Security Close to the Applications

ThreatIQ, Geoblocking and Anomaly Detection

Aviatrix ThreatIQ and Threat Guard

aviatrix

What is it?

- Multicloud native network security to dynamically **identify, alert, and remediate potential threats** to known malicious destinations
- **Distributed threat visibility** and control built into the network data-plane at every hop
- Identify potential **data exfiltration and compromised host**
- **No data-plane performance impact**
- **Complementary security solution** with full multicloud support

Threats View in ThreatIQ

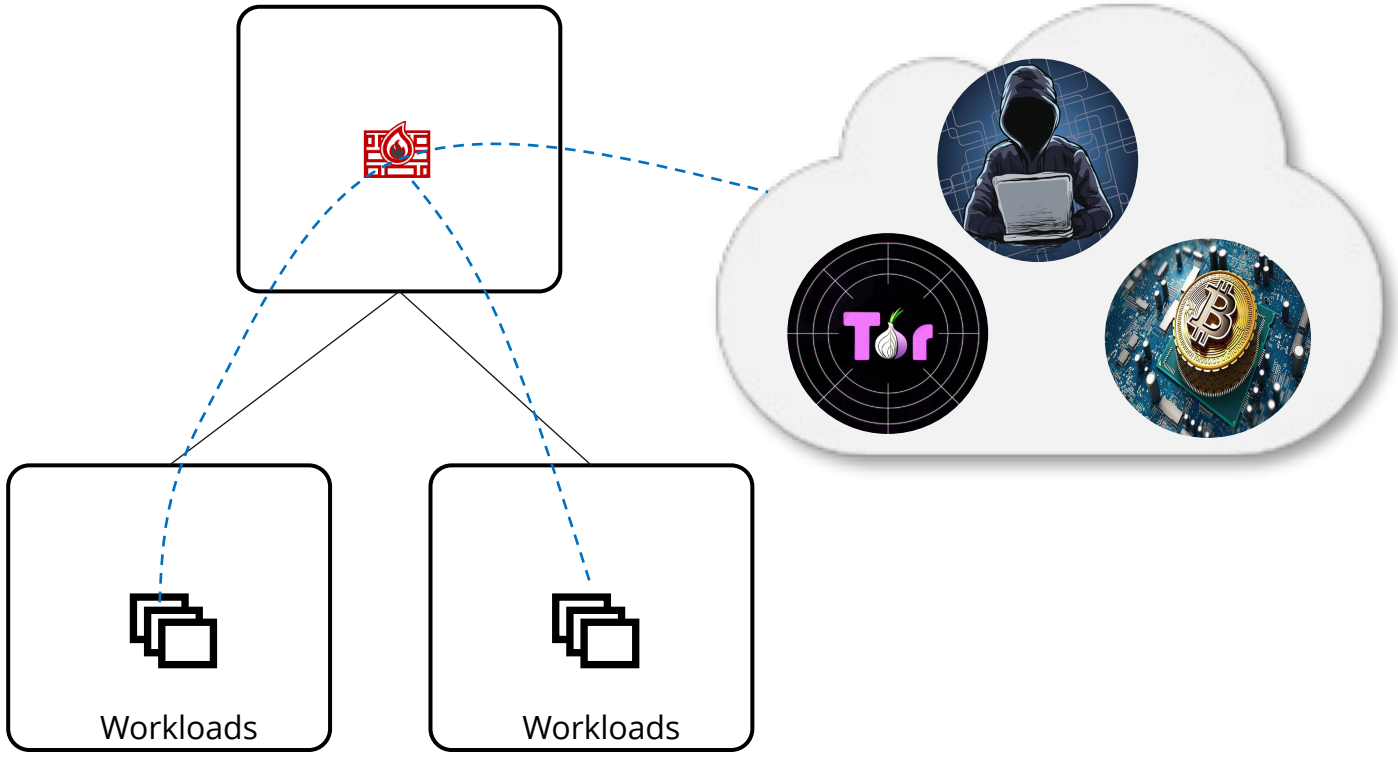
Timestamp	Severities	Classifications
Oct 24, 2023 7:33:02 PM	Major	misc-attack
Oct 24, 2023 7:32:54 PM	Major	misc-attack
Oct 24, 2023 7:32:35 PM	Major	misc-attack
Oct 24, 2023 7:32:35 PM	Major	misc-attack

Detected Intrusions View in Security

Timestamp	Severity	Category
Oct 24, 2023 7:00 PM	Minor	Not Suspicious Traffic
Oct 24, 2023 7:00 PM	Minor	Not Suspicious Traffic
Oct 24, 2023 7:00 PM	Minor	Not Suspicious Traffic
Oct 24, 2023 7:00 PM	Minor	Not Suspicious Traffic

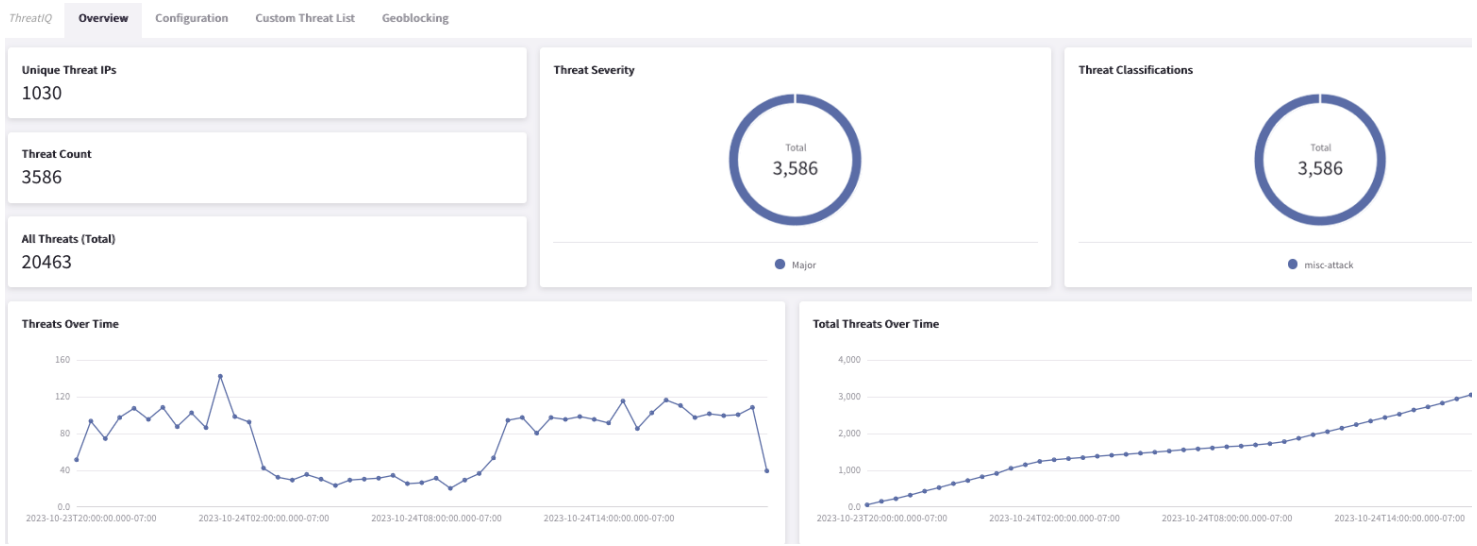
Why should enterprises care about it?

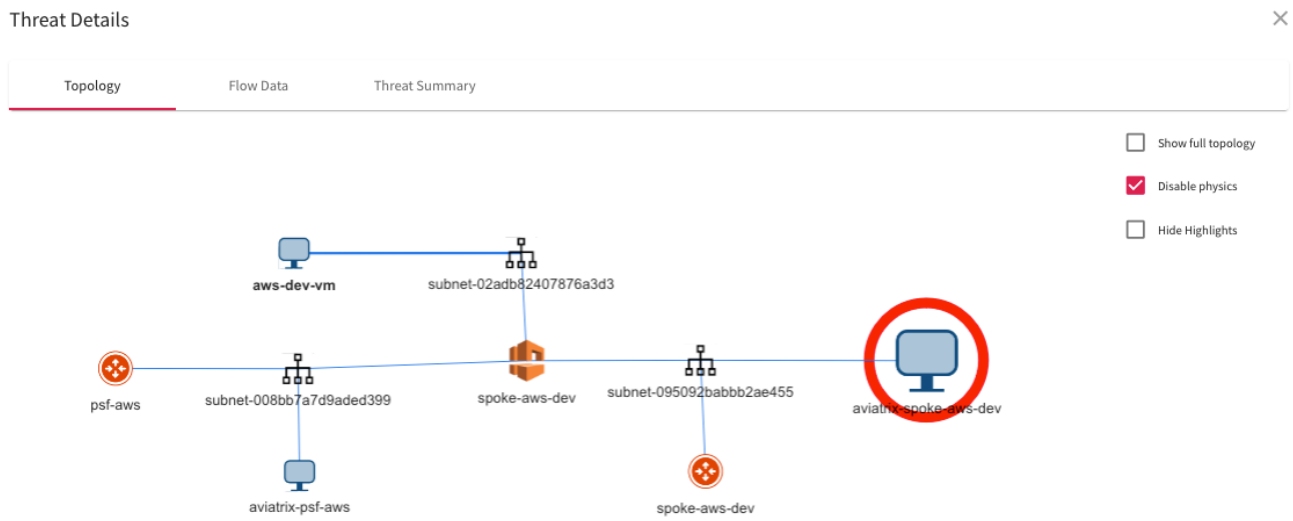
- Internet access is everywhere in the cloud and on by default for some CSPs
- Funneling traffic through choke points or 3rd party services is inefficient and ineffective
- Protect business from security risks associated to:
  - Data exfiltration
  - Botnets
  - Compromised hosts
  - Crypto mining
  - TOR
  - DDoS, and more



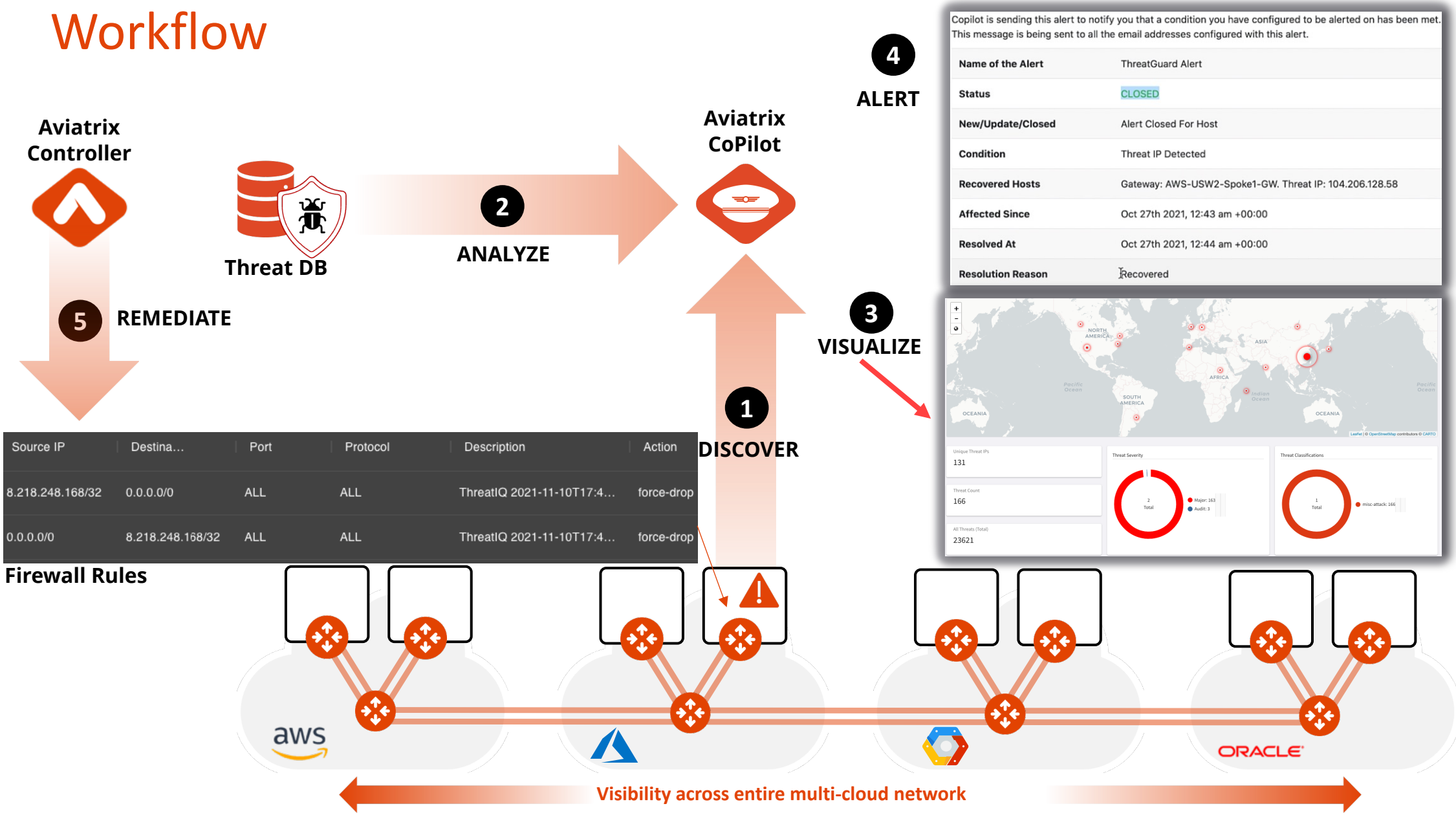
How does it work?

- **Distributed Inspection & Notification**
  - Aviatrix gateways across Multicloud environment send real-time NetFlow data to CoPilot
  - CoPilot analyzes the data on all public destinations against well-known Threat DB
  - CoPilot alerts on any potential threats in the environment
  - CoPilot provides extreme visibility of the impacted communication flow
- **Distributed Enforcement**
  - CoPilot informs Aviatrix Controller to push firewall policies to all the Aviatrix gateways in the data path
  - Firewall policies automatically get updated with the current status of the threat
  - Blocking threats with firewall policy is optional but recommended





Workflow


Aviatrix Controller
Threat DB
2
ANALYZE
Aviatrix CoPilot
4
ALERT
Copilot is sending this alert to notify you that a condition you have configured to be alerted on has been met.
This message is being sent to all the email addresses configured with this alert.
Name of the Alert
ThreatGuard Alert
Status
CLOSED
New/Update/Closed
Alert Closed For Host
Condition
Threat IP Detected
Recovered Hosts
Gateway: AWS-USW2-Spoke1-GW. Threat IP: 104.206.128.58
Affected Since
Oct 27th 2021, 12:43 am +00:00
Resolved At
Oct 27th 2021, 12:44 am +00:00
Resolution Reason
Recovered
3
VISUALIZE
5
REMEDIATE
1
DISCOVER
Source IP
Destina…
Port
Protocol
Description
Action
8.218.248.168/32
0.0.0.0/0
ALL
ALL
ThreatIQ 2021-11-10T17:4…
force-drop
0.0.0.0/0
8.218.248.168/32
ALL
ALL
ThreatIQ 2021-11-10T17:4…
force-drop
Firewall Rules
aws
ORACLE
Visibility across entire multi-cloud network

Block Threats Based on Geographic Location

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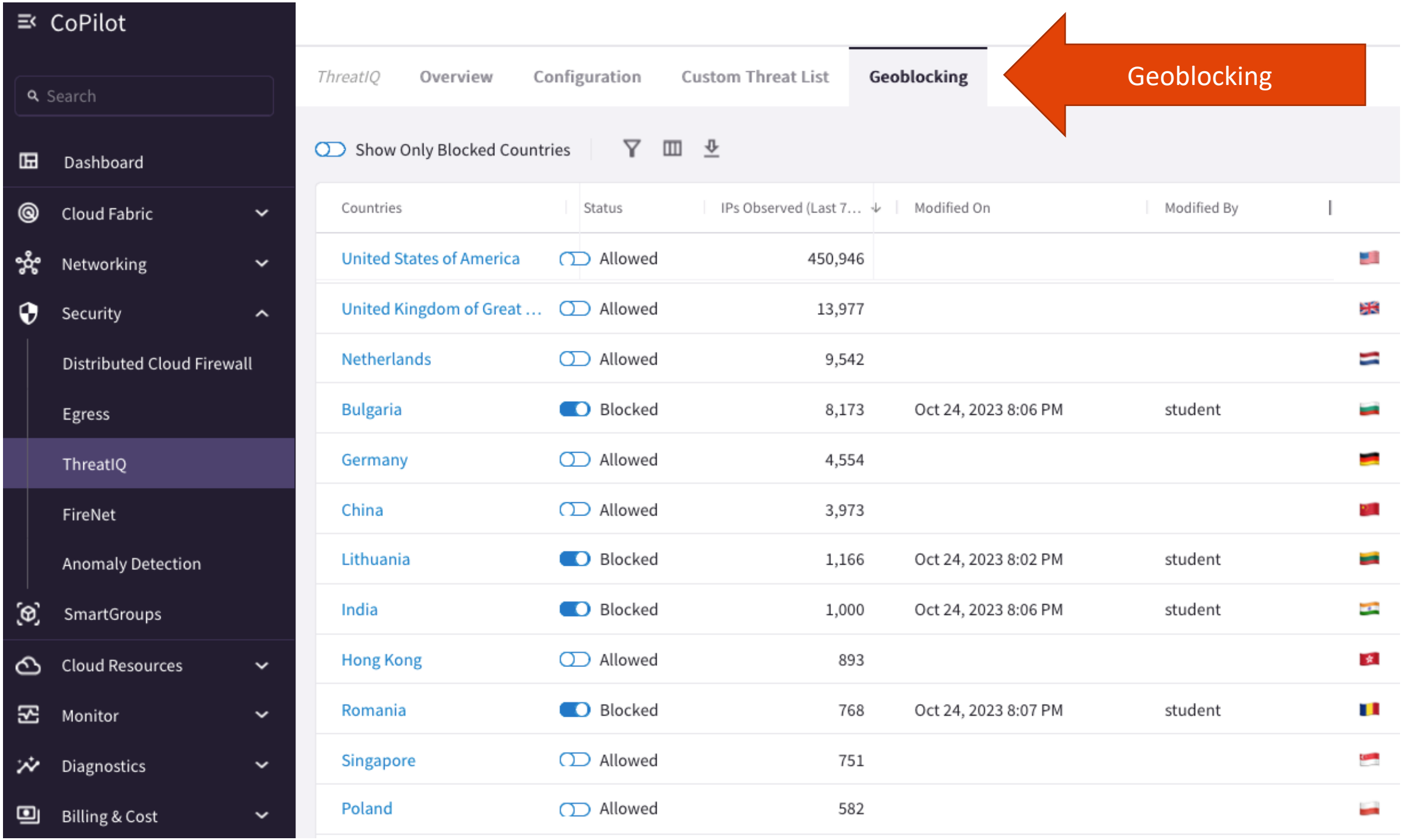
CoPilot
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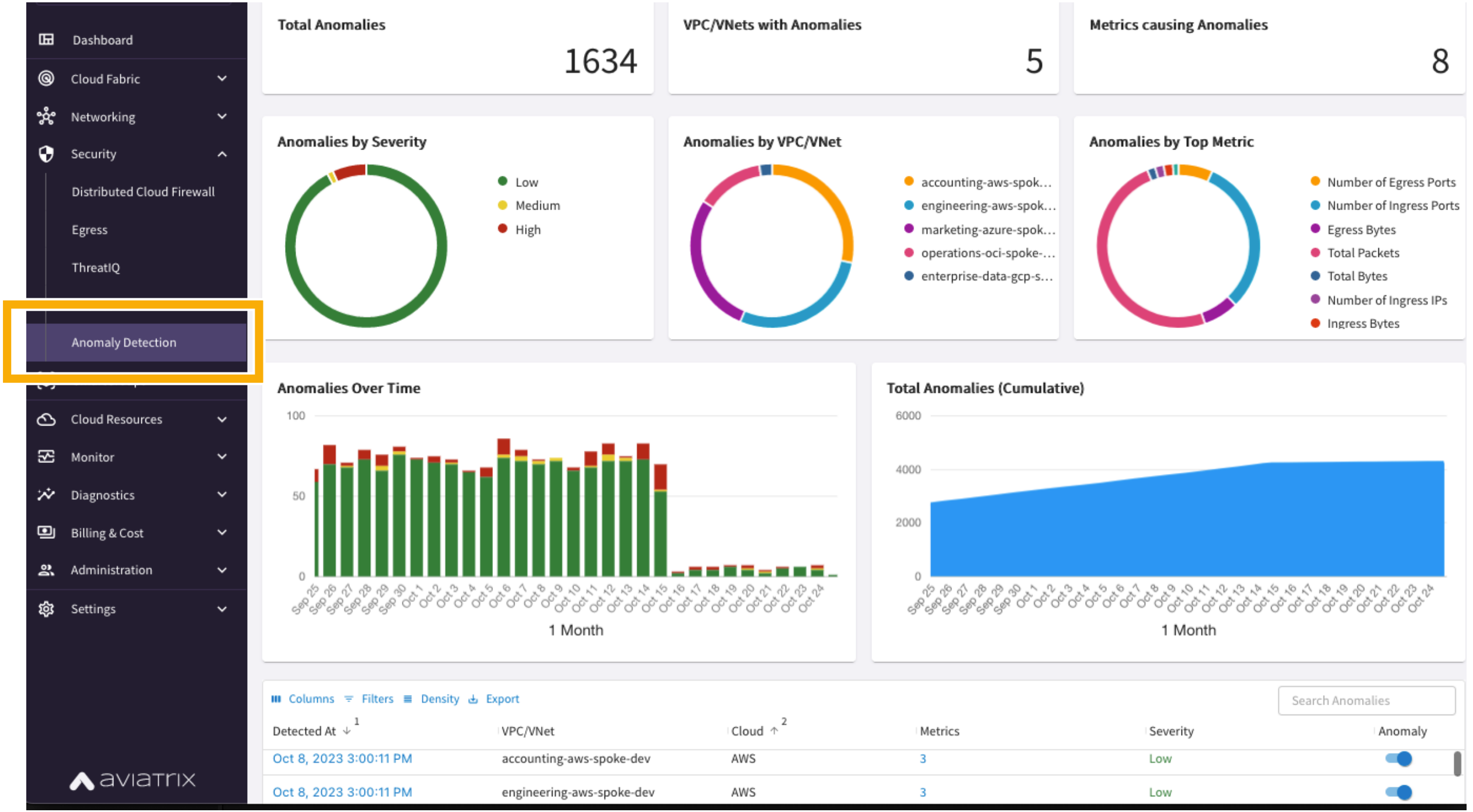
Diagnostics
Billing & Cost
ThreatIQ
Overview
Configuration
Custom Threat List
Geoblocking
Geoblocking
Show Only Blocked Countries
Countries
Status
IPs Observed (Last 7…
Modified On
Modified By
United States of America Allowed 450,946
United Kingdom of Great … Allowed 13,977
Netherlands Allowed 9,542
Bulgaria Blocked 8,173 Oct 24, 2023 8:06 PM student
Germany Allowed 4,554
China Allowed 3,973
Lithuania Blocked 1,166 Oct 24, 2023 8:02 PM student
India Blocked 1,000 Oct 24, 2023 8:06 PM student
Hong Kong Allowed 893
Romania Blocked 768 Oct 24, 2023 8:07 PM student
Singapore Allowed 751
Poland Allowed 582

Network Behavior Analytics

Aviatrix Anomaly Detection


Dashboard
Cloud Fabric
Networking
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Distributed Cloud Firewall
Egress
ThreatIQ
Anomaly Detection
Cloud Resources
Monitor
Diagnostics
Billing & Cost
Administration
Settings
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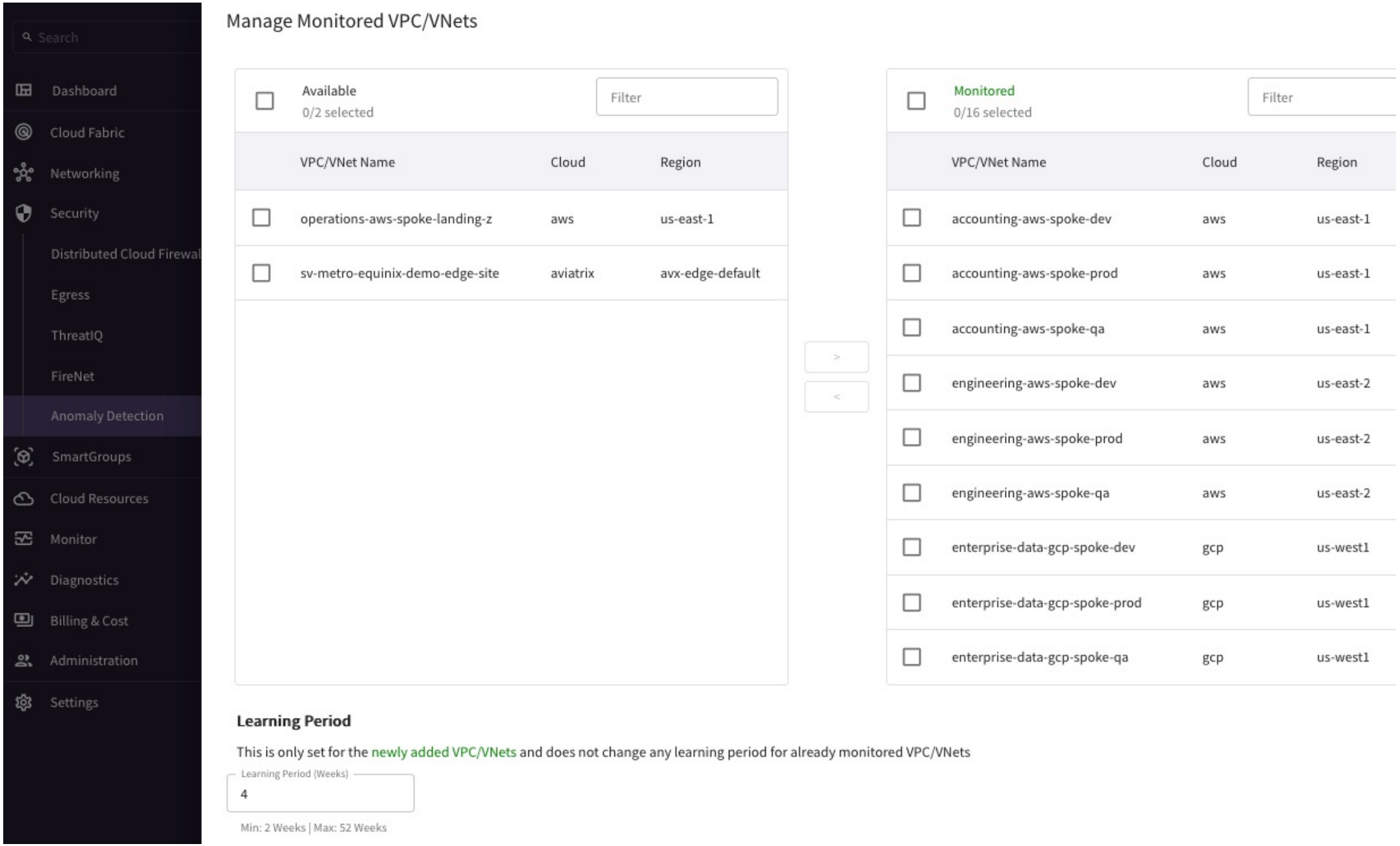
Total Anomalies
1634
VPC/VNets with Anomalies
5
Metrics causing Anomalies
8
Anomalies by Severity
Low
Medium
High
Anomalies by VPC/VNet
accounting-aws-spok…
engineering-aws-spok…
marketing-azure-spok…
operations-oci-spoke-…
enterprise-data-gcp-s…
Anomalies by Top Metric
Number of Egress Ports
Number of Ingress Ports
Egress Bytes
Total Packets
Total Bytes
Number of Ingress IPs
Ingress Bytes
Anomalies Over Time
100
50
0
1 Month
Total Anomalies (Cumulative)
6000
4000
2000
0
1 Month
Columns
Filters
Density
Export
Search Anomalies
Detected At
VPC/VNet
Cloud
Metrics
Severity
Anomaly
Oct 8, 2023 3:00:11 PM
accounting-aws-spoke-dev
AWS
3
Low
Oct 8, 2023 3:00:11 PM
engineering-aws-spoke-dev
AWS
3
Low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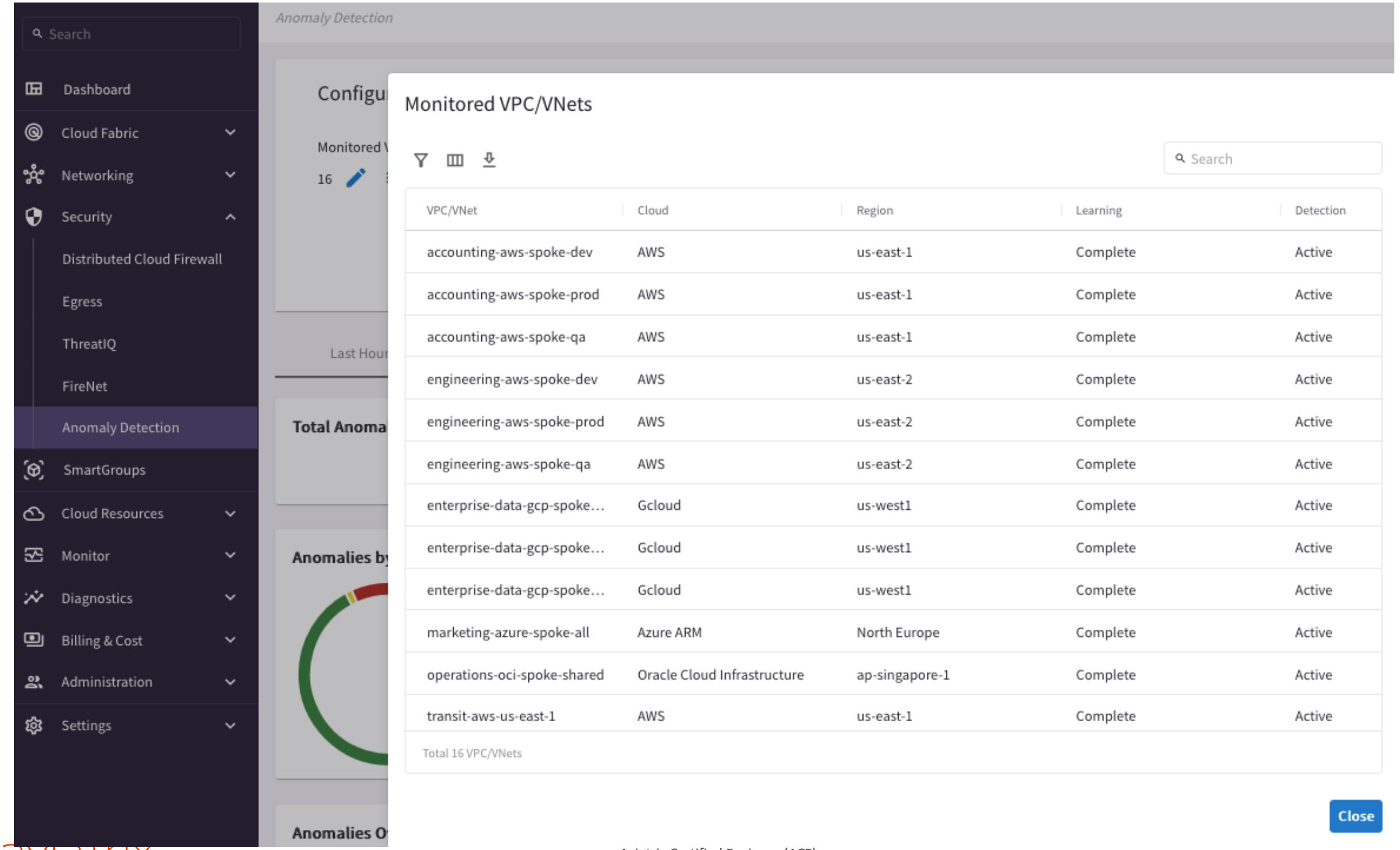
Billing & Cost
Administration
Settings
Manage Monitored VPC/VNets
Available
0/2 selected
Filter
VPC/VNet Name
Cloud
Region
operations-aws-spoke-landing-z
aws
us-east-1
sv-metro-equinix-demo-edge-site
aviatrix
avx-edge-default
Monitored
0/16 selected
Filter
VPC/VNet Name
Cloud
Region
accounting-aws-spoke-dev
aws
us-east-1
accounting-aws-spoke-prod
aws
us-east-1
accounting-aws-spoke-qa
aws
us-east-1
engineering-aws-spoke-dev
aws
us-east-2
engineering-aws-spoke-prod
aws
us-east-2
engineering-aws-spoke-qa
aws
us-east-2
enterprise-data-gcp-spoke-dev
gcp
us-west1
enterprise-data-gcp-spoke-prod
gcp
us-west1
enterprise-data-gcp-spoke-qa
gcp
us-west1
Learning Period
This is only set for the newly added VPC/VNets and does not change any learning period for already monitored VPC/VNets
Learning Period (Weeks)
4
Min: 2 Weeks | Max: 52 Weeks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Search
VPC/VNet
Cloud
Region
Learning
Detection
accounting-aws-spoke-dev AWS us-east-1 Complete Active
accounting-aws-spoke-prod AWS us-east-1 Complete Active
accounting-aws-spoke-qa AWS us-east-1 Complete Active
engineering-aws-spoke-dev AWS us-east-2 Complete Active
engineering-aws-spoke-prod AWS us-east-2 Complete Active
engineering-aws-spoke-qa AWS us-east-2 Complete Active
enterprise-data-gcp-spoke… Gcloud us-west1 Complete Active
enterprise-data-gcp-spoke… Gcloud us-west1 Complete Active
enterprise-data-gcp-spoke… Gcloud us-west1 Complete Active
marketing-azure-spoke-all Azure ARM North Europe Complete Active
operations-oci-spoke-shared Oracle Cloud Infrastructure ap-singapore-1 Complete Active
transit-aws-us-east-1 AWS us-east-1 Complete Active
Total 16 VPC/VNets
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