

Secure your application journey from earth to the cloud Mario Cuomo & Edoardo Garofano































Agenda

Security as an opportunity, not a blocker

The security opportunity as a service

Microsoft Defender for Cloud for every workload

Microsoft Defender for Cloud Demos

Q&A



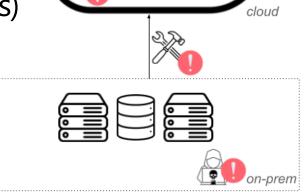




Why here?

Monitor transitions from traditional workloads to hybrid cloud to speed-up the migration and checking for:

- Threats (already present?)
- Misconfigurations (moving to cloud exposes to new possible ones)
- Compliance needs







Availailabilty

Security as an opportunity, not a blocker

Security still sounds like an option but it's not!

- Security increases the availability of a workload (but availability is really a security KPI?)
- Implementation of security measures contribute to the general performance of workloads
- Without security one day the workload will have disruption – who will restore the application? Security or workload team?

with low security hygiene¹ security VS performance **Availailabilty** with high security hygiene¹ 0.2 0.4 0.6 0.8

¹Source: Considerations regarding security issues impact on systems availability

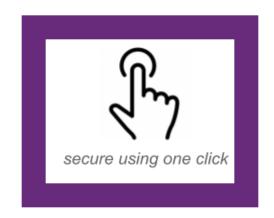






The security opportunity as a service

Once, also security platforms were workloads to be managed (and in many cases still are)



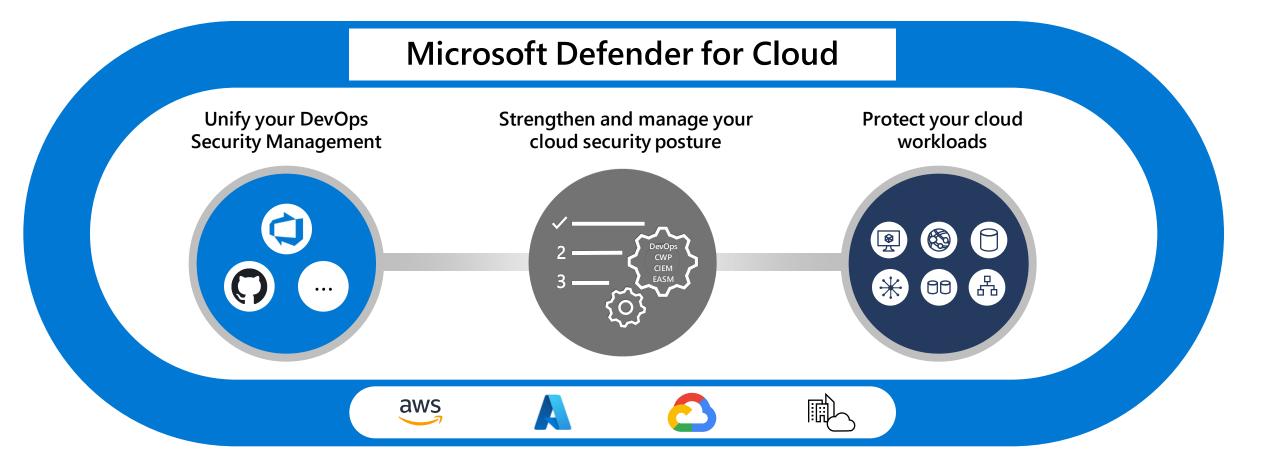
- What about having one single SaaS service to handle security of any workload?
- No infrastructure maintenance
- Single point of view of my assets, unified evaluation, unified threat detections







Core Value Propositions



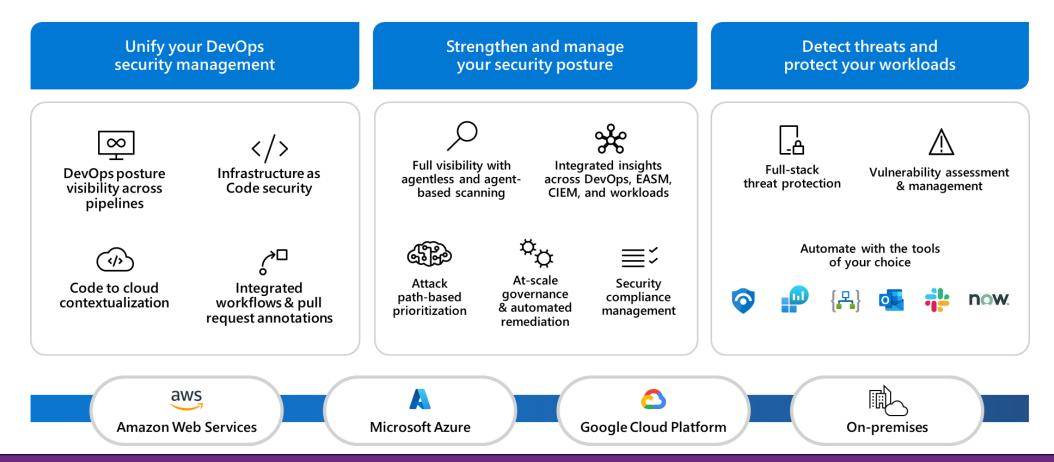






Microsoft Defender For Cloud

Cloud-native application protection across clouds and on-premises environments

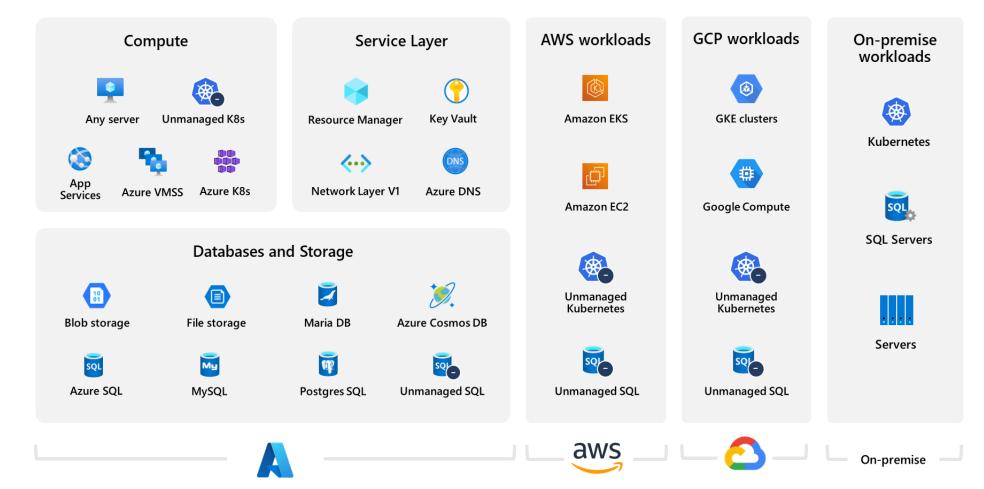








Full-stack coverage with dedicated detections



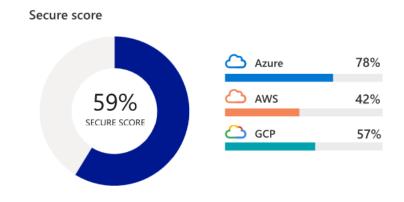




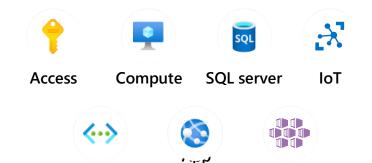


Secure Score

- Assess and implement best practices for security and compliance
- Cover all critical cloud resources across network, access, compute, databases, your service layer and more
- 450+out-of-the-box recommendations
- Create custom recommendations to meet organizational requirements
- → Use "Quick fix" to remediate with a single click or scale enforcement mechanisms to enforce policies to avoid configuration drifts



Evaluated categories



Services

Containers

Network







Compliance assessment and management

- → Assess and manage your compliance status with a continuous assessment of your cloud resources
- Use industry standards, regulatory compliance frameworks, and vendor provided benchmarks to implement security and compliance best practices
- Create custom recommendations to meet unique organizational needs

Support for:

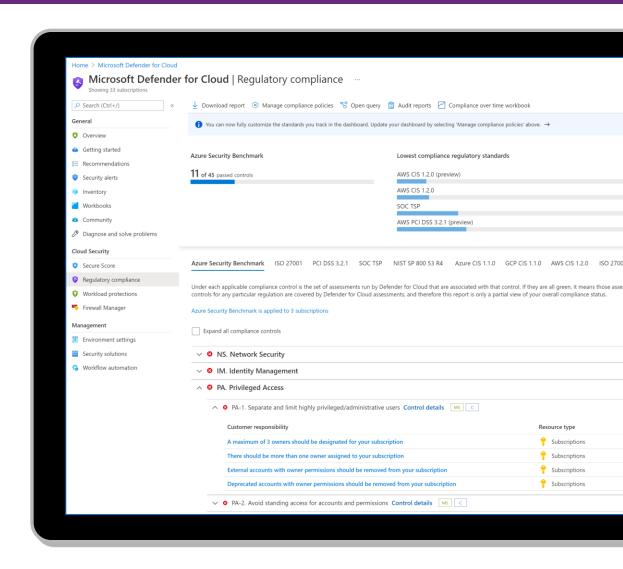
✓ CIS ✓ HIPAA

✓ PCI ✓ Local/National compliance standards

✓ NIST
✓ Azure Security Benchmark

✓ SOC ✓ AWS Foundational Security best practices

✓ ISO









Defender for DevOps architecture



DevOps posture visibility

Code | Dependencies | Secrets | Container images | Infrastructure as code security insights



Infrastructure as code security

ARM | Bicep | Terraform | CloudFormation | And more



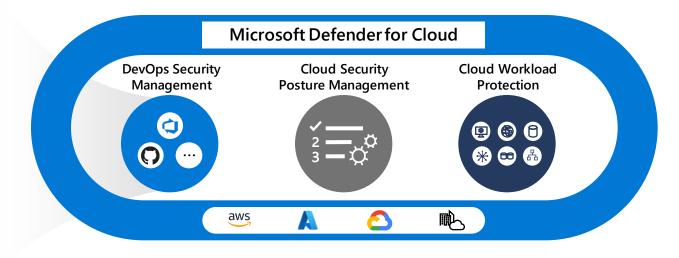
Code to cloud contextualization

Across multipipeline and multicloud environments



Integrated workflows

Pull request annotations | Developer ownership assignments









Microsoft Defender for Containers

Protect multi-cloud and hybrid container deployments



Hardening

Continuously assess and improve the security posture of your containerized environments and workloads



Vulnerability management

Reduce your attack surface by continuously scanning workloads to identify and manage container vulnerabilities



Advanced threat detection

Identify runtime threats with prioritized, containerspecific alerts – using powerful insights from Microsoft Threat Intelligence



Multi-cloud support

Single container security solution for Kubernetes clusters, across Azure, AWS, GCP and on-premise



Deployment and monitoring

Frictionless deployment provisioning at scale with easy onboarding and support for standard Kubernetes monitoring tools







Protect your SQL workloads anywhere

Defender for SQL PaaS



Database

Azure SQL Managed Instance



Azure SQL Elastic Pools



Dedicated SQL pool in Azure Synapse

Defender for SQL laaS



SQL Server



Azure Arc enabled SQL Server



SQL Server on Azure VM



SQL Server on any other cloud

Defender for OSS DB



Azure Database for MariaDB



Azure Database for MySQL



Azure Database for PostgreSQL

Defender for Azure Cosmos DB

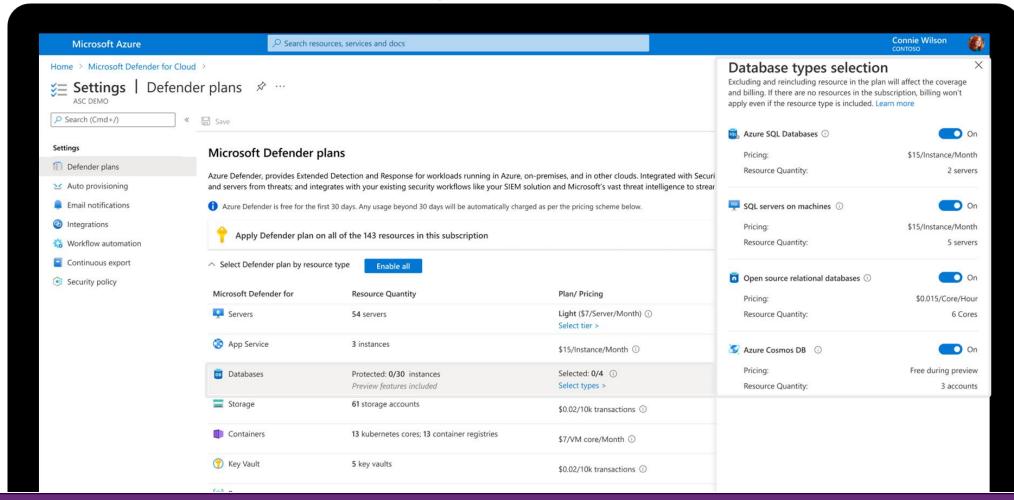








One-click enablement to protect your database estate









The multi-cloud landscape visibility and control problem



Lack of visibility and coverage across hybrid & multicloud environments



Overwhelming volume of security recommendations



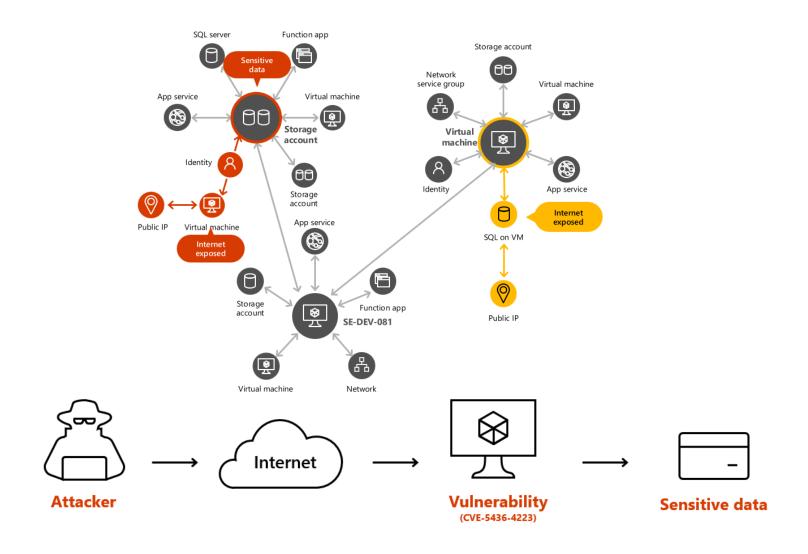
Fragmented tools across different clouds







Overwhelming security recommendations don't help to prioritize security risks

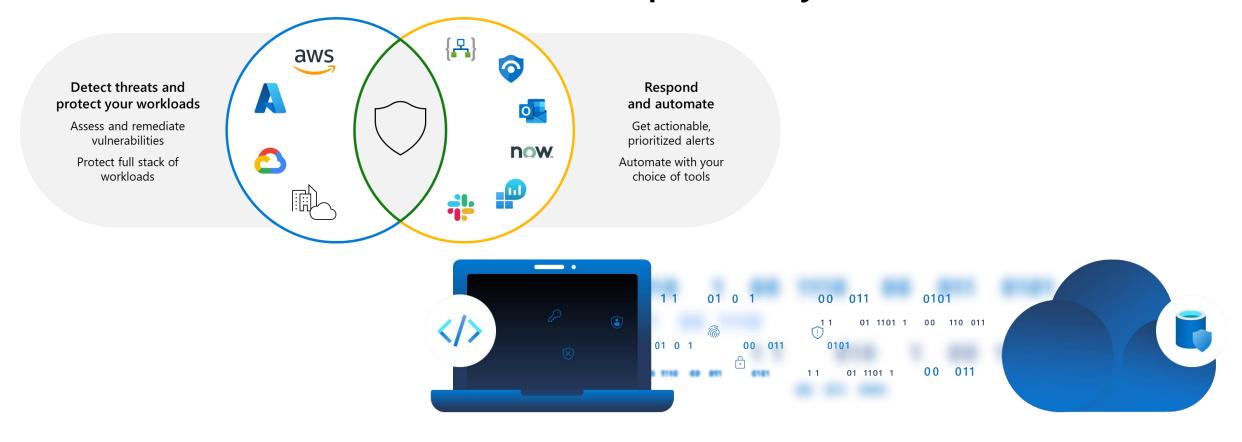








Demo 1 – Multi-Cloud CSPM and DevOps Security





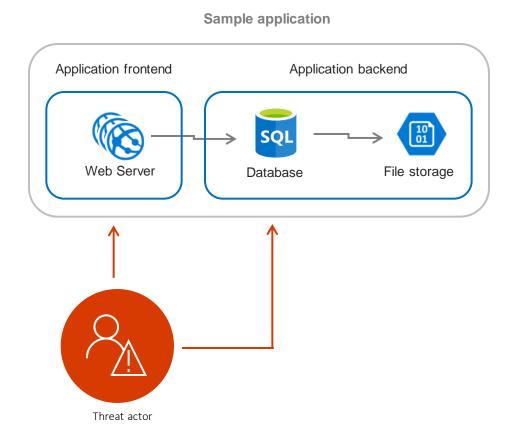




Your databases are at risk!

Databases contain your most sensitive data, making them a key target for attackers

- Databases have double the attack surface database + frontend application
- Frontend attacks are extremely common as they are inherently exposed to end-users and usually internet-facing
- Frontend attacks can lead to sensitive dataleaks, data destruction and compromise database credentials



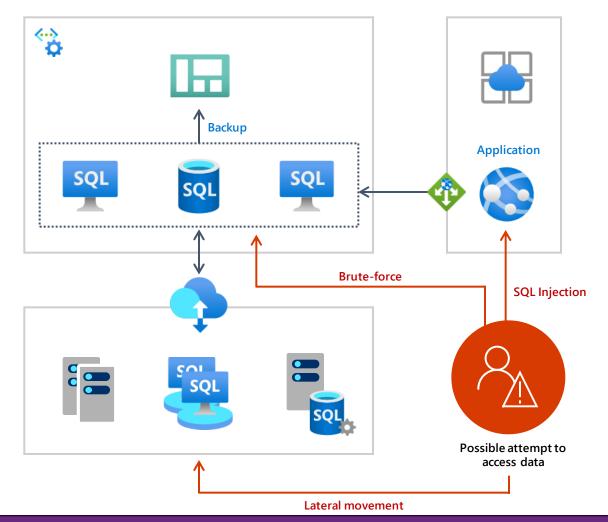






Most common database threats

- ▲ SQL injection attacks
- ▲ Brute-force attacks
- Unusual data exfiltration
- Suspicious access or queries

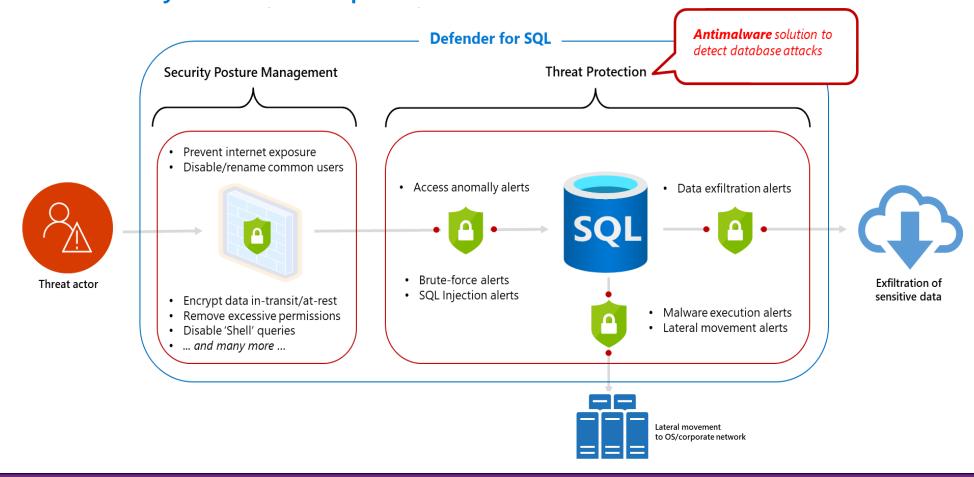








Database protection deep-dive Defender for SQL two-layered database protection

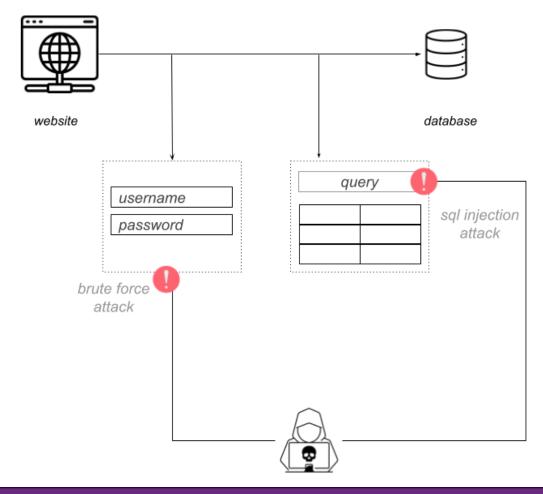








Demo 2 – Detect SQL "anywhere" compromise









Pricing (good news only ©)

Microsoft Defender for Cloud is free for the first 30 days!

Let's start to have fun with it

Resource Type	Price
Microsoft Defender for Servers Plan 1	€0.007 /Server/hour
Microsoft Defender for Servers Plan 2	€0.019/Server/hour
	Included data - 500 MB/day
Microsoft Defender for Containers	€0.0087 /vCore/hour ⁴
Microsoft Defender for SQL on Azure-connected databases	€0.019/Instance/hour ²
Microsoft Defender for SQL outside Azure	€0.014/vCore/hour³
Microsoft Defender for MySQL	€13.838/Instance/month

Resource Type	Price
Microsoft Defender for PostgreSQL	€13.838/Instance/month
Microsoft Defender for MariaDB	€0.019/Instance/hour
Microsoft Defender for Azure Cosmos DB ^{5, 6}	€0.0012 per 100 RUs/hour
Microsoft Defender for Storage ¹	€0.0124 per storage account/hour ⁷
Microsoft Defender for App Service	€0.019/App Service/hour
Microsoft Defender for Key Vault	N/A/10K transactions
Microsoft Defender for ARM	€3.690/1M API calls

https://azure.microsoft.com/en-us/pricing/details/defender-for-cloud/







Final considerations

- Go SaaS to deploy your workloads it's easier to apply security measures without any operational impact!
- Use security as a booster for your workload's performance

 Defender for Cloud helps you in any kind of environment, choose yours and just enable it











Questions & Answers

Thanks (english)

谢谢 (chinese)

धन्यवाद (hindi)

Gracias (spanish)

Merci (french)

(arabic)

Grazie!

Спасибо (russian)

Obrigado (portuguese)

থ্যাংকয়ু (Bengali)

Danke (German)

ありがとう (Japanese)

감사합니다 (Korean)























