VECTRA®

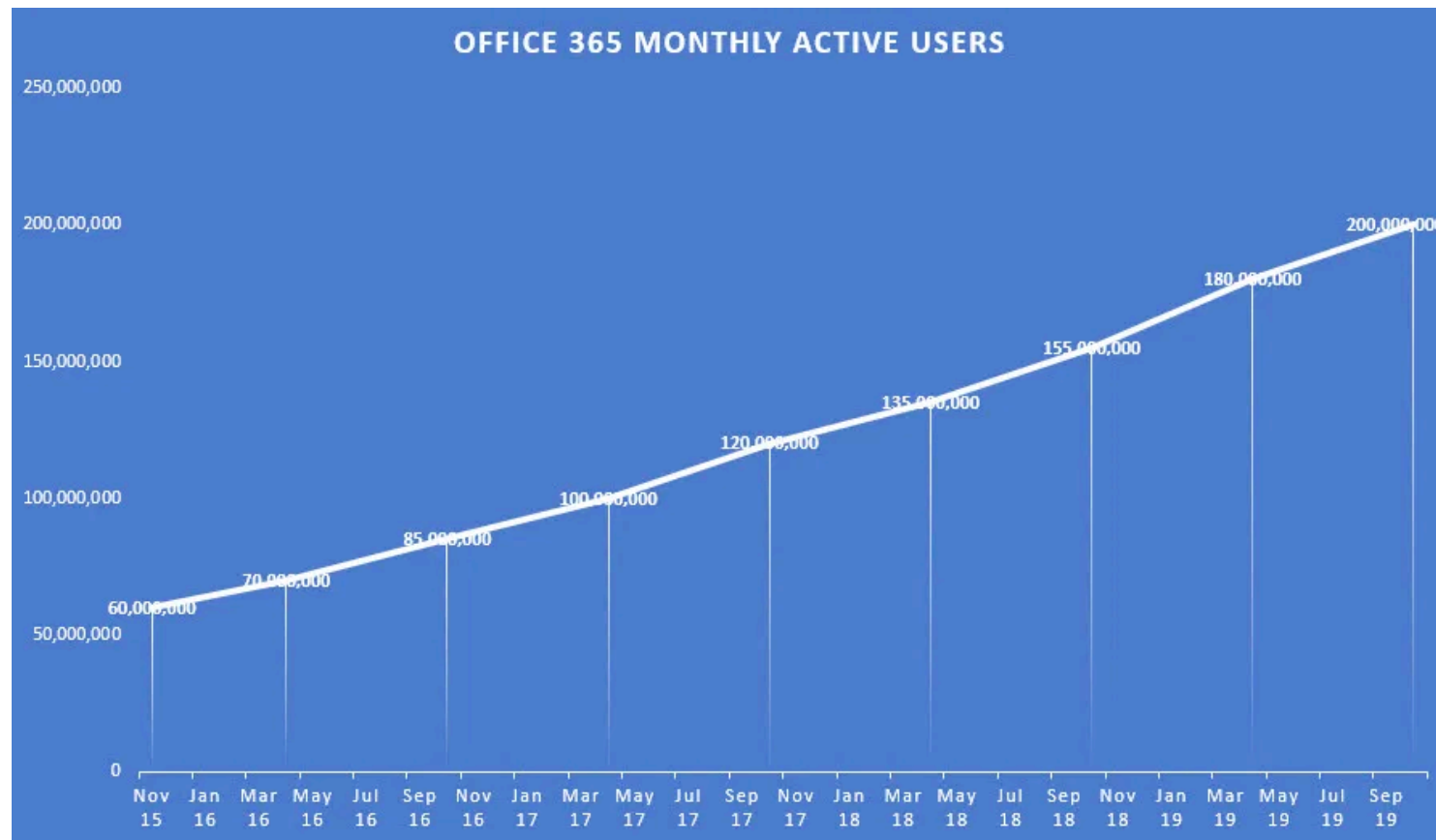# Practicing "Safe SaaS" for Microsoft Office 365

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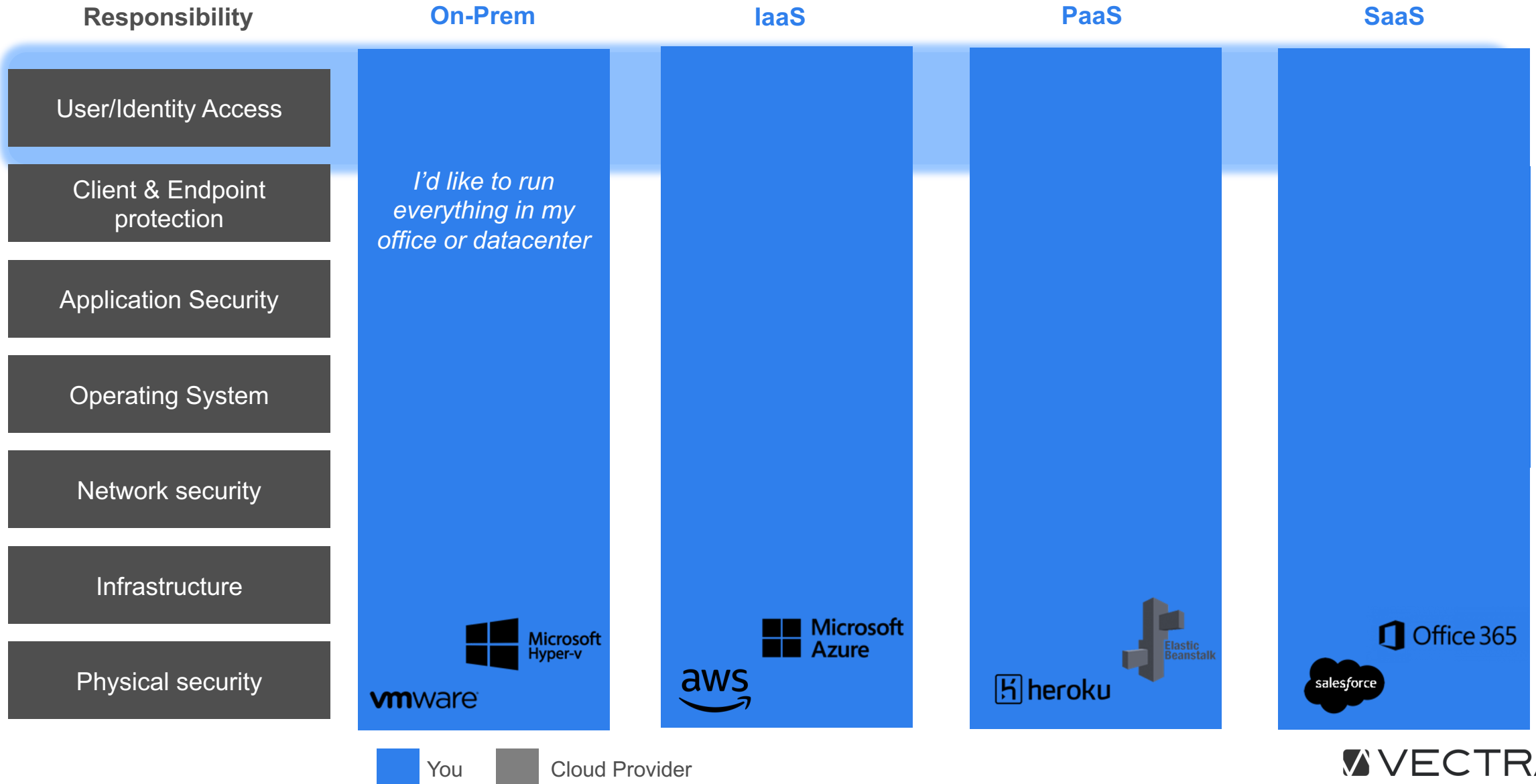# No surprises, Office 365 is widely used

>200,000,000 active users each month

OFFICE 365 MONTHLY ACTIVE USERS

Cloud is a shared risk / responsibility model

Responsibility	On-Prem	IaaS	PaaS	SaaS
User/Identity Access				
Client & Endpoint protection	*I'd like to run everything in my office or datacenter*			
Application Security				
Operating System				
Network security				
Infrastructure				
Physical security	Microsoft Hyper-v vmware	Microsoft Azure aws	heroku Elastic Beanstalk	Office 365 salesforce

You   Cloud Provider

Cloud security expertise is hard to find

Cloud security is complex to configure

Focus is on prevention, not detection

Cloud security implementations are siloed

Legacy on-prem tools don't work in the cloud

No consistency across Cloud Service Providers

Current cloud security solutions are inefficient

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Office 365 is a high-value attack target

Valuable business data + repeatable tactics make Microsoft 365 an attractive target

- IP and trade secrets
- Plans and project data
- Financial data
- Customer and employee data

Consequences

- Subversion
- Espionage
- Ransom
- Theft
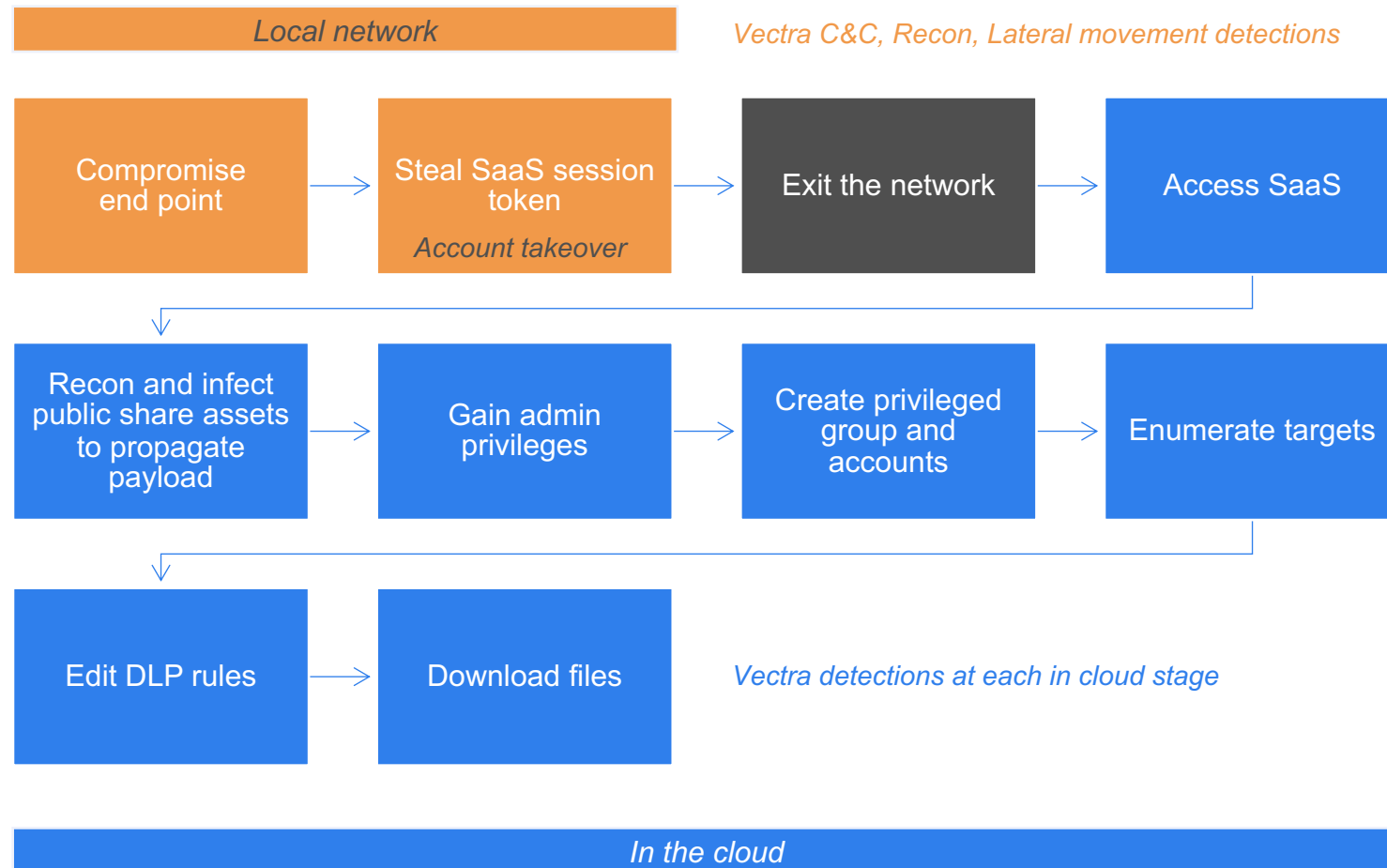

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Understanding Office 365 attacks

Account Takeover in
Office 365 has become
the largest threat vector in the cloud

Even with the rising adoption
of incremental security approaches like
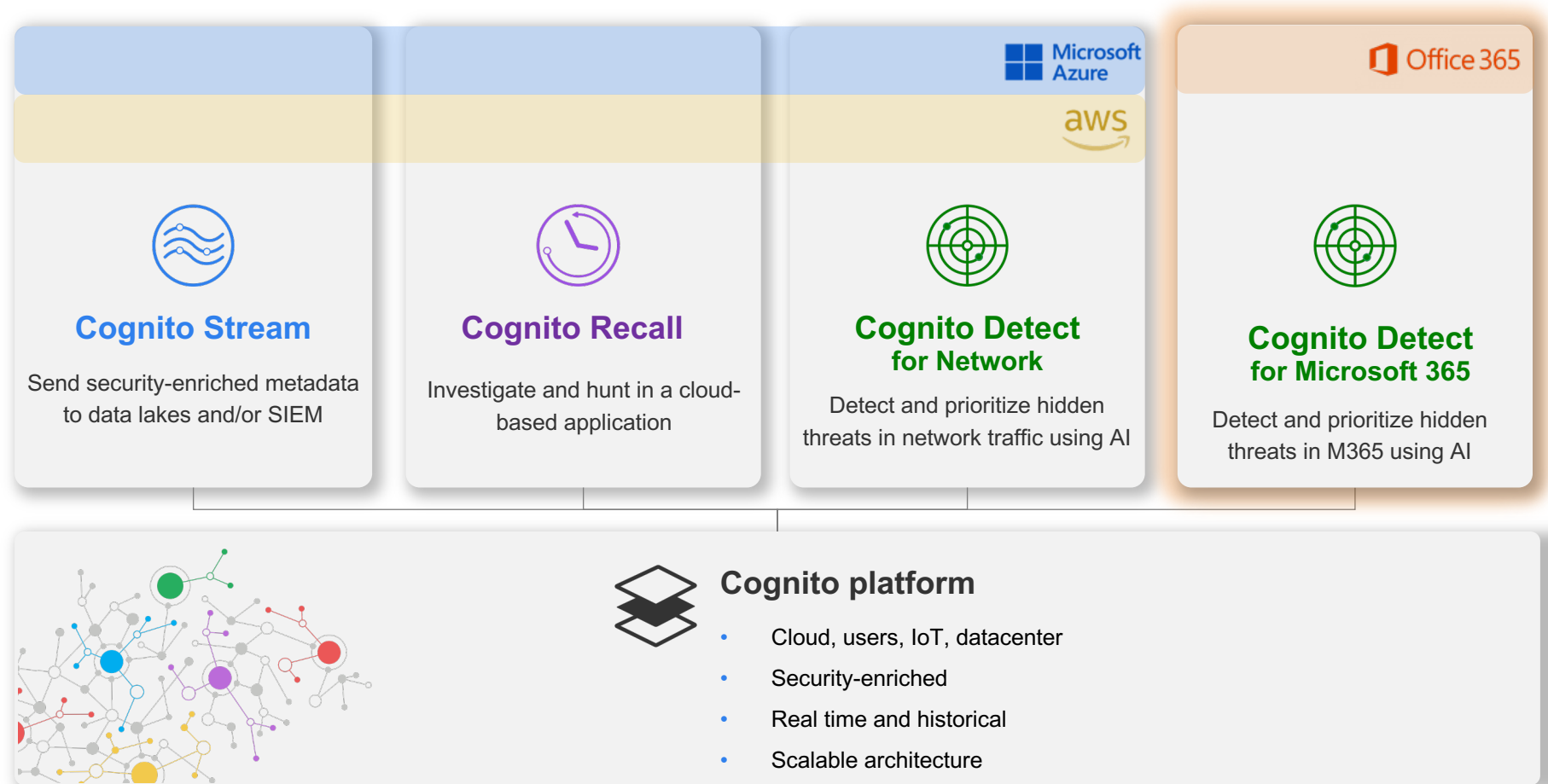multi-factor authentication, access controls

continue to be circumvented.

SaaS attacks have deeper impact, as they make
it easy to move around laterally

40%

2018   2019

Visibility into MFA bypass SaaS attack

| Local network | | | Vectra C&C, Recon, Lateral movement detections |

| Compromise end point | Steal SaaS session token | Exit the network | Access SaaS |

Account takeover

| Recon and infect public share assets to propagate payload | Gain admin privileges | Create privileged group and accounts | Enumerate targets |

| Edit DLP rules | Download files | *Vectra detections at each in cloud stage* |

| In the cloud |

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Cognito, the AI-powered network detection and response (NDR) platform

Cognito Stream

Send security-enriched metadata to data lakes and/or SIEM

Cognito Recall

Investigate and hunt in a cloud-based application

Cognito Detect for Network

Detect and prioritize hidden threats in network traffic using AI

Microsoft Azure

aws

Cognito Detect for Microsoft 365

Detect and prioritize hidden threats in M365 using AI

Office 365

Cognito platform

- Cloud, users, IoT, datacenter
- Security-enriched
- Real time and historical
- Scalable architecture

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Get <u>answers</u> with Cognito Detect for Office 365

Find post-compromise attacker behaviors in Office 365 before it too late

- **Infiltration and elevation:** Brute force, adding users and privileges to groups, staging malware, etc.

- **Reconnaissance:** accessing files in unusual ways; listing users, files, and shares, etc.

- **Persistence and evasion:** installing apps to keep access, changing policy and logging, turning off DLP, etc.

- **Exfil and destruction:** creating mail sinks, sharing and downloading files, etc.

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Covering key areas of the MITRE ATT&CK matrix for Office 365

MITRE ATT&CK®

TTP	Tactic covered by =>1 Cognito model
TTP	Addressed via integrations

Initial Access	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection
Spear phishing Link	Account Manipulation	Valid Accounts	App Access Token	Account Manipulation	Account Discovery	App Access Token	Email Collection
Valid Accounts	Create Account		Redundant Access	Brute Force	Cloud Service Dashboard	Internal Spear phishing	
	Office Application Start		Valid Accounts	Steal App Access Token	Cloud Service Discovery	Web Session Cookie	
	Redundant Access		Web Session Cookie	Steal Web Session Cookie	Permission Groups		
	Valid Accounts						

attack.mitre.org/matrices/enterprise/cloud/office365/

25+ Attacker Behavior models optimized for Microsoft 365

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Keeping your Office 365 deployments safe

Stop the largest attack vector in Microsoft 365

30% of organisations suffer account takeovers every month. Vectra understands attacker behavior and account privilege in SaaS applications, allowing you to put an end to breaches.

Attackers don't operate in silos, your security solution shouldn't either

Office 365

Track attacker activity pivoting between on-premise, data center, IaaS and SaaS. All from a single place.

Microsoft security telemetry can be overwhelming and feel disjointed. Vectra's AI models put it all together

Triage and enrich the security data from Microsoft 365 without having to deploy sensors. Make your business safe in the cloud in minutes.

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What makes Vectra uniquely valuable?

Correlate across hybrid, multi-cloud and on-prem

Automated deployment with a rich integration ecosystem

High-Fidelity, low noise alerts with enriched metadata for threat hunting and investigation

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Looking for what the threat does

Durable coverage

- Both novel and known attacks
- Difficult and expensive to evade

Fast, labeled coverage of known threats

- Tools
- Exploits
- Known attacker infrastructure
- Environment-specific indicators

Combine data science and security research

Attacker Behavior models

- High-fidelity detection of things attackers must do
- Find known and unknown

Security Research

- Identify, prioritize, and characterize fundamental attacker behaviors
- Validate models

Data Science

- Determine best approach to identify behavior
- Develop and tune models

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To automate detecting attacker behaviors

Command and Control
- Advanced C2: human control
- Botnet C2

Reconnaissance
- Network sweeps and scans
- Advanced: AD, RPC, shares

Lateral Movement
- Stolen accounts
- Exploits
- Backdoors

Exfiltration
- Data movement
- Methods, e.g. tunnels

Security Research
- Identify, prioritize, and characterize fundamental attacker behaviors
- Validate models

Data Science
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- Develop and tune models

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The Vectra difference

Low Noise / High Signal

LAN-Cloud Pivots

Simple onboarding process
Cognito Detect for Microsoft Office 365 Early Access program

Information we need

- Choice of cloud location
  - EU
  - USA

- Domain of the Microsoft 365 Admin who will authorize Vectra access

Vectra provided URL to sensor App

Actions for Microsoft 365 Admin

- Follow the URL to install Vectra Microsoft 365 sensor App

- Authenticate to Microsoft 365

- Grant consent to Vectra for 2 privileges
  - ActivityFeed.Read
  - ActivityFeed.ReadDLP

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To find out more…

Solution materials

www.vectra.ai/microsoft365

Early access program requests

www.vectra.ai/microsoft365-program

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Q&A

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Thank you