

# Understanding and Leveraging Microsoft's Enterprise Mobility + Security Suite (EMS)



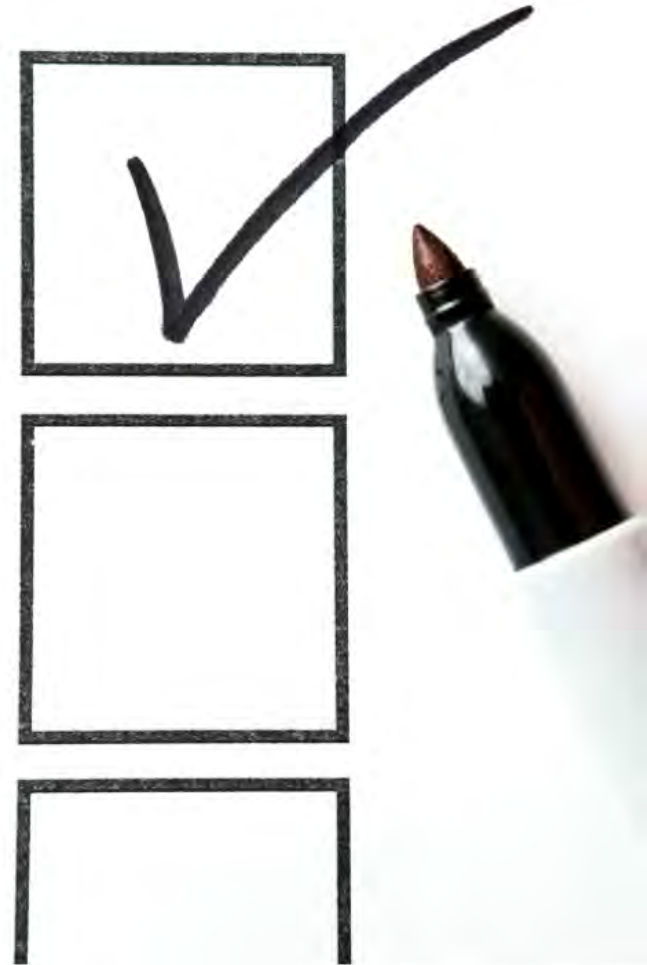
Sean P McDonough  
Microsoft MVP (Office Servers and Services)  
Chief Technology Officer and Owner  
Bitstream Foundry LLC

*@spmcDonough  
on Twitter (for  
heckling purposes)*



# Our Agenda

- Why I'm Doing This
- An Overview of EMS
- Individual EMS Workloads
- Putting Together Solutions
- Questions & Answers
- References



wwhy



Let's start with a simple question:

How many of you had heard of EMS prior to this session?

Okay, now how many of you really know what EMS is?



In your own words, what is EMS?



**Really know what EMS is.**



In my experience, plenty of people have heard of EMS.



**Microsoft has been  
talking about it A LOT**

Very few people know exactly what it is or does, though.



**A couple of things**

what it is or does, though.



A couple of things  
complicate the  
discussion, as well

- There is significant overlap between how EMS is positioned next to Office 365
- The EMS feature set is a fast moving target; it's capabilities keep changing



# My Goal

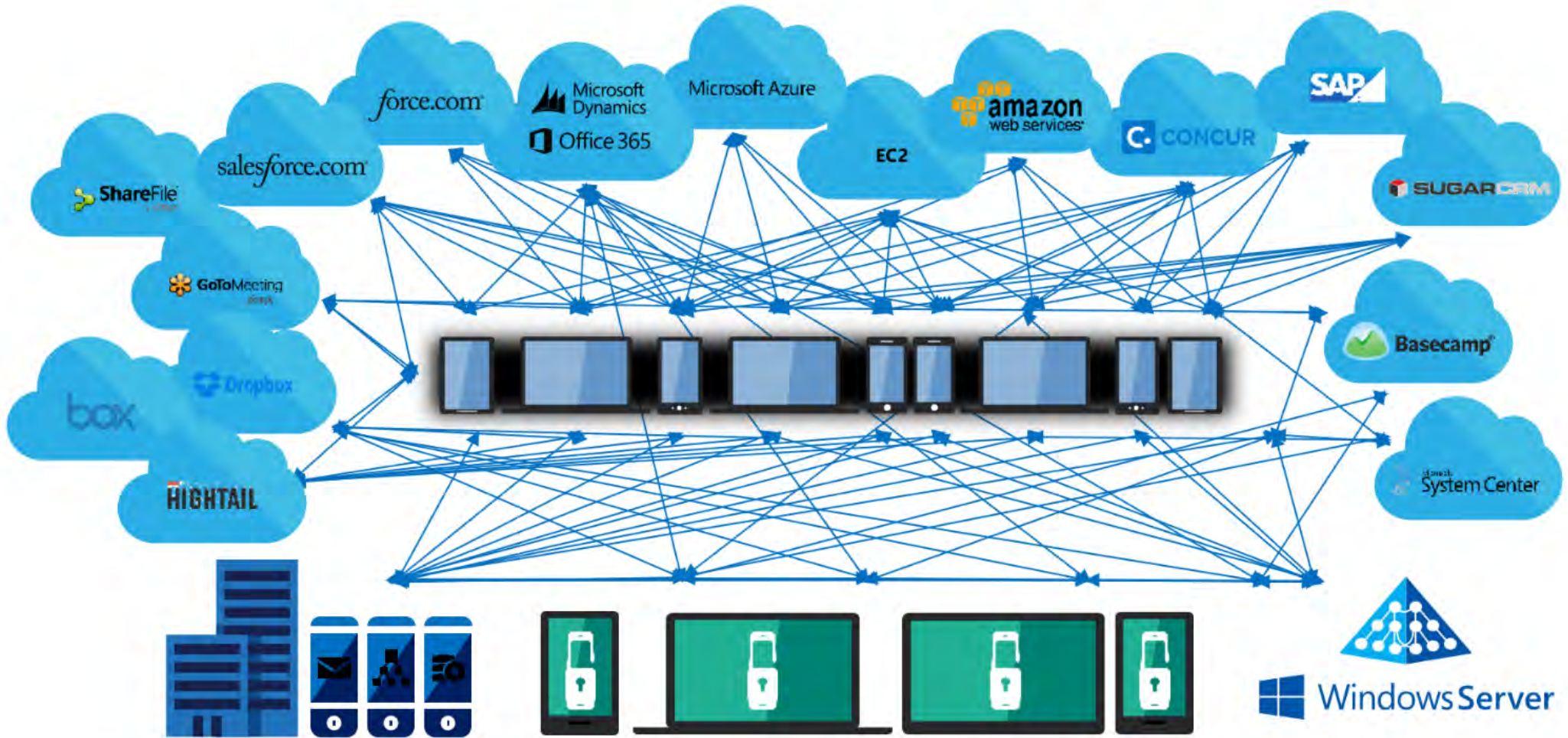


To give you real, usable information on how to better leverage Office 365 (which you probably already have) and understand when and where you would need to step-up to EMS



# Supply Chain Management

Our modern reality with devices, data, and services

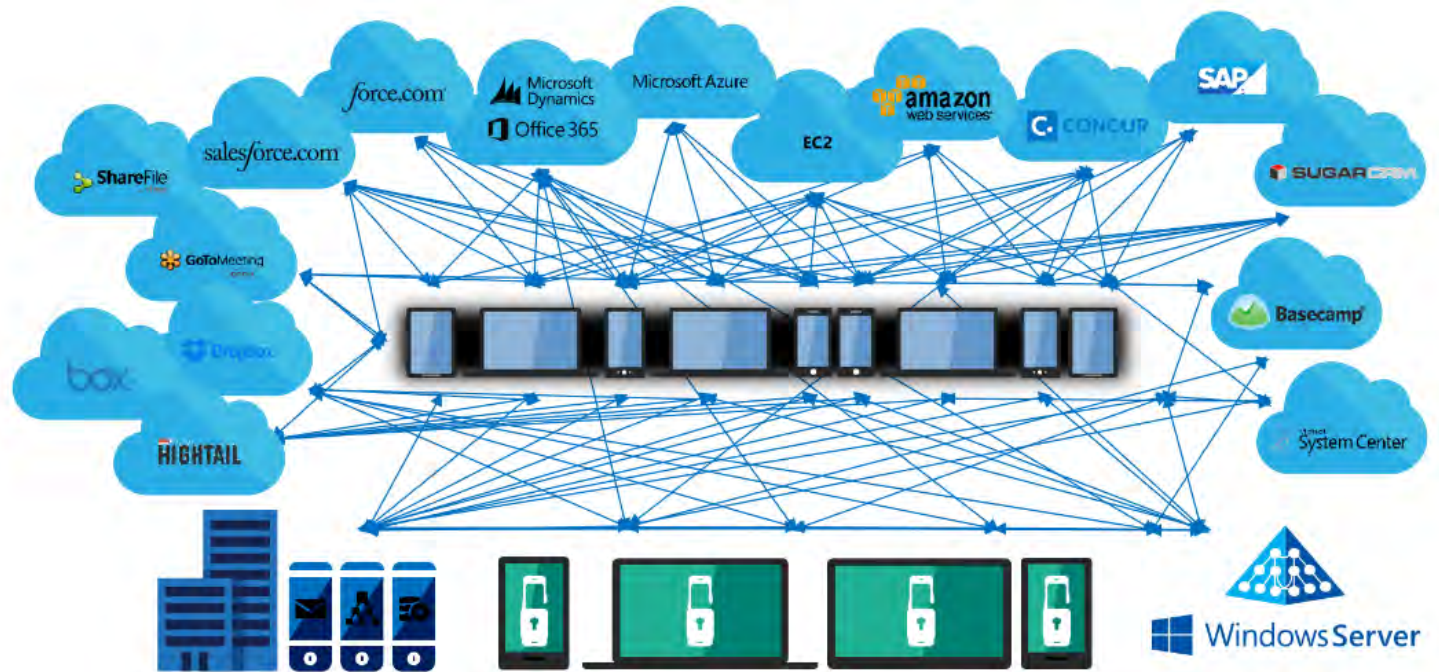


highlighted by this diagram



# Employees in Large En

Our modern reality with devices, data, and services



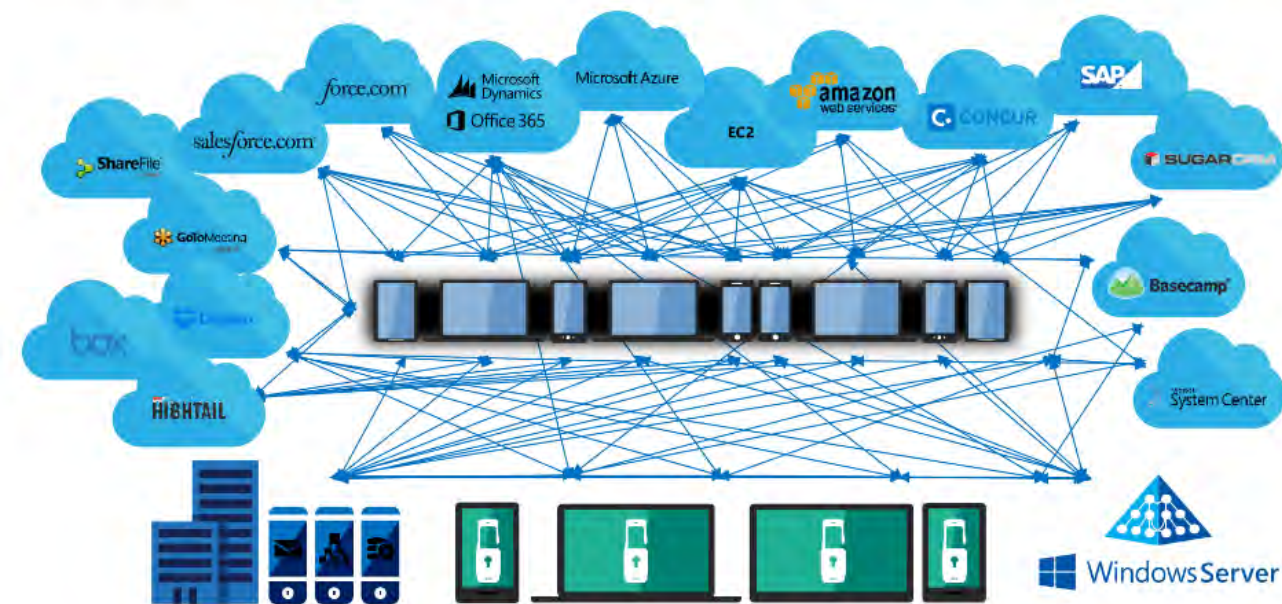
## Two truths highlighted by this diagram

- These days, we are hyperconnected across a variety of devices and services
- If you're in IT, security in this type of environment can be an extreme challenge



# According to a Gartner study of U.S. Employees in Large Enterprises

Our modern reality with devices, data, and services



highlighted by this diagram

perconnected across a variety of devices and services

- 40% use their personal devices for work purposes
- households average two or more devices
- online banking and purchasing are in the top three activities done on desktop or laptop

Combined with r

# enterprises

- 40% use their personal devices for work purposes
- households average two or more devices
- online banking and purchasing are in the top three activities done on desktop or laptop



- 80% use non-approved SaaS applications in their jobs
- Nearly 35% of all SaaS applications used in enterprises are not approved
- On average, 15 percent of users have had security, access, or liability events while using SaaS apps

Combined with data from McAfee, the security and related implications are alarming.



Your employees are impacted



Combined with data from McAfee, the security and related implications are alarming.



Your employees are impacted  
*... but by extension, you are also impacted by*



Your business partners



Your customers



Your customers



Bringing this  
discussion  
back to EMS

# At it's core, EMS is about security

- Enhancing existing identity security
- Strengthening device security
- Protecting data, not just systems
- Extending security to on-premises systems

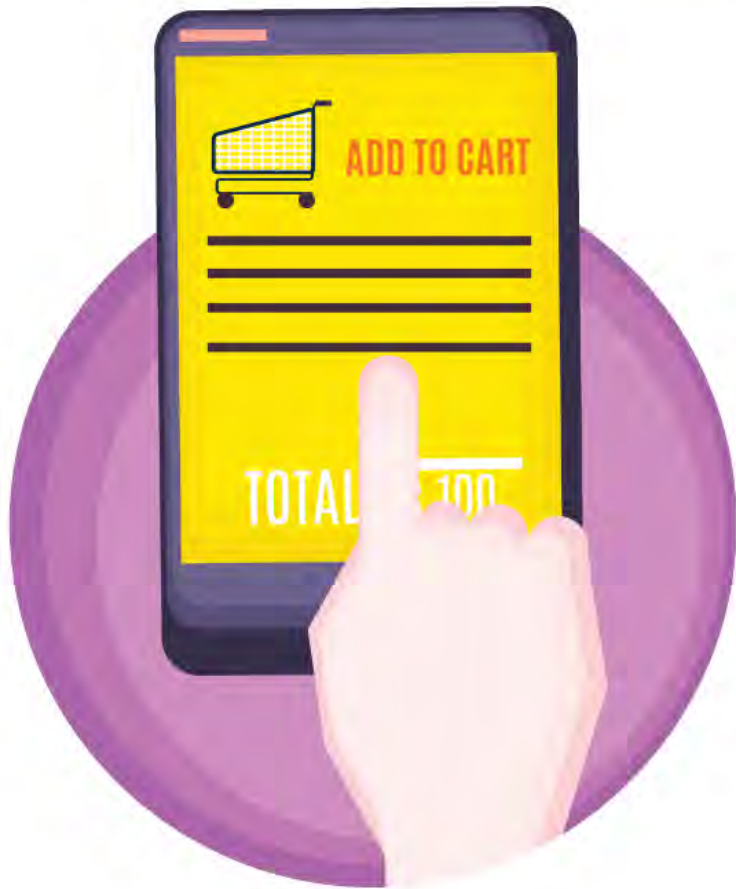


**It's also about convenience**



- Extending security to on-premises systems

## It's also about convenience



- Can be used to simplify SSO to cloud-based and on-premises systems
- Maximum capability with minimum config
- Natural complement to Office 365

At the end of the day, though  
the best part of EMS is this:



It simply works  
and complements  
Office 365 nicely

start by acknowledging that this is something of a trick que



So ...  
what's in  
EMS?



Let's start by acknowledging that this is something of a trick question.



So ...  
what's in  
EMS?

Azure  
Active  
Directory  
Premium



Intune



Azure  
Information  
Protection







Advanced  
Threat  
Analytics



All EMS subscriptions include these four workloads. EMS E5 has some others.

Of course, too many of us were starting to understand the offering, so, Microsoft pulled a change-up

	Identity and access management 	Managed mobile productivity 	Information protection 	Identity-driven security 
EMS E5	<b>Azure Active Directory Premium P2</b> Identity and access management with advanced protection for users and privileged identities <i>(includes all capabilities in P1)</i>		<b>Azure Information Protection Premium P2</b> Intelligent classification and encryption for files shared inside and outside your organization <i>(includes all capabilities in P1)</i>	<b>Microsoft Cloud App Security</b> Enterprise-grade visibility, control, and protection for your cloud applications
EMS E3	<b>Azure Active Directory Premium P1</b> Secure single sign-on to cloud and on-premises apps MFA, conditional access, and advanced security reporting	<b>Microsoft Intune</b> Mobile device and app management to protect corporate apps and data on any device	<b>Azure Information Protection Premium P1</b> Encryption for all files and storage locations Cloud-based file tracking	<b>Microsoft Advanced Threat Analytics</b> Protection from advanced targeted attacks leveraging user and entity behavioral analytics

EMS became "Enterprise Mobility +



Of course, too many of us were starting to understand the offering, so, Microsoft pulled a change-up

	Identity and access management	Managed mobile productivity	Information protection	Identity-driven security
EMS E5	<b>Azure Active Directory Premium P2</b> Identity and access management with advanced protection for users and privileged identities <i>(includes all capabilities in P1)</i>		<b>Azure Information Protection Premium P2</b> Intelligent classification and encryption for files shared inside and outside your organization <i>(includes all capabilities in P1)</i>	<b>Microsoft Cloud App Security</b> Enterprise-grade visibility, control, and protection for your cloud applications
EMS E3	<b>Azure Active Directory Premium P1</b> Secure single sign-on to cloud and on-premises apps MFA, conditional access, and advanced security reporting	<b>Microsoft Intune</b> Mobile device and app management to protect corporate apps and data on any device	<b>Azure Information Protection Premium P1</b> Encryption for all files and storage locations Cloud-based file tracking	<b>Microsoft Advanced Threat Analytics</b> Protection from advanced targeted attacks leveraging user and entity behavioral analytics

Cliff Notes for the changes that rolled out towards EOY 2016

EMS became "Enterprise Mobility + Security" rather than "Enterprise Mobility Suite"

- existing EMS capabilities became the EMS E3

An EMS E5 was introduced with additional capabilities

- E5 includes Cloud App Security, AAD identity protections, and more

Azure  
Active  
Directory  
Premium



Intune



Azure  
Information  
Protection



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Analytics



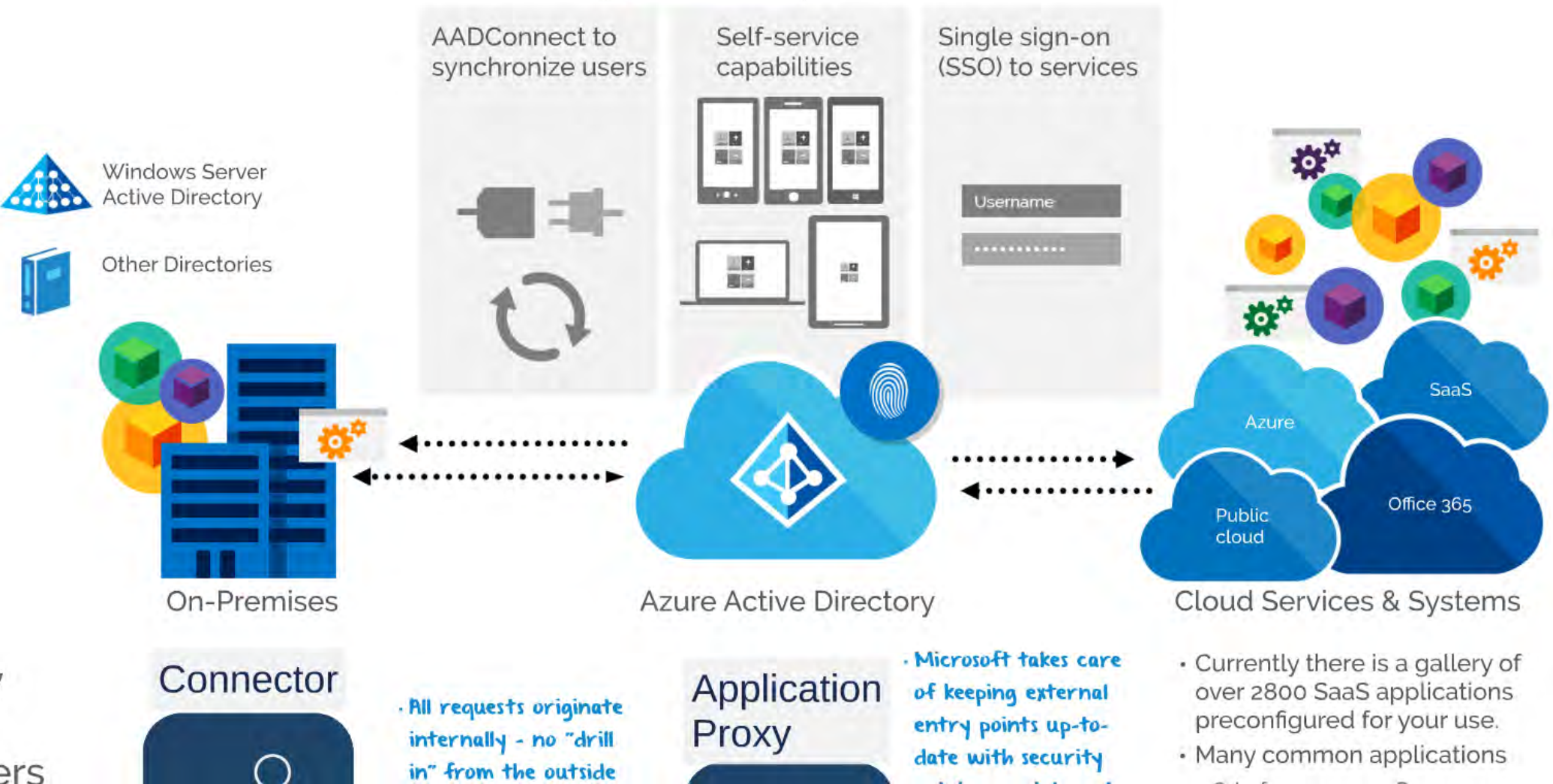
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# Azure Active Directory: identity controls everything



- Password management
- Password reset
- Group Management



Windows Server Active Directory

Other Directories

AADConnect to synchronize users

Self-service capabilities

Single sign-on (SSO) to services

On-Premises

Azure Active Directory

Cloud Services & Systems

Connector

• All requests originate internally - no "drill in" from the outside

Application Proxy

• Microsoft takes care of keeping external entry points up-to-date with security

• Currently there is a gallery of over 2800 SaaS applications preconfigured for your use.  
• Many common applications



# AADConnect to synchronize users



Windows Server  
Active Directory



Other Directories



# Single sign-on (SSO) to services

Username

.....



## Connect to synchronize users



## Self-service capabilities



## Single sign- (SSO) to ser

Username

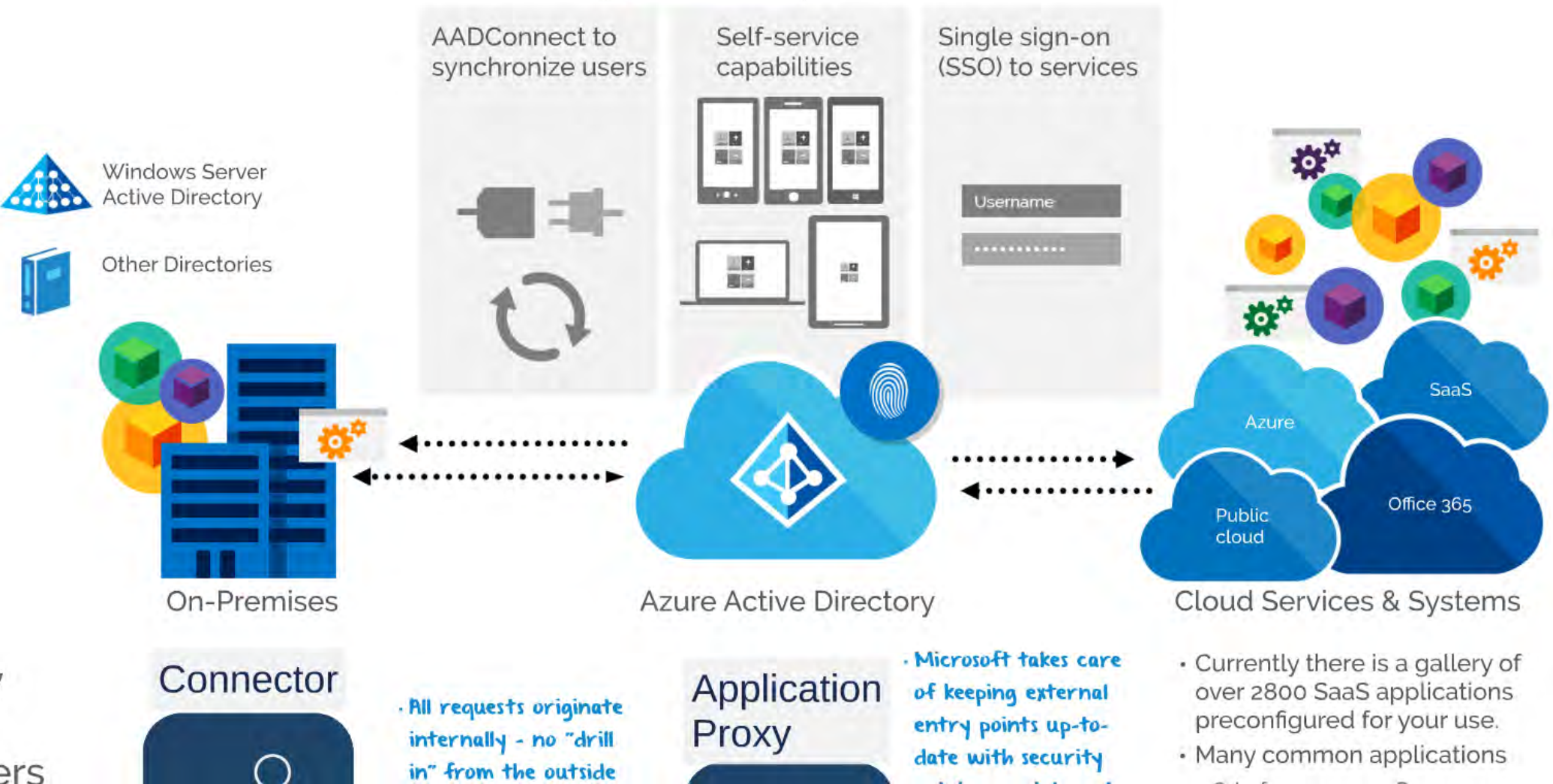




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## Cloud Services & Systems

- Currently there is a gallery of over 2800 SaaS applications preconfigured for your use.
- Many common applications
  - Salesforce
  - WorkDay
  - Dropbox
  - GoToMeeting
  - Box
  - AvePoint Online
  - Concur
  - Google Apps

# SSO Application Support

APPLICATION GALLERY

Add an application for my organization to use

FEATURED APPLICATIONS (17)

- CUSTOM
- ALL (2841)
- BUSINESS MANAGEMENT (222)
- COLLABORATION (368)
- CONSTRUCTION (8)
- CONTENT MANAGEMENT (112)
- CRM (137)
- DATA SERVICES (132)
- DEVELOPER SERVICES (100)
- E-COMMERCE (69)
- EDUCATION (108)
- ERP (59)
- FINANCE (250)
- HEALTH (53)
- HUMAN RESOURCES (233)
- IT INFRASTRUCTURE (148)
- MAIL (31)
- MARKETING (700)

box Box

Citrix GoToMeeting

Concur

Docusign

Dropbox for Business

Google Apps

box

NAME Box

PUBLISHER Box

APPLICATION URL <https://www.box.com/>

Use Microsoft Azure AD to manage user access, synchronize user accounts, and enable single sign-on with Box.

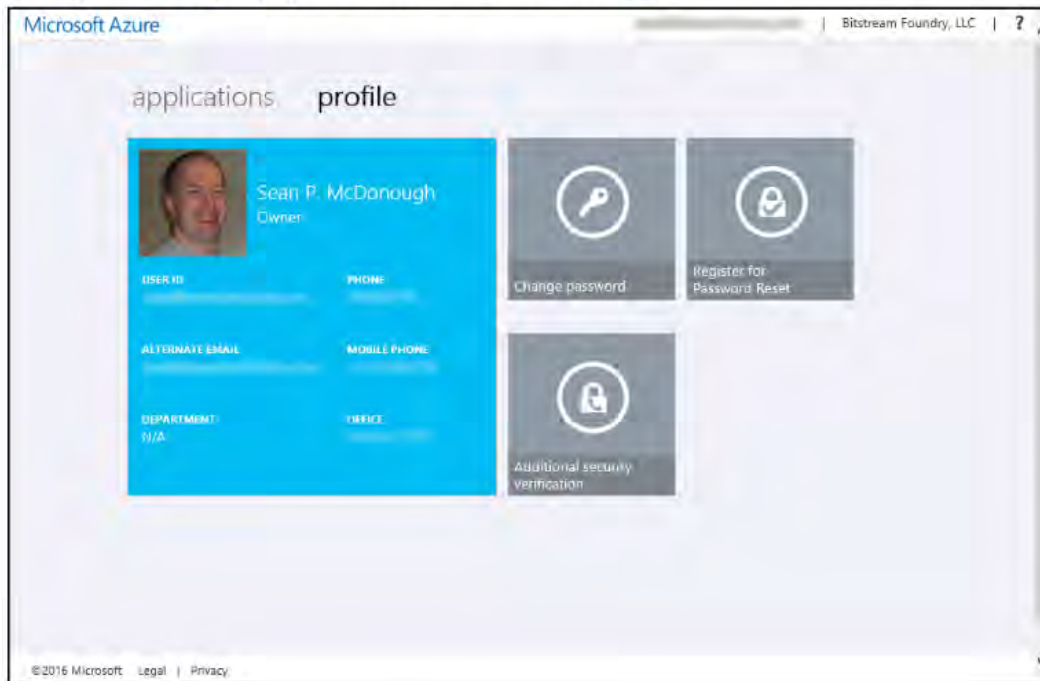
Requires an existing Box subscription.

DISPLAY NAME



# Identity

<https://myapps.microsoft.com>



- Password management
- Password reset
- Group Management

t to  
users

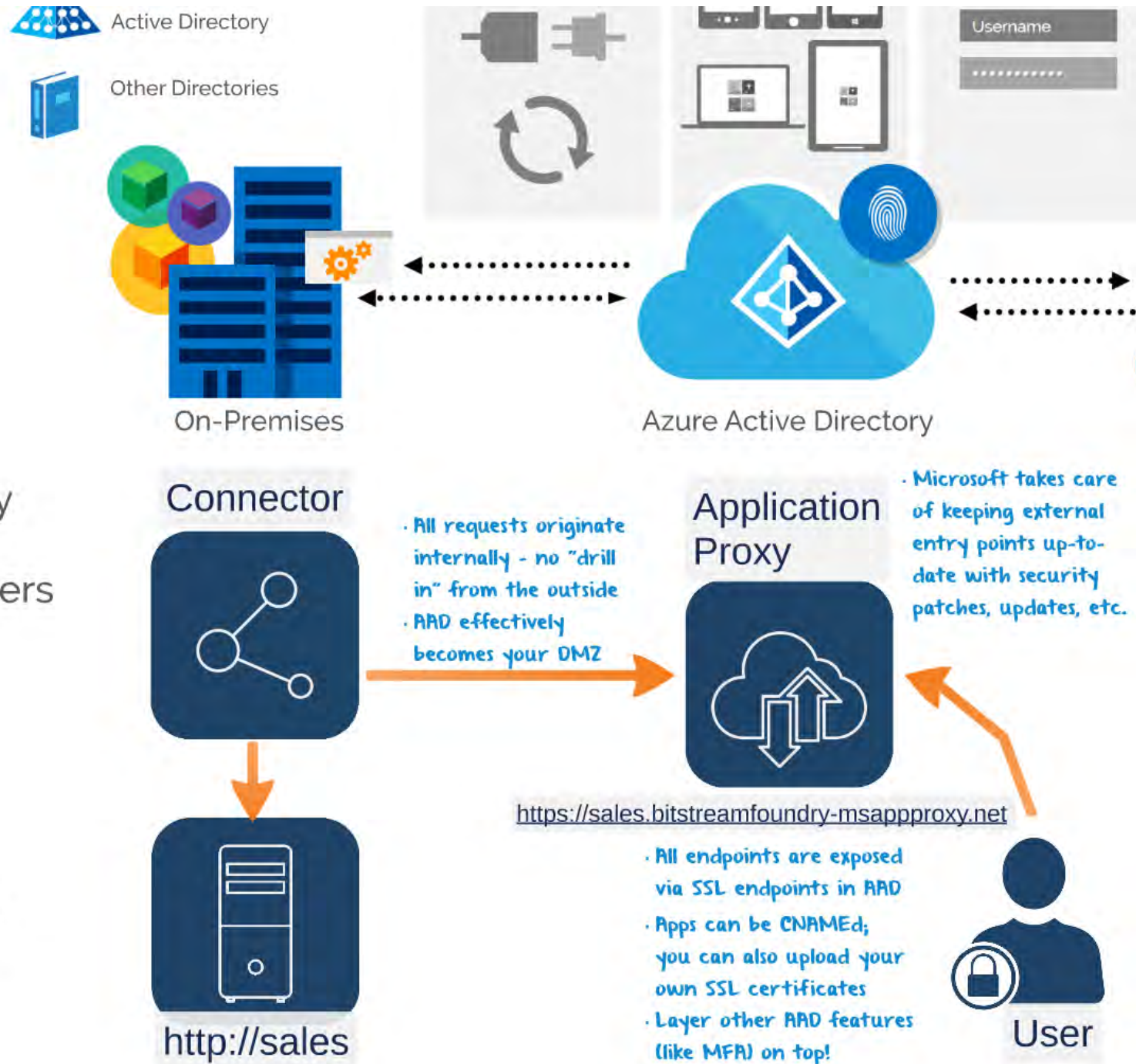
Self-service  
capabilities

Singl  
(SSO)



# Exposing on-premises applications (like SharePoint)

- Deploy Azure App Proxy Connector to an on-premises server or servers
- Connector initiates connection to AAD
- Applications are configured in AAD
- Users connect through AAD to get to internal web endpoints





On-Premises



Azure Active Directory

### Connector



- All requests originate internally - no "drill in" from the outside
- AAD effectively becomes your DMZ



### Application Proxy



- Microsoft of keep entry date w patches



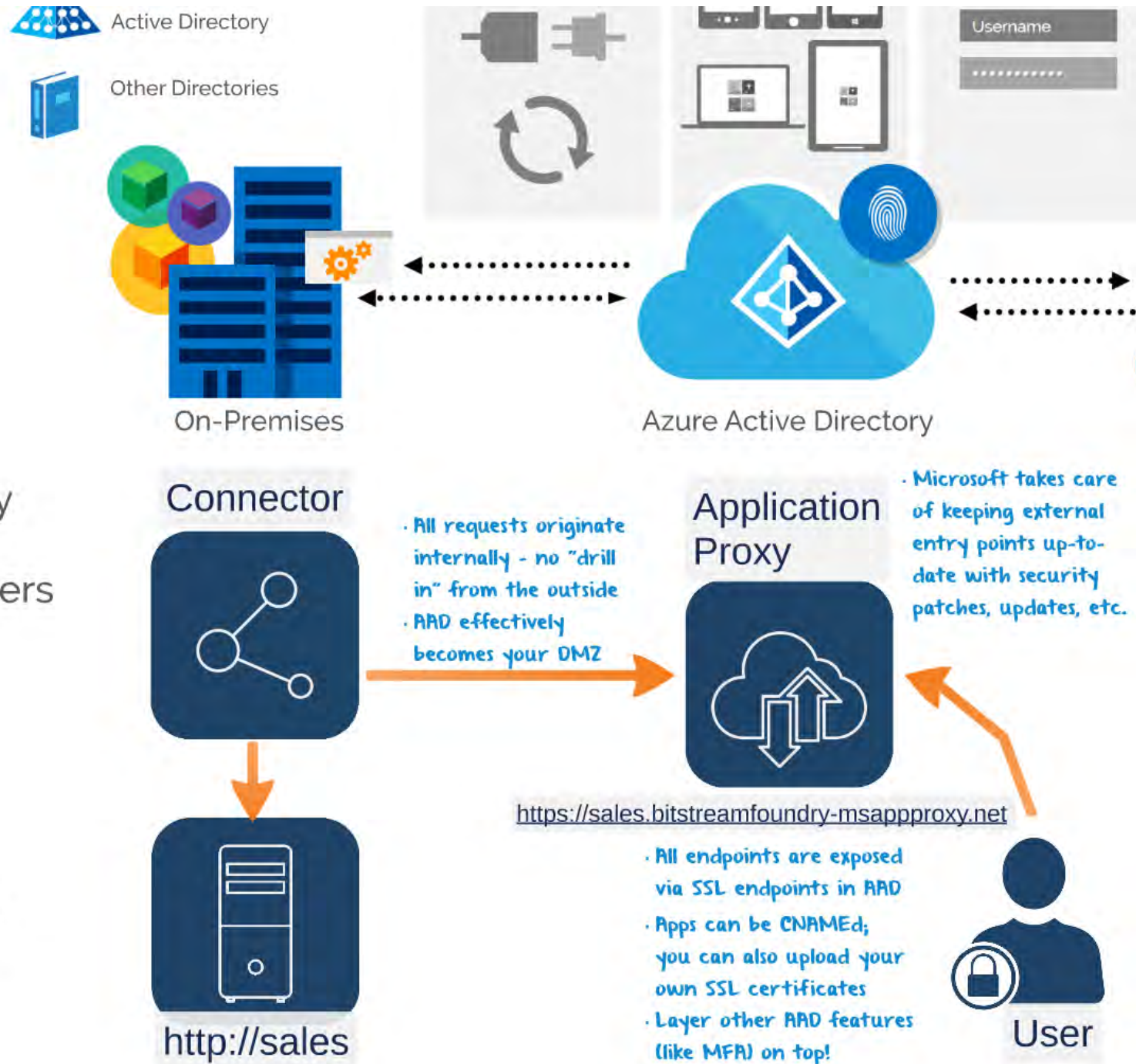
<https://sales.bitstreamfoundry-msapproxy.n>

- All endpoints are exposed via SSL endpoints in AAD
- Apps can be CNAMEd;



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# Azure Active Directory

## Application Proxy



- Microsoft takes care of keeping external entry points up-to-date with security patches, updates, etc.

[/sales.bitstreamfoundry-msappproxy.net](https://sales.bitstreamfoundry-msappproxy.net)

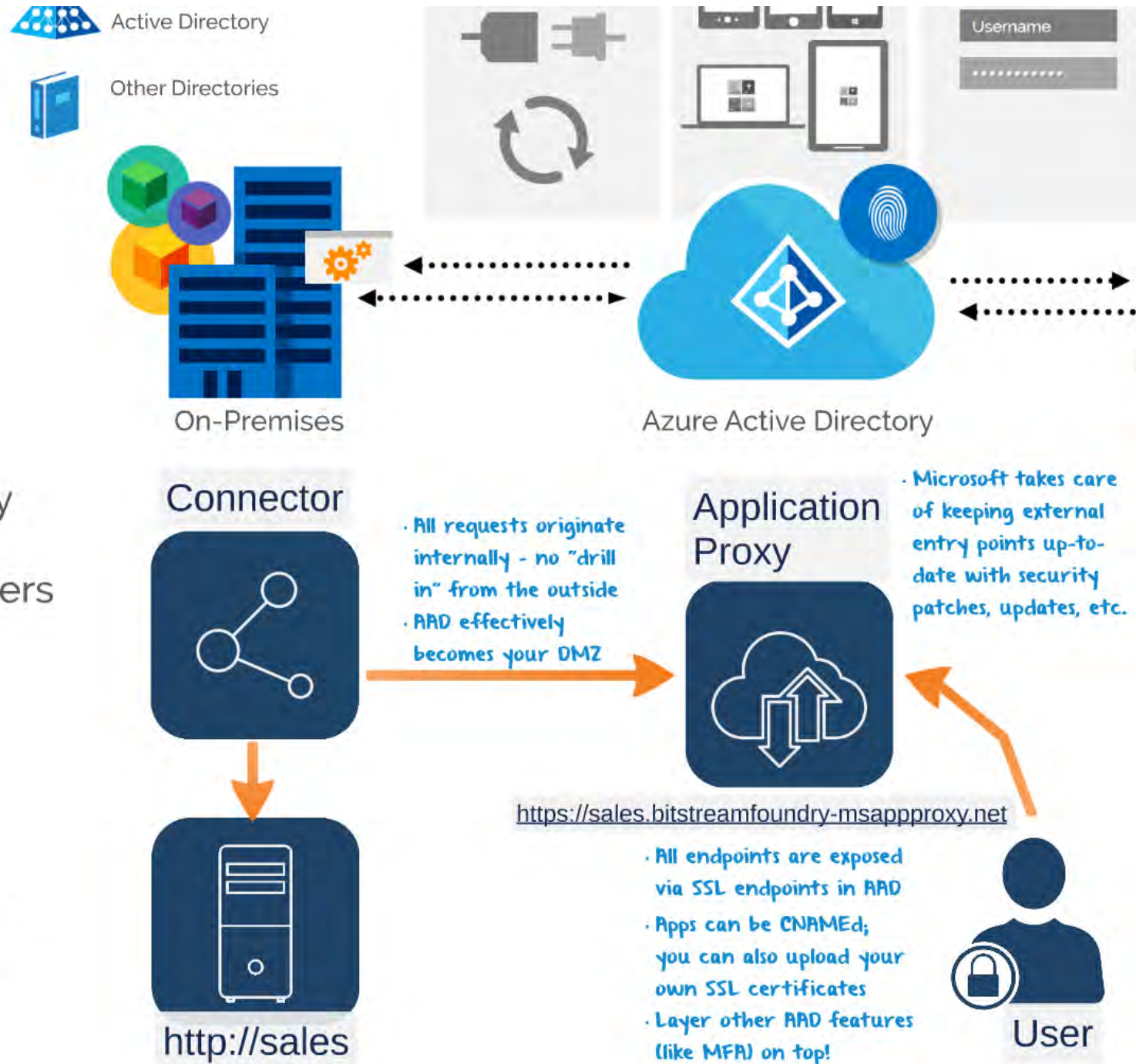
- All endpoints are exposed

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to your site



<https://sales.bitstreamfoundry-msappproxy.net>

- All endpoints are exposed via SSL endpoints in AAD
- Apps can be CNAMEd; you can also upload your own SSL certificates
- Layer other AAD features (like MFA) on top!

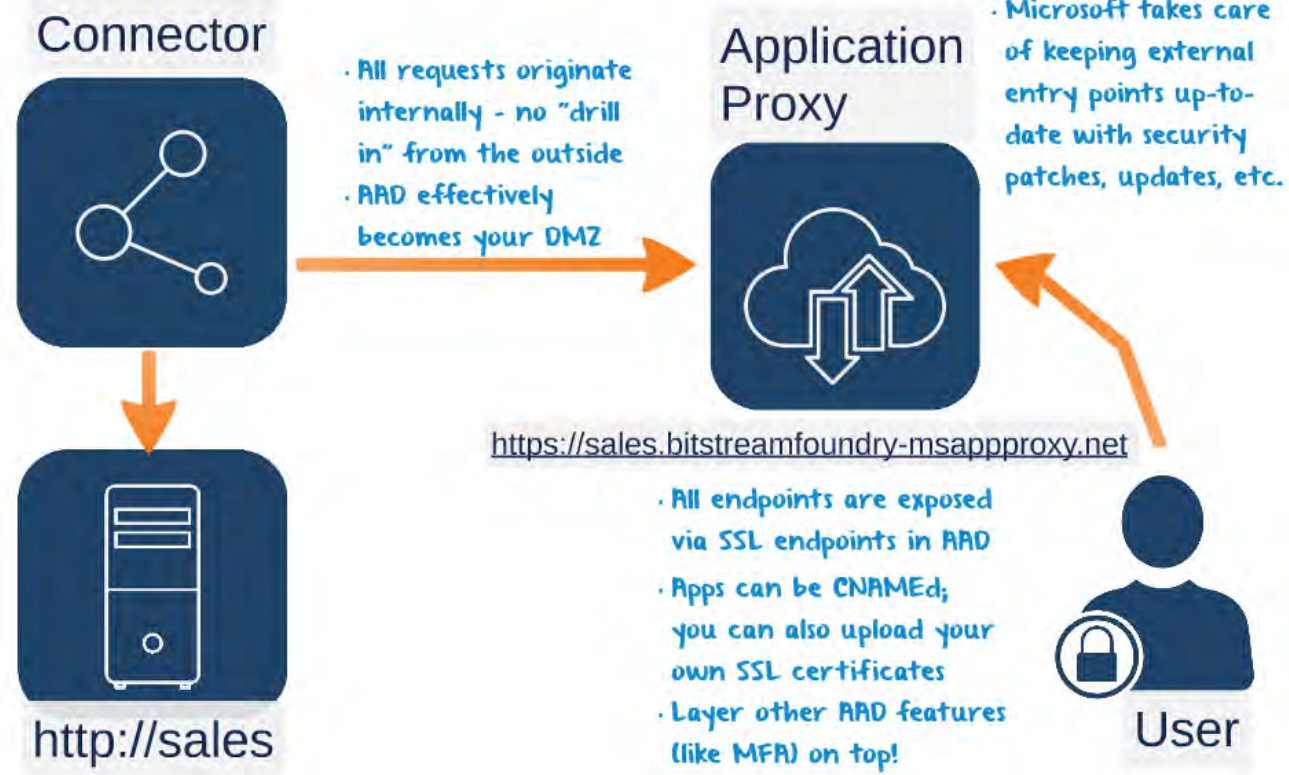


User

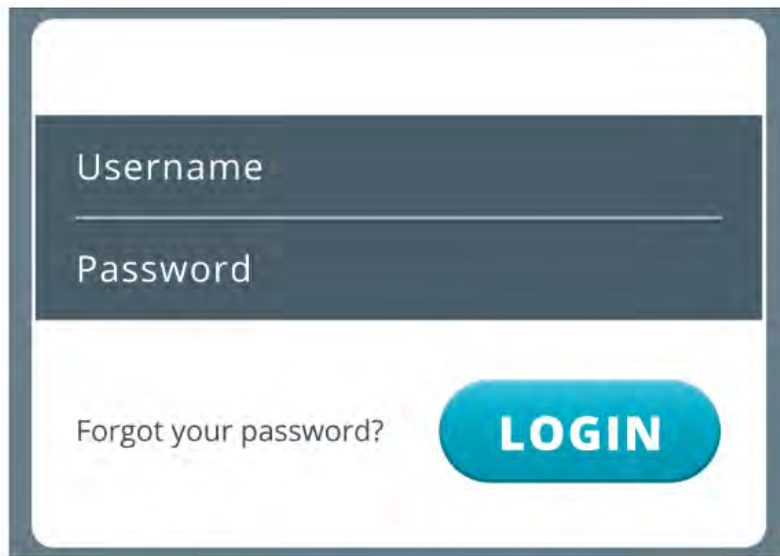


# Exposing on-premises applications (like SharePoint)

- Deploy Azure App Proxy Connector to an on-premises server or servers
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# Multi-Factor Authentication (MFA)

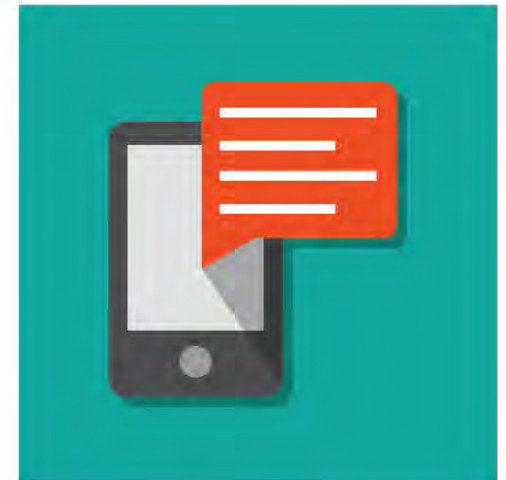


Username

Password

Forgot your password? **LOGIN**

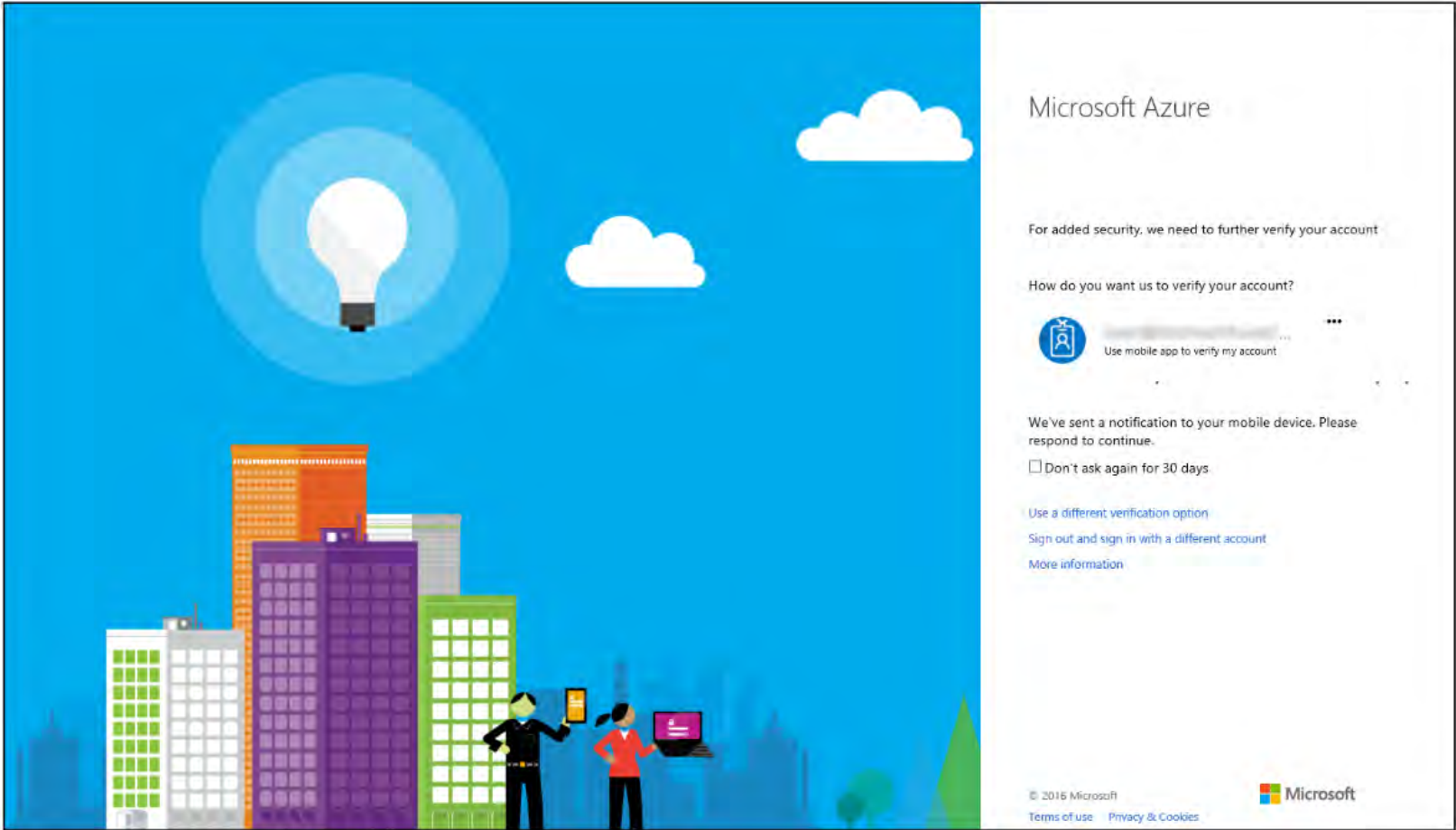
MFA is this ...



... plus something like a fingerprint, SMS message, etc.

When MFA is enabled, the sign-in experience changes a bit

# When MFA is enabled, the sign-in experience changes a bit





Microsoft Azure

For added security, we need to further verify your account

How do you want us to verify your account?



Use mobile app to verify my account

We've sent a notification to your mobile device. Please respond to continue.

Don't ask again for 30 days

[Use a different verification option](#)

[Sign out and sign in with a different account](#)

[More information](#)

I've signed in  
with my  
username and  
password, and  
now I'm being  
prompted for  
verification

Multi-factor authentication (all available features on Windows Azure and on-premises environments)		✓
Service-level agreement (SLA)		✓
Forefront Identity Manager CAL + Forefront Identity Manager Server		✓



## Why should I care about MFA?

- **bottom line: if your username and password ever become compromised, your account will (probably) still be safe!**

# Azure Active Directory Version Comparison

	Azure AD (O365)	Azure AD Premium
Directory as a service	☑ Up to 500,000 objects	☑ No limit
User and group management	☑	☑
Single sign-on for pre-integrated SaaS and custom applications	☑ 10 apps per user	☑ No limit
Microsoft Directory Synchronization Tool (Windows Server Active Directory extension)	☑	☑
User-based access management and provisioning	☑	☑
Group-based access management and provisioning		☑
Self-service group management for cloud users		☑
Self-service password change for cloud users	☑	☑
Self-service password reset for cloud users		☑
Security reports	☑	☑
Advanced security reporting (based on machine learning)		☑
Usage reporting		☑
Company branding (logon pages and Access Panel customization)		☑
Multi-factor authentication (all available features on Windows Azure and on-premises environments)		☑
Service-level agreement (SLA)		☑
Forefront Identity Manager CAL + Forefront Identity Manager Server		☑

Why should I care about MFA?





# MFA: Office 365 versus EMS

	MFA for O365/Azure Administrators	Windows Azure Multi-Factor Authentication / EMS
Administrators can Enable/Enforce MFA to end-users	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Use Mobile app (online and OTP) as second authentication factor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Use Phone call as second authentication factor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Use SMS as second authentication factor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Application passwords for non-browser clients (e.g. Outlook, Lync)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Default Microsoft greetings during authentication phone calls	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Custom greetings during authentication phone calls		<input checked="" type="checkbox"/>
Fraud alert		<input checked="" type="checkbox"/>
MFA SDK		<input checked="" type="checkbox"/>
Security Reports		<input checked="" type="checkbox"/>
MFA for on-premises applications/ MFA Server.		<input checked="" type="checkbox"/>
One-Time Bypass		<input checked="" type="checkbox"/>
Block/Unblock Users		<input checked="" type="checkbox"/>
Customizable caller ID for authentication phone calls		<input checked="" type="checkbox"/>
Event Confirmation		<input checked="" type="checkbox"/>

Azure  
Active  
Directory  
Premium



Intune



Azure  
Information  
Protection



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Analytics



All EMS subscriptions include these four workloads. EMS E5 has some others.

# Intune: Mobile Device Management (MDM)



MDM Comparison between Office 365 and FMS



# QUESTION FREQUENTLY ASKED QUESTION

**What is mobile device management?**



- applying policies to require PINs, lock devices after a period of time, etc.

## What is mobile device management?



- applying policies to require PINs, lock devices after a period of time, etc.
- deploying and controlling corporate applications for business use
- having the ability to completely or selectively wipe lost or stolen devices
- configuring specific settings for VPN, wi-fi, email, certificates, and more



## So, how does Intune "control" my device and protect corporate data?

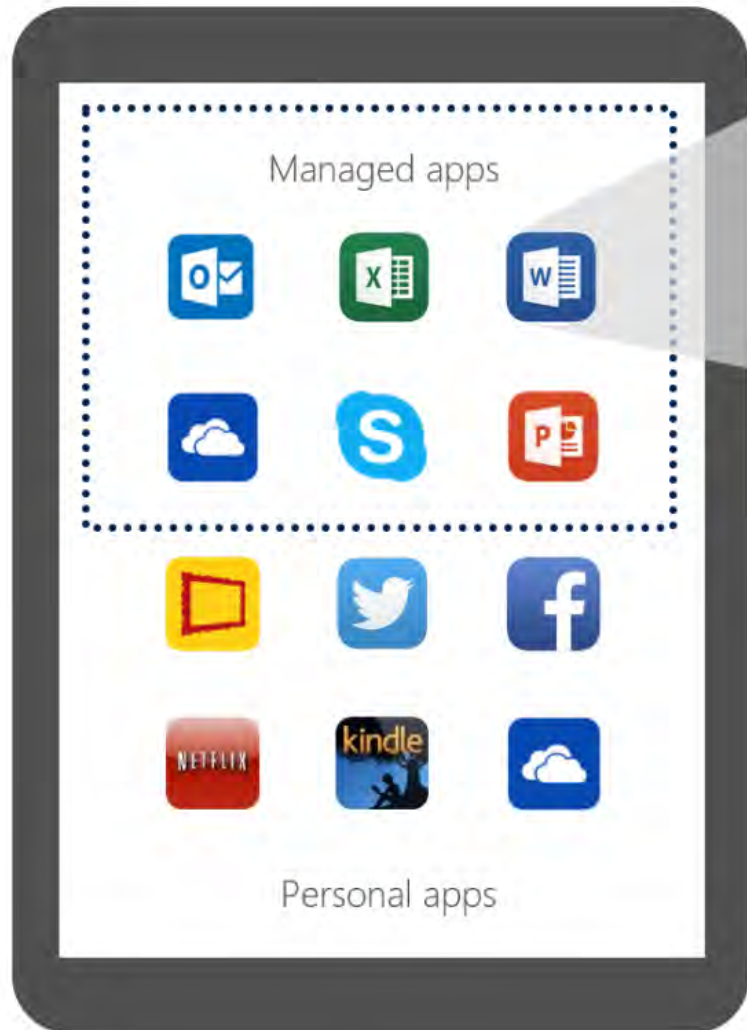
- You begin by installing the Intune Company Portal from Google Play or the iTunes store.
- You sign into your cloud tenant from the Company Portal to link your device to your Intune configuration.
- Intune pulls down compliance policies, configuration polices, and other policy items.
- During this enrollment process, applications may also be installed. Apps can be installed later, as well. These are "managed apps."



Intune administrators control who



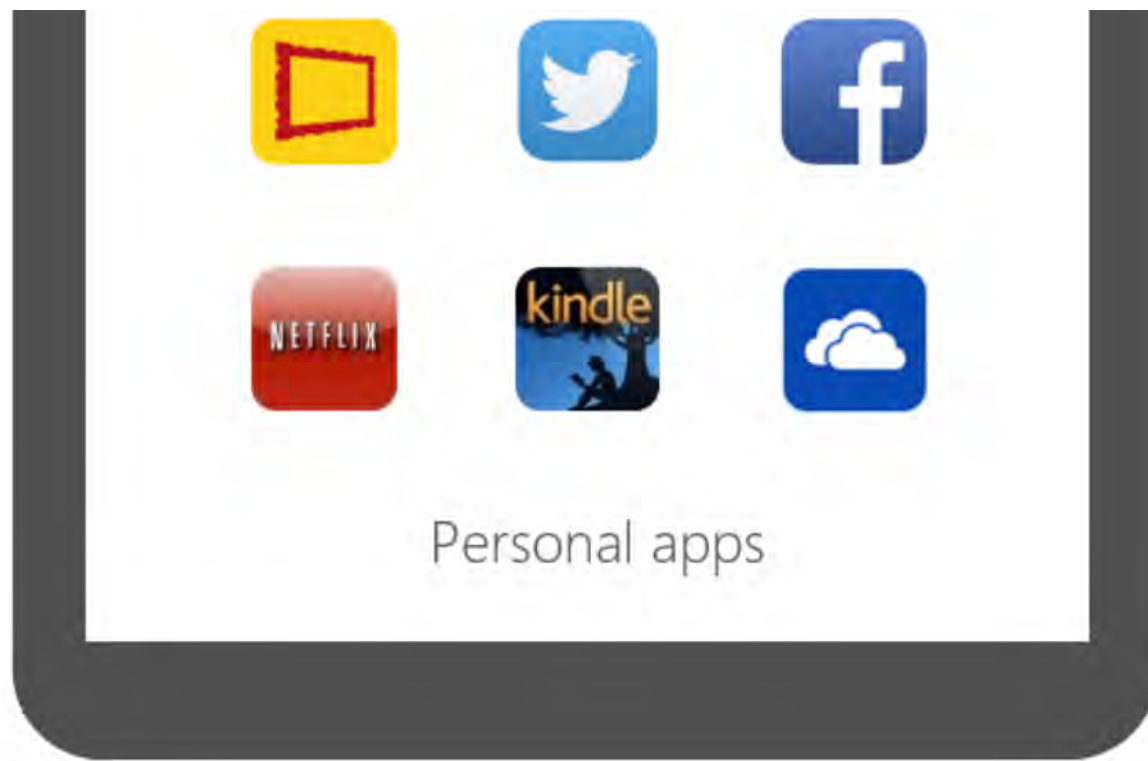
Apps that were written with Intune SDK integration can safely span the personal and managed data boundary



**Dual-mode app with native Intune integration**

- managed apps are special because they (and their data) live in a sandbox
- the sandbox is like a logical container for control of data flow and policy management

**the enrollment will not "mess**




beca  
live i

- the s  
cont  
flow

**Intune enrollment will not "mess with" personal apps and data**

*... but, if you don't want to enroll devices*



Intune enrollment will not “mess with” personal apps and data

*... but, if you don't want to enroll devices*

**MAMWE (or MAM Without Enrollment)**

- wrap applications and manage their data without requiring device enrollment



Apps that were written with Intune SDK integration can safely span the personal and managed data boundary

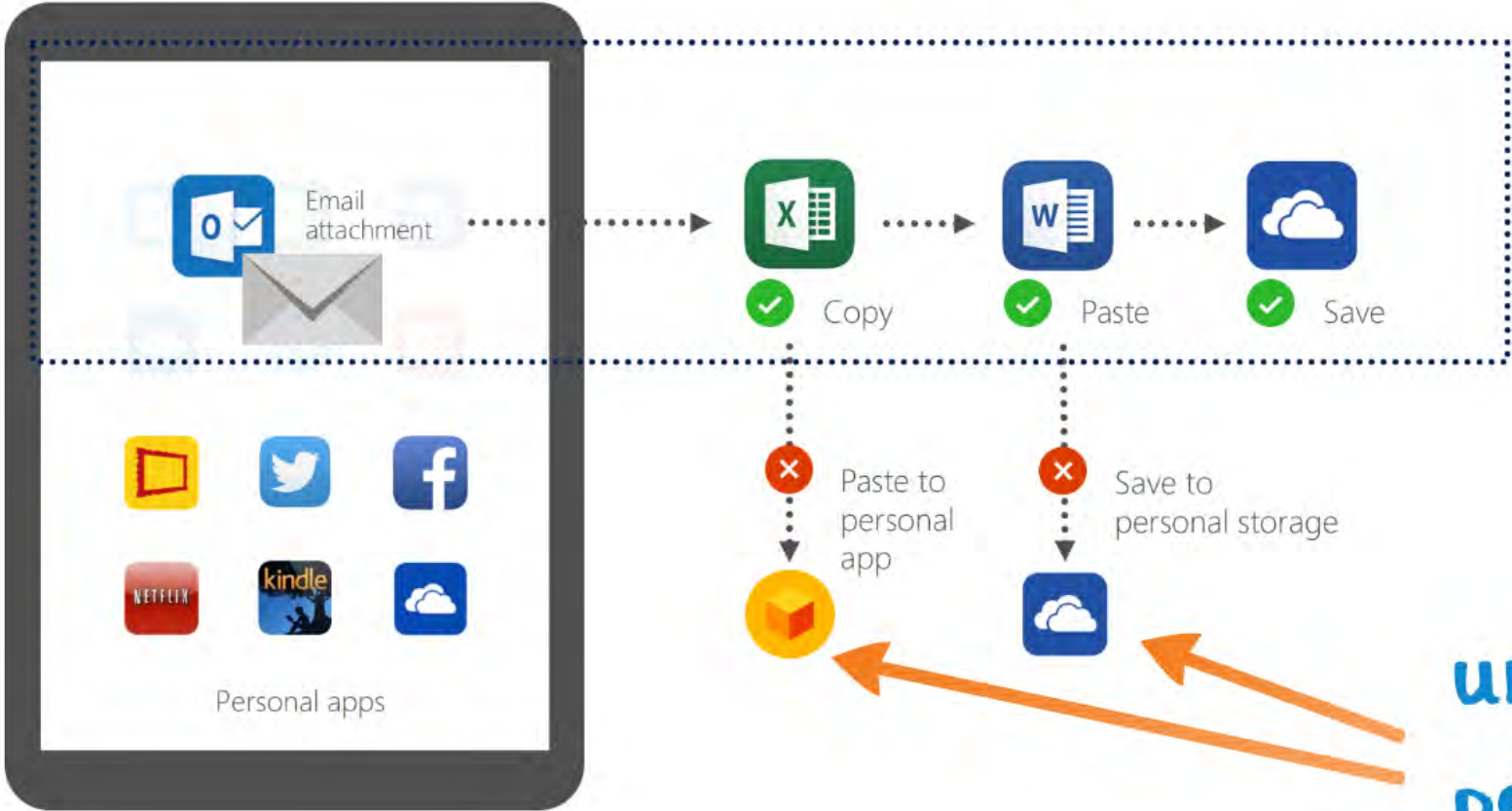


Dual-mode  
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integration

- managed apps are special

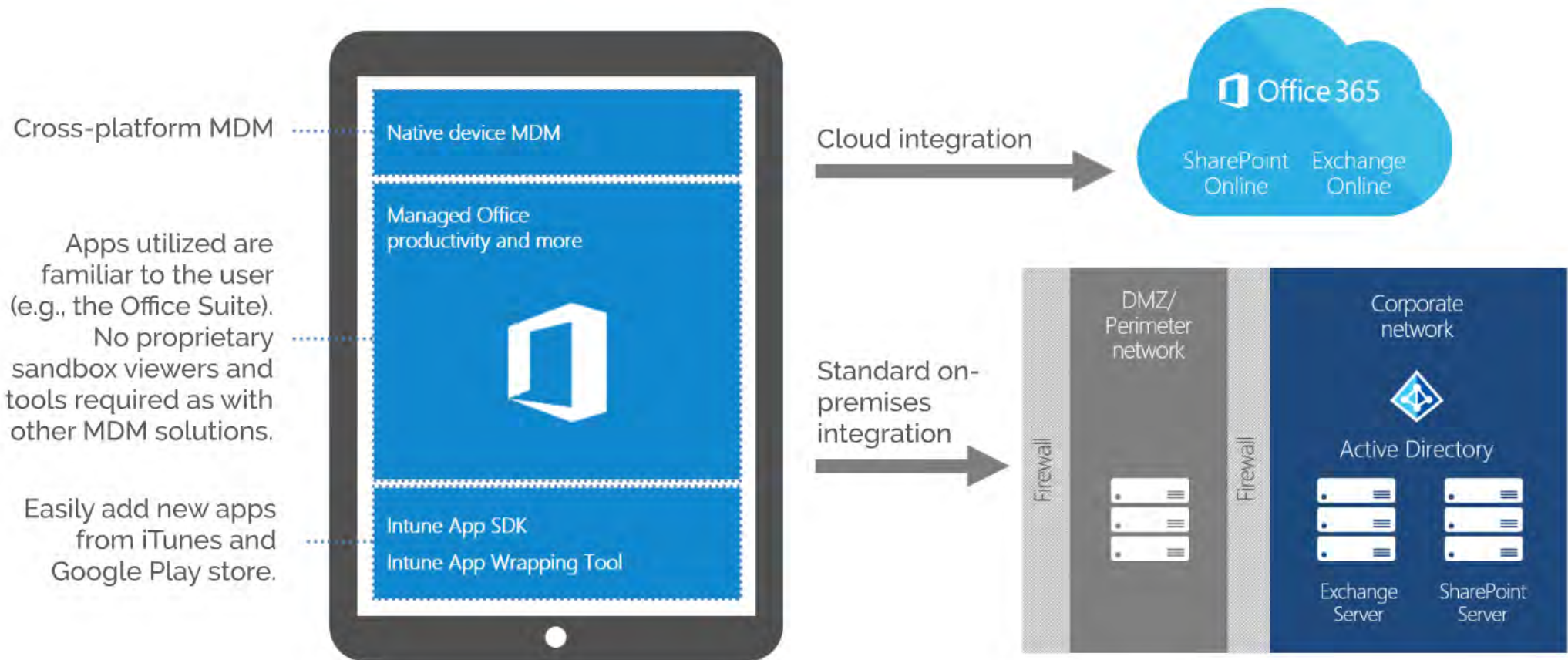


# Intune administrators control whether or not data can flow across managed/personal boundaries



**unmanaged/  
personal apps**

# Intune: Under the Hood





# Intune versus other MDM solutions

- I believe in honest assessments
- Intune is not the market leader; Airwatch is the king
- "Organizations that should consider Intune are those that want to extend the Office 365 services to mobile devices and ConfigMgr customers that value client management and EMM integration over best-of-breed EMM functionality."

Figure 1. Magic Quadrant for Enterprise Mobility Management Suites



Source: Gartner (June 2015)

# MDM Comparison between Office 365 and EMS

Category	Feature	Exchange ActiveSync	MDM for Office 365	Microsoft Intune (cloud only)	Intune + ConfigMgr (hybrid)
Device configuration	Inventory mobile devices that access corporate applications	•	•	•	•
	Remote factory reset (full device wipe)	•	•	•	•
	Mobile device configuration settings (PIN length, PIN required, lock time, etc.)	•	•	•	•
	Self-service password reset (Office 365 cloud only users)	•	•	•	•
Office 365	Provides reporting on devices that do not meet IT policy		•	•	•
	Group-based policies and reporting (ability to use groups for targeted device configuration)		•	•	•
	Root and jailbreak detection		•	•	•
	Remove Office 365 app data from mobile devices while leaving personal data and apps intact (selective wipe)		•	•	•
	Prevent access to corporate email and documents based upon device enrollment and compliance policies		•	•	•
Premium mobile device & app management	Self-service Company Portal for users to enroll their own devices and install corporate apps			•	•
	App deployment (Windows Phone, iOS, Android)			•	•
	Deploy certificates, VPN profiles (including app-specific profiles), email profiles, and Wi-Fi profiles			•	•
	Prevent cut/copy/paste/save as of data from corporate apps to personal apps (mobile application management)			•	•
	Secure content viewing via Managed Browser, PDF Viewer, Image Viewer, and AV Player apps for Intune			•	•
	Remote device lock via self-service Company Portal and via admin console			•	•
PC management	Client PC management (e.g. Windows 8.1, inventory, antimalware, patch, policies, etc.)			•	•
	PC software management			•	•
	Comprehensive PC management (e.g. Group Policy, login scripts, BitLocker management, virtual desktop and power management, custom reporting, etc.)				•
	Windows Server/Linux/UNIX/Mac OS X support				•
	OS deployment and imaging				•

Figure 1. Magic

## Intune versus other



Azure  
Active  
Directory  
Premium



Intune



Azure  
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Advanced  
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All EMS subscriptions include these four workloads. EMS E5 has some others.

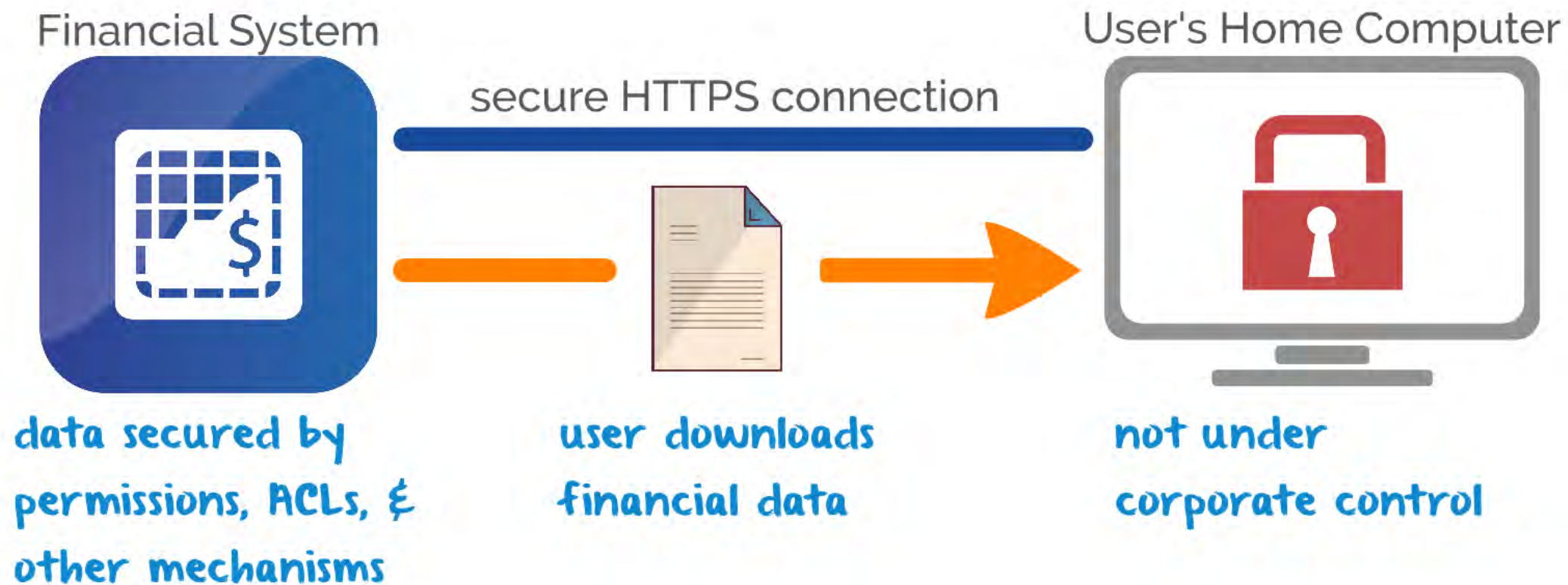


Let's start  
with a simple  
question



What problem does Azure  
Information Protection actually solve?

Consider the following example where a user is accessing a corporate financial application



Once the data is on the user's

em

User

secure HTTPS connection



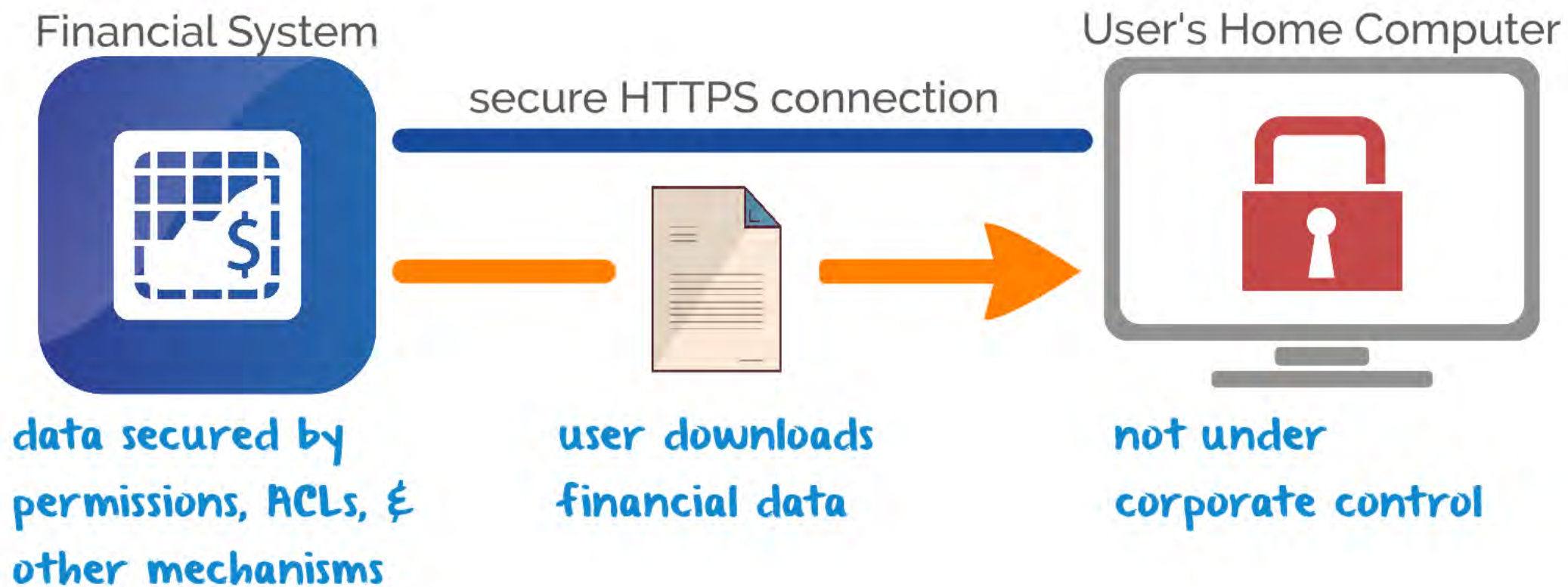
py  
s, £  
sms

user downloads  
financial data

no  
con



Consider the following example where a user is accessing a corporate financial application



Once the data is on the user's system, what is securing that data?

Working with AIP (in





If you answered "the user's adherence to corporate policies regarding data usage and system security," then you're trying to apply a protection strategy I call ...

This is where All



If you answered "the user's adherence to corporate policies regarding data usage and system security," then you're trying to apply a protection strategy I call ...



is where AID comes in





This usually doesn't cut it in the real world

Users will not protect data the way that they should (or that you want them to)

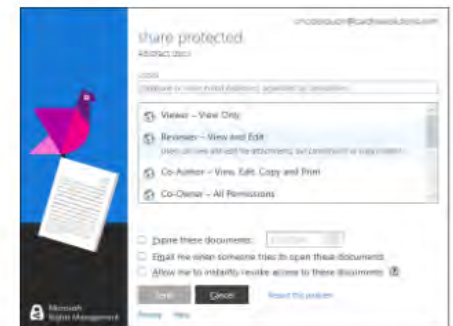
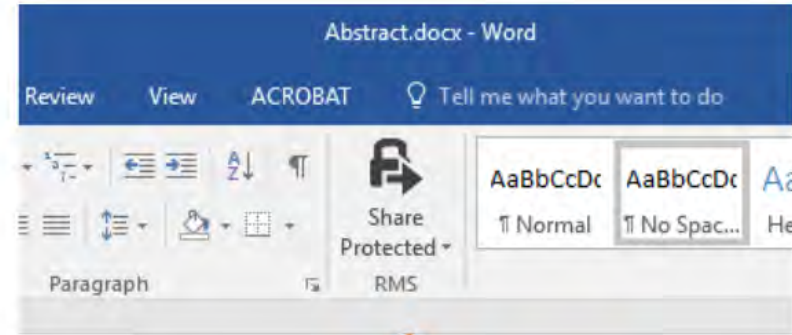
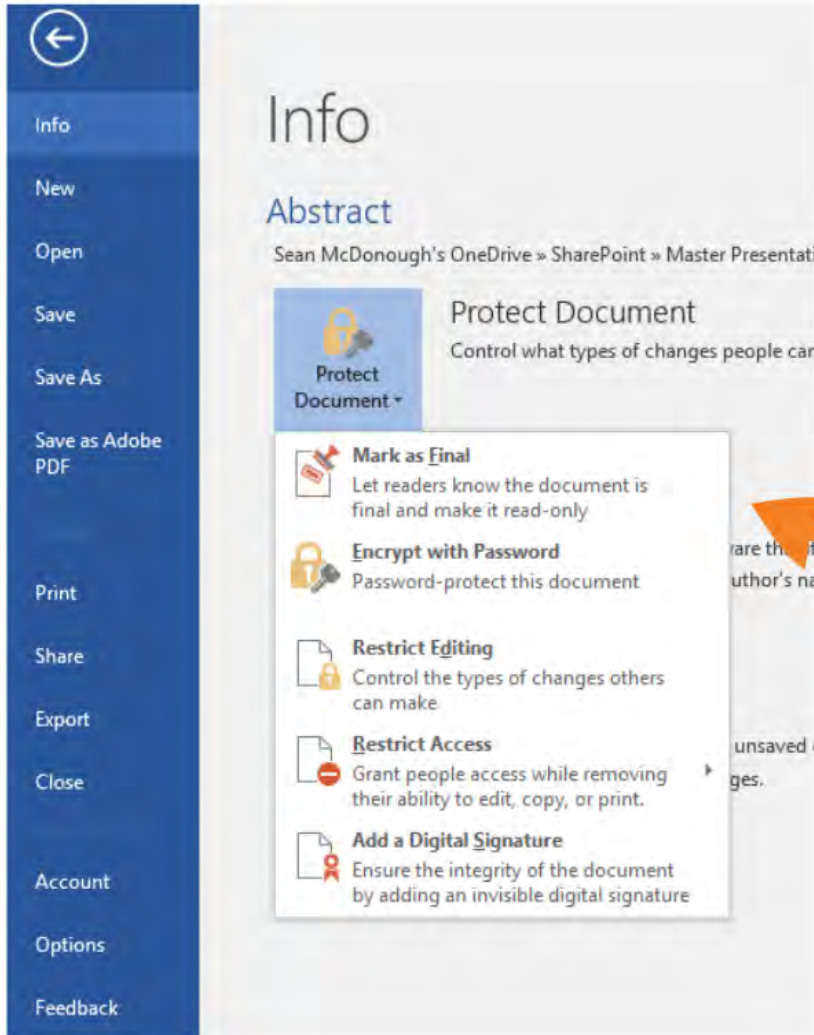
D comes in

# This is where AIP comes in

- With AIP, documents are protected with encryption
- Regardless of where a document resides, it is safe
- Authors determine "who" can do "what" with a document

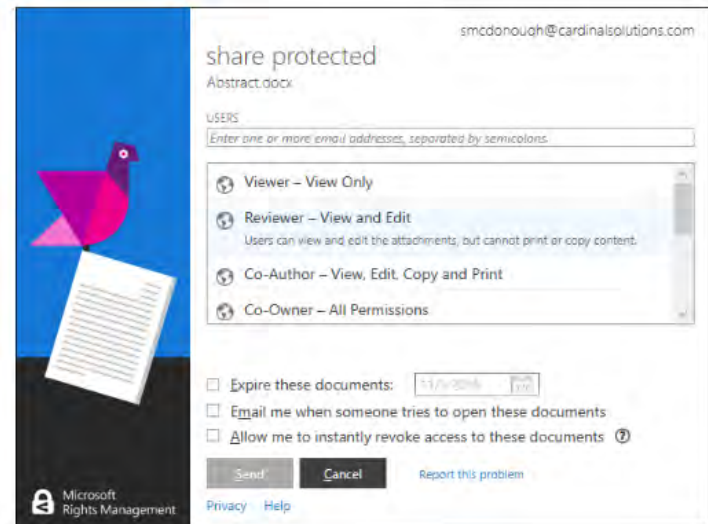
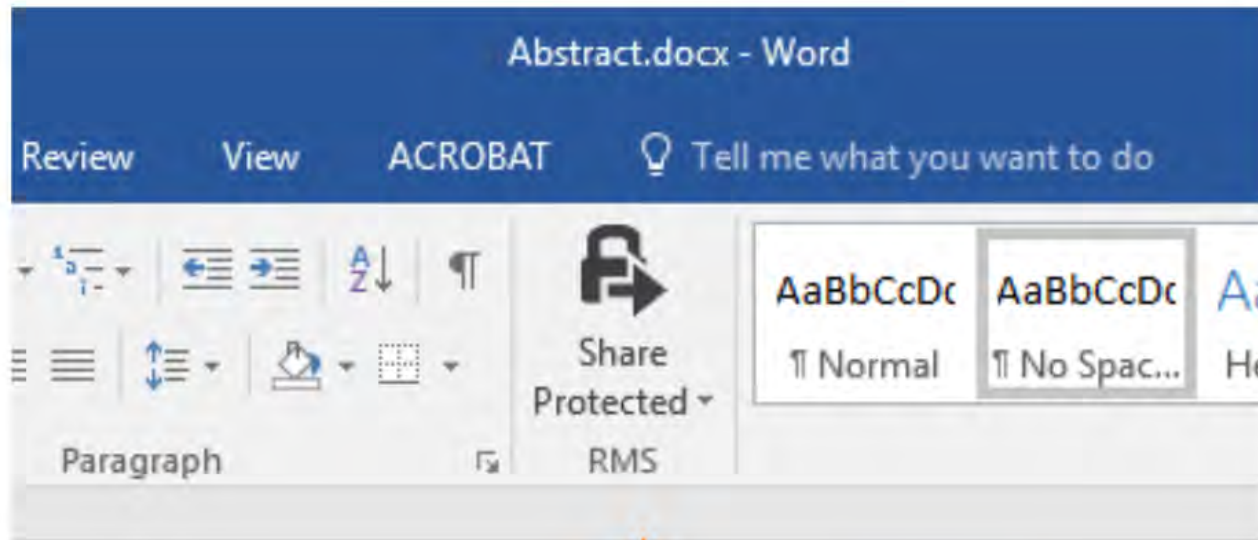


# securing that data?



Protecting documents is easy






# Protecting


# share protected

Abstract.docx

## USERS


*Enter one or more email addresses, separated by semicolons.*

 Viewer – View Only

 Reviewer – View and Edit

Users can view and edit the attachments, but cannot print or copy content.

 Co-Author – View, Edit, Copy and Print


 Co-Owner – All Permissions

Expire these documents:

11/3/2016

15

Email me when someone tries to open these documents

Allow me to instantly revoke access to these documents 

Send

Cancel

[Report this problem](#)

[Privacy](#) [Help](#)



system, what

Behind the scenes, Office is working with AIP (in the cloud) to manage certificates and keys

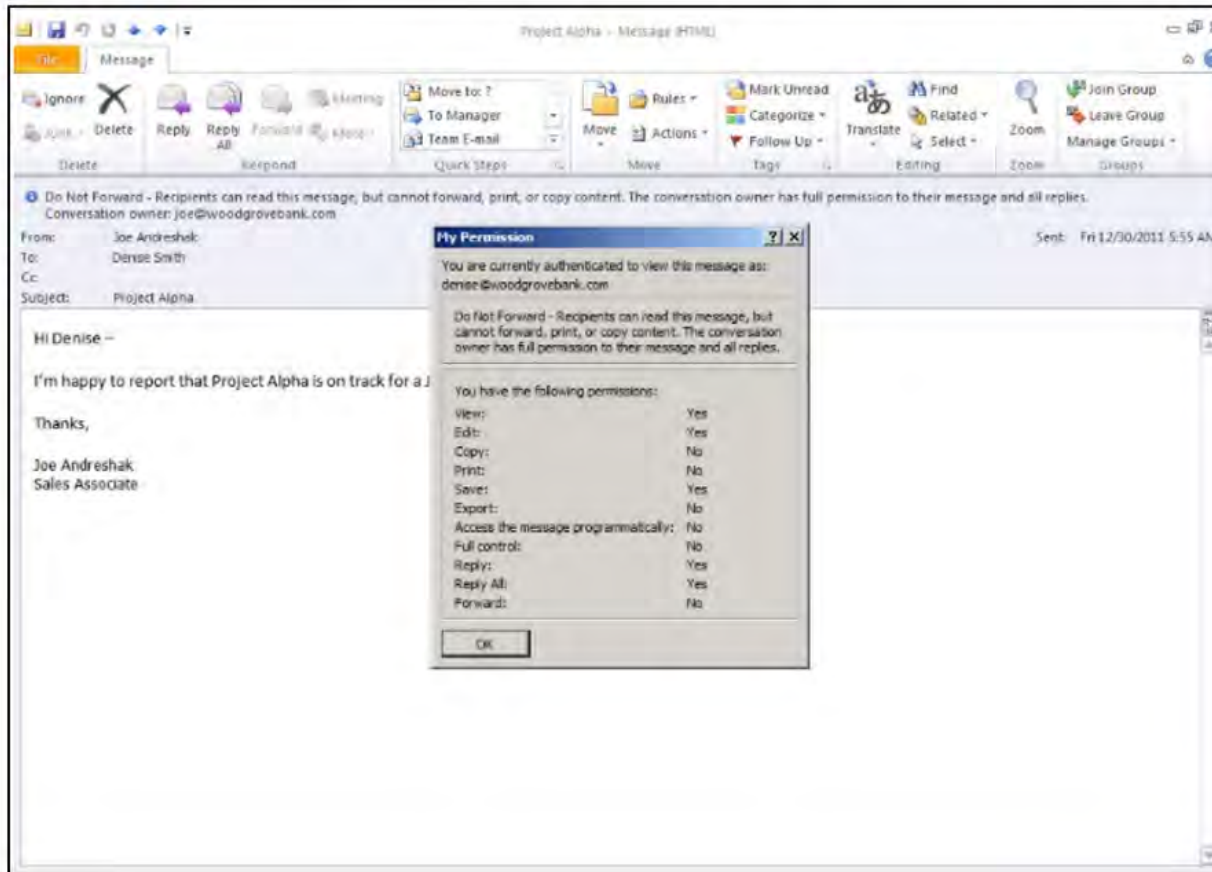


Have any of you ever worked with PGP?

Managing public and private keys for asymmetric encryption is heavy lifting. AIP does this for you. You simply create and apply policies for document usage



# Policies can also be auto-applied



- for example, automatically encrypt any email and/or attachments containing SSNs
- AIP is a natural complement to digital loss prevention (DLP) policies

# One big AIP "add" with EMS E3

An on-premises connector that can be used to apply AIP to non-Office files (via Windows Server 2012 R2 File Classification Infrastructure)



	RMS for O365	Azure RMS (EMS)
Consume & Create RMS content with company ID	☑	☑
Protection for content stored in O365	☑	☑
Protection for content stored in on prem Office (Exchange, Sharepoint via RMS Connector)	☑	☑
Bring your own Key (Hybrid protection)	☑	☑
RMS protection for non office files	☑	☑
RMS SDK	☑	☑
RMS On Prem Connector for on-premises Windows Server file shares (via RMS FCI Connector)		☑

Azure  
Active  
Directory  
Premium



Intune



Azure  
Information  
Protection



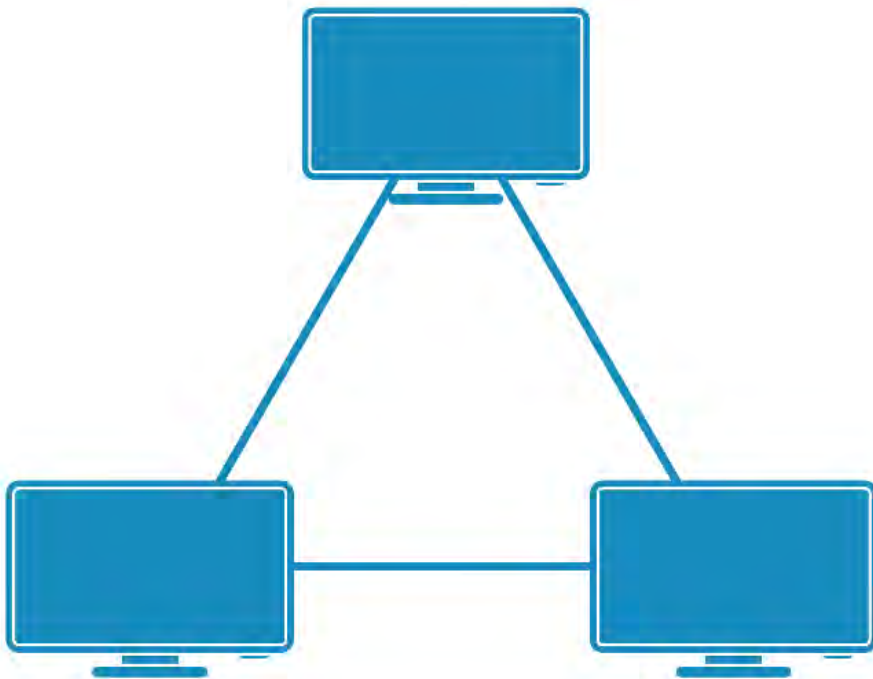
Advanced  
Threat  
Analytics



All EMS subscriptions include these four workloads. EMS E5 has some others.

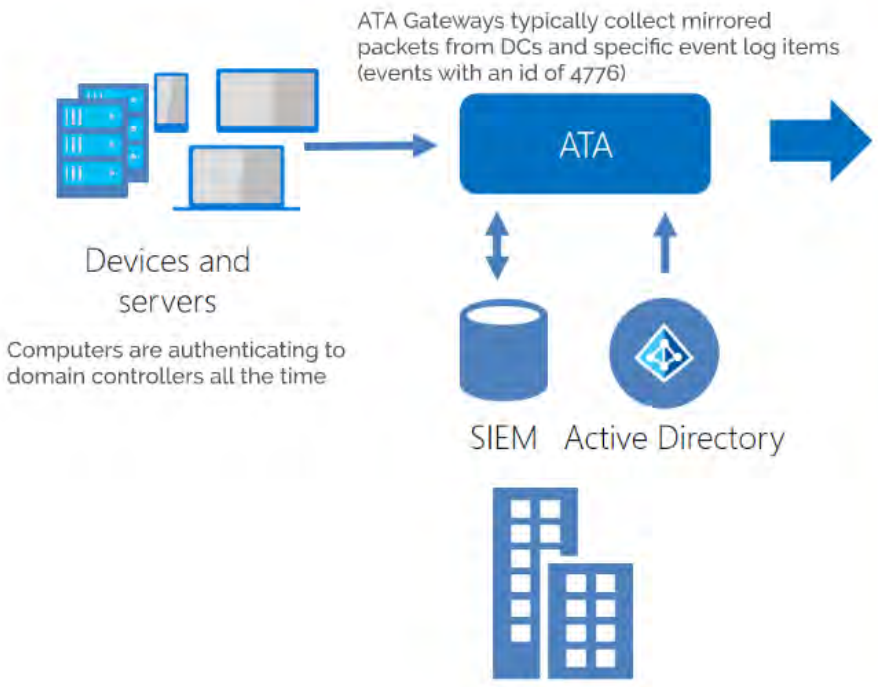


# What is Advanced Threat Analytics?



- ATA does analysis of your on-premises authentication traffic
- It looks for anomalies and "weird behavior" using machine learning
- When attacks or compromises are found, you are alerted by ATA

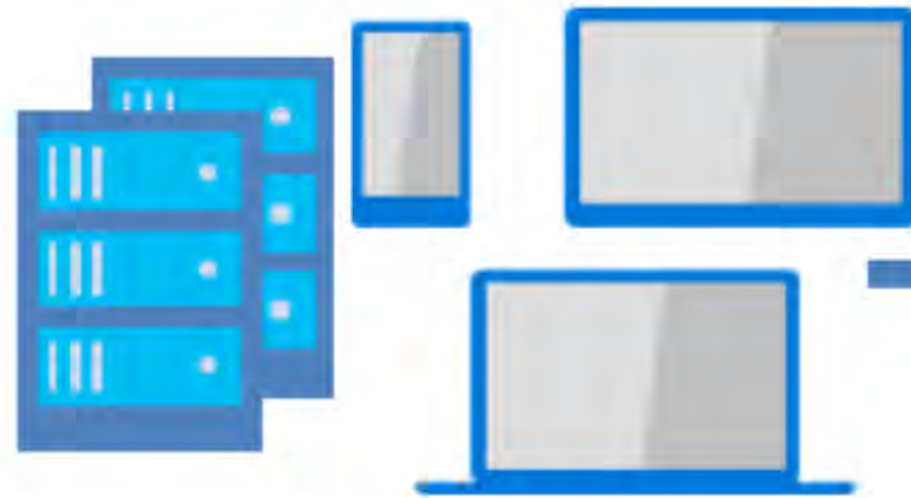
# The ATA "Big Picture"



Packets and log information are sent to ATA Centers for analysis. Machine learning does the heavy lifting to find "needles in the haystack" that indicate potential security issues

<b>Behavioral Analytics</b>	<b>Forensics for known attacks and issues</b>	<b>Advanced Threat Analytics</b>
Profile normal entity behavior (normal vs. abnormal)	Search for known security attacks & issues	Detect suspicious user activities, known attacks and issues

The right side of the slide features a blue background with three columns of analysis capabilities. Each column has a title, an icon, and a description. The icons are: a computer monitor with a grid for Behavioral Analytics, a magnifying glass with a lightning bolt for Forensics, and a target symbol for Advanced Threat Analytics. The descriptions are: 'Profile normal entity behavior (normal vs. abnormal)', 'Search for known security attacks & issues', and 'Detect suspicious user activities, known attacks and issues'. Between the columns are mathematical symbols: a plus sign (+), an equals sign (=), and a magnifying glass icon.



ATA Gateway  
packets from  
(events with

## Devices and servers

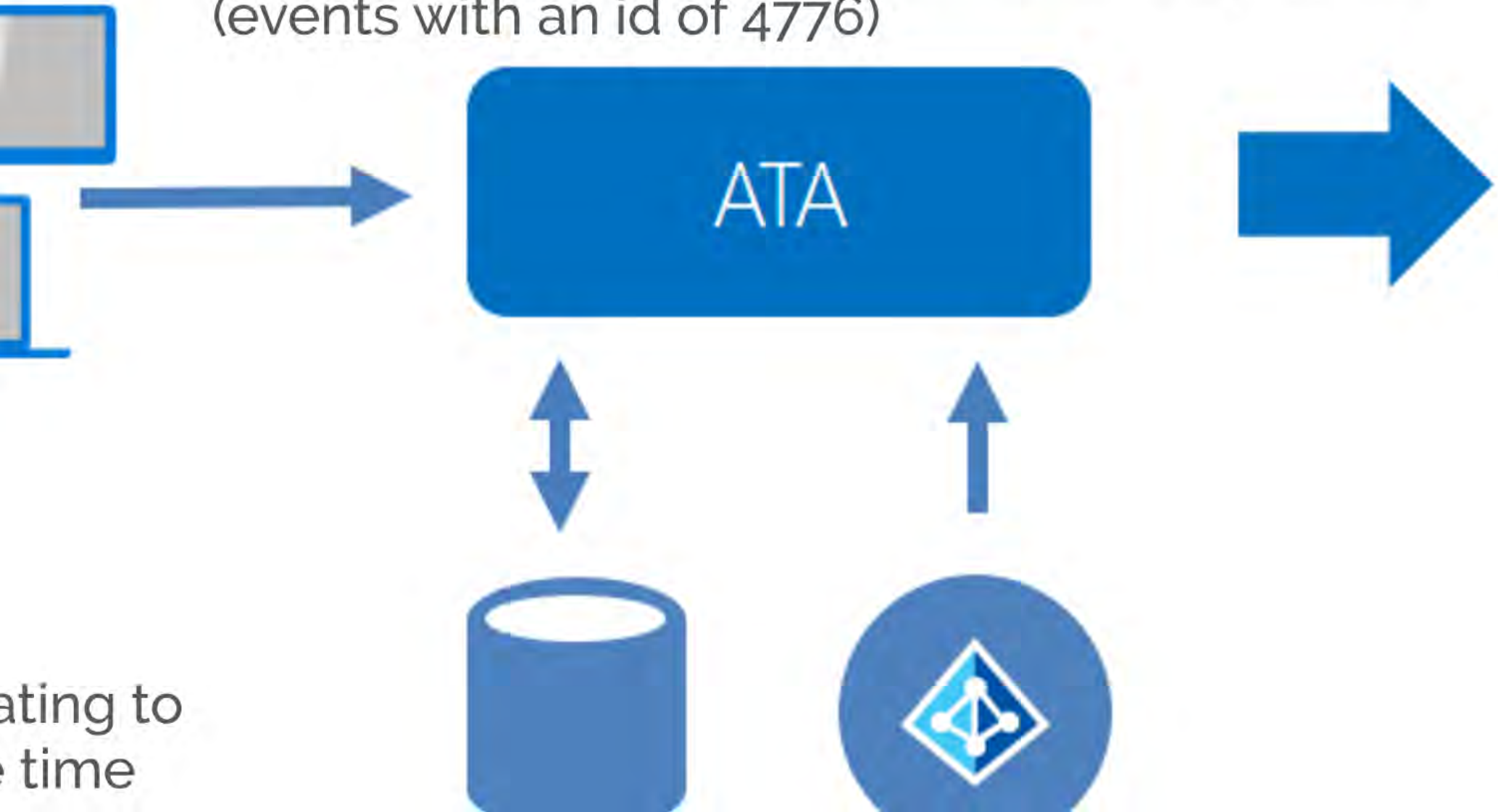
Computers are authenticating to domain controllers all the time



S



ATA Gateways typically collect mirrored packets from DCs and specific event log items (events with an id of 4776)



ating to  
e time

Packets and log information are sent to ATA Centers for analysis. Machine learning does the heavy lifting to find "needles in the haystack" that indicate potential security issues

Behavioral Analytics

Forensics for known attacks and issues

Advanced Threat Analytics



Profile normal entity behavior

Search for known security attacks &

Detect suspicious user activities

# What can ATA detect?

As it turns out, ATA can detect quite a bit

*Note: behavioral analytics are available once 30 days' of data is acquired*



## Malicious attacks

ATA detects known malicious attacks almost as instantly as they occur.

- Pass-the-Ticket (PtT)
- Pass-the-Hash (PtH)
- Overpass-the-Hash
- Forged PAC (MS14-068)
- Golden Ticket
- Malicious replications
- Reconnaissance
- Brute Force
- Remote execution



## Abnormal behavior

Behavioral analytics leverage Machine Learning to uncover questionable activities and abnormal behavior.

- Anomalous logins
- Unknown threats
- Password sharing
- Lateral movement



## Security issues and risks

ATA identifies known security issues using world-class security researchers' work.

- Broken trust
- Weak protocols
- Known protocol vulnerabilities



Azure  
Active  
Directory  
Premium



Intune



Azure  
Information  
Protection



Advanced  
Threat  
Analytics



All EMS subscriptions include these four workloads. EMS E5 has some others.









# To Sum It Up

- At its core, EMS is about enhancing security
- EMS complements Office 365's capabilities well, but EMS doesn't require Office 365
- If you have Office 365, it's worth seeing what you already have before jumping into EMS
- Microsoft is continuously adding to EMS



# Office 365 versus EMS

	Identity and access management 	Managed mobile productivity 	Information protection 	Identity-driven security 
<p><b>Enterprise Mobility + Security</b></p> 	<p><b>Azure AD for O365+</b></p> <ul style="list-style-type: none"> <li>• Advanced security reports</li> <li>• Single sign-on for all apps</li> <li>• Advanced MFA</li> <li>• Self-service group management &amp; password reset &amp; write back to on-premises,</li> <li>• Dynamic Groups, Group based licensing assignment</li> </ul>	<p><b>MDM for O365+</b></p> <ul style="list-style-type: none"> <li>• PC management</li> <li>• Mobile app management (prevent cut/copy/paste/save as from corporate apps to personal apps)</li> <li>• Secure content viewers</li> <li>• Certificate provisioning</li> <li>• System Center integration</li> </ul>	<p><b>RMS for O365+</b></p> <ul style="list-style-type: none"> <li>• Automated intelligent classification and labeling of data</li> <li>• Tracking and notifications for shared documents</li> <li>• Protection for on-premises Windows Server file shares</li> </ul>	<p><b>Cloud App Security</b></p> <ul style="list-style-type: none"> <li>• Visibility and control for all cloud apps</li> </ul> <p><b>Advanced Threat Analytics</b></p> <ul style="list-style-type: none"> <li>• Identify advanced threats in on premises identities</li> </ul> <p><b>Azure AD Premium P2</b></p> <ul style="list-style-type: none"> <li>• Risk based conditional access</li> </ul>
	<p><b>Basic identity mgmt. via Azure AD for O365:</b></p> <ul style="list-style-type: none"> <li>• Single sign-on for O365</li> <li>• Basic multi-factor authentication (MFA) for O365</li> </ul>	<p><b>Basic mobile device management via MDM for O365</b></p> <ul style="list-style-type: none"> <li>• Device settings management</li> <li>• Selective wipe</li> <li>• Built into O365 management console</li> </ul>	<p><b>RMS protection via RMS for O365</b></p> <ul style="list-style-type: none"> <li>• Protection for content stored in Office (on-premises or O365)</li> <li>• Access to RMS SDK</li> <li>• Bring your own key</li> </ul>	<p><b>Advanced Security Management</b></p> <ul style="list-style-type: none"> <li>• Insights into suspicious activity in Office 365</li> </ul>



# References

Processing.

file:///C:/Users/sean/AppData/Local/Temp/msohtmlclip1/01/clip\_ima

- **Release for User Survey Analysis: Gartner Consumer Insights - People at Work and Play in 2014**

<http://www.gartner.com/newsroom/id/2881217>

- **McAfee Finds Eighty Percent of Employees User Unapproved Apps at work**

<http://newsroom.mcafee.com/press-release/mcafee-finds-eighty-percent-employees-use-unapproved-apps-work>

- **Introducing Enterprise Mobility + Security**

<https://blogs.technet.microsoft.com/enterprisemobility/2016/07/07/introducing-enterprise-mobility-security/>

- **Enterprise Mobility**

<https://www.microsoft.com/en-us/cloud-platform/enterprise-mobility>

- **Gartner Magic Quadrant for Enterprise Mobility Management 2016**

<http://www.air-watch.com/lp/gartner-magic-quadrant-for-enterprise-mobility-management-2016/>

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