

# Office 365 Security, Privacy and Compliance

Robert Crane

<http://about.me/ciaops>



# Agenda

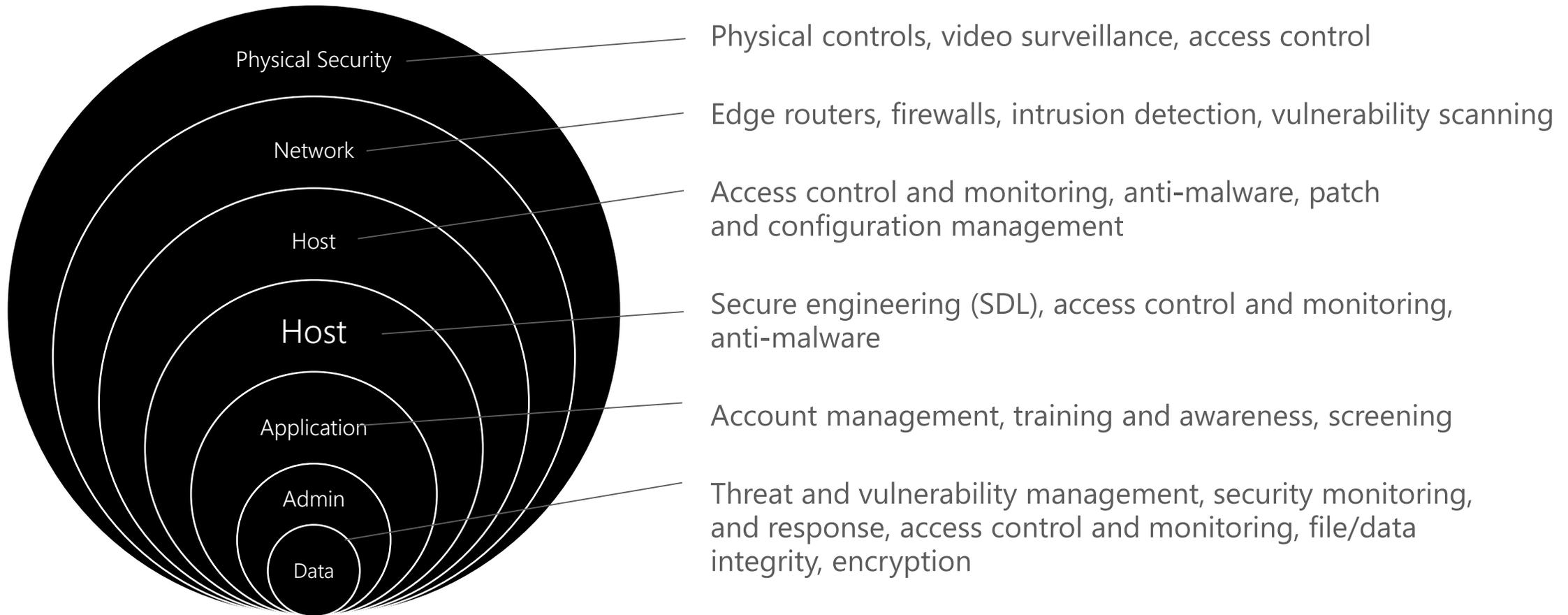
- Common Business Requirements
- Security features of Office 365
- Compliance features of Office 365
- Security and compliance within plans
- Configuration of security and compliance options
- Best practices.
- Take aways.

# Common Business Requirements

- Security
  - Is my information safe?
- Retention
  - What happens when an employee leaves?
- Policies
  - How do we manage our information?
- Auditing
  - What's happening to the information?
- Control
  - Who has access to the information?
- Reporting
  - How do I know what's happening with the information?

Security

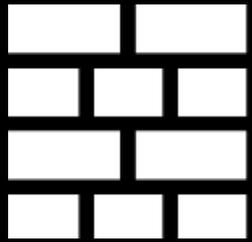
# Defense in depth



Independently verified to meet key standards – ISO 27001, SSAE 16, FISMA

# Physical security

Perimeter security



Fire suppression



Multi-factor authentication

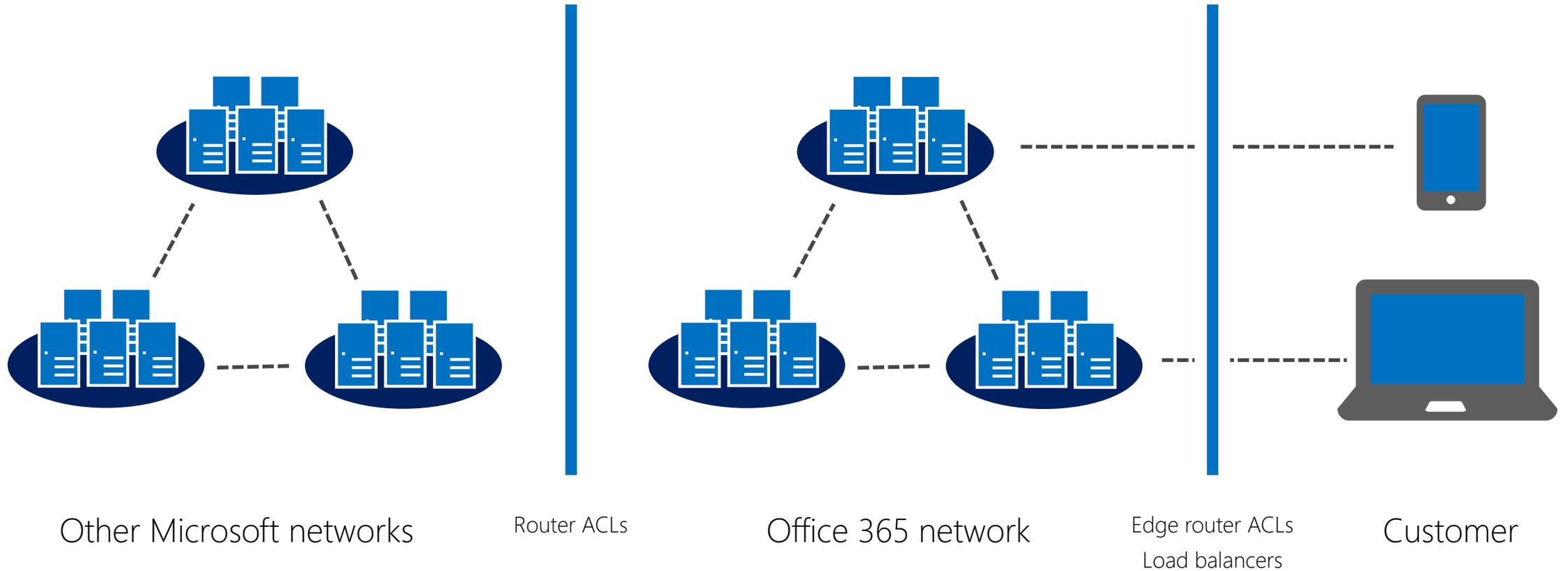


Extensive monitoring



Seismic bracing  
24x7 onsite security staff  
Days of backup power  
Tens of thousands of servers

# Network security



# Host/application

Patching/malware protection

Whitelisted processes

Security development lifecycle

Automated tooling for routine activities

Zero standing permissions in the service

Auditing of all operator access and actions

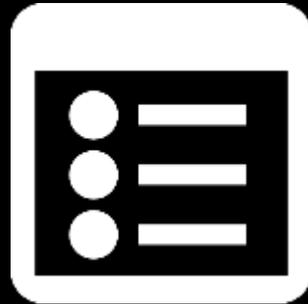


# Administrators

Personnel



Account  
management



Training, policies,  
and awareness



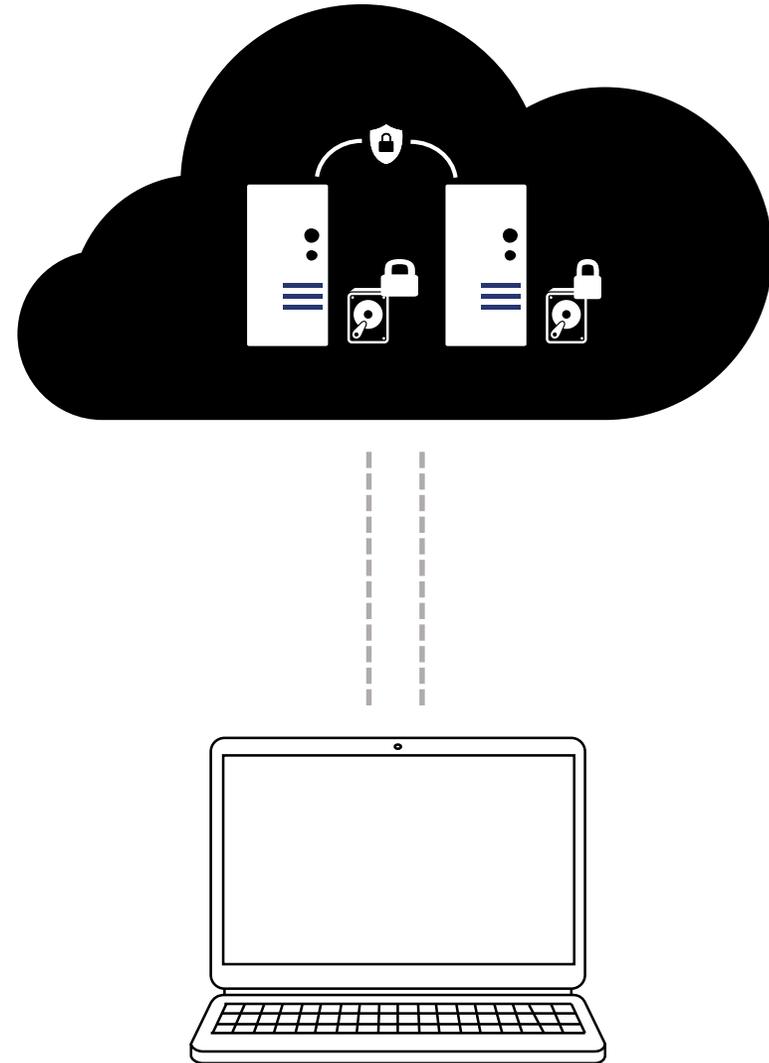
Background checks  
Screening

Automatic account deletion  
Unique accounts  
Zero access privileges

SDL  
Annual training

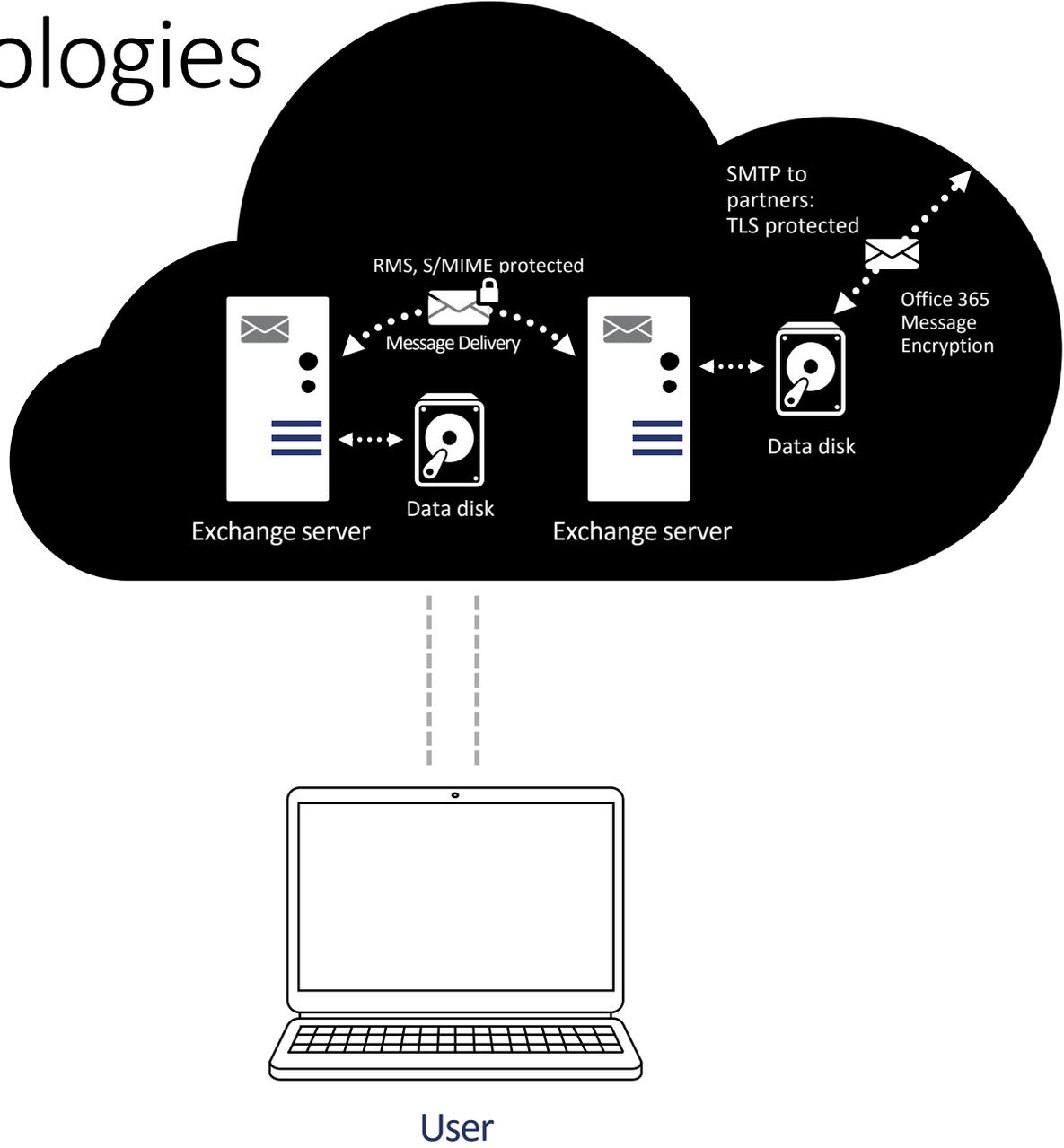
# Default Encryption

- **Data in transit**
  - Strong SSL/TLS cipher suite
  - Perfect Forward Secrecy
  - Datacenter-to-datacenter encryption
- **Data at rest**
  - BitLocker disk encryption
  - Per-file encryption for customer content



# Additional Encryption technologies

- Rights Management Service
- S/MIME
- Office 365 Message Encryption
- Transport Layer Security



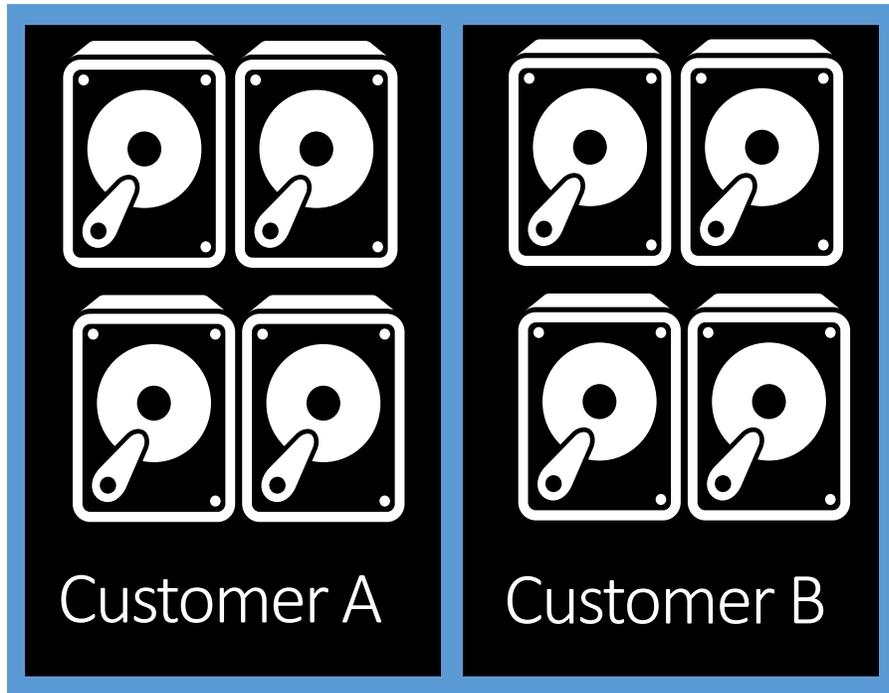
# Anti Spam/ Anti Virus

- Multi-engine antimalware protects against 100% of known viruses.
- Continuously updated anti-spam protection captures 98%+ of all inbound spam.
- Advanced fingerprinting technologies that identify and stop new spam and phishing vectors in real time.
- Mark all bulk messages as spam.
- Block unwanted email based on language or geographic origin.

Comprehensive  
protection



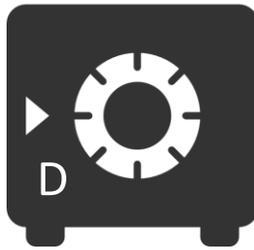
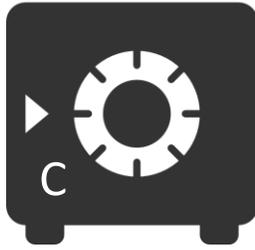
# Customer data isolation



Designed to support logical isolation of data that multiple customers store in same physical hardware.

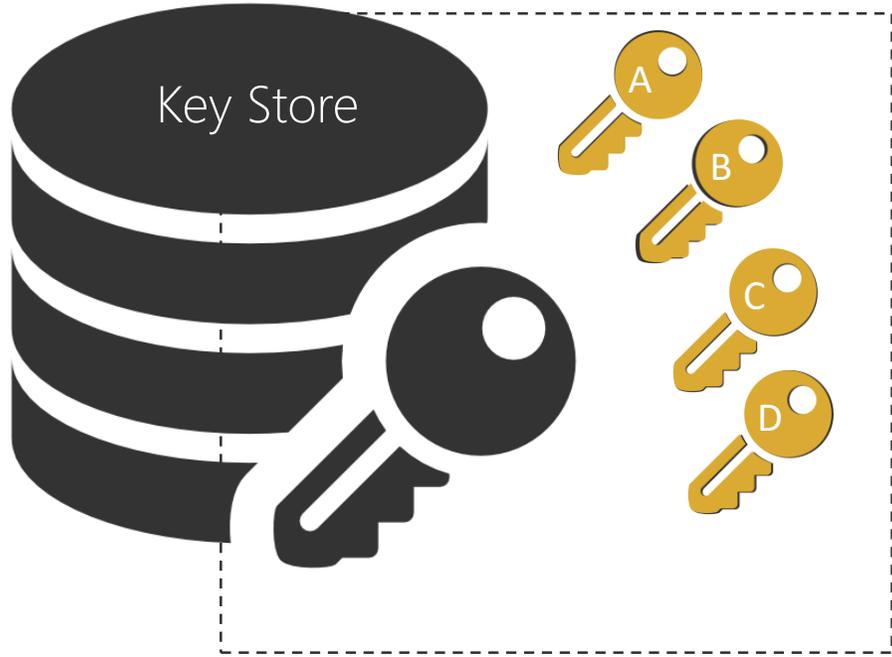
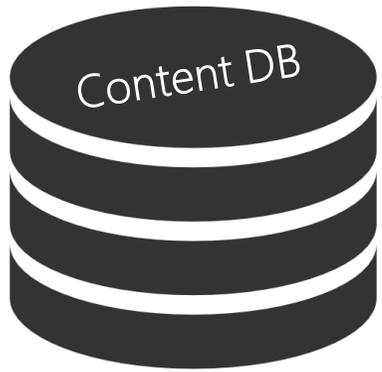
Intended or unintended mingling of data belonging to a different customer/tenant is prevented by design using Active Directory organizational units

# Encryption at rest with Per-file Encryption



crypto

```
001010101010  
101010110011  
001010101010  
101010110011  
001010101010  
101010110011  
001010101010  
101010110011
```



# Breach simulations



# Multi-factor authentication using any phone

Mobile Apps



Push Notification  
One-Time-Passcode  
(OTP) Token

Phone Calls



Out-of-Band\* Call

Text Messages



Text  
One-Time Passcode  
(OTP) by Text

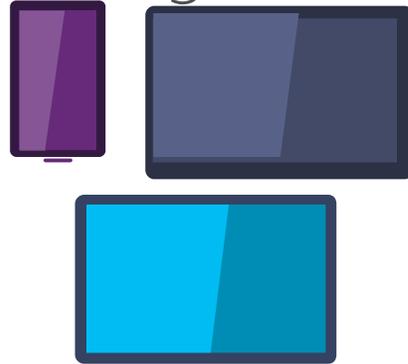
\*Out of band refers to being able to use a second factor with no modification to the existing app UX.

# Mobile Device Management

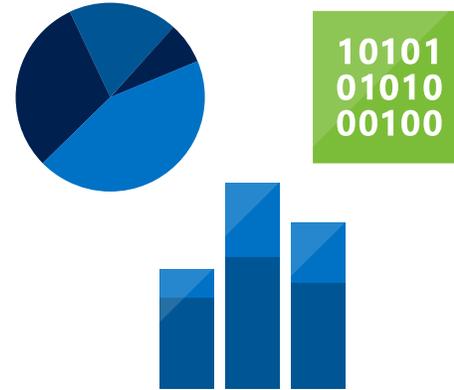
Conditional Access



Device Management



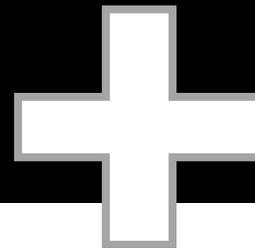
Selective Wipe



Advanced Application Management



**MDM Office 365 Built-in**



**Microsoft Intune**

# Rights Management Service



RMS can be applied to any file type using RMS app

# DLP document fingerprinting

Scan email and attachments to look for patterns that match document templates

Protect sensitive documents from being accidentally shared outside your organization

No coding required; simply upload sample documents to create fingerprints

The screenshot shows a web interface for configuring document fingerprints. At the top, the title is 'document fingerprints'. Below the title is a descriptive sentence: 'You can use document fingerprints to customize sensitive information types in your policies.' Underneath are four icons: a plus sign, a pencil, a trash can, and a refresh symbol. The main area is a table with two columns. The left column is a list of document templates, with 'Standard Bank Forms' selected. The right column provides details for the selected template, including a description and a list of associated file names. At the bottom of the table, it indicates '1 selected of 2 total'.

NAME	
IRS Tax Forms	
<b>Standard Bank Forms</b>	<b>Standard Bank Forms</b> This sensitive information type will detect any of the standard bank forms, like a loan application, account information, etc.  Files: Account opening form - Business.pdf Account opening form - Personal.pdf Account opening form - Priority.pdf Auto loan application for business.pdf Auto loan application for salaried individual.pdf Cash Deposit Slip.pdf Cheque Deposit Slip.pdf Credit Card application form.pdf

1 selected of 2 total

# Email archiving and retention

## Preserve

### In-Place Archive

Secondary mailbox with separate quota  
Managed through EAC or PowerShell  
Available on-premises, online, or through EOA

### Governance

Automated and time-based criteria  
Set policies at item or folder level  
Expiration date shown in email message

### Hold

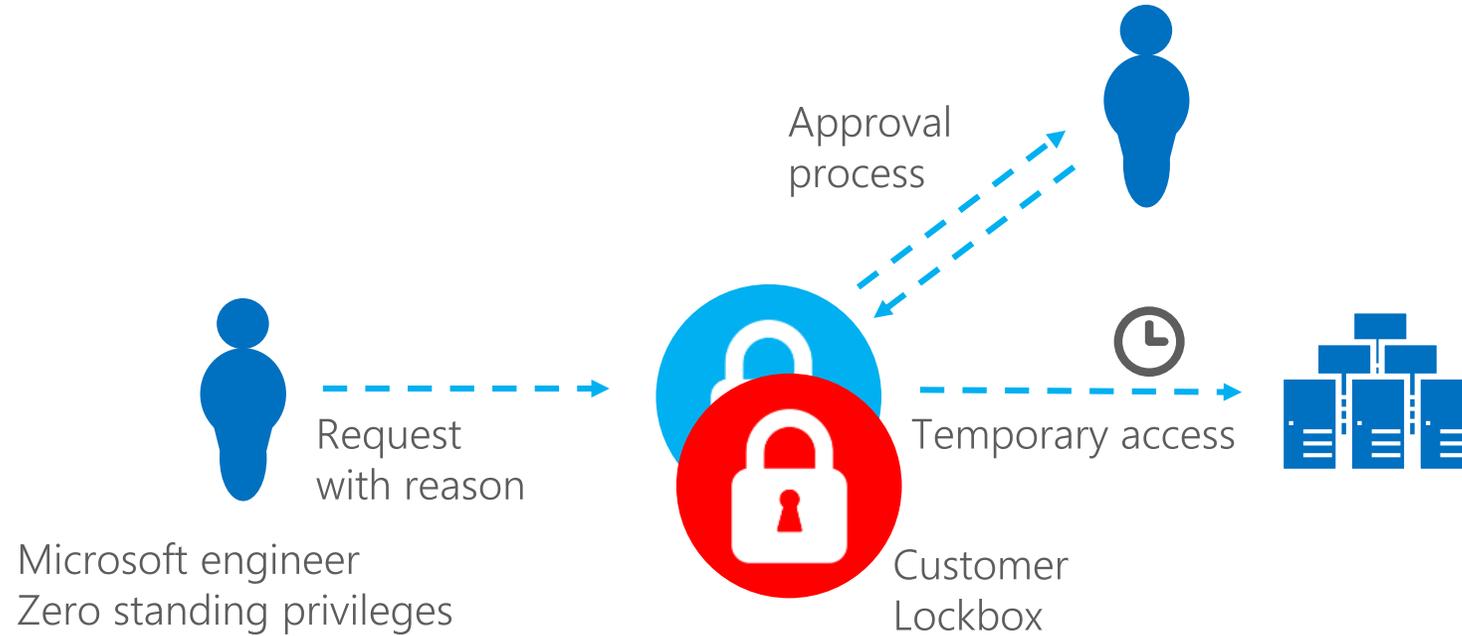
Capture deleted and edited email messages  
Time-Based In-Place Hold  
Granular Query-Based In-Place Hold  
Optional notification

## Search

### eDiscovery

Web-based eDiscovery Center and multi-mailbox search  
Search primary, In-Place Archive, and recoverable items  
Delegate through roles-based administration  
De-duplication after discovery  
Auditing to ensure controls are met

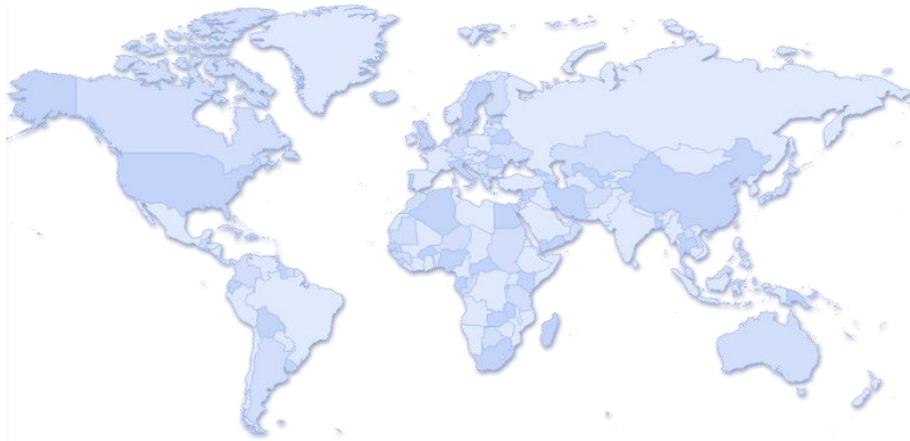
# Just-in-time access



Engineers must have current background check, fingerprinting, security training.  
System grants least privilege required to complete task.

Compliance

# Standards & Certifications



Standards Certifications	Market	Region
SSAE/SOC	Finance	Global
ISO 27001:2013	Global	Global
ISO 27018	Global	Global
EUMC	Europe	Europe
FERPA	Education	U.S.
FedRAMP/FISMA	Government	U.S.
HIPAA	Healthcare	U.S.
HITECH	Healthcare	U.S.
ITAR	Defense	U.S.
HMG IL2	Government	UK
CJIS	Law Enforcement	U.S.
Article 29 <sup>+</sup>	Europe	Europe
SOC 2	Global	Global

Security, Audits and certifications - <http://www.microsoft.com/online/legal/v2/?docid=27>

<sup>+</sup>EU Data Protection Authorities validate Microsoft's approach to privacy

# Privacy

Privacy by design means that we do not use your information for anything other than providing you services

## No Advertising



No advertising products out of Customer Data

No scanning of email or documents to build analytics or mine data

## Transparency



Access to information about geographical location of data, who has access and when

Notification to customers about changes in security, privacy and audit information

## Privacy controls



Various customer controls at admin and user level to enable or regulate sharing

If the customer decides to leave the service, they get to take their data and delete it in the service

# On government snooping...

Here's what Microsoft does, and doesn't do:

We don't provide any government with direct, unfettered access to your data

We don't assist any government's efforts to break our encryption or provide any government with encryption keys

We don't engineer back doors into our products and we take steps to ensure governments can independently verify this

If as reports suggest there is a bigger surveillance program we aren't involved

# eDiscovery and In-Place Hold in Office 365

Integrated tools to help you preserve, expire, and discover data

Hold



Keep the data you do want

Data Held In-Place

Customize holds based on filters

Hold across multiple products in a single action

Capture deleted & edited messages

Deletion

Delete the data you don't want

Automated time-based criteria to delete

Set policies at item or folder level – admin or user

Set site level retention policies

Search



Find the data you need

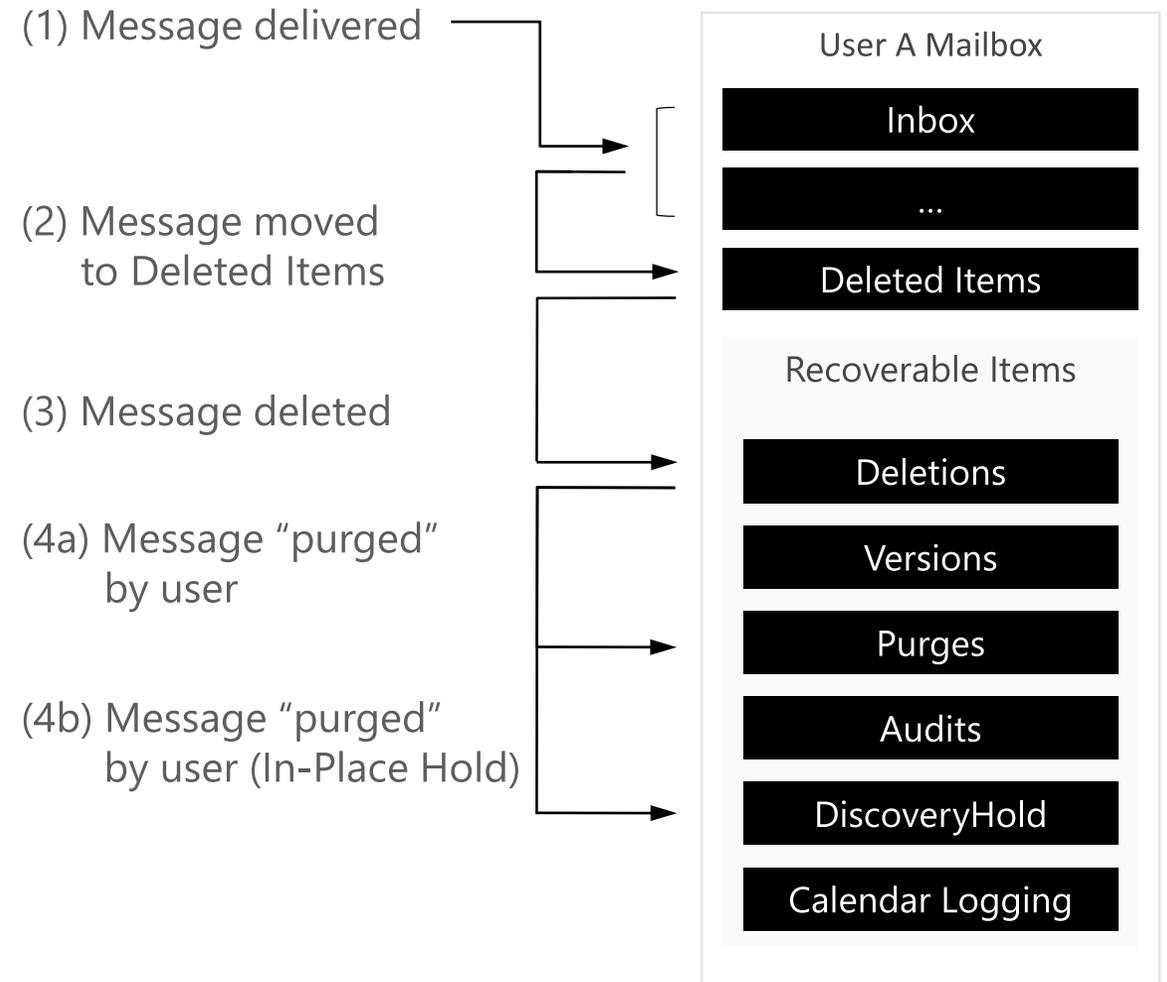
Search across multiple products

De-duplication & search statistics

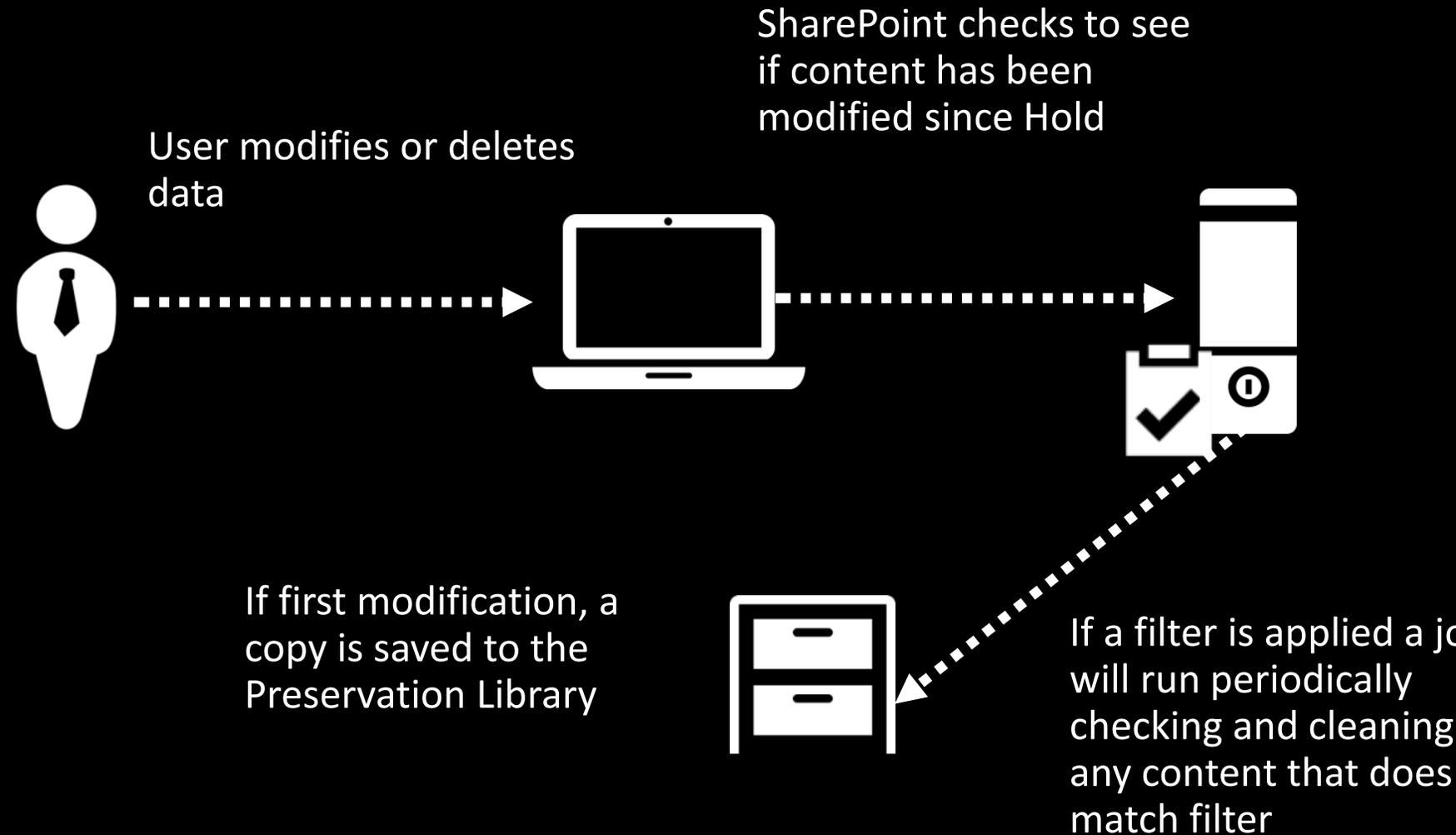
Case management

Export search results

# How does Exchange Hold Work?

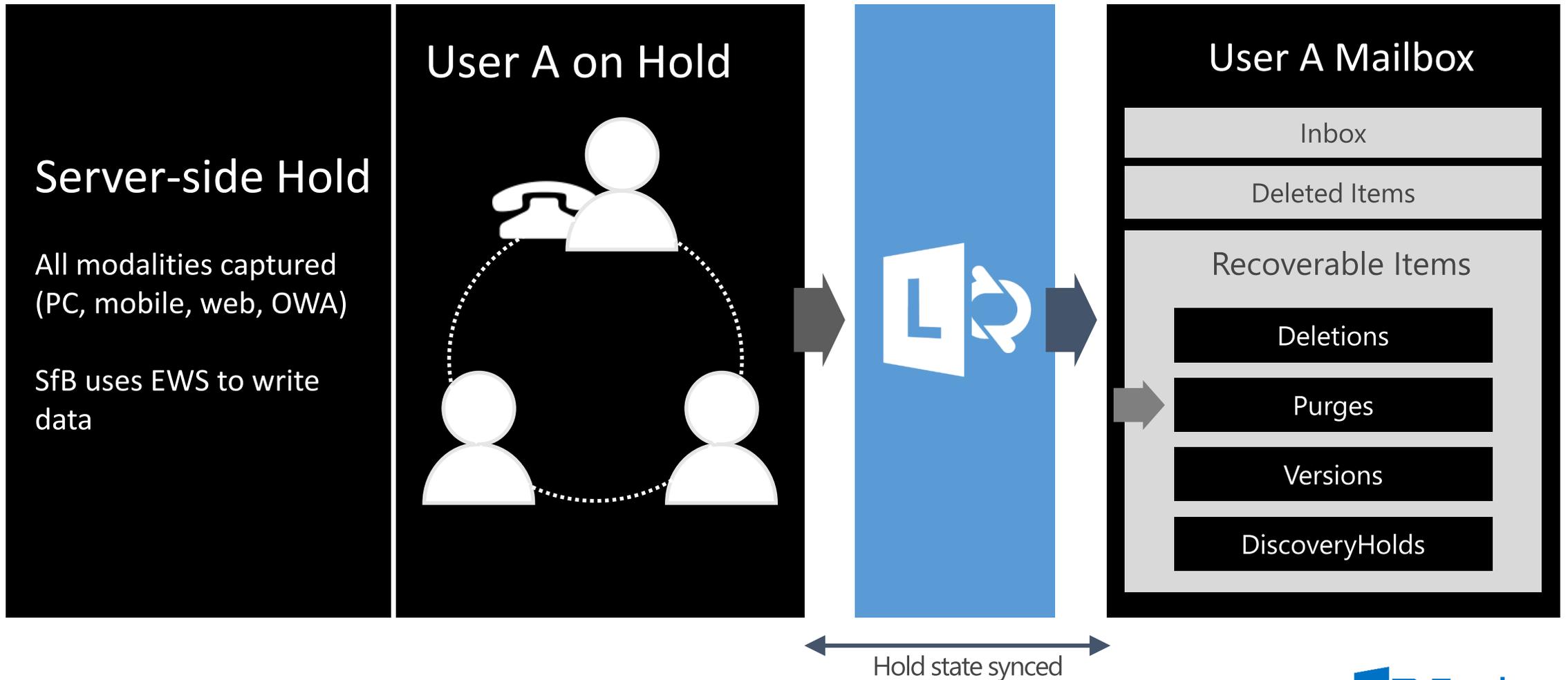


# How does SharePoint Hold Work?

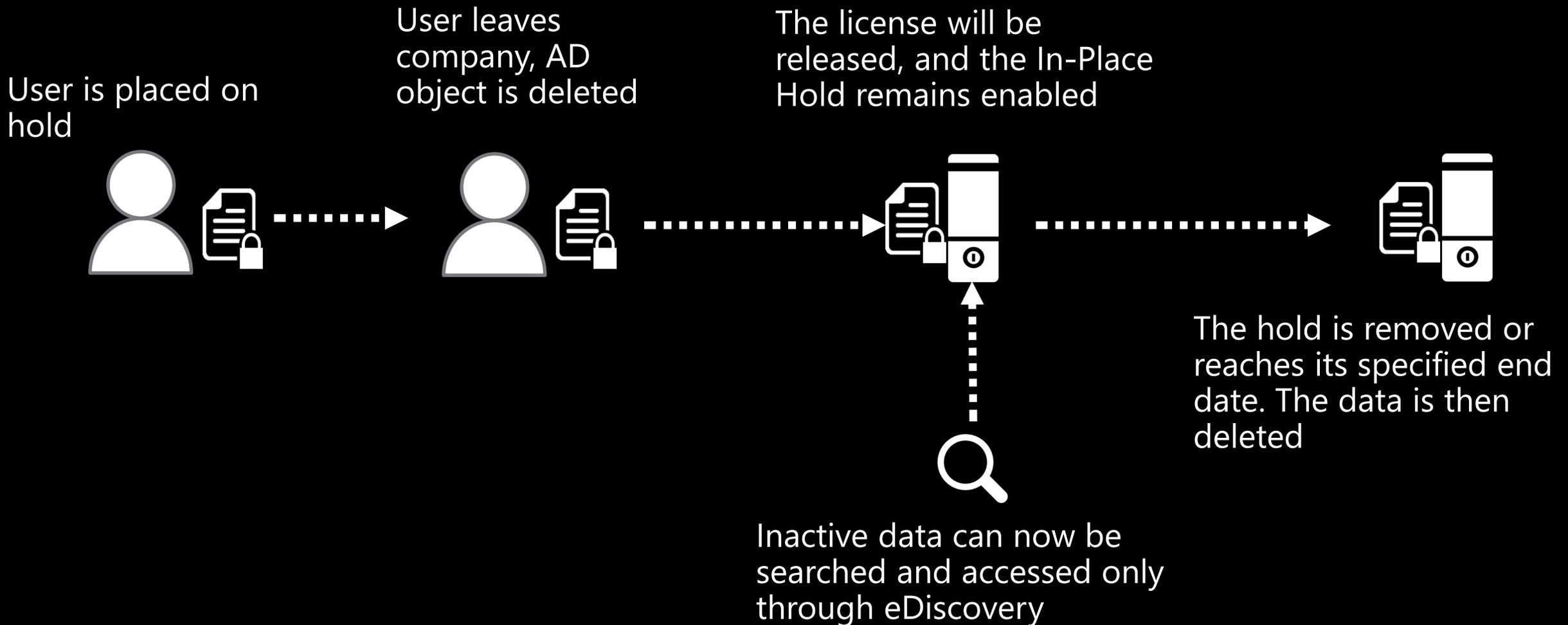


\*\*If versioning is enabled versions of documents will be saved

# How does Skype for Business Hold Work?



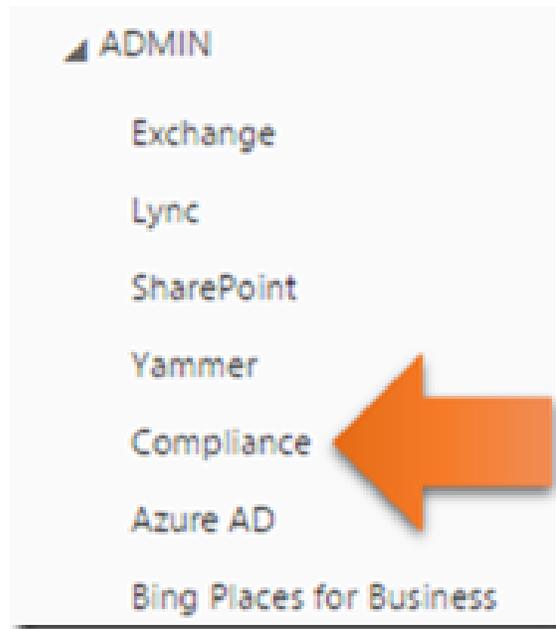
# How does hold work for inactive users?



# Full plan lineup

		Business			Enterprise		
		Business	Business Essentials	Business Premium	ProPlus	E1	E3
Target customer	Price (per year) \$AUD	\$158	\$68	\$167	\$230	\$107	\$338
	Seat Cap	300 (for each plan)			Unlimited		
	24/7 phone support from Microsoft	Critical issues			All issues		
Security	Antivirus / Anti-malware	●	●	●	●	●	●
	Encryption at rest	●	●	●	●	●	●
	Multi factor	●	●	●	●	●	●
	Mobile Device Management	●	●	●	●	●	●
Email Security	Message encryption						●
	Unlimited email archiving						●
	Litigation hold						●
	Message tracing		●	●		●	●
Advanced services	Active Directory integration	●	●	●	●	●	●
	Supports hybrid deployment				●	●	●
	Rights Management						●
	Full eDiscovery (hold)						●
	Data Loss Prevention						●

# New Compliance centre



## Compliance Center

Home

Archiving

Device management

eDiscovery

Retention

Import

Permissions

Search

DEMO

# Resources

## Office 365 Trust Center

Your people and your data are your most important assets and so, as you consider Office 365 for your productivity needs, we want to do our best to answer your top questions upfront. Trust Center is the place where we share our commitments and information on trust-related topics.



How does Office 365 combat emerging threats? [Find out more](#)

What controls protect data in transit? [Find out more](#)

What does it mean to own your data? [Find out more](#)

What is continuous compliance? [Find out more](#)

See more Trust Center videos [Watch now](#)

- Welcome
- Built-in security
- Privacy by design
- Continuous compliance
- Transparent operations

With Office 365, it's your data. You own it. You control it. And it is yours to take with you if you decide to leave the service. The core tenets of our approach to earning and maintaining your trust are:

### Built-in security

- Service-level security through defense-in-depth
- Customer controls within the service
- Security hardening and operational best practices

### Continuous compliance

- Proactive processes to meet your compliance needs
- Customer controls for organizational compliance
- Independently verified to meet evolving standards

### Privacy by design

- Your data is not used for advertising
- You have extensive privacy controls
- You can take your data with you when you want

### Transparent operations

- You know where your data resides and who has access
- Visibility into availability and changes to the service
- Financially backed guarantee of 99.9% uptime

Quarterly uptime : **99.98%** | [Office 365 Security white paper](#) | [Top 10 security and privacy features](#) | [Top 10 compliance standards](#) | [Privacy authorities across Europe approve Microsoft's cloud commitments](#) | [Services covered by the Office 365 Trust Center](#)

## Two resources you must know

Office 365 Trust Center <http://trust.office365.com>

Office 365 Blog <http://blogs.office.com/>

# Best practices

- Understand the customer need for security and compliance.
- Sell the right plan to meet these needs.
- Automate security and compliance configuration.
- Look to enable all the security and compliance options.

# Take aways

- Understand what security and compliance options offer.
- Enhance pitch by asking about security and compliance.
- If targeting a vertical know the industry security and compliance requirements.
- Office 365 security and compliance is always being enhanced. Stay up to date.

# Resources

- Customer Lockbox - <https://blogs.office.com/2015/04/21/announcing-customer-lockbox-for-office-365/>
- Office 365 Compliance - <https://technet.microsoft.com/en-au/library/office-365-compliance.aspx>
- Office 365 Security, Audits and Certifications – <http://www.microsoft.com/online/legal/v2/?docid=27>
- Beyond MDM – [https://www.youtube.com/watch?v=\\_X3-LEYc8Y8](https://www.youtube.com/watch?v=_X3-LEYc8Y8)
- Roadmap for information protection in Office 365 and beyond - <https://www.youtube.com/watch?v=FhmCYyCgeG4>
- Overview of Advanced Threat protection in Exchange - [https://www.youtube.com/watch?v=GEE5y9sE\\_t4](https://www.youtube.com/watch?v=GEE5y9sE_t4)
- Office 365 Message encryption - <http://blog.ciaops.com/2014/11/office-365-message-encryption.html>

# QUESTIONS / FEEDBACK?



director@ciaops.com



@directorcia