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NETSCOUT Omnis Cyber Intelligence With AWS Security Hub

Illuminate Threats Everywhere, Anywhere, Anytime With Smarter Security

Challenges

Migrating workloads to the cloud is the new normal for enterprises. But this new hybrid cloud era amplifies infrastructure complexity, increases the attack surface, and limits end-to-end visibility. Limited visibility in these complex hybrid cloud environments makes it much harder to detect, analyze, and mitigate threats. Operational overhead and cost to business is compounded as the power, sophistication, and frequency of threats increase daily. Whatever the motivation, cyber threats can cause severe financial harm, reputational damage, and disrupt business continuity. SOC teams across every industry need help to secure dynamic infrastructures that span the cloud, on-premises, and network edge. Strengthening the security posture and reducing business risk, therefore, requires a smart solution to illuminate threats everywhere, anywhere, anytime.

Solution

NETSCOUT® and AWS have come together to provide smarter security with end-to-end visibility and actionable intelligence. Leveraging the power of the NETSCOUT cyber threat and risk investigation platform with AWS Security Hub, this solution for enterprises streamlines contextual investigations for security risks and strengthens the corporate security posture. SOC teams use AWS Security Hub as a single place that aggregates, organizes, and prioritizes security alerts, or findings, from multiple AWS services and now, NETSCOUT[®] Omnis™ Cyber Intelligence (OCI). Events and insights detected by NETSCOUT OCI are displayed in AWS Security Hub and users can do contextual drill-downs from AWS Security Hub to investigate these events further in NETSCOUT OCI. AWS Security Hub continuously aggregates and prioritizes events from multiple sources, including NETSCOUT OCI, making it easy to visualize findings and enabling insights so that SecOps teams can intervene and investigate high severity findings. Within the NETSCOUT OCI platform, users can detect and conduct highly contextual investigations of security risks and cyber threats based on NETSCOUT Smart Data derived from packet data (cloud, on-premises, network edge) and IoCs (Indicators of Compromise) identified based on NETSCOUT ATLAS® Intelligent Feed (AIF) and 3rd party threat intelligence feeds using STIX/TAXII. NETSCOUT collaboration with AWS enables practical, affordable, and scalable access to packet data for end-to-end security visibility in the hybrid cloud. For example, using seamless integration with AWS Gateway Load Balancer, NETSCOUT OCI can effectively access large volumes of AWS packet data at scale and convert it into Smart Data, thus enabling effective and cost-efficient vulnerability and threat detection and investigation. The AWS Security Hub and NETSCOUT OCI solution increases security team productivity and enables them to intelligently combat cyber threats and attacks across complex hybrid cloud environments by reducing the effort of collecting and prioritizing security findings and enabling integrated context-rich investigations.

FEATURES AND BENEFITS

Key Benefits

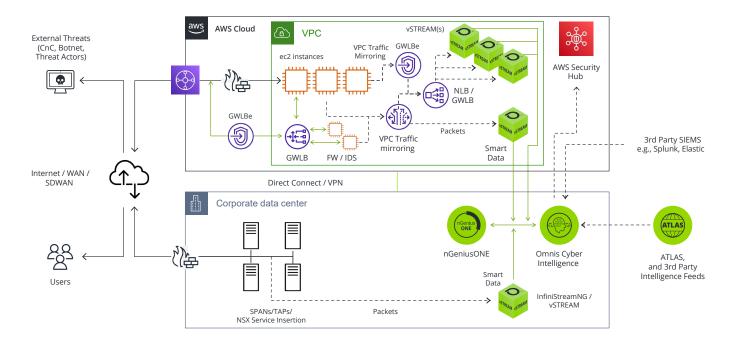
- Strengthen security posture and reduce business risk by integrating NETSCOUT OCI with AWS Security Hub to aggregate, organize and prioritize findings, and for contextual drill-down and forensics analysis to resolve the highest priority security issues
- Gain visibility into threats and derive actionable insights for security issues that span AWS, on-premises, and hybrid environments
- Proactively examine security risks and Indicators of Compromise in complex, interconnected infrastructures by turning network traffic and global threat intelligence feeds into smart data and use results of the highly contextual investigation to remediate with confidence
- AWS tested and certified NETSCOUT solutions

AWS and NETSCOUT Collaboration



Enterprise IT organizations want to rely on vendors

who can demonstrate strong collaboration with AWS. NETSCOUT has achieved several qualifications to provide Visibility without Borders through interoperability with a variety of AWS services and technologies. These qualifications have been validated by AWS in the specialization areas listed below.



Sample NETSCOUT OCI Deployment in AWS

The diagram above shows a sample deployment of the NETSCOUT OCI solution in AWS, illustrating the following:

- NETSCOUT vSTREAM[®] virtual appliances with the Cyber Adaptor add-on use ASI technology to turn packet data into security metadata for NETSCOUT OCI.
- Native AWS packet acquisition features such as VPC traffic mirroring, VPC ingress routing, and Gateway Load Balancer (GWLB) enable vSTREAM to monitor both East-West and North-South network traffic without leaving the cloud.
- NETSCOUT OCI can export its findings to AWS Security Hub using AWS Security Finding Format (ASFF). Alerts seen in NETSCOUT OCI are reported in AWS Security Hub and provide contextual drill-down to the details in NETSCOUT OCI.
- NETSCOUT OCI incorporates IoCs (Indicators of Compromise) identified based on both the NETSCOUT ATLAS Intelligent Feed (AIF) and 3rd party STIX/TAXII threat intelligence feeds.

AWS Validated Qualifications

NETSCOUT has demonstrated the highest level of specialization, deep AWS technical expertise, and proven customer success for all qualifications listed below.

AWS Competencies

- Networking ISV Competency
- Migration and Modernization ISV Competency

Partner Programs

- AWS Public Sector Partner
- AWS Marketplace Seller

AWS Certifications

- · AWS Certified Security Specialty
- AWS Certified DevOps Engineer -Professional
- AWS Certified Solutions Architect Associate
- AWS Certified SysOps Administrator -Associate
- AWS Certified Cloud Practitioner
- AWS Certified Solutions Architect -Professional
- AWS Certified Developer Associate

Risk Visualization and Host Investigation Use Case

Gain visibility in critical and questionable host interactions—both internal and external. AWS Security Hub shows Insight graphs including findings over time by severity and a table with high severity findings from NETSCOUT OCI. Findings can include EC2 hosts infected by malicious IP such as DNS exfiltration from internal EC2 hosts to external servers. The finding details (see figure 1) has an embedded URL that takes the user to NETSCOUT OCI for contextual drill-down. Risk visualization (see figure 2) in NETSCOUT OCI allows comprehensive and contextual visibility of security risks, threat indicators, and cyber threats in the hybrid cloud (see table below). Risk visualization allows host investigation drilldowns (see figure 3) to examine the specific hosts conversations as well as related traffic and throughput information involved in the threats. Users can analyze sessions and do packet decodes for specific events.

Risk Visualizations	Types		
Cyber threat events	Malware, C2, Campaign & Targeted Attacks		
Threat indicators	Volumetric, State Exhaustion, Application Layer DDoS Attacks		
Security risk events	Certificate Expiration, Self-signed Certificate Usage, Weak Cyphers		

OmnisCl:SiemBaseType for 169.239.182.217 Finding ID: us-west-1/8fdq9d07-1289-454-9263-53ef7abbbd31618407005735	×
HIGH Threat: 168.233.182.217(PolicyEmotet; Category-Attacker;Credential Theft,Banking,Backdoor;HTTP,D for host: 192.168.100.100	ropper,Spam; Classification:Malware,Email Threats,Command and Control,DDoS Reputation) encountered
Workflow status	RECORD STATE
New	ACTIVE Set by the finding provider
AWS account ID	Severity (original)
091741439927 🕀	1 🔍
Created at	Updated at
2021-04-14T13:30:00.000Z @	2021-04-14T13:30:00.000Z @
Product name	Severity label
NETSCOUT Cyber Investigator @	HIGH Q
Company name	Source URL
NETSCOUT Q	https://54.146.225.180:8443/console/? moldD=idRiskidentification&modMsg=params&type=0&cat=Cyber+Threats&iocId=21&dvchost=ip- 192-168-100- 100:cc2.imtemal&sGeniusCHtostType=Host&start=16184067000008.end=1618407000000 Q
Types and Related Findings	
Resources	
Resources detail	
i-07923b5d33f51ae9e	•
Resource type	Resource ID
AwsEc2Instance @	i-07923b5d33f51ae9e @
▼ Network	
Network source IPv4	
192.168.100.100 @	
Threat Intel	
Finding Provider Fields	

Figure 1: AWS Security Hub with NETSCOUT Omnis Cyber Intelligence Insight.

	Omnis Cyber	Intelligence	Se All Modules	Risk Visualizatior	n x				
I	Enterprise		03/11/2021 08:00 AM GM	T 1 Hour(s)	A Shift By	03/11/2021 09:00 AM GMT	ł¢		
•	Security	Risks 55	Servers 6		Т	hreat Indicators	Violations Ser 2 2		
	Context: IOC Name = 5.149.253.99:443 X								
Threats By Policy									
	TrickBot			0					
		26 Violations	2 Hosts						
008:15 08:30 08:45 09:00									
	Risk Snapsho	ŧ					Q 53		
	Туре	ME Name	Host	loC	loC Vendor	Other Policies	Violations		
	CS	vSTREAM-4:if3	ip-10-4-1-149.e	5.149.253.99 443	ATLAS Intellige	TrickBot	12		

Figure 2: Omnis Cyber Intelligence risk visualization directly from alert in AWS Security Hub.

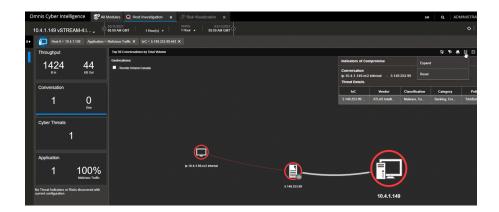


Figure 3: Omnis Cyber Intelligence Host Investigation.

LEARN MORE

For more information visit:

AWS and NETSCOUT Collaboration NETSCOUT Omnis Cyber Intelligence AWS Security Hub AWS Marketplace

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NETSCOUT offers sales, support, and services in over 32 countries. Global addresses, and international numbers are listed on the NETSCOUT website at: www.netscout.com/company/contact-us

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