AZURE ACTIVE DIRECTORY

Hype oder Revolution?

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Welcome

Agenda

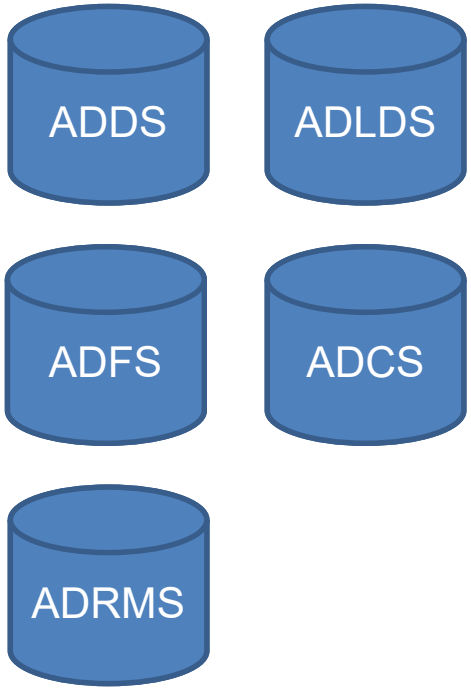
- Was ist [Azure] Active Directory?
- Synchronization, Federation, Integration
- Praktische Anwendungen
  - ⇨ z.B.: Multifactor Authentication
- Azure Stack

Herausforderungen :: Anforderungen

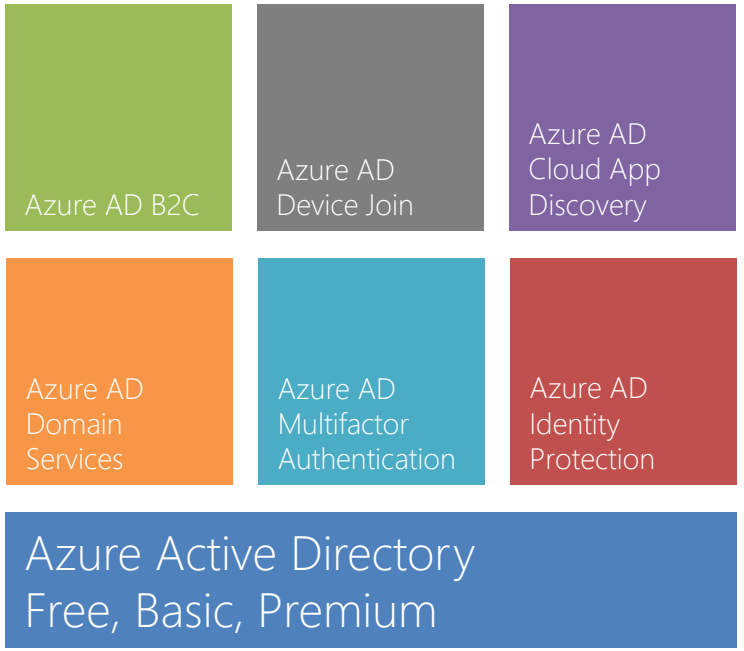
[ein paar davon ;-)]

- Multiple … for different services
- Is a p… …lly secure?
- Kerbe… …at
- Passwo…

What is Azure AD? (Active Directory)



On-Premise



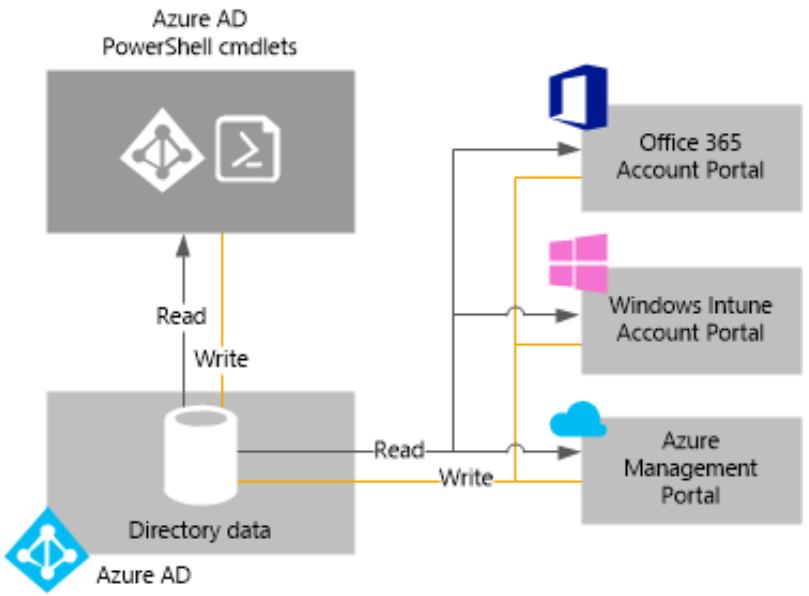
Cloud-Based

Azure AD Editions

	Free	Basic	Premium
Object-Limit	150k	Unlimited	Unlimited
SSO	SaaS, Eigene Apps	+ Application Proxy	+Templates
Reporting	Basic	Basic	Advanced
Group-Based		✓	✓
Branding		✓	✓
Self-Service-Password-Reset mit WriteBack			✓
App-Discovery			✓
Connect Health			✓
Subscription	Azure	Office 365	EA/Open

Azure AD mit Cloud-Services

- Integriert in Microsoft Cloud Services
  - ⇨ Office 365
  - ⇨ Windows Intune
  - ⇨ Windows Azure
    IaaS, PaaS, SaaS



- Integrierbar in
  3P Cloud Services
  - ⇨ Twitter, Facebook for Work, DropBox for Business
  - ⇨ Salesforce, Cisco WebEx
  - ⇨ Google Apps and 2600 ;-) more.
- Azure AD SDK via .NET (SDK) oder REST API (graph.windows.net)

Hybrid, federated or what?

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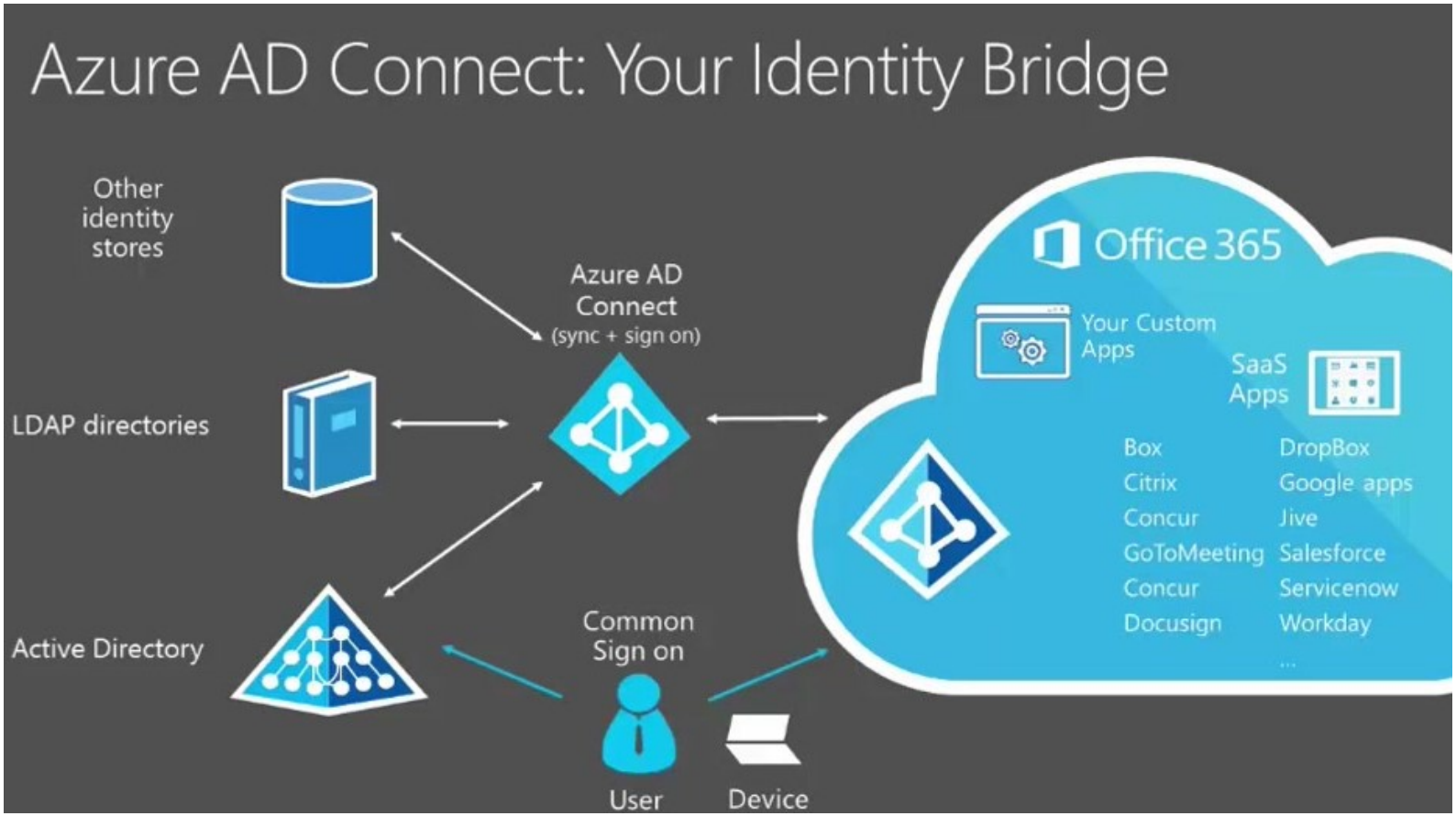
Azure AD Connect	ADFS	Azure AD Application Proxy	Azure AD Domain Services	Azure AD Health
• Synchronization • aka DirSync	• Federation • Single Sign On • IP STS	• Integration von On-Premise Apps	• Domain Controller in Azure • LDAP • Kerberos • NTLM	• Monitoring • Reporting

Azure AD Connect

- Sync und Sign-On Plattform
- Zwischen On-Prem Active Directory ←→Azure AD



AADConnect Options

Password Management

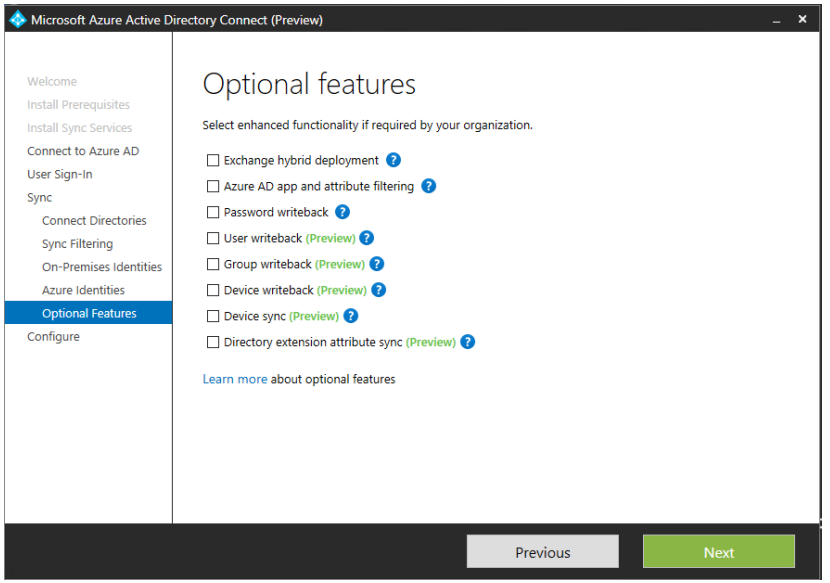
- Password (Hash) Sync
- Password Writeback

Exchange Integration

- Exchange Hybrid Option
- Group Writeback

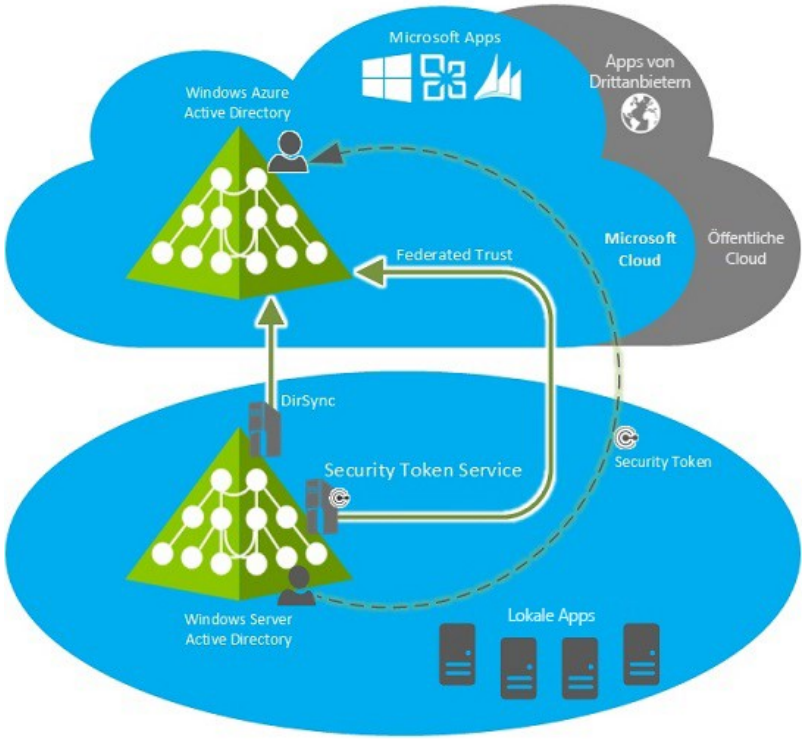
Attribute Options

- Extension Attributes
- Attribute Filtering



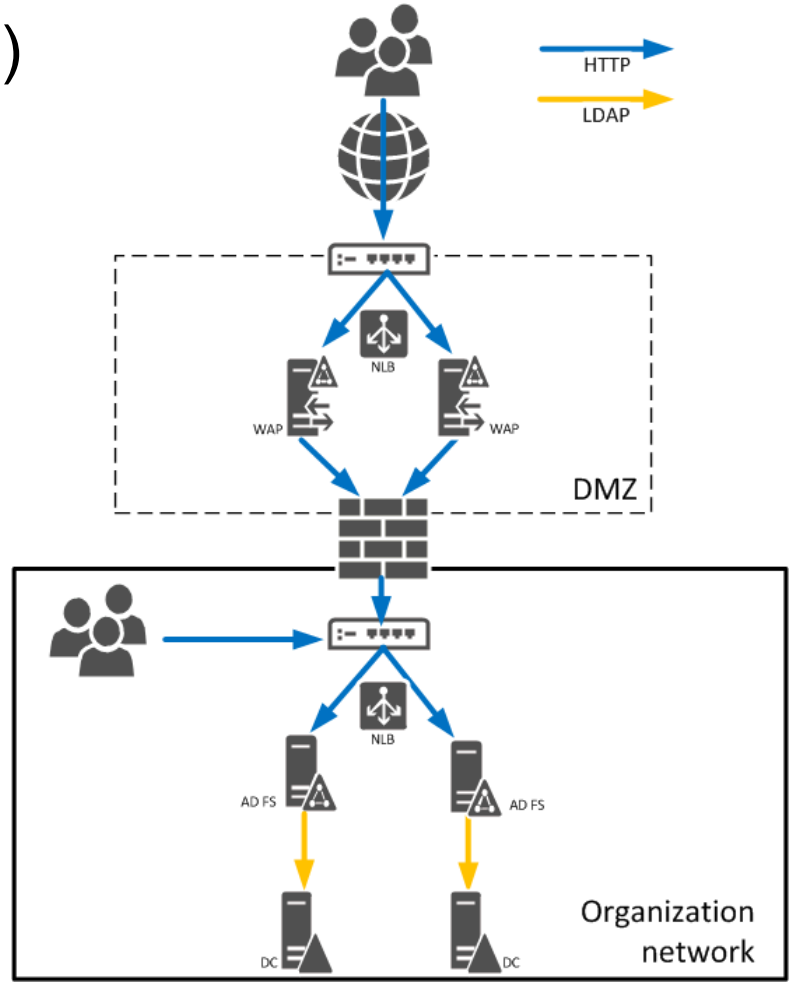
Active Directory Federation Services

- Federation Trust zwischen
  - ⇨ Azure AD
  - ⇨ On-Premise Active Directory
- Based on Open Standards
  - ⇨ Authorization: OAUTH 2.0
  - ⇨ Authentication: OpenID 1.0
  - ⇨ SAML Protocol
  - ⇨ WS Federation 1.2
- Free mit Windows Server



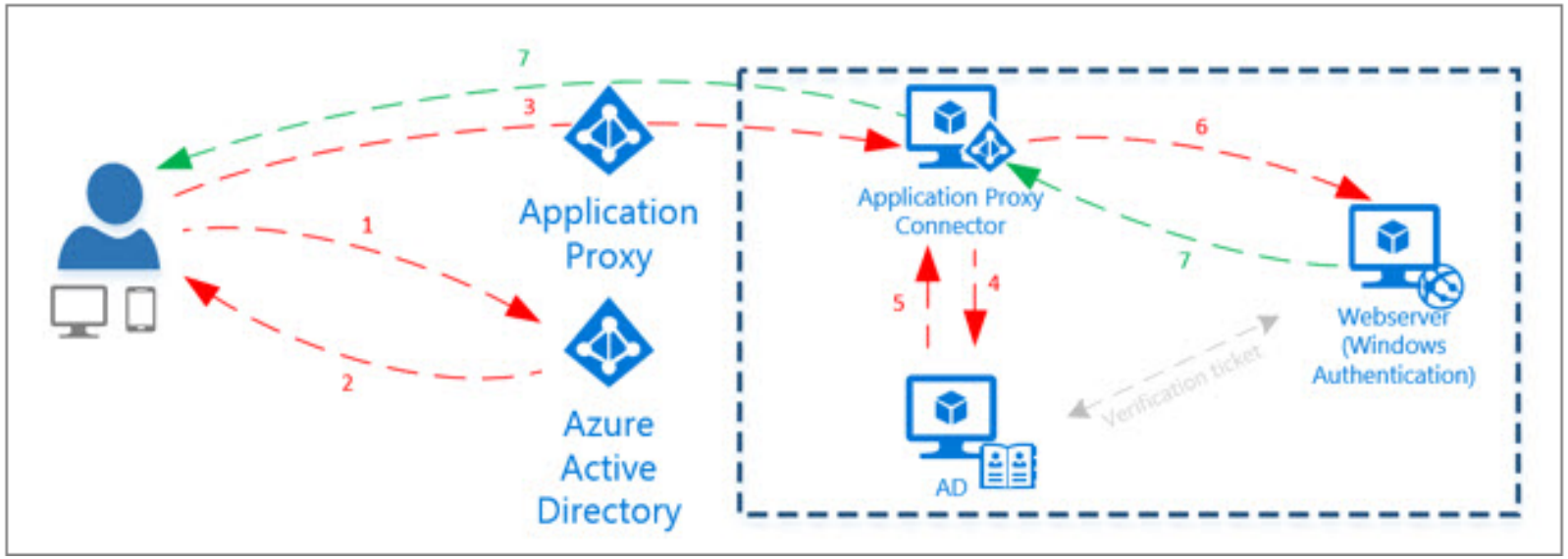
ADFS :: Architecture

- Secure Token Service (IP-STS)
  - ADFS Role
  - Issues Tokens (z.B.:SAML) for Applications
- Reverse Proxy
  - Web Application Proxy



Azure AD Application Proxy

- Authenticates On-Premise Apps with Azure AD
- z.B.: Exchange 2013/2016 On-Premise



Azure AD Domain Services

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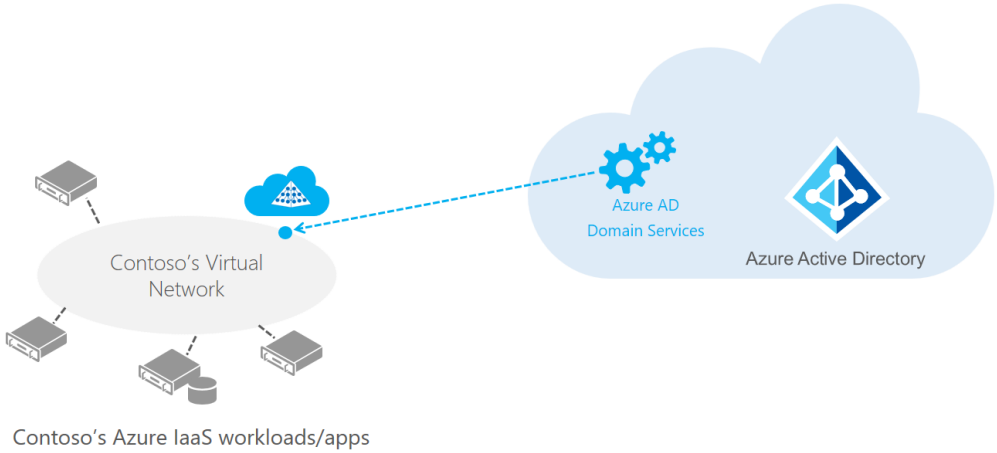
- Full blown AD Domain Controller in Azure
- Managed, patched by MS (not a VM!)
- Options
  - ⇨ Cloud Only: Virtual Network or
  - ⇨ Hybrid: AADConnect mit Password Hash Sync

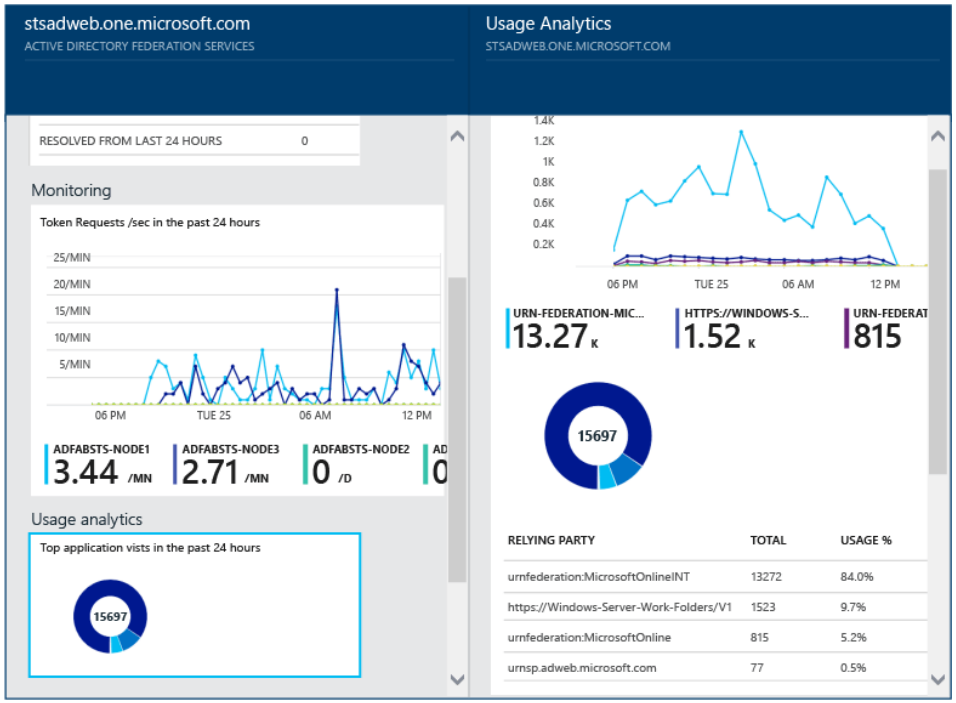
- NTLM/Kerberos Domain Join
- Group Policies
- LDAP bind/read
- Custom-Domain-Names (UPN Suffix)

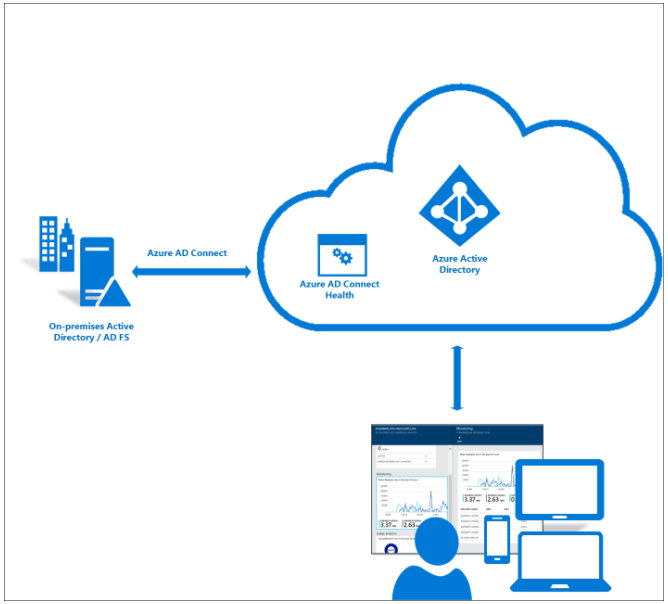
- GA Price
  ~37,-/Monat bis 5k Objects
  ~150,-/Monat bis 25k Objects



Azure AD Connect Health

- Monitors
  - ⇨ ADConnect Sync
  - ⇨ ADFS Operations

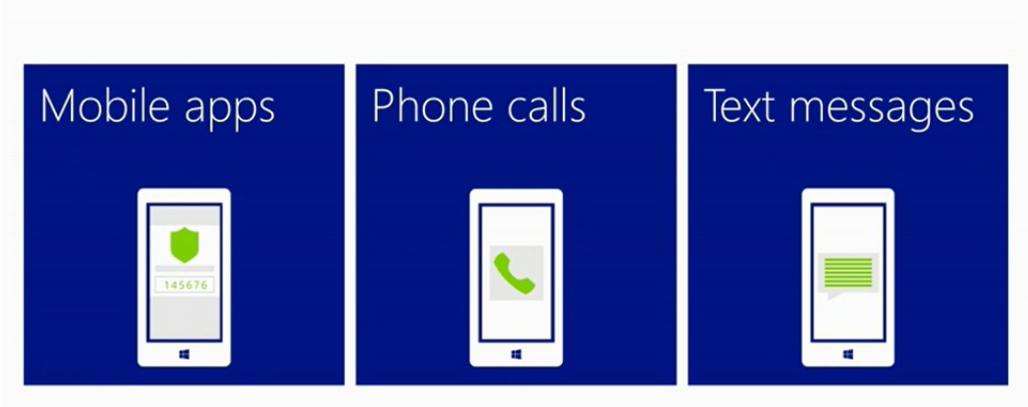


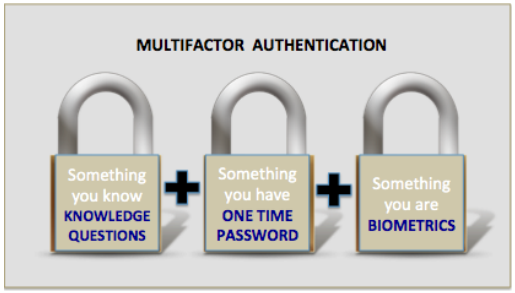


- https://aka.ms/aadconnecthealth

Azure AD MFA

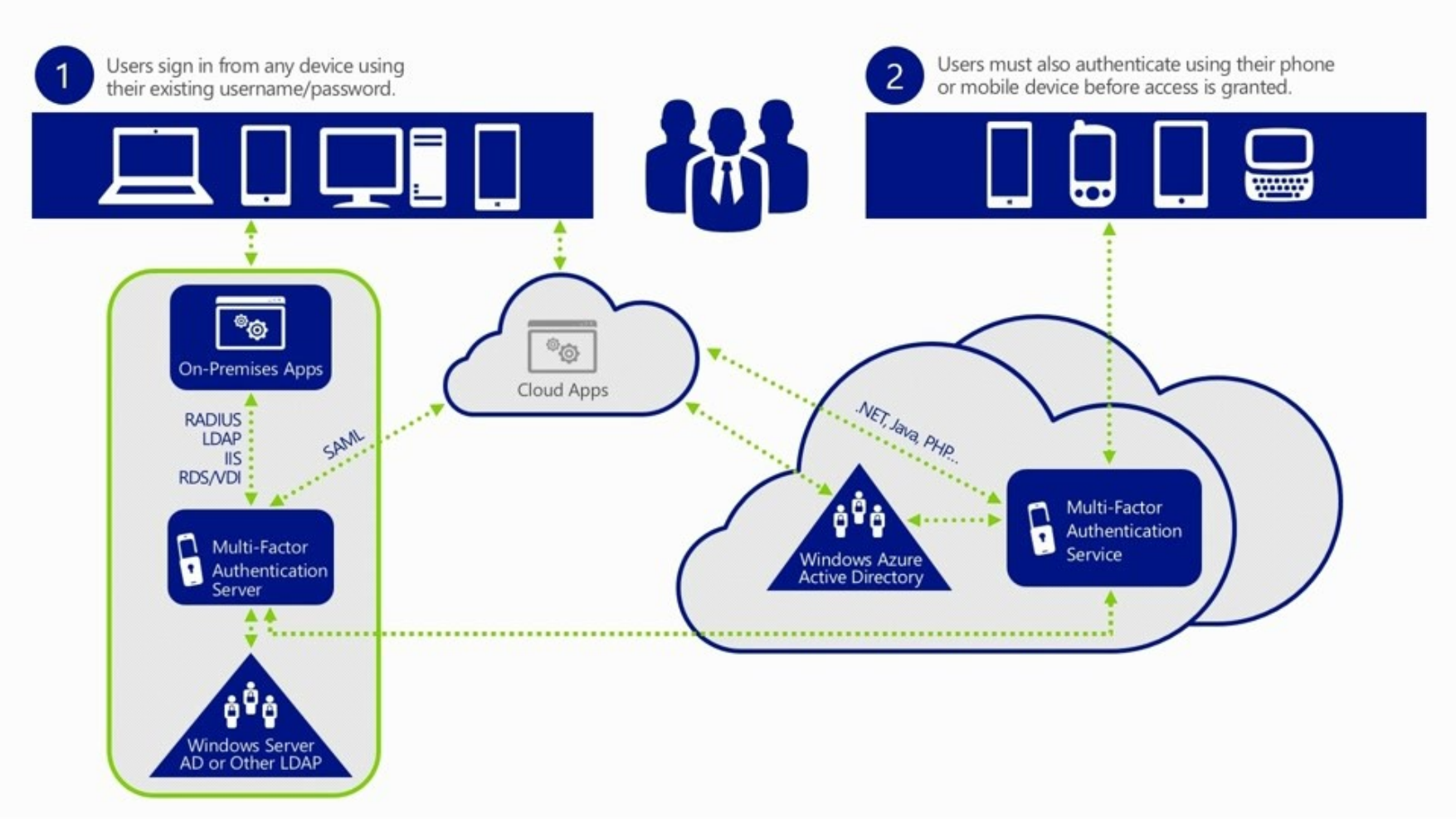
- Multi-Factor-Authentication mit





- Free for Admin Accounts
- Als
  - ⇨ Cloud-Service oder
  - ⇨ On-Premise mit MFA Authentication Server

Azure AD MFA :: Architecture



AND NOW…


Microsoft® Azure™
UNPLUGGED

Zusammenfassend
10 Gründe für AAD

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Marketplace
#1 One Identity for 1000 Apps

ADFS
#2 SSO with On-Prem Creds

Application Proxy
#3 Secure Remote Access to On-Prem Apps

Access Panel
#4 One Start Portal

MFA
#5 Multi-Factor-Authentication and Windows Hello

B2E, B2B, B2C
#10 One-Directory

AAD Health
#9 Active Security Monitoring

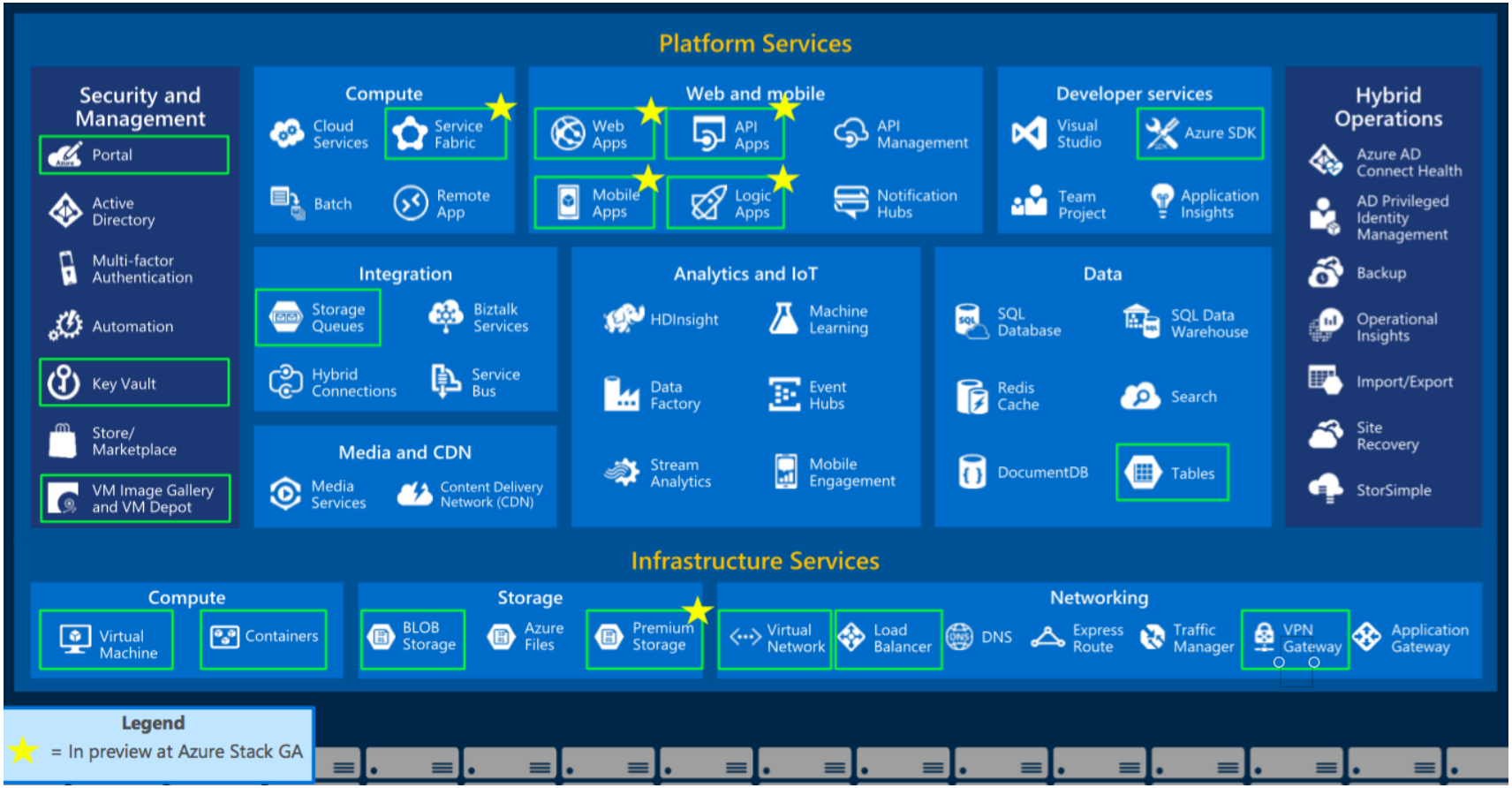
Cloud App Discovery
#8 Detect Shadow IT

AAD Domain Services & Availability Groups
#7 Scaling AD The Easy Way

AAD Ident.Prot.
#6 Identity & High-Value Account Protection

The Future :: Windows Azure Stack

- Azure deployed On-Premise



Q&A


AUS- UND WEITERBILDUNG
SYSTEM-ADMINISTRATION
6431 SEMINARTHEMEN
128800 SEMINARTEILNEHMER
DEVELOPMENT
24 CLASSROOMS
SOFTWAREENGINEERING
SOFTWARE
KOMMUNIKATION
SOCIAL MEDIA
26839 SEMINARE
ORACLE UNIVERSITY
INNSBRUCK
SECURITY-AWARENESS
TECHNOLOGY
BOZEN
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