

# Azure Sentinel: 3-Week Workshop

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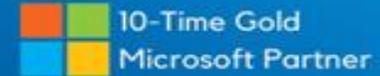
by Exelegant & Microsoft



This provider has demonstrated competency in the following areas

Gold	Communications
Gold	DevOps
Gold	Data Analytics
Gold	Data Platform
Gold	Cloud Productivity
Gold	Security
Gold	Cloud Platform
Gold	Windows and Devices
Gold	Collaboration and Content
Gold	Messaging
Silver	Small and Midmarket Cloud Solutions
Silver	Enterprise Mobility Management
Silver	Application Development
Silver	Project and Portfolio Management
Silver	Datacenter

## 10 -Time Gold Microsoft Partner



[Visit Website](#)

### About us

Exelegant is a cyber security and professional services company where efficiency is standard, and our customers are our partners. Headquartered in Freehold, NJ with supporting offices in Newark, NJ and L'viv Ukraine, Exelegant leverages years of experience to bring about a world-class experience for our clients.

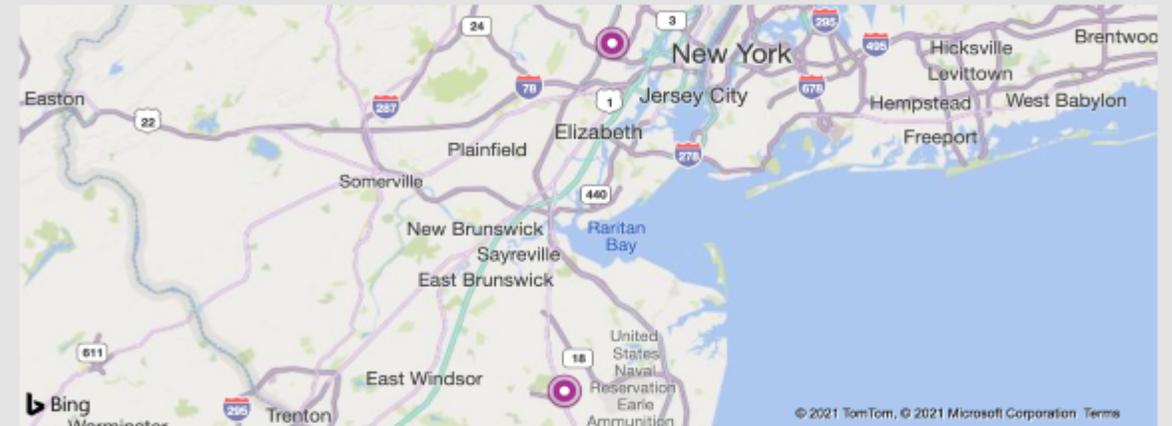
Our specialties include:

[More](#)

### Skills and Capabilities

- Advanced Analytics
- Agriculture, Forestry, & Fishing
- Application Integration
- Artificial Intelligence
- Azure
- Azure Security & Operation Management

### Top locations



36 W Main Street, Suite 300, Freehold, NJ, US 07728

495 N 13th street, Newark, NJ, US 07107

# Clients

## What our clients say:

- "Exelegant helped our company migrate from G-Suite to Microsoft Office 365 with zero downtime and zero data loss. During the process, over 3,500 users continued to collaborate and run critical business functions seamlessly."

Robert Florescu, CISO, CityMD

- "Switching to Exelegant has been a major contributing factor to the growth of our group. As a company looking to expand, we really value our employees' time and productivity. Exelegant's IT Support has enabled our business to run as efficiently as possible."

Bruce Lucarelli, CTO, DermOne

- "Exelegant has been with our hospital since we've opened our doors. Their experience in a wide range of projects and solutions, and management of vendors has made a tremendous impact on our efficiency"

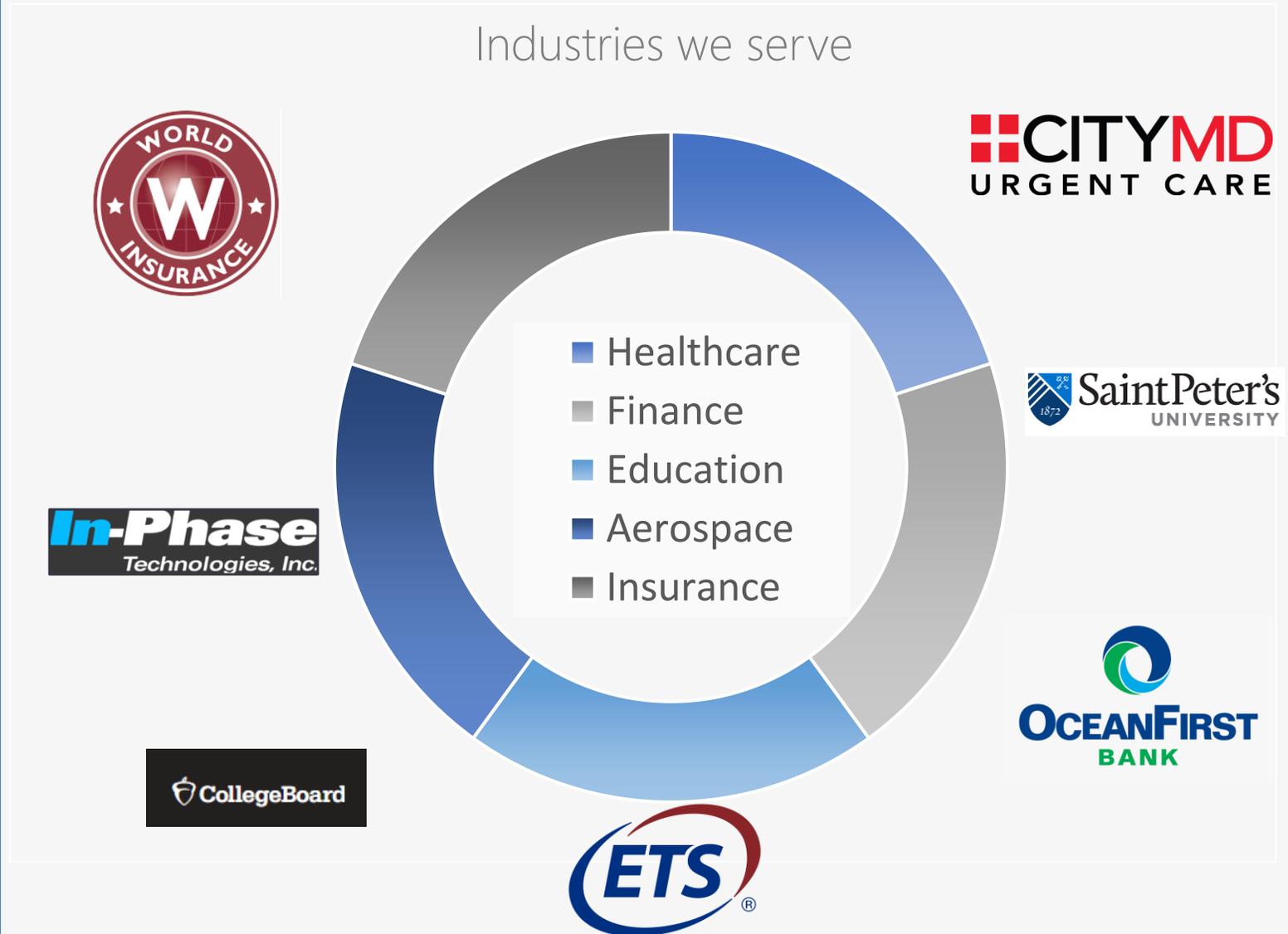
Alexey Gololobov, CFO, Columbus Hospital LTACH

- "Exelegant has become our trusted business partner and completed migration on time, alleviated hosting responsibilities, and gave us capabilities to enable team productivity and data security."

Kevin Hannigan, President, ACC Inc.



## Industries we serve

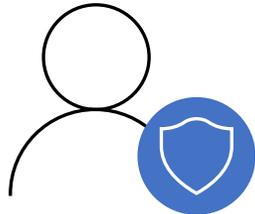


**76%**  
report increasing  
security data\*

Sophistication  
of threats

IT deployment and  
maintenance

**44%**  
of alerts are  
never investigated\*

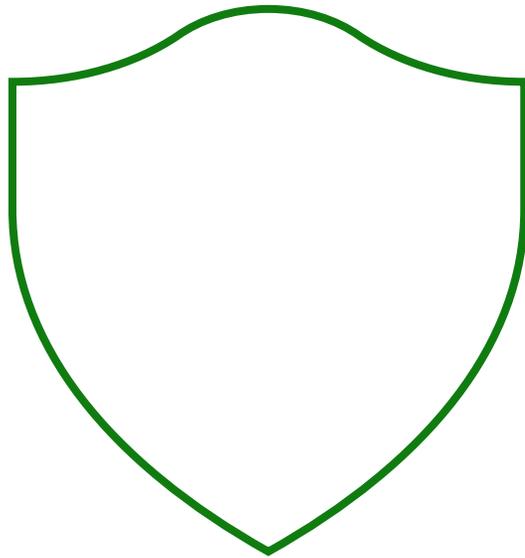


Too many  
disconnected  
products

**3.5M**  
unfilled security  
jobs in 2021\*\*

Lack of  
automation

\*ESG: Security Analytics and Operations: Industry Trends in the Era of Cloud Computing 2019  
\*\*CSO Magazine



## What is Microsoft Sentinel?

Microsoft Sentinel is a scalable, cloud-native, security information event management (SIEM) and security orchestration automated response (SOAR) solution.

## Insights into threats

Get a birds-eye view across all data ingested and detect threats using Microsoft's analytics and threat intelligence. Investigate threats with artificial intelligence and hunt for suspicious activities.

In scope for this engagement.

## Ability to automatically respond to detected threats

Out of scope for this engagement.

## Requirements

Available to organizations with an Azure tenant.

Optimize security operations with cloud-native SIEM powered by AI and automation



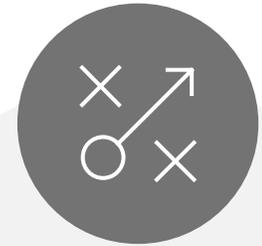
Harness the scale  
of the cloud



Detect  
evolving threats



Expedite  
incident response



Get ahead  
of attackers

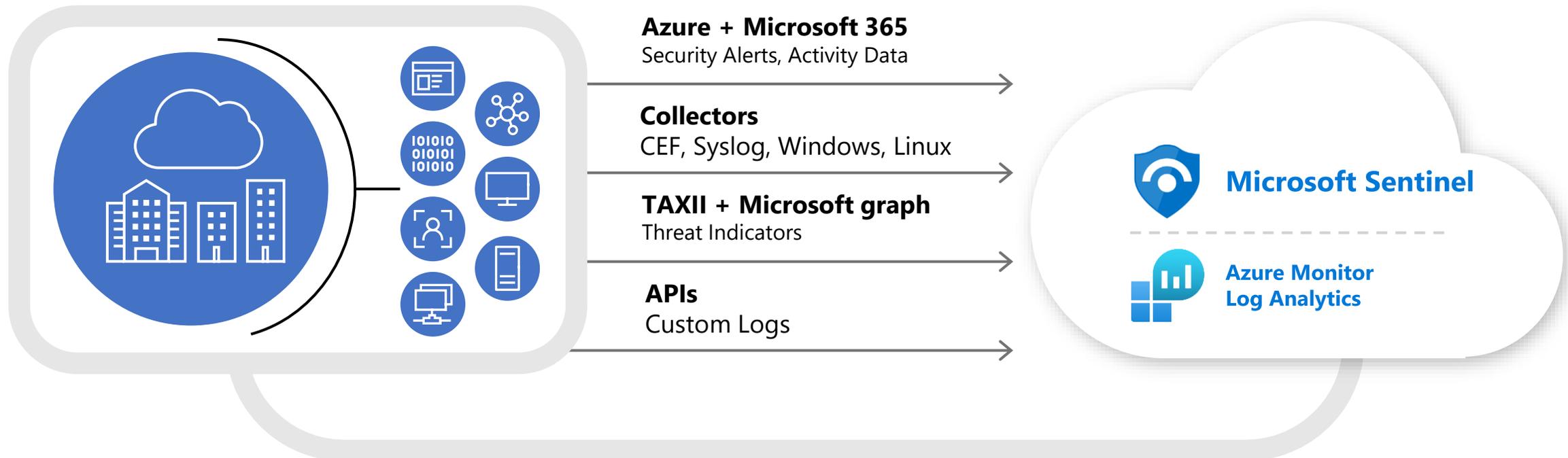
# Harness the scale of cloud-native SIEM

- Eliminate infrastructure setup or maintenance
- Put no limits to compute or storage resources and scale at will
- Collect and analyze data across your entire organization at cloud scale
- Pay only for what you use—resulting in a SIEM 48% less expensive than traditional SIEMs\*

\*Forrester Consulting, Total Economic Impact™ of Microsoft Azure Sentinel, 2020



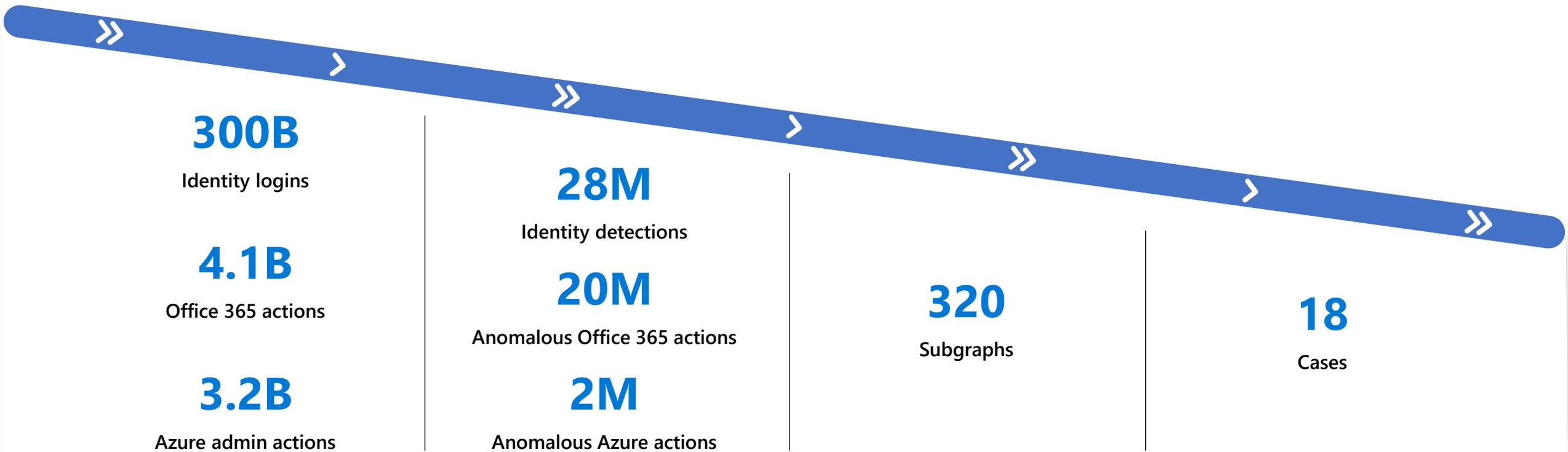
# Collect security data at cloud scale from any source



Proven log platform with more than 10 petabytes of daily ingestion

# Reducing alert fatigue

Analyzing activities across multiple cloud services into high-fidelity security cases



Service layer  
raw events

Anomalous behaviors  
and detections

Convert  
to graph

Score each subgraph  
with Machine Learning

# Leverage extensive library of detections or build your own

- Choose from more than 100 built-in analytics rules
- Customize and create your own rules using KQL queries
- Correlate events with your threat intelligence and now with Microsoft URL intelligence + network data
- Democratize machine learning with code-free, customizable ML anomaly detections

The screenshot displays the Microsoft Sentinel 'Active rules' page. At the top, there are 51 active rules, categorized by severity: HIGH (12), MEDIUM (26), LOW (9), and INFORMATIONAL (4). A search bar and filters for SEVERITY, TYPE, and TACTICS are visible. The main table lists various rules, including 'Known Phosphorus group domains', 'Create incidents based on Azure Acti...', 'Advanced Multistage Attack...', and 'Create incidents based on A...'. The 'Known Phosphorus group domains' rule is selected, showing its details in a right-hand pane. This pane includes the rule's description, required data sources (DNS, DnsEvents, VMConnection, Cisco ASA, CommonSecurityLog, Palo Alto Networks, CommonSecurityLog), and the KQL query used for detection. The KQL query is: 

```
let timeframe = 1d;
let DomainNames = dynamic(["yahoo-verification.org","s
"accounts-web-mail.com","customer-certificate.com","se
"yahoo-verification.net","yahoo-verify.net","outlook-v
```

# Start hunting over security data with fast, flexible queries

- Run built-in threat hunting queries—no prior query experience required
- Customize and create your own hunting queries using KQL
- Integrate hunting and investigations
- Use bookmarks and live stream to manage your hunts

The screenshot displays the Exelegant security dashboard interface. At the top, there are navigation options like 'Refresh', 'Last 24 hours', '+ New Query', and 'Run all queries'. Below this, there are summary statistics: '93 Total Queries', '2 My Bookmarks', and '1 Live Stream Results'. A 'MITRE ATT&CK' bar is also visible. The main content area features a search bar and filters for 'FAVORITES: All', 'PROVIDER: All', 'DATA SOURCES: All', and 'TACTICS: All'. A table lists various queries with columns for 'Query', 'Provider', 'Data Source', 'Results', and 'Tactics'. The first query, 'Suspicious network traffic patterns', is highlighted. On the right side, there is a detailed view for the selected query, including a 'Description', 'Created time' (11/1/2019), 'Created by' (sender@microsoft.com), and 'Query' field. Below this, there are sections for 'Entities' (IP, Account, Host) and 'Tactics' (Initial Access). At the bottom right, there are 'Run Query' and 'View Results' buttons.

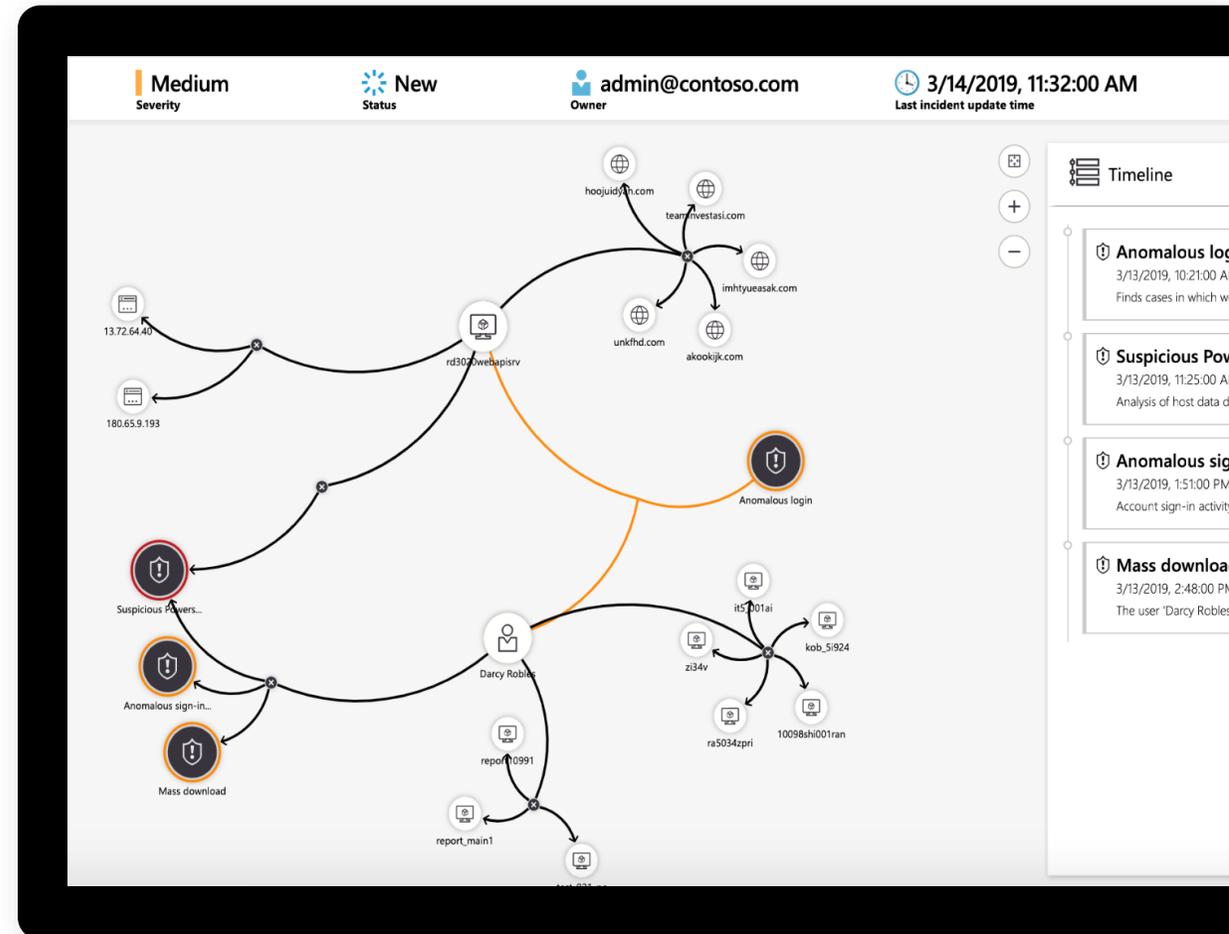
Query	Provider	Data Source	Results	Tactics
Suspicious network traffic patterns	Custom Que...	CommonSecurityLog	0	
Changes made to AWS IAM policy	Microsoft	AWSCloudTrail	--	
Consent to Application discovery	Microsoft	AuditLogs +1	--	Persistence
Rare Audit activity initiated by App	Microsoft	AuditLogs	--	
Rare Audit activity initiated by User	Microsoft	AuditLogs +1	--	
Azure storage key enumeration	Microsoft	AzureActivity	--	Discovery
DNS commonly abused TLDs	Microsoft	DnsEvents	--	
DNS Domain anomalous lookup increase	Microsoft	DnsEvents	--	
DNS Full Name anomalous lookup increase	Microsoft	DnsEvents	--	
High reverse DNS count	Microsoft	DnsEvents	--	Discovery
Long DNS URI Query	Microsoft	DnsEvents	--	
DNS Domains linked to WannaCry ransomwar...	Microsoft	DnsEvents	--	
Cobalt Strike DNS Beaconing	Microsoft	DnsEvents	--	Command and Control
Failed service logon attempt by user account ...	Microsoft	AuditLogs +1	--	Credential Access
Failed Login Attempt by Expired account	Microsoft	SecurityEvent +1	--	Initial Access
Multiple Password Reset by user	Microsoft	AuditLogs +3	--	
Permutations on logon attempts by UserPrinci...	Microsoft	OfficeActivity +1	--	Credential Access
RareDNSLookupWithDataTransfer	Microsoft	CommonSecurityLog +2	--	Exfiltration
Rare domains seen in Cloud Logs	Microsoft	AuditLogs +2	--	
Tracking Privileged Account Rare Activity	Microsoft	SecurityAlert +5	--	
Exploit and Pentest Framework User Agent	Microsoft	W3CISLog +2	--	

# Visualize the entire attack to determine scope and impact

- Navigate the relationships between related alerts, bookmarks, and entities
- Expand the scope using exploration queries
- Gain deep insights into related entities—users, domains, and more

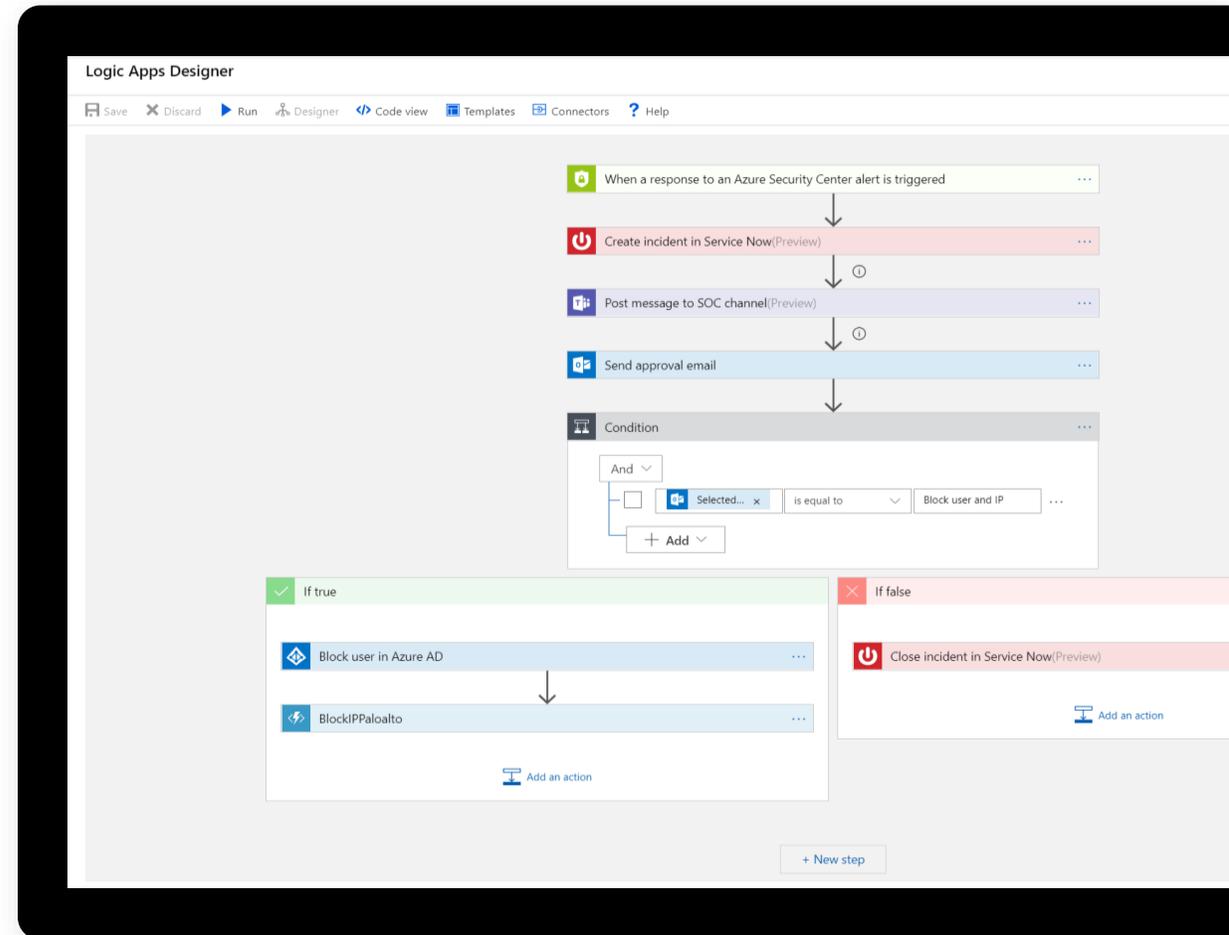
80% reduction in investigation effort compared to legacy SIEMs<sup>1</sup>

1: [Commissioned study-The Total Economic Impact™ of Microsoft Azure Sentinel](#), conducted by Forrester Consulting, 2020



# Automate and orchestrate security operations using integrated Azure Logic Apps

- Build automated and scalable playbooks that integrate across tools
- Choose from a library of samples
- Create your own playbooks using 200+ built-in connectors
- Trigger a playbook from an alert or incident investigation

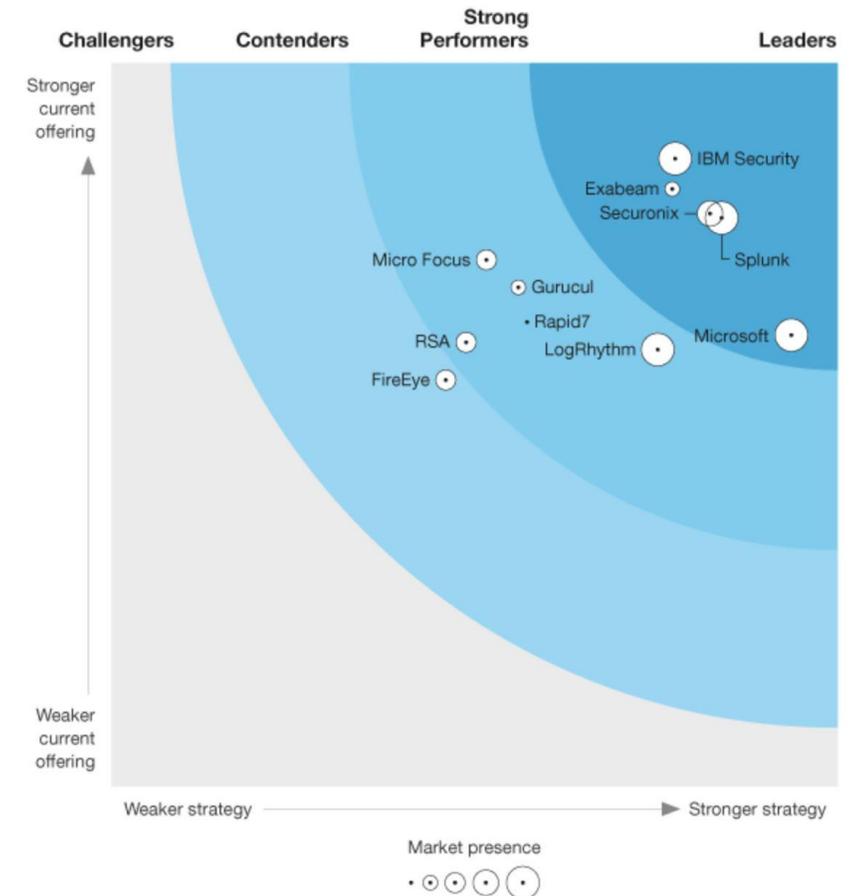


## “Microsoft roars into the security analytics market...

The vendor’s entry into the security analytics space captivated security buyers. Microsoft’s bold move to allow the ingestion of Microsoft Azure and Microsoft Office 365 activity logs into Sentinel at no cost makes the solution attractive to enterprises invested in Azure and Microsoft 365.”

- The Forrester Wave™: Security Analytics Platforms, Q4 2020 report

### THE FORRESTER WAVE™ Security Analytics Platforms Q4 2020



# An end-to-end solution for security operations



Powered by community + backed by Microsoft's security experts



**Collect**



Visibility

**Detect**



Analytics



Hunting



Intelligence

**Investigate**



Incidents

**Respond**



Automation



## Analyze

- Business and IT requirements
- Existing SIEM/SOC tools
- Data sources to be connected
- Security Operations automation requirements



## Define scope & deploy

- Define the scope of the Microsoft Sentinel deployment
- Deploy and configure Microsoft Sentinel
- Connect Microsoft Sentinel to ingest data from:
  - Azure AD Identity Protection
  - Microsoft Defender for Cloud Apps
  - Microsoft Defender for Office 365
  - Agreed 3rd party Syslog integration
  - Limited nr. of on-premises servers



## Remote Monitoring

- Remote incident monitoring during the data collection phase
- **Optional** - Threat hunting to discover Indicators of Attack in the ingested data



## Discover

- Use Microsoft Sentinel to analyze and discover threats to your organization



## Recommend

- Map found threats to Microsoft 365 security products
- Provide a Microsoft Sentinel deployment roadmap

## Kick-off Meeting

Introduce the Microsoft Sentinel Workshop engagement, discuss the upcoming activities, align expectations and establish timelines.

## Define Scope

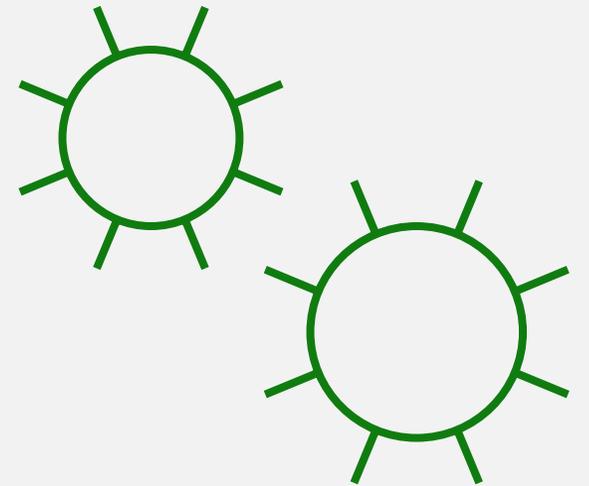
Define and finalize the engagement scope and required configuration settings for the engagement tools.

## Threat Check Configuration

Deploy and configure the Microsoft 365 security tools in your production tenant.

## Microsoft Sentinel Configuration

Deploy and configure Microsoft Sentinel in your production tenant.



# Engagement scenarios

## Scenario 1 – Remote monitoring of threats

Designed for organizations that can't justify building and staffing their own SOC or when you need to offload certain monitoring tasks so that your SecOps team can focus on key risk areas.

We will manage your Microsoft Sentinel deployment remotely during the alert and log collection phase allowing us to also provide:

- **Incident monitoring** - Our security analysts will provide remote monitoring of Microsoft Sentinel for incidents during the engagement.
- **Optional - Proactive threat hunting** - Our security analysts will use Microsoft Sentinel's powerful hunting search and query tools to hunt for security threats across your organization's data sources.

### Out of scope

- **Incident response** – Not included in the default scope

### Requirements

- Access to deployed Microsoft Sentinel instance in your tenant using delegated access through either Azure B2B or Azure Lighthouse (recommended)

## Scenario 2 – Joint threat exploration

No remote monitoring. Instead, we will complete the threat exploration step together, allowing your security analysts and engineers additional hands-on experience with Microsoft Sentinel to enable you to manage Microsoft Sentinel as part of your existing SOC. As part of the joint threat exploration, you will:

- **Experience Microsoft Sentinel** - Get hands-on experience and learn how to discover and analyze threats using Microsoft Sentinel. Learn how to automate your Security Operations to make it more effective.
- **Analyze threats** - Analyze and gain visibility into threats to your Microsoft 365 cloud and on-premises environments across email, identity and data in order to better understand, prioritize and mitigate potential cyberattack vectors

### Out of scope

- **Incident response** - Not included in the default scope

### Requirements

- No additional requirements necessary

# Weekly Agenda

## Week 1

- Define engagement scope
- Align expectations & next steps

## Week 2

- Goals, scope and deliverables
- Engagement tools
- Deploy and Configure Microsoft Sentinel

## Week 3

- Limited remote incident monitoring
- Prepare Results report and Recommendations
- Present engagement results report

**Pre-engagement Call – 1-hour**

- Goals:
- Introductions
  - Engagement overview
  - Define engagement scope
  - Identify right stakeholders
  - Engagement scheduling
  - Align expectations & next steps
  - Provide engagement questionnaire

**Kick-Off – 1-hour**

- Goals:
- Kick-off meeting
    - Goals, scope and deliverables
  - Engagement tools
  - Expectations and next steps

**Remote Monitoring – 2h/week**

- Goals:
- Limited remote incident monitoring
  - Proactive threat hunting

**Results Presentation – 2 hours**

- Present engagement results report
- Joint plan and next steps

**Define Scope – 1-hour**

- Goals:
- Define and document deployment scope

**Threat Exploration and Report Generation – 5 hours**

- Goals:
- Threat Exploration
  - Prepare Results report and Recommendations

**Threat Check and Microsoft Sentinel Configuration – 4 hours**

- Goals:
- Set-up trial license
  - Deploy and Configure Microsoft Sentinel
  - Setup Azure Lighthouse

