



Business continuity that's unshakable: Establishing a digital workplace of tomorrow with [Windows Virtual Desktop](#)



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Virtualization can address a broad range of business needs



Security and regulation

Financial Services

Healthcare

Government



Flexible workforce

Mergers and acquisition

Short term employees

Contractor and partner access

BYOD and mobile

Call centers

Branch workers



Specialized workloads

Design and engineering

Legacy apps

Software dev test

WVD is Microsoft's virtualization service and delivers compelling value

Windows Virtual Desktop

Best User Experience



Enhanced Security



Simplified Management



Azure



Standardized, Global, & Secure

Superior Economics



Cost effective, Flexible, & Opex

Strong Partner Ecosystem



Extensive, Integrated, & Experienced

Best Virtualized End-user Experience

Platform of your choice



- Connect from any device of your choice (Windows, MacOS / iOS, HTML5, Android, Linux*)

* Coming soon

Windows differentiation



- Like-local Windows experience
- Extensive support for devices

Enhanced protocol



- Support for Windows Hello for Business
- Dynamically adapting bandwidth utilization

Containerized User Profiles



- Containerized User Profiles (FSLogix) with fast VHD load times

Native O365 performance



- Uncompromised O365 email and calendar performance, Real-time Outlook search
- Persistent and non persistent environments

Teams Enhancements



- Best conferencing and media experience
- Multimedia redirection capability, high-performance, low latency audio & video calling



Office 365 ProPlus also supported on Windows Server 2019 (with OneDrive Files-on-Demand capabilities)



Enhanced Security with Simplified Configuration

Azure AD Security Services



Sophisticated security services easily configured through Azure AD (e.g. MFA, CA, etc.)

Reduced Attack Surface



Reverse connect technology eliminates the need to open inbound ports to the VMs

Granular Access Control



Multiple admins can be assigned role-based access control

Isolated User Sessions



Isolated user sessions in both single and multi-session environments

Efficient and Simplified Management

User Experience Management



- One service supports both Desktop & RemoteApp experience
- Flexible user experience through a single host pool, with multiple app groups
- Familiar Azure AD credentials, to access WVD resources

VM Management



- Multiple tools for automated VM deployment
- Enhanced OS/App update tools
- Disaster Recovery with integrated Azure Site Recovery

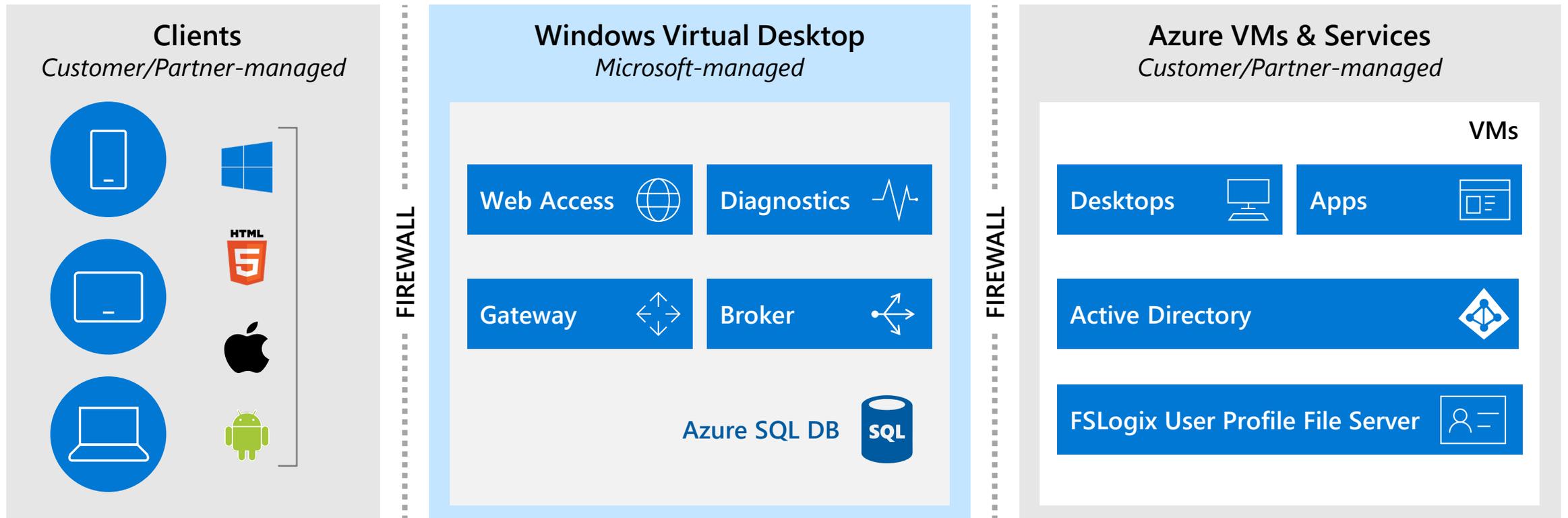
WVD Service Management



- Simplified and effective troubleshooting using advanced diagnostic service
- 3rd party value-added services enabled by APIs

WVD Architectural Overview

3 BIG PIECES



Best Virtualized End-user Experience

Platform of choice

WVD allows users to connect from any device of their choice



User Experience Benefits

Local and remote UI is optimized for the various form factors across all supported platforms: Windows, macOS, iOS, HTML5, and Android

Linux SDK* will enable partners to build their own high performance WVD clients for their Linux endpoints

Performance of clients built on Linux SDK is at parity with other non-Windows clients

* Coming soon

For more information  connect@embee.co.in

Best Virtualized End-user Experience

Enhanced WVD / remote desktop protocol

RDP enhancements deliver the optimized WVD experience for end users



User Experience Benefits

Support for Windows Hello for Business and smartcard authentication

Dynamically adapting bandwidth utilization

Devices and resources redirection (camera, printers, multi-touch, pen, time zone, clipboard)

Dynamic resolution and scaling

Best Virtualized End-user Experience

Containerized user profiles enable fast VHD load times

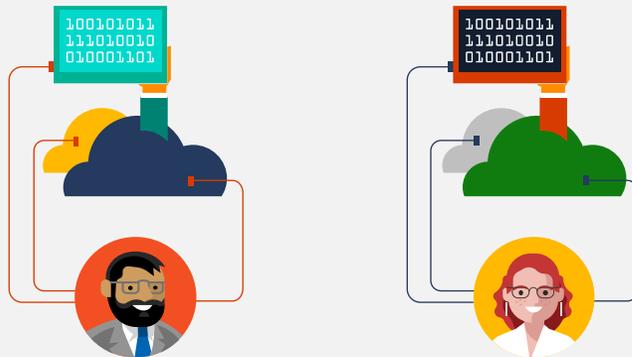
End users receive seamless O365 experience



WVD

Containerized profiles

User profiles



Placed into a VHD container that is stored on Azure

- Dynamically attached at user logon
- Content appears to be in its native location

User Experience Benefits

Achieves extremely fast logon times

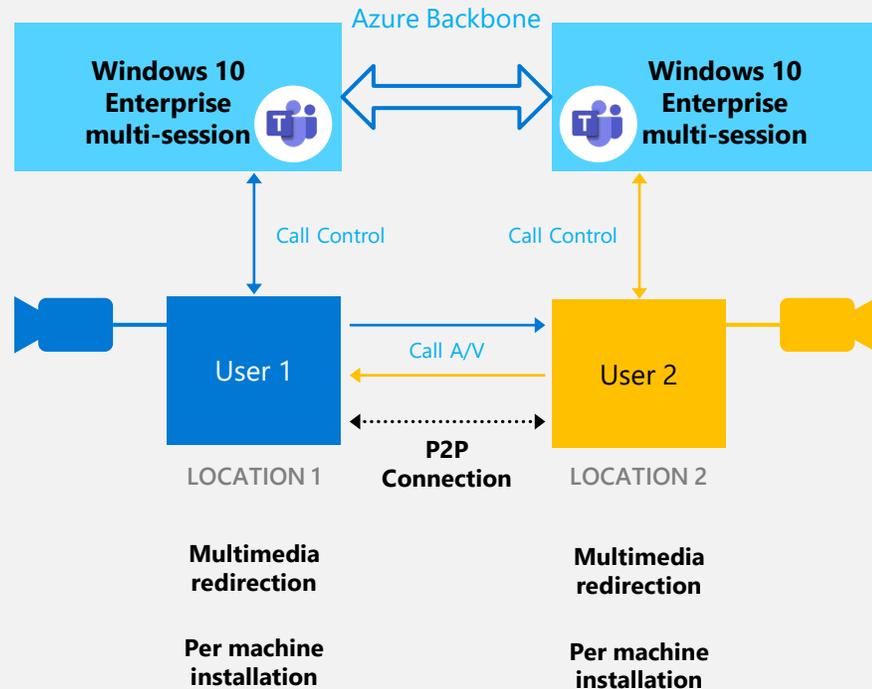
*Uses native Windows VHD capabilities –
no hypervisor*

Teams Enhancements

Teams provides end users with better conferencing and media experience



Teams on WVD – With Enhancement



User Experience Benefits

Less network bandwidth compared to USB camera redirection

Increased video framerates, up to 30 fps

Enhanced UI for ease of use in virtualized environments

Ability to redirect multiple cameras

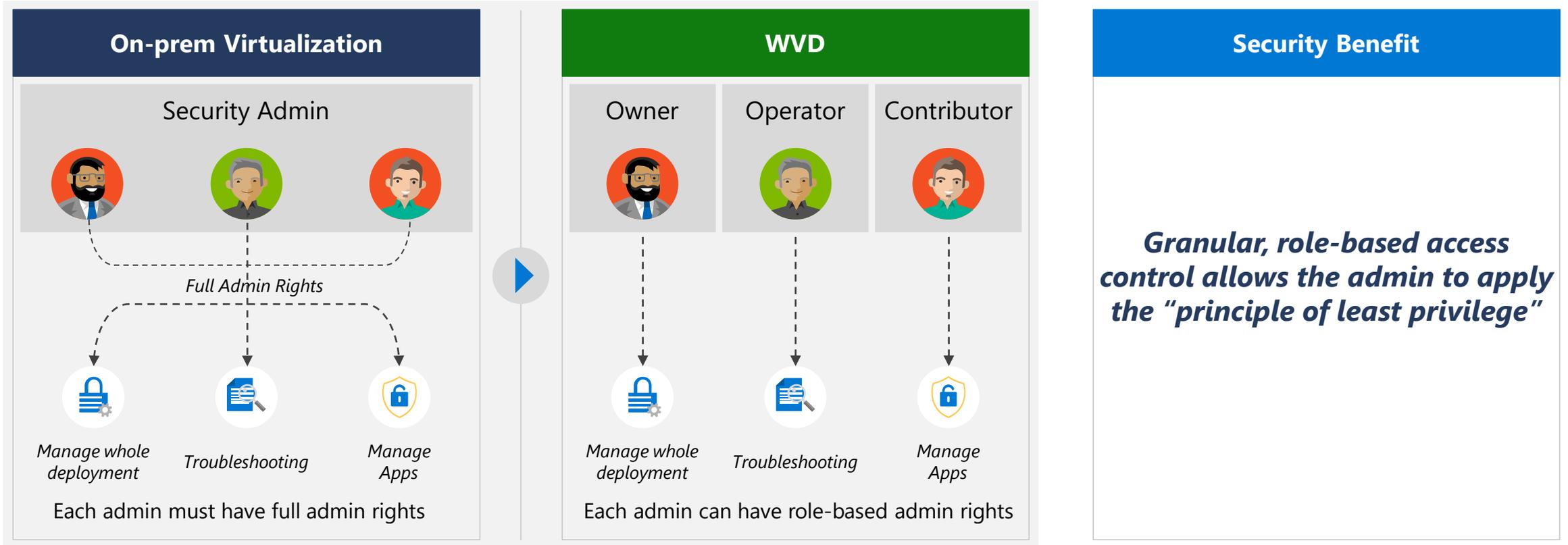
High-performance, low latency audio & video calling

Enhanced Security with Simplified Configuration

Granular access control enables role-based administration

Customer Scenario – Moving from on-prem virtualization to WVD

- WVD role-based access control enables delegation of admin rights at granular level



Enhanced Security with Simplified Configuration

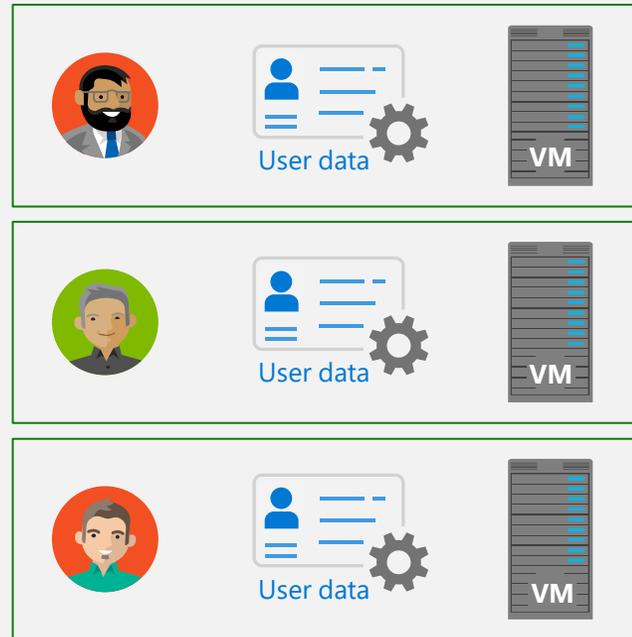
User sessions are isolated

Customer Scenario – Deploys both Windows 10 Enterprise single-session and multi-session in WVD

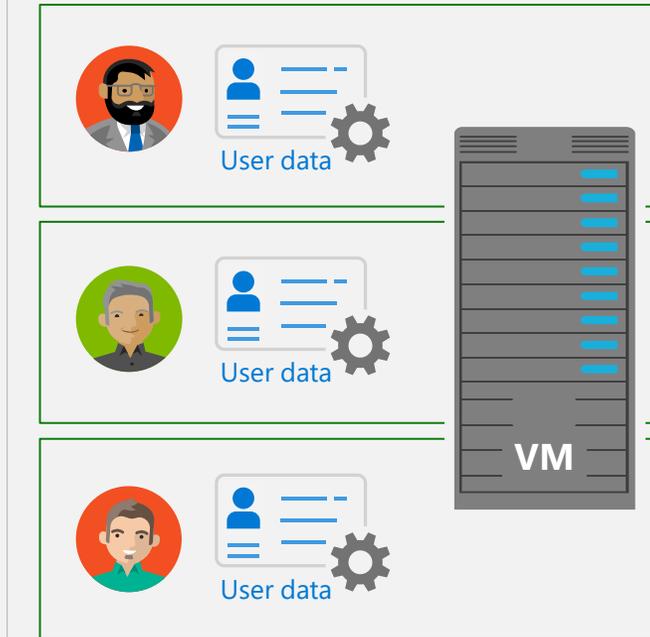
- WVD ensures user isolation in both single and multi-session environment



Windows 10 Enterprise Single-session in WVD



Windows 10 Enterprise Multi-session in WVD



Security Benefit

***Users are always isolated,
whether using single or
multi-session***

Efficient and Simplified Management

Readily-available VM management tools

Customer Scenario – From on-prem virtualization to WVD

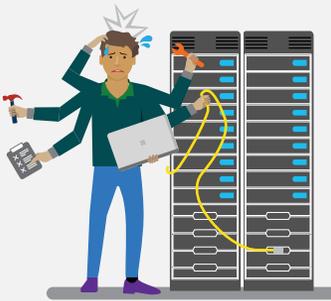
- WVD customers can leverage a broad set of VM management tools via WVD and Azure



On-prem Virtualization

Complicated VM Management
Manually Conducted by IT

- VM Deployment
- OS and App Management
- DR Setup and Configuration



WVD

Readily-available, Built-in Tools
Easily Utilized by IT

- Menu
- VM Deployment (e.g. Azure Update Management)
- Multiple OS and App Management tools at choice
- DR with Azure Site Recovery
- ...



Management Benefit

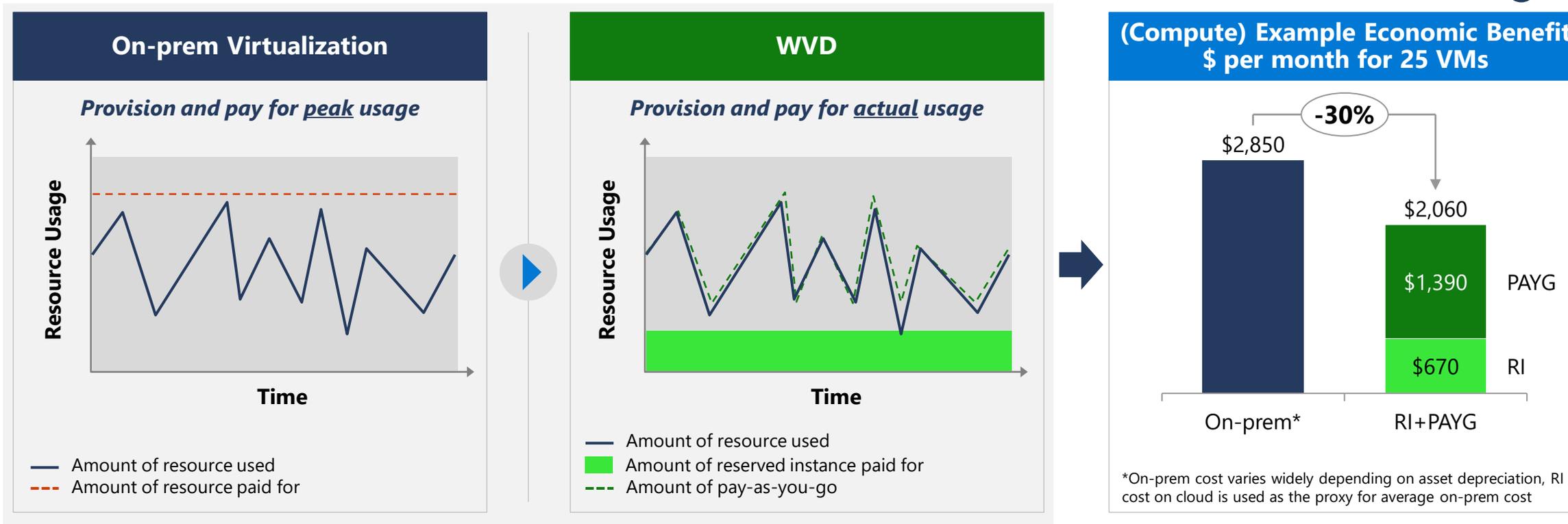
Simplified management via versatile tools and automation

Cost-optimized infrastructure

Cost Effective Compute and Storage*

Customer Scenario – From on-prem virtualization to WVD

- Pay for actual usage instead of peak usage; optimize compute by using both Pay-as-you-go and Reserved Instance



*When using Azure NetApp Files or Azure Files for storage, customers pay for actual consumed storage (vs. pay for fixed-sized disks)

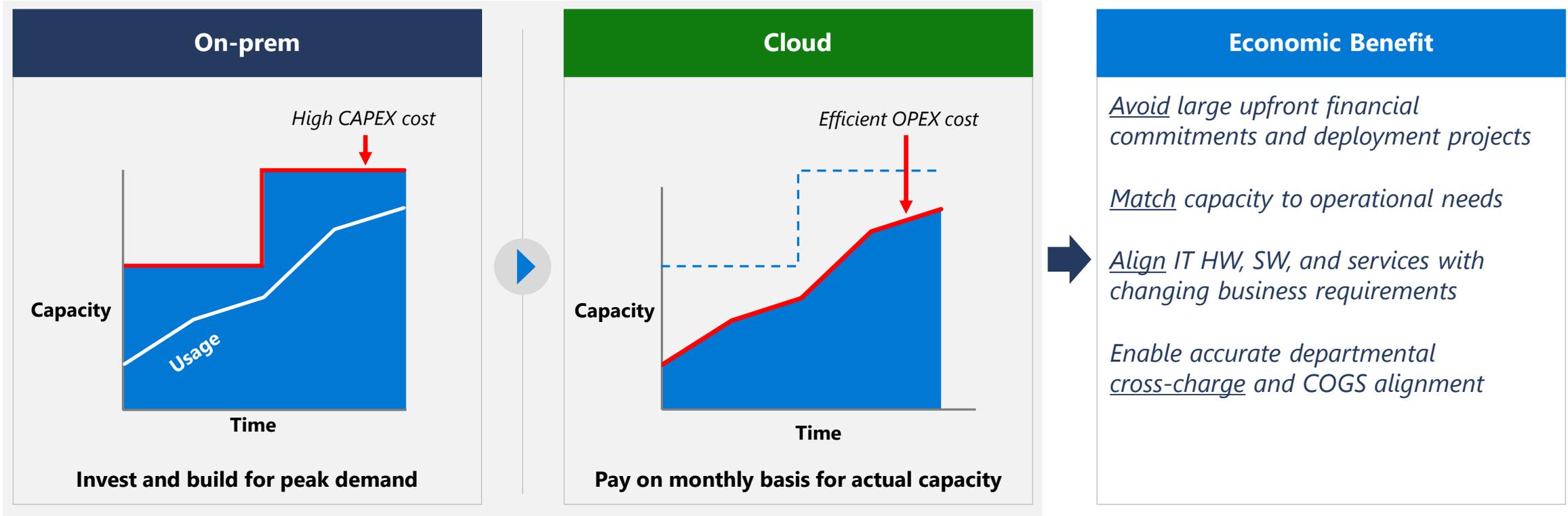
Note: Figures are illustrative and based on pre-configured assumptions; actual savings vary by user requirements and infrastructure configuration

Cost-optimized infrastructure

Opex Spend Aligned to Business Usage

Customer Scenario – On-prem to Cloud

- From up-front Capex commitment to flexible Opex investment



Note: Figures are illustrative and based on pre-configured assumptions; actual savings vary by user requirements and infrastructure configuration

Cost-advantaged licensing

3-year Win7 ESU Included

Customer Scenario – From Windows 7 on-prem to Windows 7 in WVD

- With WVD, 3-year Extended Security Update is included for Windows 7 VMs running on Azure*



On-prem



↓

Pricing for extended security updates

Year	ESU Cost (/ device)	
	Enterprise	Pro
2020	\$25	\$50
2021	\$50	\$100
2022	\$100	\$200

WVD



↓

Year	ESU Cost (/ device)	
	Enterprise	Pro
2020	\$25	\$50
2021	\$50	\$100
2022	\$100	\$200

Economic Benefit

\$25-200 Savings
Per device per year

*Benefit not applicable to Windows 7 running on local devices

Note: Figures are illustrative and based on pre-configured assumptions; actual savings vary by user requirements and current licensing position

Many customers are already eligible for WVD

WVD Licensing Requirements

CLIENT

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

- Microsoft 365 E3/A3
- Microsoft 365 E5/A5
- 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, Microsoft 365 A3/A5 or Windows 10 VDA per user license.*

SERVER

Customers are eligible to access Windows Server 2012 R2 and newer desktops and apps if they have an RDS CAL license with active Software Assurance (SA)

Demo



Customers

See if Windows Virtual Desktop is right for your organization

Take the self-assessment:

- You need the ability to add users quickly and easily
- You need to scale efficiently on demand
- Your end-users need a seamless rich client experience with Outlook, Search, Cortana, OneDrive, and Skype
- You need to manage different deployment types across different deployment planes
- You need to bring Remote Desktop Services (RDS) to your users
- You need to support both persistent and non-persistent environments
- You need integrated security and management e.g. Microsoft 365, AAD
- You need to run Windows 7 legacy applications post upcoming Win 7 EOL
- You are in a regulated industry and need to meet strict compliance requirements
- Your virtual desktop journey requires reuse of existing investments (e.g. Citrix)
- You want to reduce management and deployment costs for Windows Server

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Thank You

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