Azure RemoteApp:
A Workplace in the Cloud?

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DuCUG, 25.09.2015

Who is that guy?

Husband, father, geek, autor, aikidoka

Teamlead Enterprise Consulting @ Makro Factory
10+ years experience with SBC/VDI
RDS MVP since 2010

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Microsoft Hyper-V und System Center
in Windows Server 2012 (R2)

Agenda

| Remote Desktop Services	Flavours	Clients	Licensing
Authentication	Applications	What now?	

3

Remote Desktop Services

Quick Introduction

The user accesses published resources through Web Access using a web browser

Web Access talks to Connection Broker to determine a suitable Session Host

The clients connect directly to the selected Session Host

The deployment is managed using Server Managers
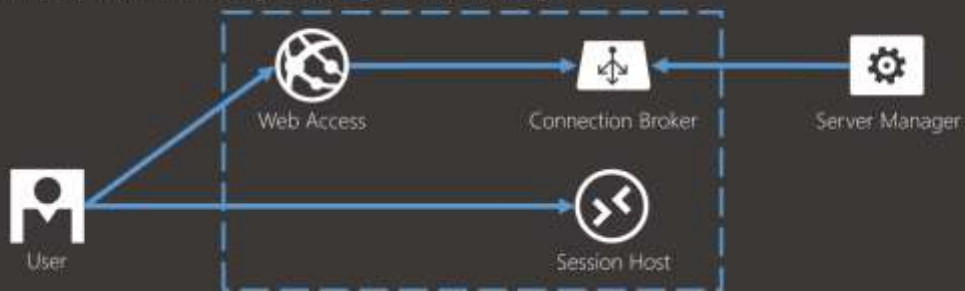
Flavours

Cloud Deployment

Managed RDS deployment

Authentication against Azure AD
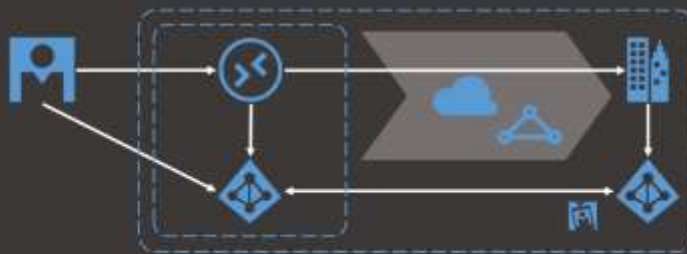
Low management overhead

Hybrid Deployment

Integration of LOB applications

Hybrid Identity: Azure AD Connect

Hybrid Network: Azure VPN / ExpressRoute

Hybrid Management: AD membership

https://azure.microsoft.com/en-us/documentation/articles/remoteapp-whatis/

Flavours

Cloud Deployment

Image gallery

Automatic Updates of VMs
  Updates for OS and Office
  Microsoft Anti-Malware

No additional applications

Authentication using Azure AD

Hybrid Deployment

Custom Images

Responsibility for Updates
  Updates for OS and all applications
  Updates for anti-virus solution etc.

Integration of LOB applications

Authentication with on-premises AD

Can also be deployed from template image
  In this case, updates are handled by Azure

https://azure.microsoft.com/en-us/documentation/articles/remoteapp-whatis/
https://azure.microsoft.com/en-us/documentation/articles/remoteapp-update/

Demo

Creating a Cloud Deployment

Managing a Deployment
User Access
Publishing
Sessions

Hybrid Deployment

Prerequisites

On-premises infrastructure
  Active Directory
  Application backends

Network connection
  Internet access
  ExpressRoute

Configuration

Set up Virtual Network (VNET)

Set up Azure AD Connect

AD membership for Session Hosts

http://blogs.msdn.com/b/rds/archive/2015/04/23/deploy-azure-remoteapp-collection-to-your-azure-virtual-network-with-support-for-expressroute.aspx
http://www.microsoft.com/en-us/download/details.aspx?id=47594

Deployment Planner

Azure RemoteApp Deployment Planner

Custom Images

Templates

Windows Server 2012 R2

Microsoft Office 365 ProPlus (Office 365 subscription required)

Microsoft Office 2013 Professional Plus (trial only)

Requirements

Gen1 only // MBR partitioning scheme // may have multiple partitions // no snapshots // VHD only // no VHDX // 127GB max // may be dynamically expanding // one Windows per image // no EFS // RDSH // Desktop Experience // SysPrep without /mode:vm

Updating

Update image, then assign image to collection

Existing session can have a grace period of 60 minutes OR NOT ;-)

https://azure.microsoft.com/en-us/documentation/articles/remoteapp-images/
https://azure.microsoft.com/en-us/documentation/articles/remoteapp-imagereqs/
https://azure.microsoft.com/en-us/documentation/articles/remoteapp-image-on-azurevm/
http://blogs.msdn.com/b/rds/archive/2015/03/17/how-to-create-a-remoteapp-template-image-in-azure.aspx
https://azure.microsoft.com/en-us/documentation/articles/remoteapp-update/

Clients

Platforms

Microsoft offers clients for all major operating systems

Licensing

Editions & Cost

Fee per collection, Microsoft Office must be licenced separately

Windows license and RDS CALS are included

Service Level Agreement: 99,9% monthly availability

	Basic	Standard
Target user	Task Worker	Information Worker
Starting price (user/month)	$10	$15
Hours included	40	40

https://azure.microsoft.com/en-us/pricing/details/remoteapp/

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Target user	Task Worker	Information Worker
Starting price (user/month)	$10	$15
Hours included	40	40
Hourly overage rate	$0,175/h	$0,20/h
Capped price (user/month)	$17	$23

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Capped price (user/month)	$17	$23
Maximum users per collection	400* (800**)	250* (500**)
		(* Default // ** Maximum)

https://azure.microsoft.com/en-us/pricing/details/remoteapp/

18

Licensing

Limitations

	Limit
Collections per Subscription	3 *
Collections per User	1
RemoteApps per Collection	100
Maximum Number of Sessions in all Collections	5.000 *
Storage per User	50GB
Idle Timeout	4 hours
Disconnected Timeout	4 hours

(* You can request an increase)

https://azure.microsoft.com/en-us/documentation/articles/azure-subscription-service-limits/#azure-remoteapp-limits

Authentication

Azure Active Directory

User accounts need to come from the same AAD domain

This domain can be changed but requires clearing and setting permissions

	Cloud	Hybrid
Microsoft Account	Yes	No
Azure Active Directory		
▪ Cloud only	Yes	No
▪ AD Connect with password sync	Yes	Yes
▪ AD Connect without password sync	Yes	Yes
▪ AD Connect with ADFS	Yes	Yes
Azure Multi-Factor Authentication (MFA)	Yes	Yes

(Office 365 accounts are AAD accounts)

Environment

Applications

Treat just like RDS deployment ;-)

Office 365 ProPlus
  Included only in Office 365 Enterprise/Government E3 and higher
  ARA supports Shared Computer Activation (but only in custom images)

Office Professional Plus 2013

Data

OneDrive for Business (not OneDrive Consumer)

SharePoint

Network Share

Dropbox (not Box)

https://azure.microsoft.com/en-us/documentation/articles/remoteapp-o365/
https://technet.microsoft.com/library/dn782858.aspx
https://azure.microsoft.com/en-us/documentation/articles/remoteapp-officesubscription/
https://technet.microsoft.com/library/office-365-plan-options.aspx

Tips and Tricks (1/2)

Configuring redirection

Enable USB redirection

Set-AzureRemoteAppCollection –CollectionName MyCol -CustomRdpProperty "usbdevicestoredirect:s:*"

Configure more redirection options

https://azure.microsoft.com/en-us/documentation/articles/remoteapp-redirection/

Working with UPDs

Prepopulating: Modify the default profile in the template image

Managing UPDs almost exclusively through support (remoteappforum@microsoft.com)

Central management

(Local) Group Policy depending on deployment (domain joined or not)

Perhaps even PowerShell Desired State Configuration

https://azure.microsoft.com/en-us/documentation/articles/remoteapp-redirection/
https://azure.microsoft.com/en-us/documentation/articles/remoteapp-upd/
https://azure.microsoft.com/en-us/documentation/articles/remoteapp-secure/

http://blogs.msdn.com/b/rds/archive/2015/08/18/how-to-link-an-azure-remoteapp-
collection-to-your-existing-azure-virtual-network-without-domain-join.aspx

Automation

PowerShell

Installing Azure PowerShell Module
  https://azure.microsoft.com/en-us/documentation/articles/powershell-install-configure/

Introduction to ARA Cmdlets
  https://azure.microsoft.com/en-us/documentation/articles/remoteapp-tutorial-arawithpowershell/

Azure Automation

Use the Azure PowerShell Cmdlets (see above)

Azure Resource Manager

Quick Start Template for RDS
  http://blogs.msdn.com/b/rds/archive/2015/07/13/azure-resource-manager-template-for-rds-
  deployment.aspx

Demo
Azure RemoteApp PowerShell Cmdlets

What now?

Give it a try

Landing Page
https://www.remoteapp.windowsazure.com/

What you get
Runs 30 days
2 Collections per Subscription
10 Users per Collection
25 Template Images

https://azure.microsoft.com/en-us/documentation/articles/azure-subscription-service-limits/#azure-remoteapp-limits

What now?

Learn

Documentation
   http://azure.microsoft.com/en-us/documentation/services/remoteapp/

FAQ
   https://azure.microsoft.com/en-us/documentation/articles/remoteapp-faq/

Forum
   https://social.msdn.microsoft.com/forums/azure/en-US/home?forum=azureremoteapp

Azure RemoteApp AskTheExperts Webinar
   https://azureinfo.microsoft.com/AzureRemoteAppAskTheExperts-Registration-Page.html

Opsgility: Azure RemoteApp, From Introduction to Advanced (by Freek Berson)
   https://www.opsgility.com/courses/details/azure-remote-app-from-introduction-to-advanced

Microsoft Virtual Academy: Azure RemoteApp Core Skills
   https://www.microsoftvirtualacademy.com/en-US/training-courses/azure-remoteapp-core-skills-11814

Challenges

End User

~~No desktop integration~~
No file type association
No profile management

Features

No UDP for RDP
No GPU support
No container
No client API

Collections

No assigments based on RemoteApp
Single AAD domain
No telemetry data

http://feedback.azure.com/forums/247748-azure-remoteapp

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