



Vindows Admin Center 🔍	Microsoft			
Windows Admin Cente	er			
Alle Verbindungen				
+ Hinzufügen 🖻 Verbinden	☐ Verwalten als	🗓 Entfernen 🖉 Tags bearbeiten		
□ Name ↑	Тур	Zuletzt verbunden	Verwalten als	
da.ad.cloudmechanic.de	Server	Nie	AD\DomainRoot	
dpm.ad.cloudmechanic.de	Server	28.3.2018, 13:06:45	AD\DomainRoot	
gw.ad.cloudmechanic.de	Server	13.4.2018, 08:07:17	AD\DomainRoot	
hvh1	Server	12.4.2018, 19:53:52	AD\DomainRoot	
mail1.ad.cloudmechanic.de	Server	Nie	AD\DomainRoot	
sccm1.ad.cloudmechanic.de	Server	Nie	AD\DomainRoot	
sql1.ad.cloudmechanic.de	Server	14.1.2018, 00:46:19	AD\DomainRoot	

Windows Admin Center Gregor Reimling











# Thank you to our wonderful sponsors









































## About me:

Gregor Reimling

IT Consultant for Azure

Since October Microsoft MVP for Azure ©

Azure, Windows Server, Hyper-V

Working @sepago GmbH Cologne

Orga AzureBonn Meetup (Next: Azure DevOps 22.11.18)



@GregorReimling | @AzureBonn

info@Reimling.eu







www.reimling.eu



www.neutralien.com













# Windows Admin Center — Agenda

General

**Functions** 

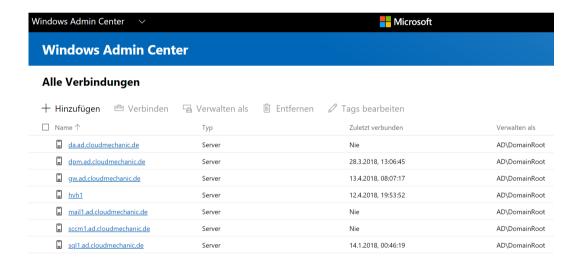
Demo

Azure B-Series

Good to Know

Conclusion

Links







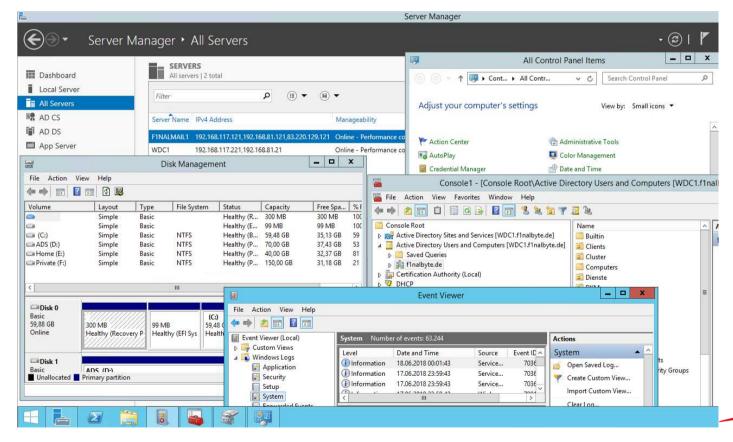








# Servermanagement so far















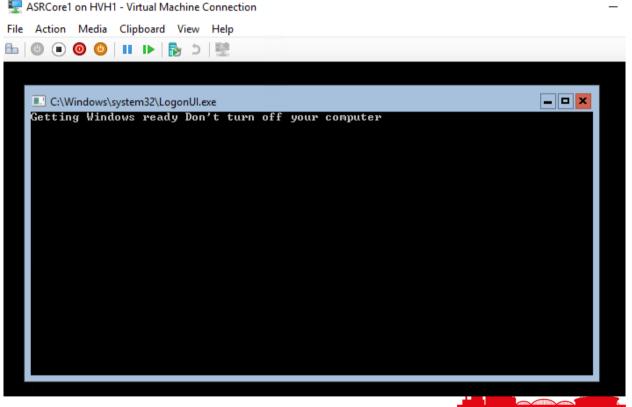
# Servercore Management so far

Via Commandline

Powershell (Remote)

Servermanager

Corefig.ps1















# Windows Admin Center — Allgemeines

Windows Admin Center = WAC

Next Generation Servermanager – Webbased on HTML 5

Central surface for all server

Easy installation - (MSI Paket) On-Premise or Cloud VM

All Functions from the Servermanagers + many more included

Import of existing Server easy via Textfile

Serveranalysis agentenlees – WMI and PS





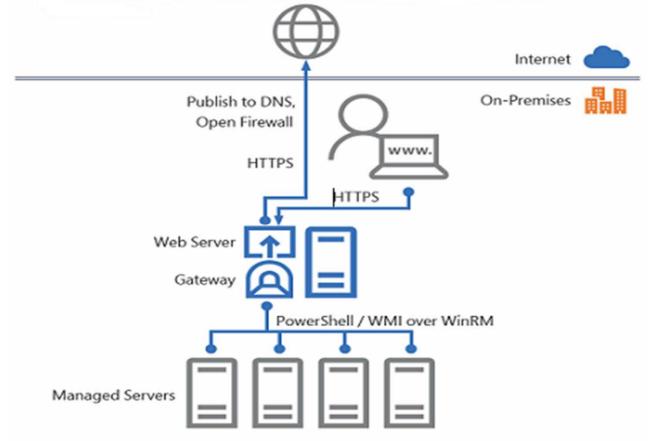








# Windows Admin Center - Architecture







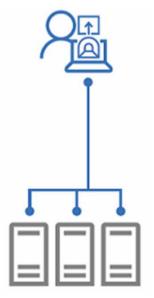




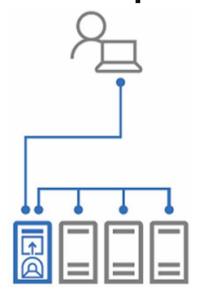




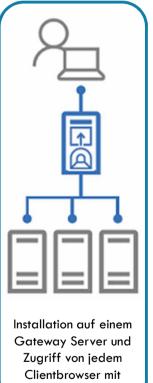
# WAC - Installationsoptionen



Installation Lokal auf Windows 10 Client. Zum Testen und für kleinere Szenarien.



Installation direkt auf dem Server. Zur Serververwaltung oder für Clusternodes.



Zugriff zum Gateway.



Installation auf einem hochverfügbaren Gatewayserver.



https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/plan/installation-options











# WAC — Requirements

#### WAC based installation

- Windows 10 (<=1709) in Desktop Mode
- Windows Server 2016 (GUI oder Core), v1709 in Desktop or Gateway Mode

### Supported Server for Management

from Windows Server 2012

General availability since 1804

Updates now manually, planning for WSUS













## WAC — Unterstützte Funktionen

#### Server

- Overview
- Certificates, Devices, Events
- Files, Firewall, Local User and Groups
- Network, Powershell, Processes
- Registry, Remote Desktop
- Roles and Features, Services
- Storage Replica, Storage
- Updates, Virtual Machines
- Virtual Switchtes
- ...

#### Failover Cluster

- Overview
- Disks
- Networks
- Nodes
- Roles
- Virtual Machines
- Virtual Switches
- ...

### Hyper-Converged Cluster

- Overview
- Drives
- Server
- Virtual Machines
- Virtual Switches
- Volumes
- ...













## WAC — Recommendation for installation

Provisioning as Gateway Server

Used as Entrypoint, register manageable Server here

Used Ports only open to internal

Can also used for DMZ

Installation local or in Azure possible

#### High availability

HA only in Active- Passive Mode via Failover- Cluster Function from Windows Server

#### Integration in Azure possbile

- To authenticate via AzureAD
- To manage Azure Site Recovery
- There coming more and more manageable services in Azure













### Windows Admin Center $\vee$ Microsoft

### **Windows Admin Center**

#### Alle Verbindungen

🕂 Hinzufügen 🖷 Verbinden	☐ Verwalten als	🗓 Entfernen 🖉 Tags bearbeiten	
□ Name ↑	Тур	Zuletzt verbunden	Verwalten als
da.ad.cloudmechanic.de	Server	A O TINA Nie	AD\DomainRoot
dpm.ad.cloudmechanic.de	Ser	10-TIM2 2018, 13:06:45	AD\DomainRoot
gw.ad.cloudmechanic.de	Server	13.4.2018, 08:07:17	AD\DomainRoot
hvh1	Server	12.4.2018, 19:53:52	AD\DomainRoot
mail1.ad.cloudmechanic.de	Server	Nie	AD\DomainRoot
sccm1.ad.cloudmechanic.de	Server	Nie	AD\DomainRoot
sql1.ad.cloudmechanic.de	Server	14.1.2018, 00:46:19	AD\DomainRoot













## Azure B-Series

B- Series new since Sep. 2017

**Burstable Performance** 

Priceless Azure-VM's

- (A2, 2 vCPU, 3,5GB RAM) = 110,81€
- (B2S, 2vCPU, 4GB RAM) = 39,89€

Ideal for small workloads (Domaincontroller, Webserver, ...)

Collects credits when Machine in idle

Machine needs performance, the credits will be used

Information about credit status availaible over Azure Metric











## Exkurs Azure B-Series

Size	vCPU's	RAM	Local SSD	Baseline Performance	Max. CPU Performance	West Europe Price (monthly)
Standard B1s	1	1	4	10%	100%	10,53€
Standard B1ms	1	2	4	20%	100%	19,95€
Standard_B2s	2	4	8	40%	200%	39,89€
Standard_B2ms	2	8	16	60%	200%	75,35€
Standard_B4ms	4	16	32	90%	400%	142,39€
Standard_B8ms	8	32	64	135%	800%	273,70€













## WAC — Recommendation for installation

Provisioning as Gateway Server

Used as Entrypoint, register manageable Server here

Used Ports only open to internal

Can also used for DMZ

Installation local or in Azure possible

#### High availability

HA only in Active- Passive Mode via Failover- Cluster Function from Windows Server

#### Integration in Azure possbile

- To authenticate via AzureAD
- To manage Azure Site Recovery
- There coming more and more manageable services in Azure













## WAC - Recommendation for installation

### Deploy in Azure

For installation recommended Azure VM

■ B2S – 2 Cores, 4GB RAM (based one a environement with 20 managable servers)

### HA possible

- Need 2 B2S Azure VMs
- Need Failover Cluster
- Based on Active Passive Mode

Management for On-Prem Server via \$2\$ and Azure VMs possbile

Azure Integration for using Azure AD as Rights Management













SUMMIT # SUMIT # SUMMIT # SUMIT # SUMIT # SUMMIT # SUMMIT # SUMMIT # SUMIT # SUMMIT # SUMMIT # SUMMIT # SUMIT # SUMIT # SUMMIT # SUMIT # SUMIT

# WAC - Overview

Cost	Browse using	Installs on	Manages	Connectivity
Free!	Edge  Chrome	Windows Server, version 1709 Windows Server 2016 Windows 10	Windows Server, version 1709 Windows Server 2016 Windows Server 2012 R2 Windows Server 2012 Microsoft Hyper-V Server	Azure not required Internet not required AD not required
Security	Configuration	Positioning	Feedback	Extensions
HTTPS LAPS Delegation	IIS not required Agents not required SQL not required WMF 5.1 required on WS 2012 and 2012 R2	Evolution of "in-box" tools  Complementary to RSAT, SC and OMS	Upvotes via UserVoice	Early alpha SDK in private preview











## WAC — Good to know

Note for Browser- compatibility (only Edge or Chrome)

#### **Extended Rightsmanagement**

- Using of local Servergroups or AD Integration integriert
- Direct AzureAD Integration

#### Additionally Rollebased Acces (RBAC – 3 level)

- WAC Administratoren Viewing and managing of most functions
- WAC Hyper-V Admins Managing the Hyper-V Role, other functions only readable
- WAC Readers All functions only in reading mode

Powershell and Remotedesktop Connection via Browser

SSL Certificate required for secured HTTPS Connection













# WAC - Installationsempfehlung

Bereitstellung in DMZ oder in Azure Hub VNET empfohlen

Zur Bereitstellung geeignete Azure VMs

■ B2S – 2 Cores, 4GB RAM

Management der On-Premise Server via S2S und Azure VMs möglich

Azure Integration und Nutzung der Azure AD als Rechteverwaltungsinstanz













# WAC - Installationsempfehlung

Bereitstellung in DMZ oder in Azure Hub VNET empfohlen

Zur Bereitstellung geeignete Azure VMs

■ B2S – 2 Cores, 4GB RAM

Management der On-Premise Server via S2S und Azure VMs möglich

Azure Integration und Nutzung der Azure AD als Rechteverwaltungsinstanz













## WAC - Conclusion

Many options for installation ©

Free available and easy to install – included HA option ©

Simplifies the administrations life ©

Powershell and Remotedesktop Connection via Browser ©

SSL Certificate required for secured HTTPS Connection 😐

Updates currently via Windows Update 😊













## WAC - Links

**Windows Admin Center Documentation** 

Windows Admin Center Launch

Windows Admin Center Known issues

WAC – MSIgnite Theater Session for partner extensions

WAC - MSIgnite WAC Session recordings

**Azure B- Series Introduction** 













# Thank you for your attention

















# Thank you to our wonderful sponsors













































### Please evaluate this session

Your feedback is important to us!

Please evaluate this session through MyEvaluations on the mobile app or website.

### Download the app:

https://l.ead.me/mct-mobileapp

### Go to the website:

https://events.crowdcompass.com/mctsummit



