Stroopwafel

Questions to ask?



Freek Berson

Remoting Windows Enthusiast

@fberson
freek@wortell.nl









Modern Desktop



Remoting 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



The options

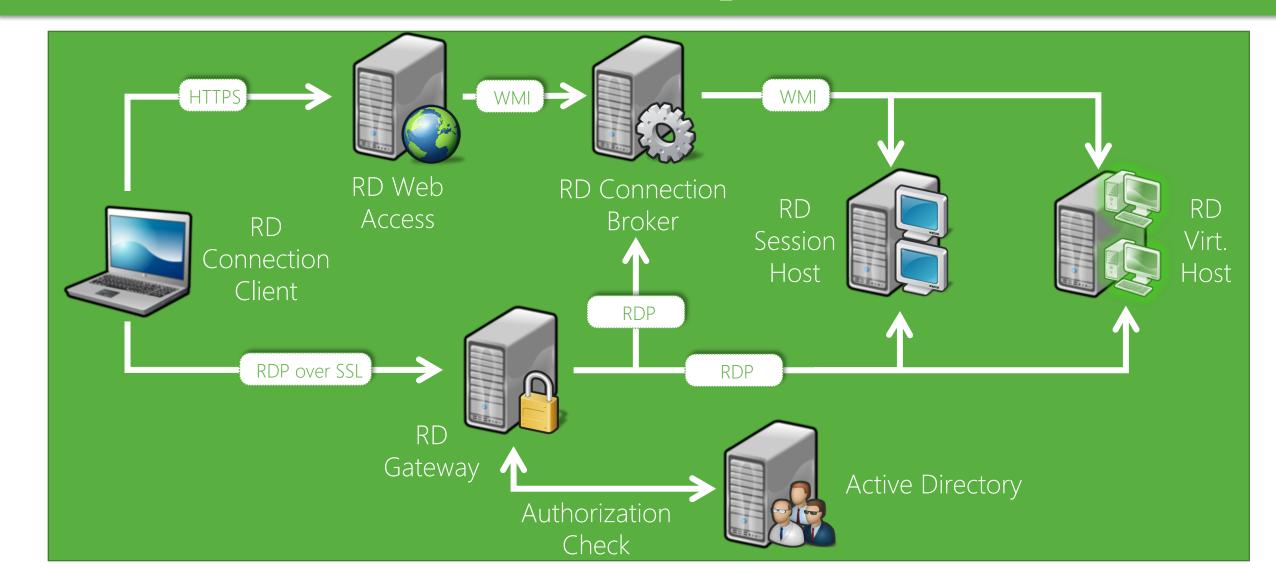
RDS on (Azure) laaS ideal if you want...

- full end-to-end control of the desktop virtualization environment
- a private, isolated environment
- to extend current deployments

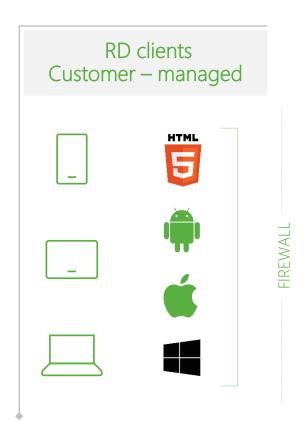
Windows Virtual Desktop ideal if you want...

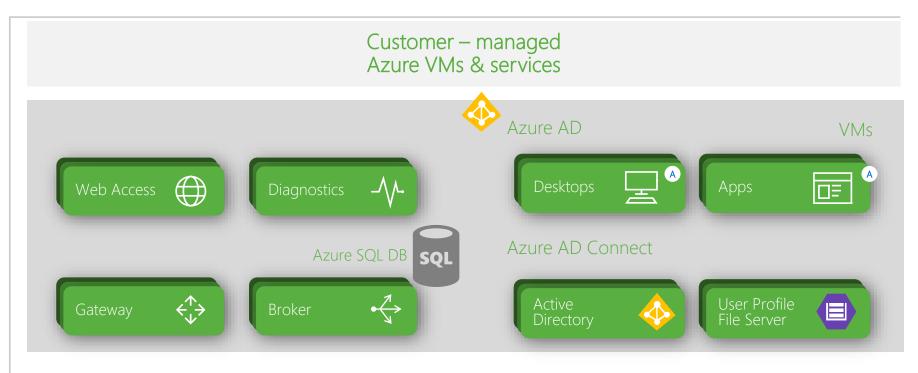
- Microsoft to manage the brokering infrastructure as a service
- Windows 10 Enterprise multi-session capabilities
- Windows 7 Extended Security Updates

RDS Roles explained



RDS on Azure laaS

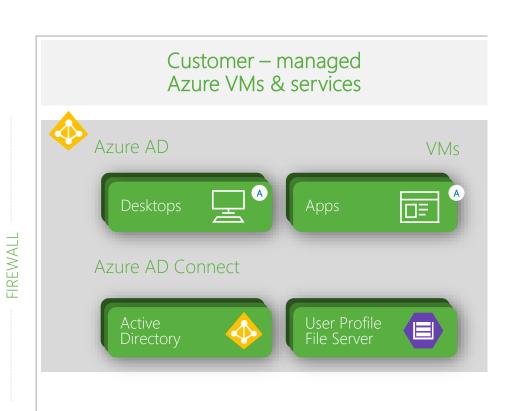




Windows Virtual Desktop

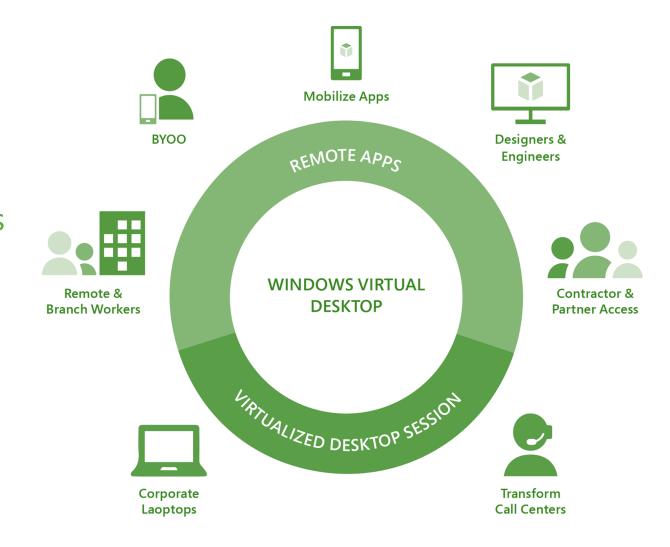






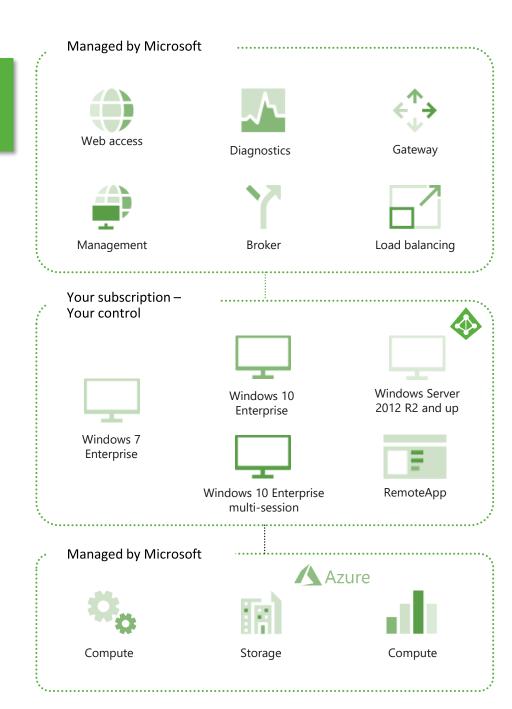
Windows Virtual Desktop

- Provides virtualization infrastructure as a managed service
- Deliver the only multi-session Windows
 10 experience
- Enable optimizations for Office 365
 ProPlus
- Deploy and scale in minutes



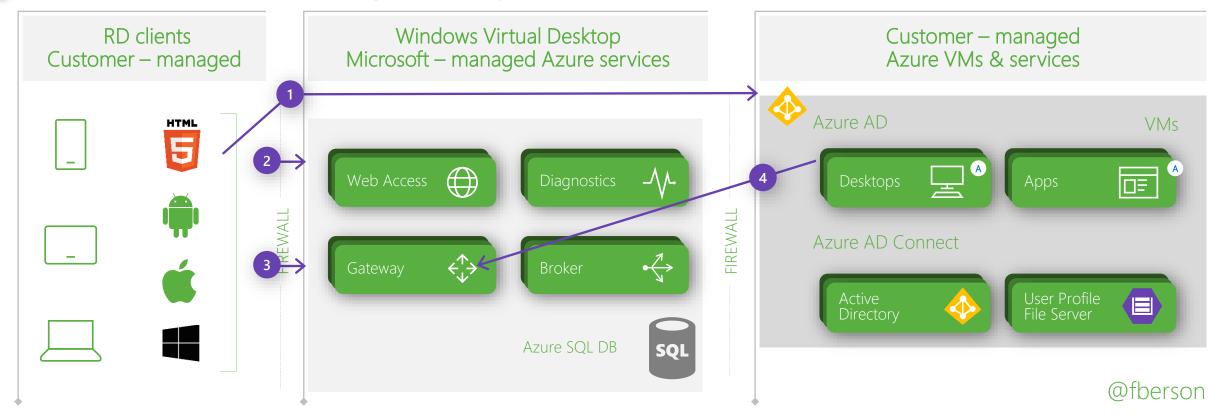
High Level Architecture

- Utilizes Azure Active Directory identity management service
- Deploy and manage VMs in Azure subscription
- Manage using existing tools like System Center Configuration Manager
- Optionally connect to on-premises resources -(VPN – ExpressRoute)



User Connection Flow

- 1 User launches RD client which connects to Azure AD, user signs in, and Azure AD returns token
- 2 RD client presents token to Web Access, Broker queries DB to determine resources authorized for user
- 3 User selects resource, RD client connects to Gateway
- 4 Broker orchestrates connection from host agent to Gateway

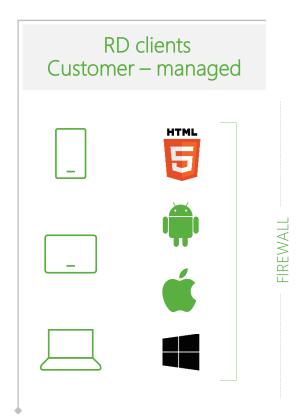


Improved Isolation: Reverse Connect

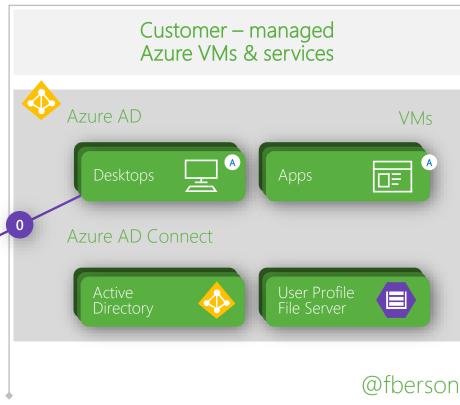
Outbound WebSocket connections from VMs to Broker and Gateway

Bidirectional communications between VMs and RD infra over https (443)

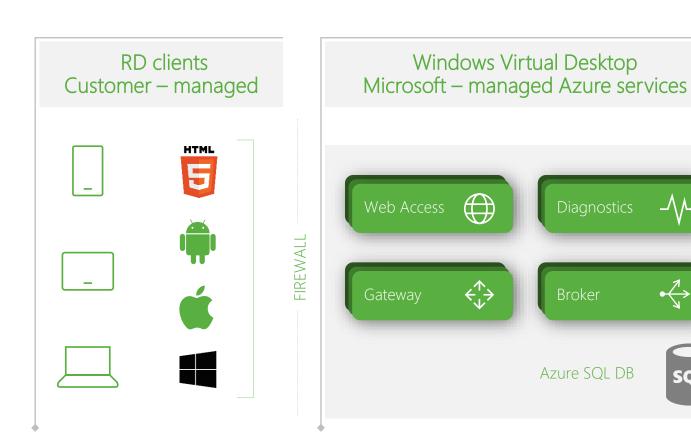
No inbound ports need be opened on the VM.

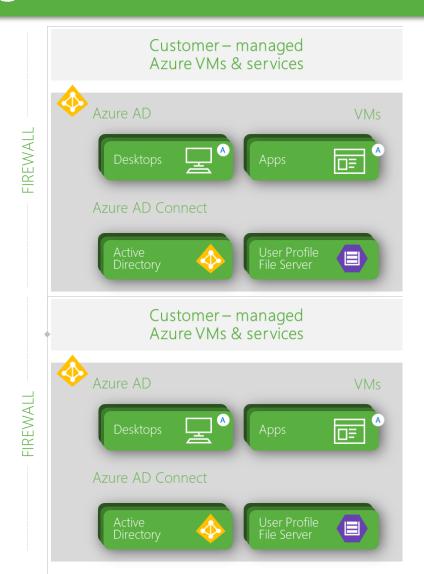




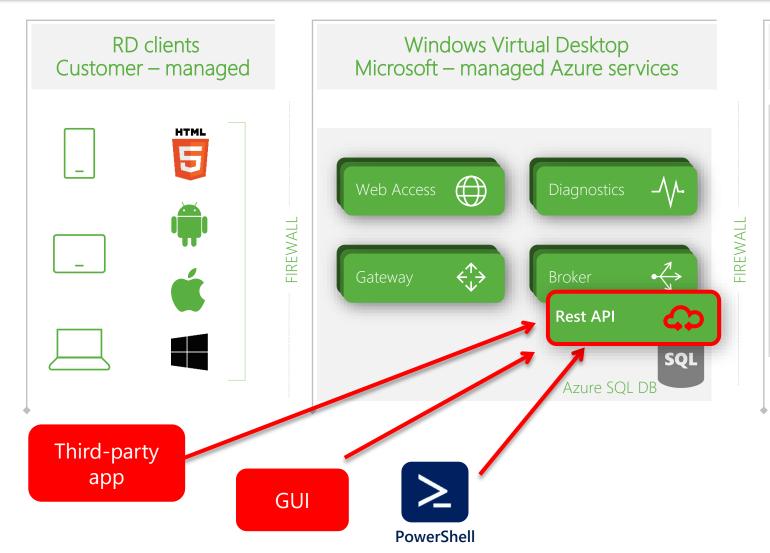


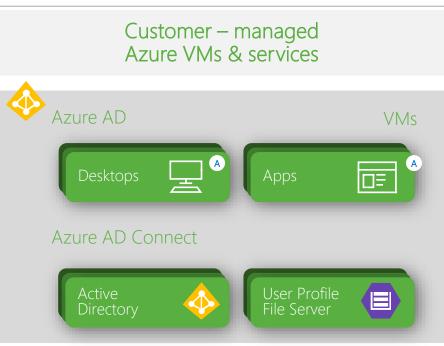
Multitenancy



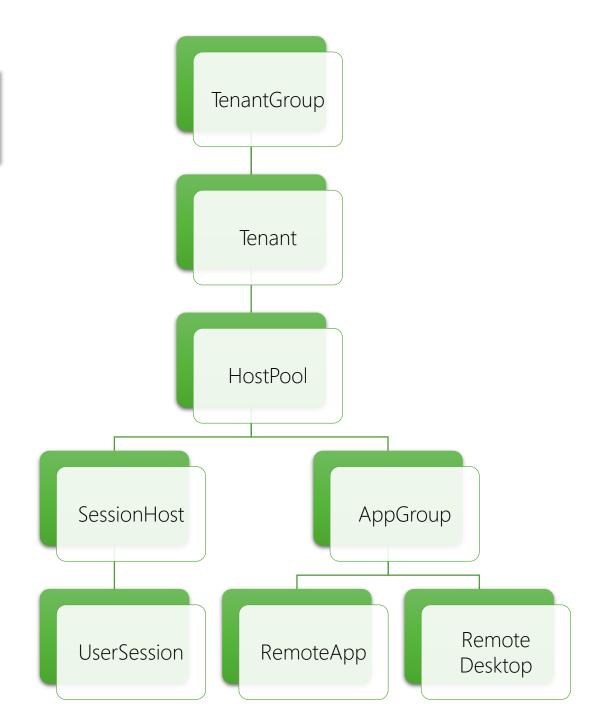


Extensible Platform





WVD Object Model



Built-in RDS roles

	Create (New-Rds*)	Read (Get-Rds*)	Update (Set-Rds*)	Delete (Remove-Rds*)	Authorize (*-RdsRoleAssignment)
RDS Owner					
RDS Contributor					
RDS Reader					
RDS Operator					

Session Host



Windows Server 2019 RD Session Host

Scalable multi-user **legacy** Windows environment.

Windows Server 2019

Multiple users

Win32

Office 2019 Perpetual

Long-Term Servicing Channel

Windows 10 Enterprise multi-user

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

Windows 10

Multiple users

Win32, UWP

Office 365 ProPlus

Semi-Annual Channel

Windows 10 Enterprise

Native single-session **modern**Windows experience.

Windows 10

Single user

Win32, UWP

Office 365 ProPlus

Semi-Annual Channel

Supported Hosts

Windows 7*

Windows 10

Windows 10 Enterprise Multisession

Windows Server 2012

Windows Server 2012 R2

Windows Server 2016

Windows Server 2019

* 64 bit only, azure limitation



Hostpool flexibility

- RemoteApp and desktop app groups
- Set different load balancing algorithms
 - Breath mode, with Reserved Instances
 - Depth mode
- Single or multi-session session host VMs
- Pooled or personal session host VMs



Office Support Dates

	Office 365 ProPlus always supported		Office 2019 Oct 2025		Office 2016 Oct 2025		Office 2013 April 2023		Office 2010 Oct 2020	
	Client Supported Until	Service Use Supported Until	Client Supported Until	Service Use Supported Until	Client Supported Until	Service Use Supported Until	Client Supported Until	Service Use Supported Until	Client Supported Until	Service Use Supported Until
Win10 SAC always supported	No end date	No end date	Oct 2025	Oct 2023	Oct 2025	Oct 2023	Apr 2023	Oct 2020	Oct 2020	Oct 2020
Win8/8.1 Jan 2023	Jan 2023	Jan 2023	n/a		Jan 2023	Jan 2023	Jan 2023	Oct 2020	Oct 2020	Oct 2020
Win7 w/ ESU Jan 2023	Jan 2023	Jan 2023	n/	'a	Jan 2023	Jan 2023	Jan 2023	Oct 2020	Oct 2020	Oct 2020
Windows Virtual Desktop always supported	No end date	No end date	n/a n/a		/a	n/a		n/a		
WS 2019 Oct 2028	n/a		Oct 2025	Oct 2023	n/a		n/a		n/a	
WS 2016 Jan 2027	Oct 2025	Oct 2025	n/	'a	Oct 2025	Oct 2023	Apr 2023	Oct 2020	Oct 2020	Oct 2020
WS 2012 R2 Oct 2023	Jan 2020	Jan 2020	n/	'a	Oct 2023	Oct 2023	Apr 2023	Oct 2020	Oct 2020	Oct 2020
Win10 LTSC 2018 Oct 2028	n/a Oct 2025 Oct 2023		n/a		n/a		n/a			
Win10 LTSB 2016 Oct 2026	Jan 2020	Jan 2020	n/	'a	Oct 2025	Oct 2023	Apr 2023	Oct 2020	Oct 2020	Oct 2020
Win10 LTSB 2015 Oct 2025	Jan 2020	Jan 2020	n/	'a	Oct 2025	Oct 2023	Apr 2023	Oct 2020	Oct 2020	Oct 2020

FSLogix

Microsoft acquires FSLogix to enhance the Office virtualization experience

In November 2018, Microsoft <u>acquired FSLogix</u>, a next-generation platform that reduces the resources, time and labor required to support desktop and app virtualization.

FSLogix technologies enables faster load times for non-persistent users accessing Office 365





FSLogix Technologies



Profile Container

Replacement for roaming profiles and folder redirection. Dramatically speeds up logon and application launch times.

• Includes Office 365 Container, which roams Office cache data (Outlook OST, OneDrive cache, Skype for Business GAL, etc.) and Windows Search DB with user in virtual desktop environments.



App Masking

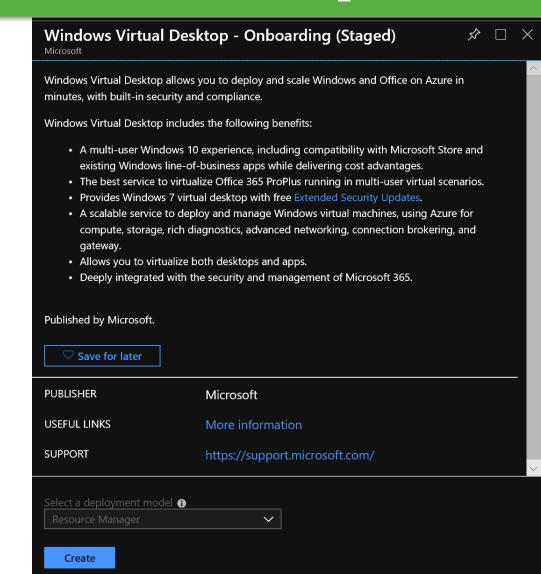
Minimize number of gold images by creating a single image with all applications. Excellent app compatibility with no packaging, sequencing, backend infrastructure, or virtualization.



Java Redirection

Helps protect the enterprise from vulnerabilities of multiple installed versions of Java by mapping specific versions to individual apps or websites.

Demo: Windows Virtual Desktop



Licensing

To run Windows 10 multi-session, Windows 10, or Windows 7

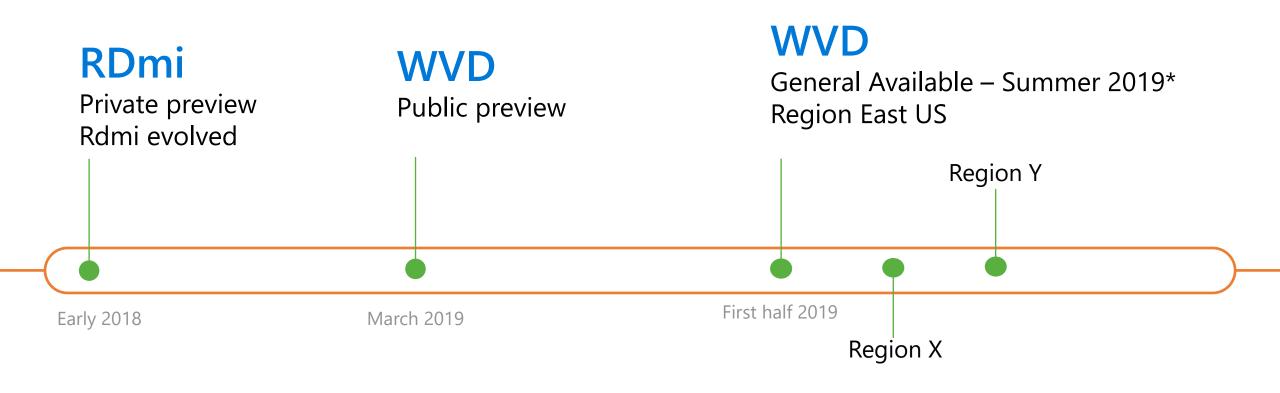
Microsoft 365 F1, E3, E5, A3, A5, Business Windows 10 Enterprise E3, E5 Windows 10 Education A3, A5 Windows 10 VDA per user

To run Windows Server 2012 R2, 2016, 2019

Remote Desktop Services (RDS) Client Access License (CAL) with active Software Assurance (SA)



Windows Virtual Desktop timeline



The modern workplace



Call to Action!

WVD Public Preview: aka.ms/wvd

Questions: freek@wortell.nl / @fberson

Blog: The Microsoft Platform.net