CISCO Connect

Build a Leading Observability Practice

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What is Digital Resilience?

What is Observability?

Observability is the ability to understand and assess the internal state, performance, and health of a technology system by analyzing the data it produces externally, such as logs, metrics, and traces.

Control Theory – Rudolf E Ka'lman, 1959–1960

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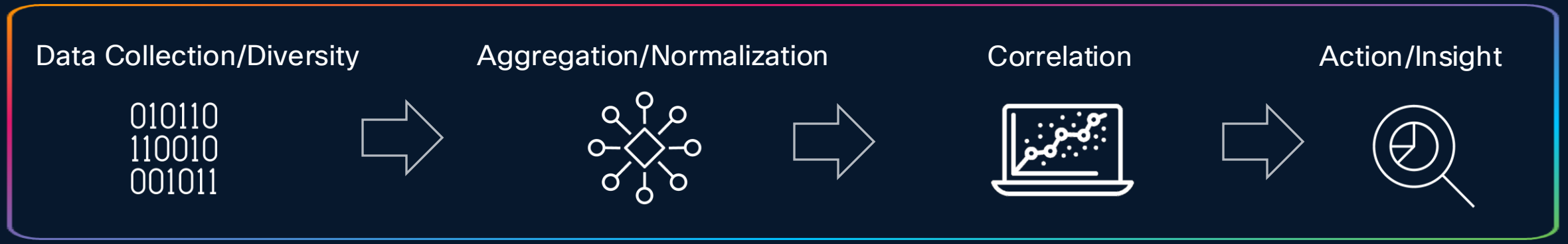
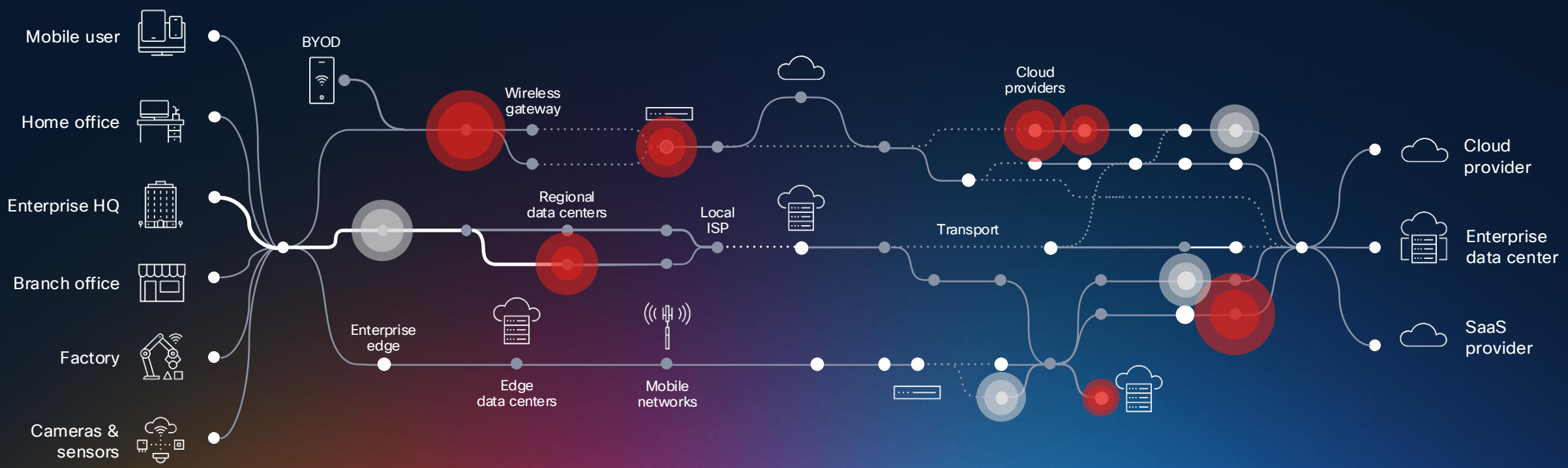
What Is Observability's Role?

Feature	Monitoring	Observability
Focus	Known issues	Unknown and complex issues
Approach	Reactive	Proactive + Exploratory
Goal	Detect failures	Understand system behavior
Question it answers	"Is it working?"	"Why is it behaving this way?"

What Really Matters?

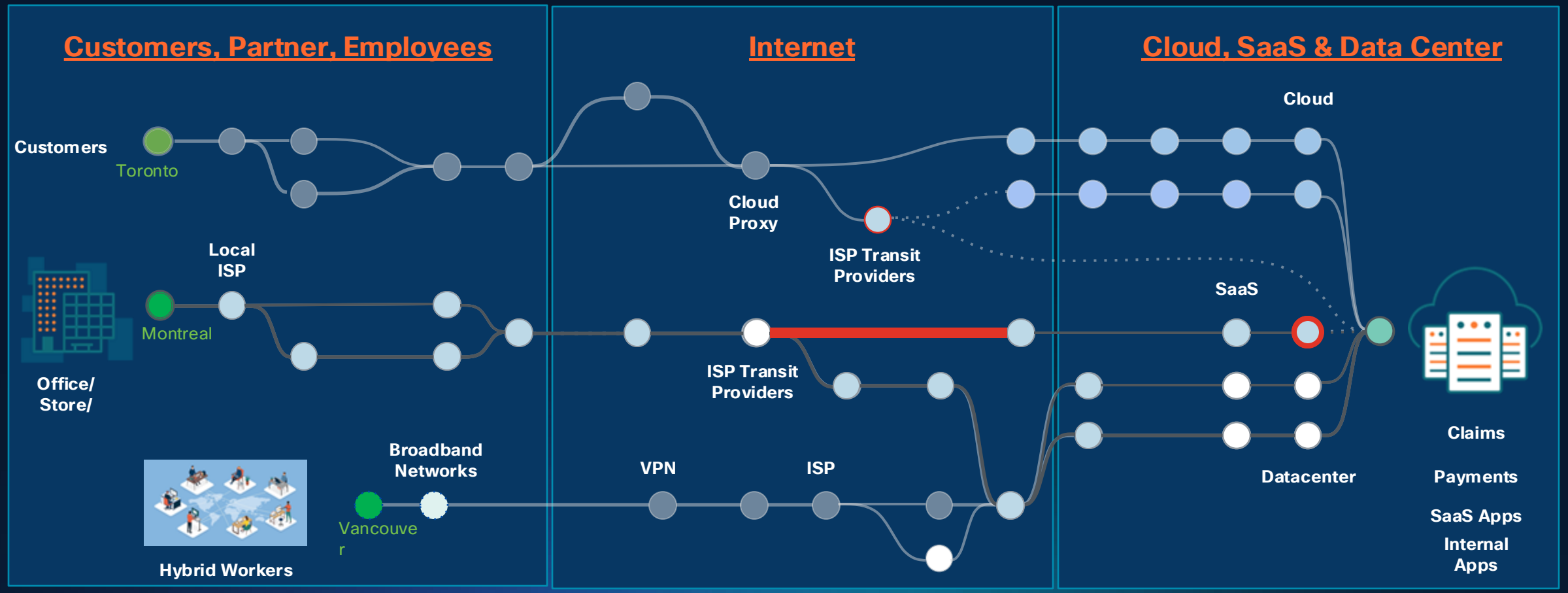


The Technology System Now Spans Owned and Unowned Environments



Silos of people, tools and data increase complexity | AI-powered workflows introduce new demands

Challenges Digital Resilience Strategies Solve



1000+ Points of Presence around the world
Leverage investments in Cisco solutions

Visibility into owned and unowned networks
Understand the impact of macro outages

Extends visibility into the Cloud and SaaS provider networks

Prevent Issues Before They Affect Customers, Remediate Rapidly, and Adapt to New Opportunities

Digital Resilience

Security

Gain comprehensive threat prevention, detection, investigation, and response for organizations of any size and security maturity

Observability

Prevent downtime and optimize experiences with visibility and insights across end-to-end services, including owned and unowned environments

Assurance

Enable seamless end-to-end connectivity across cloud, internet and enterprise networks to assure the delivery of applications and services

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From Reactive to Proactive Starts With Intelligence

Baseline and detect

Monitor end-to-end digital experience from critical vantage points

See across environments

Troubleshoot mission-critical apps and infrastructure

Localize and diagnose

Visualize, localize, and diagnose across every network segment

Guided insights

Prioritize issues based on business impact

Mitigate and remediate

Closed-loop actions across digital domains and teams

Proactive response

Prevent outages & accelerate MTTR with guided root cause analysis

Predict and optimize

Forecast disruptions, optimize path, and plan connectivity and migrations

Unified workflows

Standardize observability practices across teams

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The Unified Advantage

Observability

Unified visibility across network, infrastructure, and applications with business context

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CONTEXT

Assurance

End to-end visibility into all networks and services that affect app performance and delivery

CISCO ThousandEyes

APPLICATION | NETWORK | INFRASTRUCTURE | CLOUD

BUILT-IN DATA AND PRODUCT INTEGRATION ACROSS CISCO NETWORKING, SECURITY, AND COLLABORATION

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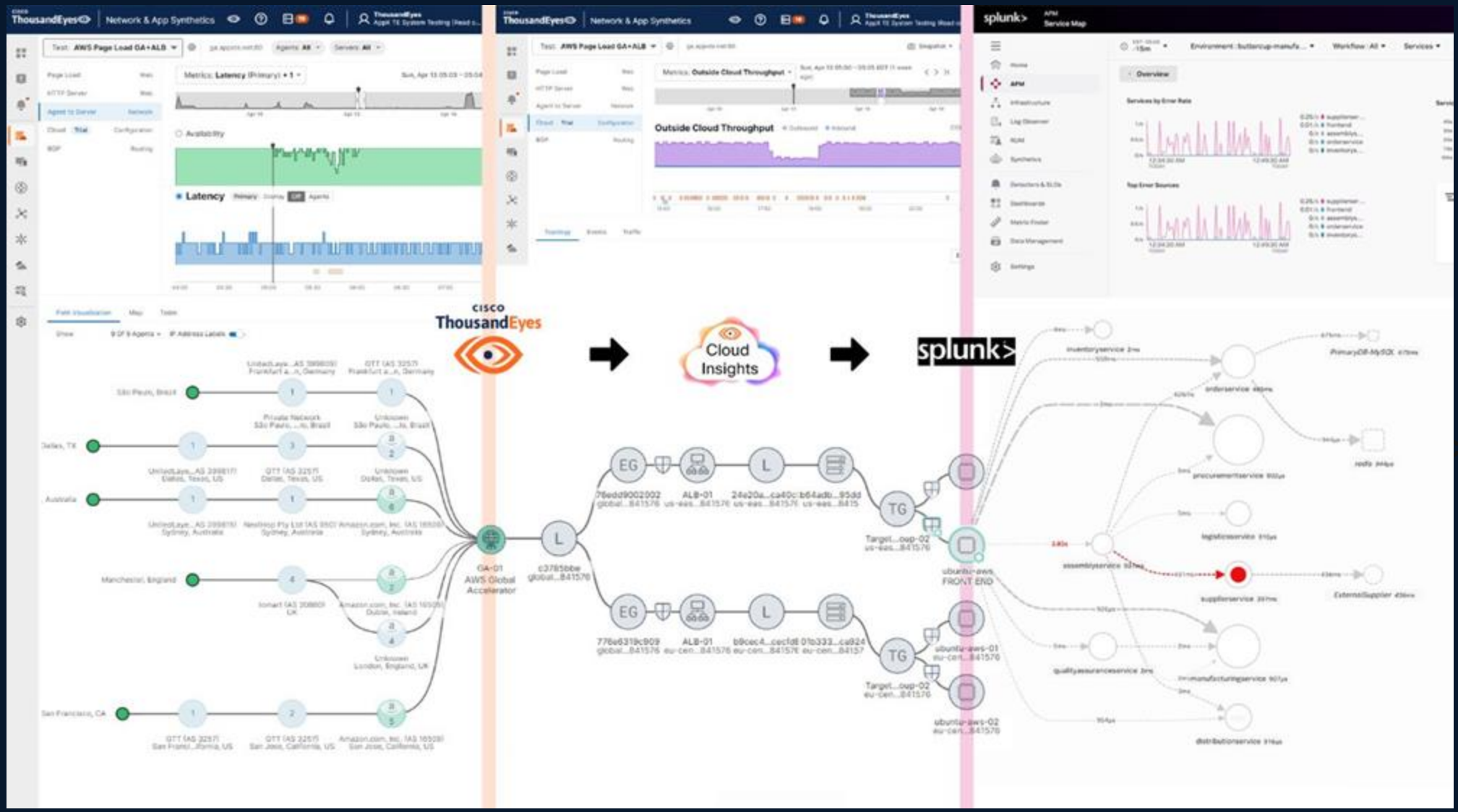
End to End Visibility (Really)



How It Works

CLOUD AGENT

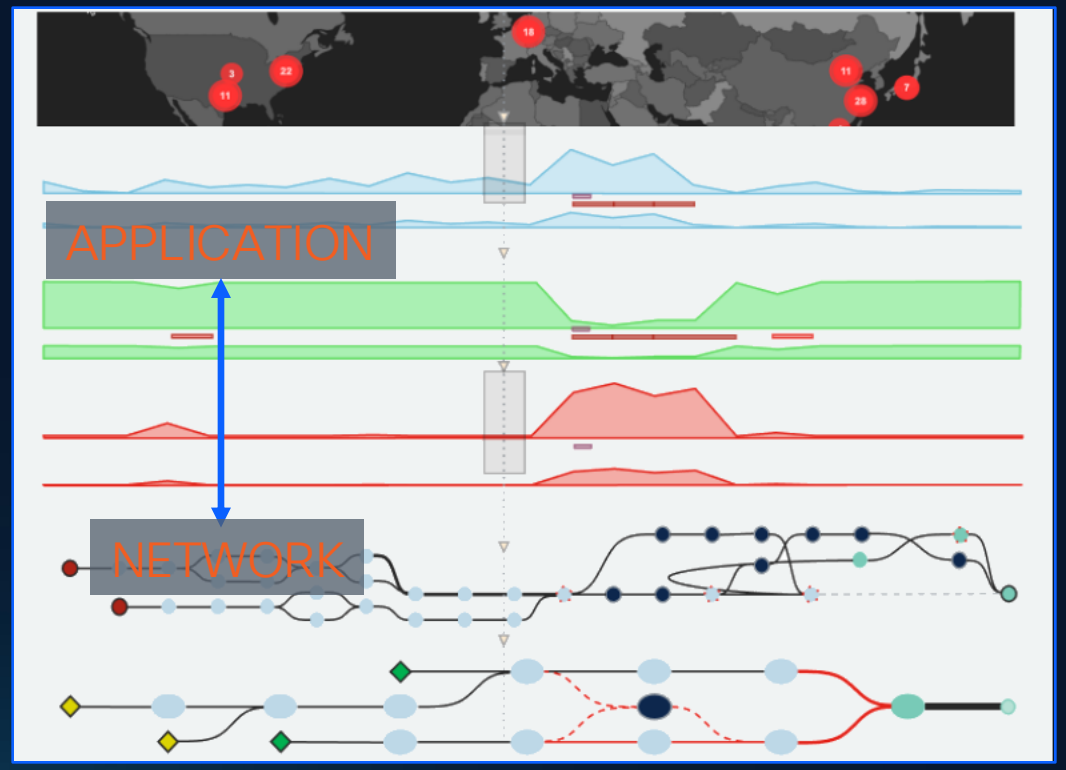
- 400+ ThousandEyes maintained POPs
- Global scale
- T1/2 DCs, Cloud and Broadband providers
- Outside-in visibility
- Public facing sites and APIs
- Customer experience

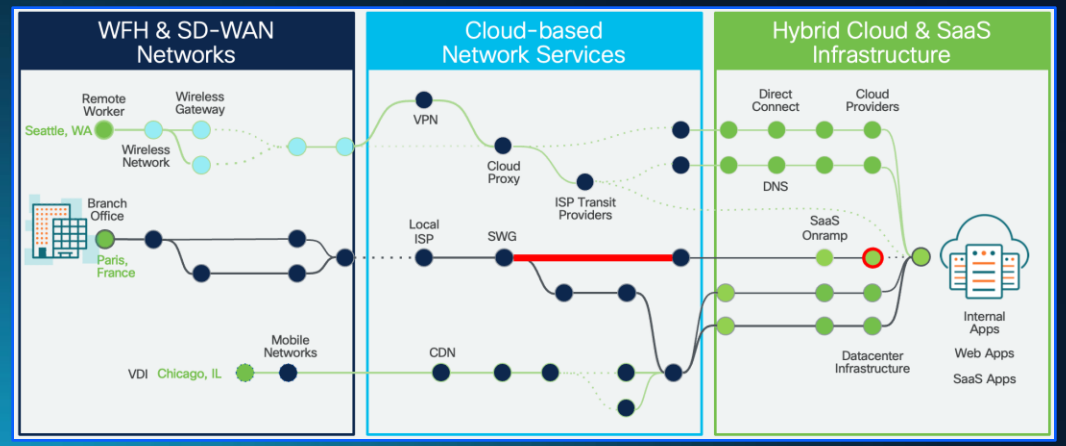
ENTERPRISE AGENT

- Deployed in YOUR environment
- DCs, sites, offices, branches, stores…
- VMs, Servers, Containers, Cisco HW
- Inside-out, inside-inside
- Internal apps, SaaS, network
- Employee / network experience

ENDPOINT AGENT

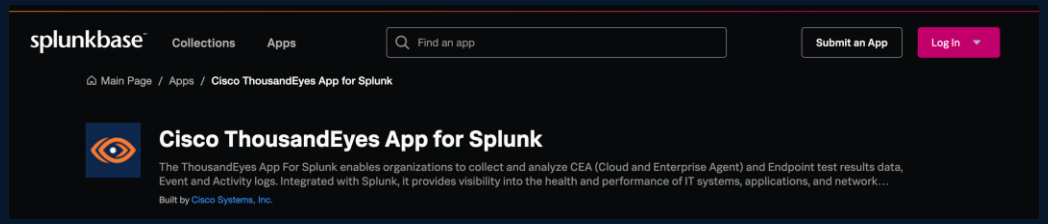
- Deployed on your employees' devices
- Home, office, anywhere…
- Laptops, RoomOS, Secure Access, Mobile
- Last mile visibility
- Internal/external apps, SaaS, network
- Wi-fi, VPN, ISP, any app

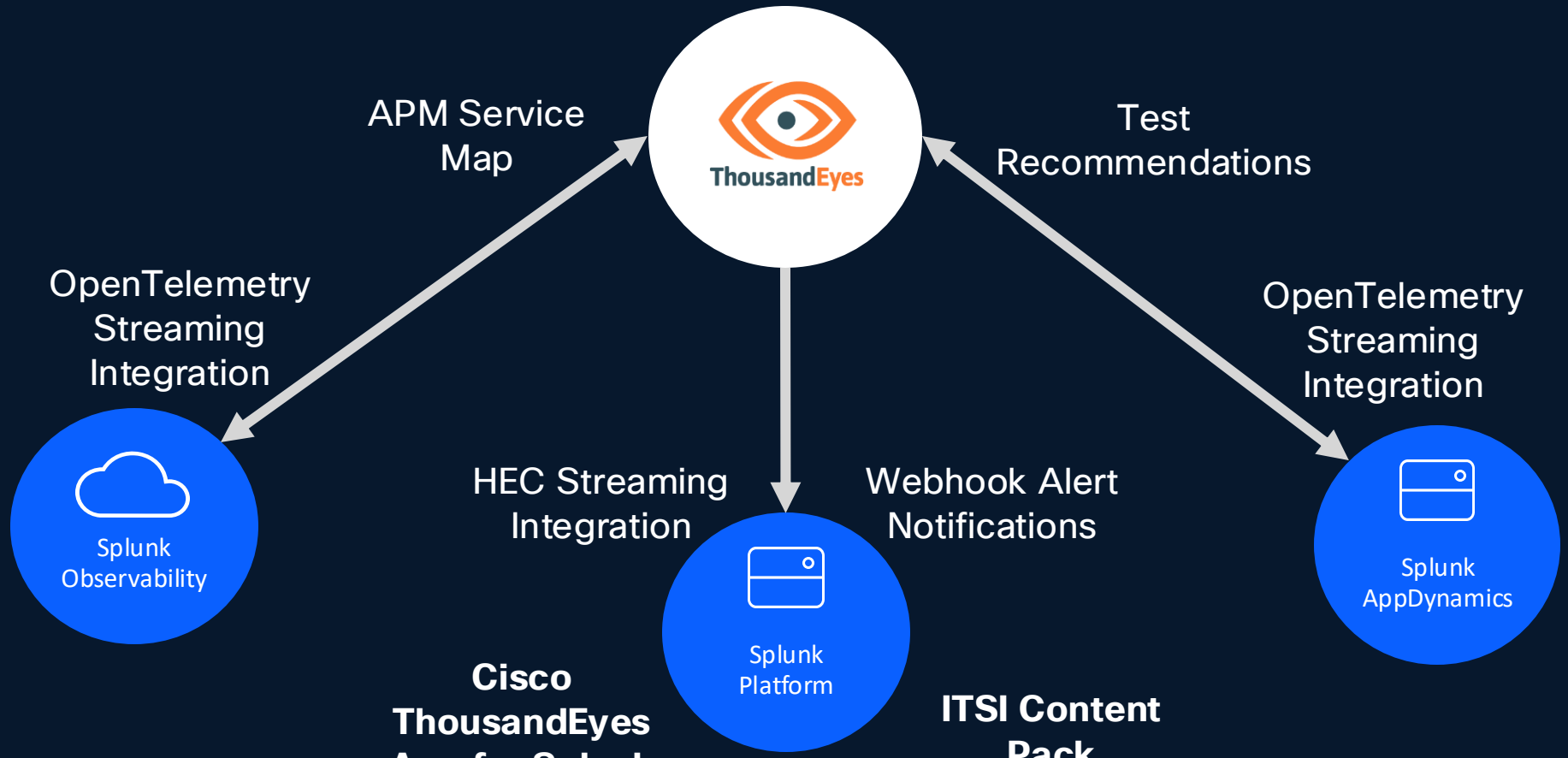




Splunk + ThousandEyes

Contextual Data Sharing and Enrichment

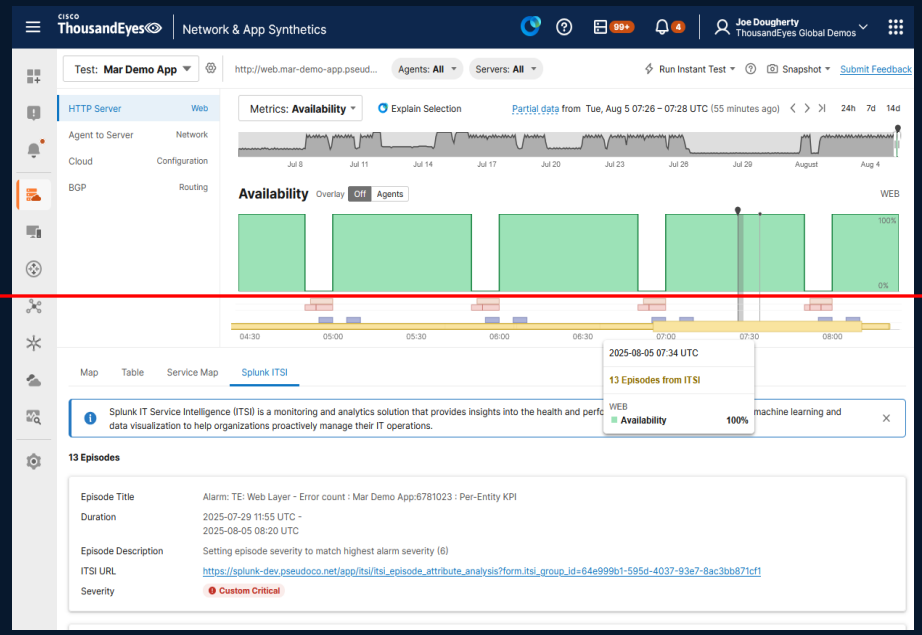




Splunk + ThousandEyes

Contextual Data Sharing and Enrichment

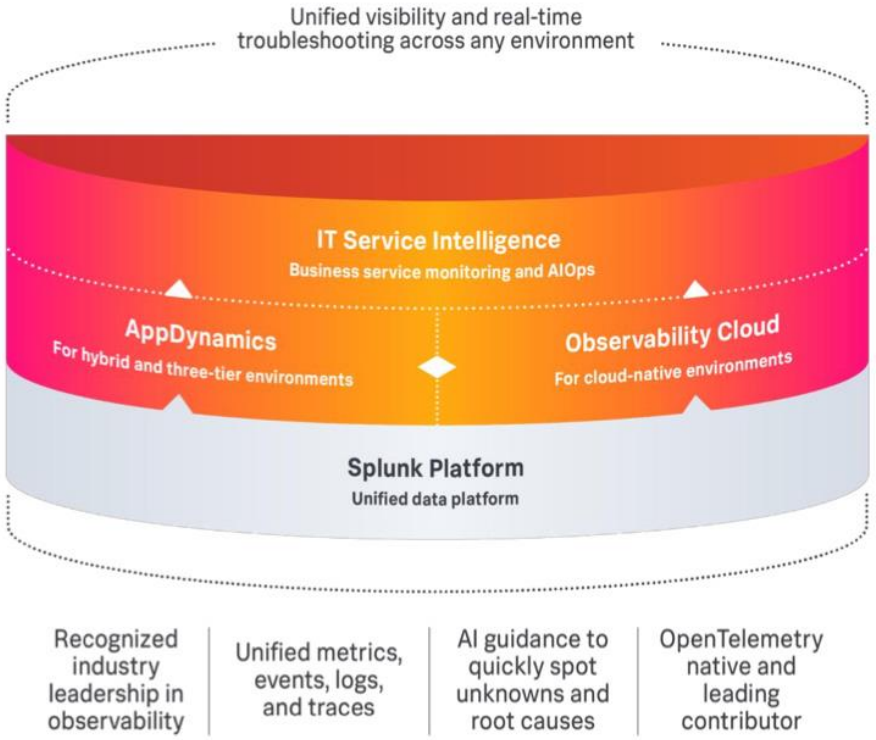
Splunk Service Dependency Map in ThousandEyes

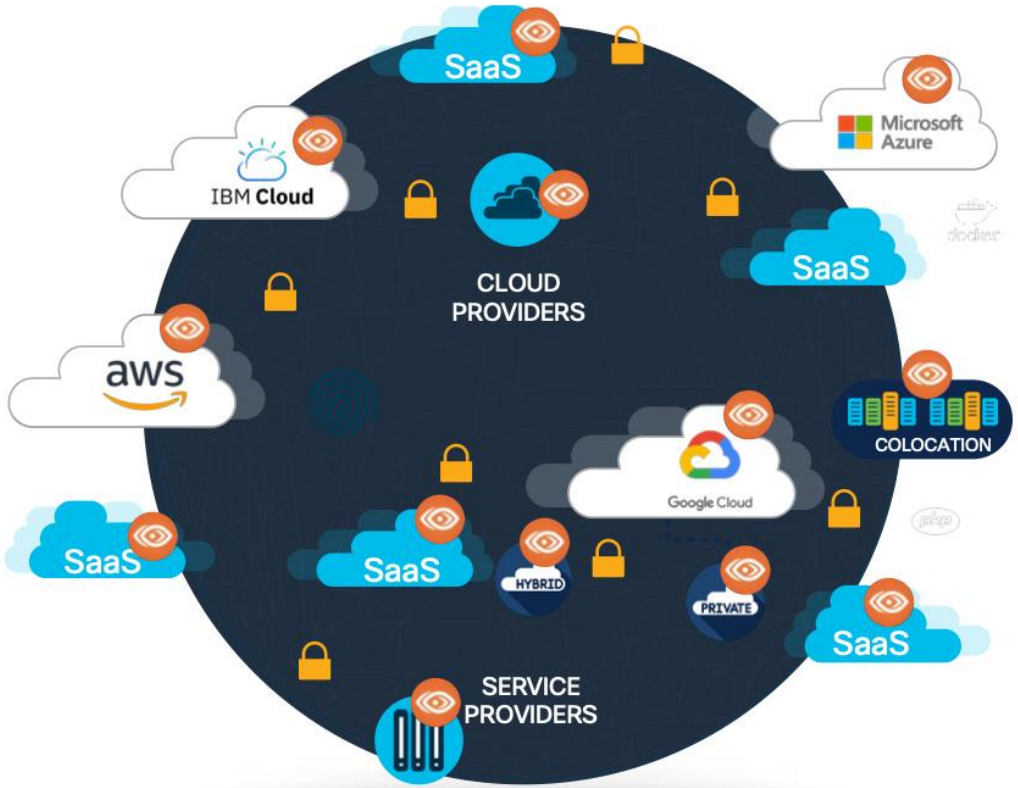


Splunk ITSI Event Context data in ThousandEyes

Splunk Observability with ThousandEyes

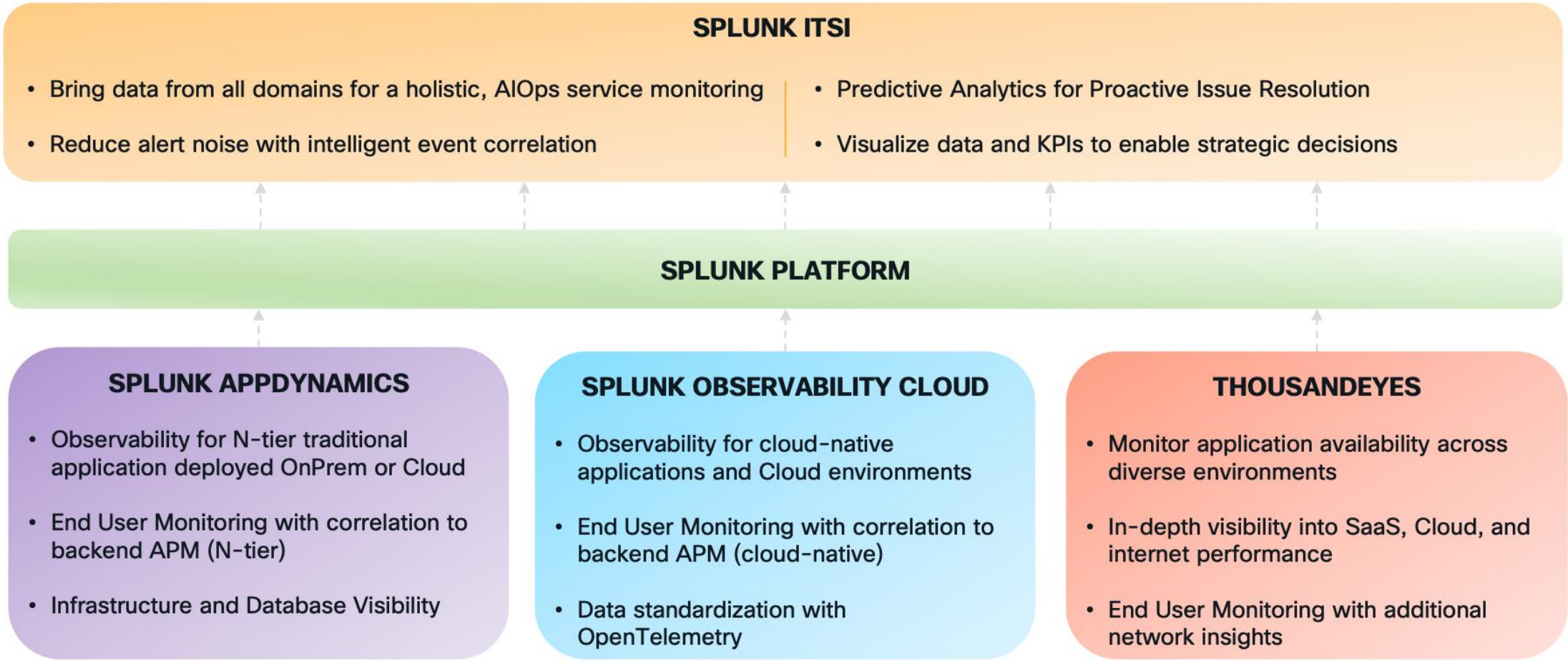
Enhancing Observability with Assurance through a big data source





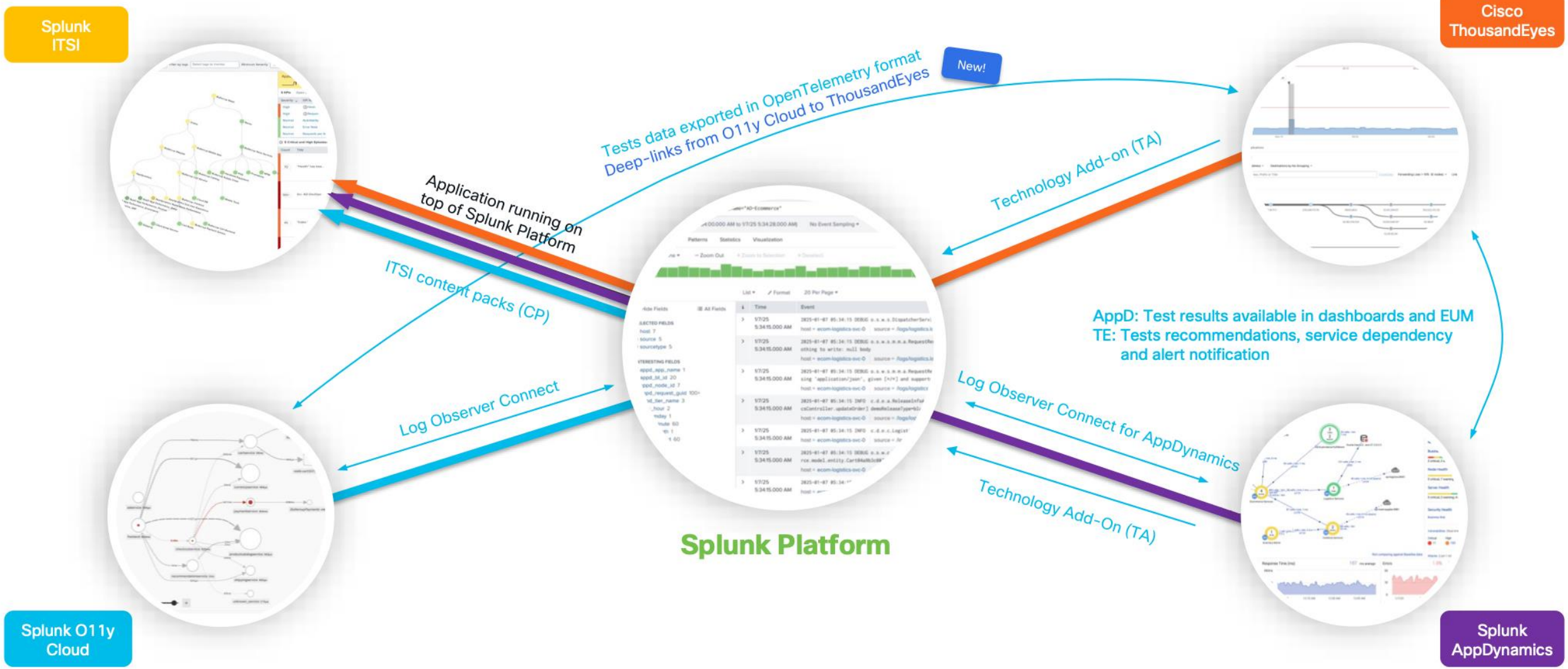
Splunk Observability with ThousandEyes

Choosing the right solution for your business needs



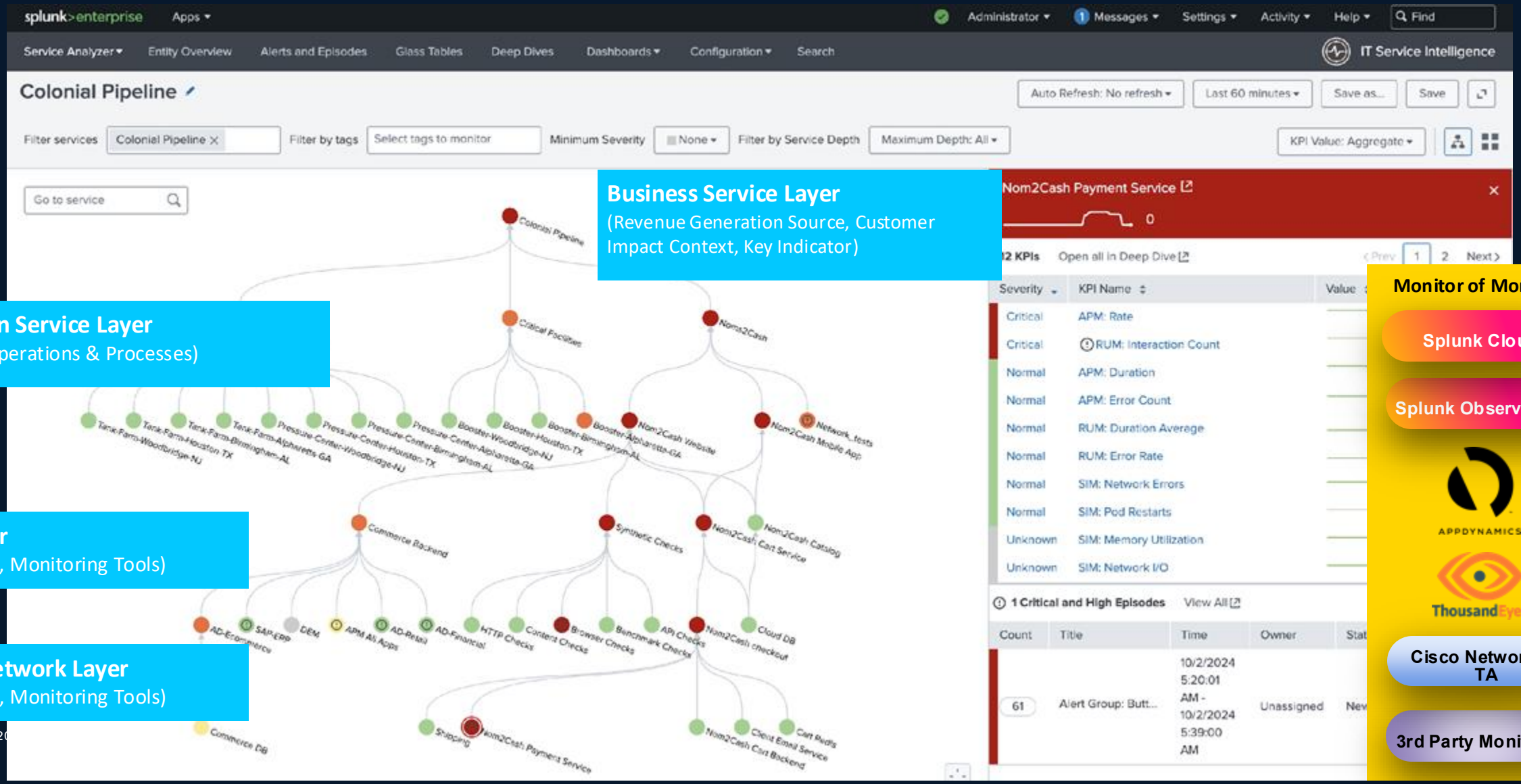
Unified Observability

The power of a truly integrated solution



IT Service Intelligence: Top-Down Business Visibility

Correlate business performance with underlying services & telemetry, across Splunk & 3rd Party monitoring

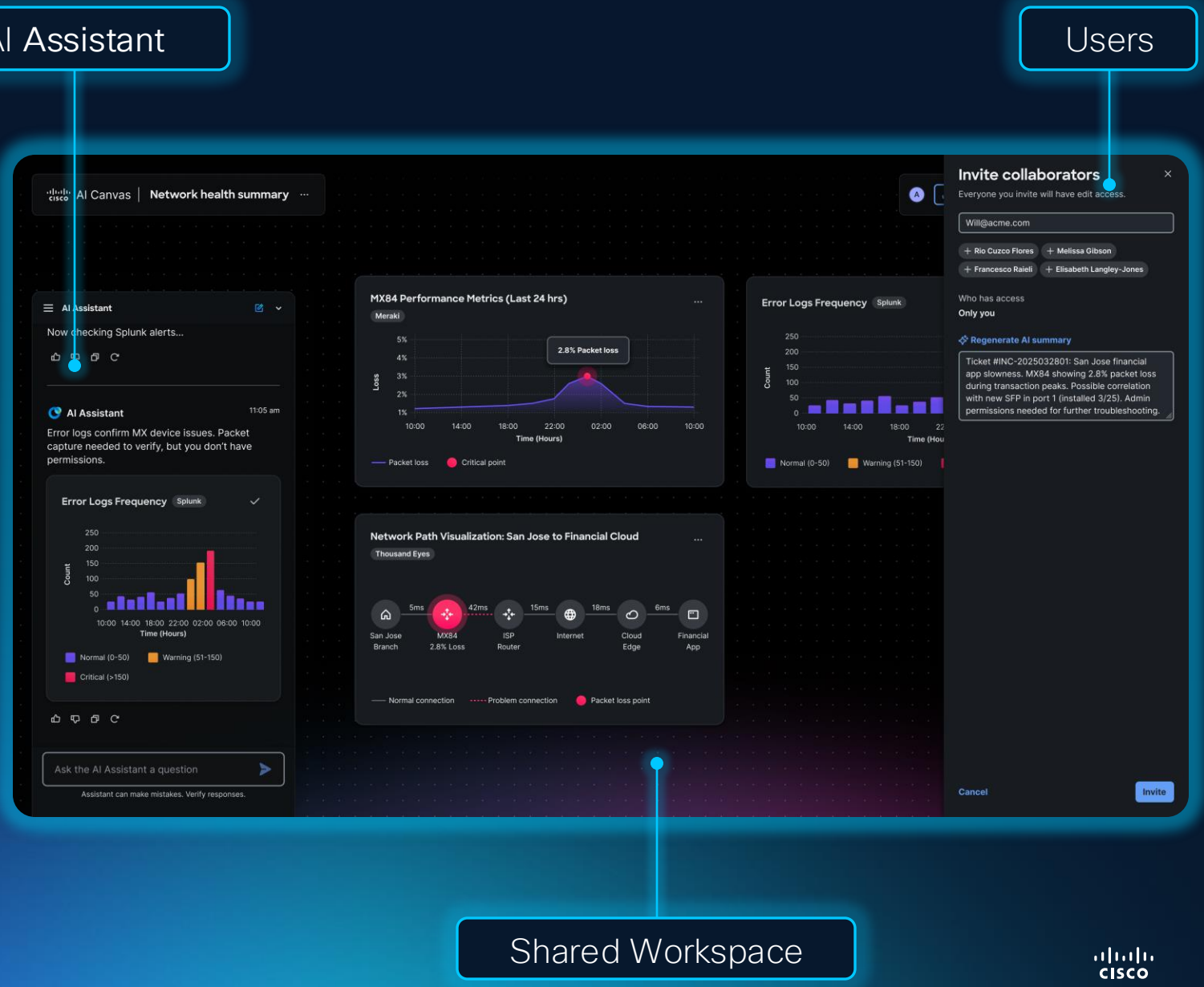


Introducing

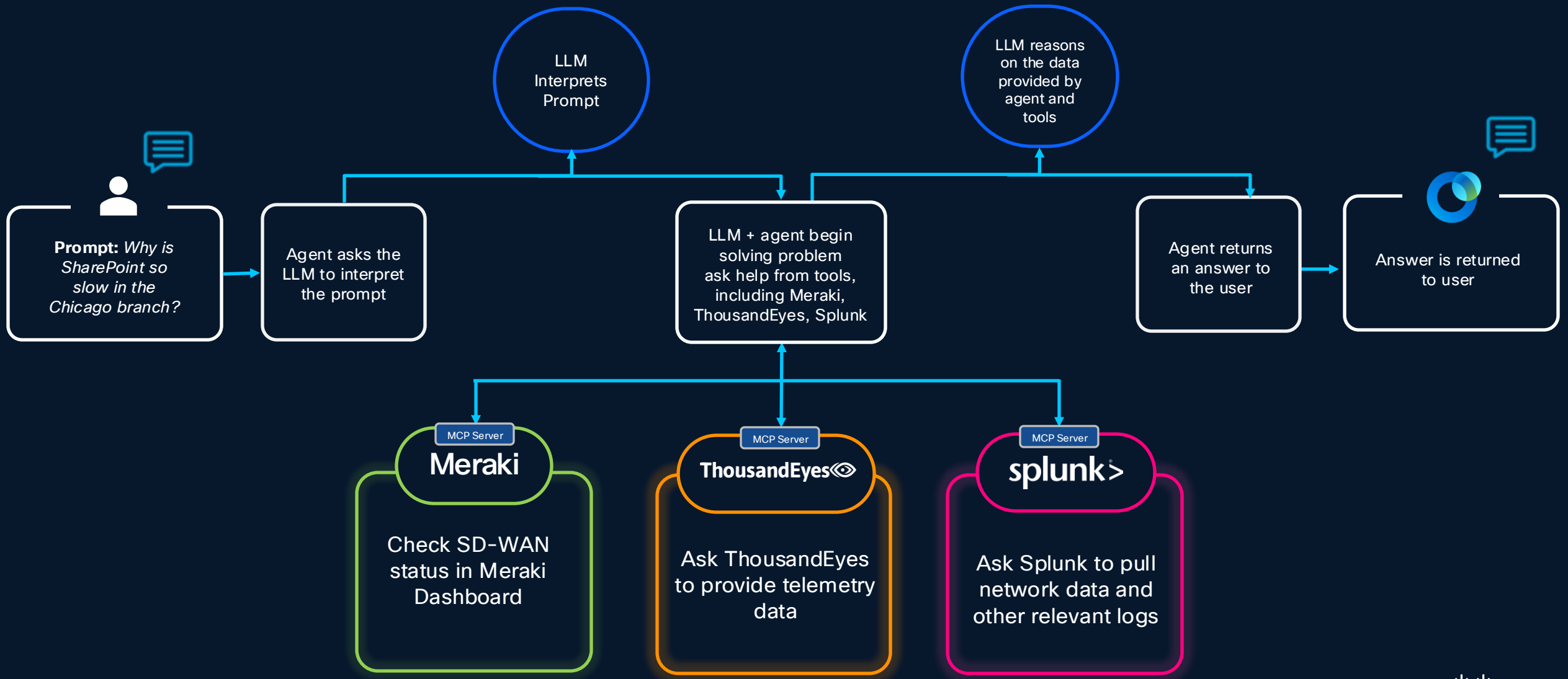
Cisco AI Canvas

A reimagined user interface for human/agent interaction

- Collaboration across multiple users (NetOps, SecOps and execs)
- Built on the intelligence of the Deep Network Model
- Troubleshooting and execution across multiple domains



An AgenticOps Example



Built-In Assurance
Built-On Resilience

LAN/WAN

Cisco Networking Embedded Agents

Increase end-to-end visibility leveraging investments in Cisco networking hardware

SSE/SASE

Cisco Secure Access Experience Insights

Gain insights to quickly resolve user impacting issues

Collaboration

webex by CISCO

Leverage Cisco Devices & Phones to optimize user experiences anywhere they choose to work

Observability

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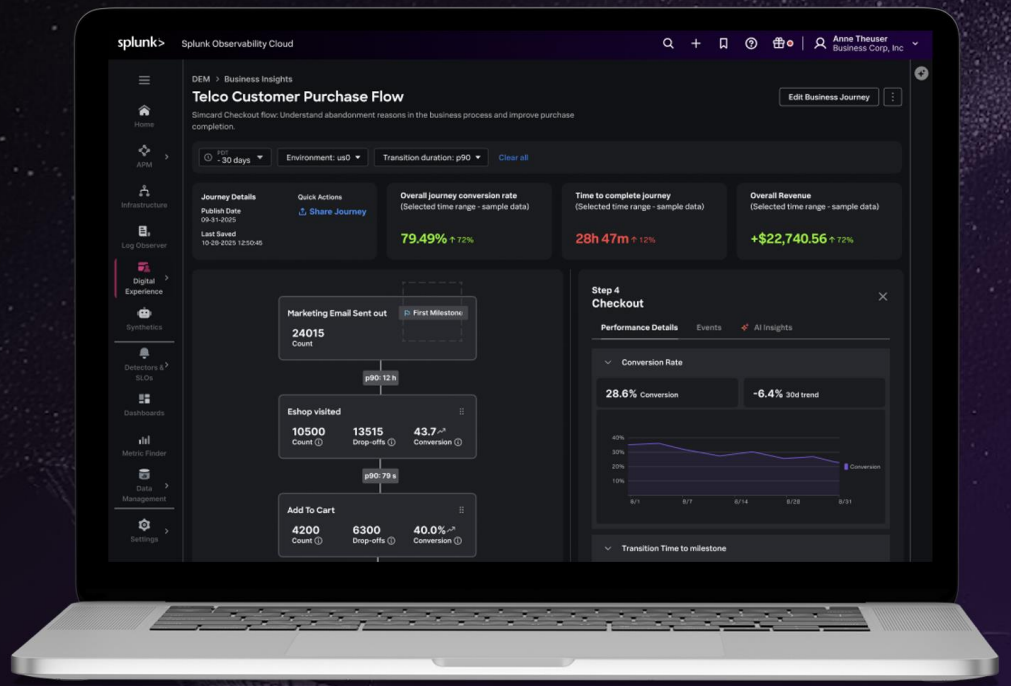
Extend visibility into owned and unowned networks to assure resilient experiences

CISCO

Deeper business context to prioritize what matters

- From an executive dashboard down to the line of code
- Curated journeys to monitor critical business processes
- KPI-based monitoring to improve service health
- High-cardinality and custom metrics without penalties
- Gain complete understanding across every environment



STARBUCKS COFFEE

T··Mobile···

carhartt

GE

Earlier detection & faster investigation of business-impacting issues

- Process & analyze telemetry data at massive scale
- AI-powered detection & root cause determination to focus on issues that matters most
- Reduce noise by correlating related alerts from any source

REPAY
Realtime Electronic Payments

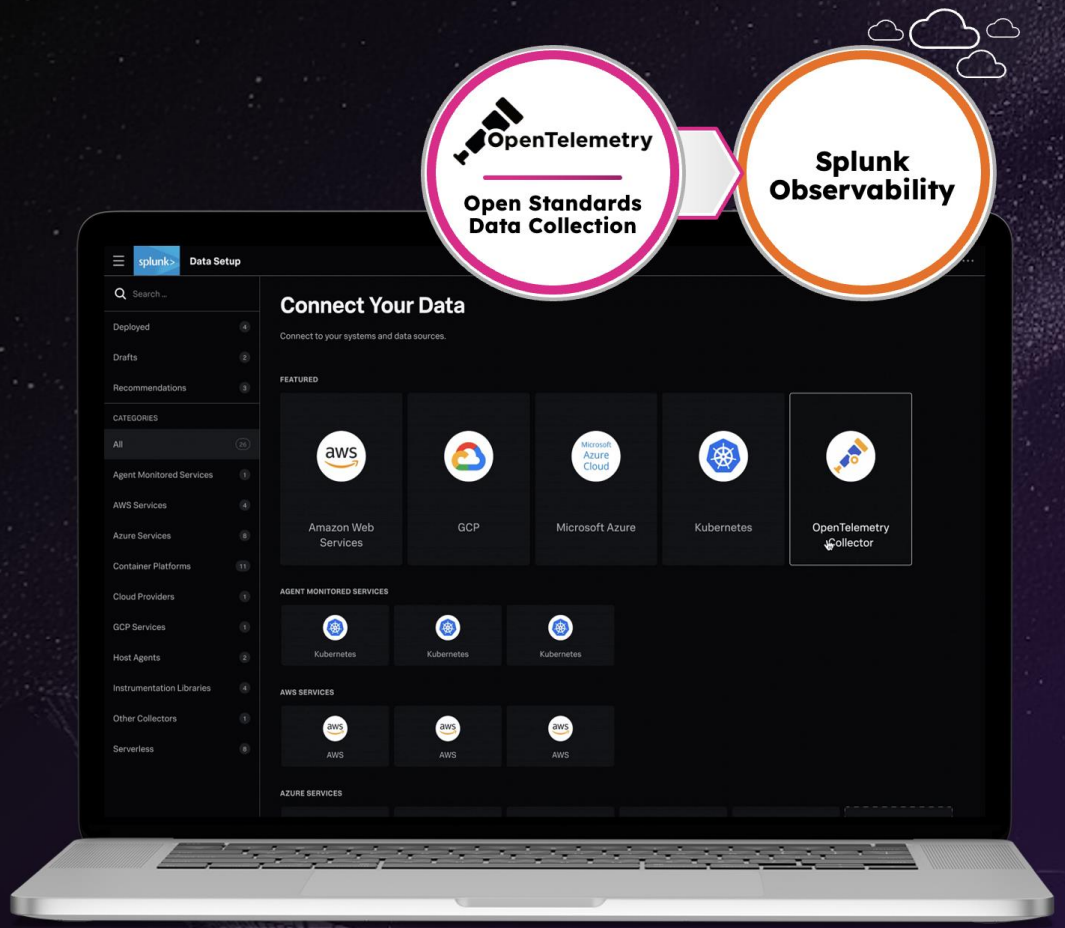
TRAVELPORT

Honeywell

PROGRESSIVE

Predictable pricing and control over your data and costs

- Collect data in any format using standards teams agree on
- Control costs via native telemetry pipeline management and federation
- Flexible contracts and predictable billing that scales with you



Pizza Hut® monster.com INSPIRE Brands dun & bradstreet

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Thank you


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Paymentservice - High Error Rate

Detection time: Thu 2 Apr 2026 11:18:40 EDT

Resolve

Rule "Paymentservice - High Error Rate" triggered at Thu, 2 Apr 2026 15:18:40 GMT.

Signal value for in online-boutique-us is out of bounds

Signal details:
{sf_environment=online-boutique-us, sf_service=paymentservice}

Teams: Buttercup Response.

Incident ID HE48K1YA0AE View Cleared event

Related content

Detector information

Analysis | AI-generated

5f93bfde-fb06-4ce7-8aa6-003dbc17c7bc

Chat to learn more

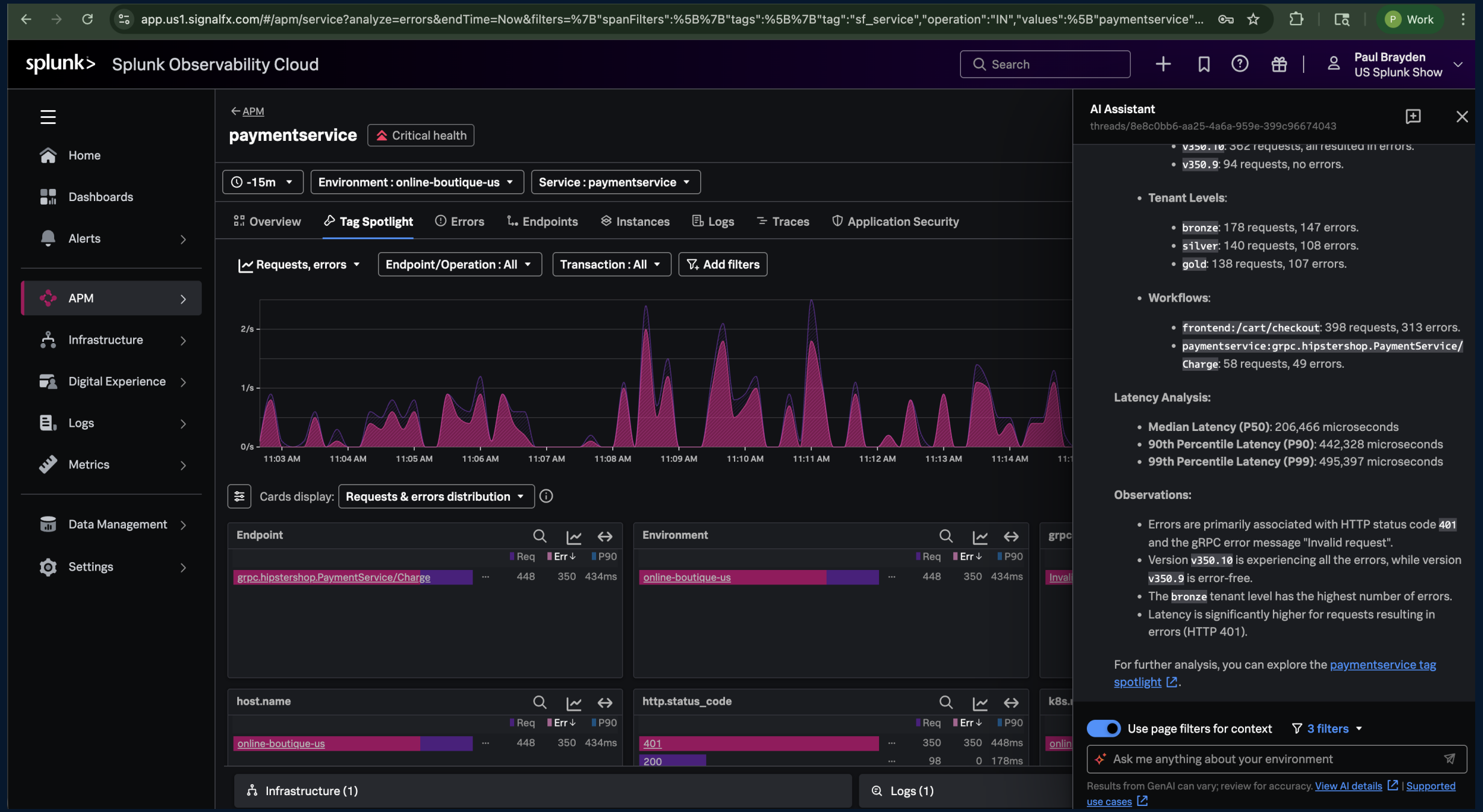
Suspected root causes

SERVICE

Paymentservice High Error Rate due to Authentication Issues

Start action plan

The paymentservice in the online-boutique-us environment experienced a high error rate of 71.4% (5 errors out of 7 total requests) during the anomalous period. All errors were root cause errors, indicating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Work
splunk> Splunk Observability Cloud
Search
Paul Brayden
US Splunk Show
Home
Dashboards
Alerts
APM
Infrastructure
Digital Experience
Logs
Metrics
Data Management
Settings
APM
paymentservice
Critical health
-15m
Environment : online-boutique-us
Service : paymentservice
Overview
Tag Spotlight
Errors
Endpoints
Instances
Logs
Traces
Application Security
Requests, errors
Endpoint/Operation : All
Transaction : All
Add filters
2/s
1/s
0/s
11:03 AM
11:04 AM
11:05 AM
11:06 AM
11:07 AM
11:08 AM
11:09 AM
11:10 AM
11:11 AM
11:12 AM
11:13 AM
11:14 AM
Cards display:
Requests & errors distribution
Endpoint
Req
Err
P90
grpc.hipstershop.PaymentService/Charge
448
350
434ms
Environment
online-boutique-us
448
350
434ms
host.name
online-boutique-us
448
350
434ms
http.status_code
401
350
350
448ms
200
98
0
178ms
Infrastructure (1)
Logs (1)
AI Assistant
threads/8e8c0bb6-aa25-4a6a-959e-399c96674043
v350.10: 362 requests, all resulted in errors.
v350.9: 94 requests, no errors.
Tenant Levels:
bronze: 178 requests, 147 errors.
silver: 140 requests, 108 errors.
gold: 138 requests, 107 errors.
Workflows:
frontend:/cart/checkout: 398 requests, 313 errors.
paymentservice:grpc.hipstershop.PaymentService/Charge: 58 requests, 49 errors.
Latency Analysis:
Median Latency (P50): 206,466 microseconds
90th Percentile Latency (P90): 442,328 microseconds
99th Percentile Latency (P99): 495,397 microseconds
Observations:
Errors are primarily associated with HTTP status code 401 and the gRPC error message "Invalid request".
Version v350.10 is experiencing all the errors, while version v350.9 is error-free.
The bronze tenant level has the highest number of errors.
Latency is significantly higher for requests resulting in errors (HTTP 401).
For further analysis, you can explore the paymentservice tag spotlight.
Use page filters for context
3 filters
Ask me anything about your environment
Results from GenAI can vary; review for accuracy. View AI details | Supported use cases