Understanding Risk in Microsoft Office 365

Our Solutions, Your Practice

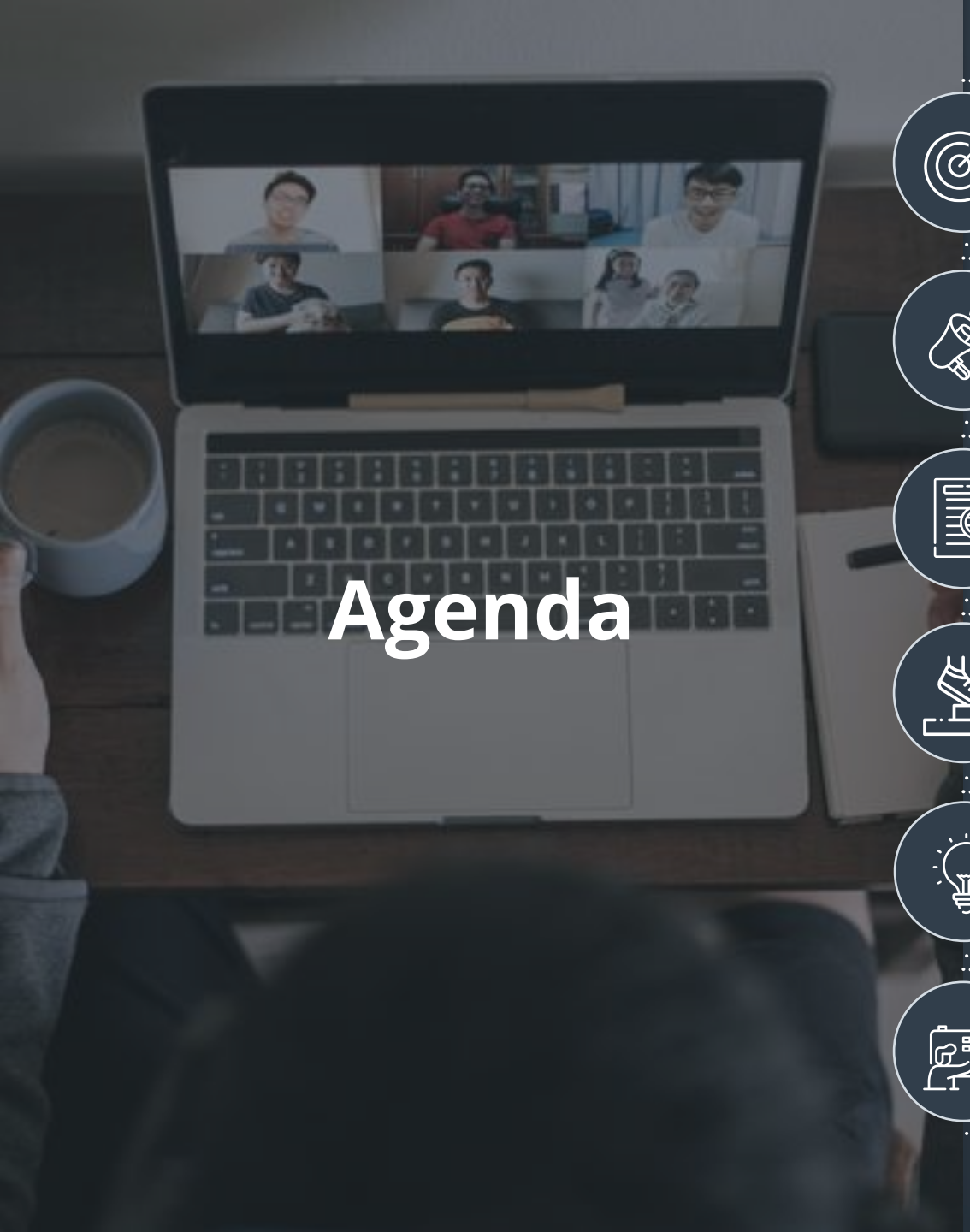
Microsoft Partner

Microsoft

Gold Application Development
Gold Collaboration and Content
Gold Cloud Productivity
Gold Messaging
Gold Datacenter

Collaborate with Confidence

Accessible content is available upon request.



Agenda

- Reasons We Secure M365
- How and Why M365 Becomes Vulnerable to Data Breaches
- How to Understand Your Risk
- Rapid Reporting on M365 Risk
- Mitigating M365 Risk
- Q&A

Why Secure Collaboration?

Budgets, Plans, Target Lists

Product Design, and Architecture

The things we collaborate on are sensitive.

Results and Analysis

Business Reviews and Strategy

We're not as protected as we think.

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Are You Exposed?

Can you pull a report to show everyone that currently has access to your sensitive business information?

Can you see who has accessed that information, and when?

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Why Should we care about M365 Risk?

$4.35 Million USD

Average Cost of a Data Breach

$5.57 Million USD

Average Cost of data Breaches for Orgs failing to comply to a Security Governance Strategy

$4.18 Million USD

Cost of a breach from Malicious Insiders- People with legitimately gained credentials to sensitive data

68 Days on Average

To contain data breaches due to Internal User action

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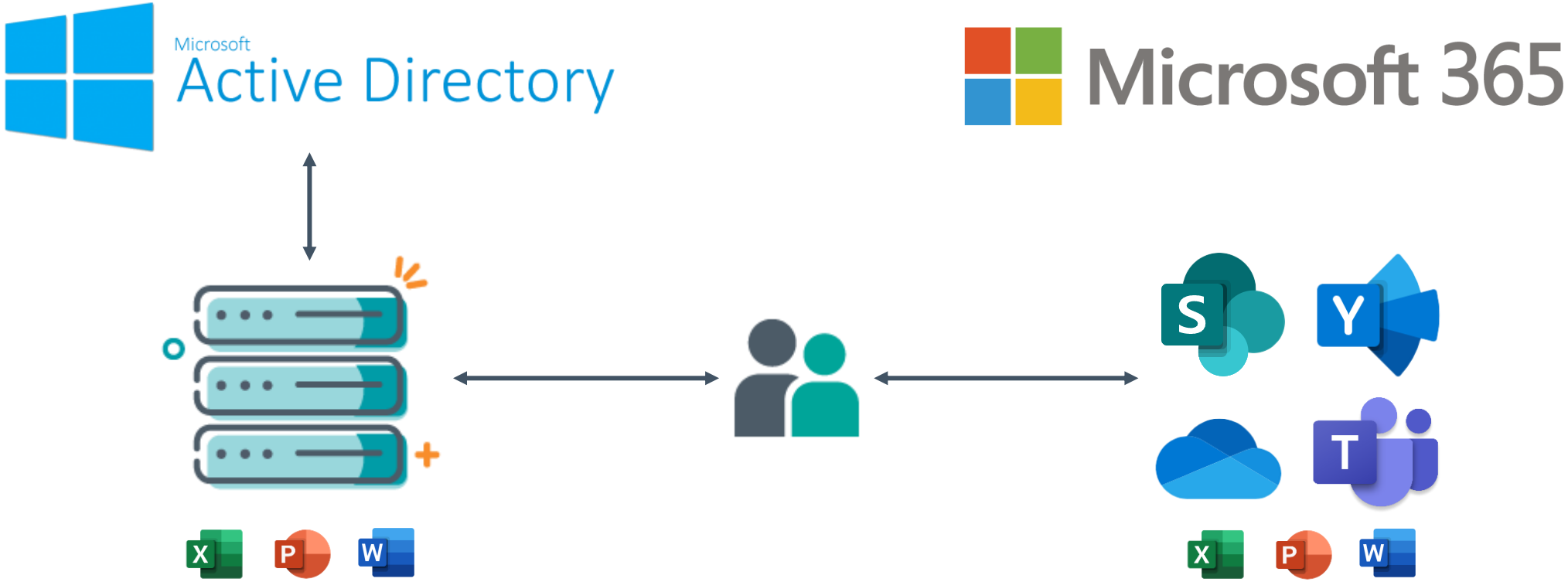
How did moving to M365 change things?



File Shares

Workspace

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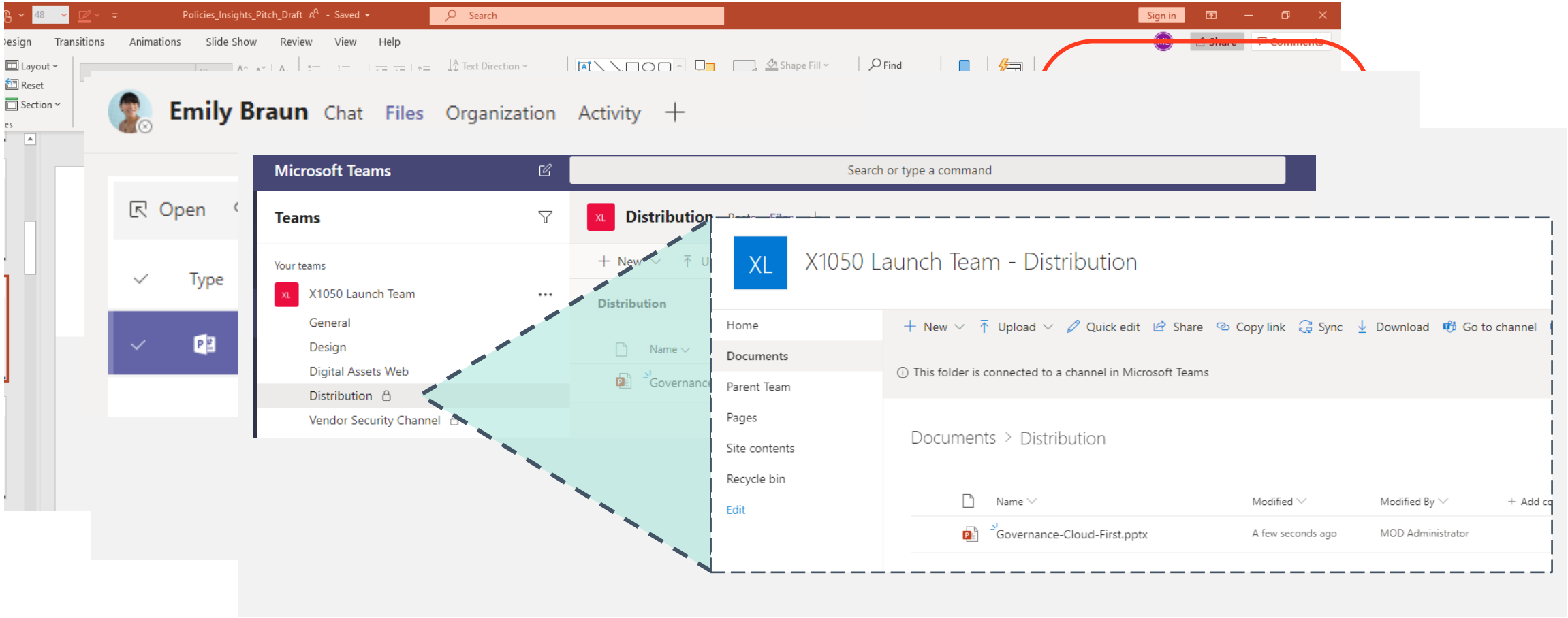
“Who has access”… Sharing is easy!

Sharing buttons in Office Apps: anonymous & unique permissions

Teams 1-1 chats: stored in OneDrive with unique permissions

Private Channels: Get their own site, unique permissions



High Risk Data Sprawl in Teams

Teams Chat

Teams Channel

Teams Private Channel

OneDrive for Business

SharePoint Document Library

Separate SharePoint Site Collection

Multiple Copies/Versions saved through development

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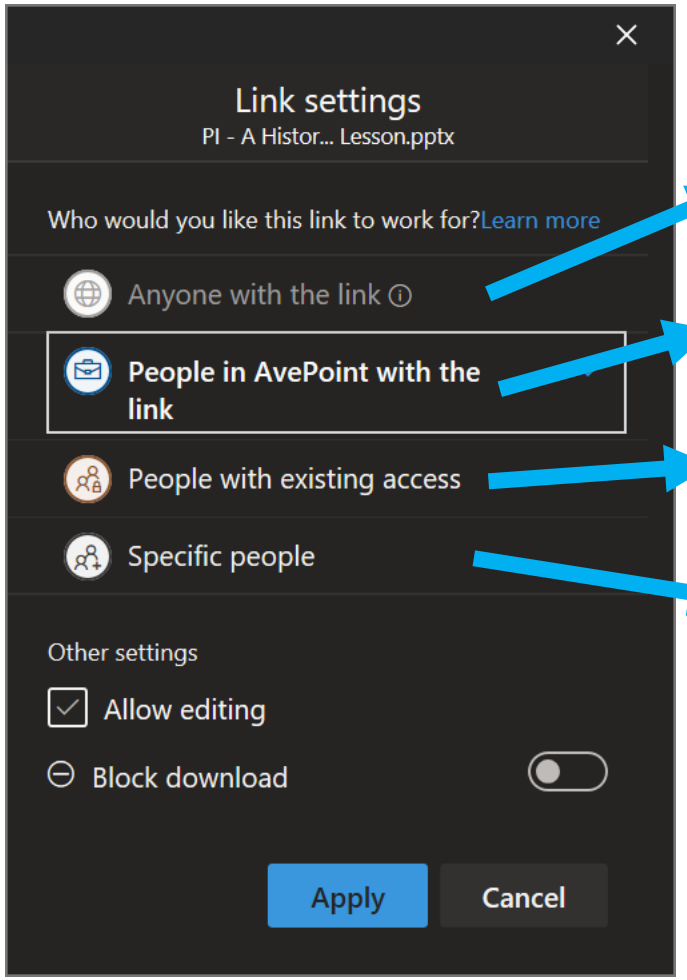
Reminder: How we got here



Anonymous Links (external too!)

- Usually disabled, but high risk if it's not!

"Everyone except external"

- Super common in migration environments (it's just easier!)

Implicit permissions from big groups

- Just who is in "PMRequest" anyway?

Explicit people hiding in the wings

- Broken inheritance is the norm in Office Apps + Teams!

Self Assessment Questions

5 What is your remediation strategy for compromised identities? — Leading Practice

4 How often is membership reviewed by Business Users? — Advanced Practice

3 How often is access reviewed by IT or other teams? — Mature Practice

2 Do we know who has access to sensitive data? — Growing Practice

1 Do we know where all our sensitive data is? — Discovery Practice

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Powershell experts can get me Permissions Reports. But, they don't tell me the whole story…

Path	Title/Name	Level	Username	Display Name	E-mail	Account Type
http://intranet/demo/Sales/Shared Documents/North East Invoices/Migration and Tagging.pptx	Migration and Tagging.pptx	Item	i:0#.w|ave\mary.preston	Mary Preston	mary.preston@ave.com	User
http://intranet/demo/Sales/Shared Documents/North East Invoices/Migration and Tagging.pptx	Migration and Tagging.pptx	Item	i:0#.w|ave\susan.adams	Susan Adams	susan.adams@ave.com	User
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http://intranet/demo/Sales/Shared Documents/North East Invoices/Migration and Tagging.pptx	Migration and Tagging.pptx	Item	i:0#.w|ave\ben.miller	Ben Miller		User
http://intranet/demo/Sales/Shared Documents/North East Invoices/Migration and Tagging.pptx	Migration and Tagging.pptx	Item	i:0#.w|ave\chris.turner	Chris Turner		User
http://intranet/demo/Sales/Shared Documents/North East Invoices/Migration and Tagging.pptx	Migration and Tagging.pptx	Item	i:0#.w|ave\wojciech.gajda	Wojciech Gajda	Wojciech.Gajda@ave.com	User
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http://intranet/demo/HR/Shared Documents/GA Slide.pptx	GA Slide.pptx	Item	i:0#.w|ave\warren.villanueva	Warren Villanueva	warren.villanueva@ave.com	User
http://intranet/demo/HR/Shared Documents/GA Slide.pptx	GA Slide.pptx	Item	i:0#.w|ave\brian.goldstein	Brian Goldstein	Brian.Goldstein@ave.com	User
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http://intranet/demo/InformationTechnology/Project Documents/AvePoint File Share Navigator vs Connect	AvePoint File Share Navigator vs C	Item	i:0#.w|ave\warren.villanueva	Warren Villanueva	warren.villanueva@ave.com	User
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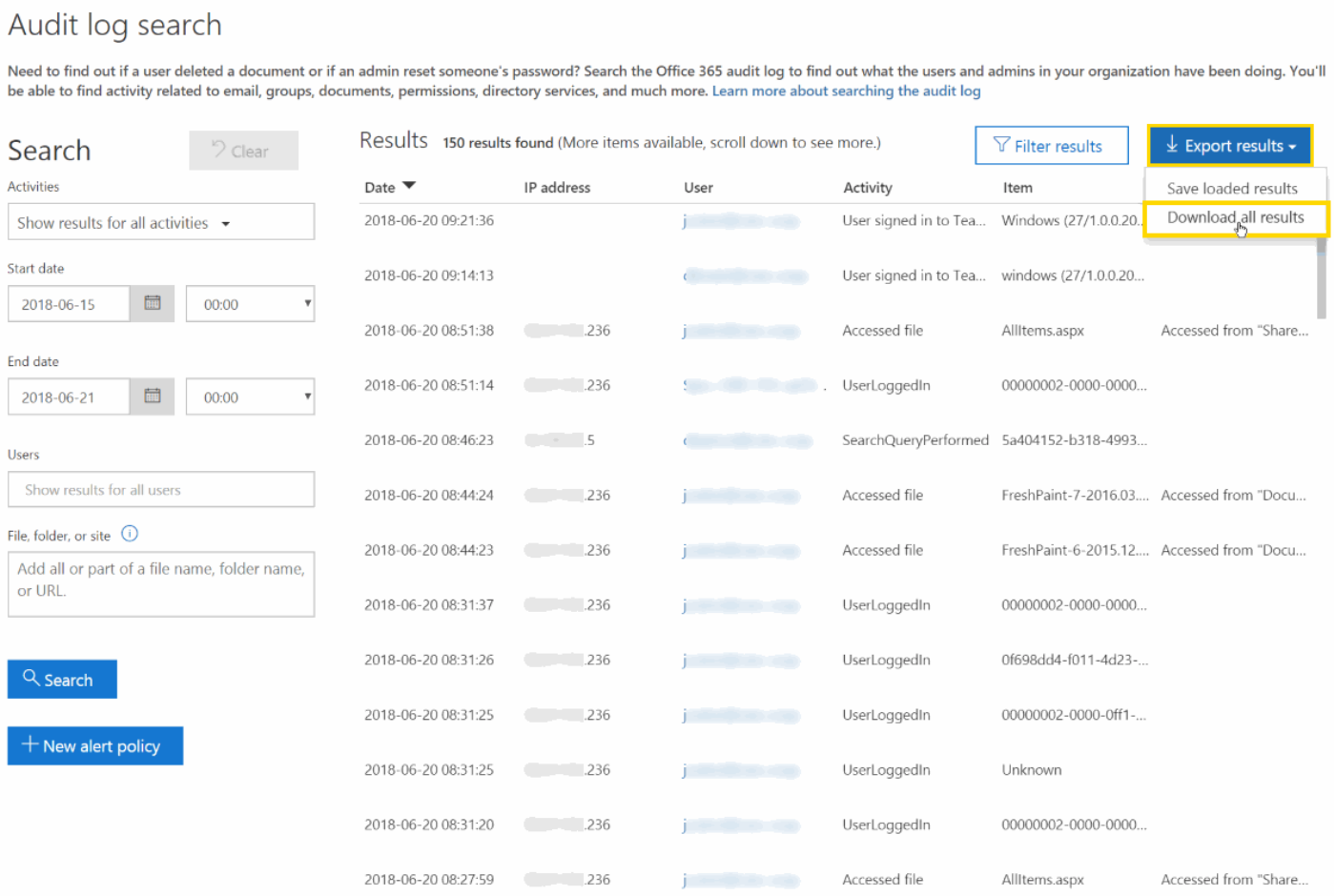
http://intranet/demo/ArchiveListlitems	ArchiveListlitems	Site	i:0#.w|ave\warren.villanueva	Warren Villanueva	warren.villanueva@ave.com	User
http://intranet/demo/ArchiveListlitems	ArchiveListlitems	Site	Excel Services Viewers	Excel Services Viewers		SharePoint Group
http://intranet/demo/ArchiveListlitems	ArchiveListlitems	Site	ArchiveListlitems Owners	ArchiveListlitems Owners		SharePoint Group
http://intranet/demo/ArchiveListlitems	ArchiveListlitems	Site	ArchiveListlitems Visitors	ArchiveListlitems Visitors		SharePoint Group
http://intranet/demo/ArchiveListlitems	ArchiveListlitems	Site	ArchiveListlitems Members	ArchiveListlitems Members		SharePoint Group
http://intranet/demo/InformationTechnology/Notification Pages	Notification List	List	i:0#.w|ave\warren.villanueva	Warren Villanueva	warren.villanueva@ave.com	User
http://intranet/demo/InformationTechnology/Notification Pages	Notification List	List	i:0#.w|ave\ben.miller	Ben Miller	Ben.Miller@ave.com	User
http://intranet/demo/InformationTechnology/Notification Pages	Notification List	List	InformationTechnology Owners	InformationTechnology Owners		SharePoint Group
http://intranet/demo/InformationTechnology/Notification Pages	Notification List	List	i:0#.w|ave\bruce.wayne	Bruce Wayne	bruce.wayne@ave.com	User

How do I prioritize? Anything sensitive in the files and sites?

Audit activity can see if bad behavior has occurred…



…but that's a lot of logs to sort through!

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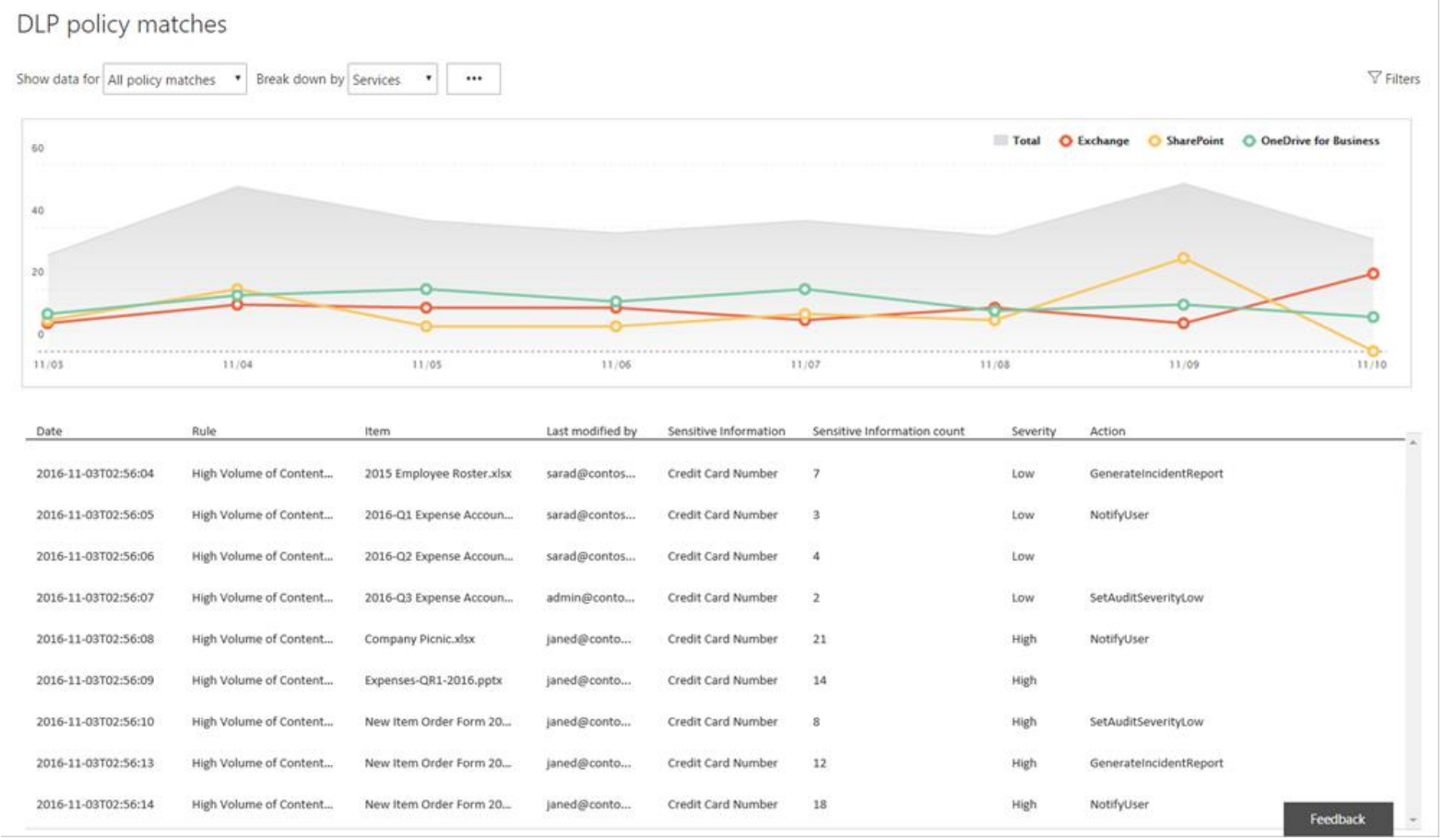
Labels give some insight…

(Sensitivity is indexed in E3. Scripting gets you access. But any action requires E5)

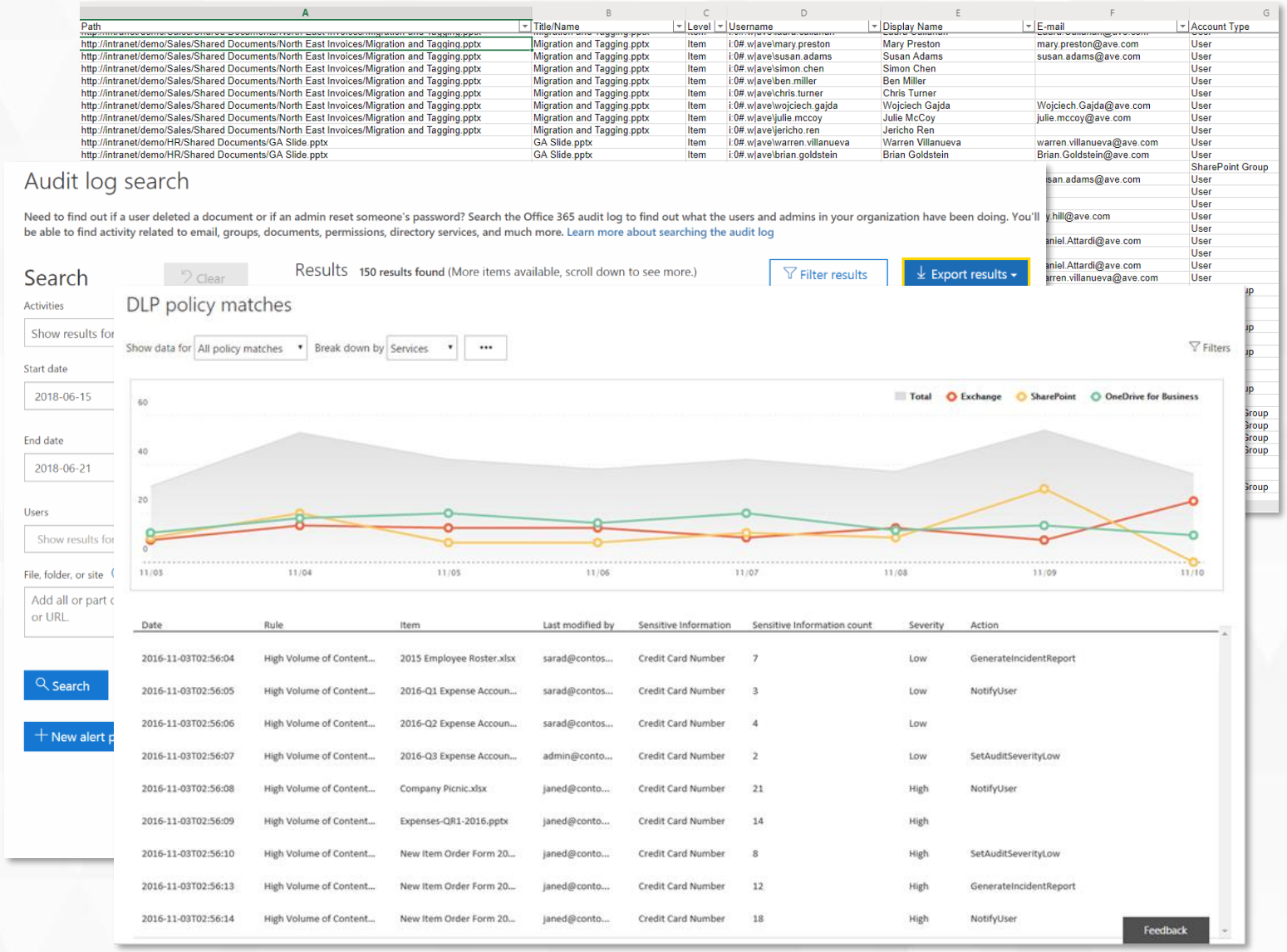


Date	Rule	Item	Last modified by	Sensitive Information	Sensitive Information count	Severity	Action
2016-11-03T02:56:04	High Volume of Content...	2015 Employee Roster.xlsx	sarad@contos...	Credit Card Number	7	Low	GenerateIncidentReport
2016-11-03T02:56:05	High Volume of Content...	2016-Q1 Expense Accoun...	sarad@contos...	Credit Card Number	3	Low	NotifyUser
2016-11-03T02:56:06	High Volume of Content...	2016-Q2 Expense Accoun...	sarad@contos...	Credit Card Number	4	Low	
2016-11-03T02:56:07	High Volume of Content...	2016-Q3 Expense Accoun...	admin@conto...	Credit Card Number	2	Low	SetAuditSeverityLow
2016-11-03T02:56:08	High Volume of Content...	Company Picnic.xlsx	janed@conto...	Credit Card Number	21	High	NotifyUser
2016-11-03T02:56:09	High Volume of Content...	Expenses-QR1-2016.pptx	janed@conto...	Credit Card Number	14	High	
2016-11-03T02:56:10	High Volume of Content...	New Item Order Form 20...	janed@conto...	Credit Card Number	8	High	SetAuditSeverityLow
2016-11-03T02:56:13	High Volume of Content...	New Item Order Form 20...	janed@conto...	Credit Card Number	12	High	GenerateIncidentReport
2016-11-03T02:56:14	High Volume of Content...	New Item Order Form 20...	janed@conto...	Credit Card Number	18	High	NotifyUser

… but must aggregate with permissions for a better picture. And, has it been accessed?

How do we prioritize risk today?

- PowerShell can assist Admins in identifying current permissions in M365
- Audit logs can tell us what happened for any item in M365
- DLP Reports can help us in identifying what is sensitive in M365



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In summary, to find who has access to what, and understand if there is a problem, I must…

Aggregate and compare

- Inherited Permissions (Via SP, AD Groups)
- Explicit Permissions (Audits or PS Reports)
- PS Report on External or Internal links

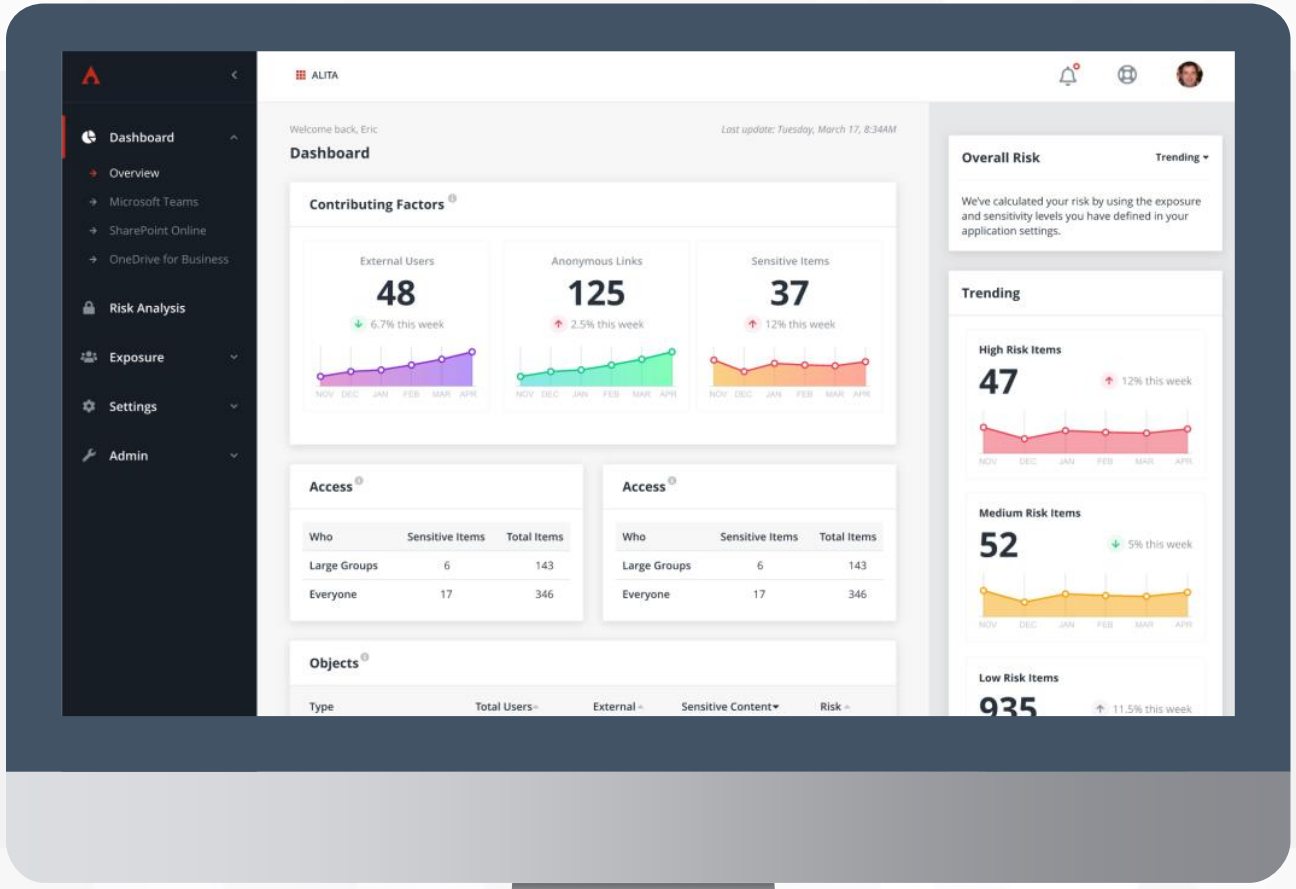
With sensitive file locations

- DLP Compliance Reports
- Sensitivity Labels
- Retention Labels

Then to be safe, I need to run an activity audit

Make Collaboration Secure

AvePoint
Policies & Insights
For Microsoft 365



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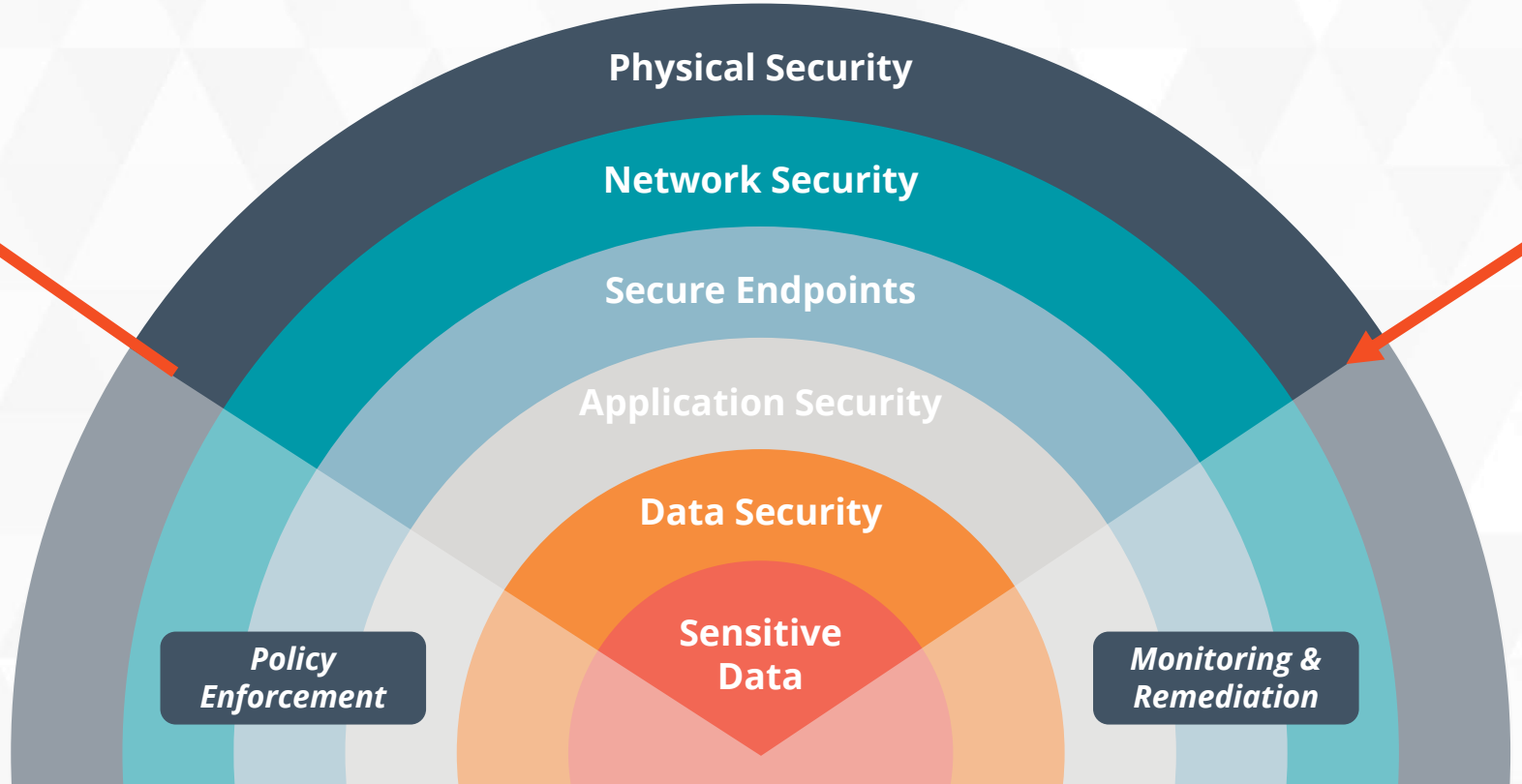
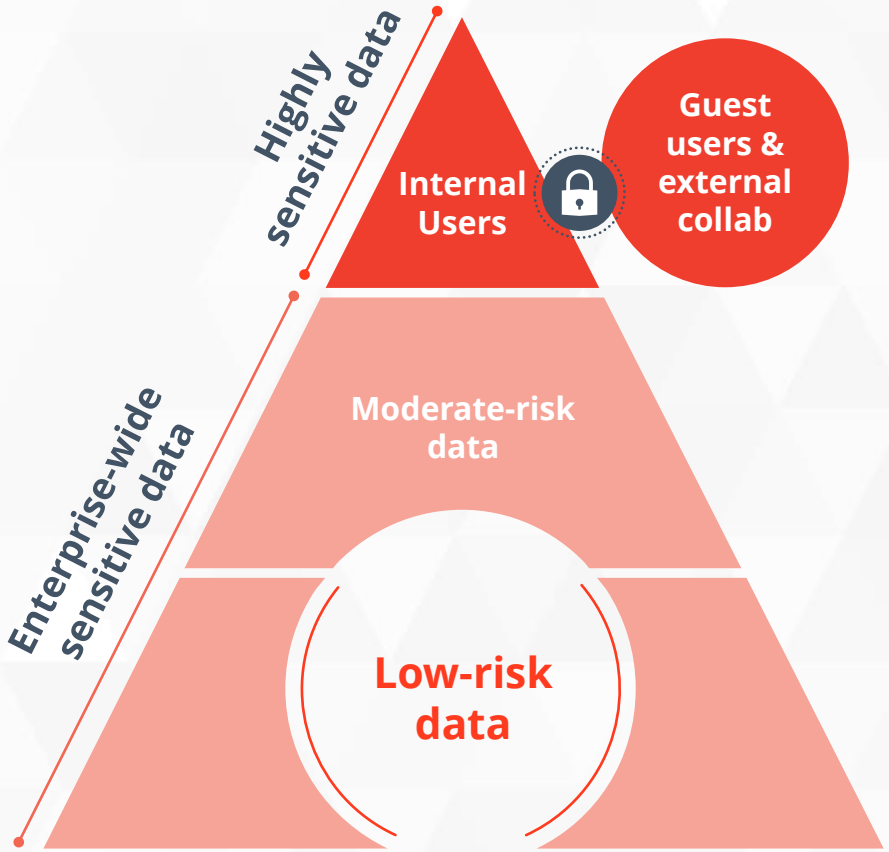
Being Specific with Risk.

What has been shared internally that is sensitive?



What do External users have access to inside of my environment?

Rapidly Reporting on M365 Risks



Managing Sensitive Content

- **PII, PCI, PIPEDA, GDPR, etc.**
- Client Information and Proposals
- Financial Records and Budgets
- Board Reports
- Strategic Roadmap
- Price Lists, Vendor Contracts, etc.

Controlling Exposure

- How *many* users internally have access to sensitive data?
- Regular Review of Anonymous Links shared
- Right External settings for the right Teams
- Routine Review of Guest Users in M365

Sensitive data management is an organic extension of AvePoint's expertise

Risk Assessment Report

Companyz

Risk Summary

What does risk mean for your organization?

The Overall Risk analyzes your organization external risk by looking at external guests or content shared outside against potential sensitive or confidential information as set by your Administrator according to rules for Microsoft 365 usage.

This helps to prioritize your risk to focus on what is important to your business.

Overall Risk

EXPOSURE \ SENSITIVITY		
13	8	57
6	4	0
62	84	0

SENSITIVITY

SENSITIVE ITEMS
167
8 in last 7 days

EXTERNAL LINKS
76
2 in last 7 days

EXTERNAL USERS IN AAD
19
18 in last 7 days

HIGH RISK ITEMS
146
17 in last 7 days

MEDIUM RISK ITEMS
13
106 in last 7 days

Direct Access Sharing

SHARED WITH	SENSITIVE ITEMS
Everyone	13

External Users with Highest Risk

NAME	SENSITIVE ITEMS
Adele Vance	96

Remediation Examples

Guest & External Link Remediation

Companyz

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EXPOSURE

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SENSITIVE ITEMS	EXTERNAL LINKS	EXTERNAL USERS IN AAD
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HIGH RISK ITEMS	MEDIUM RISK ITEMS
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17 in last 7 days	106 in last 7 days

Direct Access Sharing

SHARED WITH	SENSITIVE ITEMS
Everyone	13

External Users with Highest Risk

NAME	SENSITIVE ITEMS
Adele Vance	96

Exposure / External Links

Total

Show all objects with inherited permissions from parent-level sharing links

17 Total

Link Type	Number of Links
Anonymous Link	11
Links for Specific External Users	6

Unshare

Name | Shared By | Shared With | Inherit Fi

Unique

Unique

Exposure / External Users

Dashboard | Details

Total External Users in Azure AD

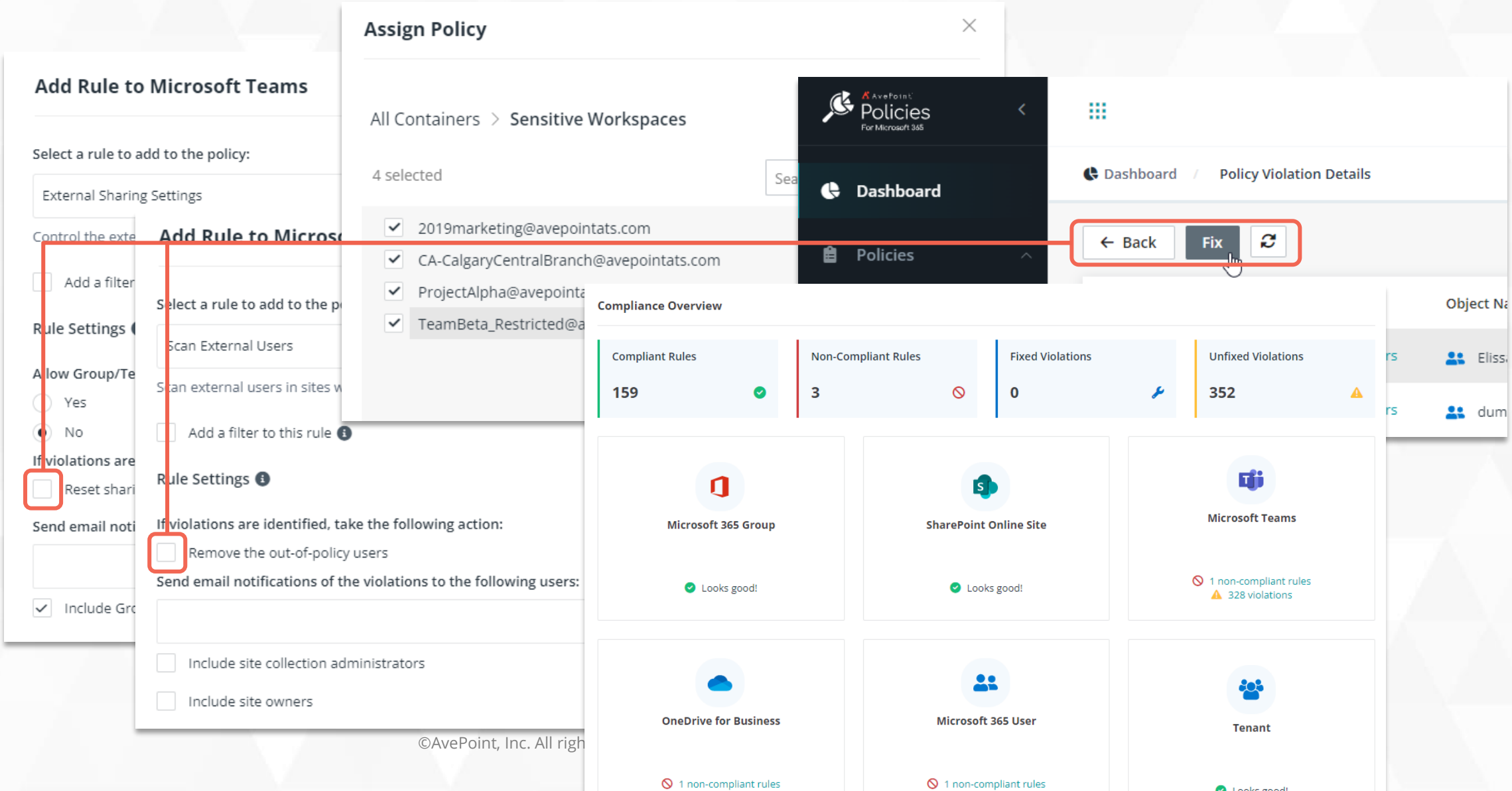
Export

Remove User from Azure AD

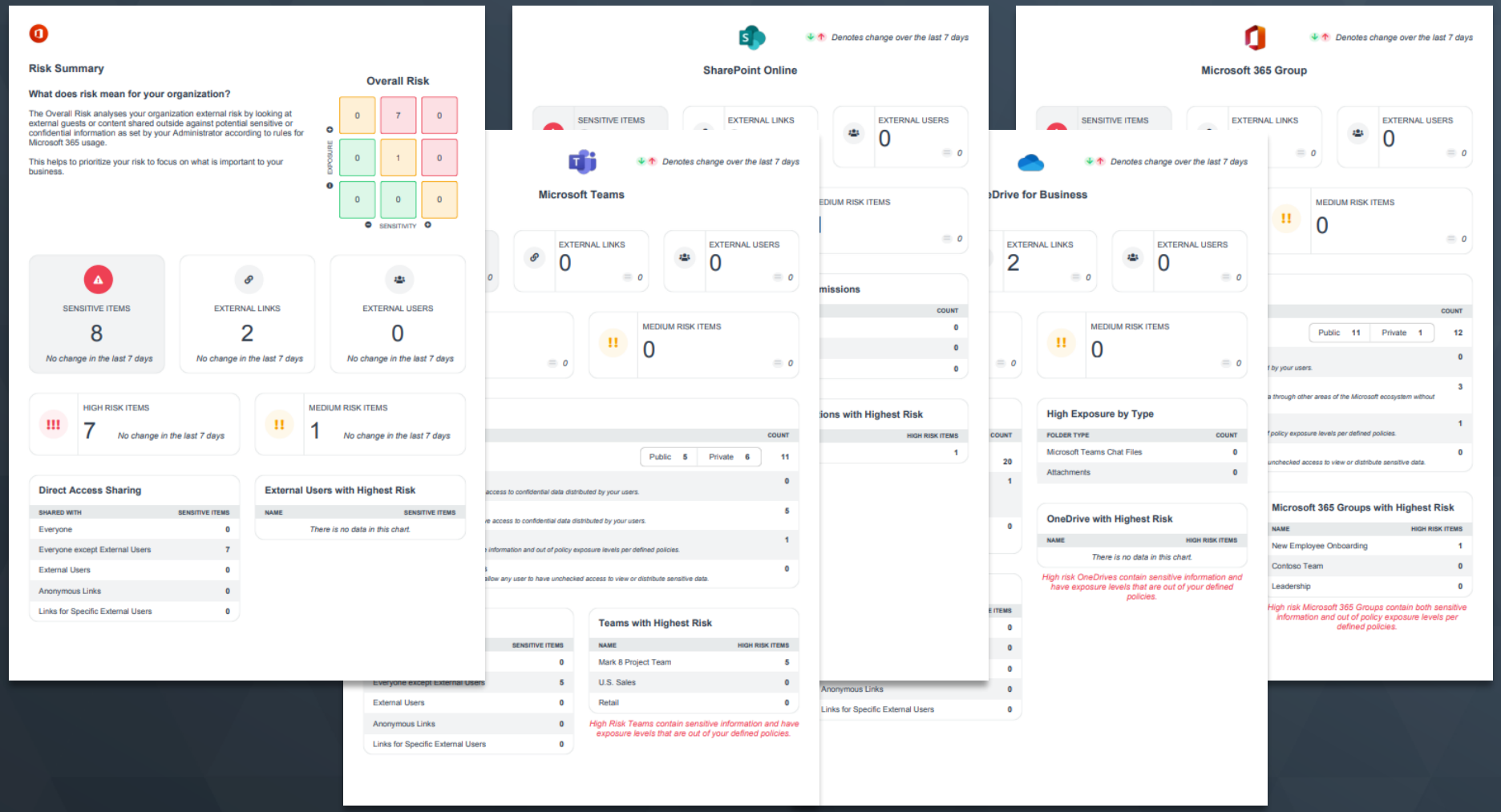
Display Name	Email	Sensitive Items
Murugan Balaji	murugan.balaji@avepoint.com	90
Murugan Balaji	murugan.balaji@avepointats.com	52
antoine.snow	antoine.snow@avepointats.com	52
michael.wit	michael.wit@avepointats.com	6

Confidentia

Guest & External Link Automation



Built-In Executive Brief



Presenting Risk

Concise and Actionable documentation allowing organizations to conduct remediation independently.

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Enforce Governance Policies

Access & Security

- Scan and remove External Users in Teams
- Prevent Direct Sharing in Teams with sensitive data
- Remove Shadow users access to SharePoint data

Governance

- Manage and enforce Teams Settings inside of M365
- Enforce Teams Provisioning controls managing Sprawl
- Restrict Content Uploads based on size, type, user, etc.

Expiration

- Control user ability to Delete Teams & Site Collections
- Replace user permissions to assign to another.
- Intuitive overview of permissions/hierarchy/teams

Better Together. When it comes to managing sensitive data throughout the M365 lifecycle, build on the power of your AvePoint stack to improve efficiencies and reduce costs.

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