



Insider threat: First Aid for a Misunderstood Risk Vector

Tatu Seppälä



★ Data security

★ Insider risk

Power Platform

Governance

IAM / Entra ID

Generative AI



The Digital
Neighborhood



Tatu Seppälä

Security & Compliance Architect



Microsoft®
Most Valuable
Professional



By 2027,

70% of organizations will combine **data loss prevention and insider risk management disciplines with IAM context** to identify suspicious behavior more effectively.

[Gartner, 3/2024](#)



Agenda

- > Insider risk vs. insider threat
- > It's all about indicators
- > The intentional insider
- > Connecting the dots
- > The unintentional insider
- > What's next?



Insider risk vs. insider threat



What is an 'insider'?

- > Any person who **has or previously had..**
- > **..authorized access to or knowledge of..**
- > the organization's resources, including **people, processes, information, technology and facilities.**



⚠ Insider risk

- > The **potential** for any individual..
- > ..who has or previously had..
- > ..authorized access to or knowledge of an organization's assets..
- > ..to act (or not act), either **maliciously** or **unintentionally**..
- > ..in a way that could cause harm or loss to an organization.



Insider threat

> An insider, or group of insiders, that either **intends to** or **is likely to** cause harm or loss to the organization.



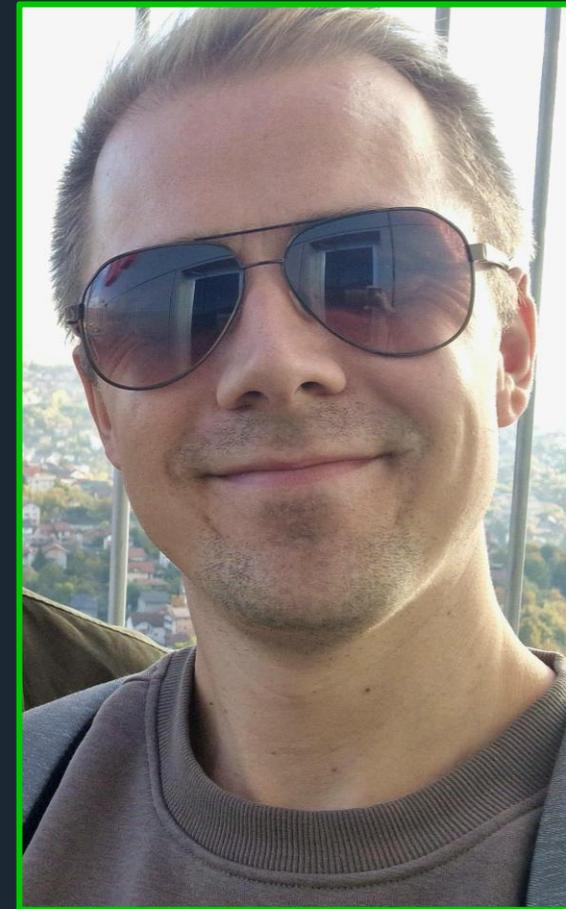
The typical threat

- > 🙂 Male
- > 🧑 31-45yo
- > 🎓 University graduate
- > 📁 Permanent staff – **not C-level**
- > Customer service, security or financial dept.
- > Employed for <5y
- > Self-initiated: identified opportunity *after* being hired
- > Threat activity ongoing for <1y when detected



The typical threat

- > 🙂 Male
- > 🧑 31-45yo
- > 🎓 University(*ish*) graduate
- > 📁 Permanent staff – **not C-level (yet..)**
- > Customer service, security or financial dept.
- > Employed for <5y
- > Self-initiated: identified opportunity *after* being hired
- > Threat activity ongoing for <1y when detected



The intentional insider



Topics: The intentional insider

- >  RAT & the criminology angle
- > Motivators, triggers and threat activities
- > Case examples & first aid



Routine Activities Theory

***Partly our
job***

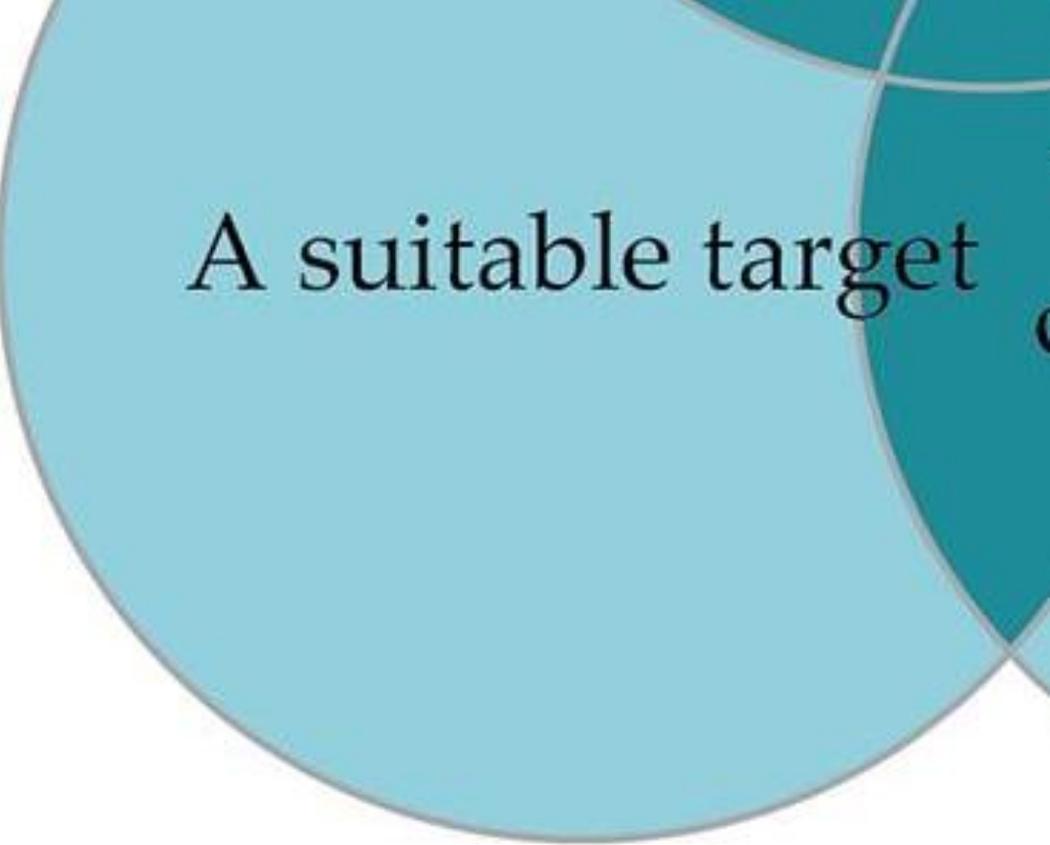


Our job



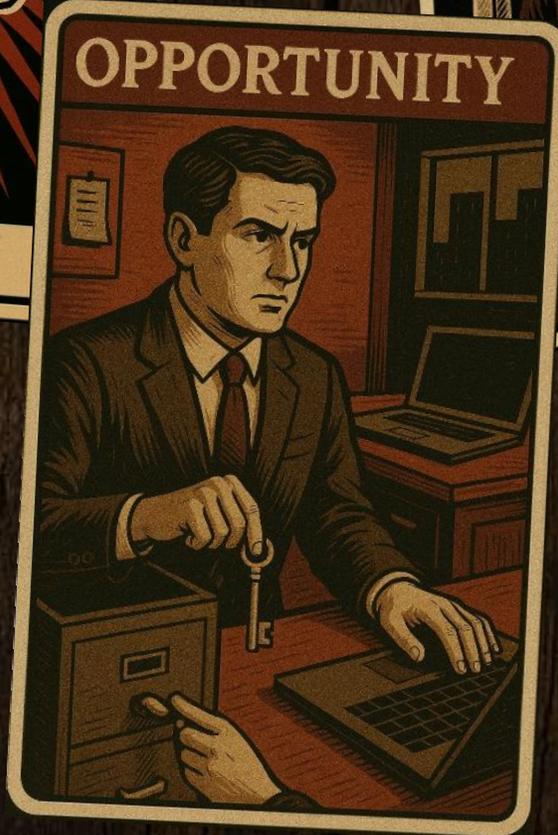
The **VIVA** model

- > **Value** – target desirability
- > **Inertia** – how simple target is to take
- > **Visibility** – how noticeable target is
- > **Access** – how easy target is to get to

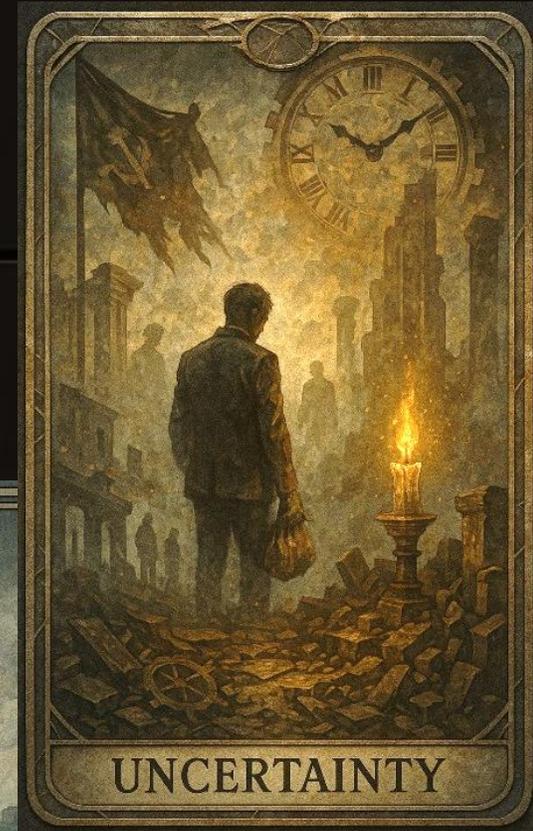
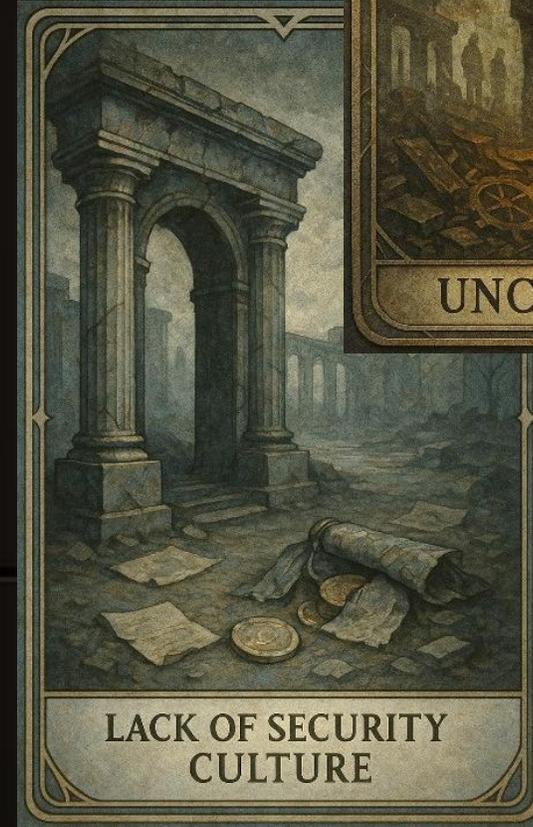


A suitable target

Motivators



Triggers



Threat activities



Predisposing factors for motivations

- > **Dark triad personality traits**
 - **Narcissism** → Ego, Revenge
 - **Machiavellianism** → Greed, Opportunity
 - **Psychopathy** → Greed, Opportunity, Revenge
- > **Impulsiveness** → Opportunity
- > **Vengefulness** → Revenge
- > **Over-achievement** → Ego
- > Paranoia
- > ...

Ephialtes of Trachis

- > Battle of Thermopylae (480BCE)
- > Betrayed the Greek army, revealing a flanking path to the Persians
- > Primary motivator: **Greed** - hoped for a monetary reward

— Didn't get paid

🎬 Got into a movie though



Assassination of Julius Caesar

- Rome (44BCE)
- Two insiders close to Julius Caesar organized his assassination
- Presented act as defense of the republic against tyranny
- Primary motivator: **Ideology**

👉 Ideological rationalization lets people justify extreme insider acts



Tim Lloyd & Omega engineering

- 1996, Newark New Jersey
- Programmer & network admin activated pre-prepared software time bomb three weeks after being fired
- Deleted all design and production software, caused \$10 million in damages
- Also stole \$50k in equipment
- Primary motivator: **Revenge**



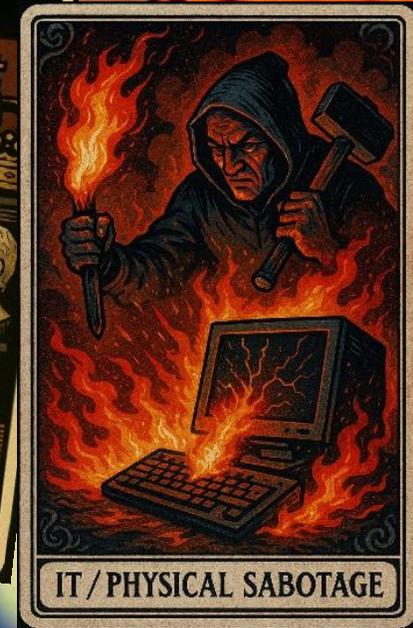
First aid

- IAM hygiene on termination
- Review automations built by / changed by user
- Require managed, compliant device



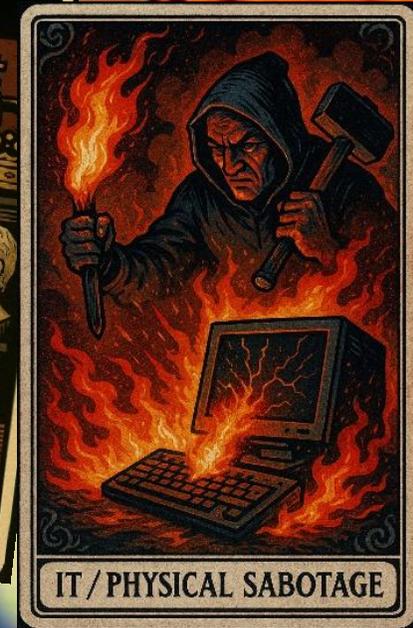
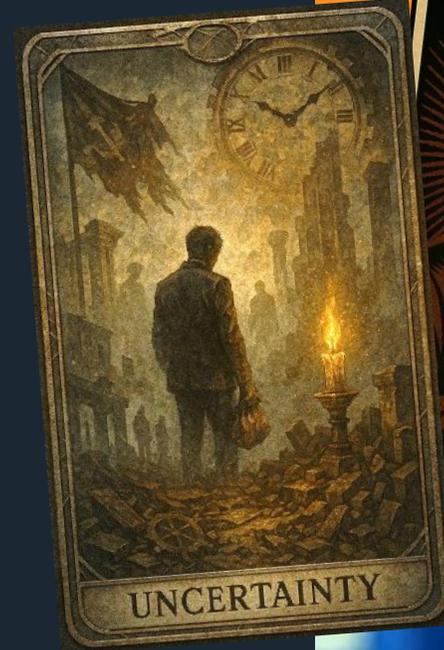
Terry Childs and the San Francisco Fik

- Engineer locked admins out of network for 12 days, “hijacked” both the network passwords and the backup configurations
- Triggers:
 - Concerned about threat of layoff
 - City discovered his lies about his criminal background
- Incident cost: \$866000
- Ultimately drew attention to ineffective security controls
- Primary motivator: **Ego**



First aid

- Implement PIM, remove standing GA privileges
- Follow least privilege, limit admin rights consolidation
- Critical admin tasks only from Privileged Access Workstations
- Offboarding playbook for individuals with privileged access
- Screening for privileged roles



Report: NSA contractor allegedly stole armory of elite hacking tools

Former NSA contractor Harold T. Martin III, who remains in jail awaiting a court case for allegedly carrying out the biggest theft of classified information in U.S. history, reportedly compromised more than 75 percent of hacking tools that were stored in a secretive library used by Tailored Access Operations, the agency's elite hacking unit, to gather intelligence.

BY CHRIS BING • FEBRUARY 7, 2017



Harold T. Martin III & the NSA

- Contractor accumulated sensitive NSA data over 20 years, total >50TB, of which dozens were secret documents
- Driven by **curiosity** and hoarding tendencies, rather than profit or malice
- Data included >75% of all hacking tools of the TAO (Tailored Access Operations) unit
- Enabled by poor access management practices and security controls on data
- Primary motivator: **Opportunity**



A capybara is the central focus of the image. It is wearing black sunglasses and a dark blue shirt with a vibrant floral pattern of red hibiscus flowers and green leaves. A wooden sign with the words "Demo time" is hanging from its neck. The capybara is looking towards the left, where the edge of a laptop is visible. The background is a soft, out-of-focus green.

Endpoint DLP restrictions

**Demo
time**



Recycle Bin



Personal

USB Drive (D:) > Personal

Search Personal

Sensitivity labels

OneDrive > Sensitivity labels

Search Sensitivit

New

Sort

View

Details

Name	Status	Date modified	Type
MISC	✓	03/11/2025 7.34	File folder
Demo file - Confidential Custom permissi...	✓	29/10/2025 23.26	Microsoft Word D...
Demo file - Confidential Internal only.docx	✓	29/10/2025 23.24	Microsoft Word D...
Demo file - Confidential Unrestricted.docx	✓	29/10/2025 23.23	Microsoft Word D...
Demo file - General.docx	✓	29/10/2025 23.23	Microsoft Word D...
Demo file - Public.docx	✓	29/10/2025 23.22	Microsoft Word D...
Demo file - Secret Custom permissions.d...	✓	29/10/2025 23.28	Microsoft Word D...
Demo file - Secret Internal only.docx	✓	29/10/2025 23.27	Microsoft Word D...
Demo file - Secret Unrestricted.docx	✓	29/10/2025 23.26	Microsoft Word D...

Date modified

Type

Size

This folder is empty.

First aid

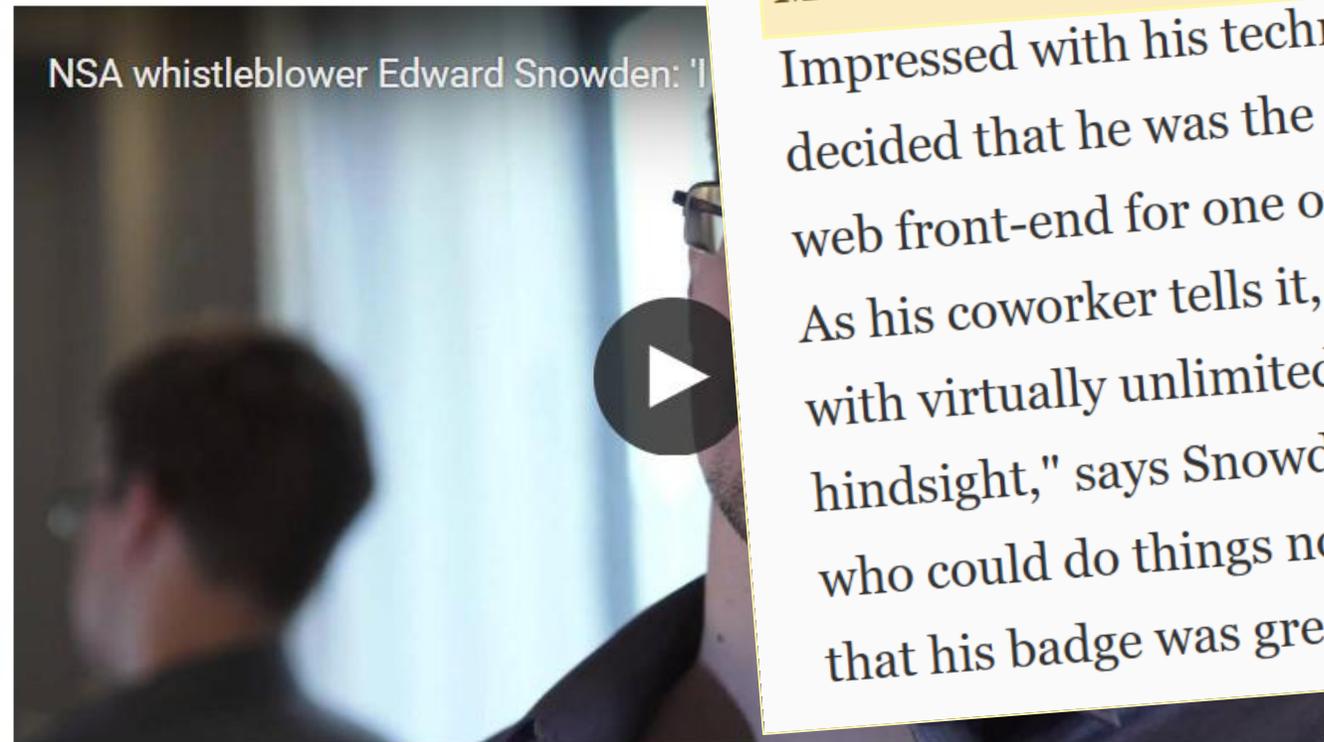
- Protect and track critical documents with Purview sensitivity labels and encryption
- Make exfiltration louder with Data Loss Prevention guardrails in M365 and endpoints
- Discover “slow drip” cumulative exfiltration patterns with Insider Risk Management
- Use Entra ID Access Packages to provide time-based access to sensitive materials



Edward Snowden: the whistleblower behind the NSA surveillance revelations

The 29-year-old source behind the largest leak in the NSA's history explains his motivation for the future and why he never intended to return to the United States

● [Q&A with NSA whistleblower Edward Snowden: 'I don't want to see home again'](#)



NSA whistleblower Edward Snowden: 'I don't want to see home again'

NSA whistleblower Edward Snowden: 'I don't want to live in a society that does these sort of things'

Snowden had been brought to Hawaii as a cybersecurity expert working for Dell's services division but due to a problem with the contract was reassigned to become an administrator for the Microsoft intranet management system known as Sharepoint. Impressed with his technical abilities, Snowden's managers decided that he was the most qualified candidate to build a new web front-end for one of its projects, despite his contractor status. As his coworker tells it, he was given full administrator privileges, with virtually unlimited access to NSA data. "Big mistake in hindsight," says Snowden's former colleague. "But if you had a guy who could do things nobody else could, and the only problem was that his badge was green instead of blue, what would you do?"

Edward Snowden & the NSA (2013)

- NSA contractor turned whistleblower, disclosed sensitive information about global surveillance programs
- Worked as **SharePoint admin** for servers used broadly by NSA analysts
- Had access to 1,7 million documents, shared up to 200,000+ with reporters
- Incl. Top Secret & Special Intelligence info
- Primary motivator: **Ideology**
 - 🔍 Ability to detect cumulative exfiltration was missing for compartmentalized information



A capybara is the central focus of the image. It is wearing black sunglasses and a dark blue shirt with a vibrant floral pattern of red hibiscus flowers and green leaves. A wooden sign is hanging from its neck, featuring the text 'Demo time' in a bold, black, sans-serif font. The capybara is looking towards the left, where the edge of a silver laptop is visible. The background is a soft, out-of-focus green, suggesting an outdoor setting. A dark blue rounded rectangle is overlaid on the right side of the image, containing the main title in white text.

Entitlement management

**Demo
time**

New access package

*** Basics** Resource roles * Requests Requestor information * Lifecycle Custom

Access package

Create a collection of resources that users can request access to.

Name * Project X admin access

Description * ⓘ asd

Catalog * ⓘ General

[Learn more.](#)

[Create new catalog](#)

New catalog

Name * Compartmentalized projects ✓

Description * ⓘ Access packages for various compartmentalized projects identified with CPRJ identifiers.

Enabled ⓘ Yes No

Enabled for external users ⓘ Yes No

★ Favorites

Entra ID

ID Protection

ID Governance

Dashboard

Entitlement management

Access reviews

Privileged Identity Management

Lifecycle workflows

Verified ID

Permissions Management

Global Secure Access

What's new

Bill

- ★ Favorites
- Entra ID
- ID Protection
- ID Governance**
- Dashboard
- Entitlement management
- Access reviews
- Privileged Identity Management
- Lifecycle workflows
- Verified ID
- Permissions Management
- Global Secure Access

New access package



- * Basics**
- Resource roles
- * Requests
- Requestor information
- * Lifecycle
- Custom extensions
- Review + create

Access package

Create a collection of resources that users can request access to.

Name * ✓

Description * ⓘ

Catalog * ⓘ ▼

[Learn more.](#)

[Create new catalog](#)





New access package ...



- * Basics
- Resource roles
- * Requests
- Requestor information
- * Lifecycle
- Custom extensions
- Review + create

Add different resources to this access package. Specify the permissions associated with each resource by selecting a role from the drop-down list. [Learn more](#)

- + Groups and Teams
- + Applications
- + SharePoint sites
- + Microsoft Entra role (Preview)
- + API Permissions (Preview)
- + Custom Data Provided Resource

Resource	Type	Sub Type	Role
----------	------	----------	------



Select groups



 Try changing or adding filters if you don't see what you're looking for.

See all Group and Team(s) not in the 'Compartmentalized projects' catalog. You must have the correct permissions to add them in this access package.

Search 

23 results found

Groups

		Name	Email
<input type="checkbox"/>		SG-DYN-AllInternals	
<input type="checkbox"/>		SG-Fabric-ServiceAccounts	
<input type="checkbox"/>		Tiedon suojausten suunnittelutiimi	Tiedonsuojauksensuunnittelutiimi@Seppala365Dev.onmicrosoft.c...
<input checked="" type="checkbox"/>		Valhalla	Valhalla@Seppala365Dev.onmicrosoft.com

Select applications



 Try changing or adding filters if you don't see what you're looking for.

See all Application(s) not in the 'Compartmentalized projects' catalog. You must have the correct permissions to add them in this access package.

Search 

10 results found

Enterprise applications

	Name	Details
<input type="checkbox"/>	 Adobe Acrobat Reader	cad2910c-3b55-4610-ba7e-dda581063c91
<input type="checkbox"/>	 asdasd	1e6a6416-35cb-44c9-bdf2-20f036e8a2d1
<input checked="" type="checkbox"/>	 Graph Explorer	de8bc8b5-d9f9-48b1-a8ad-b748da725064
<input checked="" type="checkbox"/>	 IRM-HRConnector	6ec999eb-2a2c-42cd-9154-2fbb2ccabefe

Select

New access package ...

* Basics Resource roles * Requests Requestor information * Lifecycle C

Add different resources to this access package. Specify the permissions associated with each by selecting a role from the drop-down list. [Learn more](#)

+ Groups and Teams + Applications + SharePoint sites + API Permissions (Preview) + Custom Data Provided Resource

Resource	Type	Sub Type
Valhalla	Group and Team	Team
Graph Explorer	Application	Application
IRM-HRConnector	Application	Application

Select SharePoint Online sites ✕

- See all SharePoint Site(s) not in the 'Compartmentalized projects' catalog. You must have the correct permissions to add them in this access package.

Select ⓘ

- Valhalla
https://seppala365dev.sharepoint.com/sites/Valhalla
- Valhalla-Example shared channel
https://seppala365dev.sharepoint.com/sites/Valhalla-Examples...

Selected resources (1)

- Valhalla
https://seppala365dev.sharepoint.com/sites/Valhalla Remove

New access package ...

* Basics Resource roles * Requests Requestor information * Lifecycle C

Add different resources to this access package. Specify the permissions associated with each resource by selecting a role from the drop-down list. [Learn more](#)

+ Groups and Teams
+ Applications
+ SharePoint sites
+ API Permissions (Preview)
+ Custom Data Provided Resource

Resource	Type	Sub Type
Valhalla	Group and Team	Team
Graph Explorer	Application	Application
IRM-HRConnector	Application	Application
Valhalla	SharePoint Site	Site

Select Microsoft Entra roles (P...)

See all Microsoft Entra role(s) not in the 'Compartmentalized projects' catalog. You must have the correct permissions to add them in this access package.

Select ⓘ

- Create and manage all aspects of Global Secure Internet Access... ▲
- Global Secure Access Log Reader**
Provides designated security personnel with read-only access t...
- Groups Administrator
Members of this role can create/manage groups, create/manaq...

Selected resources (1)

- Global Secure Access Log Reader
Provides designated security personnel with read-only ... [Remove](#)

New access package



* Basics Resource roles * Requests Requestor information * Lifecycle Custom extensions Review + create

Add different resources to this access package. Specify the permissions associated with each resource by selecting a role from the drop-down list. [Learn more](#)

- + Groups and Teams
- + Applications
- + SharePoint sites
- + Microsoft Entra role (Preview)
- + API Permissions (Preview)
- + Custom Data Provided Resource

Resource	Type	Sub Type	Role *	
Valhalla	Group and Team	Team	Member	
Graph Explorer	Application	Application	Default Access	
IRM-HRConnector	Application	Application	Default Access	
Valhalla	SharePoint Site	Site	Valhalla Visitors	
Global Secure Access Log Reader	Microsoft Entra role	Built-In	Eligible Member	

New access package ...



- * Basics
- Resource roles
- * Requests**
- Requestor information
- * Lifecycle
- Custom extensions
- Review + create

Create a policy to specify who can request an access package, who can approve requests, and when access expires. Additional request policies can be created. [Learn more](#)

Who can get access

Who can get access *

- For users, service principals, and agent identities in your directory
Allow users, groups, service principals, and agent identities in your directory to get access to this access package
- For users not in your directory
Allow users in connected organizations (other directories and domains) to get access to this access package
- None (administrator direct assignments only)
Allow administrators to directly assign specific users to this access package. No subjects can get access without being explicitly assigned by administrator.

Who can request access

Who can request access *

Review + create

Previous

Next: Requestor Information >

New access package ...



Approval

Require approval * ⓘ

Yes No

Require requestor justification ⓘ

Yes No

How many stages ⓘ

1 2 3

First Approver

Choose specific approvers

Select approvers ⓘ

[Odin Allfather](#)

* [+ Add approvers](#)

Decision must be made in how many days? * ⓘ

Maximum 14

Require approver justification ⓘ

Yes No

Review + create

Previous

Next: Requestor Information >

Assign access package to identities

CPRJ-1257

Assignment ends on ⓘ

Business justification * ⓘ

Project lead for project.

User information *

Zero of two user information answered. [View and edit user information](#)

User information



All fields marked with * are required.

Question

Answer

Feats of strength in battle *

Preferred type of ale

Add

Save

Cancel

New access package



- * Basics
- Resource roles
- * Requests
- Requestor information**
- * Lifecycle
- Custom extensions
- Review + create

Collect information and attributes from requestor. Go to Catalogs to add attributes for this access package's catalog resources. [Learn more](#)

- Questions**
- Attributes

Question *	Add localization	Answer format *	Multiple choice options	Regex pattern (Preview)	Required
Feats of strength in battle *	add localization	Long text		<input type="text" value="Enter regex pattern"/>	<input checked="" type="checkbox"/>
<input type="text" value="Preferred type of ale"/> ✓	add localization	<input type="text" value="Short text"/> ▼		<input type="text" value="Enter regex pattern"/>	<input type="checkbox"/>
<input type="text" value="Enter question"/>	add localization	<input type="text" value="Answer format"/> ▼			<input type="checkbox"/>



Review + create

Previous

Next: Lifecycle >

New access package



* Basics Resource roles * Requests Requestor information * **Lifecycle** Custom extensions Review + create

i Your access package contains resource roles related to Microsoft Entra Privileged Identity Management (PIM), please ensure your PIM role settings for assignment expiration are aligned with your access package assignment expiration setting. [Learn more](#)

Expiration

Access package assignments expire ⓘ

On date **Number of days** Number of hours Never

Assignments expire after (number of days) *

180 ✓

Users can request specific timeline * ⓘ

Yes No

[Show advanced expiration settings](#)

Access Reviews

Require access reviews

Review + create

Previous

Next: Rules >

New access package



- * Basics
- Resource roles
- * Requests
- Requestor information
- * Lifecycle
- Custom extensions
- Review + create**

Summary of access package configuration

Basics

Name CPRJ-1257
Description Access to materials for CPRJ-1257
Catalog name Compartmentalized projects

Resource roles

Resource	Type	Sub Type	Role
Valhalla	Group and Team	Microsoft 365 Teams Group	Member
Graph Explorer	Application	Application	Default Access
IRM-HRConnector	Application	Application	Default Access
Valhalla	SharePoint Site	SharePoint Online Site	Valhalla Visitors

Previous

Create



Tatu Seppälä
tatu@Seppala365Dev.onm...

Access packages

Access groups and teams, SharePoint sites, applications, and more in a single package. Select from the following packages, or search to find what you're looking for.

My Account

My Apps

My Groups

My Access

Overview

Access packages

Request history

Approvals

Access reviews

Give feedback

Suggested **Active (1)** Expired (0) View all

Name ↑	Description	Resources	Start date	End date	Actions
CPRJ-1257	Access to materials for CPRJ-1257	Valhalla, Global Secure Access Log...	Nov 19, 2025	May 18, 2026	...

myaccess.microsoft.com

My roles | Microsoft Entra roles

Privileged Identity Management | My roles

Refresh Open in mobile | Got feedback?

Activate

Microsoft Entra roles

Groups

Azure resources

Troubleshooting + Support

Eligible assignments

Active assignments

Expired assignments

Search by role

Role	↑↓ Scope	↑↓ Membership	↑↓ End time	Action
Global Secure Access Log Reader	Directory	Direct	Permanent	Activate



First aid

- Limit access to compartmentalized information with **access packages** and encrypting **sensitivity labels**
- Mandate monitored **Privileged Access Workstations** for admin tasks
- Deploy **Insider Risk Management** to detect and investigate anomalous content access and collection patterns



CrowdStrike (11/25)

- Company insider shared screenshots on internal Okta systems with threat actor *Scattered Lapsus\$ Hunters*
- Initial info says threat actor offered \$25,000 to the insider to provide access to CrowdStrike network
- Threat actor received SSO auth cookies from insider but they had already been detected & access had been removed
- Primary motivator: **Greed?**

CROWDSTRIKE





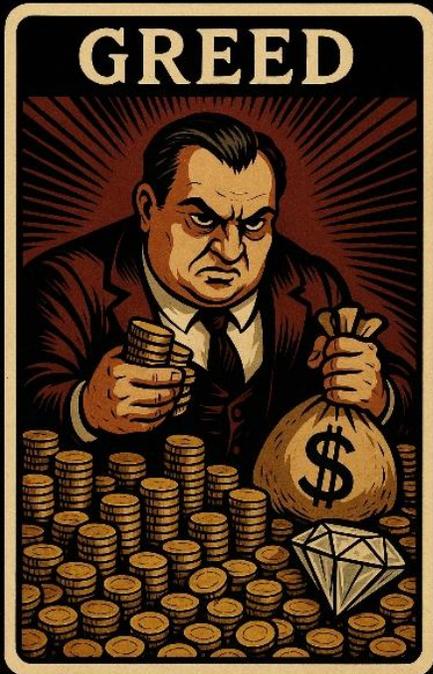
“We made a critical mistake. We assumed that outsider external threats were **different** in kind than insider threats.

My view today is they are exactly the same.”

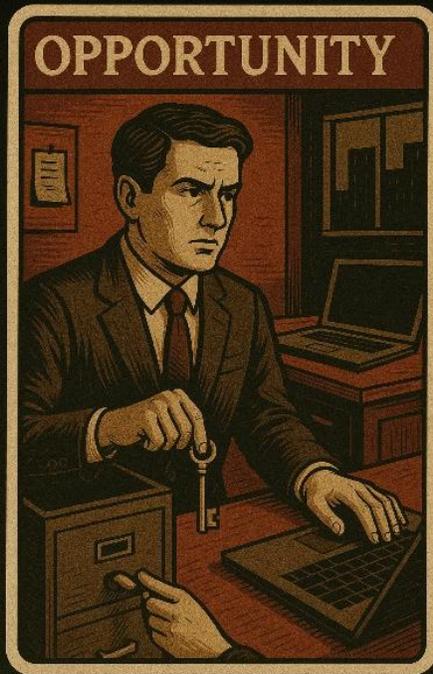
Chris Inglis

Former deputy director, NSA



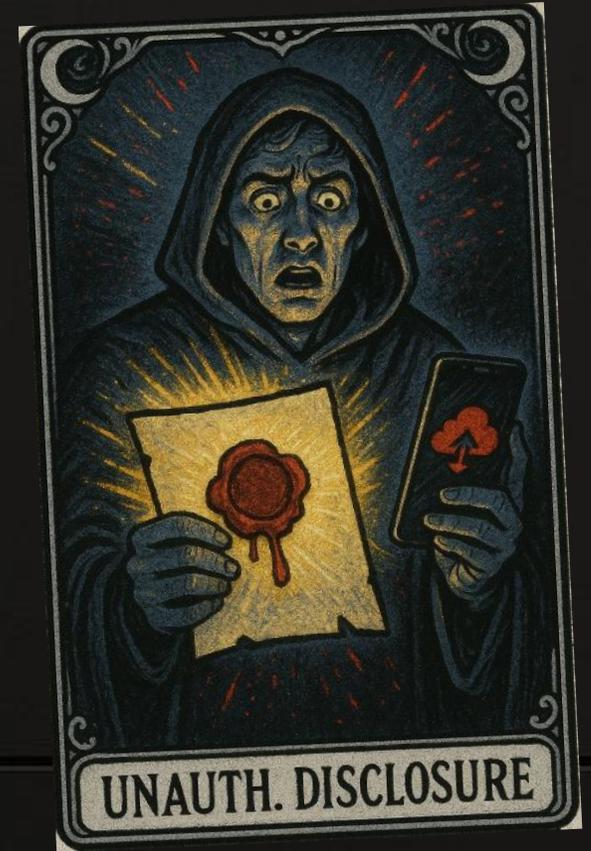
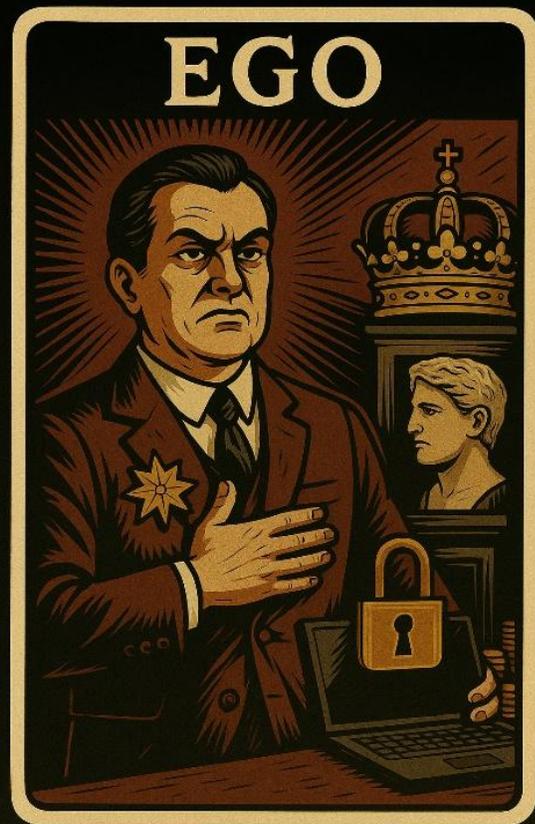


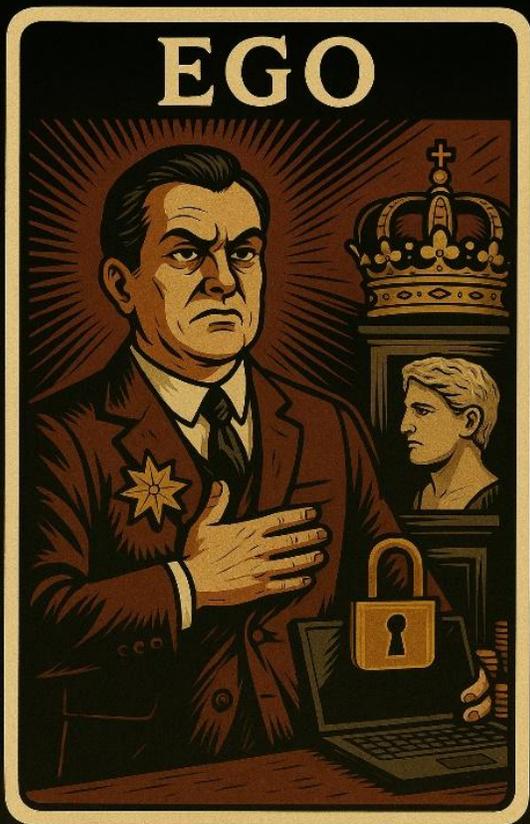
+



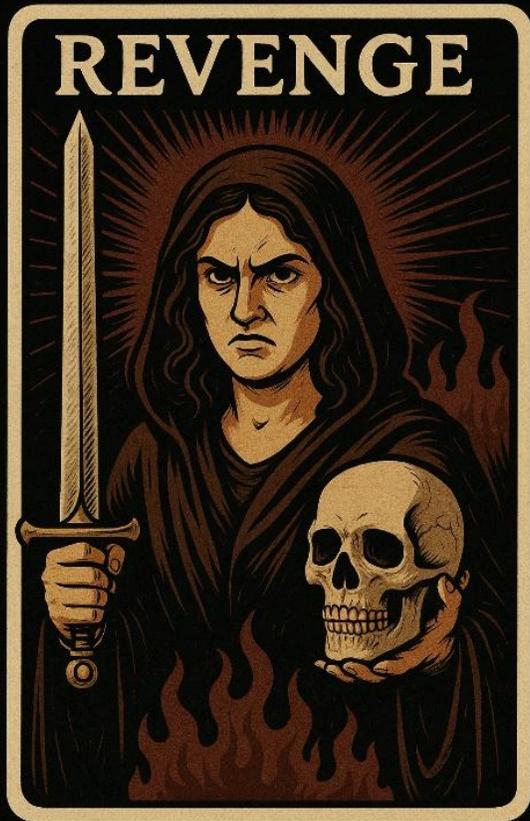


+





+



Connecting the dots



It's all about indicators

> Technical

- Mass download / exfiltration of sensitive data
- Unjustified escalation of privileges
- Anomalous access patterns
- Physical access attempts after termination or job level change

> Behavioral

- Excessive absences
- Anomalous working hours
- Anti-social behavior
- Bypassing instructions
- Poor performance
- Untruthfulness / lies

A capybara is shown in profile, facing left. It is wearing black sunglasses and a dark blue shirt with a vibrant floral pattern of red hibiscus flowers and green leaves. A wooden sign is hanging from its neck, attached to a wooden stick. The sign has the words "Demo time" written on it in a bold, black, sans-serif font. The background is a soft, out-of-focus green. In the bottom left corner, the edge of a silver laptop is visible.

Audit logging

**Demo
time**

Indicator event source tier list



Device events

Microsoft 365 / Office events

Critical



Defender for Endpoint security events

Power BI & Fabric events

OK



Defender for Cloud Apps

Risky browsing

Physical access

Health record access

Situational



Device events

Onboard devices to
Microsoft Purview!

- > Creating or copying files to USB
- > Using a browser to upload files to the web
- > Copying files over RDP & Bluetooth
- > Printing documents
- > Deleting files from the endpoint

...

Most data is exfiltrated w/ these

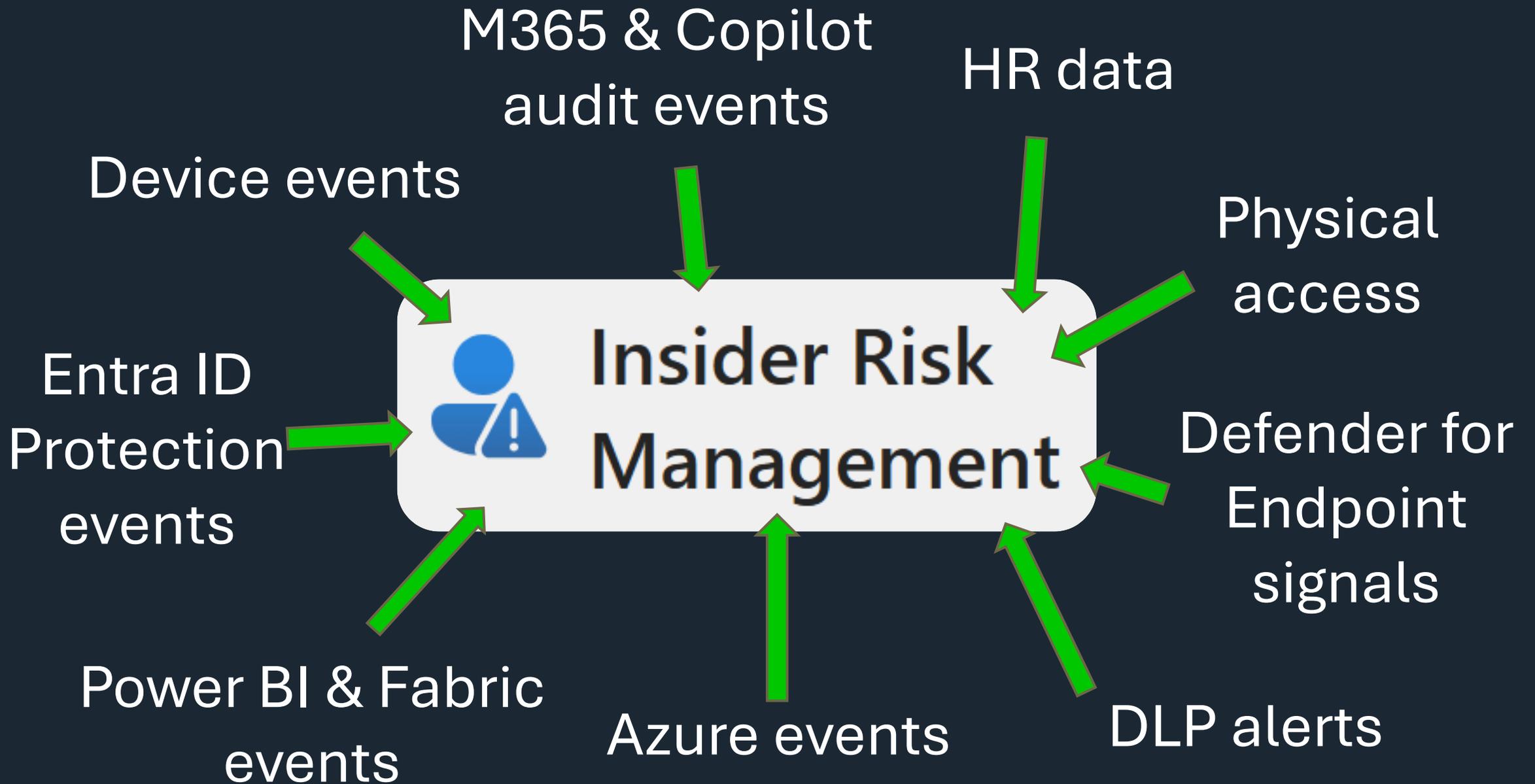


Microsoft 365 / Office events

- > Downloading content from SharePoint / OneDrive
 - Especially to unmanaged devices
- > Downgrading or removing sensitivity labels
- > Accessing sensitive documents
- > Sending email with attachments to personal accts.

...

Most **exfil sequences** start w/ these



- Home
- Solutions
- Agents
- Learn
- Settings
- Information Protection
- Data Security Investigat... (preview)
- Insider Risk Managem...
- DSPM for AI

User activity Activity explorer

Filter: Risk category: Any Activity Type: Any Reset all

Sort by: Date occurred

- Deletion: Files deleted**

Nov 14, 2025 (UTC) | Risk score: 0/100
7 events: Files deleted from Windows 10 Machine
- Obfuscation: Files renamed**

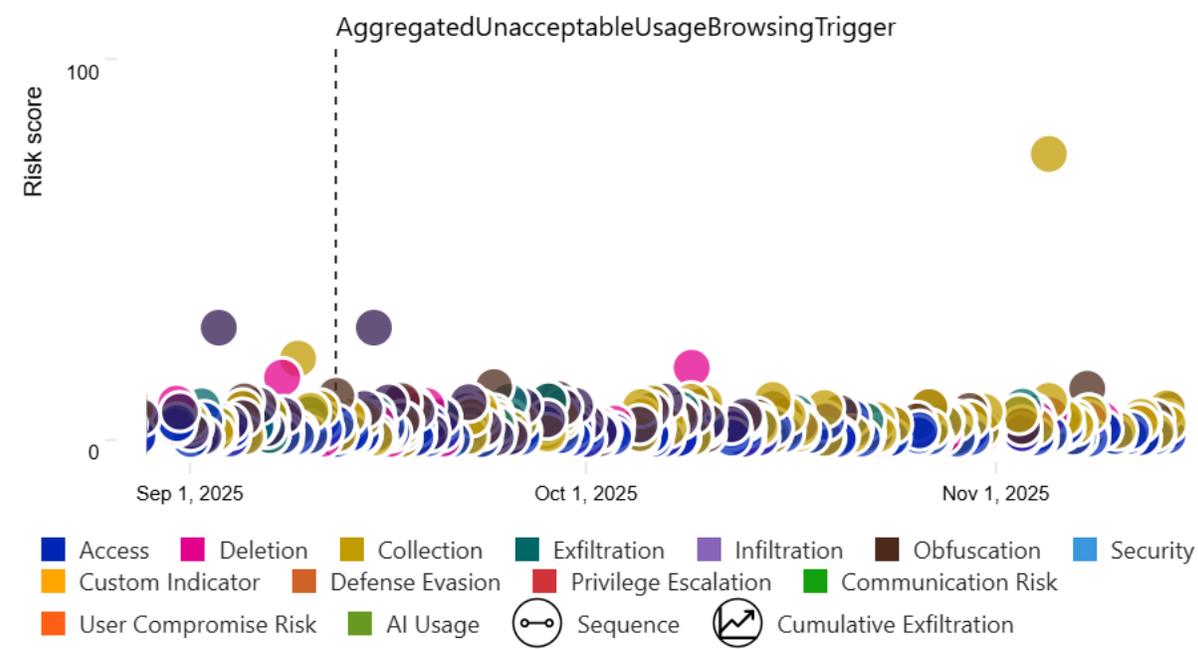
Nov 14, 2025 (UTC) | Risk score: 5/100
4 events: Files renamed
- Access: Unusual volume of sensitive files read**

Nov 14, 2025 (UTC) | Risk score: 0/100
33 events: Files were read
33 events: Files containing sensitive info, including: Email address / User Principal Name, IP Address v4,
- Exfiltration: Files uploaded to cloud storage**

Nov 14, 2025 (UTC) | Risk score: 5/100
3 events: Files uploaded
- Collection: Files downloaded from Teams**

Nov 14, 2025 (UTC) | Risk score: 5/100
1 event: Files downloaded from 1 Teams Site

User activity scatter plot 6 Months 3 Months 1 Month



- Home
- Solutions
- Agents
- Learn
- Settings
- Information Protection
- Data Security Investigat... (preview)
- Insider Risk Managem...
- DSPM for AI

- ☰
- 📄
- ☰
- ⚠️
- 📄
- 🔧
- 👤
-
- 🗨️
- 📄
- 📄

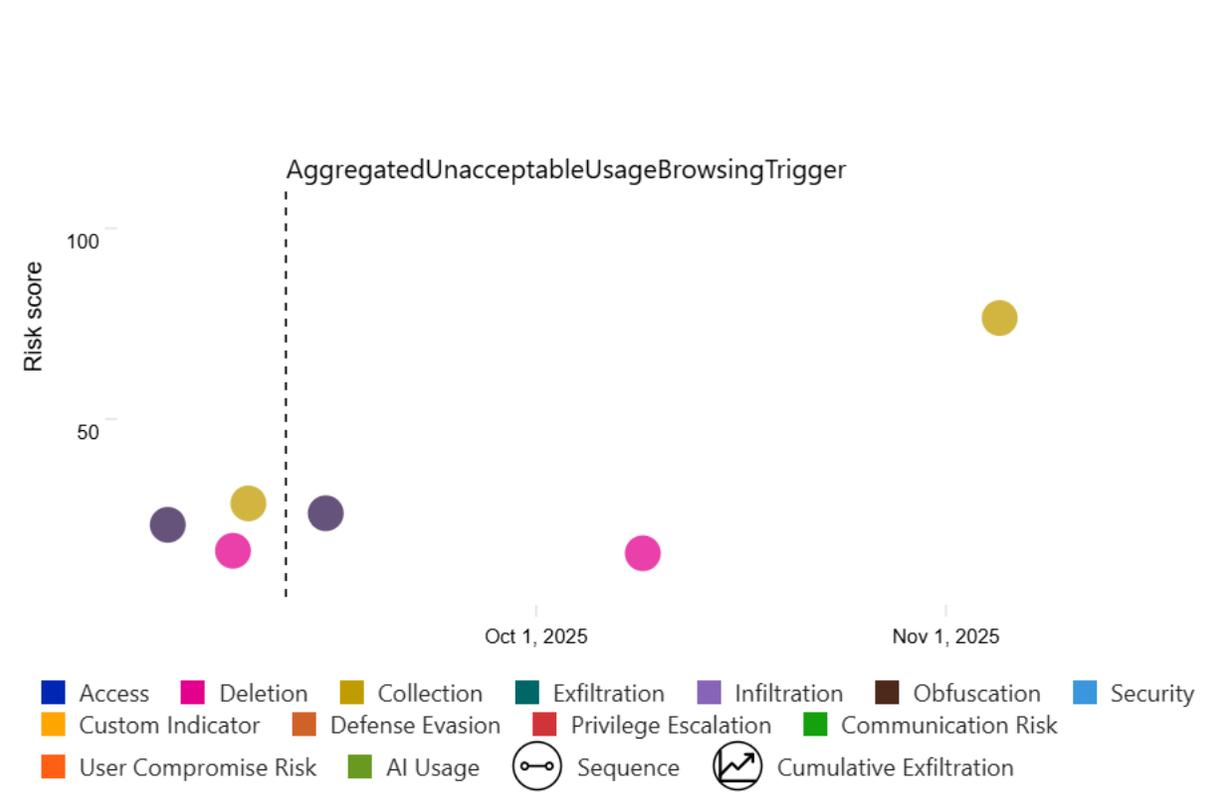
User activity Activity explorer

Filter: Risk category: Activities with risk scores > 15 (unless in a se... X Activity Type: Any X Reset all

Sort by: Risk score ▾

- Collection: Files downloaded from OneDrive while syncing** ...
 Nov 5, 2025 (UTC) | Risk score: 75/100
 1546 events: Files synced from 1 OneDrive account
 2 events: Files that have labels applied, including: General
- Browsed to generative AI websites** ...
 Sep 15, 2025 (UTC) | Risk score: 25/100
 13 events: visits to generative AI websites, including: copilot.microsoft.com
- Collection: Files downloaded from OneDrive while syncing** ...
 Sep 9, 2025 (UTC) | Risk score: 25/100
 208 events: Files synced from 1 OneDrive account
- Browsed to generative AI websites** ...
 Sep 3, 2025 (UTC) | Risk score: 25/100
 19 events: visits to generative AI websites, including: sora.chatgpt.com, auth.openai.com
- Browsed to generative AI websites** ...
 Aug 27, 2025 (UTC) | Risk score: 25/100
 14 events: visits to generative AI websites, including: copilot.microsoft.com

User activity scatter plot 6 Months 3 Months 1 Month



- Home
- Solutions
- Agents
- Learn
- Settings
- Insider Risk Management
- Overview
- Recommendations
- Alerts
- Cases
- Policies
- Users
- Reports
- Forensic Evidence
- Notice templates
- Adaptive Protection
- Data Loss Prevention
- DSPM for AI
- Information Protection
- eDiscovery

Insider Risk Management

- Overview
- Recommendations
- Alerts**
- Cases
- Policies
- Users
- Reports
- Forensic Evidence
- Notice templates
- Adaptive Protection

Related solutions

- Communication Compliance
- Data Security Investigations (preview)
- Data Loss Prevention

Alerts

🌟 Spotlight

42

Sequence activities ...

75

Priority content ...

107

CED ...

2

High-impact user ...

33

↓ Export

100 items

⚙️ Customize columns

Filter set: Save

Severity: Any
Status: Any
Time detected (UTC): Any
🔍 Add filter

<input type="checkbox"/>	ID ▾	Users ▾	Policy ▾	Status ▾	Spotlig... ▾	Alert severity ▾	Time detected ▾
<input type="checkbox"/>	8967ff02	#Anonymized#EAAA...	Data leaks	● Needs review	🌟	■ ■ ■ ■ High	5 hours ago
<input type="checkbox"/>	499b60a2	#Anonymized#EAAA...	Data leaks	● Needs review	🌟	■ ■ ■ ■ High	5 hours ago
<input type="checkbox"/>	9fcb815e	#Anonymized#EAAA...	Data leaks	● Needs review		■ ■ ■ ■ High	17 hours ago
<input type="checkbox"/>	548fa97f	#Anonymized#EAAA...	Data leaks	● Needs review	🌟	■ ■ ■ ■ High	20 hours ago
<input type="checkbox"/>	e830a606	#Anonymized#EAAA...	Data leaks	● Needs review	🌟	■ ■ ■ ■ High	20 hours ago

Alerts

◆
Spotlight
42

Sequence activities
75

Priority content
107

CED
2

High-impact user
33

↓ Export

42 items

⚙️ Customize columns

Filter set: 📄 Save

Severity: Any

Spotlight: Only spotlighted ✕

Status: Any

Time detected (UTC): Any

⚙️ Add filter

🔄 Reset all

<input type="checkbox"/>	ID ▼	Users ▼	Policy ▼	Status ▼	Spotlig... ▼	Alert severity ▼	Time detected ▼	Assigned to ▼	Case ▼
<input type="checkbox"/>	8967ff02	#Anonymized#EAAA...	Data leaks	● Needs review	◆	■ ■ ■ High	5 hours ago	Unassigned	
<input type="checkbox"/>	499b60a2	#Anonymized#EAAA...	Data leaks	● Needs review	◆	■ ■ ■ High	5 hours ago	Unassigned	
<input type="checkbox"/>	548fa97f	#Anonymized#EAAA...	Data leaks	● Needs review	◆	■ ■ ■ High	20 hours ago	Unassigned	
<input type="checkbox"/>	e830a606	#Anonymized#EAAA...	Data leaks	● Needs review	◆	■ ■ ■ High	20 hours ago	Unassigned	
<input type="checkbox"/>	e48df55e	#Anonymized#EAAA...	Data leaks	● Dismissed	✔	■ ■ ■ High	2 days ago	Unassigned	



Home



Solutions



Agents



Learn



Settings



Insider Risk Management...



Data Loss Prevention



DSPM for AI



Information Protection



eDiscovery



Alerts > Data leaks

User activity scatter plot 6 Months 3 Months 1 Month



- Access
- Deletion
- Collection
- Exfiltration
- Infiltration
- Obfuscation
- Security
- Custom Indicator
- Defense Evasion
- Privilege Escalation
- Communication Risk
- User Compromise Risk
- AI Usage
- Sequence
- Cumulative Exfiltration

Alert ID: e4c027ed



Assign

Activity that generated this alert

Reduce alerts for this activity

Nov 13, 2025 - Nov 13, 2025 (UTC)

Sequence: Files exfiltrated and cleaned up

117 events: Sequence: Files downloaded from SharePoint, copied to USB, then deleted

73 events: Files containing sensitive info, including: Diseases, UAE Passport Number, All Medical Terms And Conditions, Lab Test Terms, Philippines National ID

View all activity

User alert history

1 alert: Data leaks

View user alert history

Latest triggering event

Nov 13, 2025 (UTC)

- Home
- Solutions
- Agents
- Learn
- Settings
- Insider Risk Management
- Data Loss Prevention
- DSPM for AI
- Information Protection

Alerts > Data leaks

User activity scatter plot 6 Months 3 Months 1 Month



(3) SEQUENCE: Files exfiltrated and cleaned up

Nov 13, 2025 - Nov 13, 2025 (UTC) | Risk score: 100/100
 117 events: Sequence: Files downloaded from SharePoint, copied to USB, then deleted
 73 events: Files containing sensitive info, including: Diseases, UAE Passport Number, All Medical Terms And Conditions, Lab Test Terms, Philippines National ID

Deletion: Files deleted

Nov 13, 2025 (UTC) | Risk score: 15/100
 3234 events: Files deleted from Windows 10 Machine

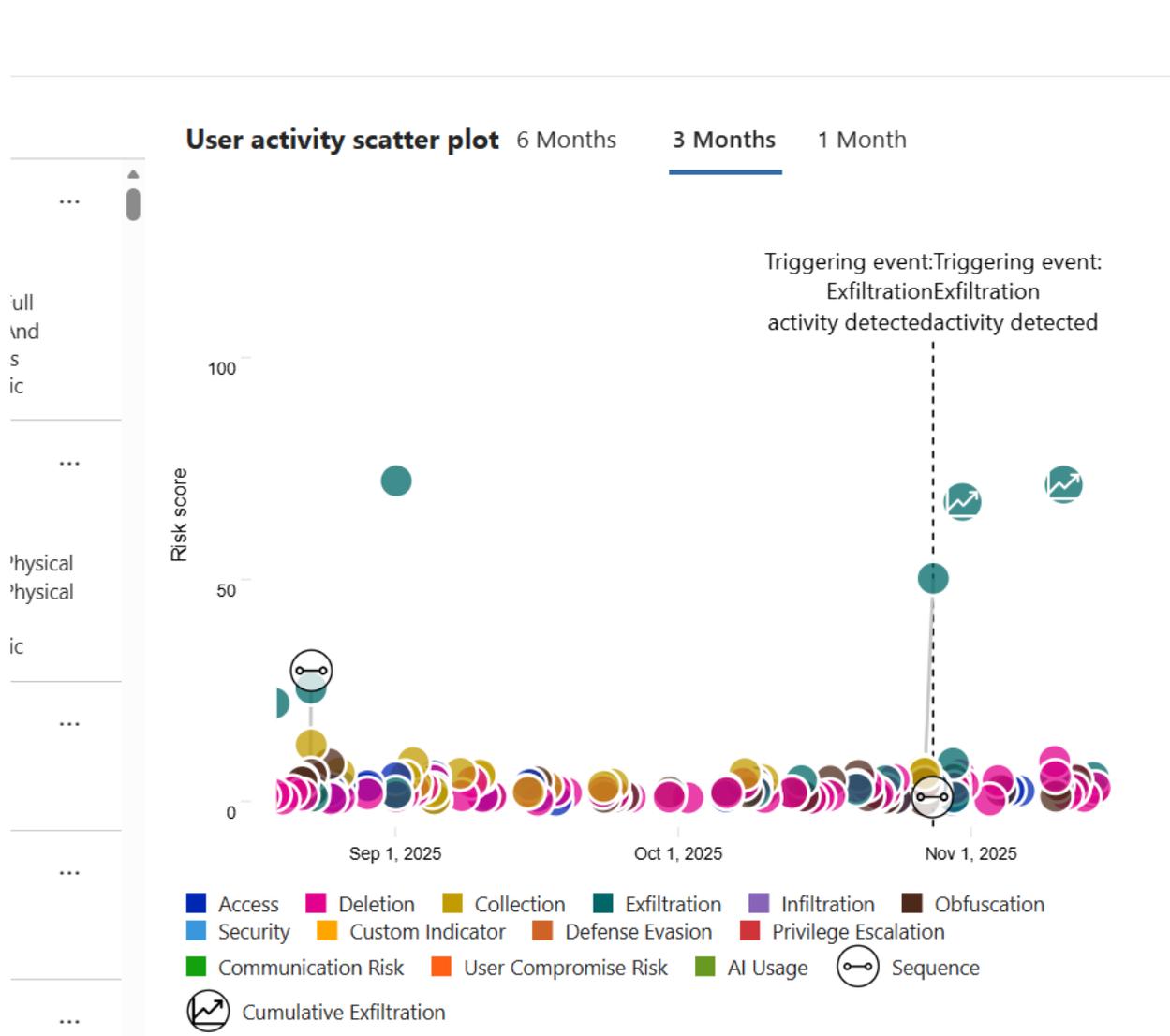
Exfiltration: Files copied to USB device

Nov 13, 2025 (UTC) | Risk score: 50/100
 5404 events: Files copied to USB devices
 195 events: Files containing sensitive info, including: Finance, Philippines Passport Number, IP, Resume, Poland Physical Addresses
 118 events: Files that have labels applied, including: 7d154282-20aa-49ad-8637-e9b4c9019bd1, General, Confidential\Internal, Confidential\Unrestricted

Collection: Files downloaded from SharePoint

Nov 13, 2025 (UTC) | Risk score: 50/100
 1236 events: Files downloaded from 7 SharePoint sites
 463 events: Files containing sensitive info, including: U.S.

- Home
- Solutions
- Agents
- Learn
- Settings
- Insider Risk Management
- Data Loss Prevention
- DSPM for AI
- Information Protection
- eDiscovery



Alert ID: 4c1ed48b

Assign

Activity that generated this alert [Reduce alerts for this activity](#)

Oct 13, 2025 - Nov 9, 2025 (UTC)

Cumulative exfiltration activities

- 83 events:** Files copied to USB devices with prioritized content: More events than **100%** compared to all users in org. Priority content includes: 3 sensitivity labels and 15 sensitive info types. ⓘ
- 83 events:** All exfiltration activities with prioritized content: More events than **100%** compared to all users in org. Priority content includes: 3 sensitivity labels and 15 sensitive info types. ⓘ
- 12943 events:** All exfiltration activities: More events than **100%** compared to teammates.

Note: 1 other activity has the same risk score of 69/100

[View all activity](#)

User alert history

3 alerts: Data leaks

View user alert history

Start with "Data theft by departing users"

Data theft by departing users

Detects data theft by departing users near their resignation or termination date.

Prerequisites

HR data connector OPTIONAL RECOMMENDED

Configure to periodically import resignation and termination date details for your organization. [Set up HR Connector](#)

Devices onboarded OPTIONAL

Physical badging connector OPTIONAL

Physical badging connector configured to periodically import access events to priority physical locations. [Set up badging connector](#)

Triggering event ⓘ

- HR data connector imports termination or resignation dates for a user.
- User account deleted from Azure AD.

- ✓ High true positive %
- ✓ Practice & validate processes
- ✓ Get buy-in for more complex scenarios





Danger zone



Employment end date set
October 1st



Employment ends
December 31st

The unintentional or careless
insider



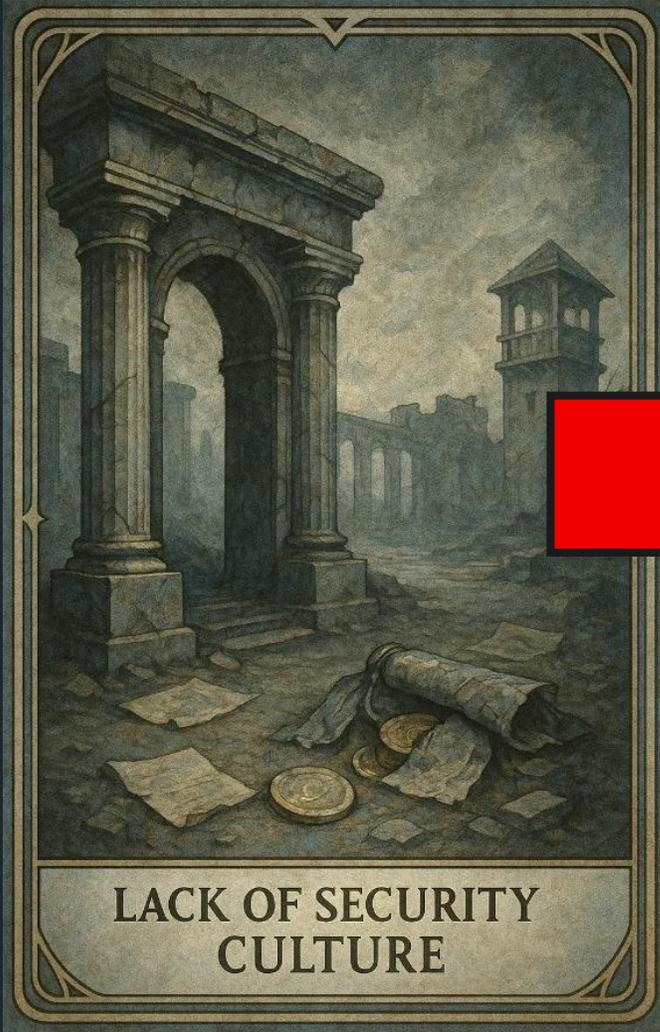


“That which is **easy** to do will be done frequently, **whether it should be or not**”

The underestimated threat

- Imminently more problematic because of **scale**
- Negligence, misunderstood role or unclear rules
- Lack of clear behavioral indicators
- Enabled by lack of security culture and secure management practices
- Carelessness – people do what they think is useful or important, but in the wrong ways





Samsung engineers & ChatGPT (2023)

- Samsung engineers pasted source code & secret internal meeting notes into consumer ChatGPT
- Tried to get help optimizing test sequences for identifying faults in chips, turn meetings notes into PPTX
- Led to trade secret exposure – OpenAI retains prompts for model training
- Samsung then developed in-house LLM / AI solution
- **Classic careless insider threat**



City of Calgary privacy breach (2015)

- City employee shared private info of **3700+** other employees with recipient from another municipality
- Info sent **unencrypted** to both professional and **personal** address of recipient
- Sharing was for purposes of “receiving technical assistance”
- Led to **\$92,9 million** class-action suit
- No malicious intent - lack of training, lack of guardrails



From .MIL to Mali

- US military email addresses end in **.MIL**
- The country of Mali has a domain, **.ML**
- US military has been accidentally sending internal email to .ML addresses for years – a “typo leak”
- Discovered in 2013 by Dutch businessman contracted to manage Mali’s domain
- Mali has warmed its relation to Russia – oops!
- **The real issue:** Lack of guardrails



First aid for unintentional insider risk

- > **Sensitivity labels & DLP** turn policy into guardrails
 - Make anomalies **louder**
- > **Audit logs** correlated by **Insider Risk Management** help identify persistent risky data handling
 - Identify bigger context & repeat offenders





Data Loss Prevention

**Demo
time**

Clipboard Font Alignment Number Styles Cells Editing Sensitivity Add-ins

M11 fx

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Credit Card Type	Credit Card Number	Source: https://www.paypalobjects.com/en_GB/vhelp/paypalmanager_help/credit_card_numbers.htm													
2	American Express	378282246310005														
3	American Express	371449635398431														
4	American Express Corporate	378734493671000														
5	Australian BankCard	5610591081018250														
6	Diners Club	30569309025904														
7	Diners Club	38520000023237														
8	Discover	6011111111111110														
9	Discover	6011000990139420														
10	JCB	3530111333300000														
11	JCB	3566002020360500														
12	MasterCard	5555555555554440														
13	MasterCard	5105105105105100														
14	Visa	4111111111111110														
15	Visa	4012888888881880														
16	Visa	42222222222222														
17																
18																
19																
20																
21																
22																
23																

Chat

Unread Channels Chats Unmuted

- Odin Allfather
- Meeting with Tatu Seppälä
- Meeting with Tatu Seppälä
- Meeting with Tatu Seppälä
- ADM Tatu Seppälä
- Teams and channels
- HR team
- Legal team
- Case management
- Due diligence
- Tiedon suojauksen suunnittelutiimi
- C-level team
- Lounge**
- Seppala365
- Legal team
- M and A docs
- Leadership team

Lounge Posts Shared Page Notes



Tatu Seppälä



Executives' new credit cards

B I U S | :≡ 1/3≡ | ✎ AA | 99 ↩ ☒ | 🗨 ...

Here are the new credit cards for the exec team. CVVs will be delivered separately.

Credit Card Type	Credit Card Number
American Express	378282246310005
American Express	371449635398431
American Express Corporate	378734493671000
Australian BankCard	5610591081018250
Diners Club	30569309025904
Diners Club	38520000023237
Discover	6011111111111110
Discover	6011000990139420
ICB	2520111222200000

😊 🗨 +

Post

Pentagon and soldiers let too many secrets slip on social networks, watchdog says

Ready, aim, mire

 [Brandon Vigliarolo](#)

Mon 17 Nov 2025 // 21:32 UTC

Loose lips sink ships, the classic line goes. Information proliferation in the internet age has government auditors reiterating that loose tweets can sink fleets, and they're concerned that the Defense Department isn't doing enough to stop sensitive info from getting out there.

The Government Accountability Office (GAO) on Monday made public a report finding that the DoD hasn't been properly training its civilian staff or military members, nor issuing proper guidance, on how to keep secrets secret. The info leaks include social media posts by military members and their families, but press releases and other information the Pentagon publishes itself were as part of the equation, too.

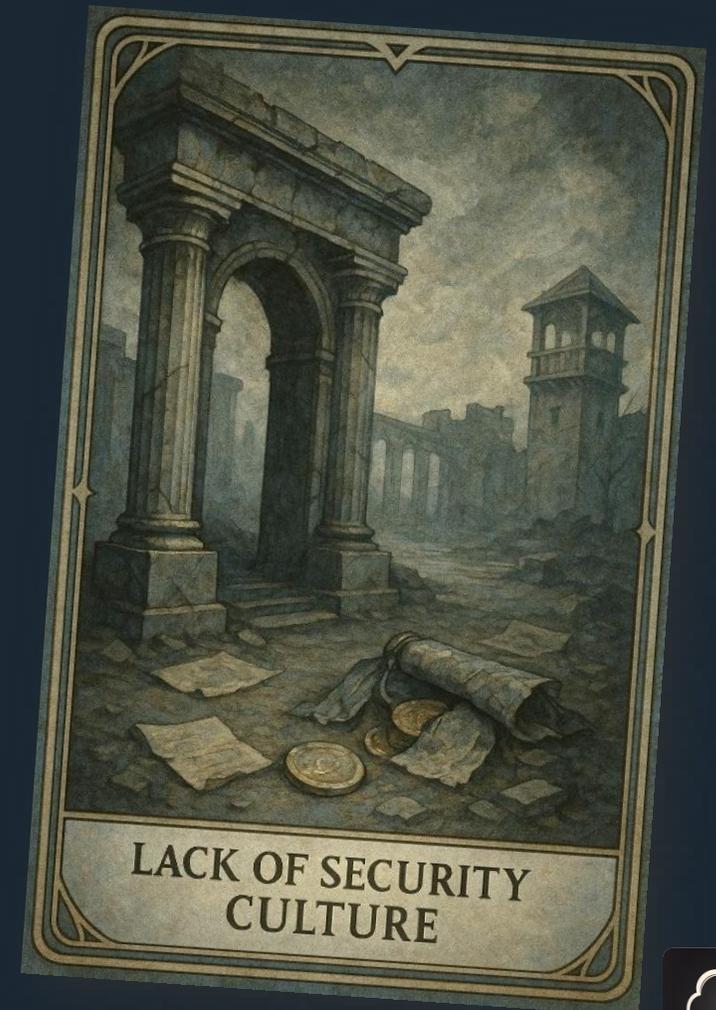
First aid for unintentional insider risk

- > Unchecked use of personally-owned devices and 24/7 social media blur boundaries between work & private life → costly mistakes!
- > Increasing volume of unstructured data in M365 magnifies accidental exposure likelihood & impact



Reinforcing security culture

- Poor security culture manifests as general disregard for security practices, no personal ownership for security
- Countermeasures: Peers acting as security champions, training, consistent enforcement of policies and positive reinforcement
- **The job of security: enable business to work in a secure, sustainable manner**



#Naas
No as a Service



Next up?

- **Nation-states** like China, Russia are now using non-state actors to identify & target vulnerable insiders
- Most at-risk industries: AI, quantum, biotech, defense



Microsoft Digital Defense Report 2025

Lighting the path to a secure future

A Microsoft Threat Intelligence report

“The critical element is not the source of a threat, but its **potential for damage**.

Evaluating threats from that perspective, it becomes obvious that although most attacks might come from outside the organization, **the most serious damage is done with help from the inside.**”

- Eric Cole

Former SANS faculty fellow

Former CTO @ McAfee

Former Chief scientist @ Lockheed Martin



Comments or
questions?

Connect with me!

