

Securing Multi-Clouds Part 2

Azure Arc
Microsoft Defender for Cloud
Microsoft Sentinel

Poll - https://aka.ms/SecuringMVC2-Poll





Meet the Team



Cassandra Browning
Cloud Solutions Architect
Security / Azure



Richard Diver Technical Business Strategy Manager



Nick Lines Security Product Marketing Manager



Darren Small
Cloud Solutions Architect
Azure Infrastructure



Ally Turnbull
Cloud Solutions Architect
Security / Compliance



Luciana Blanchard Cloud Solutions Architect Identity





Housekeeping



There will be breaks & speaker changes throughout



This is a one-way speaker to attendees audio, so please ask any questions in the Q&A



This will be recorded and links sent to you (current delay on recordings being sent)



Feedback – aka.ms/SecuringMVC2-Feedback



These Resources will be shared with you (to share with others at your company)



All content is under your partnership NDA

Today's Agenda (GMT)

- 14:00 Intro and Housekeeping Cassandra Browning
- 14:05 Opening Keynote Nick Lines
- 14:15 Azure Arc Darren Small
- 15:20 Break 10 mins
- 15:30 Microsoft Defender for Cloud Cassandra Browning
- 16:40 Break 10 mins
- 16:50 Microsoft Sentinel Ally Turnbull
- 17:20 Wrap Up + Live Q&A
- 17:30 Event ends

In case you missed part 1 MVC – Identity



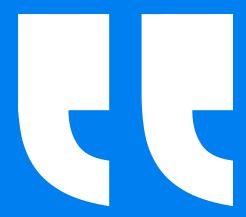
- On-Demand Recording coming soon
- Slides & Labs –
 https://aka.ms/SecuringMVC Repo



Keynote

Nick Lines
Security PMM





BUSINESSES AND USERS
ARE GOING TO
EMBRACE TECHNOLOGY
ONLY IF THEY CAN
TRUST IT.

SATYA NADELLA



For the eighth time, the American tech conglomerate has been regarded as a reputable brand.

Microsoft, which is worth more than US\$1 trillion, is the only software company listed in the top 10 for 2021.

The successful business scored 77.1 overall, giving it a Strong Reputation.



Microsoft on the Front Lines

Protecting

650 organizations in 120 countries

Analyzing

24T threat signals every day

Tracking

140+ threat groups

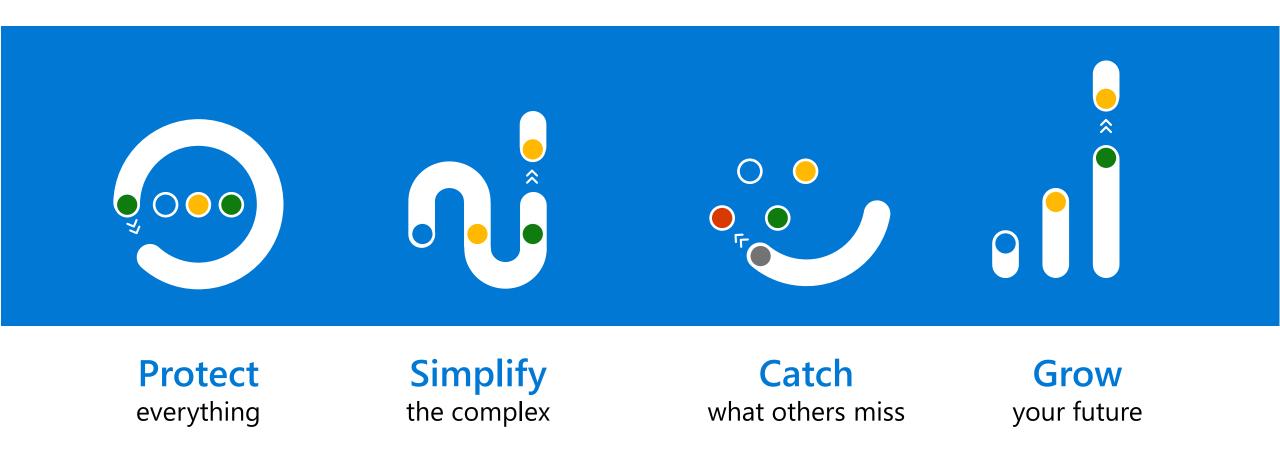
Blocked

32B email threats last year

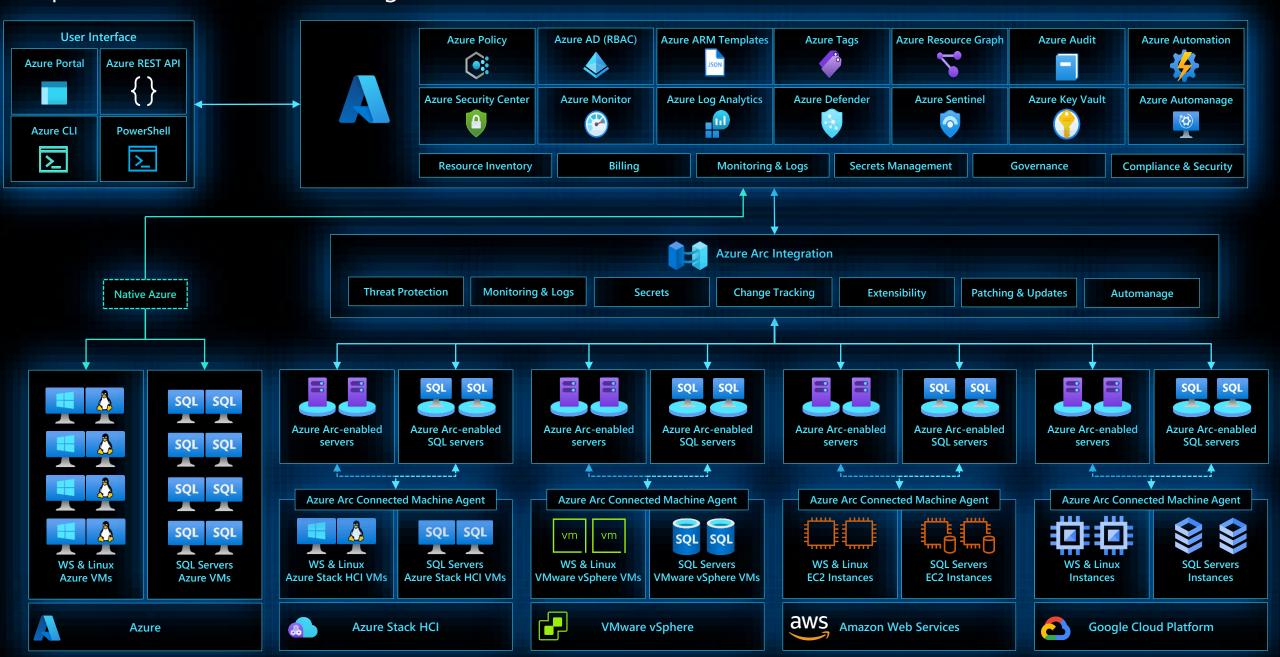


Microsoft Security

Comprehensive visibility, automation, and intelligence

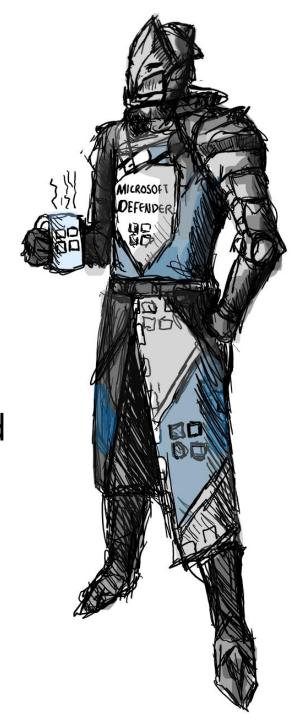


Azure Arc-enabled servers & Azure Arc-enabled SQL server On-premises and multi-cloud integration

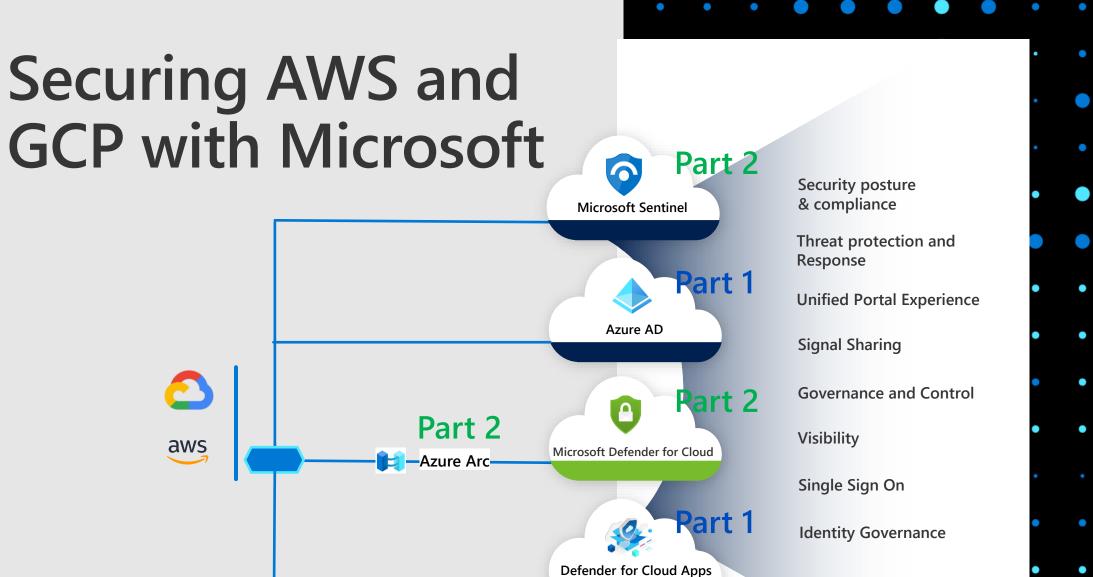


Why care?

- Revenue growth of 50% YoY for past 3 years
 - · Azure Security growing faster...
- · Strategic growth pillar for Microsoft
- · 715k customers relying on Microsoft Security
- Market for managed security services growing beyond license/service spend
- Gartner predicts
 "By 2025, 50% of enterprises will be using MDR"
- · Whitespace of \$2Bn+ in UK alone









Azure Arc

Darren Small





Microsoft Defender for Cloud

Cassandra Browning



Cloud Security from Microsoft

Integrated protection for your multi-cloud resources, apps and data



Get your security posture in order



Defend against evolving threats



Control access to critical apps & resources



Build secure apps from the start

Microsoft Defender for Cloud

Microsoft Defender for Cloud

Microsoft Defender for Cloud Apps

GitHub Advanced Security

CloudKnox

Azure Network Security

Microsoft Defender for Cloud

Posture Management

Workload Protection

Investigation & Remediation



Secure configuration of resources



Management of compliance requirements



Full-stack workload protection



Vulnerability scanning & threat management



Assess and resolve security alerts and incidents



Automate response

Automate with the tools of your choice















Microsoft Azure

aws

Amazon Web Services



Google Cloud Platform



Hybrid cloud

Cloud-Native Security



Built-in with Azure

- → No deployment, just enable
- → Built into the resource provisioning process
- → Broadest protection coverage
- → Identify sensitive data



Multi-cloud and hybrid support

- → Agentless onboarding for AWS and GCP posture management
- → Auto protection provisioning for new resources
- → Onboard on-prem resources with Azure Arc



Advanced Threat Detection

- → Deterministic, AI, and anomaly-based detection mechanism
- Leverages the power of Microsoft Threat Intelligence



Easy remediation and automation

- → Remediate with the tools and workflows of your choice
- → Native SIEM integration for automatic logging and easy management of incidents.
- → Out-of-the box reporting

Posture Management

Birds-eye view with Secure Score

- Get an all-in-one view of your security posture and vulnerabilities across clouds
- Assess and implement best practices for security and compliance
- Improve your Secure Score in minutes and manage it over time

Out-of-the-box and custom recommendations

- 450+out-of-the-box recommendations
- Support for security and regulatory compliance standards
- Create custom recommendations to meet organizational requirements

Easy remediation and automation

- Use "Quick fix" to remediate with a single click
- Create auto-remediation workflows using Azure Logic Apps

Attackers Exploit Poor Cyber Hygiene to Compromise Cloud Security Environments | CISA

https://www.microsoft.com/en-us/security/business/microsoft-digital-defense-report (p.124)

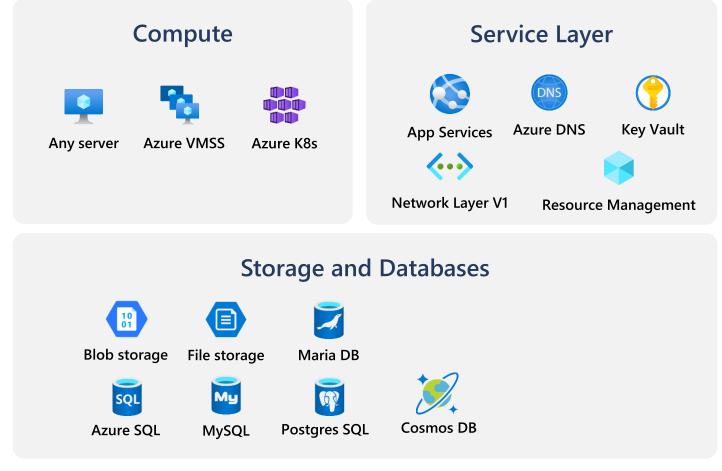


Workload Protection

- Protect cloud and on-premises resources against threats in one place
- Reduce your attack surface further by continuously scanning workloads to identify and manage vulnerabilities
- Automatically apply threat protection as soon as new workloads are deployed



Broad threat protection coverage







Amazon EKS









Microsoft Defender for Servers

Threat protection for servers

Protect Linux, Windows, EC2, and Google Compute

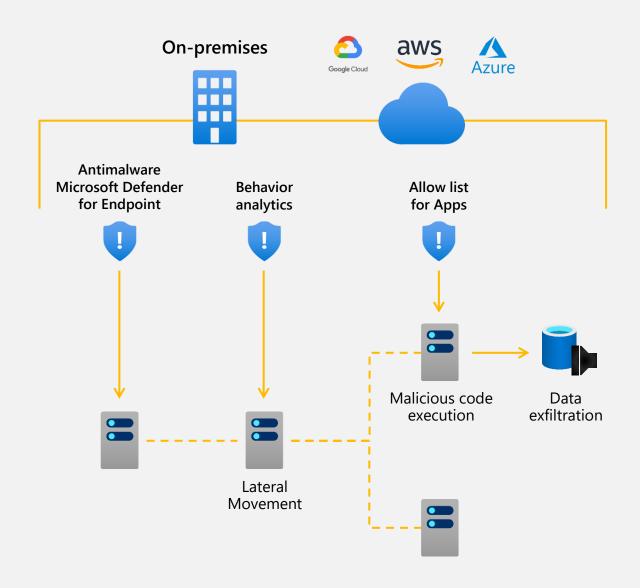
Reduce open network ports (Azure)

- Use Just-in-Time VM to control access to commonly attacked management ports
- · Limit open ports with adaptive network hardening

Block malware with adaptive application controls

Protect Windows and Linux servers with the integration of Microsoft Defender for Endpoint

Microsoft Defender for Cloud's servers features according to OS, machine type, and cloud | Microsoft Docs



Assess your VMs for vulnerabilities





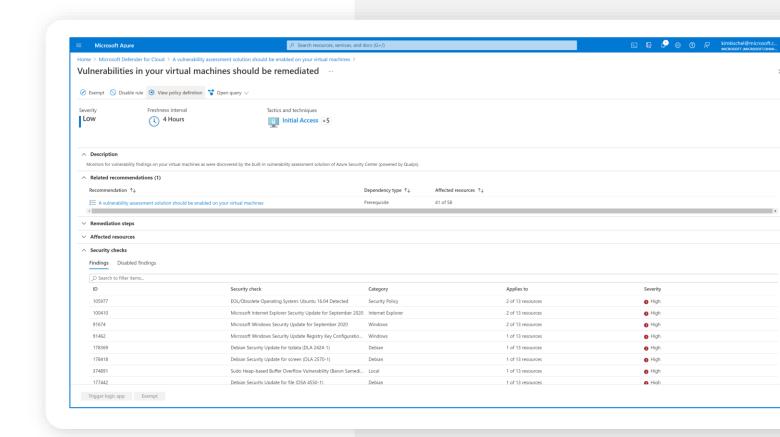


Automated deployment of the vulnerability scanner

Continuously scans installed applications to find vulnerabilities for Linux and Windows VMs

Visibility to the vulnerability findings in Security Center portal and APIs

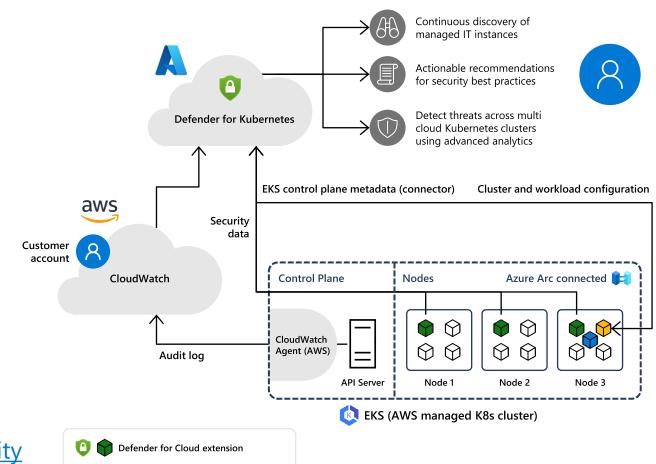
Choose between Qualys and Microsoft's threat and vulnerability management capabilities.



Microsoft Defender for Containers

Protect hybrid and multi-cloud Kubernetes deployments, leveraging Azure Arc for Kubernetes

- Cloud-native technology
- Multi-cloud and hybrid support
 - Amazon EKS and Google GKE
 - Kubernetes on-premises / laaS
- Discovery and visibility of clusters
- Management and workload visibility
- Kubernetes-aware threat detection
- Kubernetes behavioral analytics and anomaly detection



Arc-enabled Kubernetes

Gatekeeper, Azure Policy

Microsoft Defender for Containers feature availability
| Microsoft Docs

Workflow Automation

- Apply Quick Fixes to recommendations
- Automate responses with Logic Apps
- Continuously export to Event Hub and Log Analytics
- Export to CSV











servicenow

Break Please return at 15:15pm GMT

Please complete the poll if you haven't already

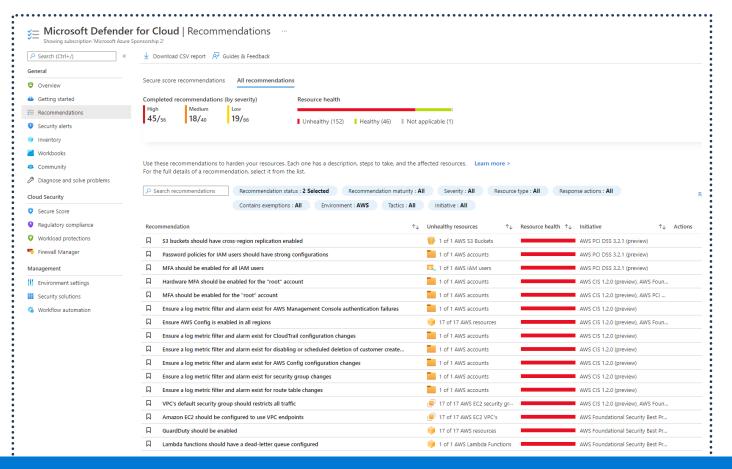
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Microsoft Defender for Cloud – AWS





Native AWS support using the AWS API

Policy management

Vulnerability management

Embedded Endpoint Detection and Response (EDR)

Detection of security misconfigurations

Protect Amazon EKS clusters and AWS EC2 workloads

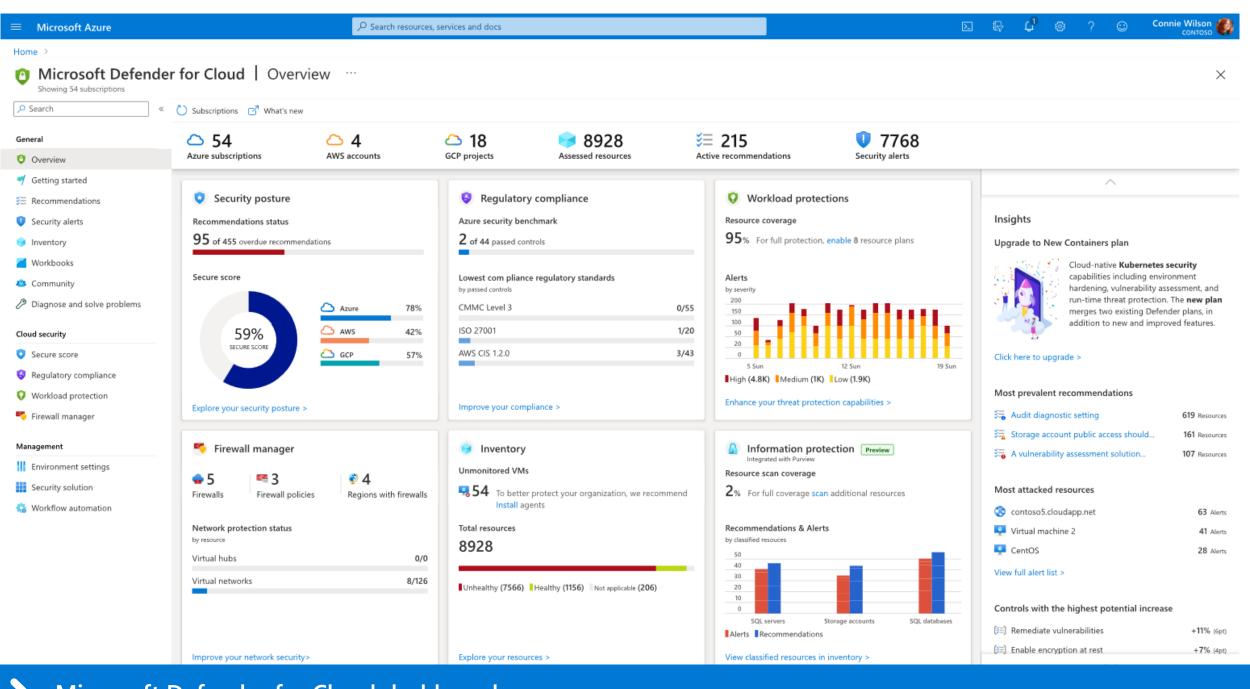
Incorporation of your AWS resources into MDfC's secure score calculations

160+ out of the box recommendations, CIS, PCI & AWS Foundational Security Best Practices support

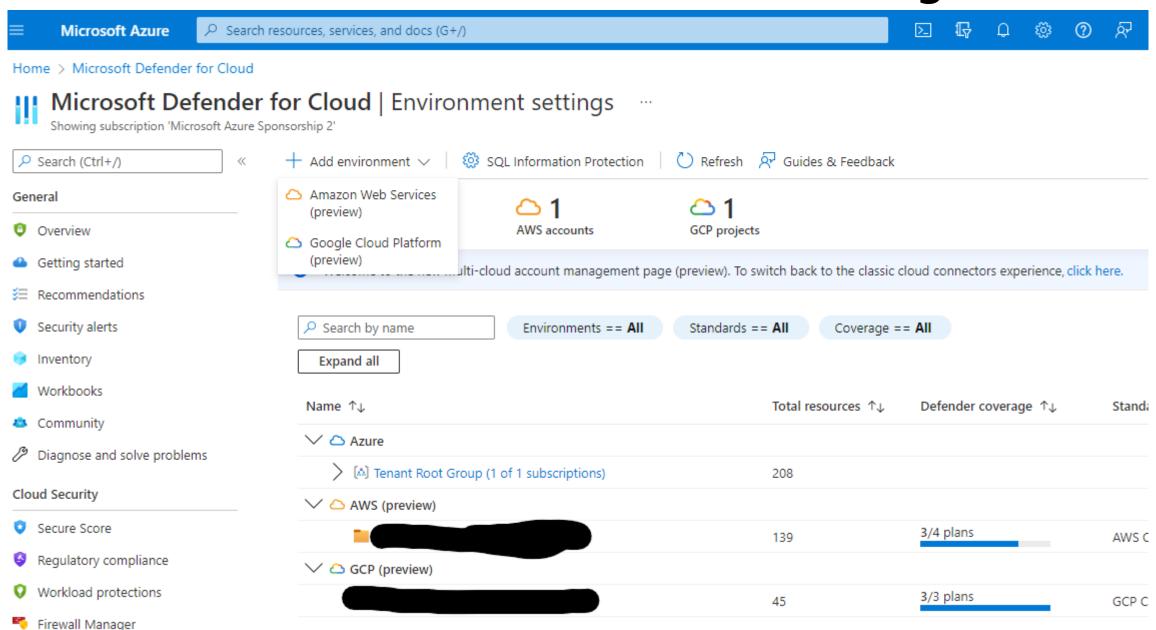
Removed dependencies on AWS Security hub; native integration into the environment and recommendations

AWS Demo



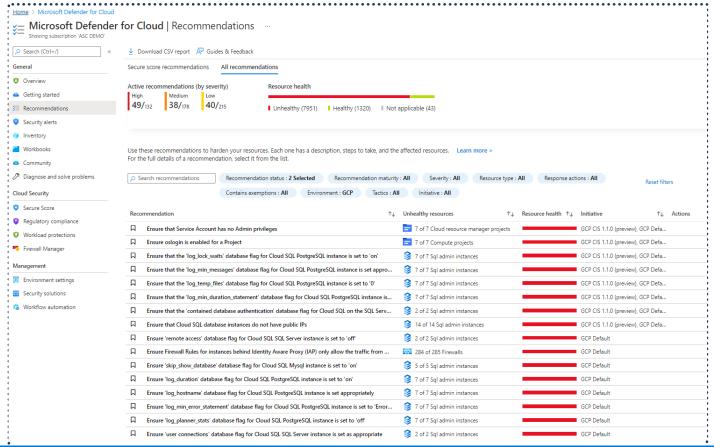


AWS – MDfC Environment Settings



Microsoft Defender for Cloud – GCP





Native GCP support using the Google APIs

Policy management

Vulnerability management

Embedded Endpoint Detection and Response (EDR)

Detection of security misconfigurations

Protect Google GKE clusters and GCE workloads

Incorporation of your GCP resources into MDfC's secure score calculations

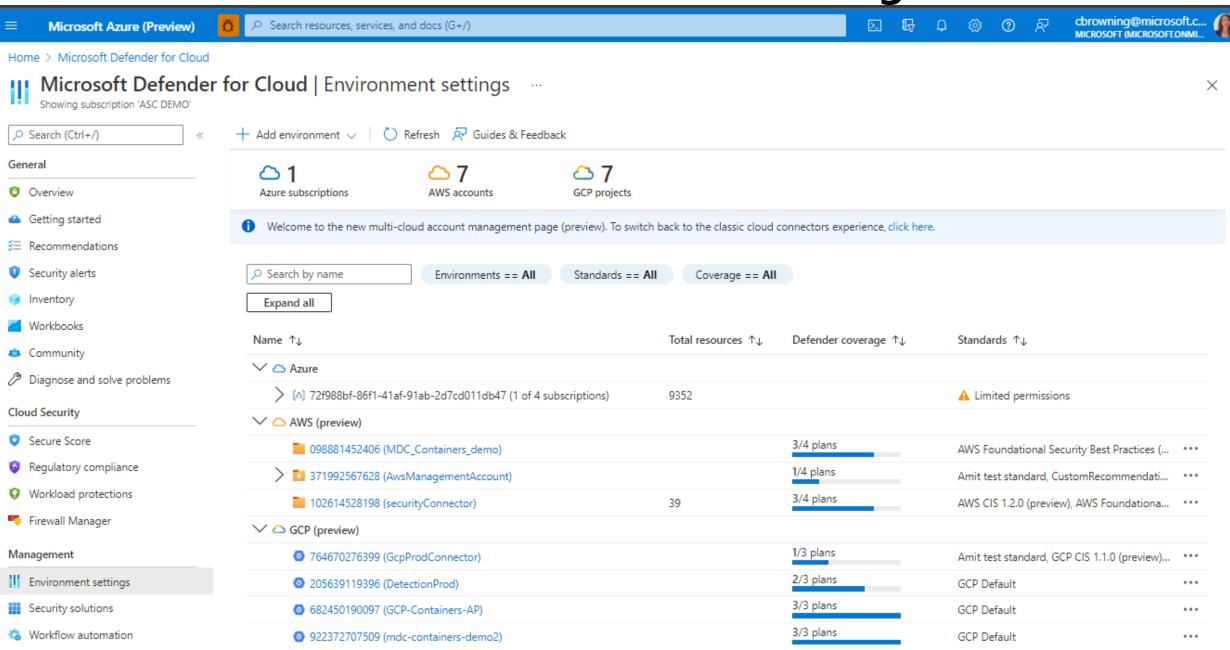
80+ out of the box recommendations aligned to industry standards and best practices such as CIS Benchmark for Google Cloud

Removed dependencies on Google Command Center; native integration into the environment and recommendations

GCP Demo



GCP – Environment settings



Microsoft Defender for Cloud



- Centrally secure and protect resources across the three major cloud providers and hybrid environments
- → Ensure the secure and compliant configuration of cloud resources
- Detect vulnerabilities and threats to protect against malicious attacks

We always welcome feedback about our products! Please use User voice if you have ideas, suggestions, or feedback: https://aka.ms/MDFCUserVoice

If you're a customer as well as a partner, we have this link for feature requests: https://aka.ms/CxESubmitFR

Microsoft Defender for Cloud and Azure Arc Resources

- Microsoft Defender for Cloud Ninja Training http://aka.ms/ascninja
- → Microsoft Defender for Cloud Community Repository https://github.com/Azure/Microsoft-Defender-for-Cloud
- → SC-200 Security Operations Analyst Associate https://docs.microsoft.com/en-us/learn/certifications/securityoperations-analyst/
- → Defender for Cloud 'In the Field' YouTube series https://www.youtube.com/hashtag/mdfcinthefield
- → Microsoft Security Community http://aka.ms/SecurityCommunity
- → Azure Arc Jumpstart https://azurearcjumpstart.io/overview/
- → Must Learn KQL http://aka.ms/mustlearnkql



Break Please return at 16:35pm GMT

Please complete the poll if you haven't already

https://aka.ms/SecuringMVC2-Poll





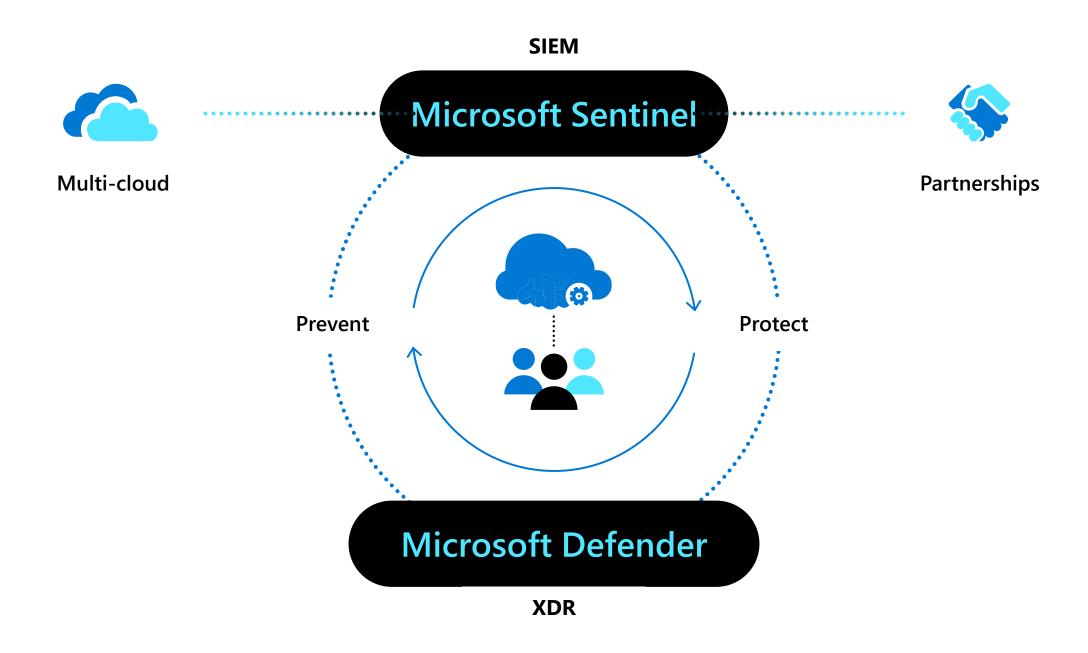


How does Microsoft Sentinel support Multi-Cloud?

Ally Turnbull

Partner SCI Cloud Solution Architect UK





Microsoft Sentinel An end-to-end solution for security operations

Powered by community + backed by Microsoft's security experts









Analytics



Detect

ics Hunting



Intelligence

Investigate



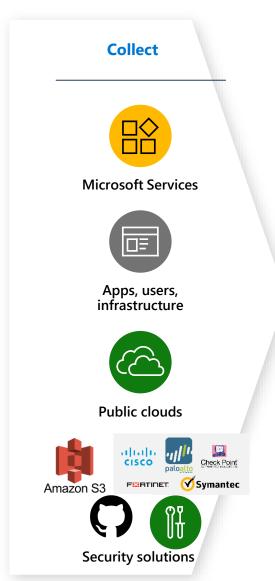
Incidents

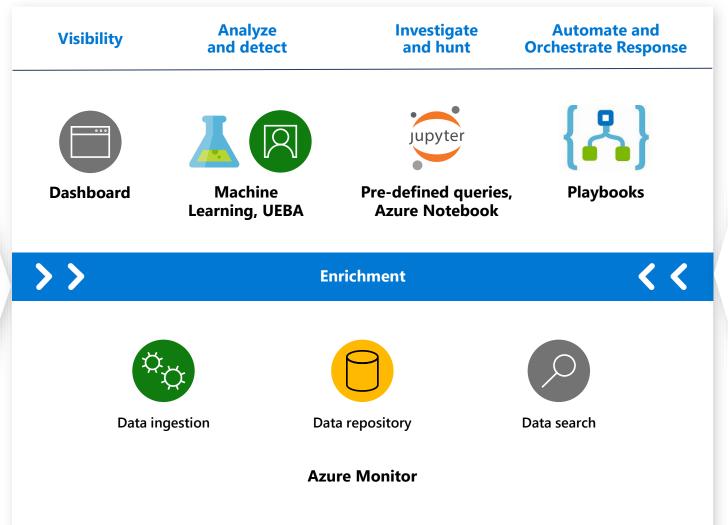
Respond



Automation

How it works





Integrate



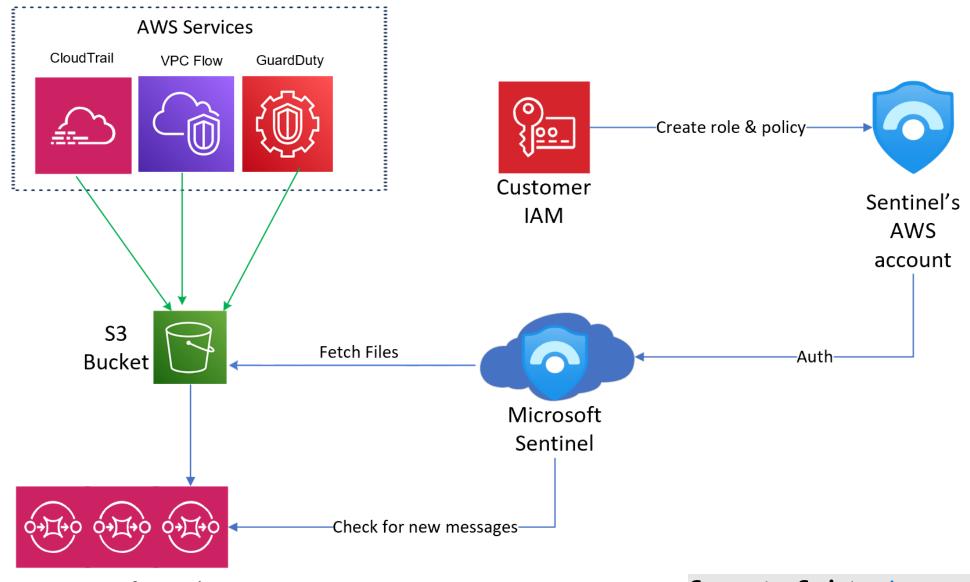
ServiceNow



Other tools



AWS S3 Microsoft Sentinel Connector Architecture



SQS Queue for each Data Source **Connector Scripts - Azure-**

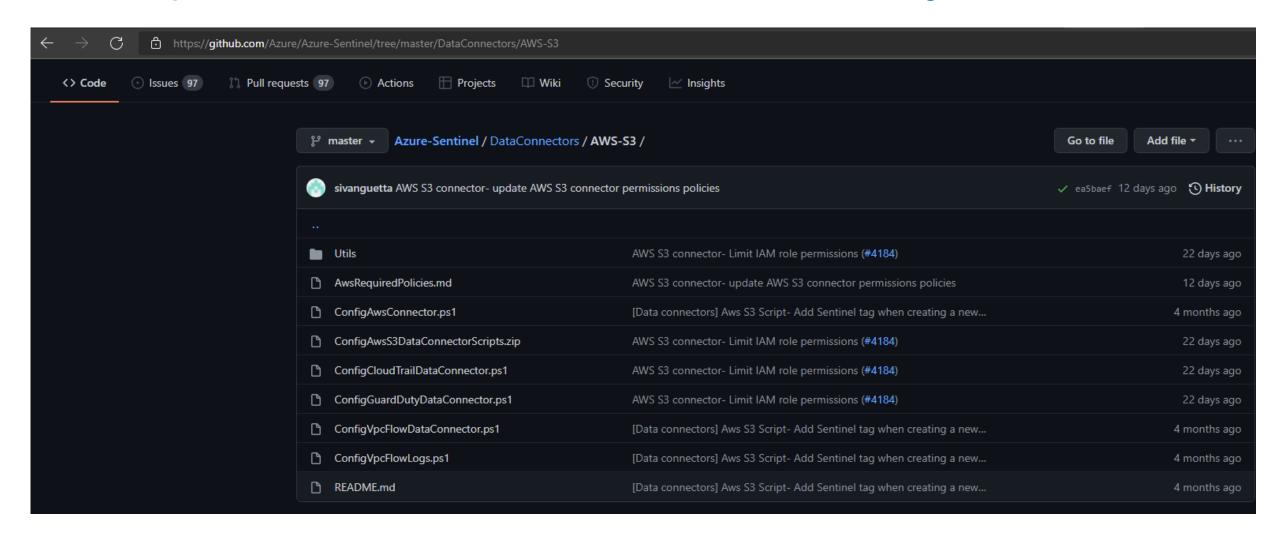
<u>Sentinel/DataConnectors/AWS-S3 at master · Azure/Azure-Sentinel (github.com)</u>

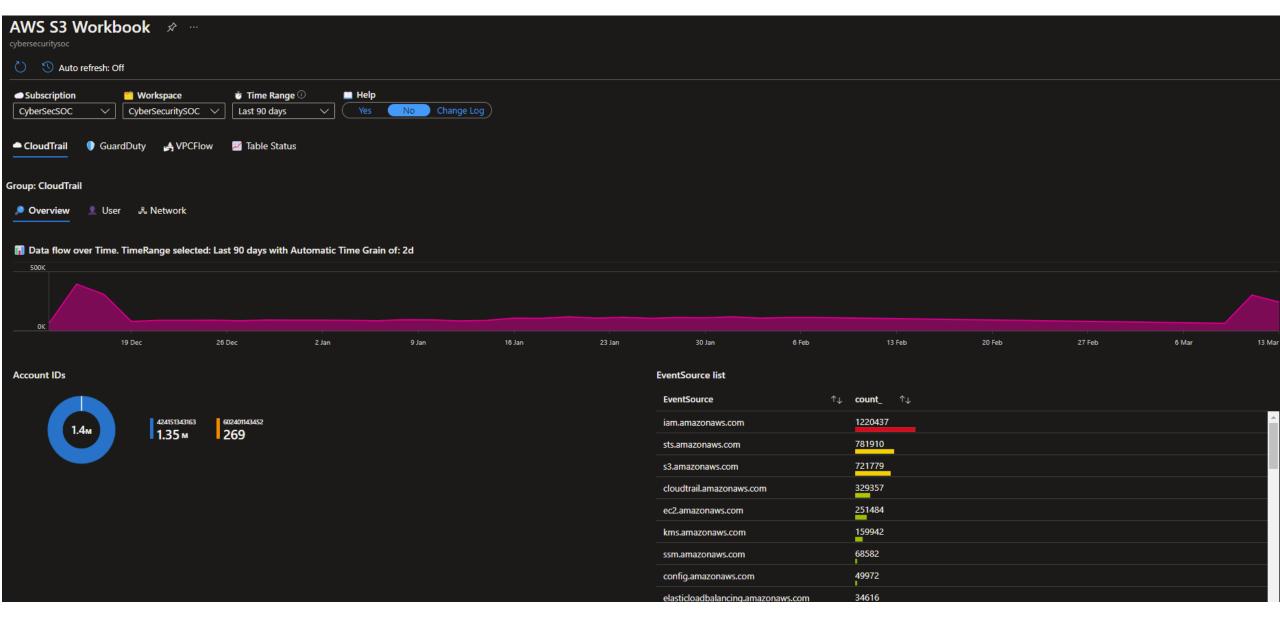
AWS S3 Demo



PowerShell Scripts

Connector Scripts - <u>Azure-Sentinel/DataConnectors/AWS-S3 at master · Azure/Azure-Sentinel (github.com)</u>





AWS S3 Workbook - Azure-Sentinel/Workbooks at master · Azure/Azure-Sentinel (github.com)

Microsoft Sentinel Resources



- Codeless connectors The Codeless Connector Platform Microsoft Tech Community
- Sentinel Github Data Connectors <u>Azure-Sentinel/DataConnectors at master · Azure/Azure-Sentinel</u> (github.com)
- Ninja Training The Ninja Training 2021 edition is out! Microsoft Tech Community
- > Sentinel Learning Path https://docs.microsoft.com/en-us/learn/paths/security-ops-sentinel/
- > SC-200 Security Operations Analyst Associate https://docs.microsoft.com/en-us/learn/certifications/security-operations-analyst/
- ➤ Sentinel Tech community Blogs https://techcommunity.microsoft.com/t5/azure-sentinel/bg-p/AzureSentinelBlog
- ➤ What's new in Microsoft Sentinel https://docs.microsoft.com/en-us/azure/sentinel/whats-new
- > How to deploy Microsoft Sentinel as a managed security services provider http://aka.ms/azsentinelmssp



Wrap Up



Capabilities Matrix aws





Product	Feature	Theme	Capabilities	AWS Requirments	Deployment Effort	Additional Costs
Defender for Cloud	Security Auditing	Visibility,	UEBA, Threat Detection, Investigation,	CloudTrail, GuardDuty	Minimal, Easy to Configure	Microsoft: E5 License
Apps		Detection, Response	AWS Activity			AWS: CloudTrail and GuardDuty
Defender for Cloud Apps	Security Configuration	Visibility	Visibility, Inventory, Misconfiguration, CIS Benchmark for AWS	Security Hub	Minimal, <u>Easy to Configure</u>	Microsoft: E5 License
						AWS: Security Hub
Defender for Cloud Apps	Conditional Access App Control	Visibility, Detection, Prevention	Session Visibility and Control, Governance Controls	None	Moderate, <u>Integration with</u> <u>IDP</u>	Microsoft: E5 License
Defender for Cloud	Cloud Security Posture Management	Visibility	Visbility, Inventory, Misconfiguration, Hardening Guidance	None	Minimal, <u>Easy to Configure</u>	None
Defender for Cloud	Defender for Servers Defender for Endpoint	Detection, Prevention, Response	EDR, Regulatory Compliance Scanning, Threat Detection, <u>Vulnerability</u> Assessment, <u>FIM</u> , <u>Adaptive Application</u>	Systems Manager	Moderate, <u>Requires Agents</u>	Microsoft: \$0.02/Server/hour
		•	Controls			AWS: Systems Manager
Defender for Cloud	<u>Defender for Containers – EKS</u>	Detection, Prevention, Response	Real-time threat protection	CloudWatch, S3, Kinesis, SQS	Minimal, <u>Easy to Configure</u>	Microsoft: \$0.00268/vCore/hour
		Кезропас				AWS: CloudWatch, S3, Kinesis, SQS
Microsoft Sentinel	N/A	Visibility, Detection, Prevention, Response	SIEM, SOAR, <u>UEBA</u> , <u>ML Threat Detection</u> , <u>SOC-ML</u>	CloudWatch, GuardDuty, VPC Flow Logging, S3, SNS	Moderate, Requires AWS component configuration	Microsoft: <u>Charged for</u> <u>Data Ingestion and</u> <u>Retention</u>
		Response				AWS: CloudWatch, GuardDuty, VPC Flow Logging, S3, SNS
Azure Active Directory	Conditional Access, SSO, Identity Protection, Privileged Identity Managment	Detection, Prevention, Protection, Zero Trust	Risk based access, threat detection, Identity Governance	None	Moderate, Requires migrating to Azure AD for SSO	Microsoft: Azure AD P2 / E5 / EMS License

Capabilities Matrix (





Product	Feature	Theme	Capabilities	GCP Requirments	Deployment Effort	Additional Costs
Defender for Cloud Apps	Security Auditing	Visibility, Detection, Response	UEBA, Threat Detection, Investigation, GCP Activity	Cloud Audit Logs	Minimal, <u>Easy to Configure</u>	Microsoft: E5 License
						GCP: Google Cloud's operations suite (formerly Stackdriver)
Defender for Cloud Apps	Security Configuration	Visibility	Visibility, Inventory, Misconfiguration, CIS 1.1 Benchmark	Security Command Center	Minimal, <u>Easy to Configure</u>	Microsoft: E5 License
						GCP: Security Health Analytics (potentially)
Defender for Cloud Apps	Conditional Access App Control	Visibility, Detection, Prevention	Session Visibility and Control, Governance Controls	None	Moderate, <u>Integration with</u> <u>IDP</u>	Microsoft: E5 License
Defender for Cloud	Cloud Security Posture Management	Visibility	Visbility, Inventory, Misconfiguration, Hardening Guidance	None	Minimal, <u>Easy to Configure</u>	None
Defender for Cloud	Defender for Servers Defender for Endpoint	Detection, Prevention, Response	EDR, Regulatory Compliance Scanning, Threat Detection, <u>Vulnerability</u> Assessment, <u>FIM</u> , <u>Adaptive Application</u> Controls	OS config agent (for autoprovisioning)	Moderate, <u>Requires Agents</u>	Microsoft: \$0.02/Server/hour
						GCP: <u>VM Agent</u> (for autoprovisioning)
Defender for Cloud	<u>Defender for Containers – GKE</u>	Detection, Prevention, Response	Real-time threat protection	None	Minimal, <u>Easy to Configure</u>	Microsoft: \$0.00268/vCore/hour
						GCP: None beyond GKE
Microsoft Sentinel	N/A	Visibility, Detection, Prevention, Response	SIEM, SOAR, <u>UEBA</u> , <u>ML Threat Detection</u> , <u>SOC-ML</u>	GCP: Cloud Logging, Cloud Monitoring	Moderate, Requires AWS component configuration	Microsoft: <u>Charged for</u> <u>Data Ingestion and</u> <u>Retention</u>
		Response				GCP: Cloud Logging + Cloud Monitoring
Azure Active Directory	Conditional Access, SSO, Identity Protection, <u>Privileged Identity</u> <u>Managment</u>	Detection, Prevention, Protection, Zero Trust	Risk based access, threat detection, Identity Governance	None	Moderate, Requires migrating to Azure AD for SSO	Microsoft: Azure AD P2 / E5 / EMS License

Labs and demo guidance



- On-Demand Recording coming in the near future after this event
- Slides & Labs http://aka.ms/securingmvc2-repo

https://aka.ms/SecuringMVC2-CSC



Silver – Complete cloud skills challenge **and** be registered for the event.



Gold – Completed cloud Skills Challenge + registered for the event + pass the SC-200 exam.



Security, Compliance, Identity Enablement Guide for Partners

Access the latest partner-facing version here: https://aka.ms/scipartnerenablement

Simplified Guide to SCI Partner training resources for the role-based exams, learning journeys across Security, and other key resources to support you and your organization on your skilling journey.

Security, Compliance, Identity Certifications and Exams



Microsoft Security, Compliance, and Identity Fundamentals (SC-900)

Training includes

- 7 hours of Microsoft Learn content
- 8 hours of exam prep instructor training
- 1-day virtual training day

Associate Certifications

Microsoft Security Operations Analyst (SC-200)

Training includes

- 30 hours of Microsoft Learn content
- 10 hours of exam prep instructor training
- 4-day instructor-led training (English, Japanese, Chinese (Simplified), Korean)

Microsoft Identity and Access Administrator (SC-300)

Training includes

- 12 hours of Microsoft Learn content
- 8 hours of exam prep instructor training
- 4-day instructor-led training (English, Japanese, Chinese (Simplified), Korean)

Microsoft Information Protection Administrator (SC-400)

Training includes

- 10 hours of Microsoft Learn content
- 8 hours of exam prep instructor training
- 2-days of instructor-led training (English, Japanese, Chinese (Simplified), Korean)

Azure Security Engineer (AZ-500)

Training includes

- 32 hours of Microsoft Learn content
- 4-day instructor-led training (English, Japanese, Chinese (Simplified), Korean)

Microsoft 365 Security Administrator Associate (MS-500)

Training includes

- 14 hours of Microsoft Learn content
- 10 hours of exam prep instructor training
- 4-day instructor-led training (English)

*Azure Network Engineer Associate (AZ-700)

<u>Training includes</u>

- 10 hours of Microsoft Learn content
- Exam prep instructor training not available

Expert Certifications

Coming Soon Microsoft Cyber Security Architect

Online modules coming soon

This page lists the certifications and exams that are recommended for partners looking to build and extend their Microsoft security, compliance, and identity practices.

The Microsoft Security,
Compliance, and Identity
certification portfolio includes the
following certifications:

- Microsoft Security, Compliance, and Identity Fundamentals
- Microsoft Security Operations Analyst
- Microsoft Identity and Access Administrator
- Microsoft Information Protection Administrator
- Azure Security Engineer
- Microsoft 365 Security Administrator
- Microsoft Cybersecurity Architect

*Azure Network Engineer Associate is categorized in the Azure certification portfolio and is also relevant to our partners.

Go here for the latest certification roadmap <u>Microsoft training</u> and <u>certifications</u>.

• Go here for the latest certification roadmap Microsoft training and certifications.

Security workshops

	Threat protection	Microsoft Sentinel	Hybrid cloud security
Methodology	Discover threats in a customer's M365 cloud environment by using the Threat Check license , and provide recommendations to mitigate threat.	Discover threats in a customer's M365 cloud environment by using Microsoft Sentinel and Threat Check license , and provide recommendations to mitigate threat.	Discover threats and vulnerabilities in a customer's Azure, hybrid, and multi-cloud environment. Provide recommendations to mitigate.
Outcome	Create intent for purchasing and deploying M365 E5 Security.	Create intent for purchasing and deploying Microsoft Sentinel.	Create intent for purchasing and deploying Microsoft Defender for Cloud and Network Security products.
Customer eligibility	800+ AADP PAUs* 250+ monthly active units (MAU) for EXO, SPO, or Teams	800+ AADP* paid available units (PAU*) 250+ MAU* for EXO*, SPO*, or Teams	Annual Azure consumption for servers, SQL, and storage must be >\$150,000 USD. Defender for Cloud consumption is <4% of total Azure consumption.
Funding	Up to \$5,000 per workshop	Up to \$2,500 per workshop	Up to \$5,000 per workshop

To find out more: aka.ms/PartnerAccelerators

^{*}PAU – Paid Available Units

^{*}MAU – Monthly Active Usage

^{*}EXO – Exchange Online

^{*}SPO – SharePoint Online

^{*}AADP – Azure Active Directory Premium

^{*}Azure AD – Azure Active Directory



Microsoft Cybersecurity Reference Architectures



We are excited to announce an **update** to the Microsoft Cybersecurity Reference Architectures (MCRA). The MCRA describes Microsoft cybersecurity capabilities. The diagrams describe how Microsoft security capabilities integrate with Microsoft platforms and third-party platforms such as Microsoft 365, Microsoft Azure, third-party apps such as ServiceNow and Salesforce, and thirdparty platforms such as Amazon Web Services (AWS) and Google Cloud Platform (GCP).

View the update and download the file here.

Capabilities

What cybersecurity capabilities does Microsoft have?



Azure Native Controls

What native security is available?



Attack Chain Coverage

How does this map to insider and external attacks?





aka.ms/MCRA | May 2021 | Microsoft

People

How are roles & responsibilities evolving with cloud and zero trust?



Multi-Cloud & Cross-Platform

What clouds and platforms does Microsoft protect?



Zero Trust User Access

How to validate trust of user/devices for all resources?



Security Operations

How to enable rapid incident response?



Operational Technology

How to enable Zero Trust Security for OT?





- Complete the <u>Cloud Skills Challenge</u>
- Pass the SC-200 Microsoft Security Operations Analyst exam
- Cloud Accelerator for Hybrid Cloud Security and Microsoft Sentinel Workshops
- Share the training and materials with others at your organization
- Help your customers with their security needs across the Microsoft security stack



Contact your local GPS Team to get started!

UK – protectanddefend@microsoft.com

Share your thoughts, **feedback** via our survey!

https://aka.ms/SecuringMVC2-Feedback



Thank you! Feedback: https://aka.ms/SecuringMVC2-Feedback