



Microsoft Ignite The Tour





Windows Virtual Desktop, Lessons Learned from the Field!

Freek Berson
@fberson
Microsoft MVP
Remoting Windows Evangelist

Additional questions?
Tomorrow all morning I'm at:
Expert Connect Area, Table 5



Windows Virtual Desktop



Deliver the only multi-session Windows 10 experience



Enable optimizations for Office 365 ProPlus



Migrate Windows Server (RDS) desktops and apps

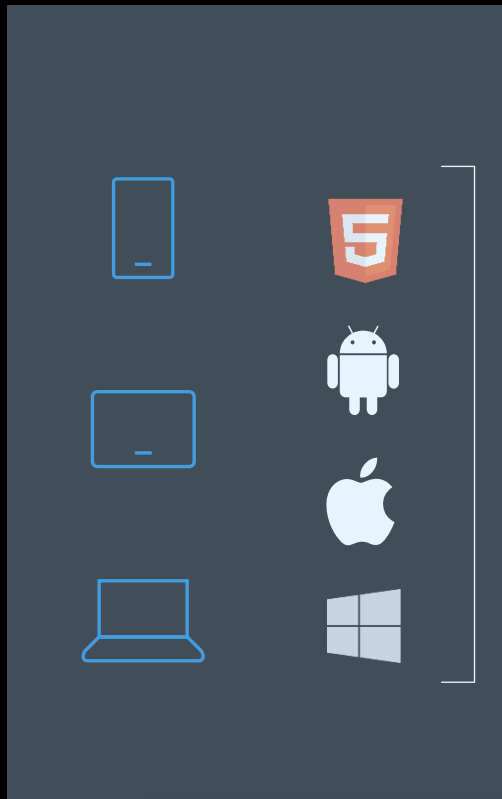


Deploy and scale in minutes



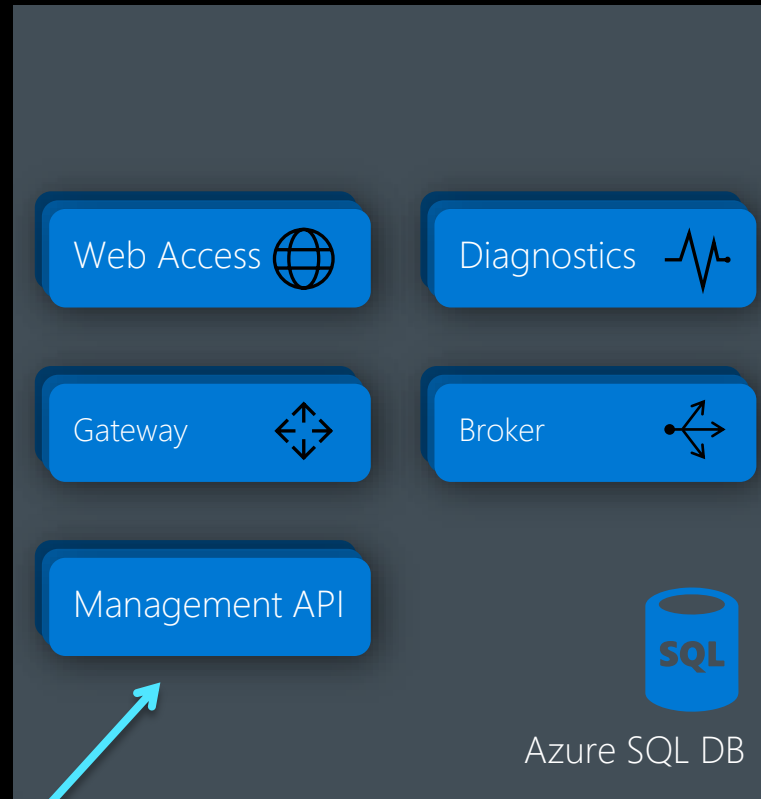
WVD Architecture

RD clients



FIREWALL

Windows Virtual Desktop
Microsoft – managed



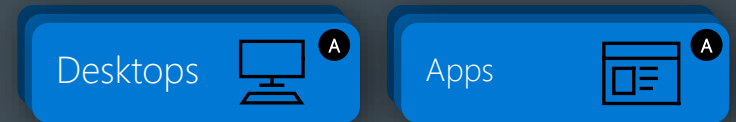
Powershell, Web UI, 3rd party

Azure VMs & services
Customer – managed



Azure AD

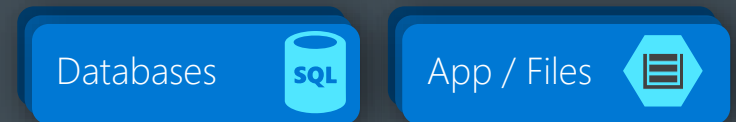
WVD Hosts



Azure AD Connect



Backend Servers & services



FIREWALL

Where to start?

Step 1 - Provide consent

Step 2 - Assign Tenant Creator Role

Step 3 - Create Service Principal

Step 4 - Create WVD Tenant

Step 5 - Create WVD Hostpool

Step 6 - Create AppGroups

Step 7 - Assign Users

Step 8 - Publish Apps/Desktops

Step 9 - Deploy Management UI



The screenshot displays the Microsoft Azure portal interface. At the top, the 'Microsoft Azure' logo is visible alongside a search bar. The breadcrumb navigation shows 'Home > New > Windows Virtual Desktop - Provision a host pool'. The main heading is 'Windows Virtual Desktop - Provision a host pool' with a 'Microsoft' sub-label. Below this is a red circular icon with a white double arrow. To the right of the icon, the text 'Windows Virtual Desktop - Provision a host pool' is displayed, followed by a 'Save for later' link. A blue 'Create' button is positioned below the icon. The page has two tabs: 'Overview' (selected) and 'Plans'. The 'Overview' section contains a paragraph stating: 'Windows Virtual Desktop allows you to deploy and scale Windows and Office on Azure in minutes, with built-in security and compliance.' Below this, a section titled 'Windows Virtual Desktop includes the following benefits:' lists six bullet points: a multi-user Windows 10 experience, the best service to virtualize Office 365 ProPlus, provisioned Windows 7 virtual desktops with free Extended Security Updates, a scalable service for deploying and managing Windows virtual machines, the ability to virtualize both desktops and apps, and deep integration with the security and management of Microsoft 365.

Microsoft Azure

Search resources, services, and docs (G+/)

Home > New > Windows Virtual Desktop - Provision a host pool

Windows Virtual Desktop - Provision a host pool

Microsoft

 **Windows Virtual Desktop - Provision a host pool** [Save for later](#)

Microsoft

Create

Overview Plans

Windows Virtual Desktop allows you to deploy and scale Windows and Office on Azure in minutes, with built-in security and compliance.

Windows Virtual Desktop includes the following benefits:

- A multi-user Windows 10 experience, including compatibility with Microsoft Store and existing Windows line-of-business apps while delivering cost advantages.
- The best service to virtualize Office 365 ProPlus running in multi-user virtual scenarios.
- Provides Windows 7 virtual desktop with free [Extended Security Updates](#).
- A scalable service to deploy and manage Windows virtual machines, using Azure for compute, storage, rich diagnostics, advanced networking, connection brokering, and gateway.
- Allows you to virtualize both desktops and apps.
- Deeply integrated with the security and management of Microsoft 365.

wvd-jumpstart.ps1

#STEP 1 - Provide Consent

start microsoft-edge:https://rdweb.wvd.microsoft.com/

#STEP 2 - Assign Tenant Creator

start microsoft-edge:https://bit.ly/3bip8Mp

#Step 3 - #Create Service Principal

\$svcPrincipal = New-AzureADApplication -AvailableToOtherTenants \$true -DisplayName "WVD Service Principal"

\$svcPrincipalCreds = New-AzureADApplicationPasswordCredential -ObjectId \$svcPrincipal.ObjectId

#Step 4 - Create the Tenant

New-RdsTenant -Name \$Tenantname -AadTenantId \$AadTenantId -AzureSubscriptionId \$AzureSubScriptiOnID -Description "Ignite Prague"

#Step 5 - Create the Hostpool

start microsoft-edge:https://bit.ly/2H8HaTj

#Step 6 - Create an AppGroup (optional)

New-RdsAppGroup -TenantName \$Tenant -HostPoolName \$hostpool -AppGroupName \$AppGroupname -ResourceType "RemoteApp"

#Step 7 - Assign Users

Add-RdsAppGroupUser -TenantName \$tenant -HostPoolName \$hostpool -AppGroupName \$AppGroupname -UserPrincipalName "rdmitest@rdmi.cloud"

#Step 8 - Publish Applications

New-RdsRemoteApp -TenantName \$tenant -HostPoolName \$hostpool -AppGroupName \$AppGroupname -AppAlias "outlook" -name "Outlook"

#Step 9 - Management using UI

start microsoft-edge:https://github.com/Azure/RDS-Templates/tree/master/wvd-templates/wvd-management-ux/deploy

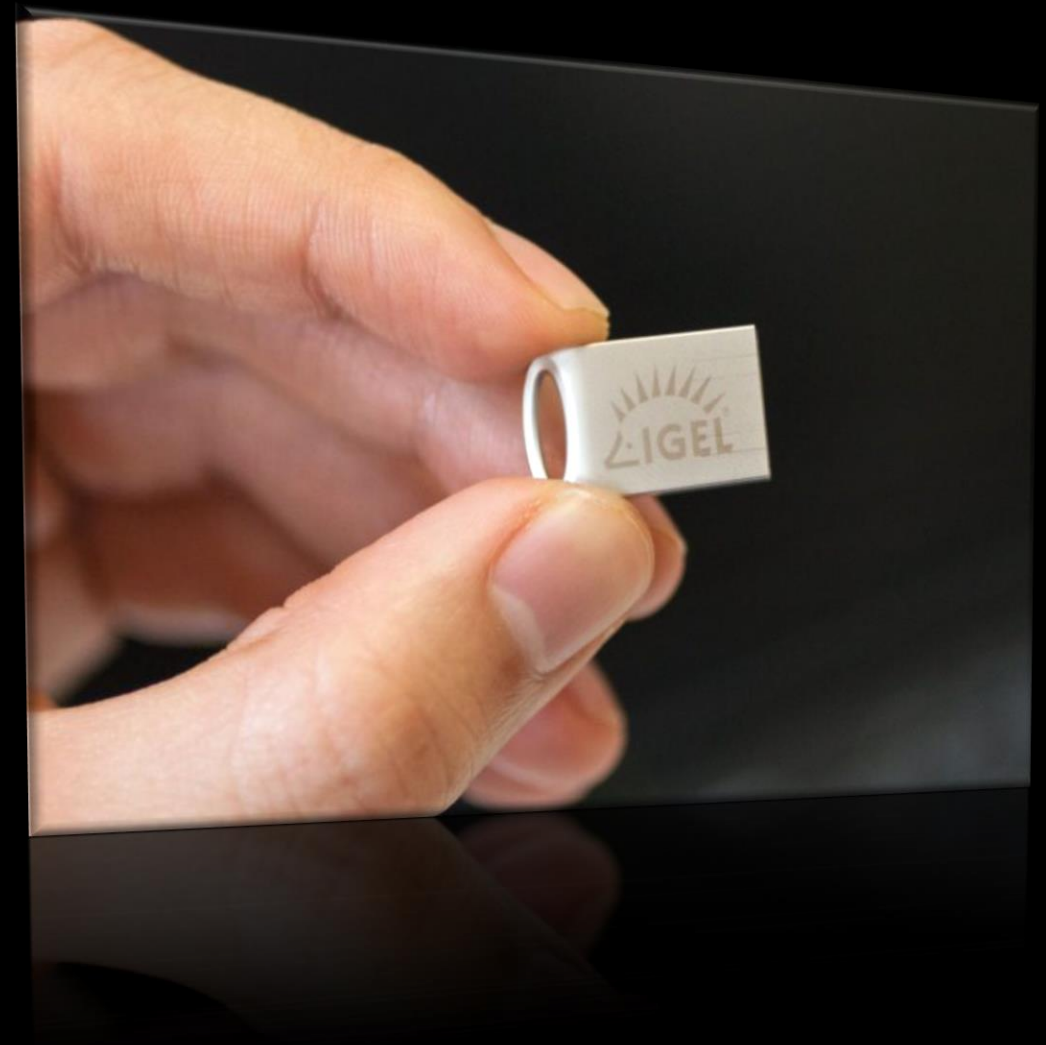
Linux thin client support

Windows Virtual Desktop supports thin clients, IGEL is first to market with Linux support!



Win a UD Pocket!

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Updating a hostpool



Template Image

Create Windows Virtual Desktop - Provision a host pool

[Basics](#) [Configure virtual machines](#) [Virtual machine settings](#) [Windows Virtual Desktop information](#) [Review + create](#)

This template creates and provisions a host pool in Windows Virtual Desktop.

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ Microsoft Azure Enterprise

Resource group * ⓘ RdsgWvdAppHostpool03
[Create new](#)

Instance details

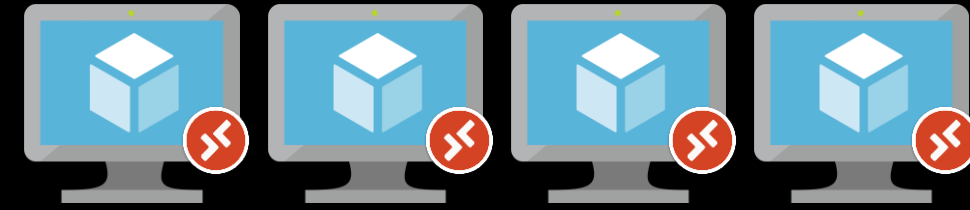
Region * ⓘ West US 2

Hostpool name * Prague-Host-Pool ✓

Desktop type ⓘ Pooled Personal

Default desktop users ⓘ freek@rdmi.cloud ✓




Hostpool



Scaling WVD hosts

aka.ms/wvdscale

Scale session hosts using Azure Automation

02/06/2020 • 10 minutes to read •     +1

You can reduce your total Windows Virtual Desktop deployment cost by scaling your virtual machines (VMs). This means shutting down and deallocating session host VMs during off-peak usage hours, then turning them back on and reallocating them during peak hours.

In this article, you'll learn about the scaling tool built with Azure Automation and Azure Logic Apps that will automatically scale session host virtual machines in your Windows Virtual Desktop environment. To learn how to use the scaling tool, skip ahead to [Prerequisites](#).

How the scaling tool works

The scaling tool provides a low-cost automation option for customers who want to optimize their session host VM costs.

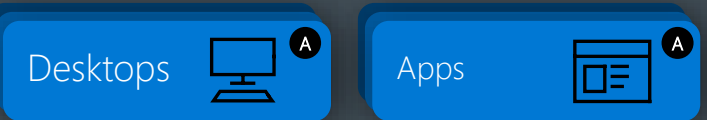
You can use the scaling tool to:

- Schedule VMs to start and stop based on Peak and Off-Peak business hours.
- Scale out VMs based on number of sessions per CPU core.
- Scale in VMs during Off-Peak hours, leaving the minimum number of session host VMs running.

Azure VMs & services Customer – managed

Azure AD

WVD Hosts



Azure AD Connect



Backend Servers & services



User authorization

1. PowerShell

```
#Add users to AppGroup
Add-RdsAppGroupUser -TenantName $tenant -HostPoolName $hostpool -AppGroupName $AppGroup -UserPrincipalName "freek@rdmi.cloud"
Get-RdsAppGroupUser -TenantName $tenant -HostPoolName $hostpool -AppGroupName $AppGroup
Remove-RdsAppGroupUser -TenantName $tenant -HostPoolName $hostpool -AppGroupName "AppGroup" -UserPrincipalName "freek@rdmi.cloud"
```

2. Management UI

"RDSGAppGroup03" Details of RdsgWvdAppHostpool03

SummaryApps

+ Add User

Remove

User Profile Name

rdmitest@rdmi.cloud

Microsoft Azure

Search resources, services, and docs (G+)

scott@rubiconvict.com

Home > Windows Virtual Desktop - Application groups

Windows Virtual Desktop - Application groups

Search (Ctrl+)

+ Add

Edit columns

Refresh

Export to CSV

Assign tags

Feedback

Filter by name...

Subscription == all

Resource group == all

Location == all

Add filter

No grouping

Showing 1 to 3 of 3 records.

| <input type="checkbox"/> | Name ↑↓ | Resource group ↑↓ | Location ↑↓ | Subscription ↑↓ | Application grou... ↑↓ | Host pool ↑↓ |
|--------------------------|-------------|-------------------|-------------|--------------------------|------------------------|--------------|
| <input type="checkbox"/> | Browsers | WVDHP1 | West US | Visual Studio Ultimat... | RemoteApp | WVDHP1 |
| <input type="checkbox"/> | Office Apps | WVDHP1 | West US | Visual Studio Ultimat... | RemoteApp | WVDHP1 |
| <input type="checkbox"/> | WVDHP2-DAG | WVDHP2 | West US | Visual Studio Ultimat... | Desktop | WVDHP2 |

User authorization

3. AD / AAD Group to AppGroup Auto Sync

Active Directory Users and Computers

Saved Queries

rdmi.cloud

Builtin

Computers

Domain Controllers

ForeignSecurityPrincipals

Keys

LostAndFound

Managed Service Accounts

Program Data

RDmi

Groups

WVD App Groups

Servers

Users

| Name | Type |
|--------------------------------------|-------------------------|
| WVD-RemoteApp-Hostpool-AdobeSuite | Security Group - Global |
| WVD-RemoteApp-Hostpool-Management | Security Group - Global |
| WVD-RemoteApp-Hostpool-Navision | Security Group - Global |
| WVD-RemoteApp-Hostpool-NotePad++ | Security Group - Global |
| WVD-RemoteApp-Hostpool-OfficeProPlus | Security Group - Global |

Sync-ADGroupsToWVD-RTC.ps1 * X

```
1 <#
2 .SYNOPSIS
3   Sync groupmembers from a AD Group towards a WVD AppGroup
4 .DESCRIPTION
5   This scripts syncs the users from all AD Group towards a WVD groups. It adds new AD Group members to
6   the WVD Group and it also removes members from thw WVD AppGroup
7 .NOTES
8   File Name : Sync-ADGroupsToWVD.ps1
9   Author : Freek Berson - Wortell
10  Version : v1
11 .EXAMPLE
12  .\Sync-ADGroupsToWVD.ps1
13 #>
14 #For each AD group, get the AD membership and sync towards App Groups
15 foreach ($GroupPostfix in $GroupPostfixes)
16 {
17     Write-Host "Processing group:($ADGroupNameRoot+$GroupPostfix) -ForegroundColor Magenta
18
19     write-host "AD Group Members:" -ForegroundColor Cyan
20     (Get-ADGroupMember -identity ($ADGroupNameRoot+$GroupPostfix) -Recursive | ForEach-Object { Get-ADUse
21     $adGroupUsers = (Get-ADGroupMember -identity ($ADGroupNameRoot+$GroupPostfix) -Recursive | ForEach-Ob
22
23     write-host "WVD AppGroup Members:" -ForegroundColor Cyan
24     (Get-RdsAppGroupUser -TenantName $tenantname -HostPoolName $hostpoolname -AppGroupName ($AppGroupname
25     $appGroupUsers = (Get-RdsAppGroupUser -TenantName $tenantname -HostPoolName $hostpoolname -AppGroupNa
26
27     write-host "Actions for this group:" -ForegroundColor Cyan
28
29     # Adding users to AppGroup
```

"RDSGAppGroup03" Details of RdsgWvdAppHostpool03

Summary

Apps

Users

+ Add User

Remove Users

Refresh

Search

| User Profile Name | Status | Last Time Active | Last Used Host |
|--|----------|------------------|----------------|
| <input type="checkbox"/> rdmitest@rdmi.cloud | Inactive | N/A | N/A |

« Previous

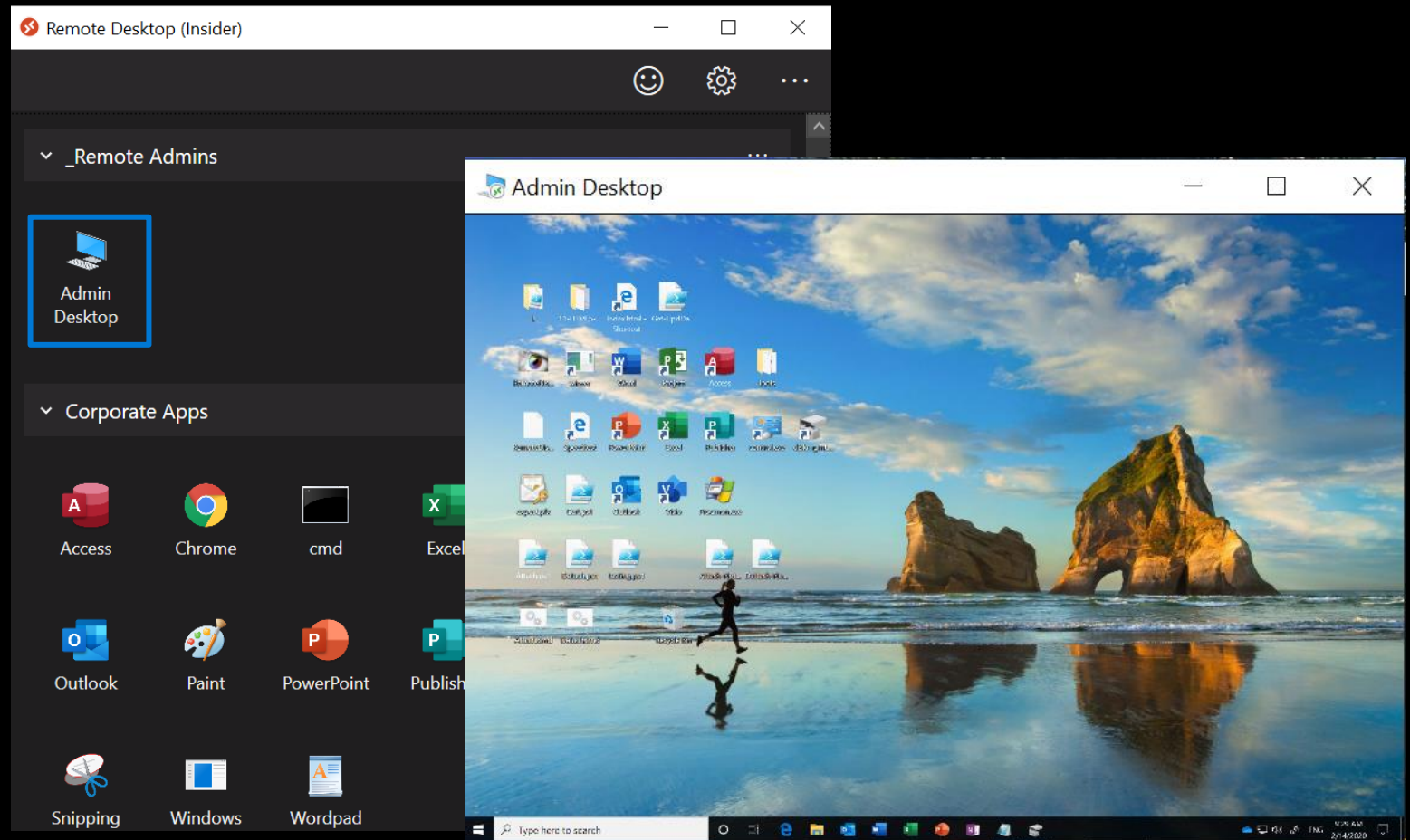
1

Next »

Eat your own dogfood!

STEP 1

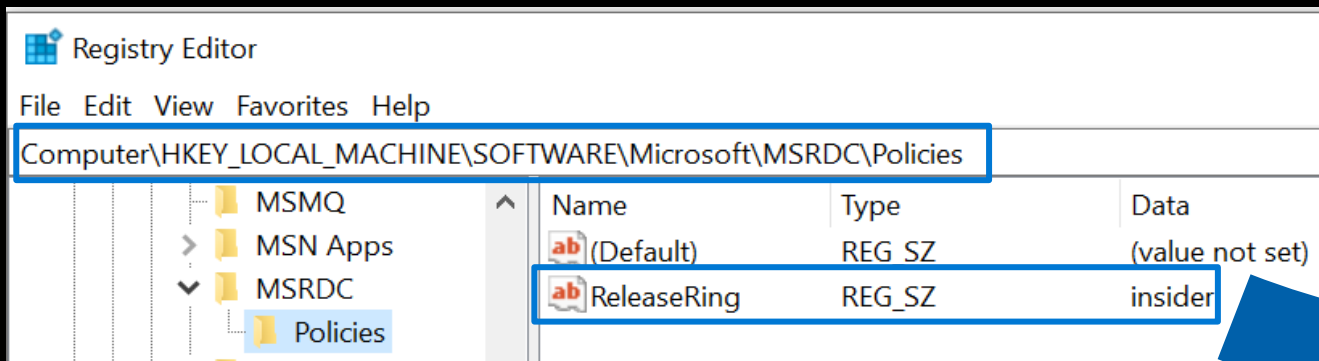
Leverage WVD for Remote Management
By administrators in secure and
efficient way!



Eat your own dogfood!

STEP 2

Join the WVD Client Insiders Ring to get updates ahead of production!



Eat your own dogfood!

STEP 3

Set the hostpool to Validation mode!

```
#Set Hostpool to validation mode
Set-RdsHostPool -TenantName $Tenantname -Name ($HostPoolName) -ValidationEnv $true
```

```
TenantName       : RdsgWvdTenant04
TenantGroupName  : Default Tenant Group
HostPoolName     : RdsgWvdDesktopHostpool03
FriendlyName     : RdsgWvdDesktopHostpool03
Description      : Created through ARM template
Persistent       : False
CustomRdpProperty : 
MaxSessionLimit  : 999999
LoadBalancerType : BreadthFirst
ValidationEnv     : True
Ring             : 
AssignmentType    :
```


Call to action!

 aka.ms/wvd

 [@fberson](https://twitter.com/fberson)

 ignite@wortell.nl

Additional questions?
Tomorrow all morning I'm at:
Expert Connect Area, Table 5



Demo

Speaker name



