



# Observability Overview

splunk>



**Will Cappelli**

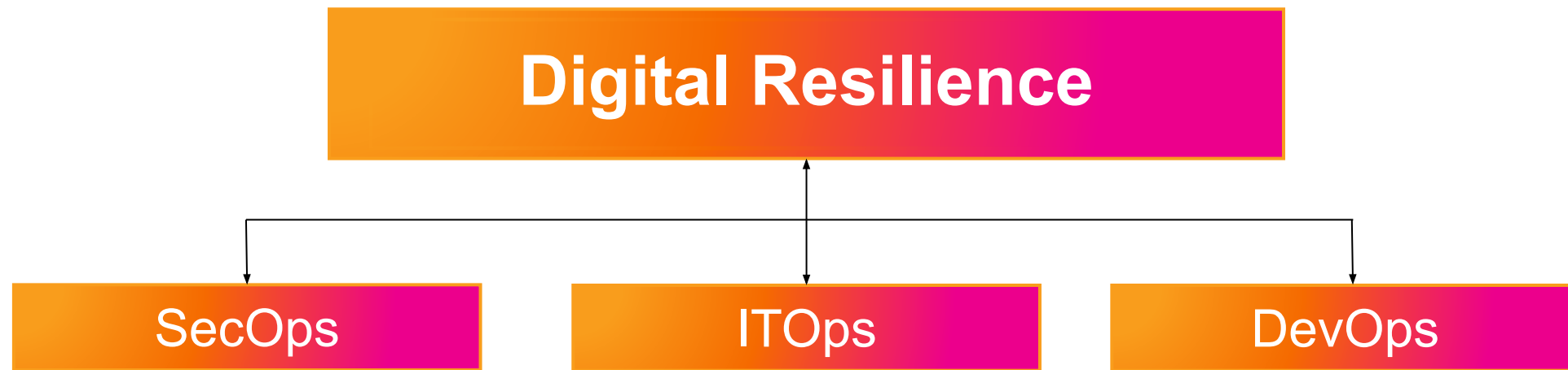
Observability Strategist, Splunk



**Rachel Palmer**

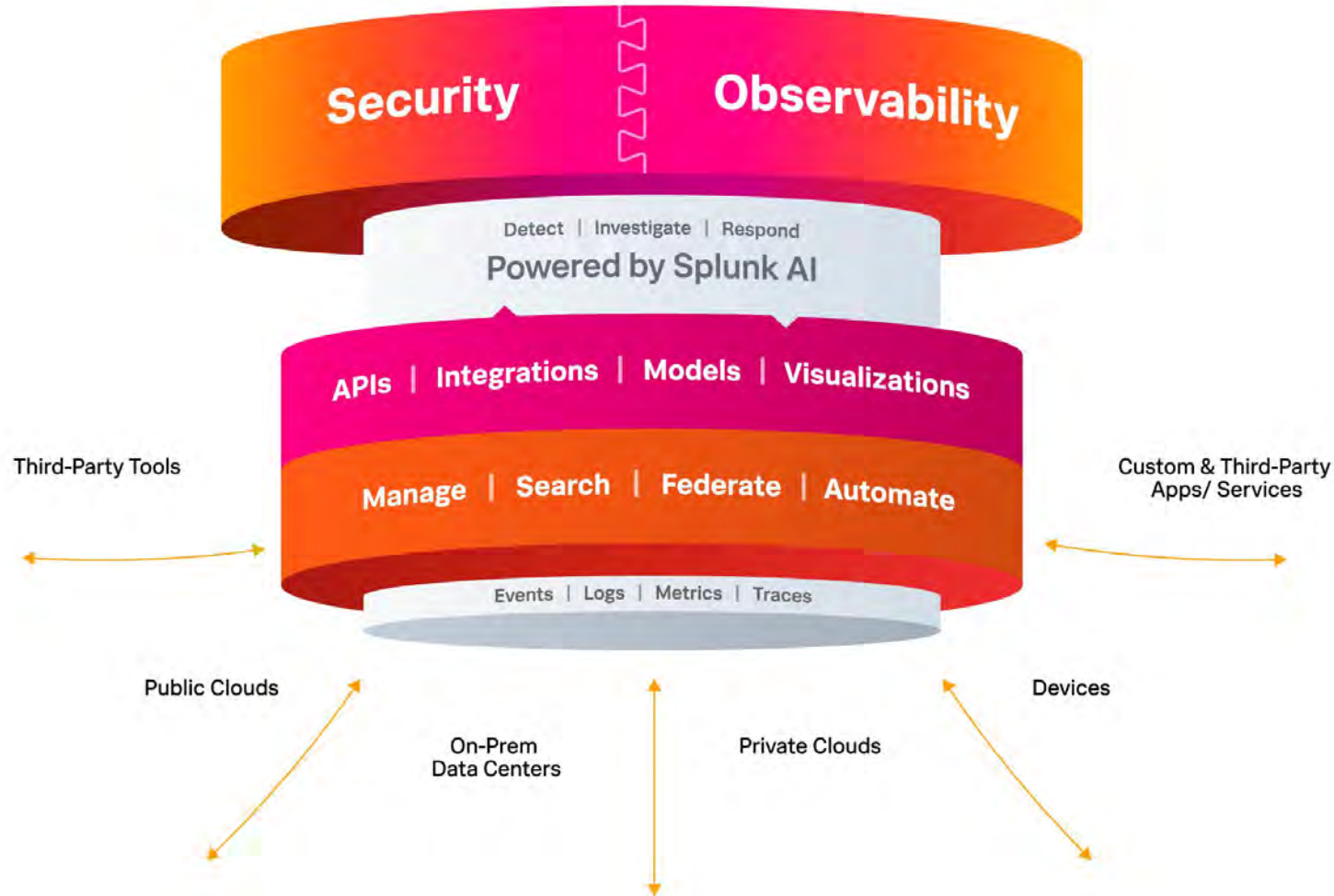
Observability Advisor, Splunk

# Observability (O11y) is part of Resilience



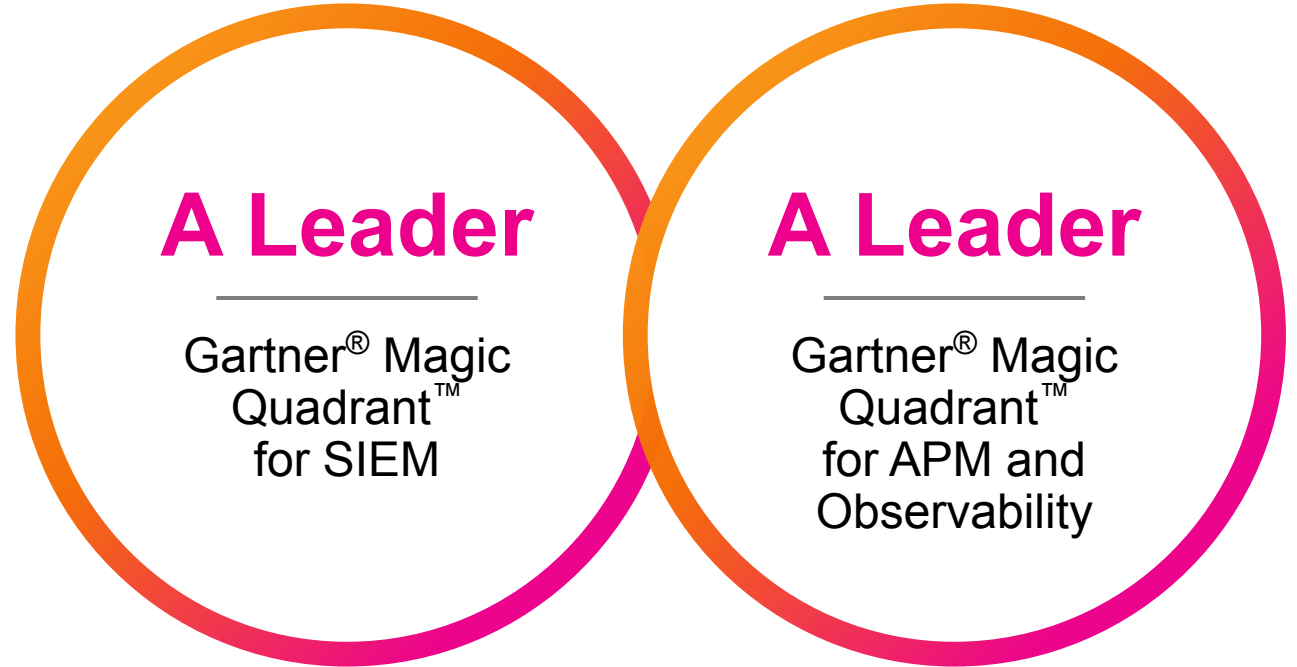
# The Unified Security and Observability Platform

The foundation for Digital Resilience



# Gartner®

## Splunk is the only vendor recognized as a leader in the latest Magic Quadrant™ Reports for SIEM and APM and Observability



2022 Gartner Magic Quadrant for Security Information and Event Management | 2023 Magic Quadrant for Application Performance Monitoring and Observability | Gartner does not endorse any vendor, product or service depicted in its research publications and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's Research & Advisory organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose. GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally, and MAGIC QUADRANT is a registered trademark of Gartner, Inc. and/or its affiliates and are used herein with permission. All rights reserved.

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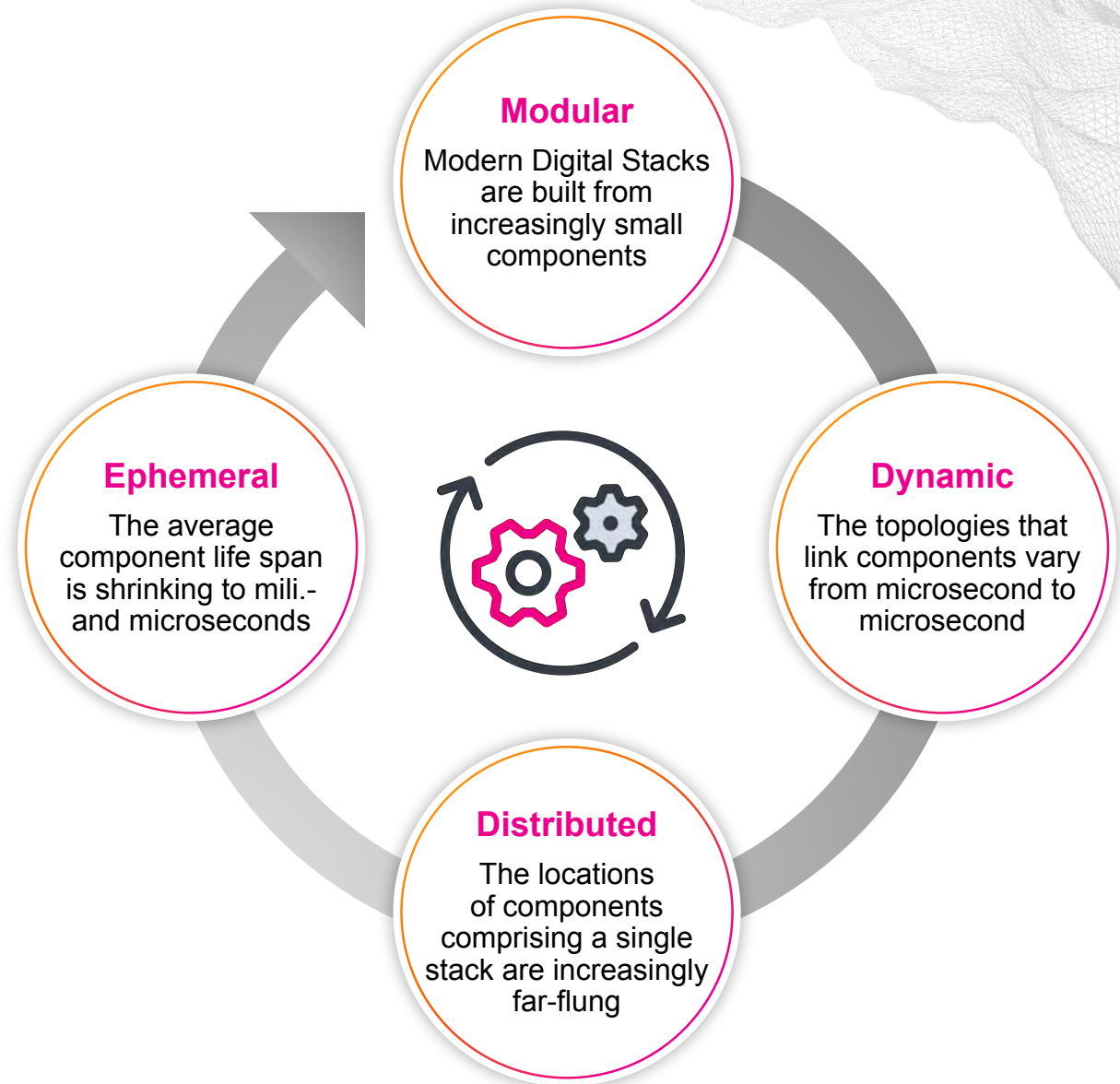
# Splunk O11y is a Gartner MQ Leader

Finally! It's taken 3 years hard work...

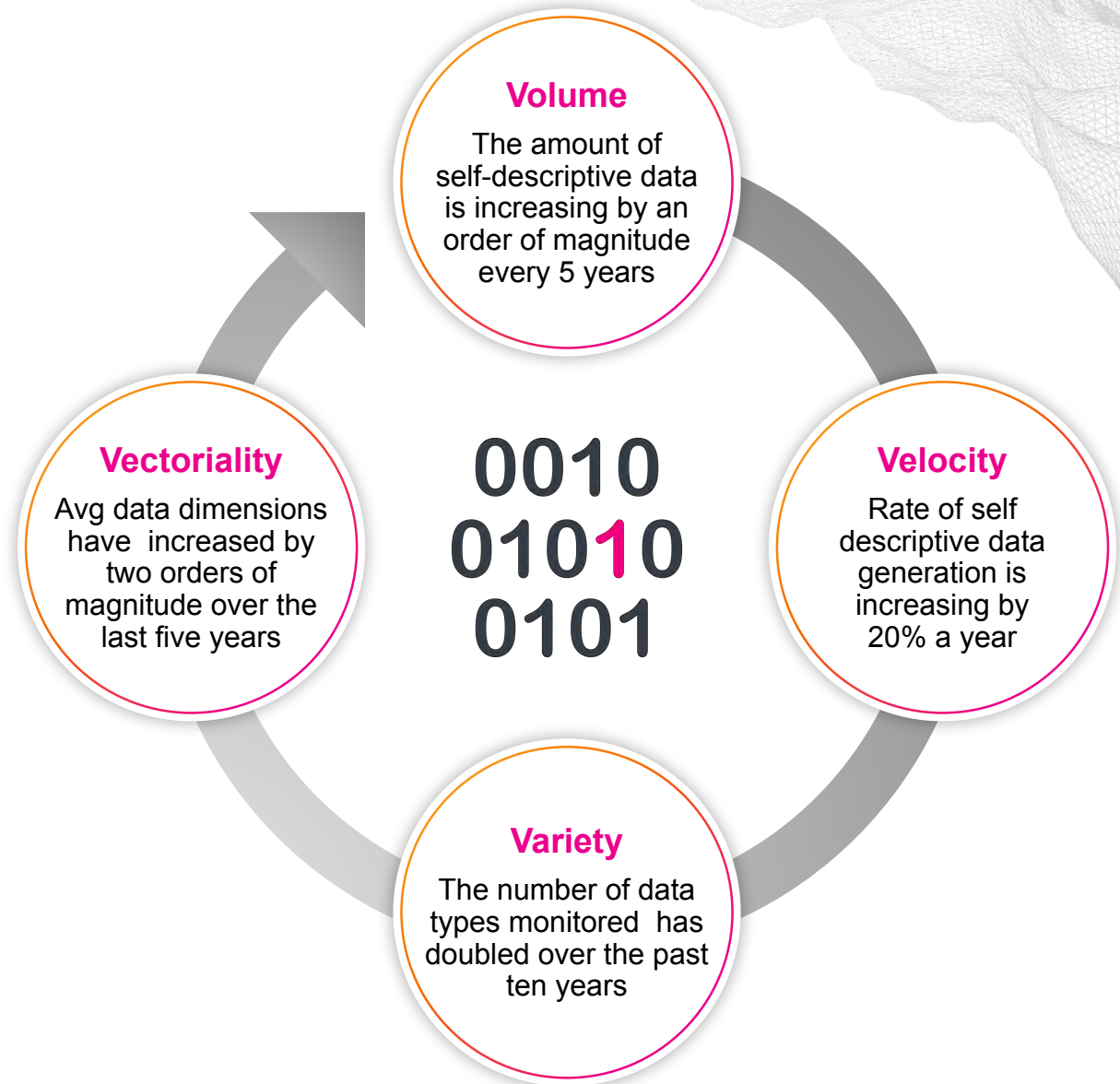


- 2023 Gartner MQ for APM + Observability Leader
- Splunk is the only new entrant in the leadership quadrant
- Strengths include:
  - OpenTelemetry support
  - Expanding coverage
  - Scalability

# System Complexity



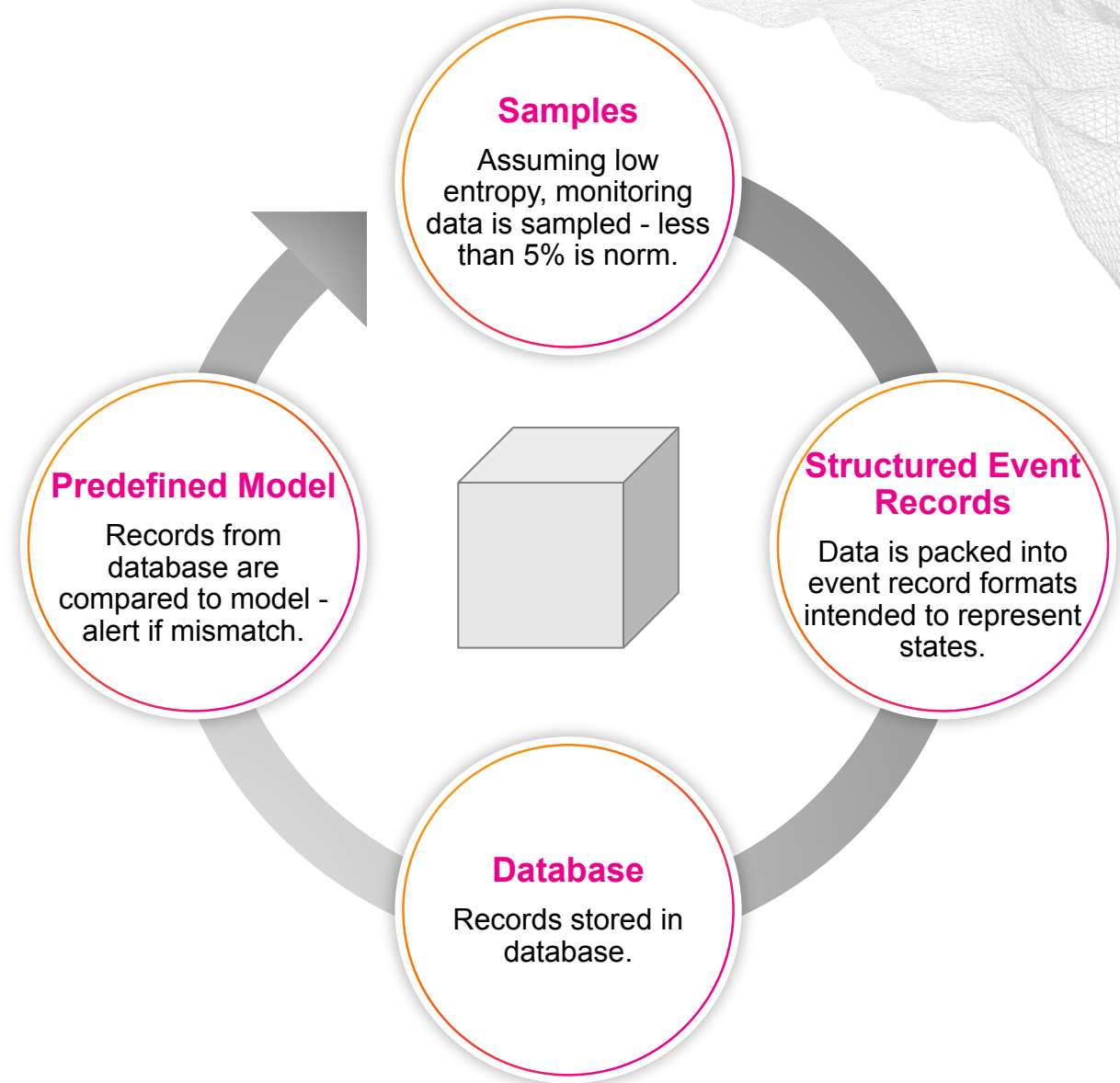
# Data Complexity





# The Monitoring Design Plan

1975 - 2022

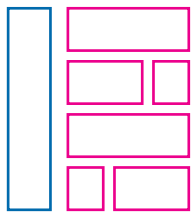


# But, it doesn't work anymore!

## Monolithic Apps (2007 -2011)



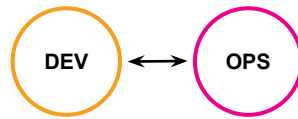
IBM, CA, BMC, HP



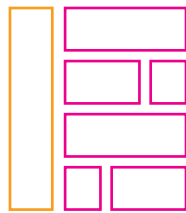
Events, Rules, Alerts



## Multi-Tier Apps (2011 - 2015)



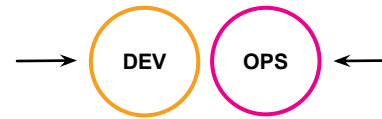
AppD, Dynatrace,  
New Relic



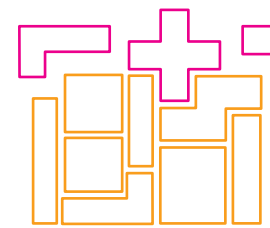
Numbers, Models,  
Reports



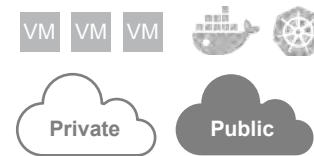
## Modular Apps (2015 -2020)



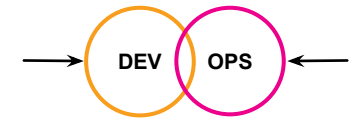
Splunk, Elastic



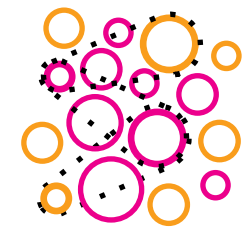
Logs, Metrics, Search



## Ephemeral Apps (2020 - ?)



DataDog, Splunk,  
BrandX?



Full Telemetry, AI,  
Automation



# Observability

# The Three Pillars

WHAT'S HAPPENING?



**METRICS**  
Detect



WHERE IS IT HAPPENING?



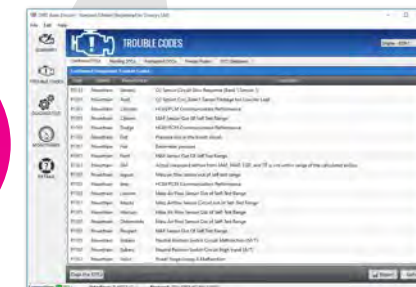
**TRACES**  
Troubleshoot



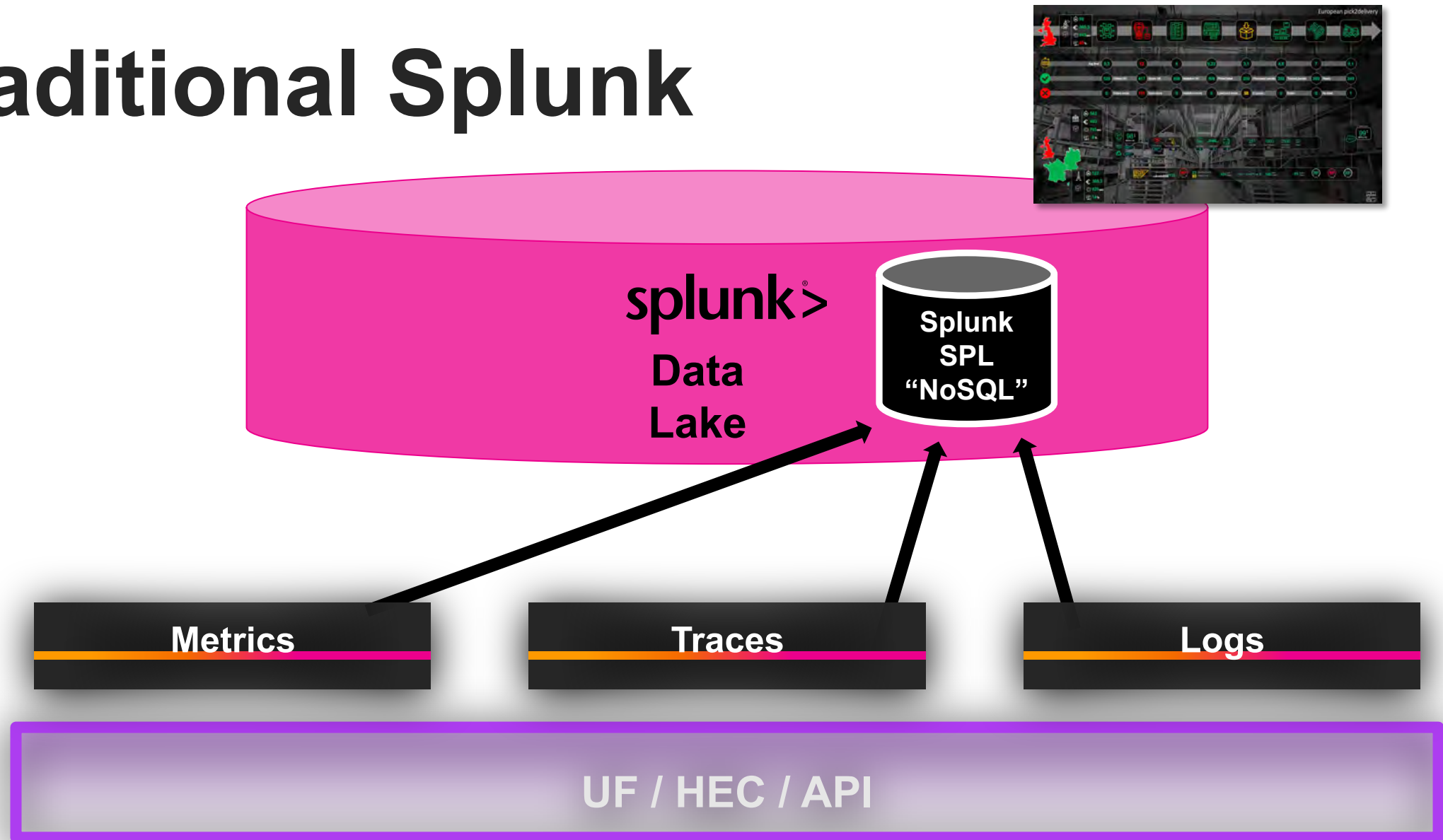
WHY IS IT HAPPENING?



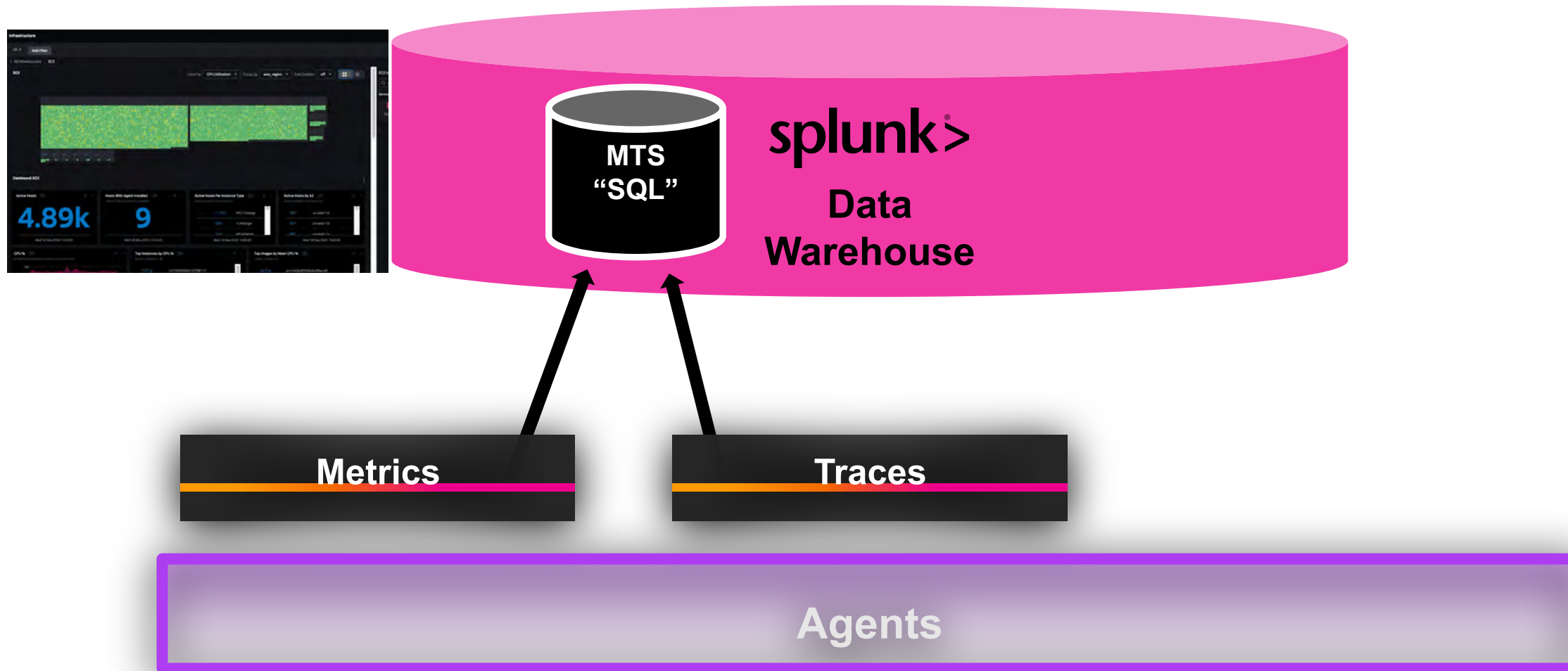
**EVENTS / LOGS**  
Pinpoint



# Traditional Splunk

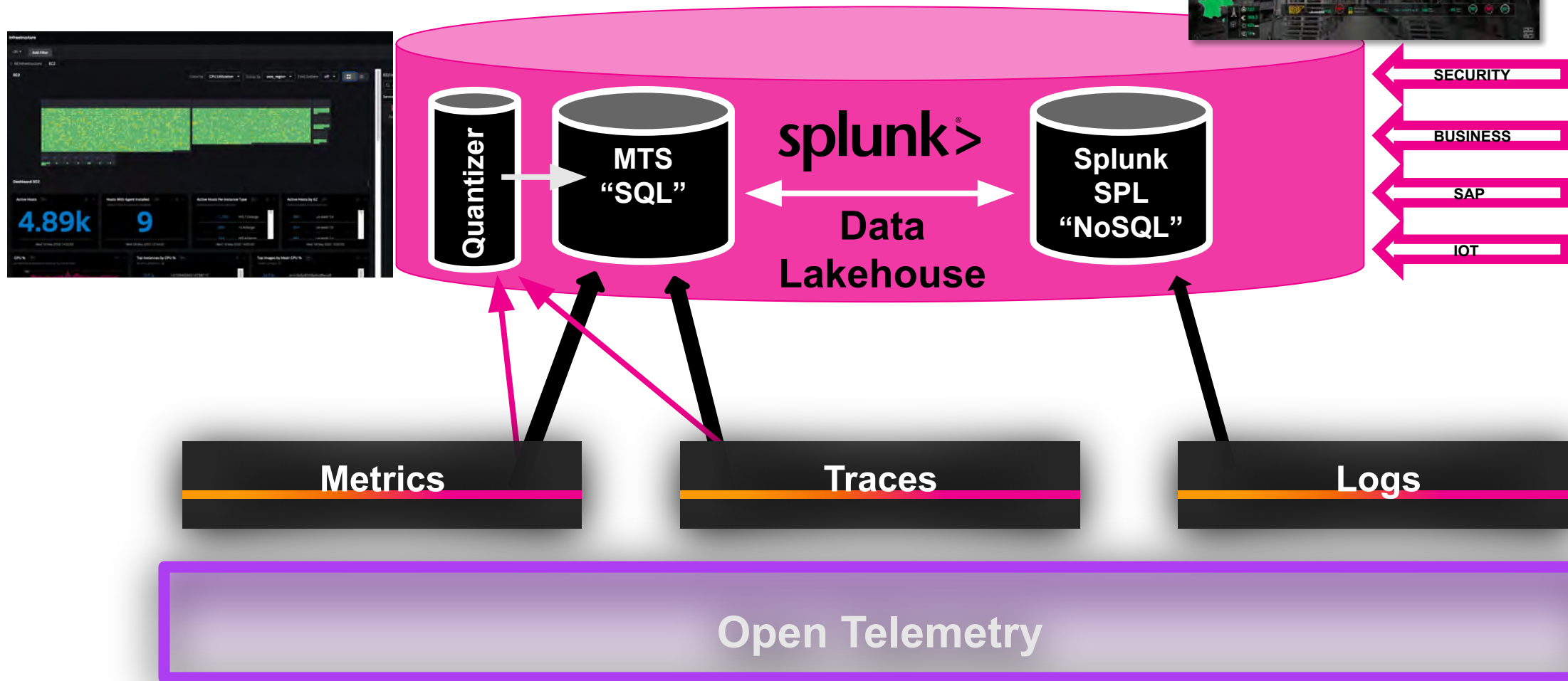


# Traditional IM / APM



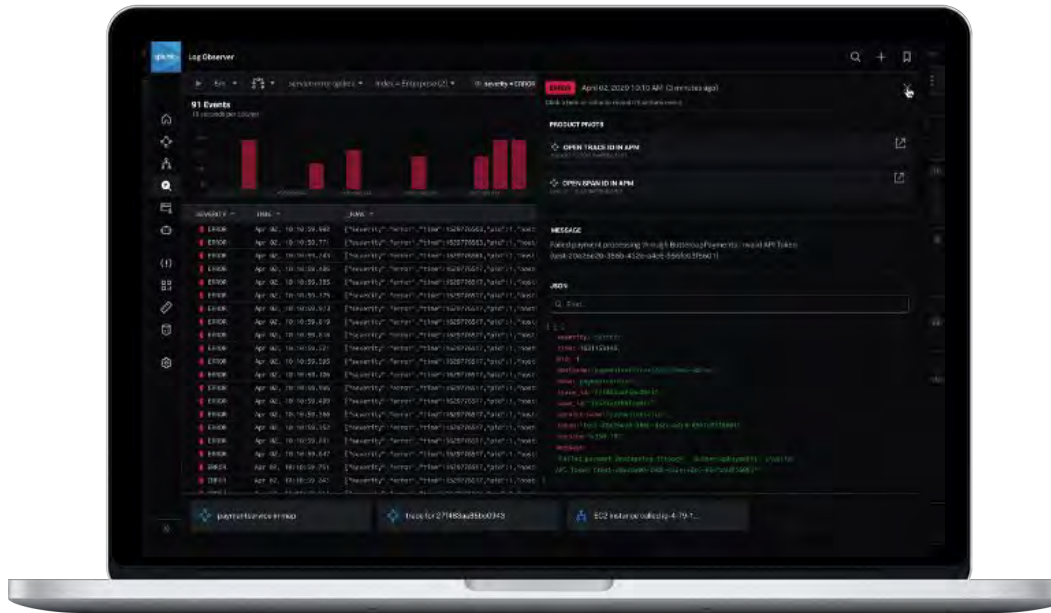


# Splunk with O11Y



# Who are you?

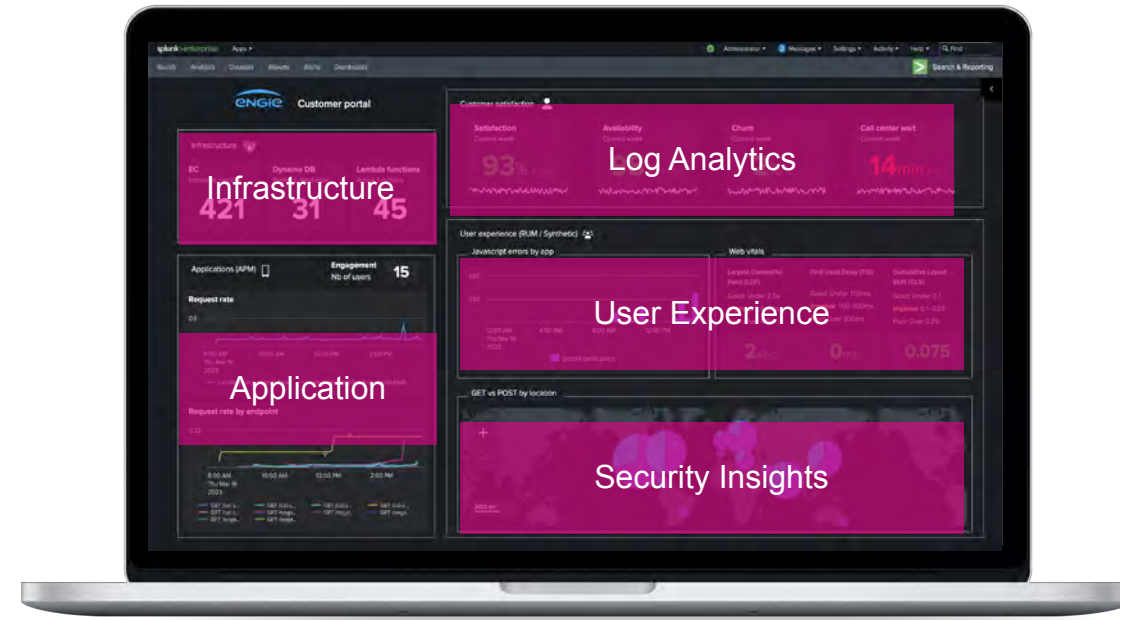
How do you want to consume your information?



## “The Engineer”

- Real Time
- What went wrong?
- How do I fix it?

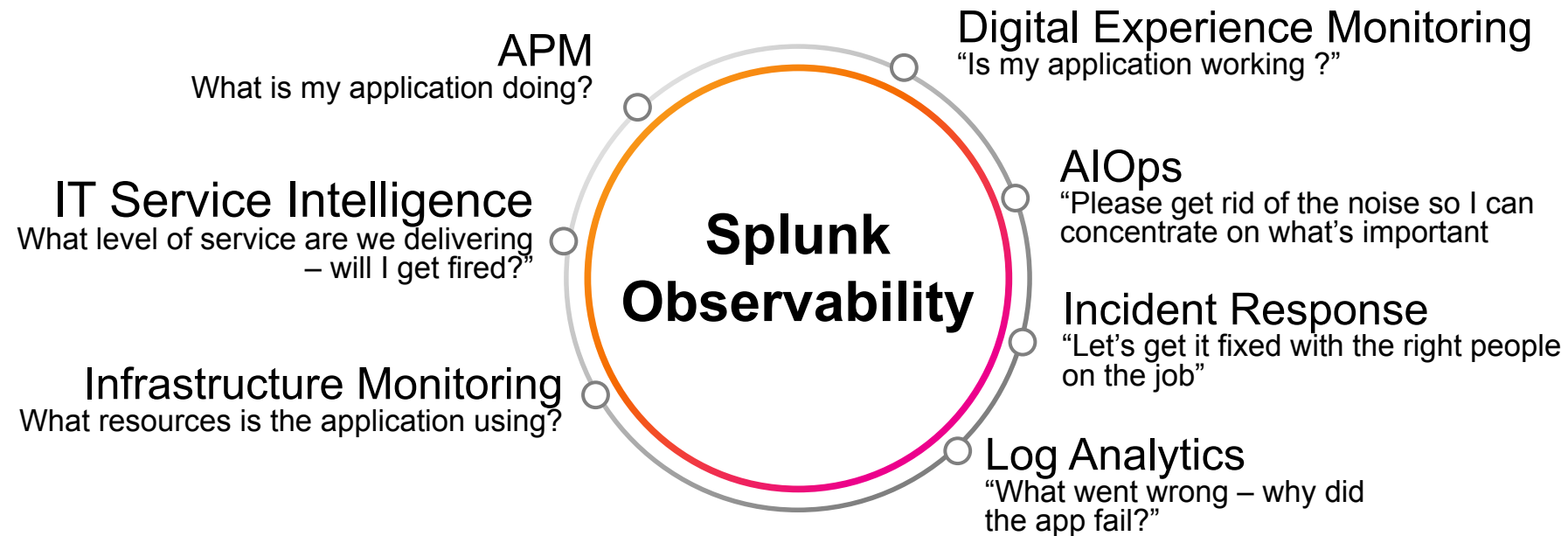
Log Analytics



## “The Service Owner”

- Full Visibility
- How is the Service Running?
- Is there any action we need to take?

# Splunk Observability Components



Full-Stack

Real-Time

Analytics-Powered

Enterprise-Grade

OpenTelemetry-Native



On-Prem | Hybrid Cloud | Multi-Cloud | Cloud-Native

# Why Splunk for Observability?

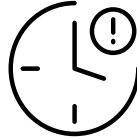
Visibility and control across your all your business services, apps and infrastructure

**Full-Stack**



Full fidelity data collection and correlation across metrics, traces, logs, events and services.

**Real-Time Streaming**



Streaming analytics enable alerting in seconds

**Analytics-Powered**



Built-in AI/ML to deliver predictive analytics, more accurate alerts and “no dead-end” investigations

**Enterprise-Grade**



One platform and integrated suite to support many teams and all your environments

**OpenTelemetry and Robust Ecosystem**



Leader in OpenTelemetry. Extensive community of thousands Splunk developers, apps and add-ons

# A Path To Greater Resilience

**Security**  
SecOps

**Observability**  
ITOps, DevOps

## Foundational Visibility

See across hybrid  
environments

---

Search and  
investigate

Troubleshoot with  
log analytics

## Prioritized Actions

Overcome alert  
fatigue

---

Expand monitoring,  
alerting and  
response

Understand  
service health

## Proactive Response

Get ahead of  
issues

---

Deliver situational  
awareness and  
automation

Ensure reliability of  
consumer-facing  
web applications

## Optimized Experiences

Delight customers  
and build trust

---

Achieve real-time  
risk insights

Deliver exceptional  
digital customer  
experiences

Digital Resilience at Enterprise Scale



splunk>



# Thank You

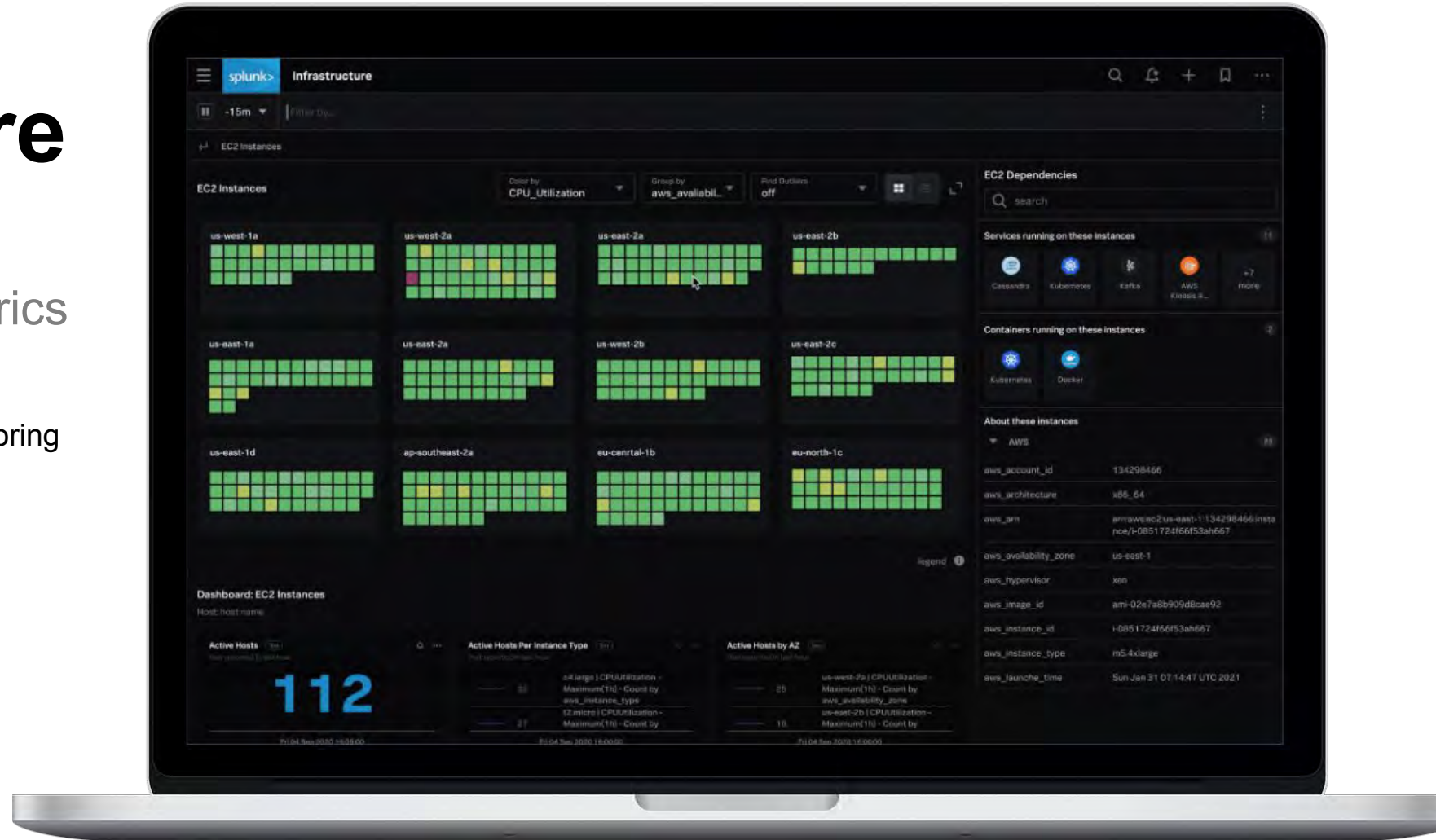


# Splunk Infrastructure Monitoring

Real-time streaming metrics



- On-prem & hybrid-/multi-cloud monitoring
- Kubernetes & container monitoring
- Serverless monitoring
- Pre-built dashboards & hundreds of integrations
- Automatic service discovery
- Instant, analytics-driven alerting
- Seamless slice-and-dice
- Custom & high resolution metrics





# Log Observer Connect

Advanced observability capabilities with Splunk Enterprise and Splunk Cloud data

- **Centralize your data.** Leverage the power of Splunk Enterprise and Splunk Cloud data in-context with metrics and traces
- **Get started quickly.** Start using Log Observer Connect in less than 10 minutes
- Access to no-code Log Observer experience and related content links for **faster troubleshooting and root-cause analysis**
- **Extend the value of your Splunk investment** at no additional cost

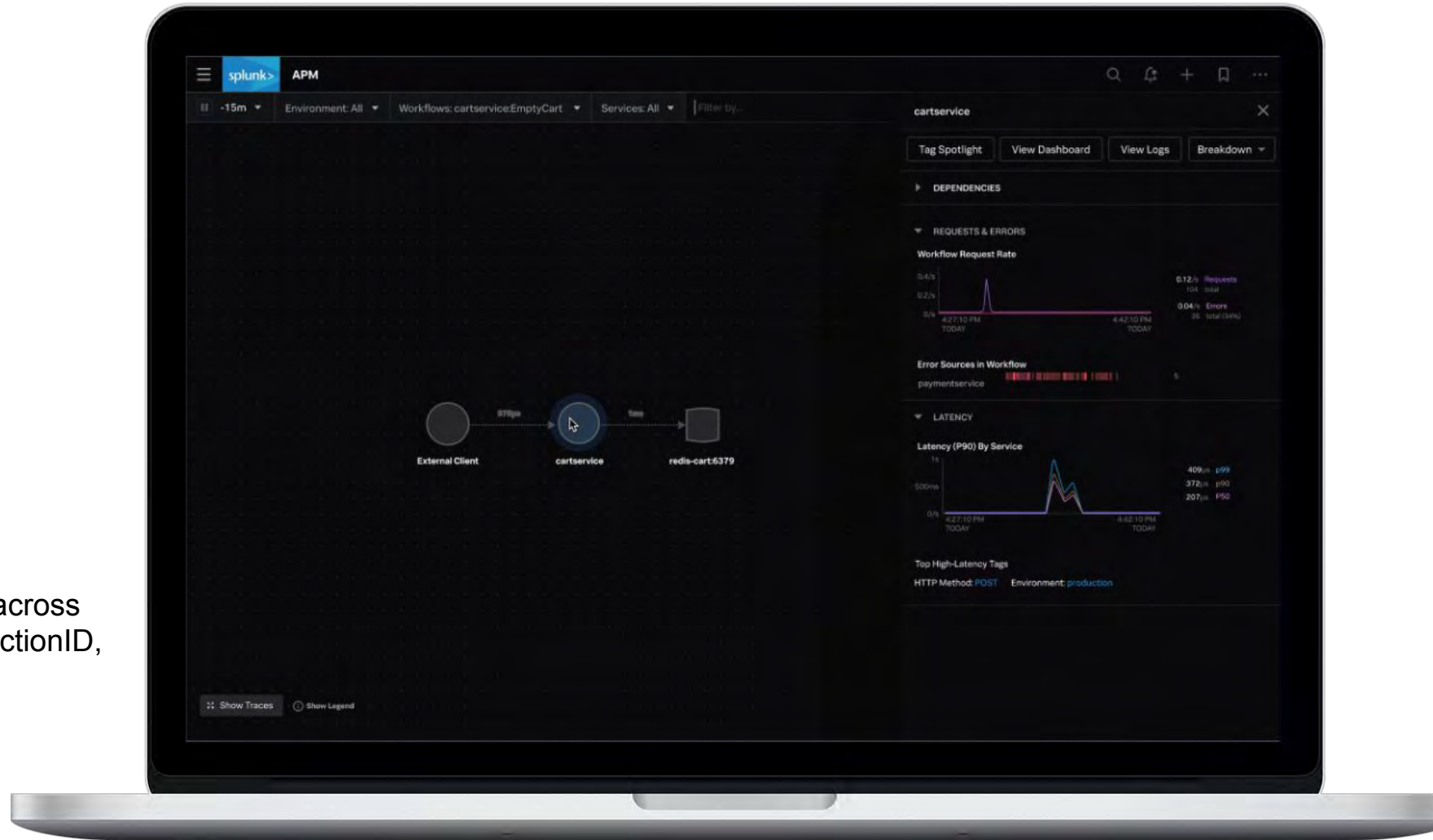


# Splunk APM

## Application Monitoring and Troubleshooting



- Lightweight, open instrumentation
- Rich, dynamic service map
- Full-stack correlation
- NoSample™ full-fidelity ingestion
- Unlimited cardinality exploration- search across any tag or dimension (UserName, TransactionID, Geography, etc.)
- Speedy UI, analytics & drilldowns
- AI-driven alerting and directed troubleshooting



# Digital Experience Monitoring

What the USER sees

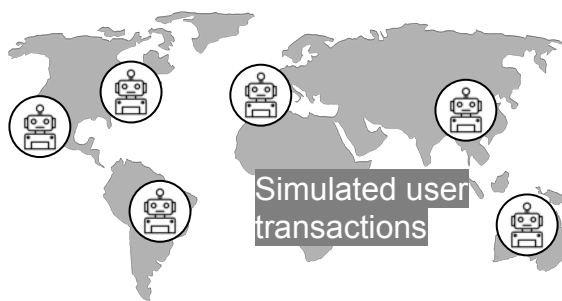


Transaction monitoring

Availability monitoring

Competition benchmarking

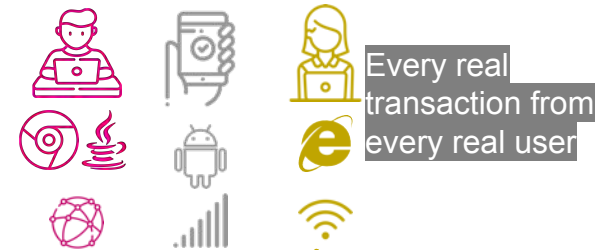
### What SYNTHETIC does



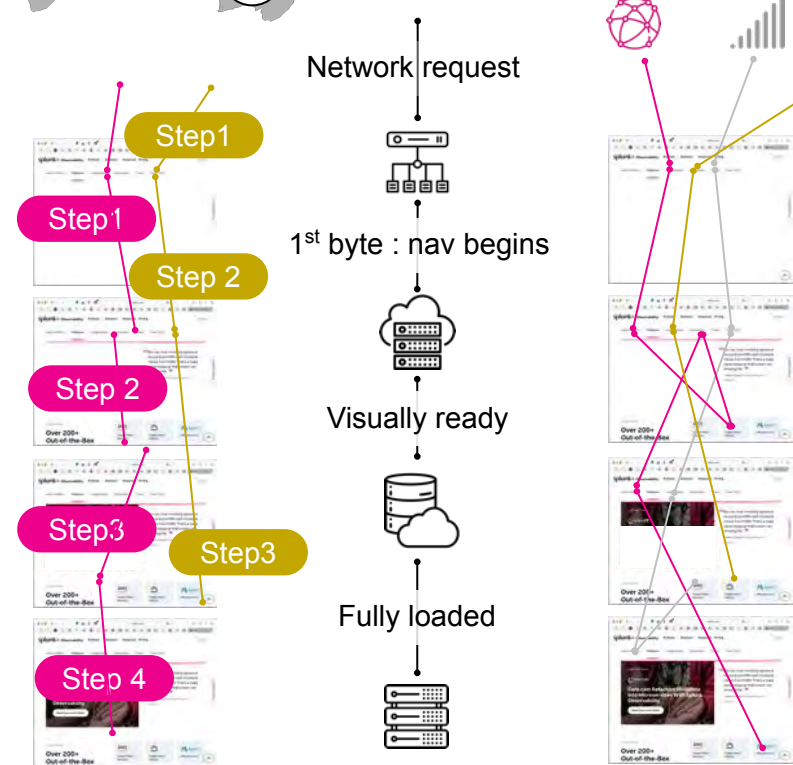
Simulated user transactions



### What RUM does



Every real transaction from every real user



Customer journey tracking

Overall web performance

User Context

Web performance / 3rd party tag monitoring

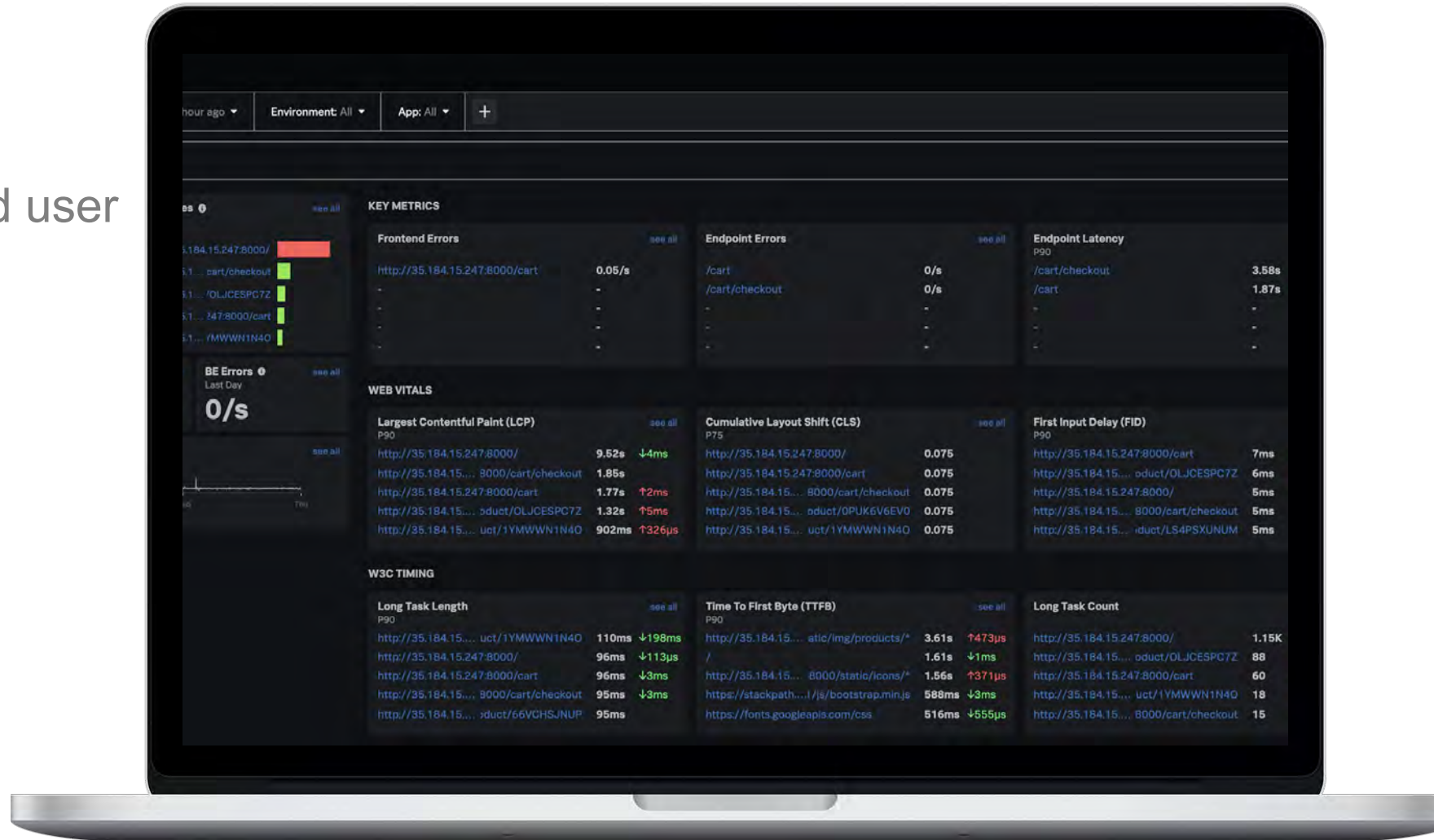


# Splunk RUM

Industry's only end-to-end, full-fidelity visibility into end user experiences



- Track and monitor continuously for performance
- Elevate quality end-user experiences in real time
- Simplify troubleshooting for faster resolution
- Unlock user data through open standards
- Built for Observability, with flexibility and choice
- Supports JavaScript (browsers), and iOS and Android native apps



# Splunk Synthetics

## Synthetic Monitoring Integrated into the Splunk Observability Platform



- Proactively detect issues in API and page performance, across entire user journeys
- Troubleshoot frontend and backend performance issues faster in a single UI
- Visualize the impact of new code on customer experience

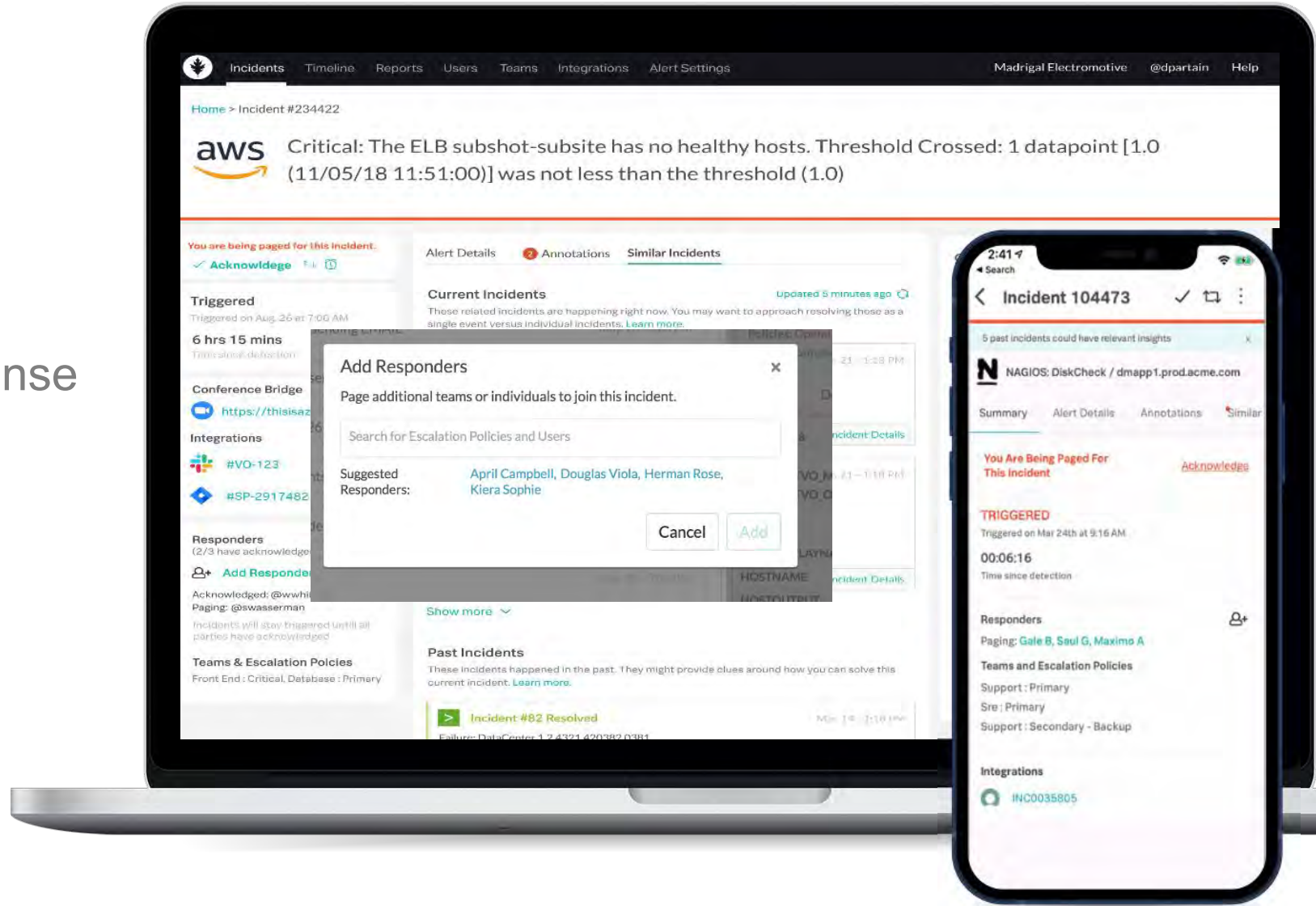


# Splunk On-Call

## Collaborative Incident Response



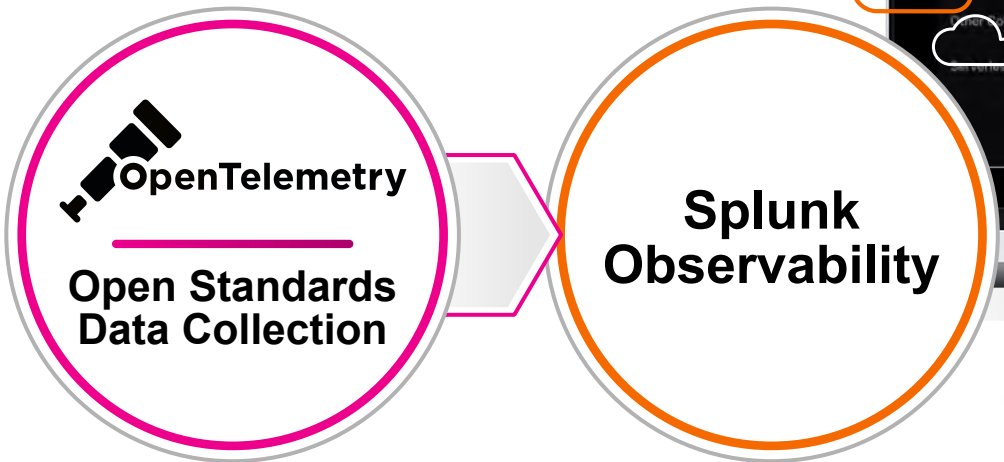
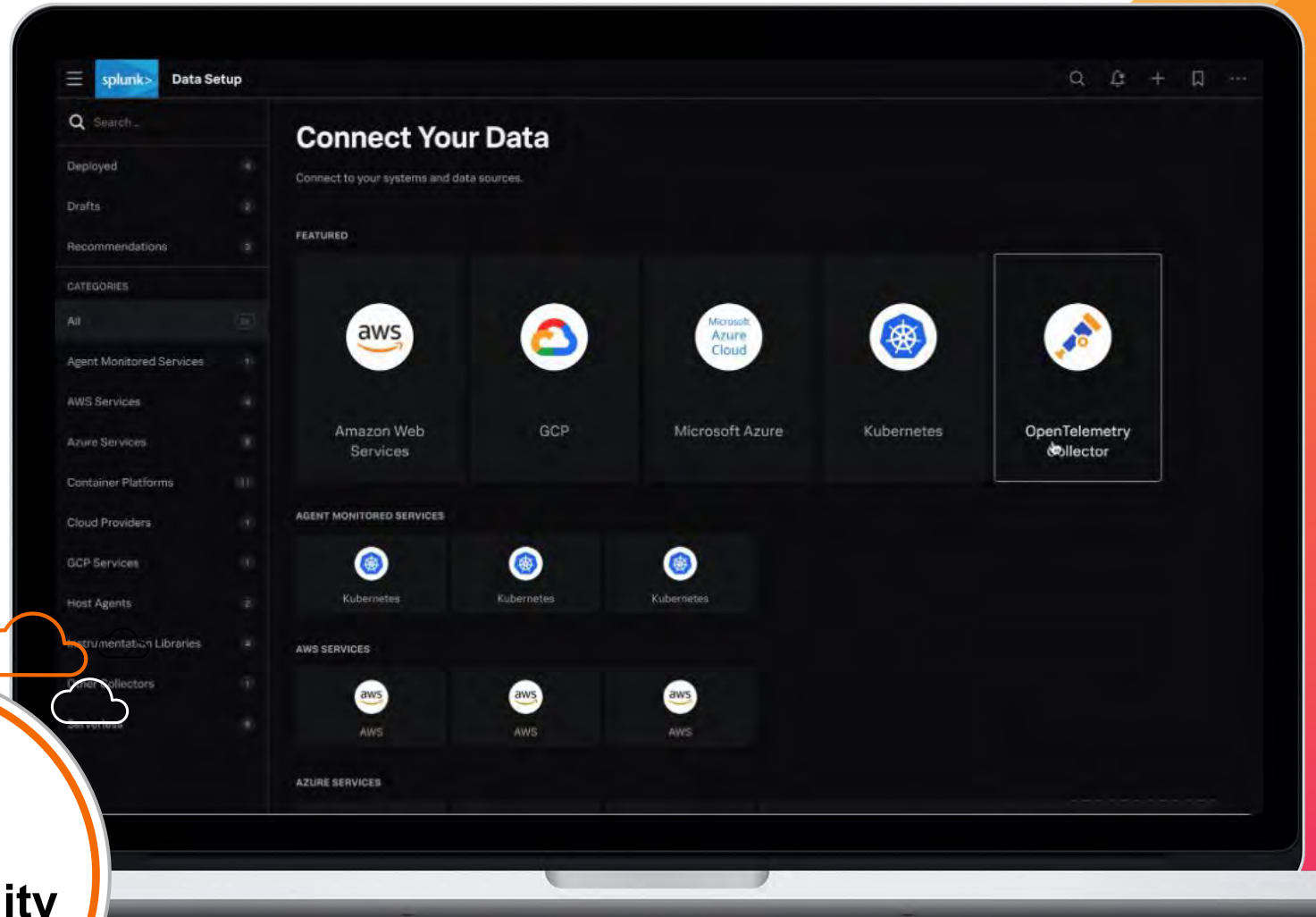
- Intelligent on-call
- Post-incident analysis and reporting
- Mobile-first





# Open Telemetry-Native

Single, open standards-based agent for metrics, traces, logs and more for more control and greater ROI



# Observability Cloud - An easier way to consume ....

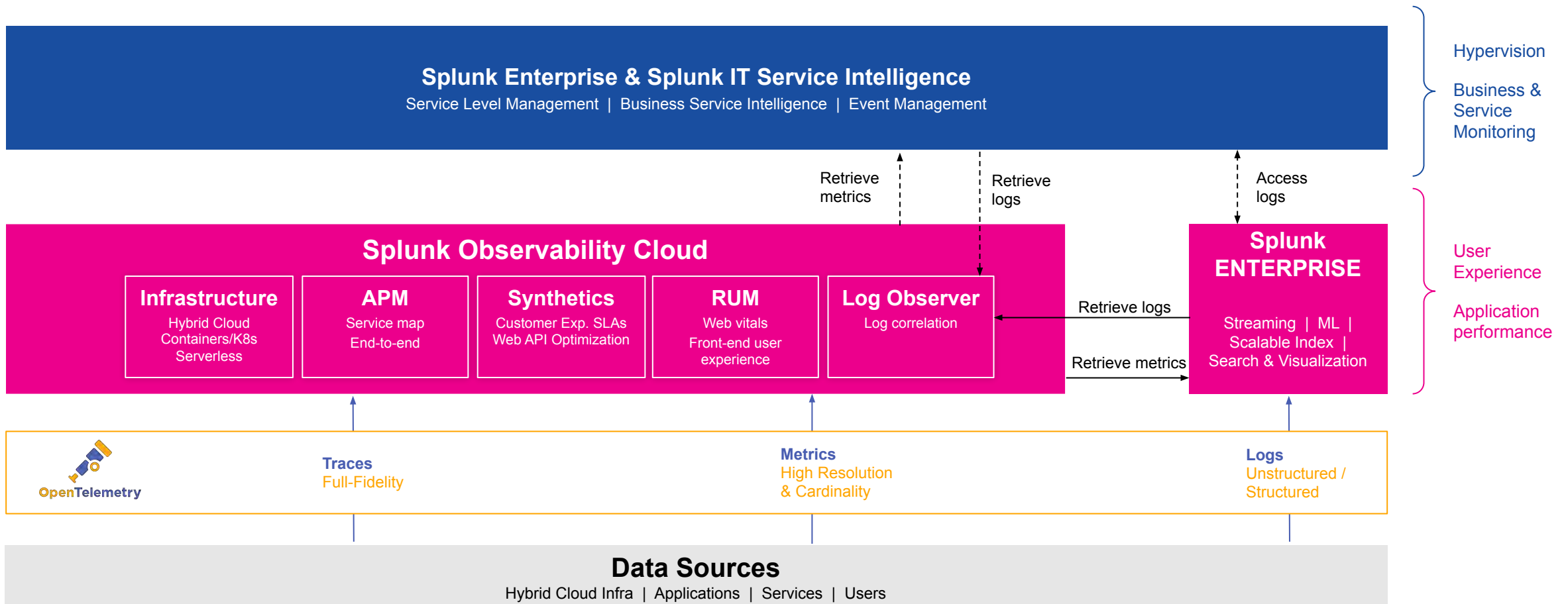
Infrastructure Per Host	Applications & Infra Per Host	End-to-End Per Host
<p><b>Products and Entitlements Included</b></p> <ul style="list-style-type: none"> <li>• <b>Splunk Infrastructure Monitoring Enterprise Edition</b> <ul style="list-style-type: none"> <li>• 20 Containers or Serverless Functions</li> <li>• 200 Custom Metrics</li> <li>• Data Retention (1min Roll-Ups / 1sec Native): 13 months / 3 months</li> </ul> </li> <li>• <b>Splunk Synthetic Monitoring - Uptime Tests, Enterprise Edition</b> <ul style="list-style-type: none"> <li>• 10k Uptime Test Runs per Month</li> </ul> </li> <li>• <b>Splunk Incident Intelligence</b> <ul style="list-style-type: none"> <li>• 1 monthly active user per 10 hosts</li> </ul> </li> <li>• <b>Log Observer Connect</b></li> </ul>	<p><b>Everything in Infrastructure PLUS:</b></p> <ul style="list-style-type: none"> <li>• <b>Splunk Application Performance Monitoring, Enterprise Edition</b> <ul style="list-style-type: none"> <li>• 20 Containers or Serverless Functions</li> <li>• 5 Profiled Containers</li> <li>• 40 Monitoring MetricSet</li> <li>• 400 Troubleshooting MetricSet</li> <li>• 20.48 MB TraceVolume ingested per min</li> <li>• 10.24 MB Profiling TraceVolume ingested per min</li> </ul> </li> <li>• <b>Splunk Synthetic Monitoring - API Tests, Enterprise Edition</b> <ul style="list-style-type: none"> <li>• 10k Synthetics API Test Runs per Month</li> </ul> </li> </ul>	<p><b>Everything in App &amp; Infra PLUS:</b></p> <ul style="list-style-type: none"> <li>• <b>Splunk Real User Monitoring, Enterprise Edition</b> <ul style="list-style-type: none"> <li>• 10k Sessions/Month</li> </ul> </li> <li>• <b>Splunk Synthetic Monitoring - Browser Tests, Enterprise Edition</b> 1000 Browser Test Runs per Month (Browser or Mobile)</li> </ul>

**Customer Success Plans (Support, EDU, PS)**

All tiers include the [Standard Customer Success Plan](#). Premium Customer Success Plans are available at additional cost per host.



# Splunk Observability



# The Splunk T-Shirt Co.

How this comes together .....

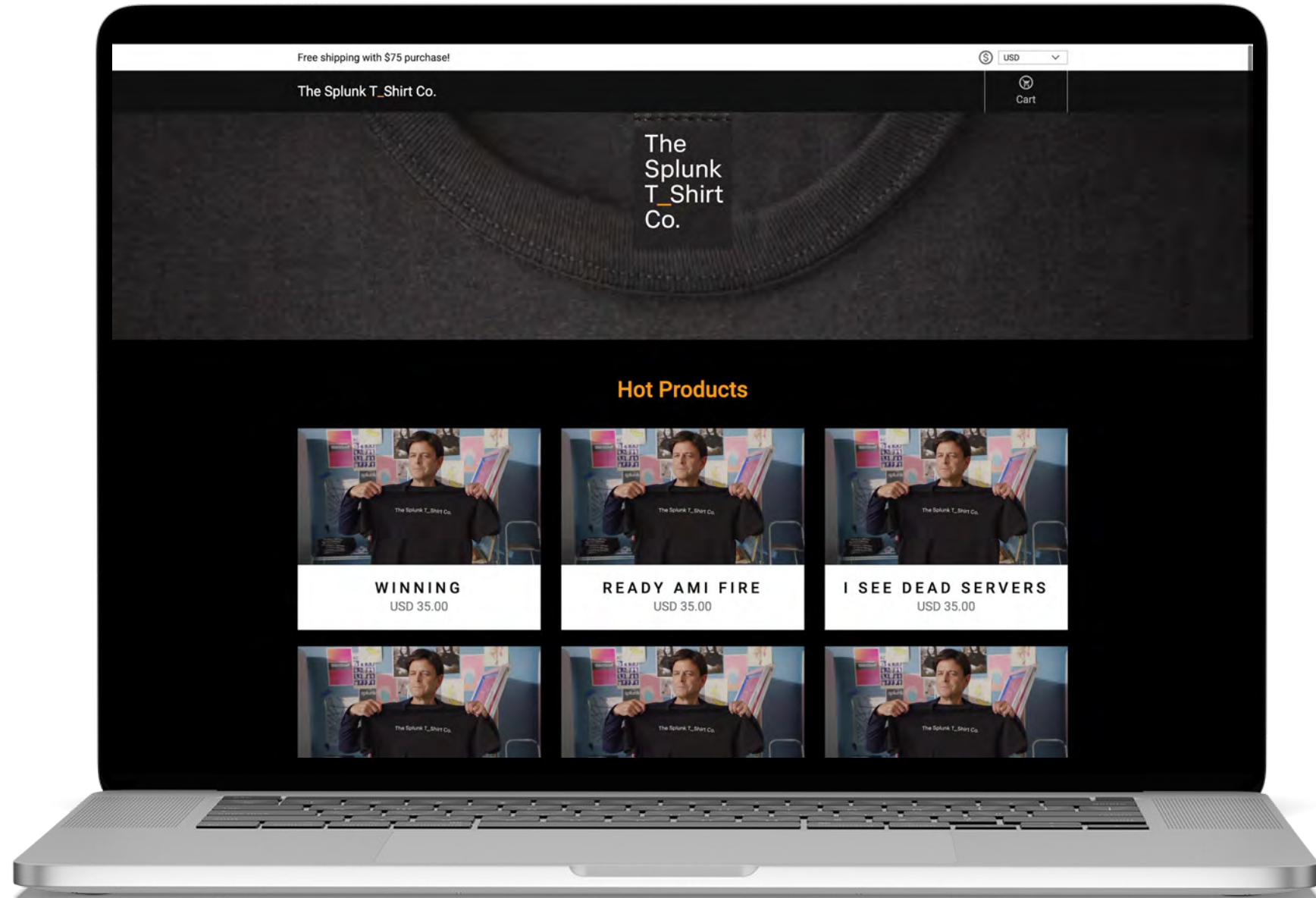
splunk>



# The Splunk T-Shirt Co.

## Online Store

- Niche Clothing brand
- Born in the Cloud
- Online Only





# Unexpected traffic spike impacting website performance

- Potential security and performance incidents
- Splunk intelligent alerting alerts business owner, SecOps and ITOp



Business Service Owner



SecOps (Security analyst)



ITOps (SRE- Site reliability engineer)

# The Splunk T-Shirt Co.

**Business Metrics**

Site Traffic <b>2,139</b>	Conversion Rate <b>-0%</b>	Revenue <b>\$900</b>	Customer Satisfaction <b>15.73%</b>
------------------------------	-------------------------------	-------------------------	--



## Internal View

**Website**

Website Health <b>13</b>	Website Traffic <b>53</b>
-----------------------------	------------------------------

**Shopfront and Call Centre**

NPS <b>36</b>	Wait Time (Mins) <b>23</b>
------------------	-------------------------------

**Services Health Scores**

Checkout <b>6</b>	Catalog <b>13</b>	Payment <b>13</b>
----------------------	----------------------	----------------------

**Synthetic Checks**

●	●	●
---	---	---

**Real User Monitoring**

●	●	●
---	---	---

**Application Performance Monitoring**

●	●	●
---	---	---

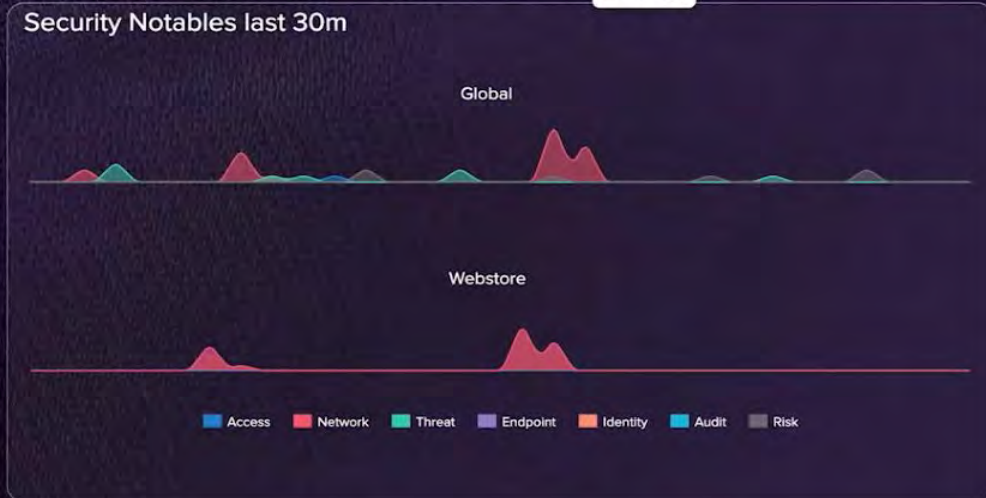
**Ticket Activity**

Open <b>58</b>
In Progress <b>51</b>
Escalation <b>25</b>

## External View

**IaaS and Hosting Health**

AWS EC2 <b>100%</b>	AWS EKS <b>100%</b>	AWS ELB <b>100%</b>	SAP Ariba <b>100%</b>
------------------------	------------------------	------------------------	--------------------------





-15m | splunkshirtc... (1) | All Workflows | Services | Tags

Clear All

< Overview

Showing 23 services



**Service Types**

- Service (16)
- Inferred database (3)
- Inferred pub/sub queue (1)
- Inferred service (3)

**Service Metrics**

- Fewer requests (small circle)
- More requests (large circle)
- Error rate (red circle)
- Root error rate (red circle with 'x')
- Name: 21ms ← P90 latency

**Intraservice Metrics**

- Fewer requests (dashed line)
- More requests (solid line)
- P90 Latency (11ms)
- Error rate > 5% (dashed line)
- Error rate > 20% (dashed line)

Services by Error Rate



Top Error Sources



Services By Latency (P90)



Traces

View Trace ID  Go

Database Query Performance

Tag Spotlight

Show Legend

🖨️ - 🔍 +

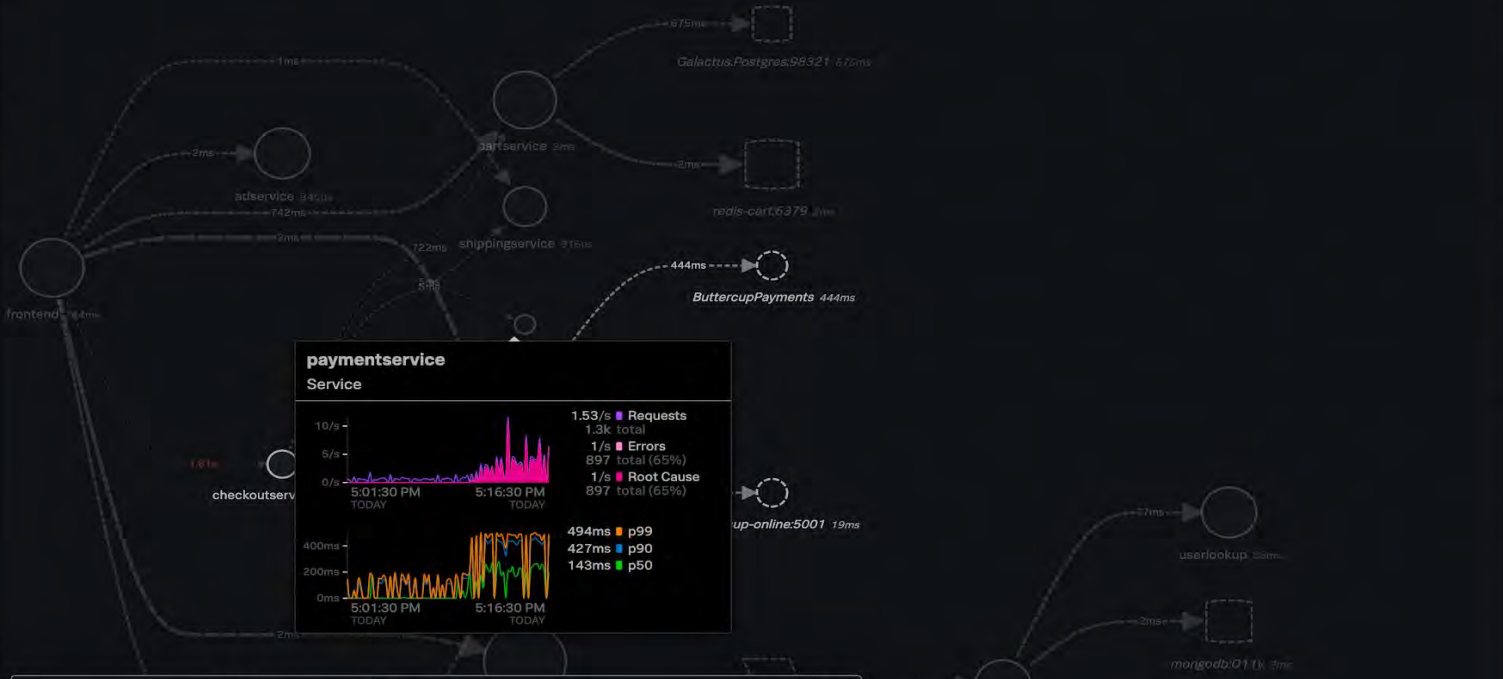


-15m | splunkshirtc... (1) | All Workflows | Services | Tags

Clear All

< Overview

Showing 23 services



**paymentservice**  
Service

1.53/s Requests  
1.3k total

1/s Errors  
897 total (65%)

1/s Root Cause  
897 total (65%)

494ms p99  
427ms p90  
143ms p50

**Service Types**

- Service (16)
- Inferred database (3)
- Inferred pub/sub queue (1)
- Inferred service (3)

**Service Metrics**

Fewer requests | More requests

Error rate | Root error rate

Name | 21ms | P90 latency

**Intraservice Metrics**

Fewer requests | More requests

11ms | P90 Latency

Error rate > 5%  
Error rate > 20%

Show Legend

Services by Error Rate



Top Error Sources



Services By Latency (P90)



Traces

View Trace ID [input] Go

Database Query Performance

Tag Spotlight

### Incident Review

Search... Hide Charts Hide Filters

Urgency



Status



Owner



Domain



Saved filters: Select... Tag: Add tags... Urgency: Select... Status: Select... Owner: Select... Security Domain: Network (1) Type: Notable (1) Search Type: Correlation S... Time or Associations: Time Last 60 mi...

Submit Type: Notable Domain: Network Time Range: Last 60 minutes

17 Notables Unselect all Edit Selected Edit All Matching Events (17) Add Selected to Investigation

20 per page Refresh

<input type="checkbox"/>	i	Title	Risk Object	Risk Score	Risk Events	Type	Time	Disposition	Security Domain	Urgency	Status	Owner	Actions
<input type="checkbox"/>	>	Unusual Geolocation of Network Activity (Australia)	--	--	--	Notable	Today, 05:40	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Geolocation of Network Activity (Australia)	--	--	--	Notable	Today, 05:39	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Geolocation of Network Activity (Australia)	--	--	--	Notable	Today, 05:39	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Geolocation of Network Activity (Australia)	--	--	--	Notable	Today, 05:39	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Geolocation of Network Activity (Australia)	--	--	--	Notable	Today, 05:39	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Geolocation of Network Activity (Australia)	--	--	--	Notable	Today, 05:39	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Volume of Network Activity	--	--	--	Notable	Today, 05:25	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Volume of Network Activity	--	--	--	Notable	Today, 05:25	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Volume of Network Activity	--	--	--	Notable	Today, 05:24	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Volume of Network Activity	--	--	--	Notable	Today, 05:24	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Volume of Network Activity	--	--	--	Notable	Today, 05:24	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Volume of Network Activity	--	--	--	Notable	Today, 05:24	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Volume of Network Activity	--	--	--	Notable	Today, 05:24	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Volume of Network Activity	--	--	--	Notable	Today, 05:24	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Volume of Network Activity	--	--	--	Notable	Today, 05:24	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Unusual Volume of Network Activity	--	--	--	Notable	Today, 05:24	Undetermined	Network	⚠ Medium	New	unassigned	▼
<input type="checkbox"/>	>	Network Change Detected On ec2.amazonaws.com	--	--	--	Notable	Today, 05:16	Undetermined	Network	🟢 Low	New	unassigned	▼



## Incident Review

### Urgency



### Status



### Owner



### Domain



Search... | Hide Charts | Hide Filters

Saved filters: Select... | Tag: Add tags... | Urgency: Select... | Status: Select... | Owner: Select... | Security Domain: Network (1) | Type: Notable (1) | Search Type: Correlation S... | Time or Associations: Time | Last 60 mi... | Save new filters | Update | Clear all

Submit | Type: Notable x | Domain: Network x | Time Range: Last 60 minutes

17 Notables | Unselect all | Edit Selected | Edit All Matching Events (17) | Add Selected to Investigation | 20 per page | Refresh

<input type="checkbox"/>	<input type="checkbox"/>	Title	Risk Object	Risk Score	Risk Events	Type	Time	Disposition	Security Domain	Urgency	Status	Owner	Actions
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Unusual Geolocation of Network Activity (Australia)	--	--	--	Notable	Today, 05:40	Undetermined	Network	⚠ Medium	New	unassigned	

#### Description:

Inbound web traffic has been detected from previously unseen location: Australia

#### Additional Fields

Additional Fields	Value
Destination	frontend/static/img/products <span style="color: red;">0</span>
Risk Score	0
Severity	high

#### Action

- ▼
- ▼
- ▼

#### Related Investigations:

Currently not investigated.

#### Correlation Search:

[Network - Unusual Geolocation of Network Activity - Rule](#)

#### History:

[View all review activity for this Notable Event](#)

#### Adaptive Responses:

Response	Mode	Time	User	Status
Notable	saved	2023-01-31T05:40:01+0000	admin	✓ success

[View Adaptive Response Invocations](#)

#### Next Steps:

[Run Playbook in SOAR](#)

#### Event Details:

event_id	DDCF25D1-77E2-4DA3-A718-507BFB828E50@@notable@@fb08987a8816d2f958bb90a01d017813
event_hash	fb08987a8816d2f958bb90a01d017813

### Incident Review

Search... Hide Charts Hide Filters

#### Urgency



#### Status



#### Owner



#### Domain



Saved filters Tag Urgency Status Owner Security Domain Type Search Type Time or Associations

Select... Add tags... Select... Select... Select... Network (1) Notable (1) Correlation S... Select... Time Last 60 mi... Save new filters Update Clear all

Submit Type: Notable x Domain: Network x Time Range: Last 60 minutes

#### 17 Notables

Unselect all Edit Selected Edit All Matching Events (17) Add Selected to Investigation

20 per page Refresh

<input type="checkbox"/>	<input type="checkbox"/>	Title	Risk Object	Risk Score	Risk Events	Type	Time	Disposition	Security Domain	Urgency	Status	Owner	Actions
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Unusual Geolocation of Network Activity (Australia)	--	--	--	Notable	Today, 05:40	Undetermined	Network	⚠ Medium	New	unassigned	⌵

#### Description:

Inbound web traffic has been detected from previously unseen location: Australia

#### Additional Fields

Additional Fields	Value
Destination	frontend/static/img/products <span style="color: red;">0</span>
Risk Score	0
Severity	high

#### Related Investigations:

Currently not investigated.

#### Correlation Search:

Network - Unusual Geolocation of Network Activity - Rule

#### History:

/view all review activity for this Notable Event

#### Adaptive Responses:

Response	Mode	Time	User	Status
Notable	saved	2023-01-31T05:40:01+0000	admin	✓ success

/view Adaptive Response Invocations

#### Next Steps:

Run Playbook in SOAR

Action

- Edit Tags
- Access Search (as destination)
- Access Search (as source)
- Asset Center
- Asset Investigator
- Map frontend/static/img/products
- Intrusion Search (as destination)
- Intrusion Search (as source)
- Review Network Traffic

#### Event Details:

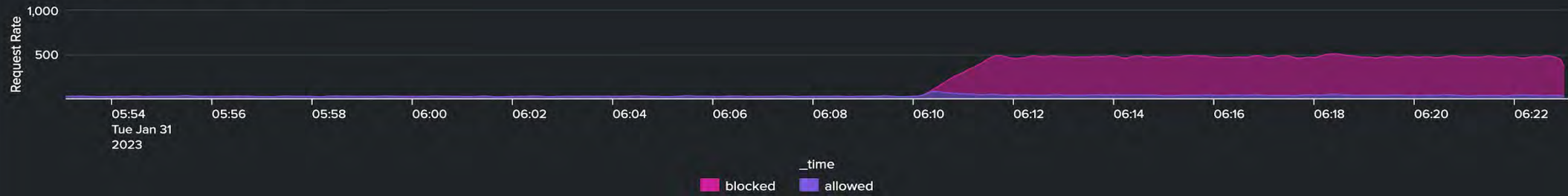
event_id	DDCF25D1-77E2-4DA3-A718-507BFB828E50@@@notable@@@fb08987a8816d2f958bb90a01d017813
event_hash	fb08987a8816d2f958bb90a01d017813
eventtype	modnotable_results
	notable
Short ID	Create Short ID

# Splunk T-Shirt Store - Web Traffic

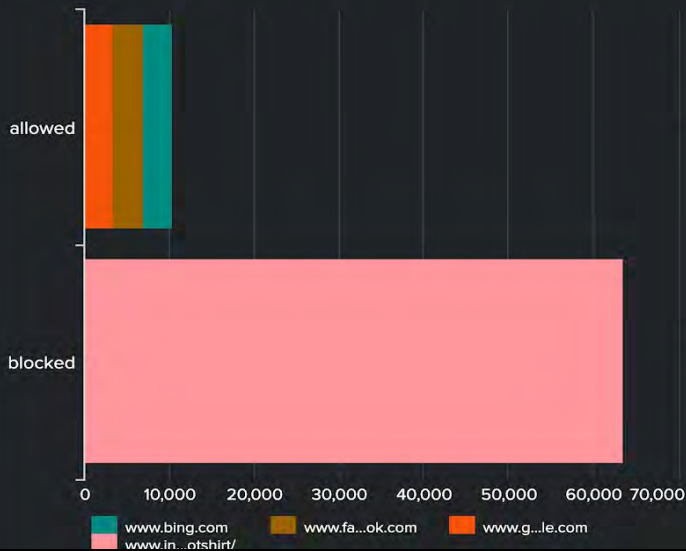
Edit Export ...

Last 30 minutes Hide Filters

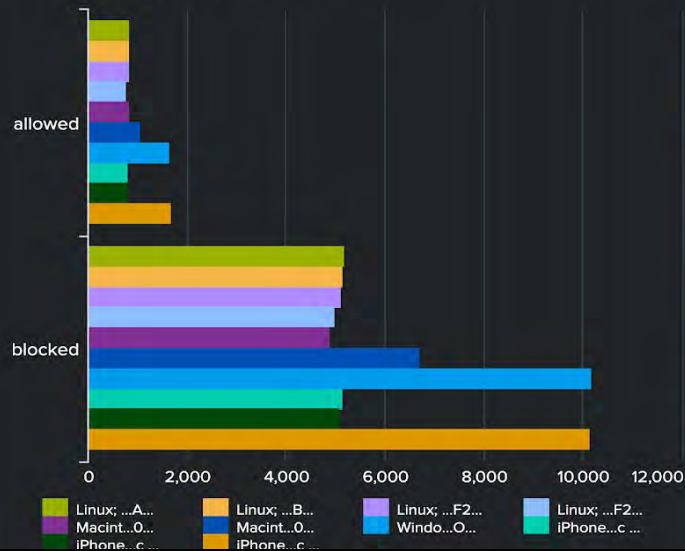
### Current Request Rate and Traffic status



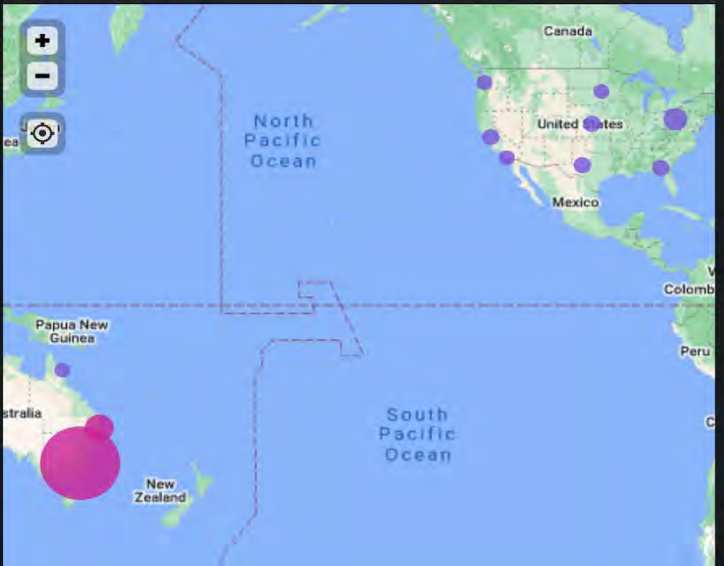
### Referrer URL by Action



### Top Device Types by Action



### Traffic Origin by Action



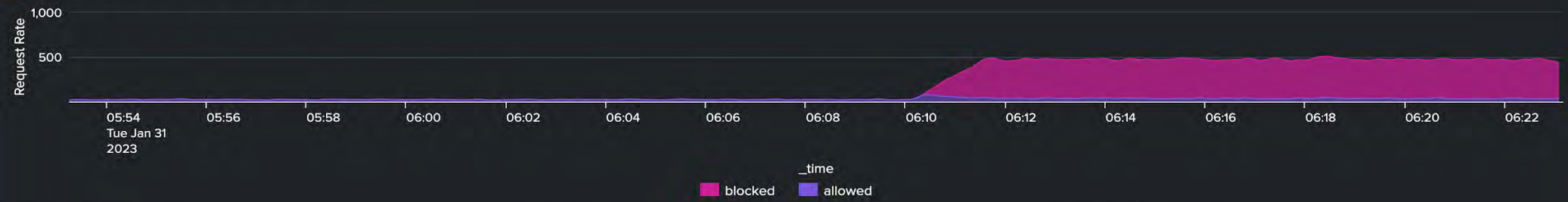


# Splunk T-Shirt Store - Web Traffic

Edit Export ...

Last 30 minutes Hide Filters

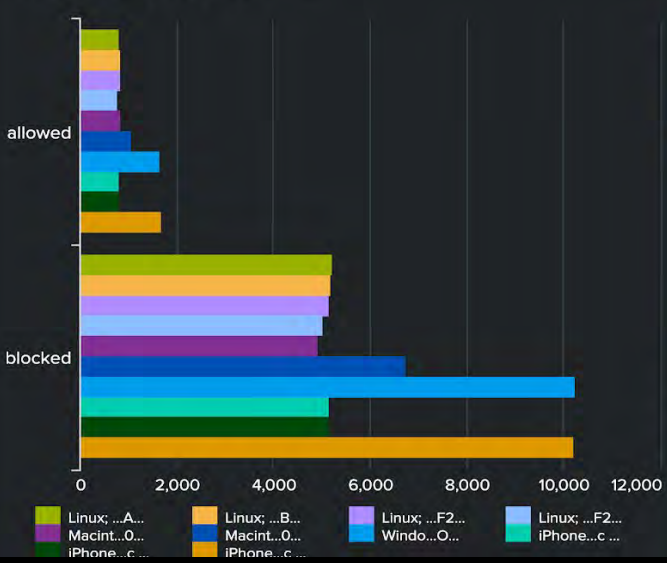
## Current Request Rate and Traffic status



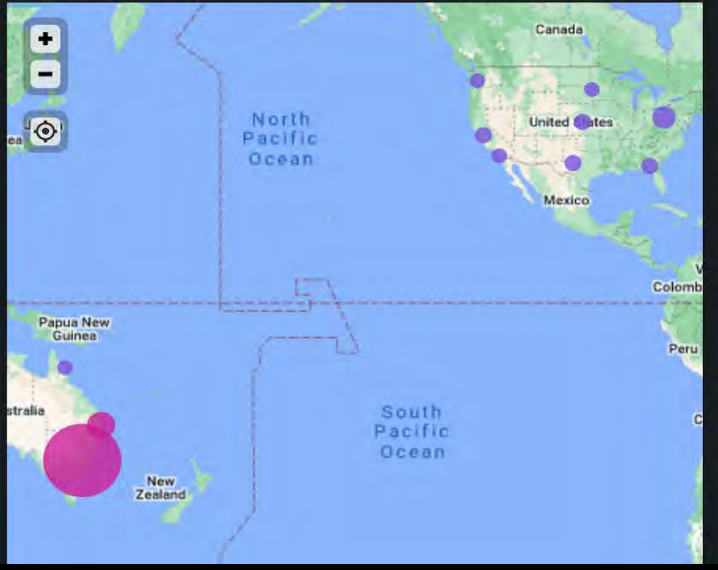
## Referrer URL by Action



## Top Device Types by Action



## Traffic Origin by Action





Instagram

Home

Search

Explore

Reels

Messages

Notifications

Create

Profile



icantbelieveitsnotshirt

Follow



1 post

0 followers

0 following

I Can't Believe Its Not Shirt

POSTS

TAGGED



Instagram

- Home
- Search
- Explore
- Reels
- Messages
- Notifications
- Create
- Profile



icantbelieveitsnotshirt • Follow

I'm Just loving my new @splunkshirtco shirt here at the Sydney Horse & Shirt fest!!!!

Get your own piece of shirty history @ <https://togetherforever.notsplunkshirtco.com/>

This is THE BEST thing you'll buy this year :3

Also: HORSE HORSE HORSE HORSE HORSE!  
1w

Be the first to like this

FEBRUARY 6

Add a comment... Post

## Incident Review



Search... | Hide Charts | Hide Filters

Saved filters | Tag | Urgency | Status | Owner | Security Domain | Type | Search Type | Time or Associations

Select... | Add tags... | Select... | Select... | Select... | Network (1) | Notable (1) | Correlation S... | Select... | Time | Last 60 mi... | Save new filters | Update | Clear all

Submit | Type: Notable x | Domain: Network x | Time Range: Last 60 minutes

17 Notables | Unselect all | Edit Selected | Edit All Matching Events (17) | Add Selected to Investigation | 20 per page | Refresh

<input type="checkbox"/>	i	Title	Risk Object	Risk Score	Risk Events	Type	Time	Disposition	Security Domain	Urgency	Status	Owner	Actions
<input type="checkbox"/>	▼	Unusual Geolocation of Network Activity (Australia)	--	--	--	Notable	Today, 05:40	Undetermined	Network	⚠ Medium	New	unassigned	▼

**Description:**

Inbound web traffic has been detected from previously unseen location: Australia

**Additional Fields**

Additional Fields	Value	Action
Destination	frontend/static/img/products <span style="background-color: red; color: white; padding: 2px;">0</span>	▼
Risk Score	0	▼
Severity	high	▼

**Related Investigations:**

Currently not investigated.

**Correlation Search:**

[Network - Unusual Geolocation of Network Activity - Rule](#)

**History:**

[View all review activity for this Notable Event](#)

**Adaptive Responses:**

Response	Mode	Time	User	Status
Notable	saved	2023-01-31T05:40:01+0000	admin	✓ success

[View Adaptive Response Invocations](#)

**Next Steps:**

[Run Playbook in SOAR](#)

**Event Details:**

event_id	DDCF25D1-77E2-4DA3-A718-507BFB828E50@notable@fb08987a8816d2f958bb90a01d017813
event_hash	fb08987a8816d2f958bb90a01d017813




Online Boutique | Glass Table - Splunk T-Shirt Store | APM - Explore | Incident Review | Splunk | Splunk T-Shirt Store - Web Traffic | Search | Splunk 9.0.3

Not Secure | ec2-18-222-254-25.us-east-2.compute.amazonaws.com:8000/en-GB/app/SplunkEnterpriseSecuritySuite/incident\_review?earliest=-60m%40m&latest=now&domain=network&type=notable

### Adaptive Response Actions

Select actions to run.

+ Add New Response Action ▾

▼  Run Playbook in SOAR ✕

SOAR Instance and Playbook:  ✕

Forward results and run playbook to this Server/Asset.

Sensitivity:

\*Sensitivity level for these events.

Severity:

\*Severity of these events.

Label:

Label for these events.

Grouping:  Collect artifacts into one container  
Applies when ES or CIM are installed.

Worker Set:  ✕

Select adaptive response relay worker set. Use "local" for non-adaptive response relay server.

Alert Action Account:  ✕

Search produced no results.  
Select Account from SOAR Alert Action Configuration. Use blank for non-adaptive response relay server.

**Run**

17 Notables

Unusual Geolocation of Network Activity (Australia)

Description: Inbound web traffic has been detected from unusual geolocation.

Additional Fields	Value
Destination	frontier
Risk Score	0
Severity	high

Event Details:

event_id	DDCF25D1-77E2-4...

No investigation is currently loaded. Please create (+) or load an existing one (≡)

Saved filters: Select... Add tags... Urgent

Time or Associations: Time Last 60 mi... Save ne

17 Notables

Title	Risk Object
Unusual Geolocation of Network Activity (Australia)	

**Description:**  
Inbound web traffic has been detected from Australia.

**Additional Fields**

Field	Value
Destination	frontier
Risk Score	0
Severity	high

**Event Details:**

Field	Value
event_id	DDCF25D1-77E2-4...

No investigation is currently loaded. Please create (+) or load an existing one (≡).

### Adaptive Response Actions

Select actions to run.

+ Add New Response Action ▾

- SOAR** Run Playbook in SOAR
 

SOAR Instance and Playbook: Default: local/Relax Traffic Protection

Forward results and run playbook to this Server/Asset.

Sensitivity: TLP: Red

\*Sensitivity level for these events.

Severity: High

\*Severity of these events.

Label: Add Australia to Policy Exception

Label for these events.

Grouping:  Collect artifacts into one container  
Applies when ES or CIM are installed.

Worker Set: Select...

Select adaptive response relay worker set. Use "local" for non-adaptive response relay server.

Alert Action Account: Select...

Search produced no results.  
Select Account from SOAR Alert Action Configuration. Use blank for non-adaptive response relay server.

**Run**



Online Boutique | Glass Table - Splunk T-Shirt Store | APM - Explore | Incident Review | Splunk | Splunk T-Shirt Store - Web Traffic | Search | Splunk 9.0.3

Not Secure | ec2-18-222-254-25.us-east-2.compute.amazonaws.com:8000/en-GB/app/SplunkEnterpriseSecuritySuite/incident\_review?earliest=-60m%40m&latest=now&domain=network&type=notable

17 Notables

Unusual Geolocation of Network Activity (Australia)

Description: Inbound web traffic has been detected from an unusual location.

Additional Fields	Value	Action
Destination	frontend/static/img/products	
Risk Score	0	
Severity	high	

Correlation Search: Network - Unusual Geolocation of Network Activity - Rule

History: View all review activity for this Notable Event

Adaptive Responses:

Response	Mode	Time	User	Status
Notable	saved	2023-01-31T05:40:01+0000	admin	success

Next Steps:

- Run Playbook in SOAR

Event Details: event\_id DDCF25D1-77E2-4DA3-A718-507BFB828E50@notable@fb08987a8816d2f958bb90a01d017813

No investigation is currently loaded. Please create (+) or load an existing one (≡).

### Adaptive Response Actions

**i** **SOAR** "Run Playbook in SOAR" - Adaptive response action has been dispatched. Check the status of the action in the notable event details.

Select actions to run.

+ Add New Response Action

Run

Infrastructure  
Kubernetes / K8s nodes

-15m k8s.cluster.name = splunktshirtco-prod x Add Filters


Clear All 0 Alerts 0 Active Detectors

All Infrastructure Service K8s nodes Switch to classic navigator

K8s nodes Group by none

# Scale Resources for Traffic Increase

- SRE
- K8S Navigator
  - InfraMon
- Terraform



splunktshirtco-prod

K8s nodes K8s clusters

# Nodes 10m

# 4

Mon 06 Feb 2023 18:48:50

# Top nodes by memory usage (bytes) 10m

7.865G	ip-192-168-25-191.us-east-2.compute.internal   splunktshirtco-prod
7.452G	ip-192-168-62-80.us-east-2.compute.internal   splunktshirtco-prod
6.974G	ip-192-168-87-61.us-east-2.compute.internal   splunktshirtco-prod

Mon 06 Feb 2023 18:48:40

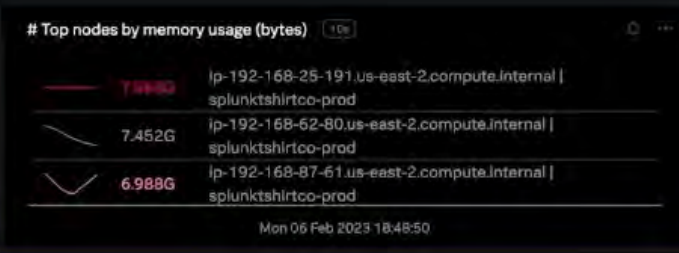
Total memory (bytes) 10m

# 32.552G

Mon 06 Feb 2023 18:48:50

Node overview 10m

K8s nodes K8s clusters



Node overview 10m

k8s.node.name	Node ready	CPU	Memory	Disk	Network	k8s.cluster.name
ip-192-168-25-191.us-east-2...	1	17.06	44.51	22.79	6.123M	splunkshirtco-prod
ip-192-168-51-149.us-east-2...	1	13.01	56.88	22.51	5.11M	splunkshirtco-prod
ip-192-168-62-80.us-east-2...	1	37.26	60.65	19.26	8.26M	splunkshirtco-prod
ip-192-168-87-61.us-east-2...	1	74.32	50.98	22.41	14.31M	splunkshirtco-prod

Mon 06 Feb 2023 18:48:50

# Top nodes by pods 10m Top nodes by network usage (bytes) 10m

infrastructure  
Kubernetes / K8s nodes

-15m | k8s.cluster.name = splunktshirtco-prod | Add Filters

Clear All | 0 Alerts | 0 Active Detectors

Switch to classic navigator

K8s nodes | K8s clusters

### Node overview

k8s.node.name	Node ready	CPU	Memory	Disk	Network	k8s.cluster.name
ip-192-168-25-191.us-east-2...	1	17.06	44.51	22.79	6.123M	splunktshirtco-prod
ip-192-168-51-149.us-east-2...	1	13.01	56.88	22.51	5.11M	splunktshirtco-prod
ip-192-168-62-80.us-east-2...	1	37.26	60.65	19.26	8.26M	splunktshirtco-prod
ip-192-168-87-61.us-east-2...	1	74.32	80.98	22.41	14.31M	splunktshirtco-prod

Mon 06 Feb 2023 18:48:50

---

### # Top nodes by pods

20 pods	ip-192-168-87-61.us-east-2.compute.internal
26 pods	ip-192-168-25-191.us-east-2.compute.internal
19 pods	ip-192-168-62-80.us-east-2.compute.internal

Mon 06 Feb 2023 18:48:50

### Top nodes by network usage (bytes)

787KIB	ip-192-168-87-61.us-east-2.compute.internal
750KIB	ip-192-168-25-191.us-east-2.compute.internal
543KIB	ip-192-168-62-80.us-east-2.compute.internal

Mon 06 Feb 2023 18:48:50

### Top nodes by CPU capacity usage (%)

With EKS/Fargate metric data can possibly go > 100%

96.85%	ip-192-168-87-61.us-east-2.compute.internal   splunktshirtco-prod
13.25%	ip-192-168-25-191.us-east-2.compute.internal   splunktshirtco-prod
9.650%	ip-192-168-62-80.us-east-2.compute.internal   splunktshirtco-prod

### Top nodes by memory capacity used (%)

With EKS/Fargate metric data can possibly go > 100%

103.2%	ip-192-168-62-80.us-east-2.compute.internal   splunktshirtco-prod
77.73%	ip-192-168-87-61.us-east-2.compute.internal   splunktshirtco-prod
67.71%	ip-192-168-51-149.us-east-2.compute.internal   splunktshirtco-prod



-15m k8s.cluster.name = splunktshirtco-prod Add Filters

Clear All 0 Alerts 0 Active Detectors

All Infrastructure Service K8s nodes

Switch to classic navigator

**K8s nodes** K8s clusters

	28 pods	ip-192-168-87-61.us-east-2.compute.internal
	26 pods	ip-192-168-25-191.us-east-2.compute.internal
	19 pods	ip-192-168-62-80.us-east-2.compute.internal

Mon 06 Feb 2023 18:48:50

	2MiB	ip-192-168-87-61.us-east-2.compute.internal
	2MiB	ip-192-168-25-191.us-east-2.compute.internal
	1MiB	ip-192-168-51-149.us-east-2.compute.internal

Mon 06 Feb 2023 18:49:00

**Top nodes by CPU capacity usage (%)** 10s

With EKS/Fargate metric data can possibly go > 100%

	96.85 %	ip-192-168-87-61.us-east-2.compute.internal   splunktshirtco-prod
	13.25 %	ip-192-168-25-191.us-east-2.compute.internal   splunktshirtco-prod
	9.650 %	ip-192-168-62-80.us-east-2.compute.internal   splunktshirtco-prod

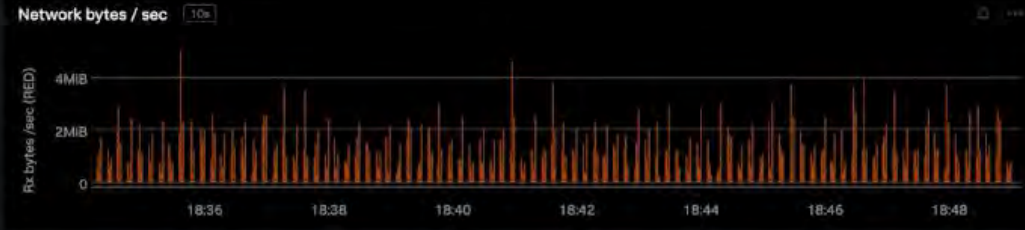
Mon 06 Feb 2023 18:48:50

**Top nodes by memory capacity used (%)** 10s

With EKS/Fargate metric data can possibly go > 100%

	103.2 %	ip-192-168-62-80.us-east-2.compute.internal   splunktshirtco-prod
	77.73 %	ip-192-168-87-61.us-east-2.compute.internal   splunktshirtco-prod
	67.71 %	ip-192-168-51-149.us-east-2.compute.internal   splunktshirtco-prod

Mon 06 Feb 2023 18:48:50



**# Network errors by interface** 10s

Network receive and transmit errors from pods on this node

0	eth0   Network error
---	----------------------

Mon 06 Feb 2023 18:48:50



# The Splunk T-Shirt Co.

... Some seriously good shirt.

## Business Metrics

Site Traffic

1,724

Conversion Rate

22%

Revenue

\$5,910

Customer Satisfaction

47.63%



## Internal View

### Website

Website Health

14

Website Traffic

54

### Shopfront and Call Centre

NPS

36

Wait Time (Mins)

23

## Services Health Scores

Checkout

7

Catalog

14

Payment

14

## Synthetic Checks

●

●

●

## Real User Monitoring

●

●

●

## Application Performance Monitoring

●

●

●

## Ticket Activity

Open

58

In Progress

50

Escalation

26

## External View

### IaaS and Hosting Health

AWS EC2

100%

AWS EKS

100%

AWS ELB

100%

SAP Ariba

100%

## Security Notables last 30m



# The Splunk T-Shirt Co.

... Some seriously good shirt.

## Business Metrics

Site Traffic

11,394

Conversion Rate

22%

Revenue

\$5,910

Customer Satisfaction

47.63%



## Internal View

### Website

Website Health

14

Website Traffic

54

### Shopfront and Call Centre

NPS  
36

Wait Time (Mins)  
23

## External View

### IaaS and Hosting Health

AWS EC2  
100%

AWS EKS  
100%

AWS ELB  
100%

SAP Ariba  
100%

## Services Health Scores

Checkout

7

Catalog

14

Payment

14

### Synthetic Checks

●

●

●

### Real User Monitoring

●

●

●

### Application Performance Monitoring

●

●

●

## Ticket Activity

Open

58

In Progress

50

Escalation

26

## Security Notables last 30m

Global

Webstore

Access Network Threat Endpoint Identity Audit Risk



# The Splunk T-Shirt Co.

... Some seriously good shirt.

## Business Metrics

Site Traffic

11,394

Conversion Rate

26%

Revenue

\$22,540

Customer Satisfaction

47.08%



## Internal View

### Website

Website Health

14

Website Traffic

54

### Shopfront and Call Centre

NPS

36

Wait Time (Mins)

23

## Services Health Scores

Checkout

7

Catalog

14

Payment

14

## Synthetic Checks

●

●

●

## Real User Monitoring

●

●

●

## Application Performance Monitoring

●

●

●

## Ticket Activity

Open

58

In Progress

50

Escalation

26

## External View

### IaaS and Hosting Health

AWS EC2

100%

AWS EKS

100%

AWS ELB

100%

SAP Arriba

100%

## Security Notables last 30m

