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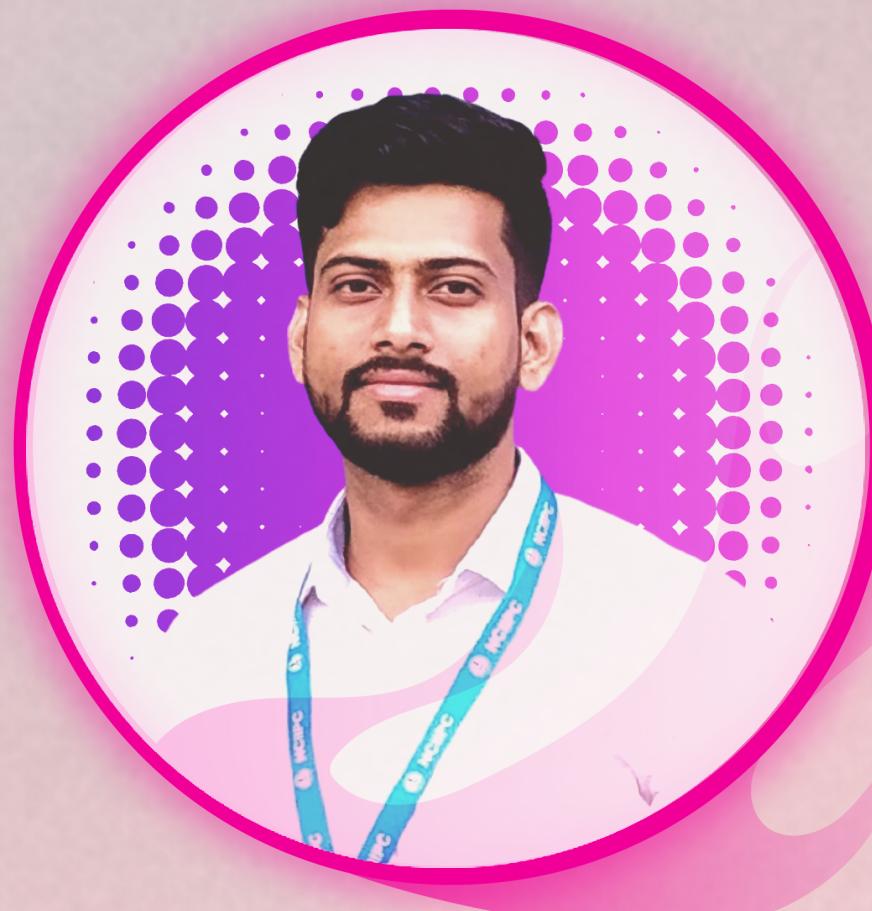
Azure Developer  
Community

# AZURE DEFENDER

iNeuron



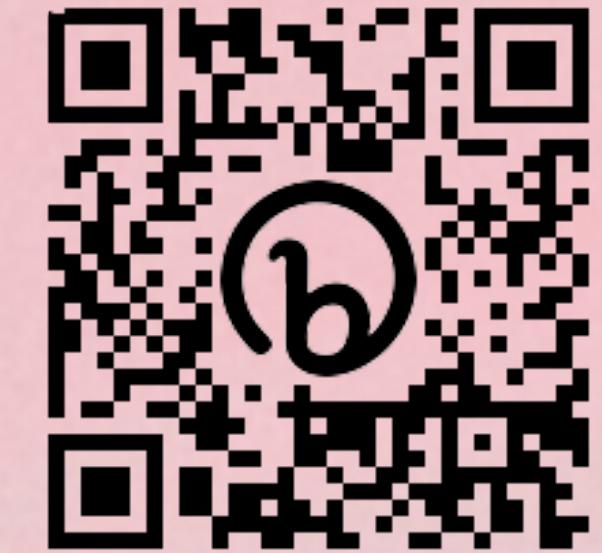
Azure Developer  
*Community*



## #whoami

Cyber Security Analyst at iNeuron  
AzDev Lead Member  
Cyber Security Consultant at Cyber Security Society | Secuneus Cyber Security | Techtwins Technologies | Ground Cyber Pvt Ltd.  
Certified Ethical Hacker – CEHv11

FOLLOW ME





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# WHAT WE COVERING



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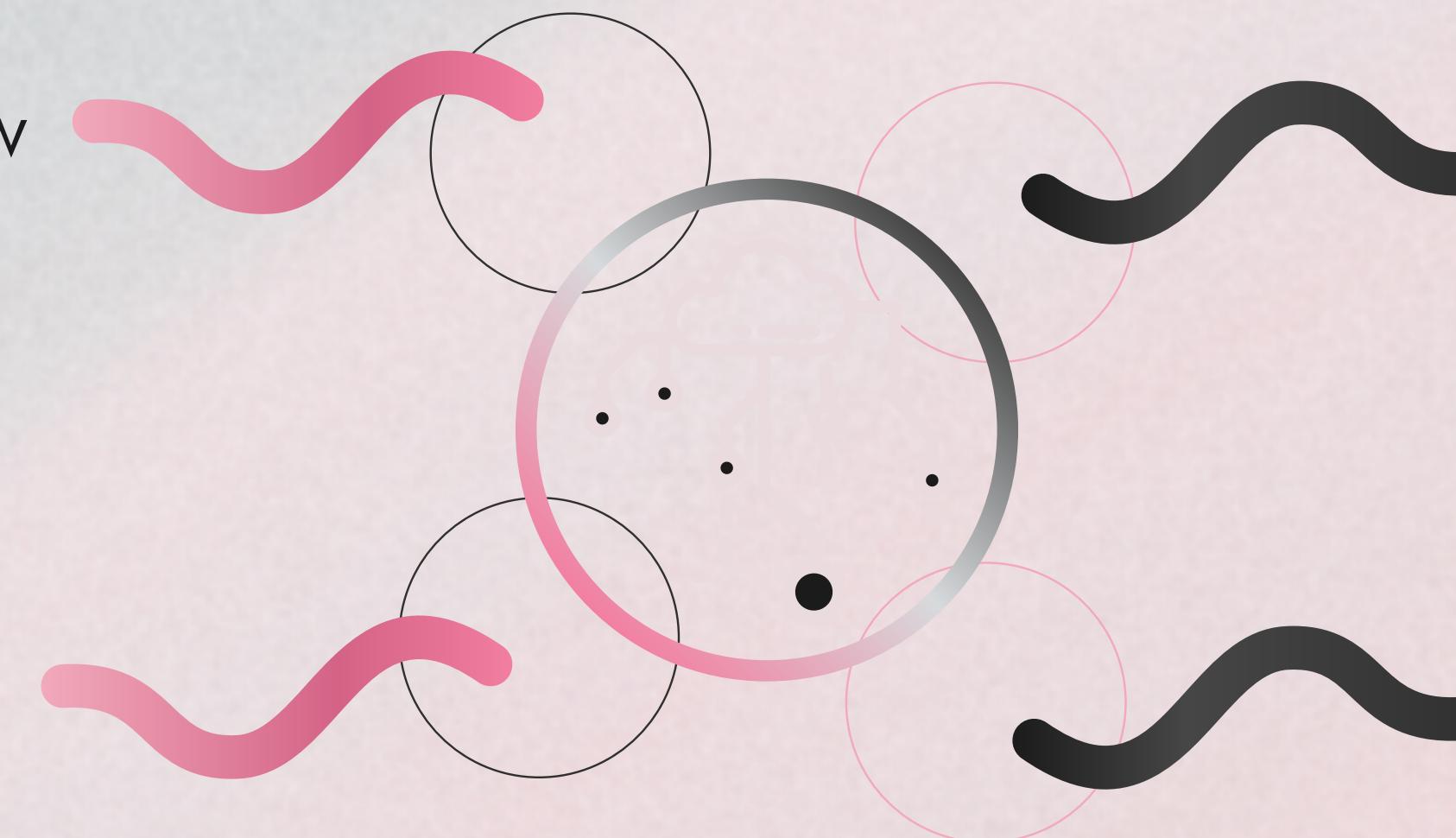
# AZURE DEFENDER

Overview

Architecture

Features

Where and Why?





## Continuously Assess

Know your security posture.  
Identify and track vulnerabilities.



## Secure

Harden resources and services with  
Azure Security Benchmark and  
AWS Security Best Practices standard



## Defend

Detect and resolve threats to  
resources and services.



Integrate with 360 degree security solutions



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Microsoft Defender for Cloud is a Cloud Security Posture Management (CSPM) and Cloud Workload Protection Platform (CWPP) for all of your Azure, on-premises, and multicloud (Amazon AWS and Google GCP) resources.

## CSPM

Hardening guidance – to help you efficiently and effectively improve your security  
Visibility – to help you understand your current security situation

SIEM

## Azure Sentinel

Visibility across your entire organization



Windows



macOS



Protect



aws

Prevent

iOS



## Microsoft 365 Defender

Secure your end users

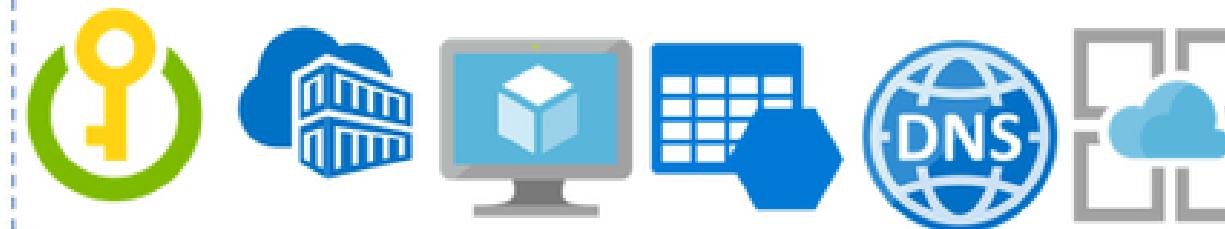
## Azure Defender

Secure your infrastructure

XDR

## Azure Defender

Advanced workload protection for selected resource types



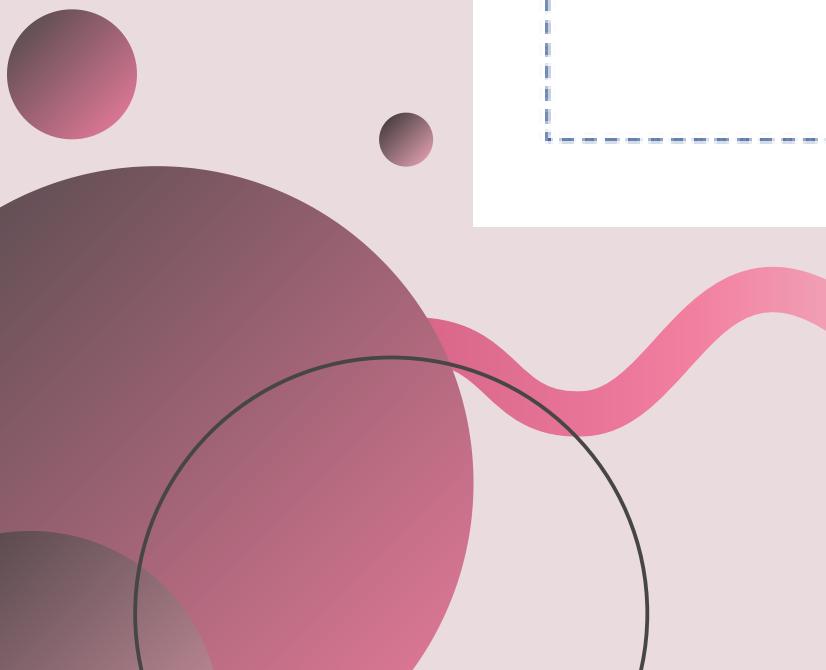
## Azure Sentinel

Security information event management, orchestration & automation across your environment, including 3<sup>rd</sup> party devices



## Azure Security Center

Your base level of security posture management including on-prem via Azure Arc



# Azure Defender

Protect your hybrid-cloud workloads



Servers



SQL & Storage



Container Registries  
and Kubernetes



Key Vault, DNS and  
Resource Manager



App services

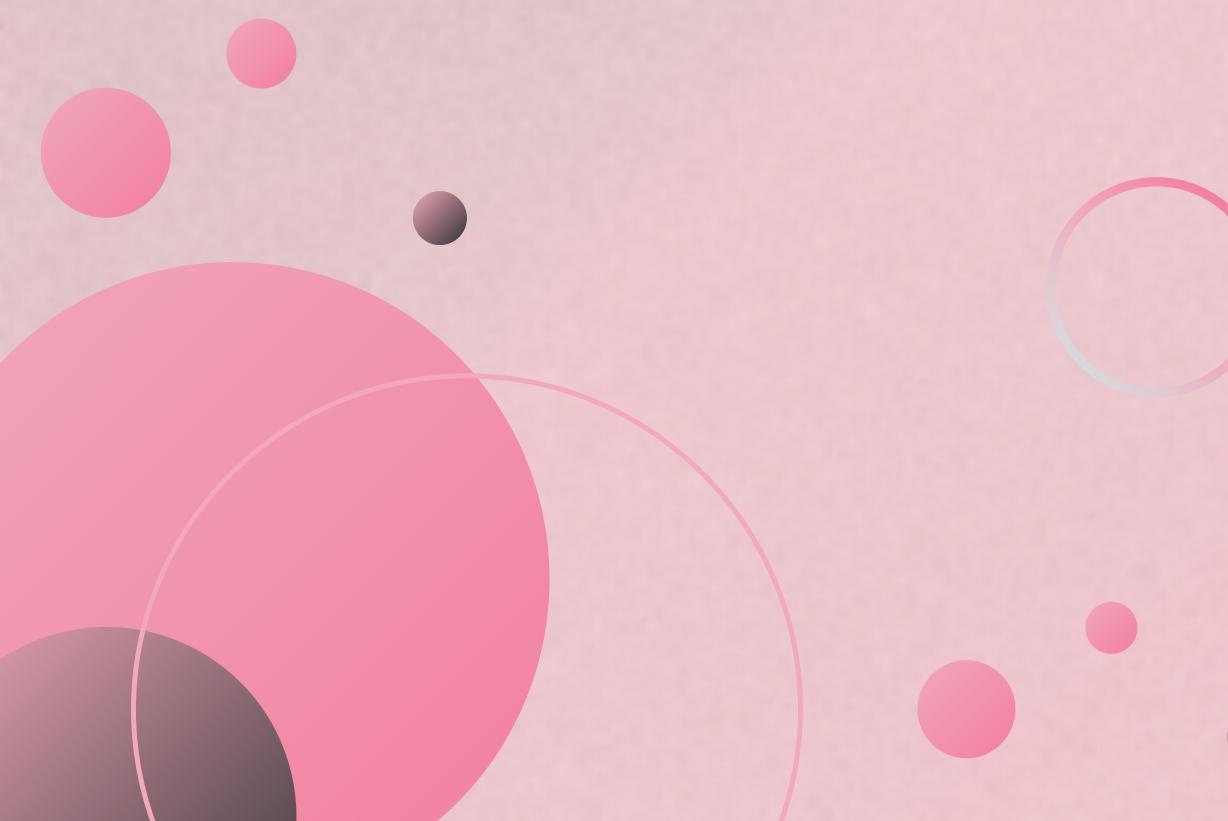


IoT



GLANCE AT  
DEPTH





Azure Defender for Azure VMs  
Azure Defender for Storage  
Azure Defender for Key Vault  
Azure Defender for Azure Kubernetes  
Azure Defender for Azure App Service  
Azure Defender for Azure SQL  
Azure Defender for Azure files  
Azure Defender for Azure Synapse  
Azure Defender for Managed Instance  
Azure Defender for Azure Network Layer V1

# Security Center | Azure Defender

Showing 64 subscriptions

Search (Cmd +/)

Subscriptions What's new

## Azure Defender coverage

General

- Overview
- Getting started
- Recommendations
- Security alerts
- Inventory (Preview)
- Community

Cloud Security

- Secure Score
- Regulatory compliance

Azure Defender

Management

- Pricing & settings
- Security policy
- Security solutions
- Workflow automation
- Coverage

### Azure Defender coverage

1,055 total

Resource Type	Status	Count
Virtual Machines	Fully covered (659)	266 / 330
Kubernetes Service	Agent not installed (12)	6 / 20
Container registry	Not covered (384)	2 / 7
App Services	Upgrade	66 / 94
SQL Server Virtual Machines	Install	0 / 7
Key vaults	Upgrade	5 / 46
SQL servers	Upgrade	28 / 37
Storage accounts	Upgrade	286 / 502

### Security alerts

The chart displays the number of security alerts per day. The y-axis ranges from 0 to 8. The x-axis shows dates: 16 Sun, 23 Sun, 30 Sun, and 6 Sun. The bars are stacked with yellow at the bottom, orange in the middle, and red at the top. A legend on the right indicates severity levels: High severity (red), Medium severity (orange), and Low severity (yellow).

Date	High severity	Medium severity	Low severity
16 Sun	20	63	7
23 Sun	20	63	7
30 Sun	20	63	7
6 Sun	20	63	7

### Advanced protection

VM Vulnerability Assessment 132 Unprotected	Just-in-time VM access 11 Unprotected	Adaptive application control 43 Unprotected	Container image scanning 2 Unprotected	Adaptive network hardening 12 Unprotected
SQL vulnerability assessment 27 Unprotected	File integrity monitoring	Network map	IoT security	

## Insights

Most prevalent security alerts

- Suspicious authentication... 8
- PREVIEW - User access... 5
- Traffic detected from IP ... 3

Most attacked resources

- ec2amaz-f4e0ns5 19 Alerts
- ch-victimvm00 19 Alerts
- ch-victimvm00-dev 19 Alerts

High severity VM vulnerability alerts

- Microsoft Windows Security Update... 19 Alerts
- Microsoft Internet Explorer Remote ... 19 Alerts
- Microsoft Windows Security Update... 19 Alerts

[View all in ARG >](#)

Home > NetworkMap

## NetworkMap

View: **Topology** **Traffic**

Filters: Security Health: 2 Selected | Recommendations: All | Network Zones: 1 Selected

/ ASC DEMO, Contoso IT...

Re-group

RestoreConstoso

**High** SECURITY HEALTH

**Info**

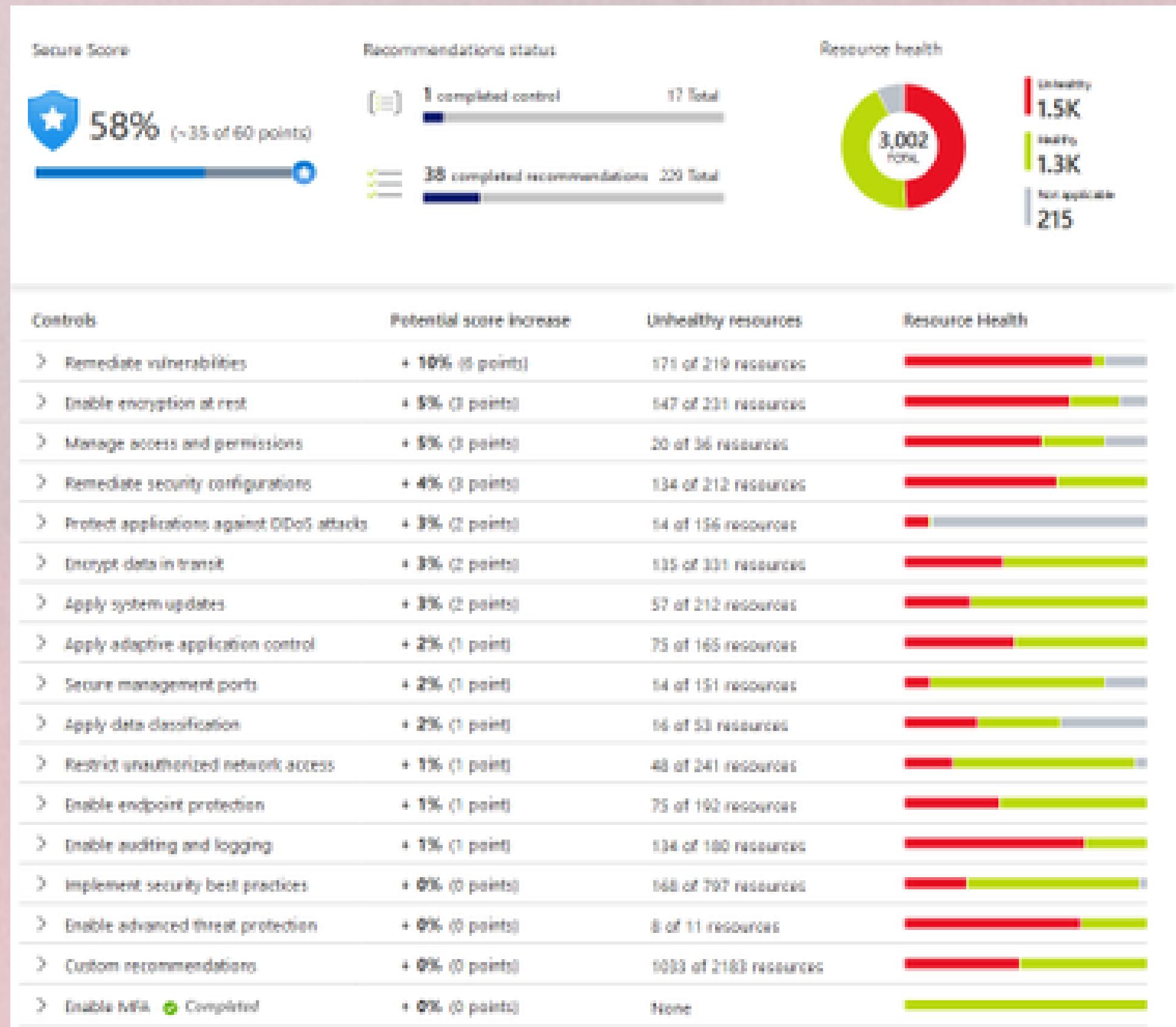
SUBSCRIPTION	Contoso IT - demo
NAME	RestoreConstoso
RESOURCE GROUP	ContosoAzureHQ
VIRTUAL MACHINE	RestoreConstoso
OPERATION SYSTEM	Windows
PUBLIC IP	104.215.85.192

**Security Solutions**

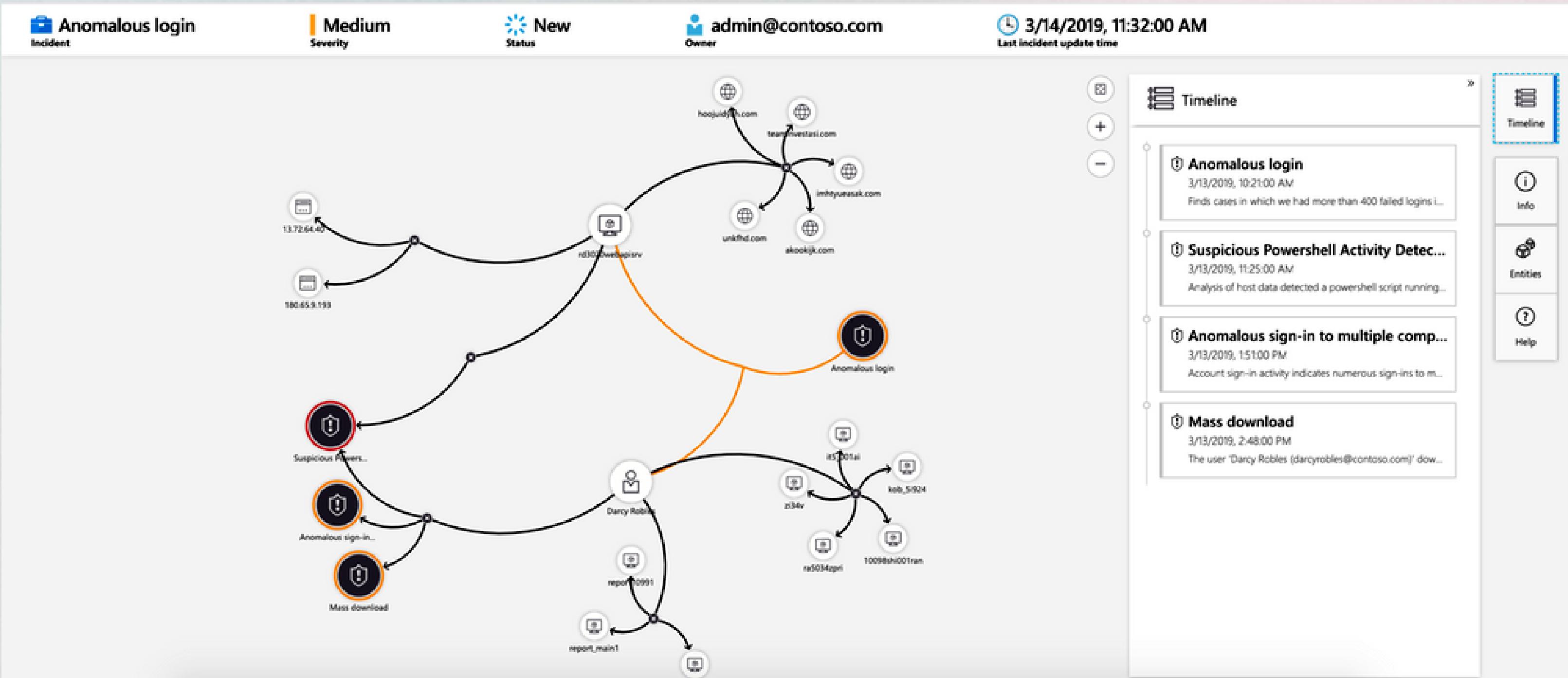
SECURITY CONFIGURATION	Microsoft (Last scan time - Not applicable)
SYSTEM UPDATES	Microsoft (Last scan time - 9/8/2018 9:57:18 PM)

**Recommendations**

DESCRIPTION	SEVERITY
Apply a Just-In-Time network access control	High
Add a web application firewall	High
Add a Next Generation Firewall	High
Restrict access through Internet facing endpoint	Medium



## Security Review and Suggestion



# Threat Investigation

# Pricing Plan

Feature	Defender for Servers Plan 1	Defender for Servers Plan 2
Automatic onboarding for resources in Azure, AWS, GCP	✓	✓
Microsoft threat and vulnerability management	✓	✓
Flexibility to use Microsoft Defender for Cloud or Microsoft 365 Defender portal	✓	✓
Integration of Microsoft Defender for Cloud and Microsoft Defender for Endpoint (alerts, software inventory, Vulnerability Assessment)	✓	✓
Security Policy and Regulatory Compliance	✓	
Log-analytics (500 MB free)	✓	
Vulnerability Assessment using Qualys	✓	
Threat detections: OS level, network layer, control plane	✓	
Adaptive application controls	✓	
File integrity monitoring	✓	
Just-in time VM access	✓	
Adaptive network hardening	✓	

# STUDY RESOURCES:

- <https://docs.microsoft.com/en-us/azure/defender-for-cloud/defender-for-cloud-introduction>
- <https://docs.microsoft.com/en-us/azure/defender-for-cloud/enable-enhanced-security>
- <https://www.microsoft.com/en-us/insidetrack/microsoft-uses-threat-intelligence-to-protect-detect-and-respond-to-threats>
- <https://techcommunity.microsoft.com/t5/itops-talk-blog/what-is-azure-defender/ba-p/1843528>
- <https://docs.microsoft.com/en-us/azure/defender-for-cloud/defender-for-servers-introduction>
- <https://www.slideshare.net/d501159/microsoft-defender-and-azure-sentinel>
- <https://techcommunity.microsoft.com/t5/itops-talk-blog/what-s-the-difference-between-azure-security-center-azure/ba-p/2155188>
- <https://charbelnemnom.com/azure-security-center-and-microsoft-defender-atp-integration/>

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# JOIN US

<https://discord.gg/pqcw9bnq>

Connect With Me

<https://bit.ly/3yDMGHP>





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# THANK YOU

for your attention

Any Questions DO FIRE

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