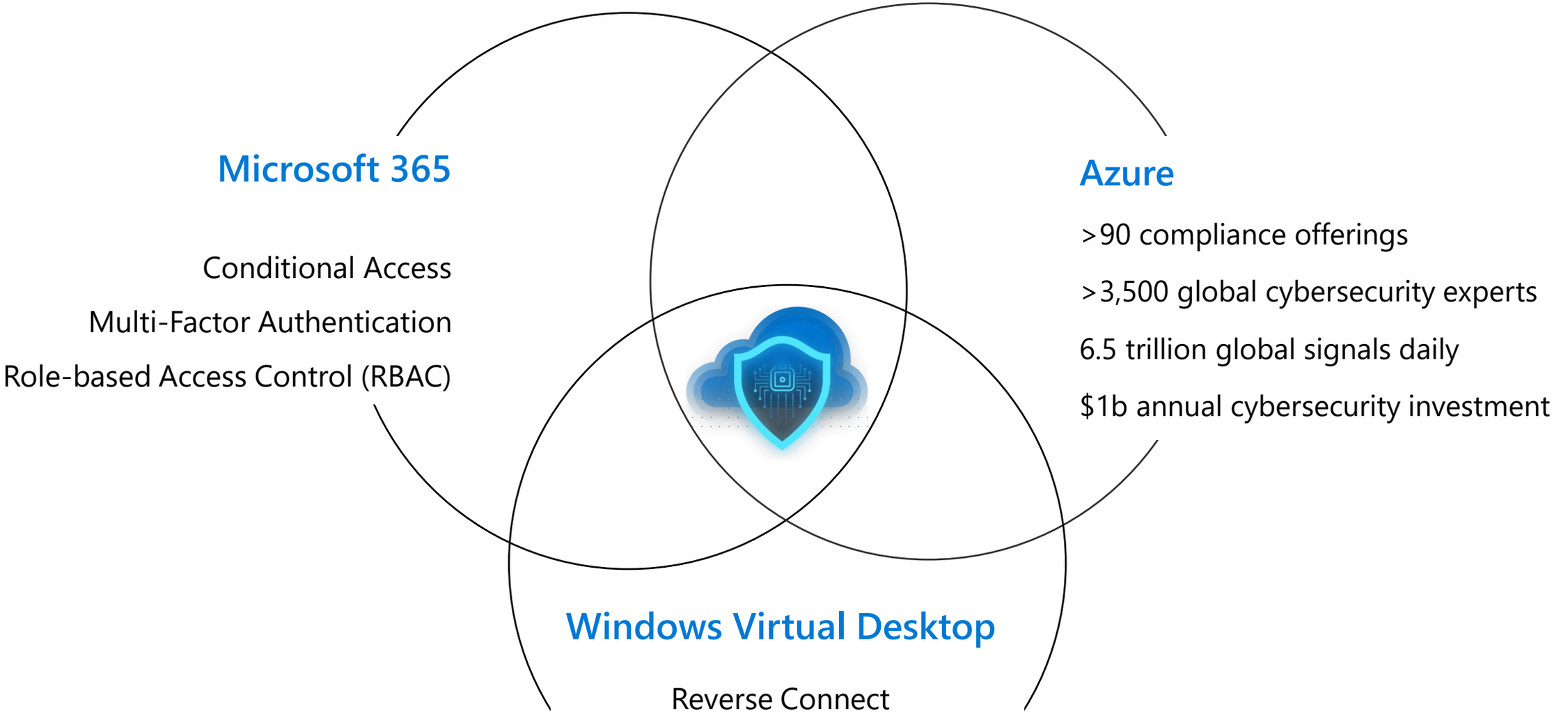
Windows Server 2019

Windows Server 2016

Windows Server 2012 R2

VMs in customer's Azure subscription

Blending the security of the convergence of the Microsoft ecosystem



Most customers are already eligible for WVD

Client

Customers are eligible to access Windows 10 single and multi session and Windows 7 with Windows Virtual Desktop (WVD) if they have one of the following licenses*:

- **Microsoft 365 E3/E5**
- **Microsoft 365 A3/A5/Student Use Benefits**
- **Microsoft 365 F1**
- **Microsoft 365 Business**
- **Windows 10 Enterprise E3/E5**
- **Windows 10 Education A3/A5**
- **Windows 10 VDA per user**

**Customers can access Windows Virtual Desktop from their non-Windows Pro endpoints if they have a Microsoft 365 E3/E5/F1, Microsoft 365 A3/A5 or Windows 10 VDA per user license.*

Server

Customers are eligible to access Server workloads with Windows Virtual Desktop (WVD) if they have one of the following licenses:

- **RDS CAL license with active Software Assurance (SA)**

Pay only for the virtual machines (VMs), storage, and networking consumed when the users are using the service

Take advantage of options such as one-year or three-year Azure Reserved Virtual Machine Instances, which can save up to 72 percent versus pay-as-you-go pricing. Now with monthly payment options!

WVD Pricing page on Azure.com

Architecture Overview

Native Windows Virtual Desktop

High Level Architecture

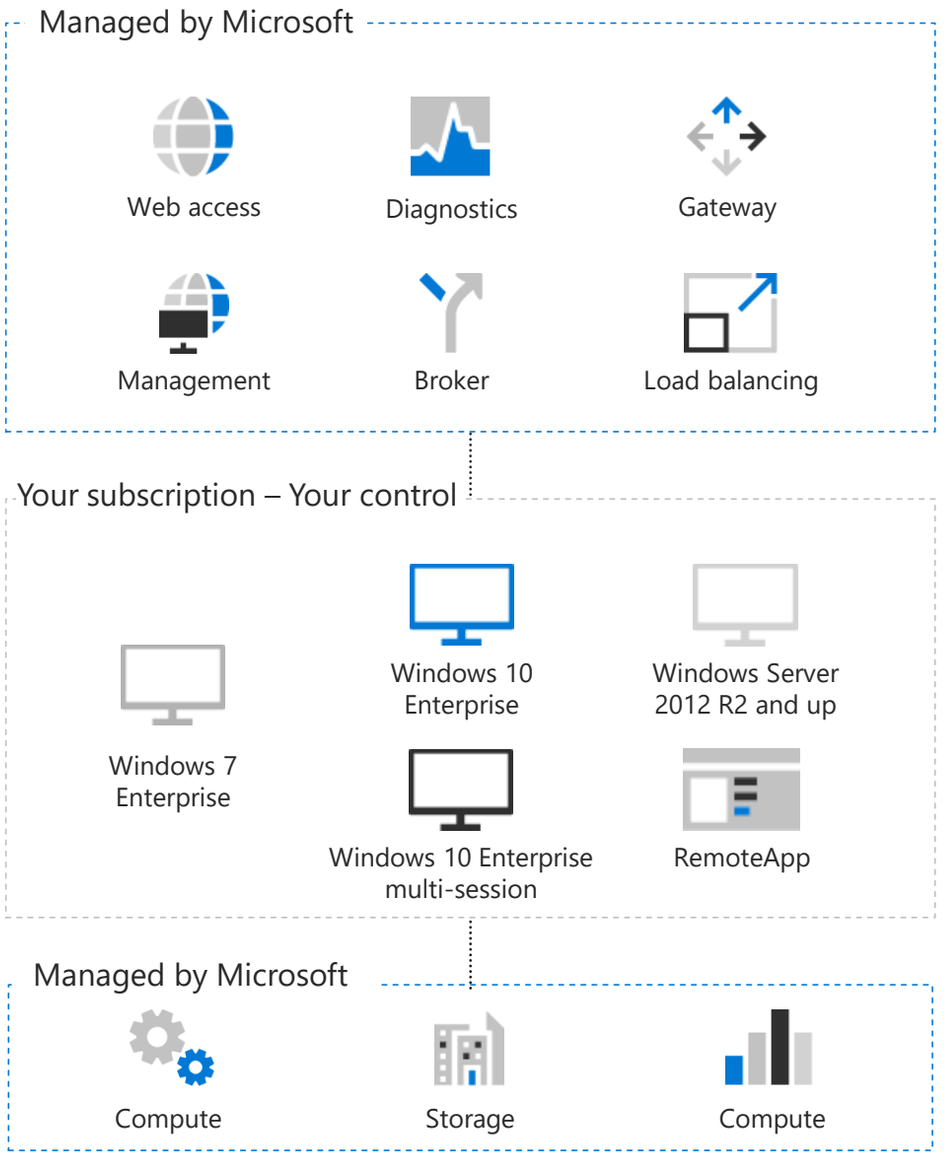
Use Azure Active Directory identity management service, integrated with AD DS or AADDS

Provide virtualization infrastructure as a managed service

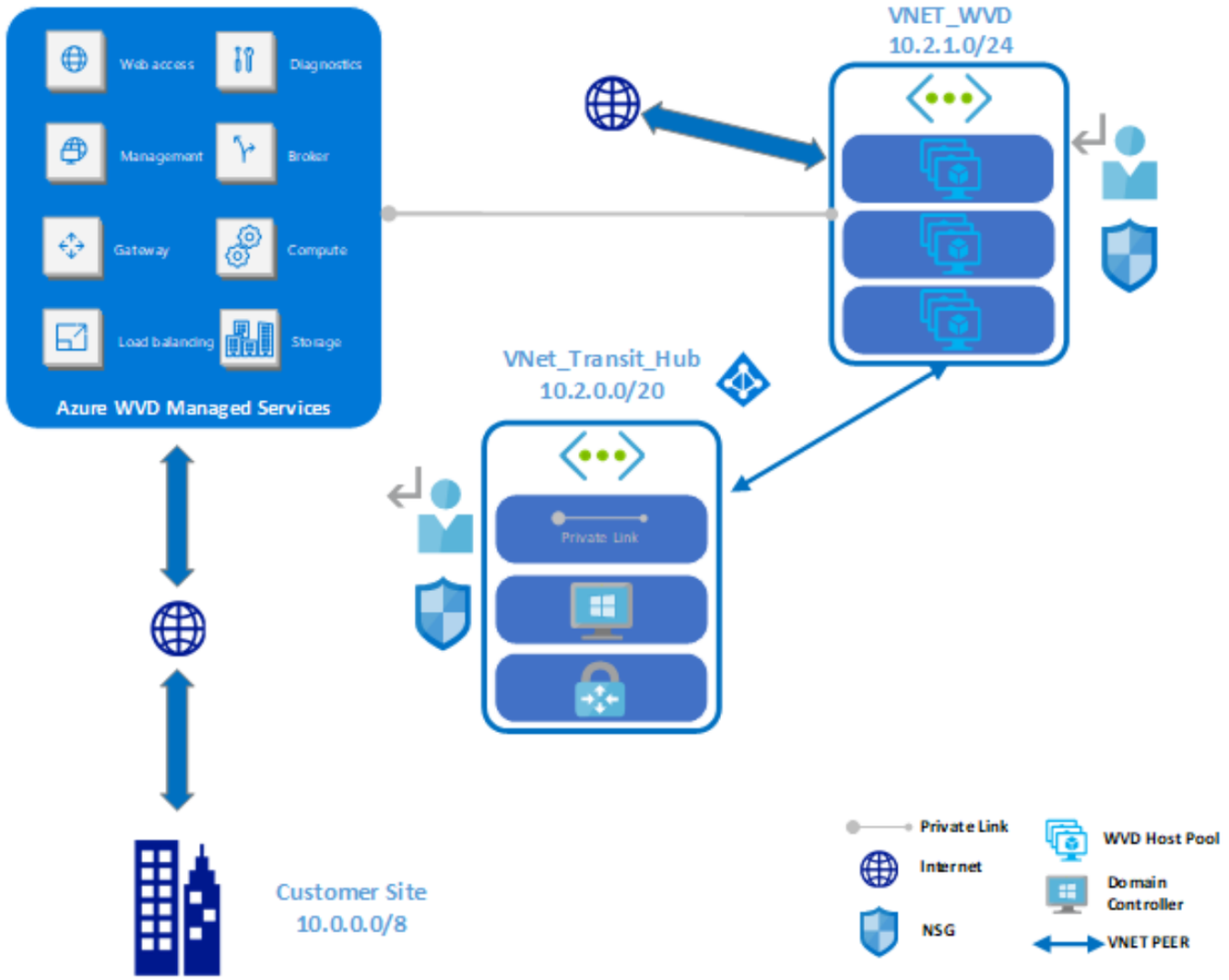
Deploy and manage virtual machines in Azure subscription

Manage using existing tools like Configuration Manager or Microsoft Intune

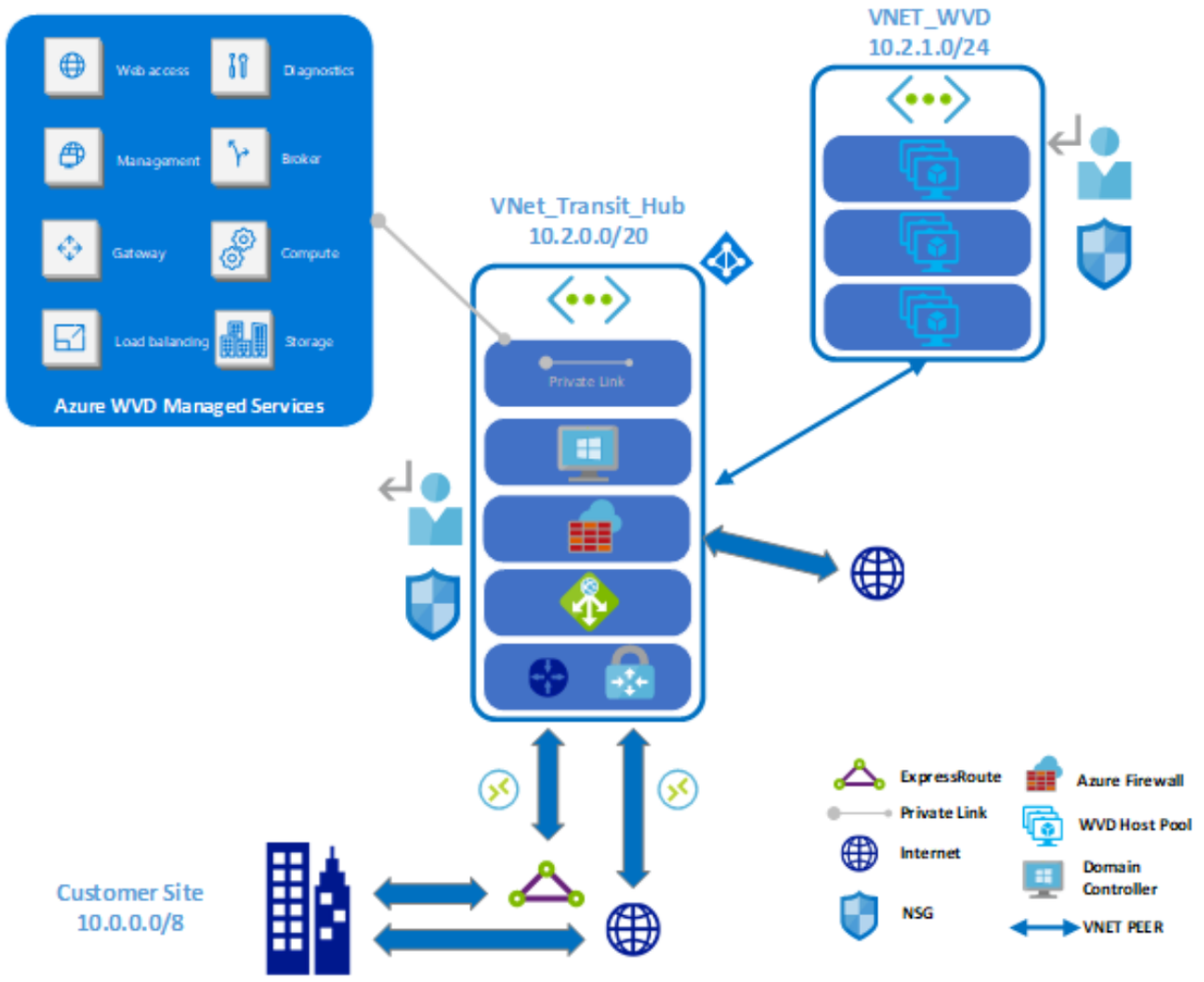
Connect easily to on-premises resources



Windows Virtual Desktop



Windows Virtual Desktop



Prerequisites to deploy Windows Virtual Desktop

[Get started at aka.ms/startwvd](aka.ms/startwvd)

STEP 1

Choose an identity strategy

- Azure ADDS
- VM with AD configured
- ExpressRoute or VPN to on-premises DC

STEP 2

Choose where to host FSLogix profiles

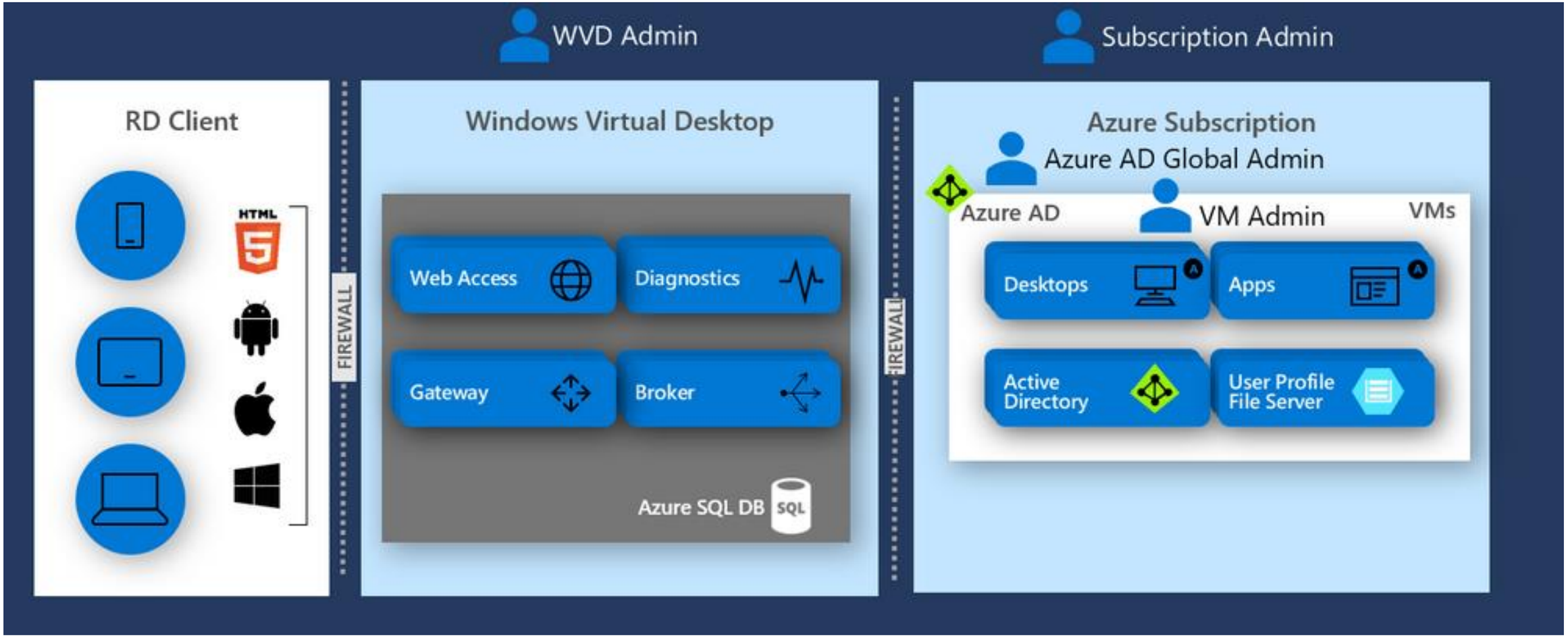
- Fileserver
- Azure Files with Azure ADDS
- Azure NetApp Files

STEP 3

Make sure you have all credentials needed

- Subscription admin
- Azure AD global admin
- Active directory administrator
- WVD tenant admin

How to access Windows Virtual Desktop



Device redirection

High-level redirection of built-in or attached video camera

Less network bandwidth compared to USB camera redirection

Increased video framerate, up to 30 fps

Redirect multiple cameras

Improved printing messages

Built-in Windows client first to adopt

Full desktop vs. RemoteApp

Based on what your users need to do.

Full desktop	Use RemoteApp
Power Users / Developers that need to install their own apps or admin privileges	Clients vary widely and application consistency is impacted
Clients lack computing power / outdated	Different version of the same app from different OS

Demo
Windows Virtual Desktop

Network guidance

Workload type	Example users	Example apps
Light	Users doing basic data entry tasks	Database entry applications, command-line interfaces
Medium	Consultants and market researchers	Database entry applications, command-line interfaces, Microsoft Word, static web pages
Heavy	Software engineers, content creators	Database entry applications, command-line interfaces, Microsoft Word, static web pages, Microsoft Outlook, Microsoft PowerPoint, dynamic web pages
Power	Graphic designers, 3D model makers, machine learning researchers	Database entry applications, command-line interfaces, Microsoft Word, static web pages, Microsoft Outlook, Microsoft PowerPoint, dynamic web pages, Adobe Photoshop, Adobe Illustrator, computer-aided design (CAD), computer-aided manufacturing (CAM)

Network guidance

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

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

How to start

- Define the scenarios
- Check prerequisites (Identity, Networking, applications)
- Define deployment plan
- Create education and communication plan

Monitoring & Security

- Azure Security Center
- Azure Monitor
- Azure Sentinel

How to calculate the costs

- Number of users
- Workload type
- Networking & Identity
- Monitoring & Security

Materials

https://github.com/CloudArchitectWebinar/Materials

Microsoft 365

Thank you