

Cyber AI Security for AWS

With self-learning Cyber AI, Darktrace combines unprecedented real-time visibility and autonomous threat detection, response, and investigation in your AWS cloud.

Key Benefits

- ✓ Offers complete, real-time visibility of workloads and admin activity in AWS and beyond
- ✓ Self-learning AI detects, interprets, and responds to the advanced threats that get through policy-based defenses
- ✓ Learns 'on the job' to evolve with your dynamic workforce and workloads
- ✓ Cyber AI Analyst automates threat investigation at speed and scale, reducing time to triage by up to 92%

“Prior to deploying Darktrace, our AWS environment was a blind spot. Darktrace has armed us with Cyber AI technology that defends our entire distributed infrastructure in real time.”

Innovating Capital

Autonomously Defending the Dynamic Workforce

With the power of Darktrace, gain real-time visibility and defense against even the most stealthy and novel threats in AWS, from critical misconfigurations to insider threats.

The Darktrace Immune System uses Cyber AI to learn normal 'patterns of life' for all users, technologies, and resources across the organization, enabling it to recognize the subtlest anomalies that point to an emerging threat.



Figure 1: The Darktrace Immune System illuminates AWS environments

Protecting AWS From Novel and Advanced Threats

Data Exfiltration and Destruction

- Detects anomalous device connections and user access, as well as unusual resource deletion, modification, and movement.

Critical Misconfigurations

- Identifies open S3 buckets, anomalous permission changes, and unusual activity around compliance-related data and devices.

Compromised Credentials

- Spots brute-force attempts, unusual login source and time, and unusual user behavior including rule changes and password resets.

Insider Threats and Admin Abuse

- Identifies the subtle signs of malicious insiders, including sensitive file access, resource modification, role changes, and adding/deleting users.

Leveraging VPC Traffic Mirroring for Enhanced Visibility

AWS VPC Traffic Mirroring gives our self-learning AI access to granular packet data, allowing the Darktrace Immune System to extract hundreds of features from the raw data and build rich behavioral models for our customers' AWS cloud environments.

Real-time visibility of the underlying fabric of AWS environments, provided by VPC Traffic Mirroring, helps Darktrace's Cyber AI learn 'on the job,' continuously adapting as your business evolves. Darktrace provides the only security solution that learns in real time, a critical feature given the speed and scale of development in the cloud.

The Darktrace Security Module for AWS provides additional visibility, with AI-powered monitoring of management and administration activity via interaction with AWS CloudTrail.

With this deep knowledge of how your business operates in the cloud, Darktrace delivers total coverage across all your AWS services, including:



Certificate Manager



Athena



EC2



IAM



Lambda



RDS



Route 53



S3



VPC



DynamoDB

Darktrace Immune System: Autonomous Cyber Defense

Detect

With advanced self-learning AI, the Enterprise Immune System autonomously detects and correlates all the weak indicators of a threat – even if it's highly sophisticated or novel.

A real-time, contextual understanding of your AWS cloud environment and wider organizational activities grounds the Enterprise Immune System's ability to identify the threats that policy-based controls and other security solutions simply cannot.

Respond

The Darktrace Immune System platform provides 24/7 active defense of your digital data and assets in AWS with Antigena's Autonomous Response.

Darktrace Antigena is the only technology on the market that can autonomously interrupt attacks on your behalf, at machine speed, and with surgical precision – providing advanced defense when your security team is overwhelmed or simply not around.

Investigate

Every threat is automatically investigated by Darktrace Cyber AI Analyst. An industry first, the technology autonomously triages, interprets, and reports on the full scope of security incidents.

Cyber AI Analyst Incident Reports include an executive-friendly summary of the event and response recommendations, as well as all the critical details needed for remediation. The AI-powered technology reduces triage time by up to 92%.

Unified AI-Driven Security Across the Enterprise

The Darktrace Immune System can be easily delivered via AWS or a hybrid deployment to provide coverage of customer cloud environments, as well as SaaS applications, email, corporate networks, industrial systems, and remote endpoints.

Taking a fundamentally unique approach, the Darktrace Immune System is the industry's only self-learning platform that correlates real-time information from across the organization.

This is of critical benefit, as businesses and workforces today are increasingly complex and dynamic. With Darktrace's unified security platform, Cyber AI can connect the dots between unusual behavior in disparate infrastructure areas and ensure cloud security is not siloed from the monitoring of the rest of the organization.

“The majority of AI workloads nowadays are being done in the cloud. Because of this, we work closely with AWS both from an infrastructure perspective and in supporting our clients.”

Mike Beck, Global CISO, Darktrace

[Read the AWS Blog interview of Mike Beck, Darktrace's Global CISO.](#)

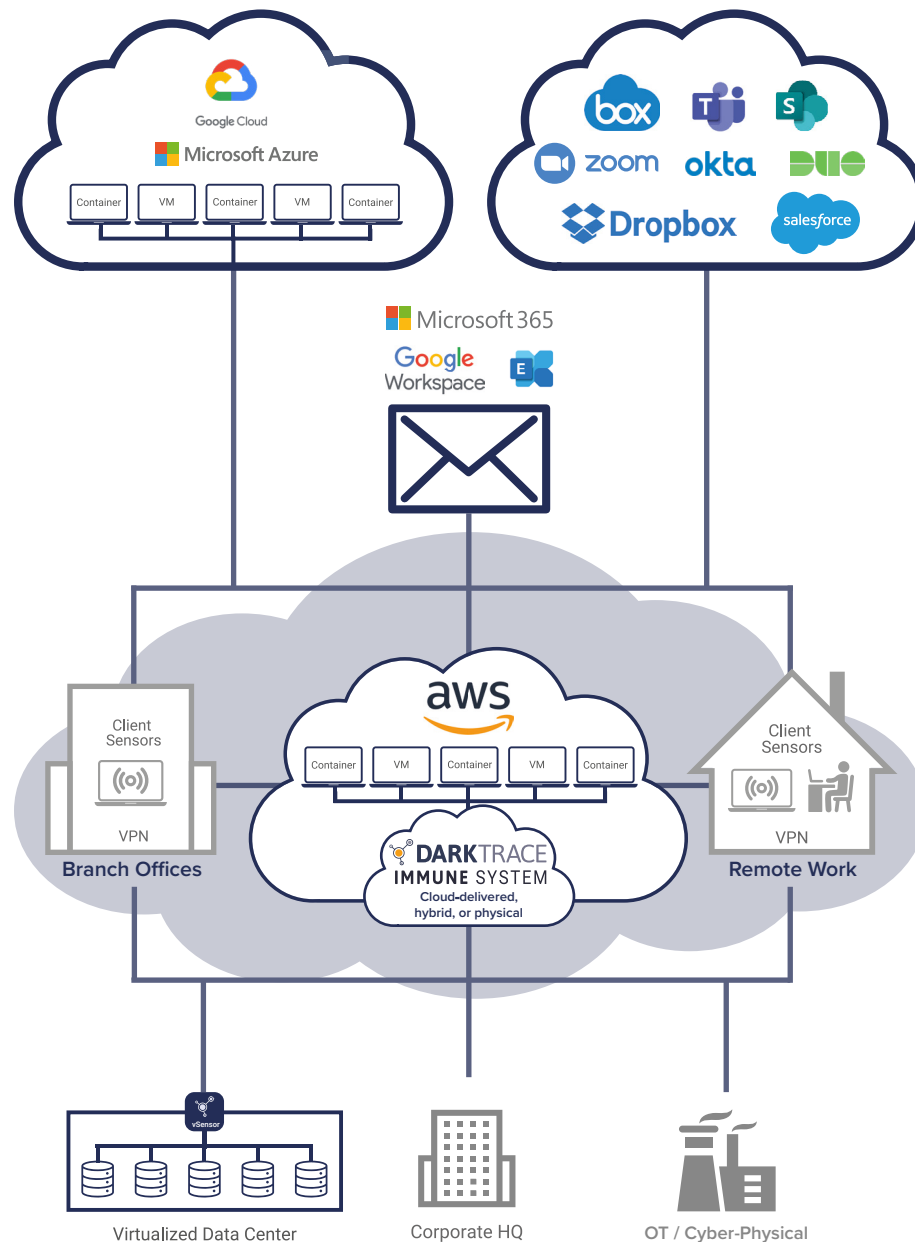


Figure 2: Darktrace's self-learning platform unifies defense across the organization