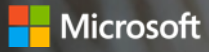




INOVASYS

Think**BIG**



Microsoft Azure Virtual Desktop

The best virtual desktop experience, delivered on Azure

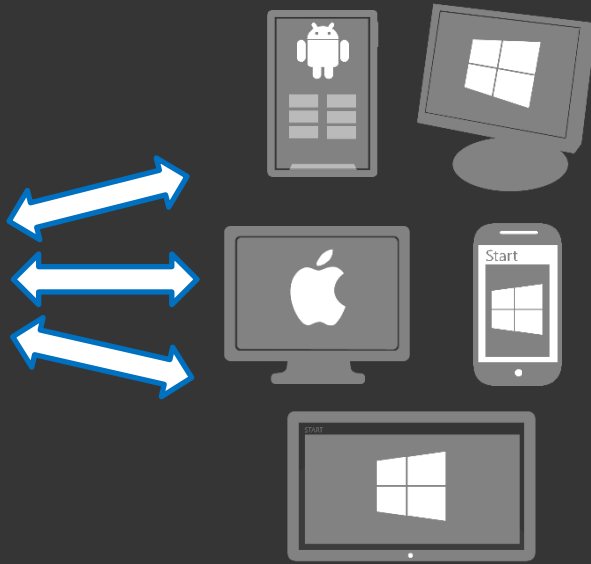


Today's challenges



Users

Users expect to be able to **work in any location** and have access to all their work resources.



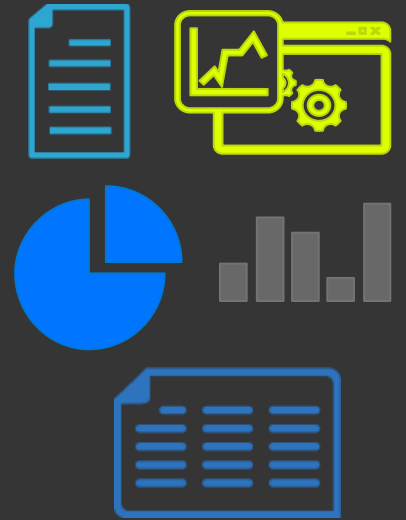
Devices

The **explosion of devices** is eroding the standards-based approach to corporate IT.



Apps

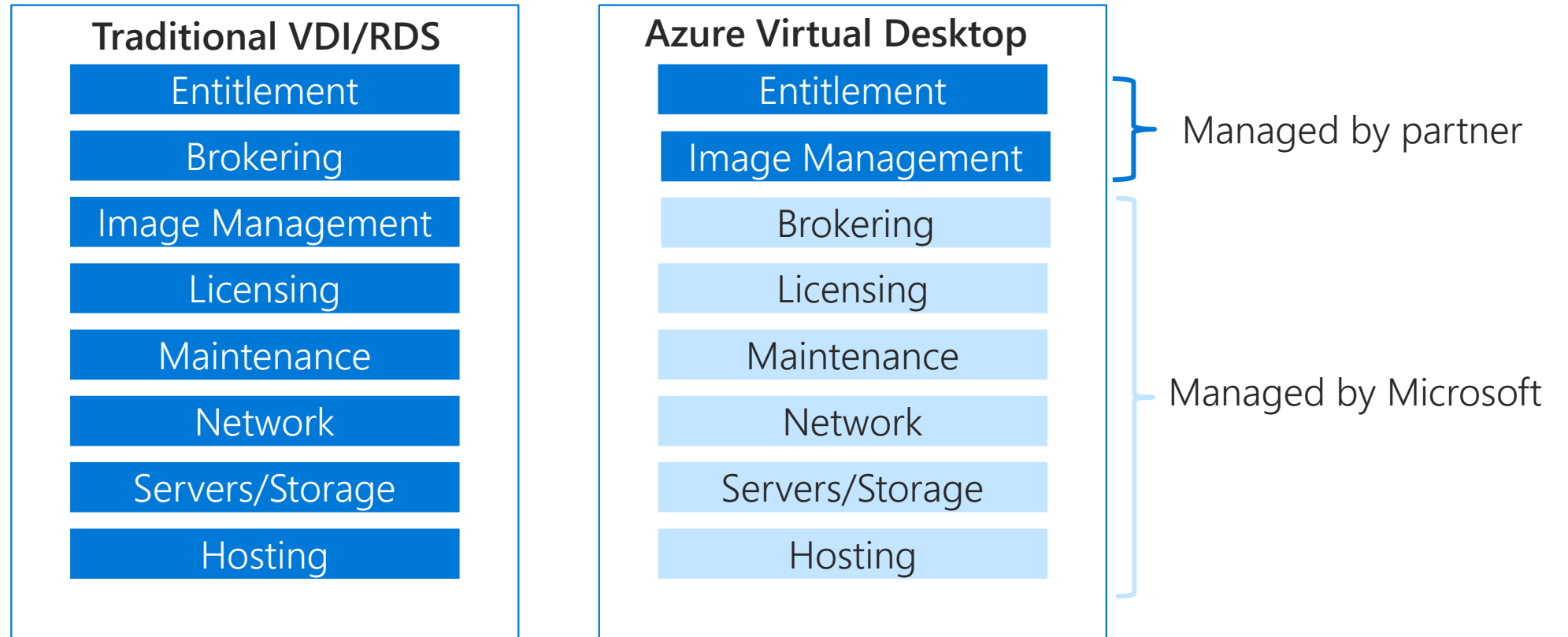
Deploying and managing applications **across platforms** is difficult.



Data

Users need to be productive while **maintaining compliance and reducing risk**.

Traditional VDI/RDS vs. Azure Virtual Desktop



Virtualization hosts today

Windows Server Desktop Experience

Scalable multi – session **legacy**
Windows environment

Windows Server

Multiple sessions

Win32

Office Perpetual

Long-Term Servicing Channel

Windows 10/11 Enterprise

Native single – session **modern**
Windows experience

Windows 10/11

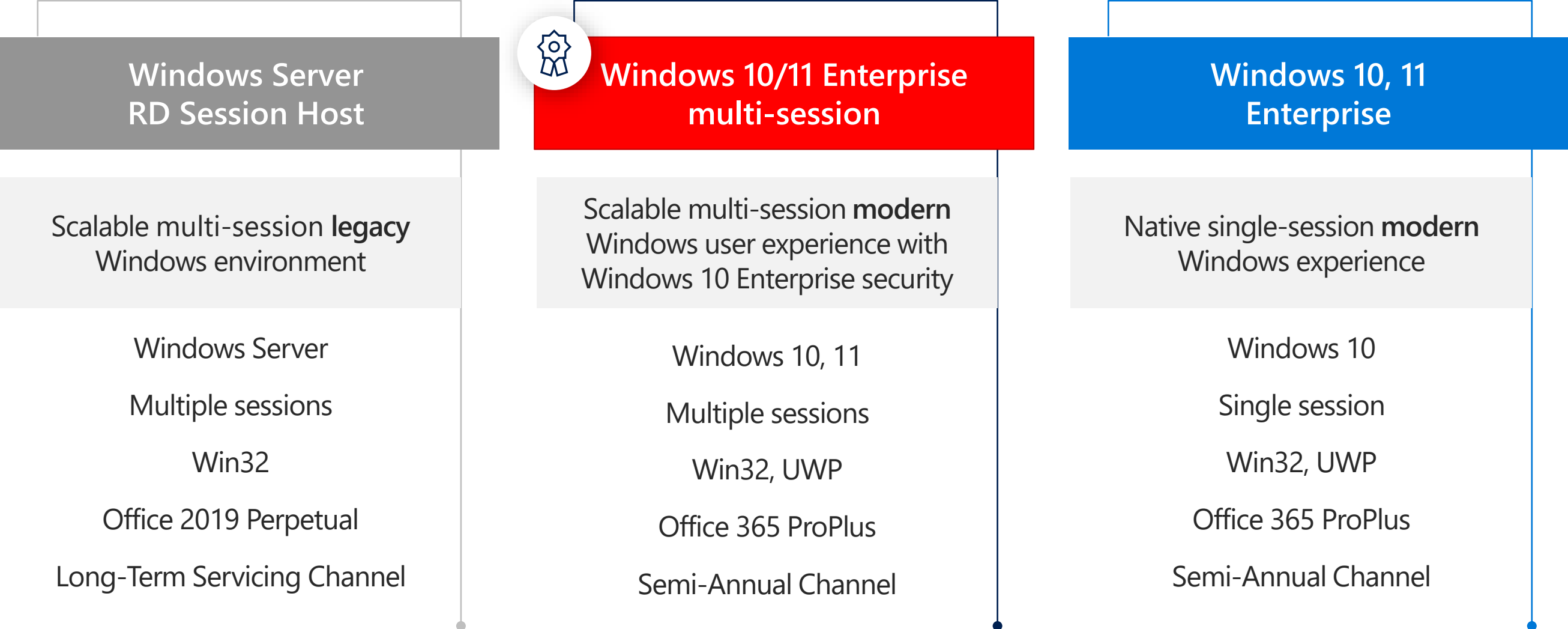
Single session

Win32, UWP

Office 365 ProPlus

Semi-Annual Channel

Virtualization hosts of the future



AVD is Microsoft's virtualization service and delivers compelling value

Azure Virtual Desktop

Best User Experience



Enhanced Security



Simplified Management

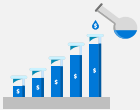


Azure



Standardized, Global, & Secure

Superior Economics



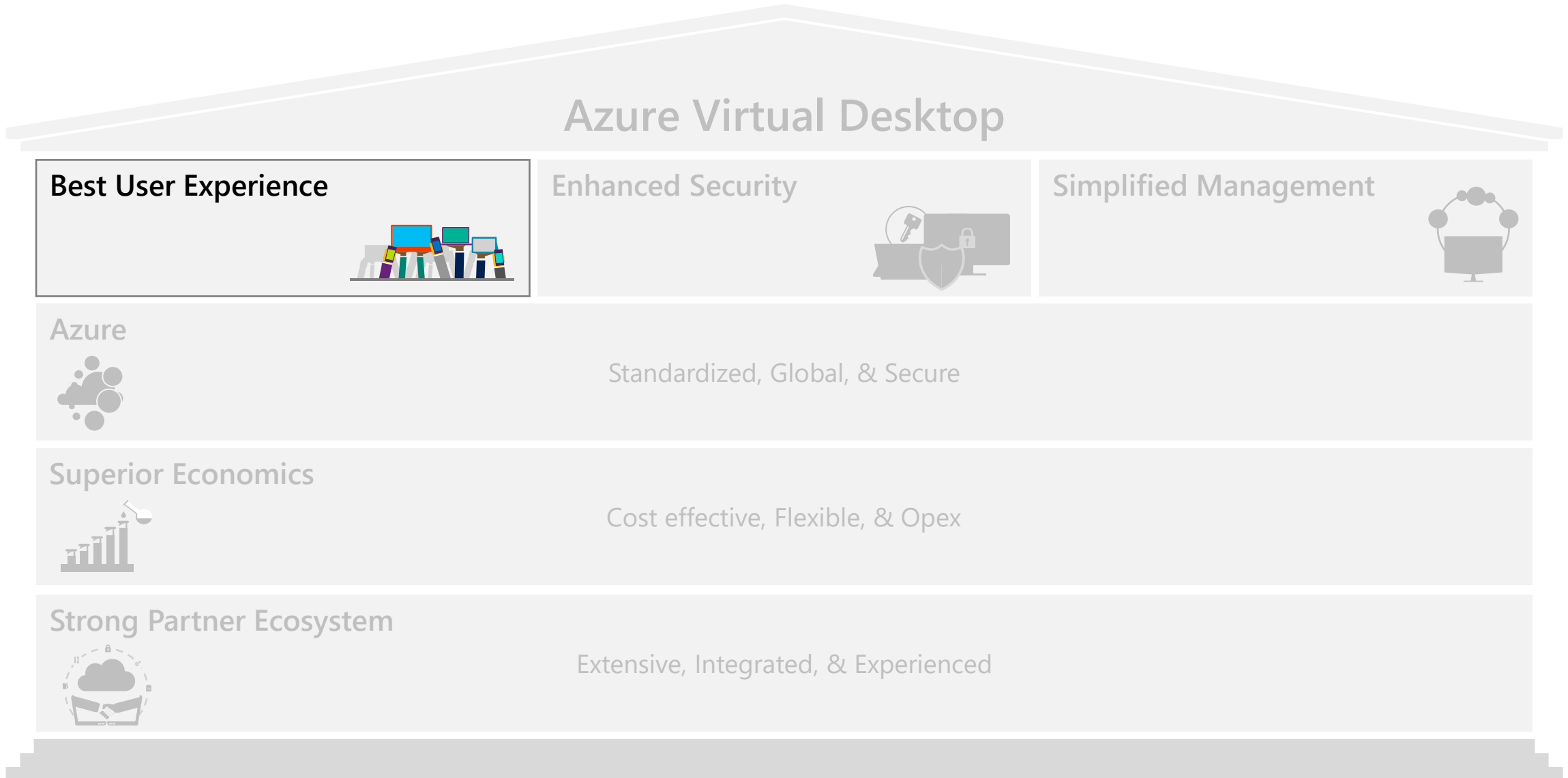
Cost effective, Flexible, & Opex

Strong Partner Ecosystem

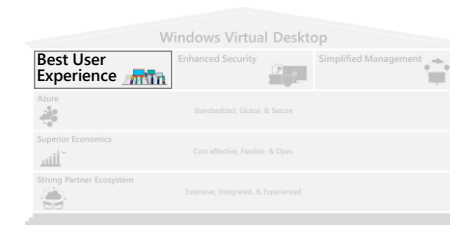


Extensive, Integrated, & Experienced

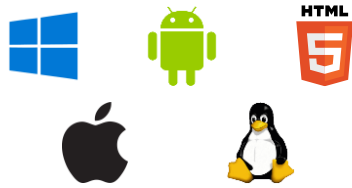
Detail on AVD value drivers follows



Best Virtualized End-user Experience

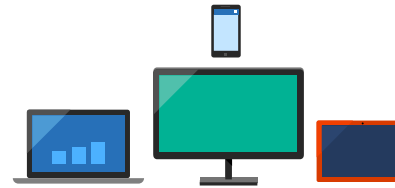


Platform of your choice



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

Windows differentiation



- Like-local Windows experience
- Extensive support for devices

Enhanced protocol



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

Isolated User Profiles



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

Native O365 performance



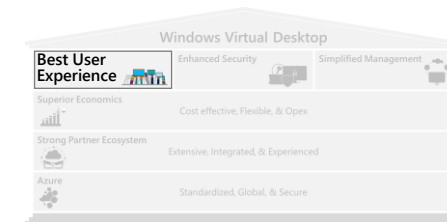
- Uncompromised O365 email and calendar performance, Real-time Outlook search
- Persistent and non persistent environments

Teams Enhancements



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

Outlook Enhancements, OneDrive & Desktop Search



End users get native O365 performance and behavior in both non-persistent and persistent virtual environments



WVD

- Deploy Cached Exchange Mode in virtual environments
- Cached Mode improvements
 - ✓ Syncing of Inbox prior to Calendar for faster startup experience
 - ✓ Admin option to reduce calendar sync window
 - ✓ Reduce the number of folders that are synced by default*
- Windows Desktop Search index is now per-user and can be persisted with the user profile
- Reliable OneDrive syncing in non-persistent environments
- OneDrive Files-on-Demand capabilities

User Experience Benefits

Uncompromised O365 email and calendar performance

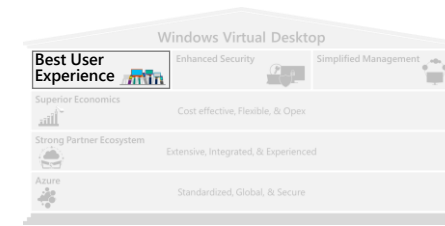
Real-time Outlook search

Speedy, persistent, per-user Windows Desktop search

Seamless O365 co-authoring and collaboration in non-persistent environments

Best Virtualized End-user Experience

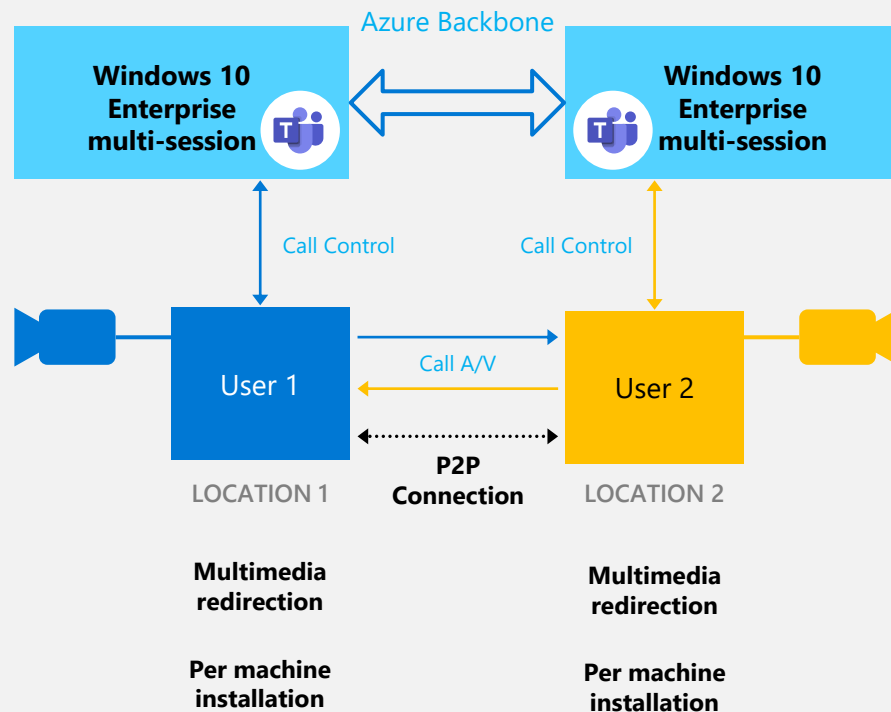
Teams Support



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

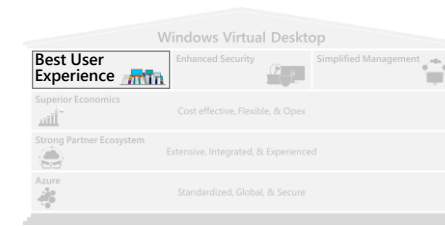
Increased video framerates, up to 30 fps

Enhanced UI for ease of use in virtualized environments

Ability to redirect multiple cameras

High-performance, low latency audio & video calling

Containerized user profiles enable fast VHD load times



End users receive seamless O365 experience



AVD

Containerized profiles

User profiles



Placed into a VHD container that is stored on Azure

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

User Experience Benefits

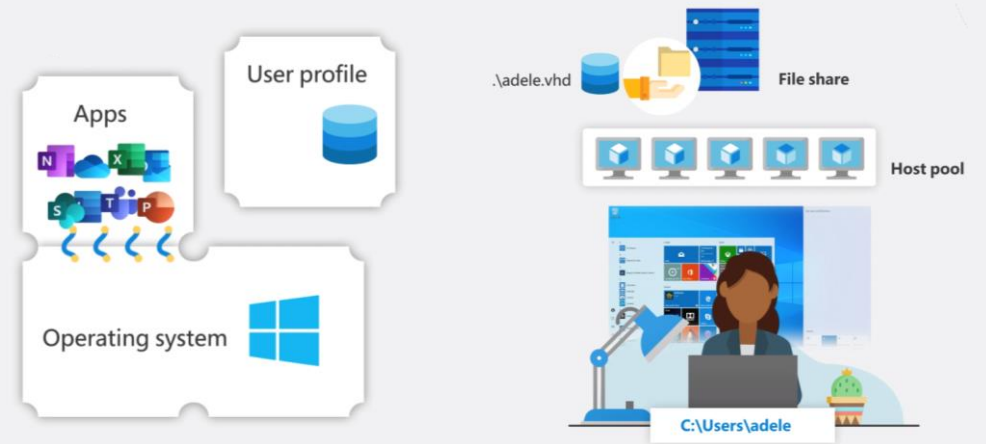
Achieves extremely fast logon times

Uses native Windows VHD capabilities – no hypervisor

Roaming user profiles get us half-way there

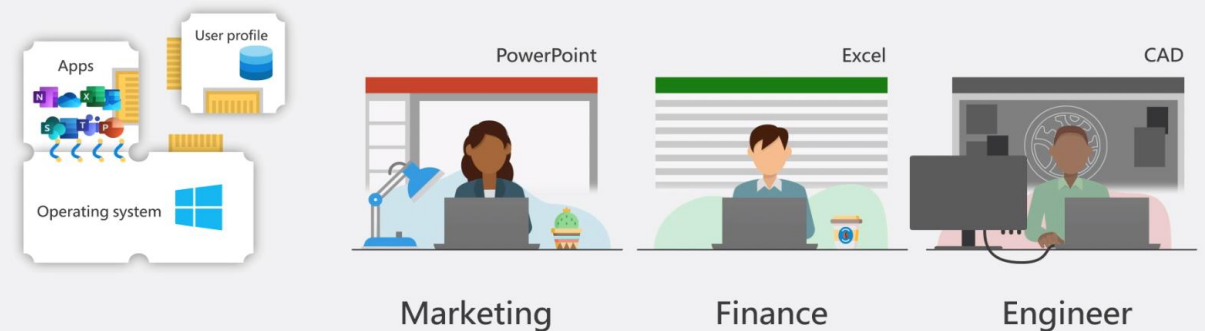
With FSLogix we've separated the user profile layer from the virtual machine

To the user it feels like you're saving and accessing files from a local disk

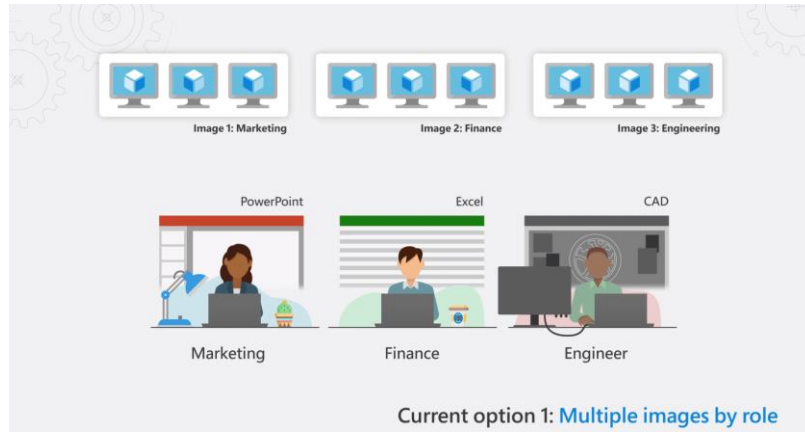


But—what about the apps?

- In a shared or pooled virtual machine, this is a challenge
- Each user might need a different set of apps
- They can be assigned to a different VM with each logon



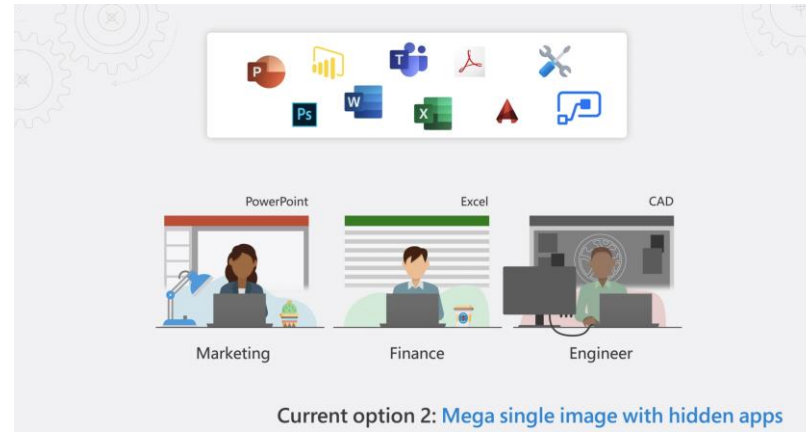
Current options



OPTION 1

Multiple images by role

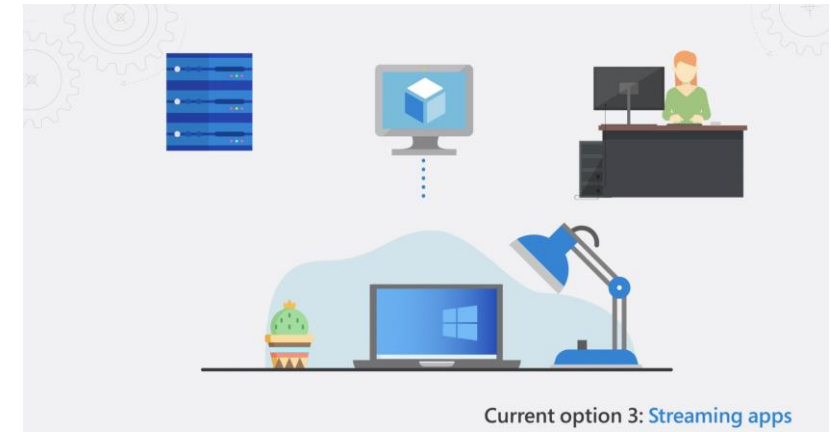
- Manage numerous VM pools customized for different users' roles
- These images would all need to be individually maintained and patched
- High overhead



OPTION 2

Traditional App layering

- Image can get bloated
- Additional policies
- App licensing could be challenging



OPTION 3

App streaming

- Requires apps to get cached into OS during user session
- Need to manage app streaming infra
- Possible need to repackage/sequence the app

Azure Virtual Desktop

Best User Experience



Enhanced Security



Simplified Management



Azure



Standardized, Global, & Secure

Superior Economics



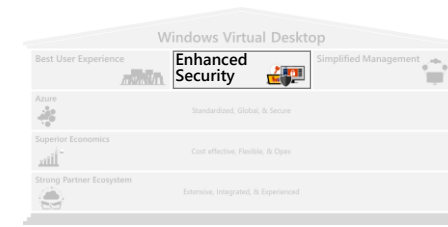
Cost effective, Flexible, & Opex

Strong Partner Ecosystem



Extensive, Integrated, & Experienced

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

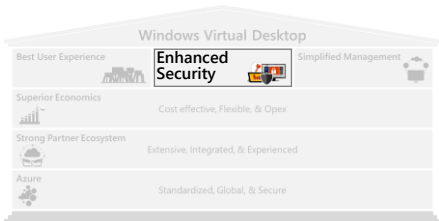
Isolated User Sessions



Isolated user sessions in both single and multi-session environments

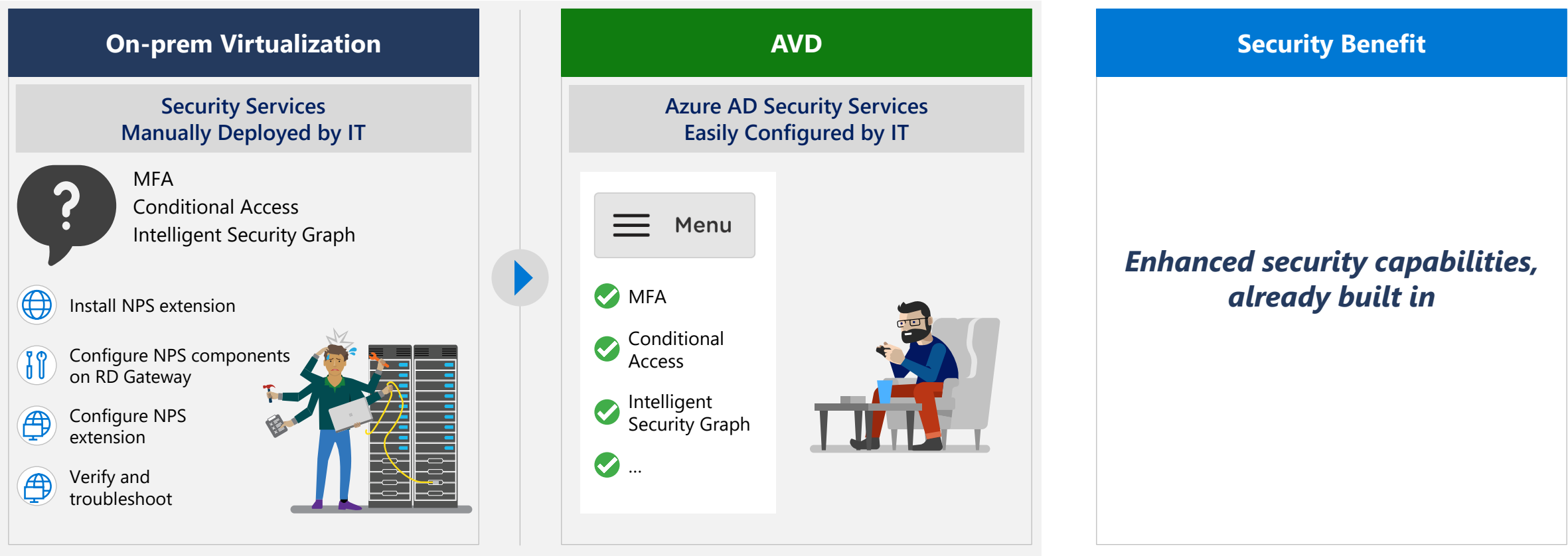
Enhanced Security with Simplified Configuration

Azure AD security services are readily available



Customer Scenario – Moving from on-prem virtualization to AVD

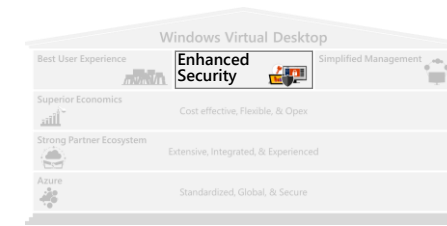
- AVD customers can readily utilize sophisticated Azure AD security services via built-in integration



Note: with AVD on Azure AD, admin can set up Conditional Access (CA) controls once and then easily expand that CA to other applications

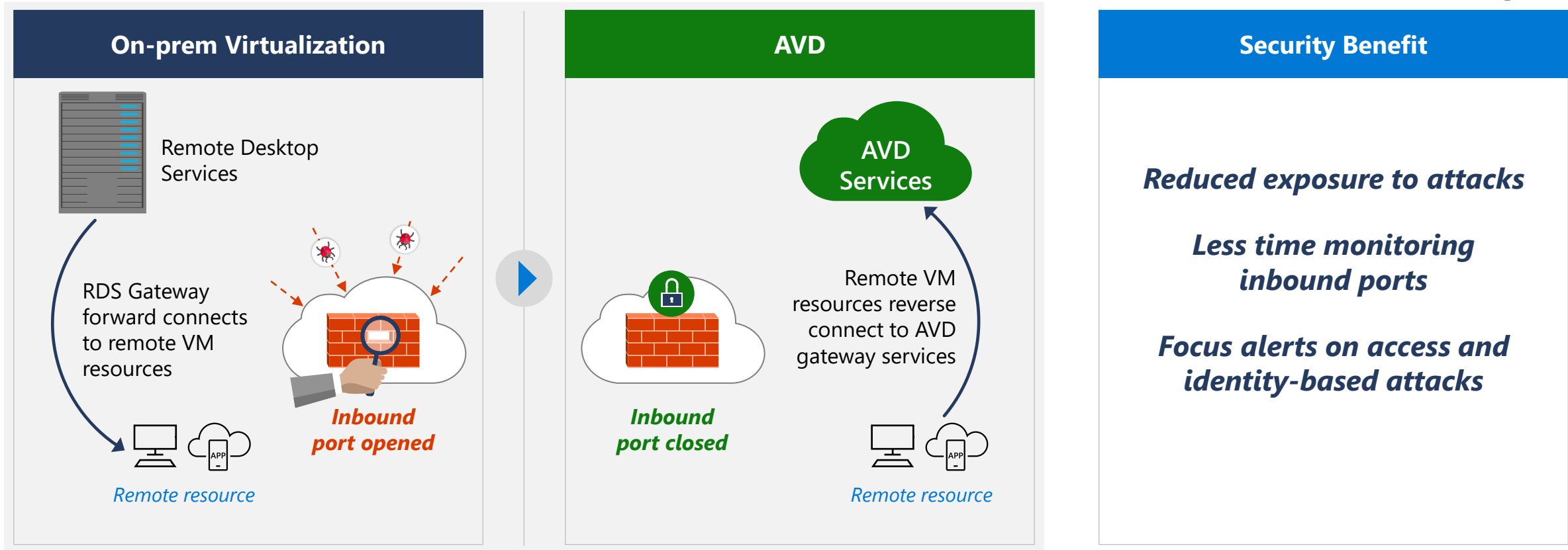
Enhanced Security with Simplified Configuration

The attack surface is reduced, compared to on-prem

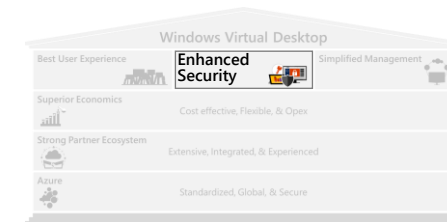


Customer Scenario – Moving from on-prem virtualization to AVD

- Reverse connect eliminates the need to open inbound ports, reducing the attack surface

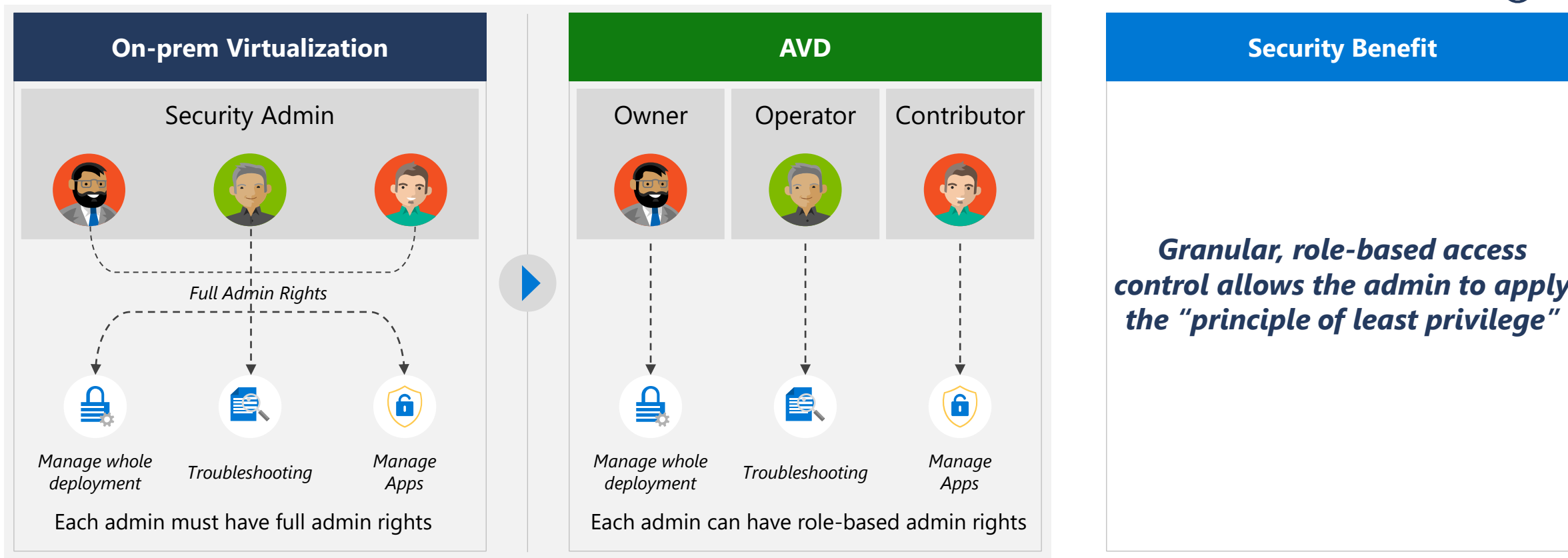


Granular access control enables role-based administration



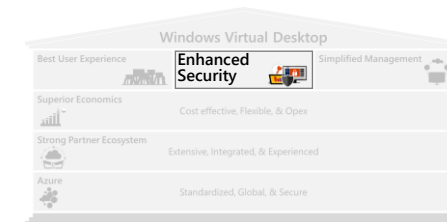
Customer Scenario – Moving from on-prem virtualization to AVD

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



Enhanced Security with Simplified Configuration

User sessions are isolated

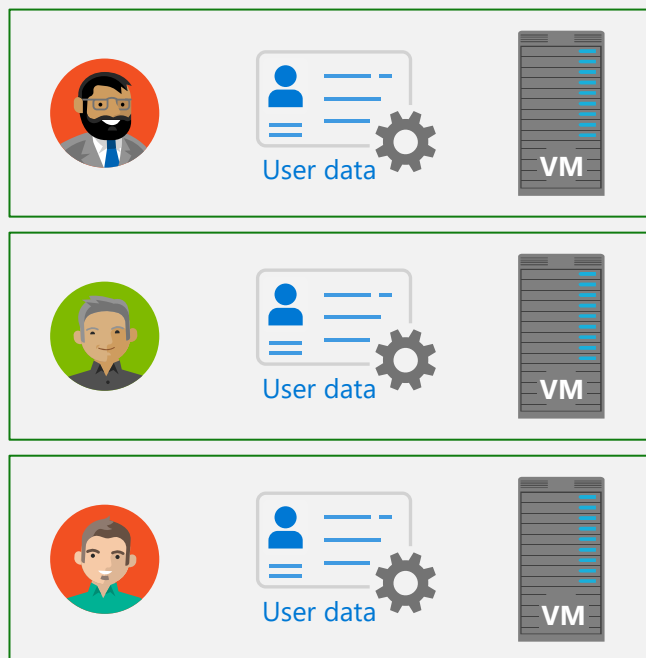


Customer Scenario – Deploys both Windows 10, 11 Enterprise single-session and multi-session in AVD

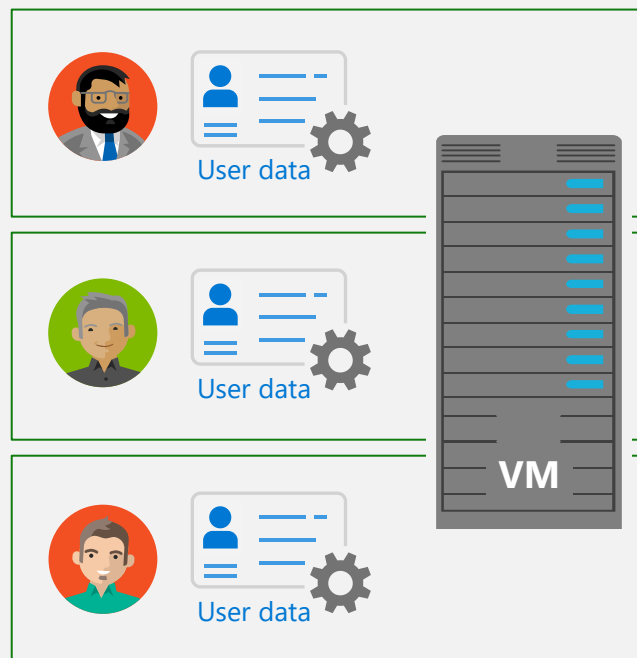
- AVD ensures user isolation in both single and multi-session environment



Windows 10, 11 Enterprise Single-session in AVD



Windows 10, 11 Enterprise Multi-session in AVD



Security Benefit

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

Azure Virtual Desktop

Best User Experience



Enhanced Security



Simplified Management



Azure



Standardized, Global, & Secure

Superior Economics



Cost effective, Flexible, & Opex

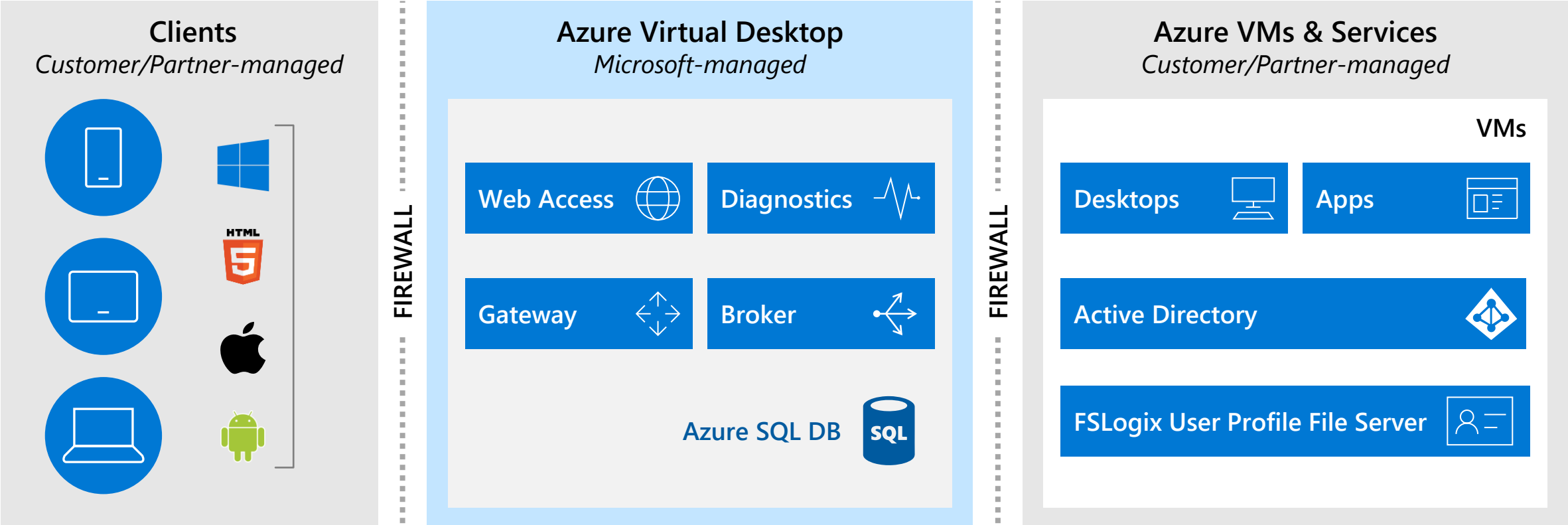
Strong Partner Ecosystem



Extensive, Integrated, & Experienced

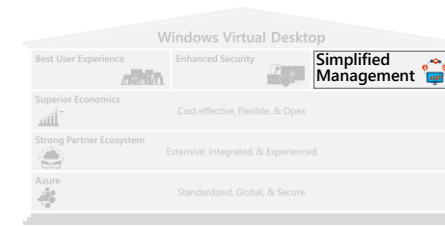
AVD Architectural Overview

3 BIG PIECES



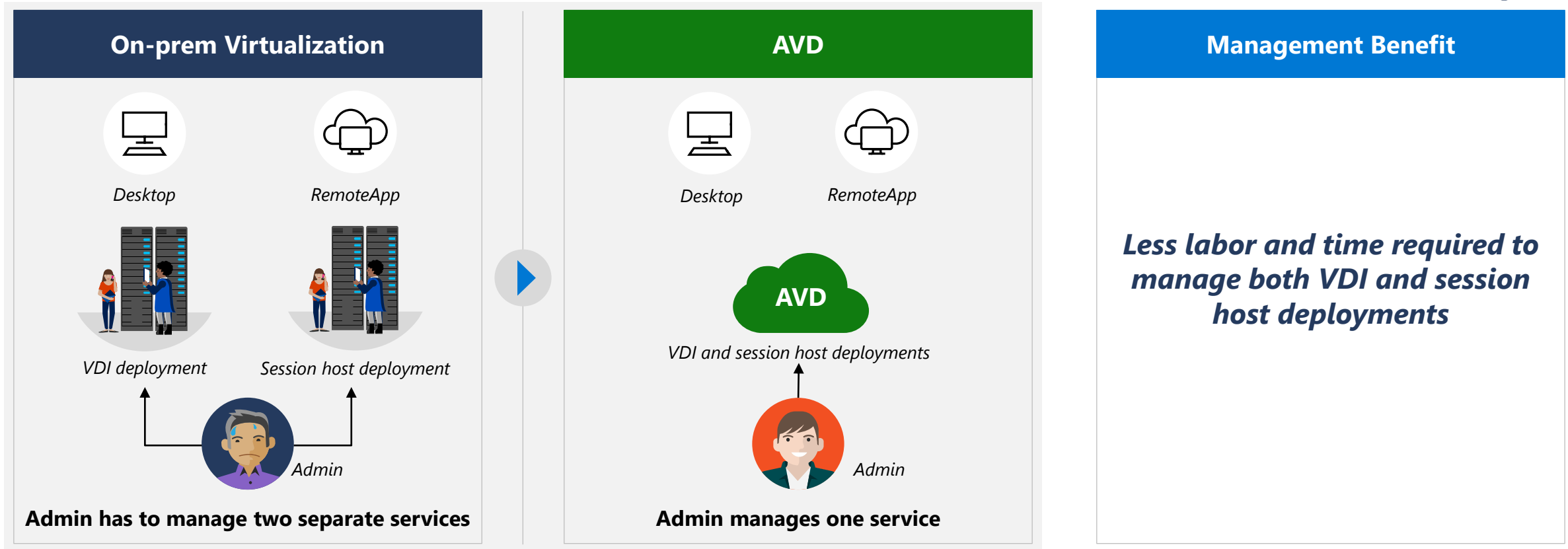
Efficient and Simplified Management

One service supports both desktop & RemoteApp experience

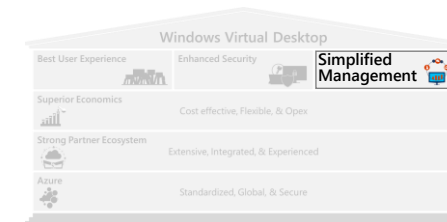


Customer Scenario – From on-prem virtualization to AVD

- Both desktop and RemoteApp are managed through one AVD service



Simplified and Efficient Troubleshooting with Diagnostic Service



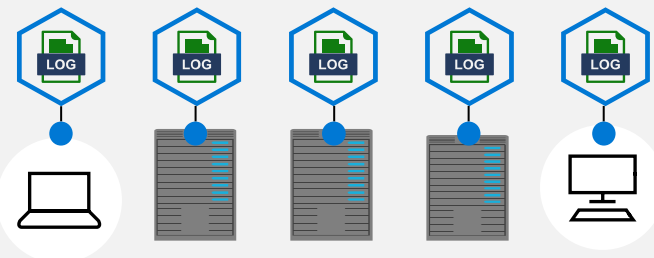
Customer Scenario – From on-prem virtualization to AVD

- Advanced Diagnostic Service enables AVD customers to identify root cause and fix issues more efficiently



On-prem Virtualization

Issue Investigation

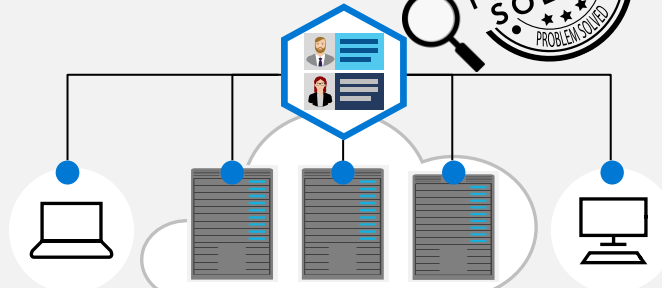


Logs dispersed across client,
RDS servers & VM



AVD

Issue Investigation



End-to-end diagnostic information
provided by WVD service

Management Benefit

*Fast root cause identification via
advanced diagnostic services*

Azure Virtual Desktop

Best User Experience



Enhanced Security



Simplified Management



Azure



Standardized, Global, & Secure

Superior Economics



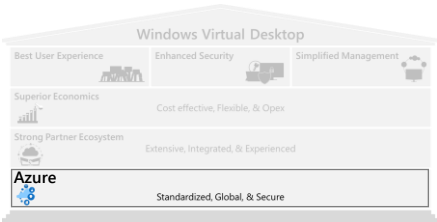
Cost effective, Flexible, & Opex

Strong Partner Ecosystem



Extensive, Integrated, & Experienced

Built on Azure: Standardized, Global, and Secure Cloud



Standardized

Consistent infrastructure across regions

IaaS


Compute


Storage


Networking

PaaS



Partner ecosystem across multiple sites

SI


Infosys®


HCL


DXC.technology


wipro


IBM


Cognizant

ISV/IHV


vmware®


SAMSUNG


IGEL®


Lakeside®


liquidware


SAP


CITRIX®


NetApp™

Purpose-built, standardized infrastructure across geos
300,000+ global partner ecosystem, leveraging consistent standards and IT architectures

Global



Largest geographical footprint of any cloud provider with more than **+60 Azure regions**

Secure



Microsoft Cyber Defense Operations Center

>3,500 full-time security professionals

6.5 trillion global signals daily

\$1 billion annual cybersecurity investment

Most customers are already eligible for AVD



Client

Customers are eligible to access Windows 10 or 11 single and multi session and Windows 7 with Azure Virtual Desktop (AVD) 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 Azure Virtual Desktop (AVD) if they have one of the following licenses:

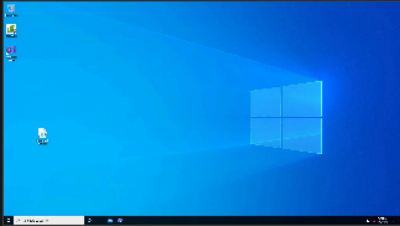
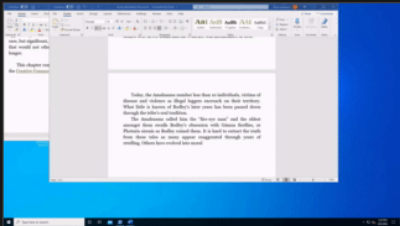
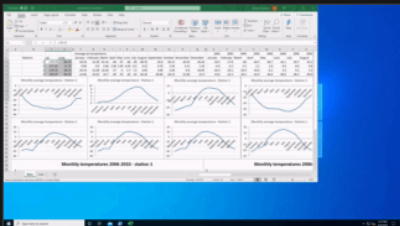
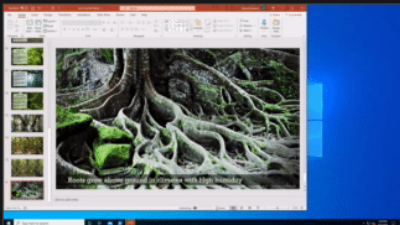
- RDS CAL license with active Software Assurance (SA)

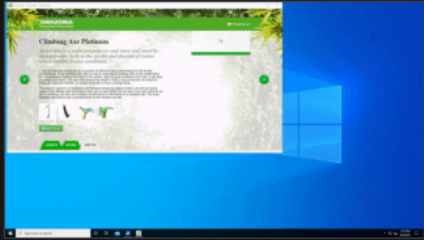
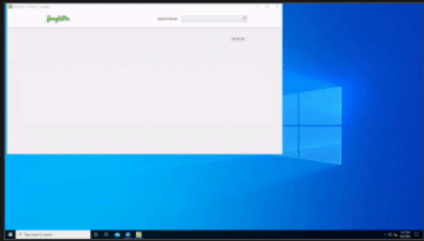


Pay only for the virtual machines (VMs), storage, and networking consumed when the users are using the service

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!](#)

AVD - Estimating Bandwidth Utilization

Scenario	Default mode	H.264/AVC 444 mode	Thumbnail	Description of the scenario
Idle	0.3 Kbps	0.3 Kbps		User is paused their work and there's no active screen updates
Microsoft Word	100-150 Kbps	200-300 Kbps		User is actively working with Microsoft Word, typing, pasting graphics and switching between documents
Microsoft Excel	150-200 Kbps	400-500 Kbps		User is actively working with Microsoft Excel, multiple cells with formulas and charts are updated simultaneously
Microsoft PowerPoint	4-4.5 Mbps	1.6-1.8 Mbps		User is actively working with Microsoft PowerPoint, typing, pasting. User also modifying rich graphics, and using slide transition effects

Web Browsing	6-6.5 Mbps	0.9-1 Mbps		User is actively working with a graphically rich website that contains multiple static and animated images. User scrolls the pages both horizontally and vertically
Image Gallery	3.3-3.6 Mbps	0.7-0.8 Mbps		User is actively working with the image gallery application, browsing, zooming, resizing and rotating images
Video playback	8.5-9.5 Mbps	2.5-2.8 Mbps		User is watching a 30 FPS video that consumes 1/2 of the screen
Fullscreen Video playback	7.5-8.5 Mbps	2.5-3.1 Mbps		User is watching a 30 FPS video that maximized to a fullscreen

Azure Virtual Desktop

Best User Experience



Enhanced Security



Simplified Management



Azure



Standardized, Global, & Secure

Superior Economics



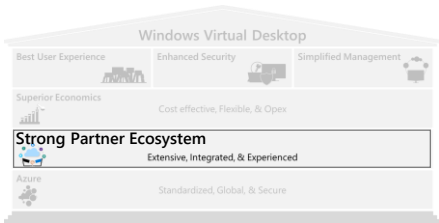
Cost effective, Flexible, & Opex

Strong Partner Ecosystem



Extensive, Integrated, & Experienced

Extensive Partner Ecosystem



AVD Approved Providers	 			
AVD Value-Added Partners		 		
AVD Hardware Partners				
	 	 	 	

Azure Virtual Desktop

Best User Experience



Enhanced Security



Simplified Management

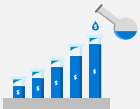


Azure



Standardized, Global, & Secure

Superior Economics



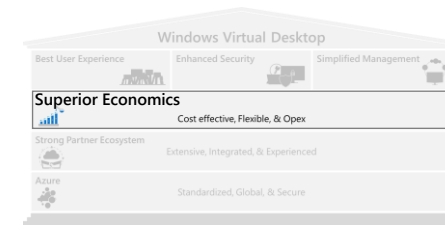
Cost effective, Flexible, & Opex

Strong Partner Ecosystem



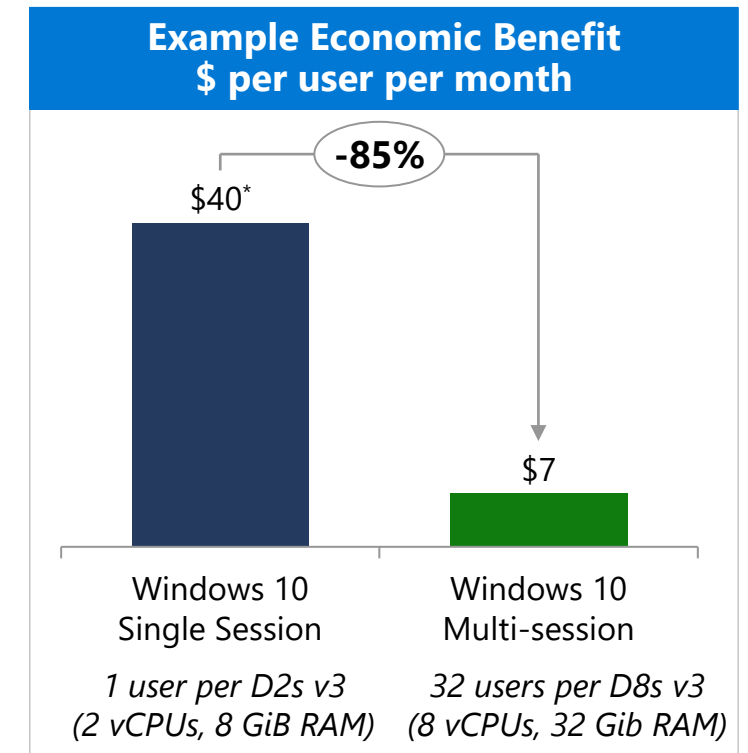
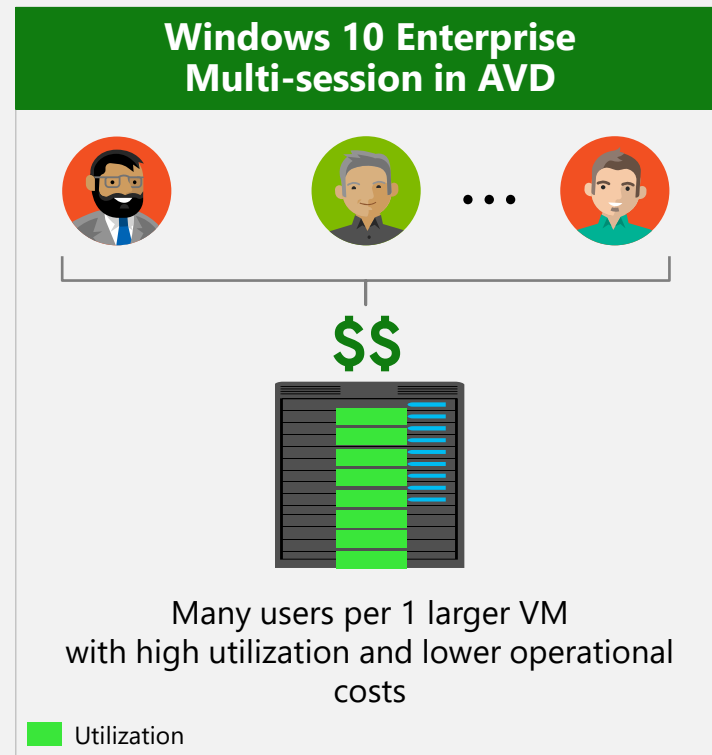
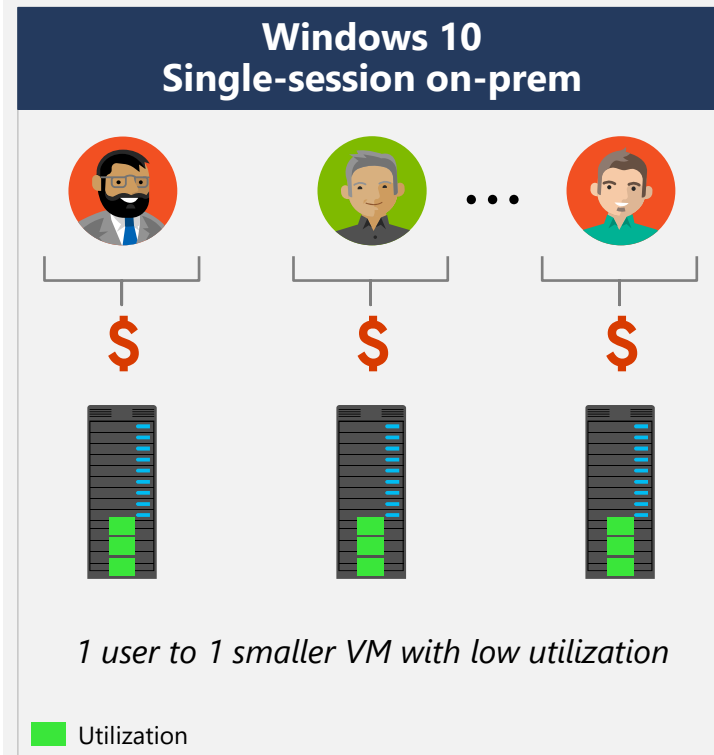
Extensive, Integrated, & Experienced

Windows 10 Experience at Multi-session Cost



Customer Scenario – From Windows 10 single-session on-prem to Windows 10 multi-session in AVD

- Trade many small dedicated VMs for few large shared VMs (with higher utilization and lower operational costs)



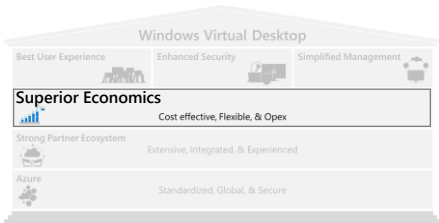
Note: WVD is the only way to run Windows 10 Multi-Session

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

*The \$40 PUPM for single session cost is modeled for a common configuration: Windows 10 single-session in WVD starts at ~\$15 per user per month for 1 vCPU, 2 GiB RAM configuration

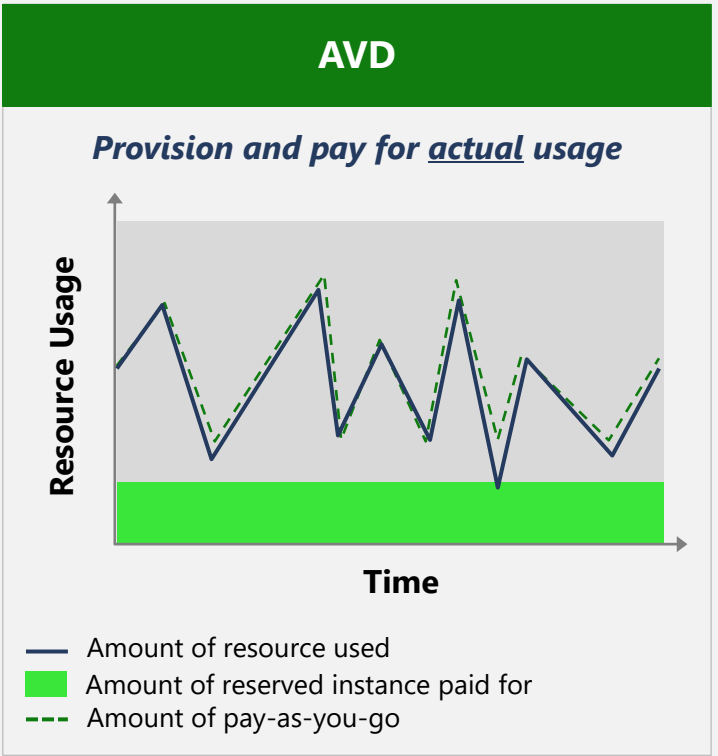
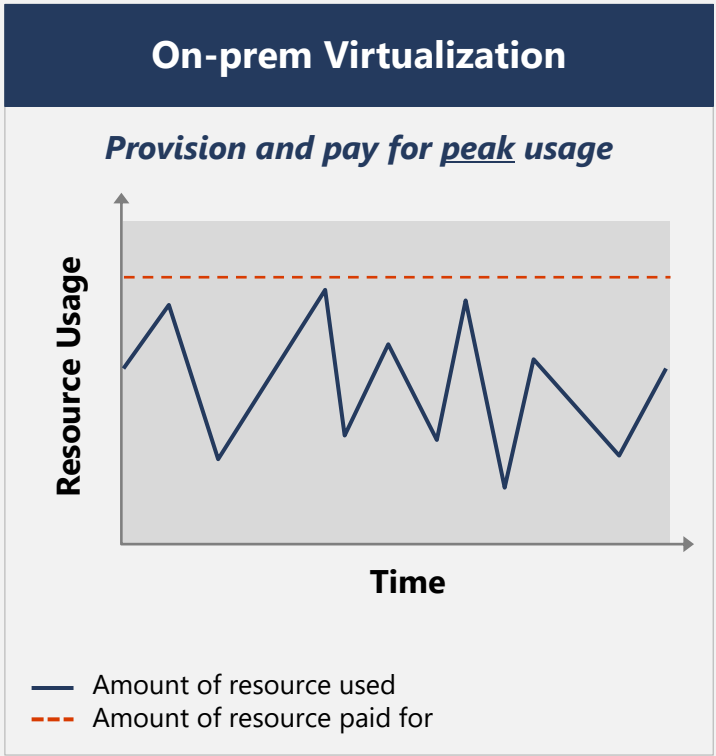
Cost-optimized infrastructure

Cost Effective Compute and Storage*

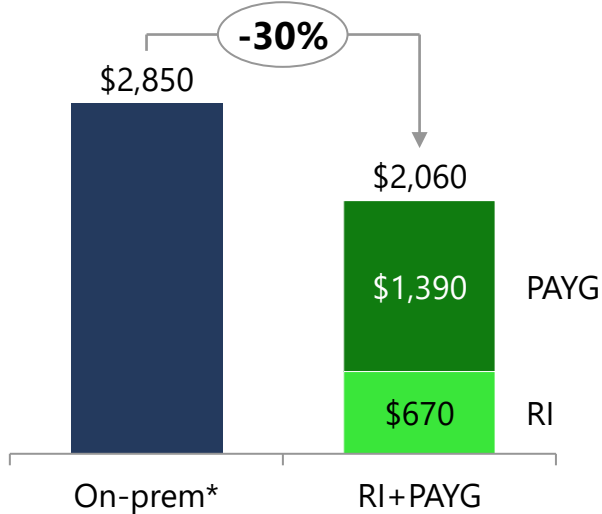


Customer Scenario – From on-prem virtualization to AVD

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



(Compute) Example Economic Benefit \$ per month for 25 VMs

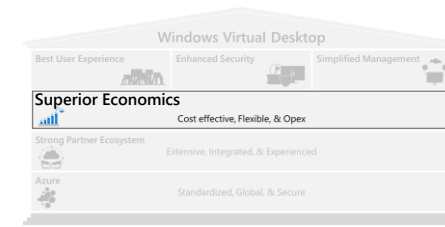


*On-prem cost varies widely depending on asset depreciation, RI cost on cloud is used as the proxy for average on-prem cost

*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

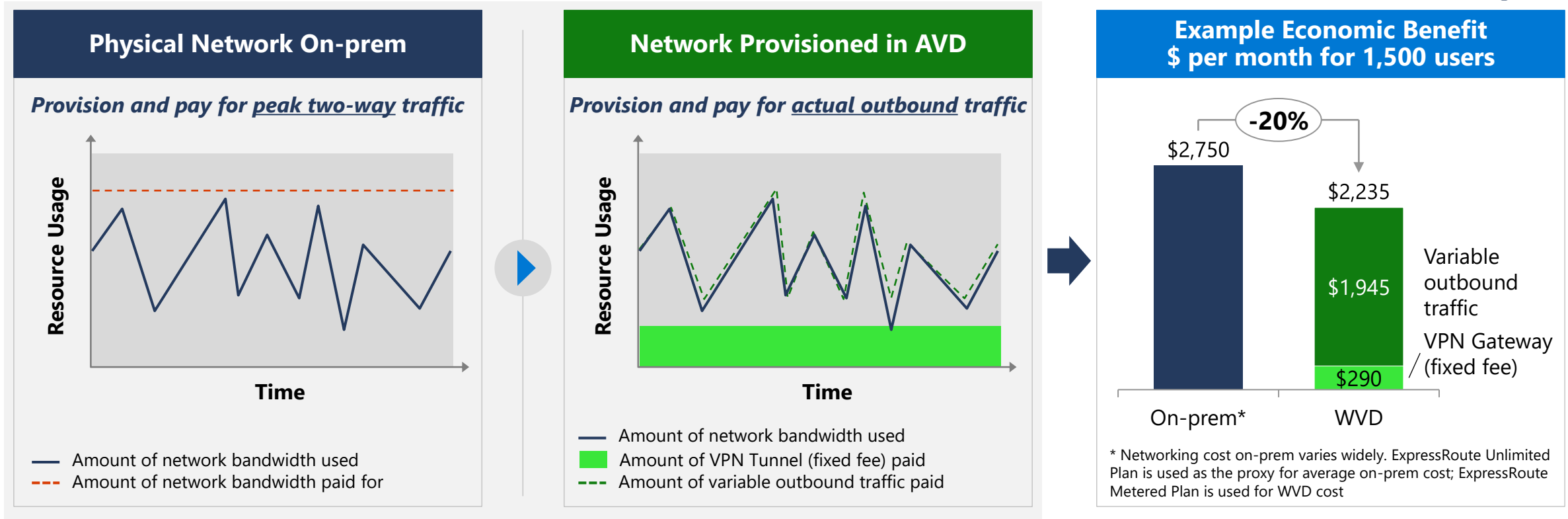
Cost-optimized infrastructure

Flexible Network Provisioning



Customer Scenario – From Physical Network on-prem to Network Provisioned in AVD

- Pay for actual outbound data transfer instead of peak two-way data transfer;
- Optimize networking cost by using both fixed fee and variable outbound traffic



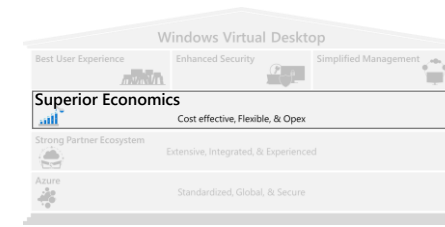
Note: Customers can connect from on-prem physical networks to Azure virtual networks via two ways: Virtual Private Network (VPN) or ExpressRoute

Note: Variable outbound traffic can be implemented via Virtual Network or ExpressRoute

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

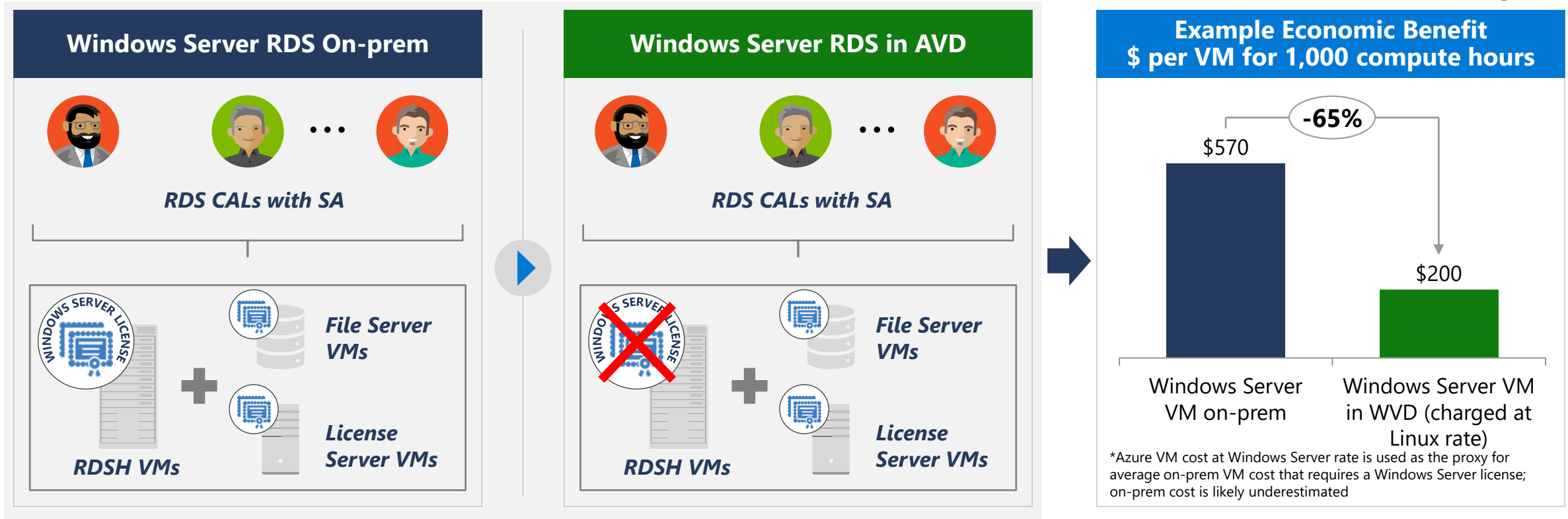
Cost-optimized infrastructure

Best Value Compute Rate



Customer Scenario – From Windows Server on-prem to Windows Server in AVD

- WVD doesn't require Windows Server license for session host VMs (i.e. session host VMs charged at Linux compute rate)

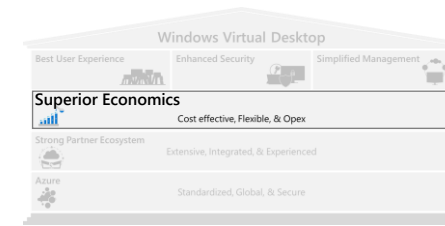


Note: Non-session host VMs still require Windows Server license (only if Azure Hybrid Benefits are not available)

Note: With Azure NetApp Files or Azure Files, customers also save the cost of Windows Server license and its hosting VM that would otherwise be required by File Server

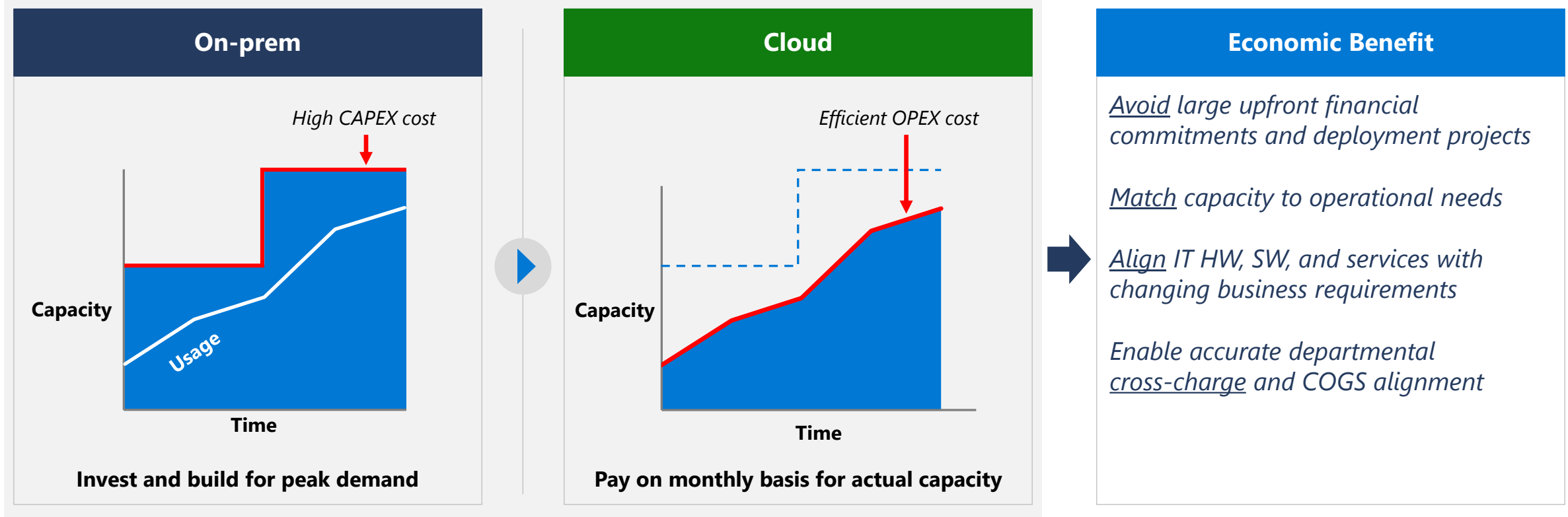
Note: Figures are illustrative and based on pre-configured assumptions; actual savings vary by user requirements and infrastructure configuration

Opex Spend Aligned to Business Usage



Customer Scenario – On-prem to Cloud

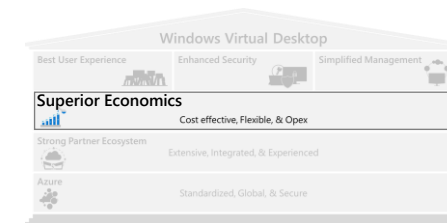
- From up-front Capex commitment to flexible Opex investment



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

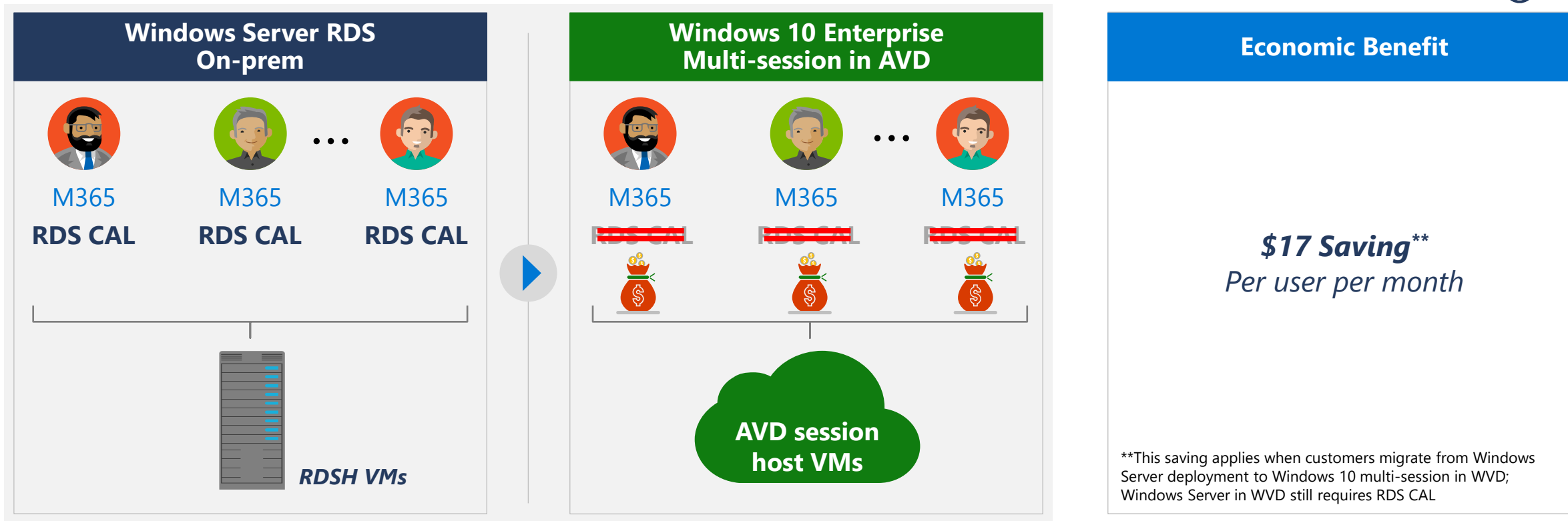
Cost-advantaged licensing

Savings on RDS CAL with Multi-session Deployment



Customer Scenario – From Windows Server RDS on-prem to Windows 10 Enterprise Multi-session in AVD

- Save on RDS CAL when migrating from Windows Server RDS on-prem to Windows 10 Enterprise multi-Session* in AVD



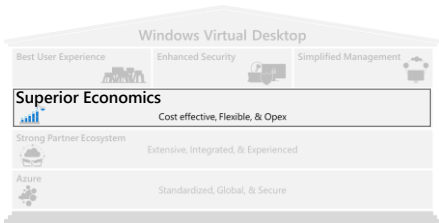
*Customers can leverage the license (e.g. M365 E3/E5, Win 10 E3/E5) they already own. See Appendix for a complete list of WVD licensing requirements

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

Note: Customers need to fully refactor desktops and apps when migrating from Windows Server deployment to Windows 10 multi-session in WVD

Cost-advantaged licensing

3-year Win7 ESU Included



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

- With AVD, 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

AVD




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

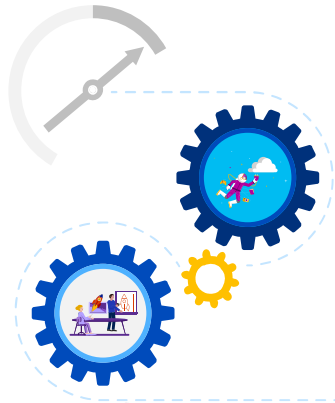
Economic Benefit

\$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

Superior Economics from Significant Cost Savings

Infrastructure



**~70%*
Savings**

- Windows 10 experience at multi-session cost
- Cost effective compute and storage
- Flexible network provisioning
- Best value compute rate
- Opex spend aligned to business usage

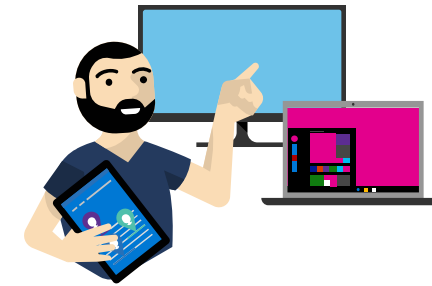
Licensing



**~60%*
Savings**

- AVD management service included with the licenses you already own
- Savings on RDS CAL with multi-session deployment
- 3-year Windows 7 ESU included

Labor



~60%
Savings**

- Lower labor cost because compute and storage move to cloud
- Lower labor cost when you use PaaS services

Note: Infrastructure includes compute, storage (IaaS/PaaS), and networking

*See [Example Scenario: WVD Economic Benefits](#)

** industry analysis

Default Values (Microsoft Guidance) for AVD Cost Estimation

User Type Profiles	Light	Medium	Heavy	Power
Description	Ideal for lightweight use cases with such as data entry and call center apps.	Ideal for basic Microsoft Office apps such as Word and Excel, as well as database apps.	Ideal for more intensive workloads such as development or engineering.	Ideal for graphics intensive apps such as 3D CAD and Adobe Photoshop.
VM Instance (Default) Multi-session	D8s v3	D8s v3	D8s v3	NV6
VM Instance (Default) Single-session	D2s v3	D2s v3	D2s v3	NV6
# users/vCPU (only valid for multi-session) (Default)	6	4	3	1
OS Disk size (GB) required (Default)	127	127	127	127
# OS Disk per VM (Default)	1	1	1	1
OS Disk Tier (Default)	Premium	Premium	Premium	Premium
Profile Data Disk size (GB) required (Default)	2,000	2,000	2,000	2,000
Storage GB/user (Default)	20	20	20	20
Storage Option (Default)	Azure NetApp Files	Azure NetApp Files	Azure NetApp Files	Azure NetApp Files
Storage Tier (Default)	Standard	Standard	Standard	Standard
Profile Data Disk Tier (Default)	Premium	Premium	Premium	Premium
Network egress (Default kbps per user)	75	150	500	1,000

AVD Infrastructure Cost* at a Glance



Customer Requirements

- User Type: Medium (Microsoft Office apps users)
- # of Users: 1000
- Peak Concurrency: 80%
- Profile Storage Requirement: 20GB / user
- Network egress: 100 kpbs / user

Key Infrastructure Assumptions

• Compute:

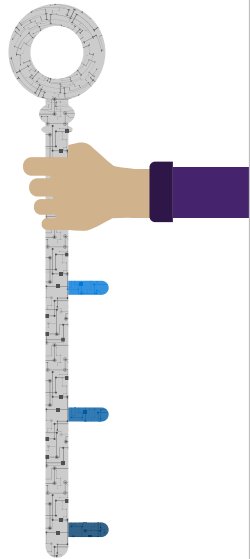
- East US
- 3-year Reserved Instance
- D8s v3 (for multi-session)
- 4 users/vCPU (for multi-session)
- D2s v3 (for single-session)

• Storage:

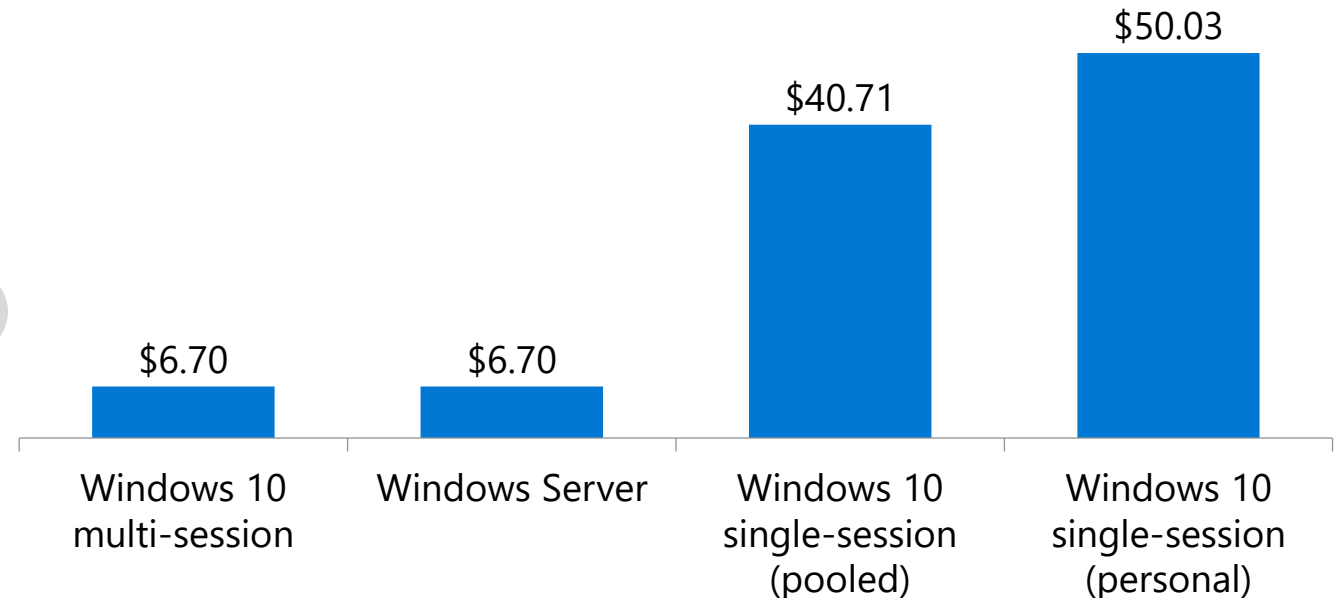
- Azure NetApp Files

• Networking:

- Virtual Network (Same Region)



WVD Cost* Per User Per Month



Note: Results generated by WVD Solution Configurator, an excel-based tool for sizing WVD opportunities; figures are rounded for simplicity

*License cost not included; Many customers already own licenses that qualify them for WVD (e.g. Win10 E3/E5, M365 E3/E5, VDA) and incur no additional license cost for WVD

AVD Cost Estimation for Win10 multi-session vs. Win10 single-session(1/3)

Opportunity Profile

WVD Opportunity	User Group 1	User Group 2
WVD (W7, W10, W10 MS, WS)	Windows 10 multi-session	Windows 10
Customer Environment / User Requirements		
User Type	Medium	Medium
Named (total) users	1,000	1,000
Peak Concurrency	80%	80%
Pooled / Personal	Pooled	Pooled
Azure Region (for infrastructure)	US-East	US-East

AVD Cost Estimation for Win10 multi-session vs. Win10 single-session(2/3)

Compute Cost

Session Host VM	User Group 1	User Group 2
OS Type	Windows 10 multi-session	Windows 10
Pooled / Personal	Pooled	Pooled
Deployment Type	Multi-session	Single-session
# users/vCPU (only valid for multi-session) (Default)	4	N/A
VM Instance (Default)	D8s v3	D2s v3
Reserved Instance (Default)	3-year reserved	3 -year reserved
Price / hour per VM	\$0.147	\$0.0368
Users per VM	32	1
Peak hours / month per VM	730	730
VMS during peak hours	26	801
Total VM cost / month	\$2,797	\$21,536
OS Disk (for Session Host VM)	User Group 1	User Group 2
OS Disk size (GB) required (Default)	127	127
# OS Disk per VM (Default)	1	1
OS Disk Tier (Default)	Premium	Premium
OS Disk	premiumssd-p10	premiumssd-p10
OS Disk cost per VM	\$19.71	\$19.71
# VMS during peak hours	26	801
Total OS Disk cost / month during peak hours	\$512.46	\$15,787.71
Total OS Disk cost / month	\$512.16	\$15,787.71

Storage Cost

Storage Requirements	User Group 1	User Group 2
Storage GB/user (Default)	20	20
Total profile storage required (GB)	20,000	20,000
Azure NetApp Files		
Azure Region	US-East	US-East
Pricing Option	Month	Month
Storage Hours	N/A	N/A
Storage Tier (Default)	Standard	Standard
Cost / GB / (Month or Hour)	\$0.15	\$0.15
Total Azure NetApp Files Storage cost / month	\$2,949.20	\$2,949.20

AVD Cost Estimation for Win10 multi-session vs. Win10 single-session(3/3)

Networking Cost

Virtual Network	User Group 1	User Group 2
Source vNet Region	US-East	US-East
Destination vNet Region	US-East	US-East
Type	Same Region	Same Region
Network egress (Default kbps per user)	150	150
Average work hours (per user per month)	160	160
Network egress (GB per user per month)	66	66
Network egress (total GB)	65,918	65,918
Cost per GB	\$0.01	\$0.01
Total Virtual Network Cost / month	\$659.18	\$659.18

Total Cost

WVD Total Infrastructure Cost (Total cost / month)	User Group 1	User Group 2
Compute	\$3,309.54	\$37,323.32
Storage	\$2,949.20	\$2,949.20
Networking	\$659.18	\$659.18
EA or Other Customer Discount	0%	0%
Total Azure Infrastructure cost / month	\$6,917.92	\$40,931.70
Named (total) users	1,000	1,000
Azure Infrastructure cost / user / month	\$6.92	\$40.93

AVD Monitoring

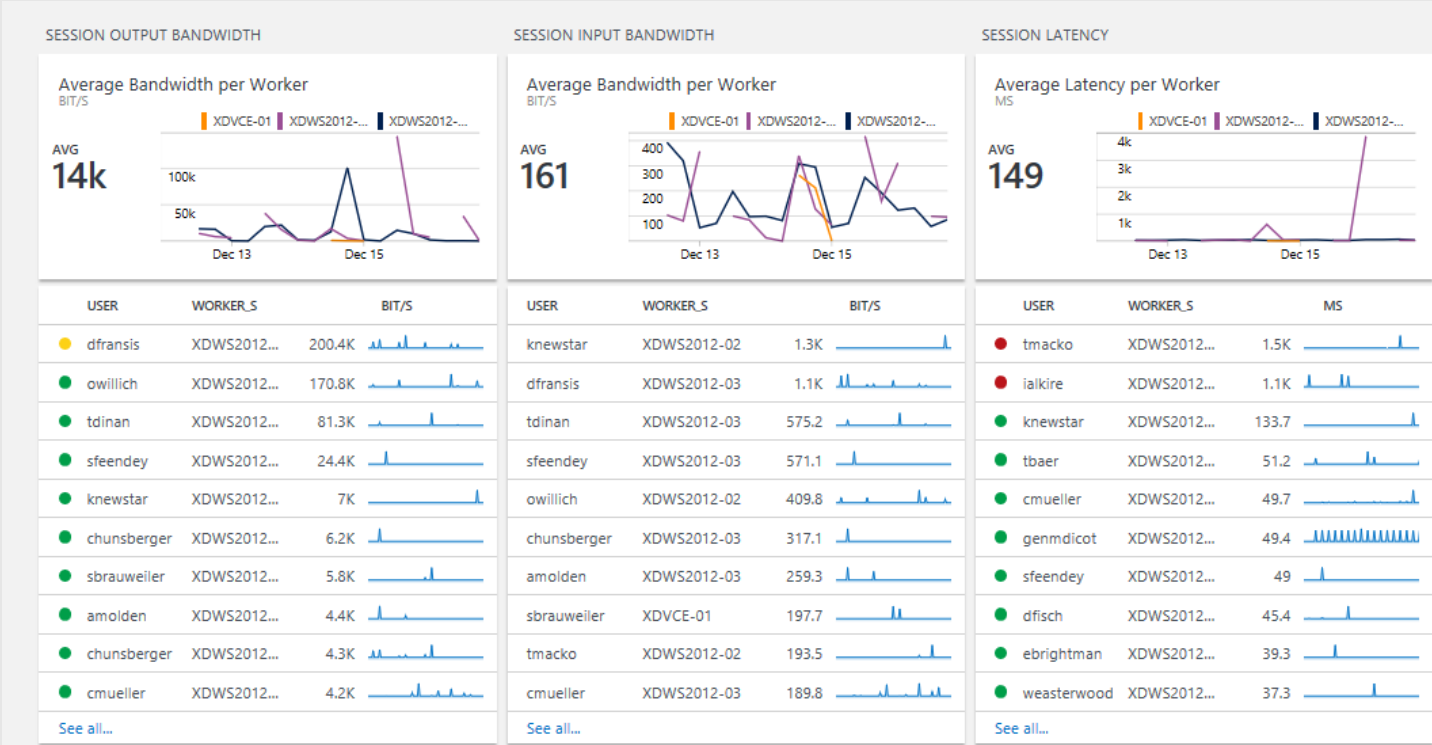
What's Azure Monitor?

- Built-In monitoring support for Azure resources
- Out-of-box metrics and logs
- Alert rules to get notified & take automated actions
- APIs for 3rd party integration
- Enables advanced monitoring and analytics experiences



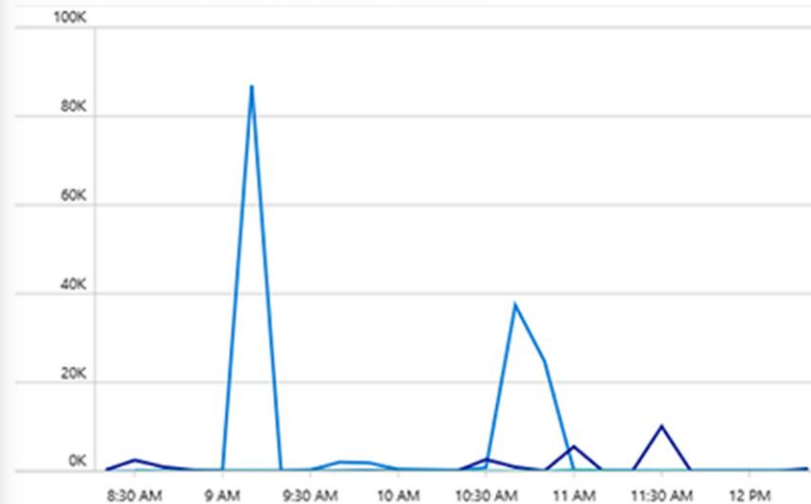
Gives you all information about your AVD

- ✓ This includes e.g. bandwidth and latency for each single user and session on your site.
- ✓ Gives you detailed information about performance data of the worker. For example: CPU usage, memory consumption, etc.



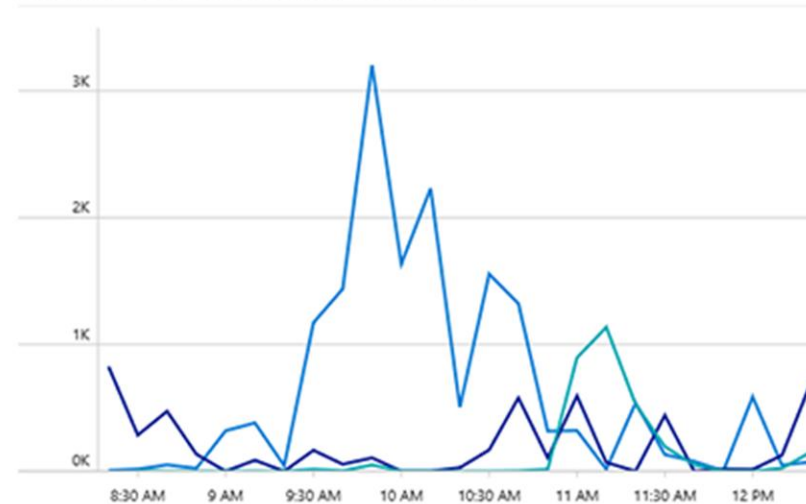
Bandwidth Monitoring

Average output bandwidth by session host (bit/s)



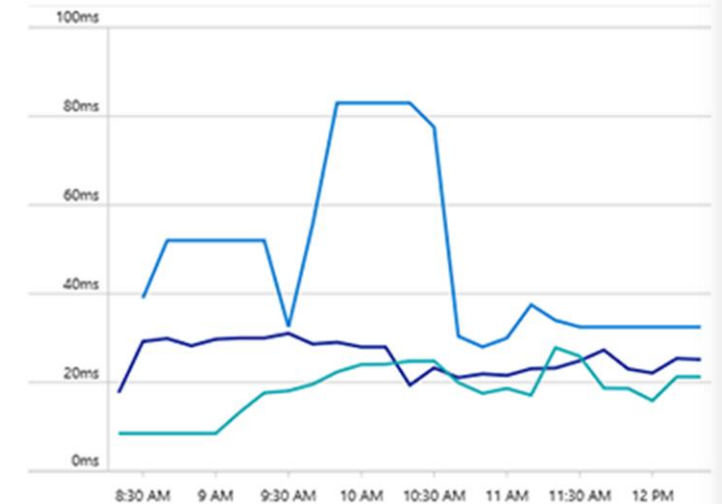
VADWS2019-03 (Avg) 6.23 K
VADWS2019-01 (Avg) 961
VADWS2019-02 (Avg) 26.2

Average input bandwidth by session host (bit/s)



VADWS2019-03 (Avg) 640
VADWS2019-01 (Avg) 199
VADWS2019-02 (Avg) 128

Average latency by session host (ms)



VADWS2019-02 (Avg) 48 ms
VADWS2019-01 (Avg) 25.6 ms
VADWS2019-03 (Avg) 18.2 ms

Average output bandwidth by user (bit/s)

User	↑↓	OutputBandwidth	↑↓
h		26.069K	
j		6.326K	
n		5.604K	
n		484.987	
n		88.955	
s		71.802	

Average input bandwidth by user (bit/s)

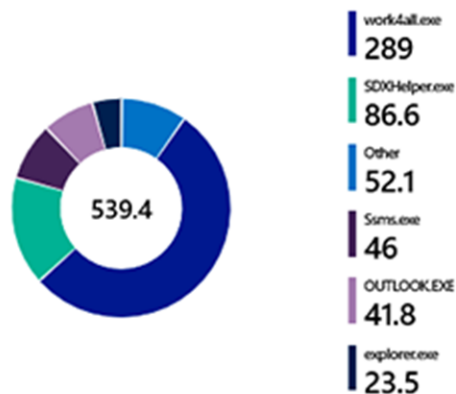
User	↑↓	InputBandwidth	↑↓
hr		4.152K	
m		593.91	
jh		586.847	
sf		488.79	
m		258.343	
m		207.967	

Average latency by user (ms)

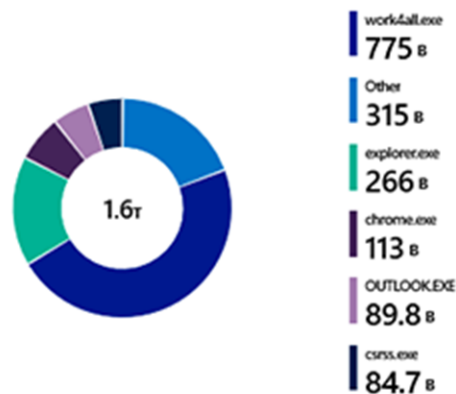
User	↑↓	Latency	↑↓
c		94.492m	
n		40.786m	
s		38.42ms	
h		38.267m	
jt		35.839m	
n		35.552m	

Application CPU & Memory Monitoring

Application CPU consumption (%*min)



Application Memory consumption (Bytes*min)



The following tables show the CPU and memory usage of the users running specific applications over the selected timeframe. The values have a synthetic unit showing the summarization of the CPU / memory usage over time by all session hosts. They clearly reveal the users with their applications having the highest impact on CPU and memory (some applications are filtered to avoid showing too much default processes).

User and application usage by CPU consumption (%*min)

Search			
User	↑↓	Application	↑↓ CPU_OverAll↑↓
n		work4all.exe	136.875
jl		Ssms.exe	46
h		work4all.exe	35.875
h		SDXHelper.exe	26.25
s		work4all.exe	26.125
n		SDXHelper.exe	24.375

User and application usage by memory consumption (Bytes*min)

Search			
User	↑↓	Application	↑↓ Memory_OverAll↑↓
n		work4all.exe	158.751 B
h		work4all.exe	98.692 B
jr		chrome.exe	60.18 B
n		OUTLOOK.EXE	56.112 B
a		chrome.exe	52.795 B
s		work4all.exe	40.217 B

Session Failures & Success Monitoring

Logins & Connections Administration Failure statistic

Time Range: Last 7 days

Brokered sessions



Session logon time (s)



Failed sessions

Search																	
TimeStamp	↑↓	User	↑↓	Tenant	↑↓	HostPool	↑↓	ResourceType	↑↓	SessionHost	↑↓	ClientOS	↑↓	ClientWvdVersion	↑↓	Id_g	↑↓
4/20/2020, 8:37:32 AM		mm-admin@ITProCloud.de		Builder City		Design		DESKTOP		< >		WINDOWS 10.0.18362		1.2.790.0		f717c2b5-7f92-46f4-993c-200882c70000	
4/17/2020, 1:41:38 PM		mm-admin@ITProCloud.de		Builder City		Design-DE		DESKTOP		VDI-DS-DE-001.ITProCloud.test		WINDOWS 10.0.18362		1.2.790.0		70864a5e-029b-4600-baa7-dbebddcd0000	
4/17/2020, 10:29:09 AM		mm-admin@ITProCloud.de		Builder City		Design-DE		DESKTOP		VDI-DS-DE-001.ITProCloud.test		WINDOWS 10.0.18362		1.2.790.0		b0904673-b078-4278-be88-e3f341800000	

We Look Forward to Partnering With You...

A Cloud 9, Mohamed Naguib Axis,
North Investors Area, New Cairo, Egypt.

P +2 02 25 390 467

E info@inovasys.co