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The bridge to possible

Cisco IT – AIOps Simplifying IT Operations

BRKXAR-2758
June 6, 2023|1:00 PM

Venkat Bongoni – Software Engineering Technical Leader, Cisco IT

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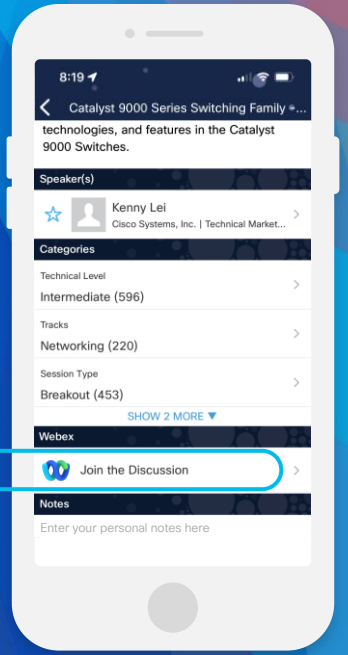

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Agenda

- IT Complexity
- The Cisco IT Vision
- Operations Transformation using AIOps
- Realized Business Value
- Demo

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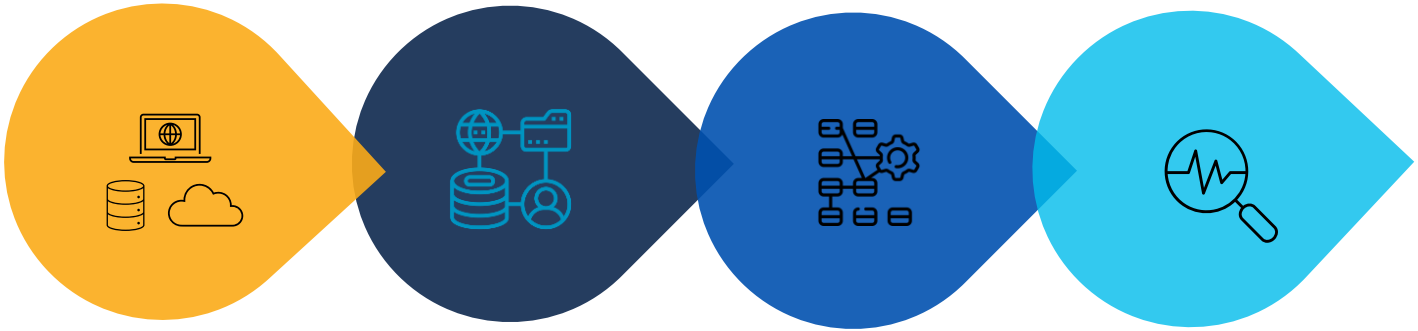
IT Complexity



Increase in volume of Applications, Data, Tools, and Systems across hybrid landscape	Increase in Operational Complexity	Increase in System dependencies	Increase in Monitoring tools

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Our Vision
Over the top virtual simplicity, insights, and action

Platform Agnostic

Any platform, any location, any operational domain, easy and fast on-boarding.

Unified Visualization

Inter-domain 5 levels of persona-based end-to-end visualization of entire I&O system health on a single screen

Insights

Inter-domain metric and incident correlation, of incidents and services across all operational domains – AppOps, NetOps, InfraOps, SecOps, CollabOps

Actions

Discover actionable events from correlated alerts and notifications and act on it

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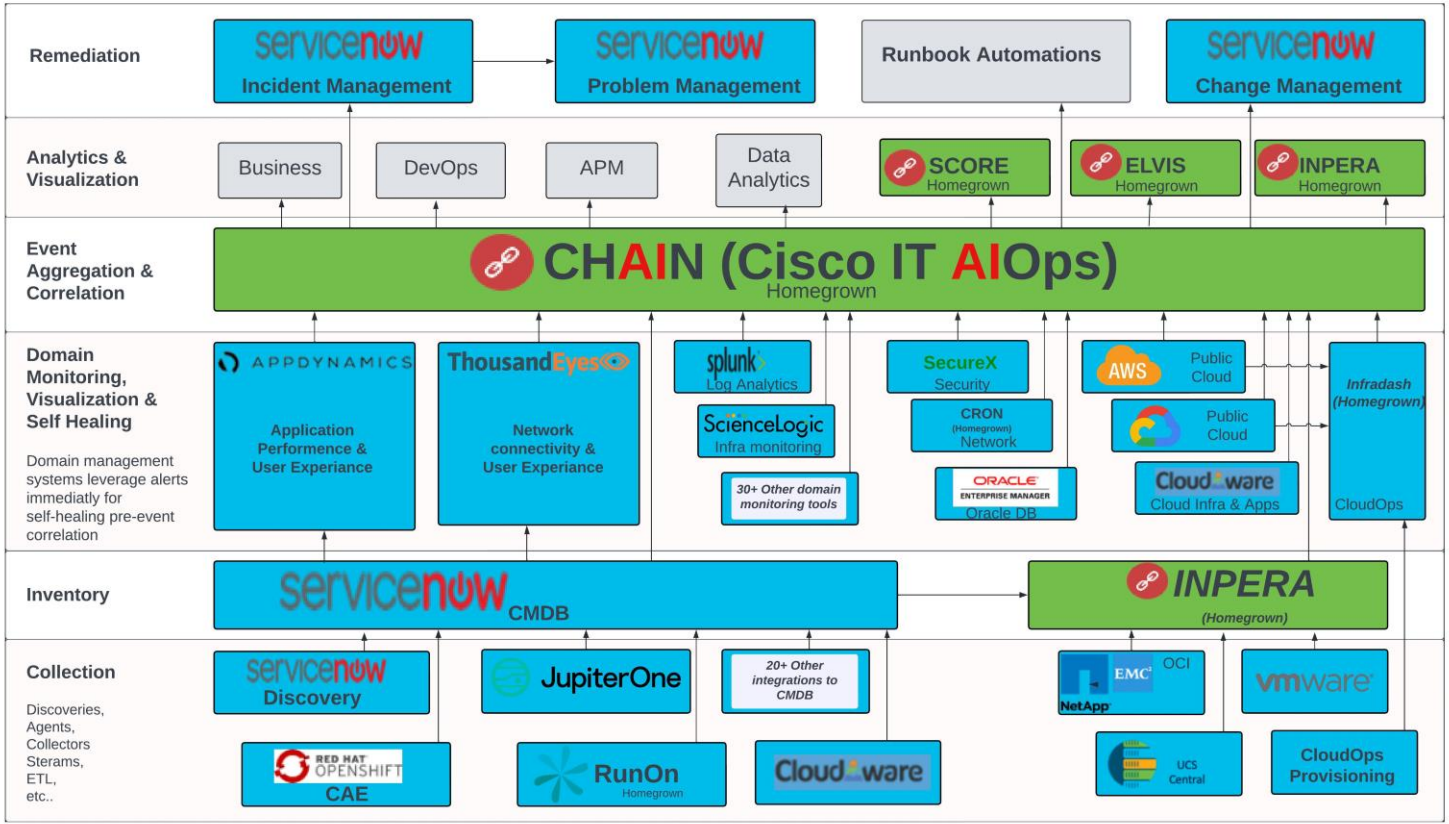
Monitoring & Observability in IT – Today

Aggregating events and metrics into a single view

Focusing on Cisco solutions but providing support for a dynamic range of monitoring tools



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Cisco IT Observability Landscape

2M events /day

40+ Integrations

800+ Policies

500+ KPI's

Availability Monitoring for 292,500+ Endpoints

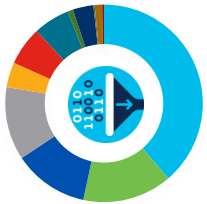
1500+ IT Users

100 Services

21,000+ App Endpoints

2900 + prod Applications

Event Distribution



- Infra-alerts
- Sciencelogic
- Sciencelogic-cms
- AppDynamics
- OEM
- ThousandEyes

4,881 Routers

7,366 LAN Switches

11,000+ UCS servers

56,553 Virtual Machines

300,000+ Nodes

24,000+ Access points

70,000+ Containers

3000+ Databases

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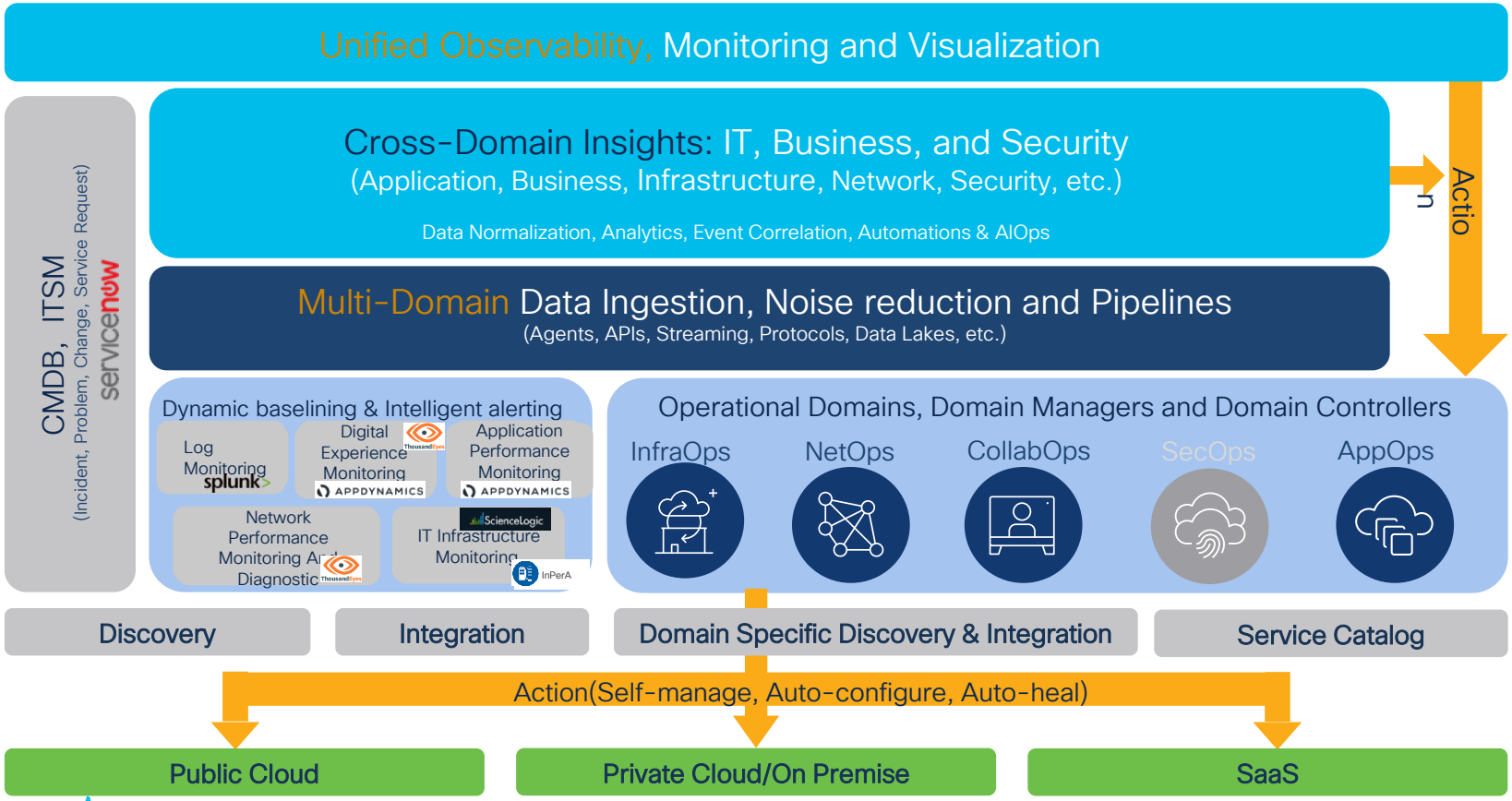
Cross Domain Architecture



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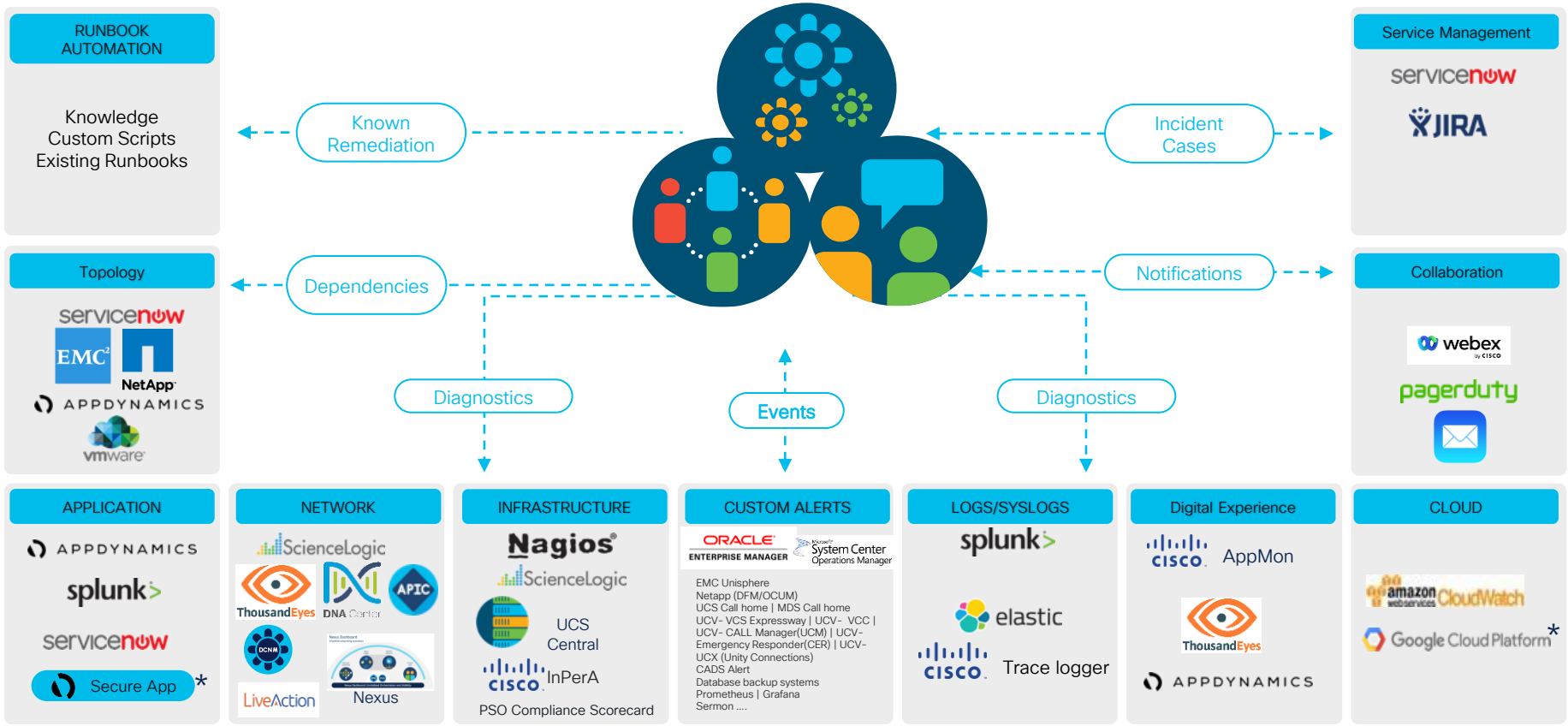
Out-of-box Brownfield Inter-domain Integrations



* Early Adoption

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Key Use Cases

Policy-enforced monitoring | reduce IT noise

Reduce Noise through AI techniques; Automated policy enforcement, detect critical root-cause events and prioritize for faster issue triaging and detection

Cross Domain event correlation for monitoring On-Prem and Cloud based IT Services

Correlate events across various domains (AppOps, SecOps, NetOps, CollabOps, InfraOps) for end-to-end IT service monitoring

Incident Correlation and Self-Remediation

Reduce mean time to resolve issues through AI based advisory ; correlate live events with historical incidents, changes and problems

Real-time Service Availability Monitoring

Monitor IT Service availability in real-time with insights into impacted services , application and infrastructure components

Outage Prediction with Actions

View predictive alerts for IT services , narrow down to causing application modules , components or end points to make quick decisions

Persona Based Unified Visualization

Visualize Business KPIs and IT's Service performance using the 5-level visualization framework from Domain teams /SRE to Leadership view

DevOps

Domain teams/SRE

Duty Managers

Command Center

Leadership (Service Management Executives)

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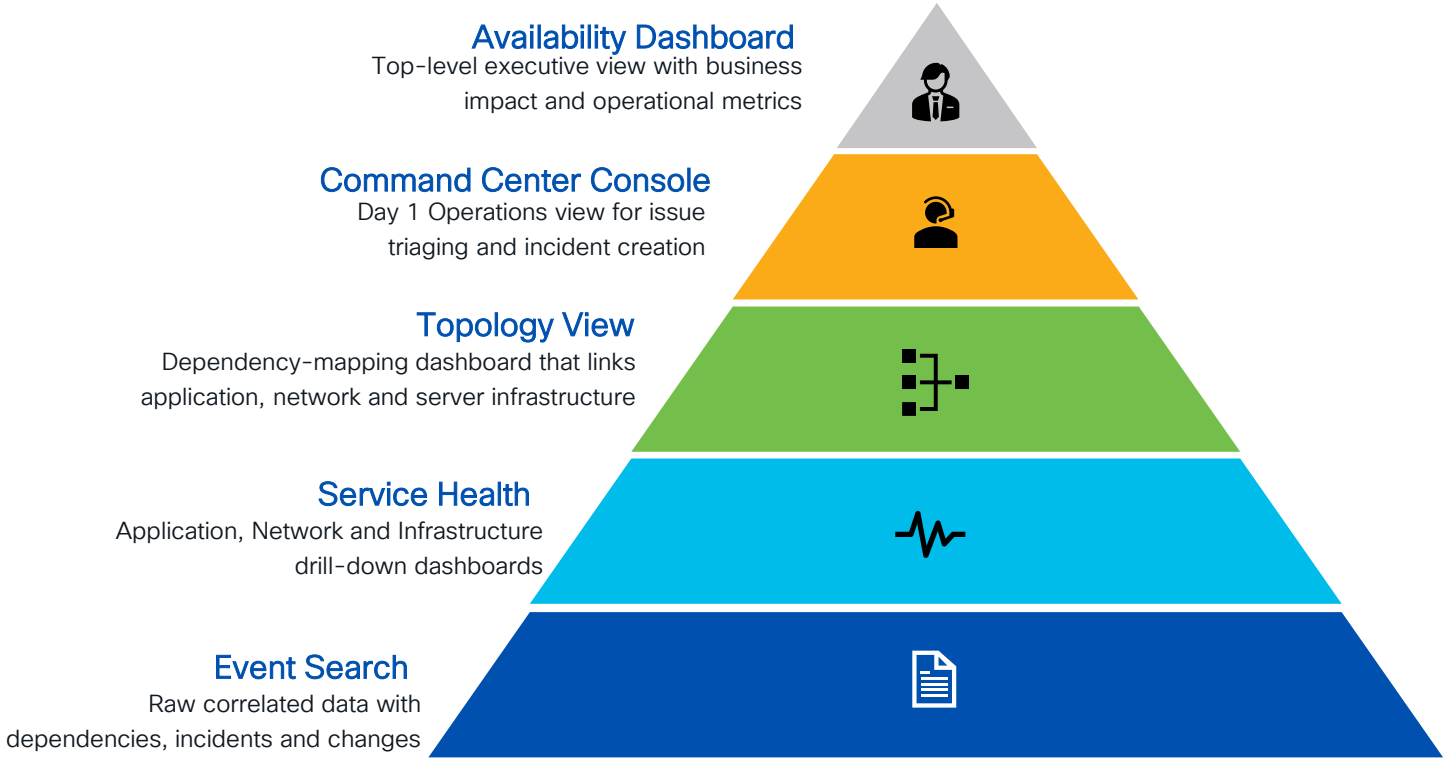
Multi-Persona Visualization Framework



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Drive Operational Excellence through Cisco IT AIOPS

Noise Reduction

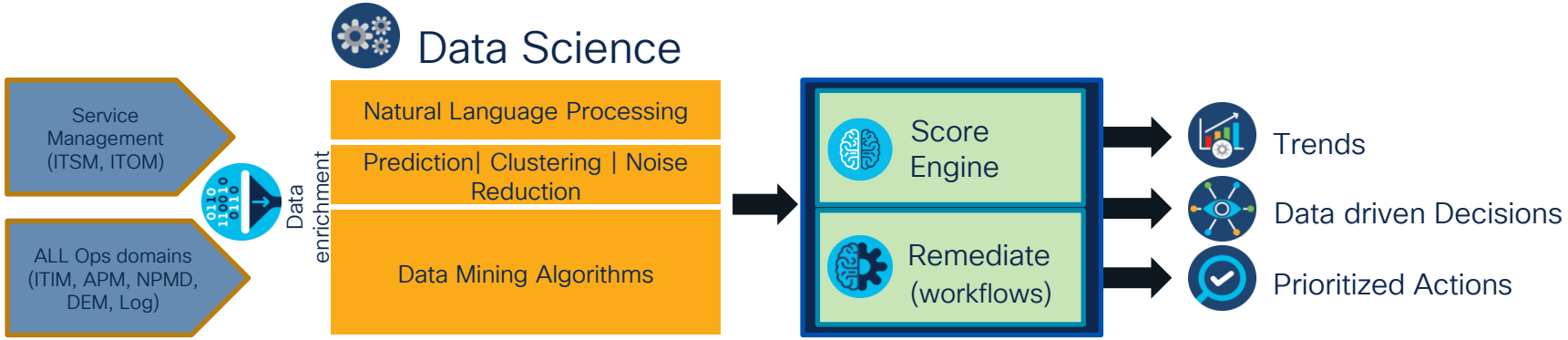
Content and time-based event grouping ; Event Deduplication

Event Clustering

Decision-making based on results from prediction & clustering

Predictive Events

Model training on historical correlated events with incidents data



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Event Management

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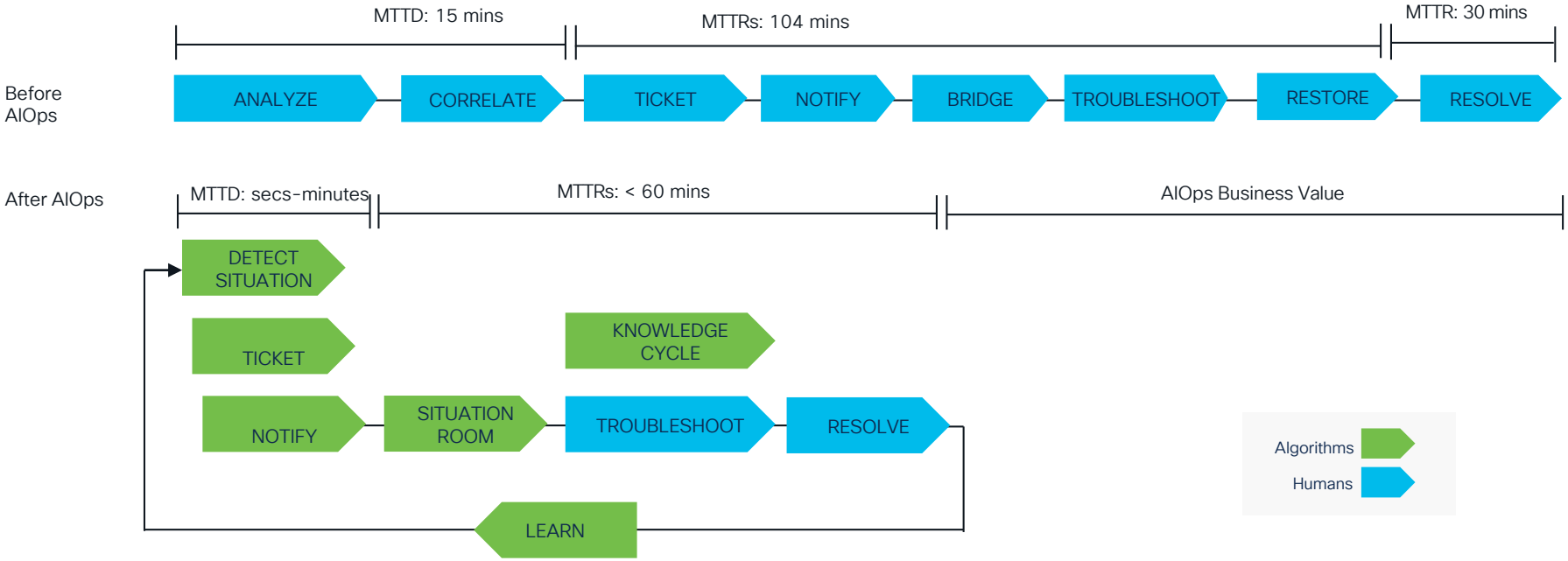
Business Value



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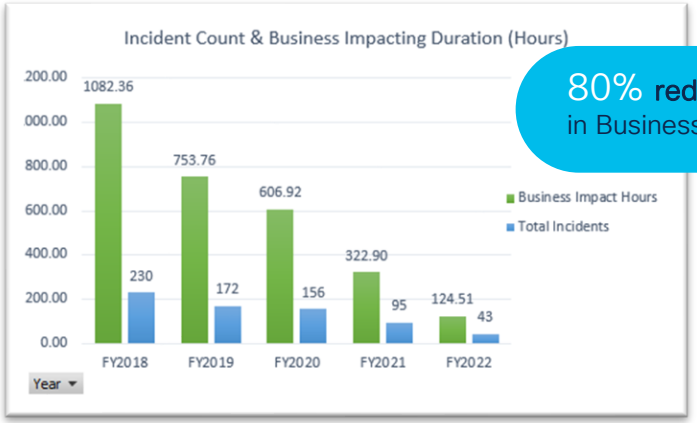
IT Operational Metrics



80% **reduction**
in Business impacting hours

38% **reduction**
in Mean Time to Restore Service

Improved Business **availability** from
99.982 → 99.9992

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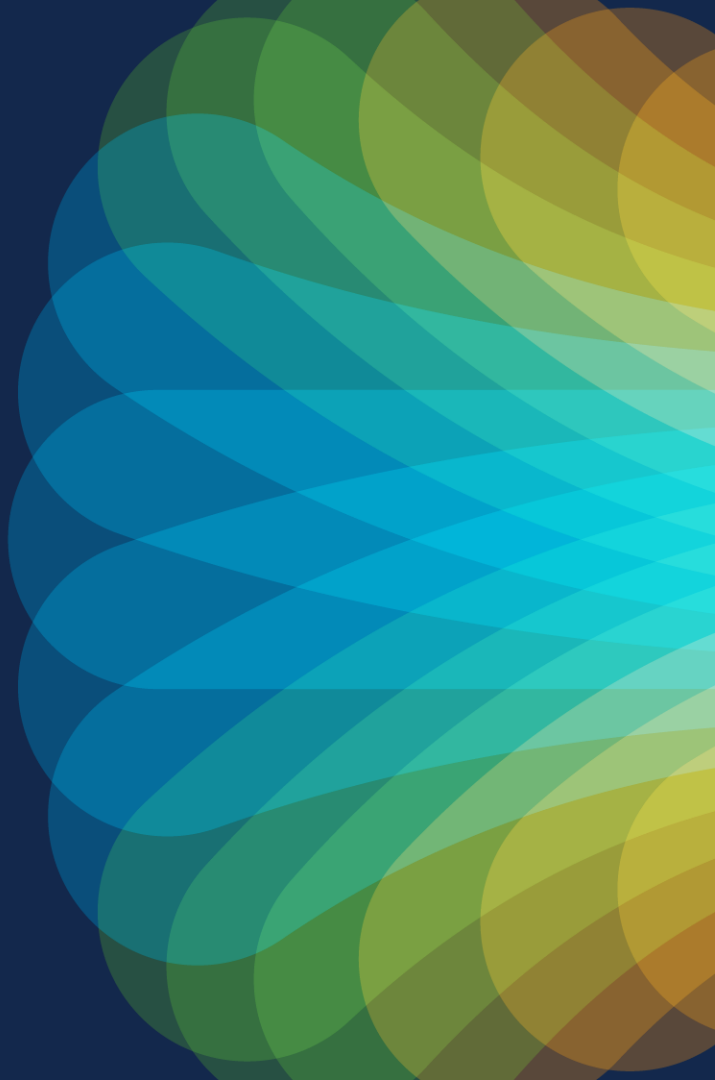
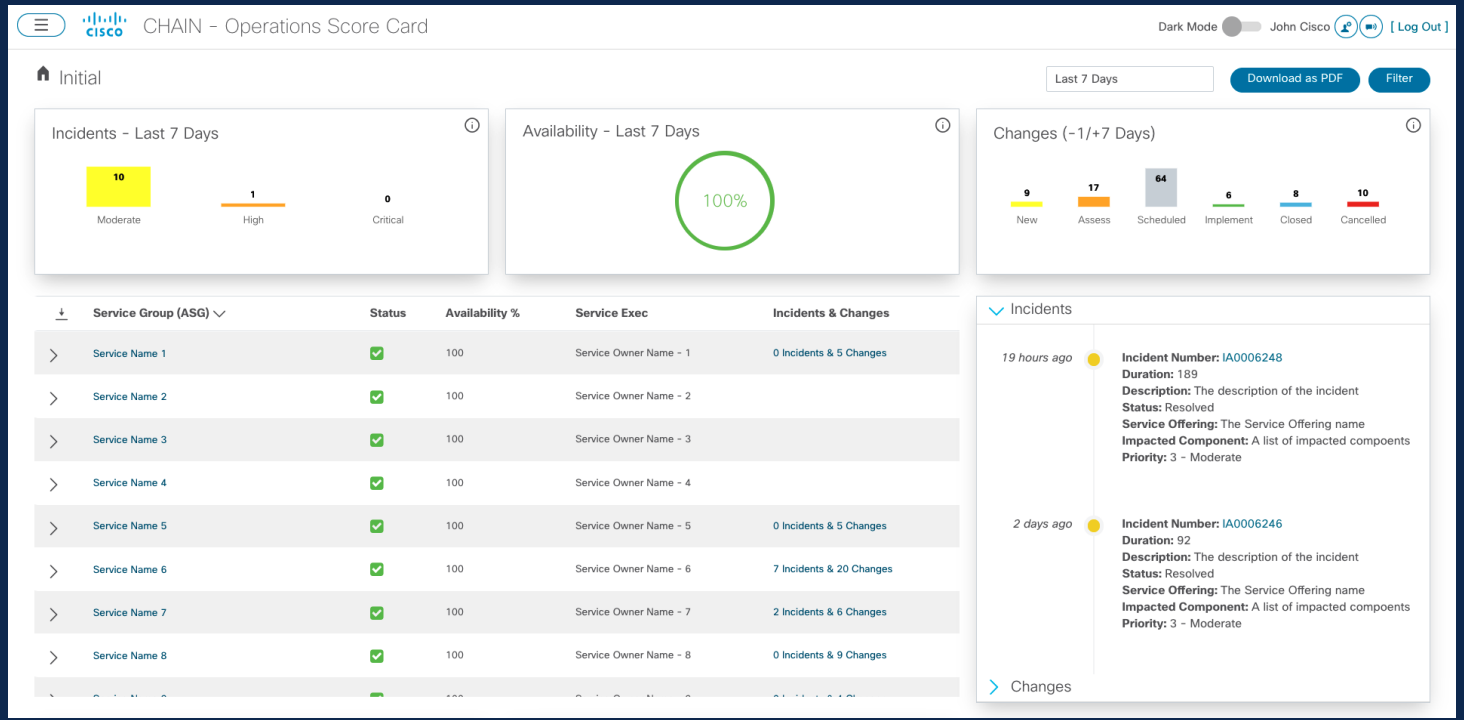
Demo



Real-time Availability Dashboard with Business Impact



Service Mgmt / Execs

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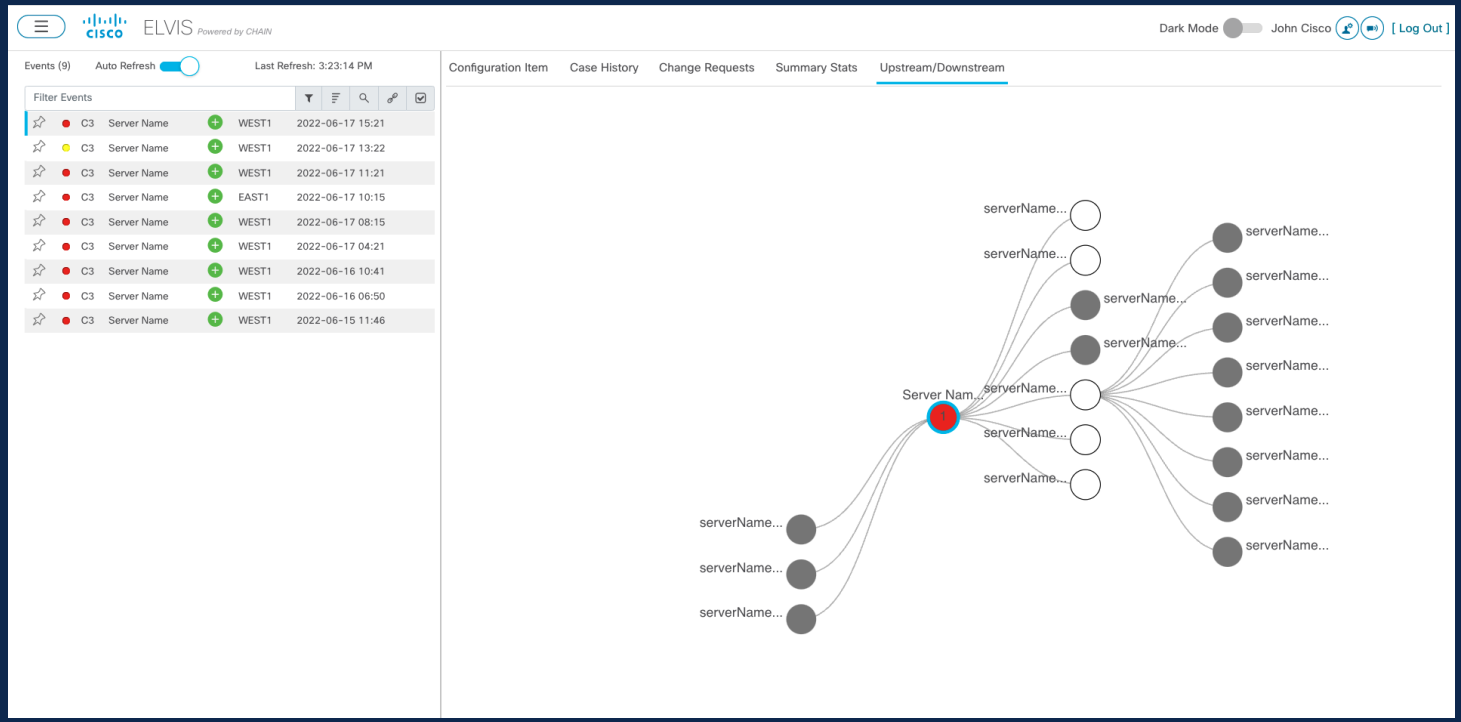
Critical Events represented in the Topology View



Domain teams

Command Center

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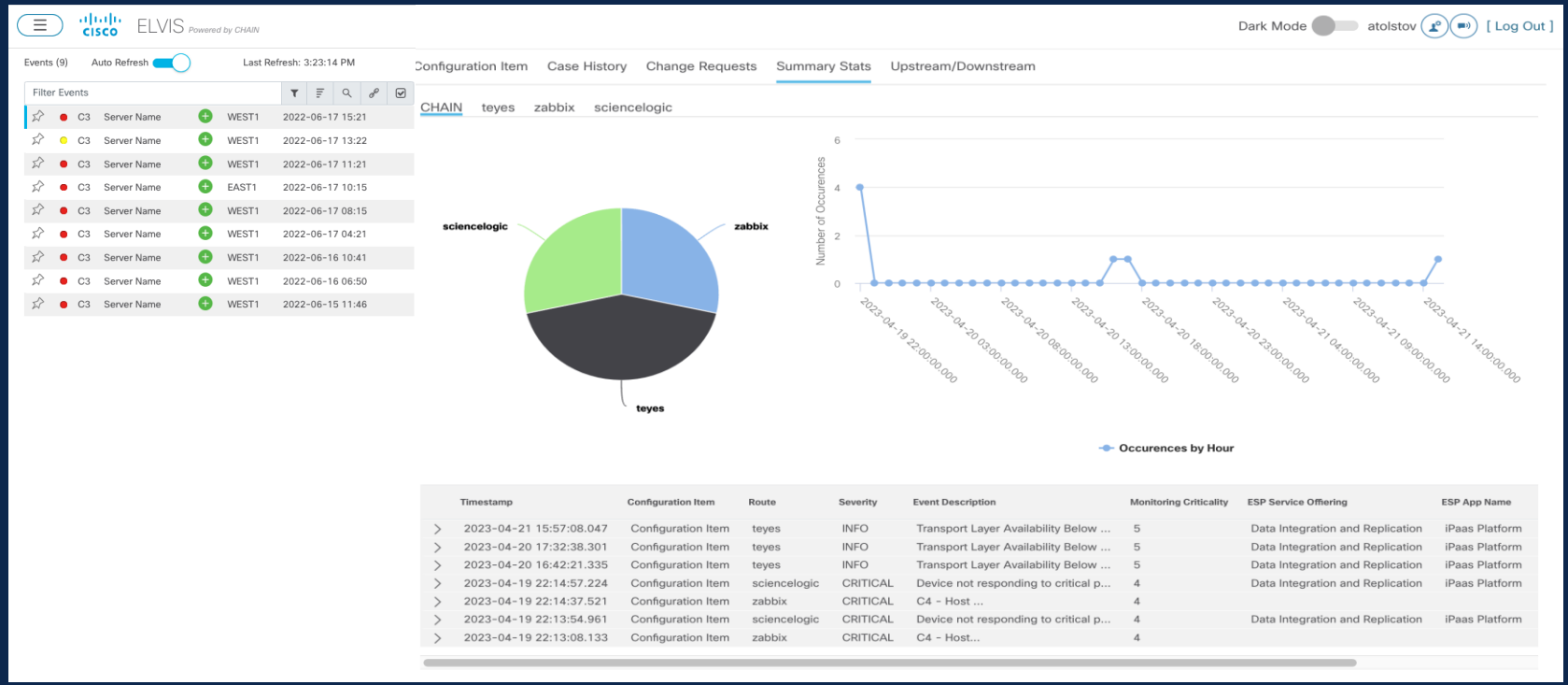
Summary view of correlated critical events



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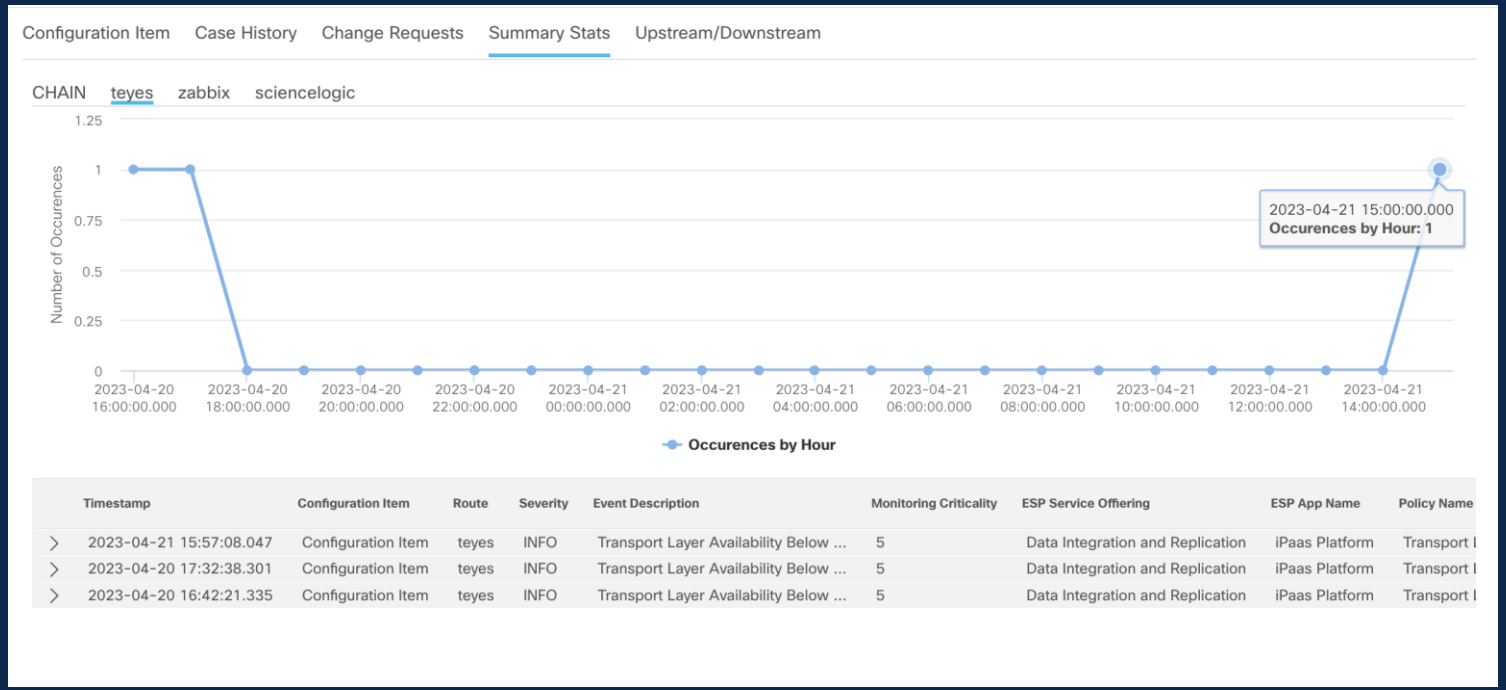
Summary Events drill down by source



Timestamp	Configuration Item	Route	Severity	Event Description	Monitoring Criticality	ESP Service Offering	ESP App Name	Policy Name
2023-04-21 15:57:08.047	Configuration Item	teyes	INFO	Transport Layer Availability Below ...	5	Data Integration and Replication	iPaas Platform	Transport I
2023-04-20 17:32:38.301	Configuration Item	teyes	INFO	Transport Layer Availability Below ...	5	Data Integration and Replication	iPaas Platform	Transport I
2023-04-20 16:42:21.335	Configuration Item	teyes	INFO	Transport Layer Availability Below ...	5	Data Integration and Replication	iPaas Platform	Transport I

Domain teams

Command Center

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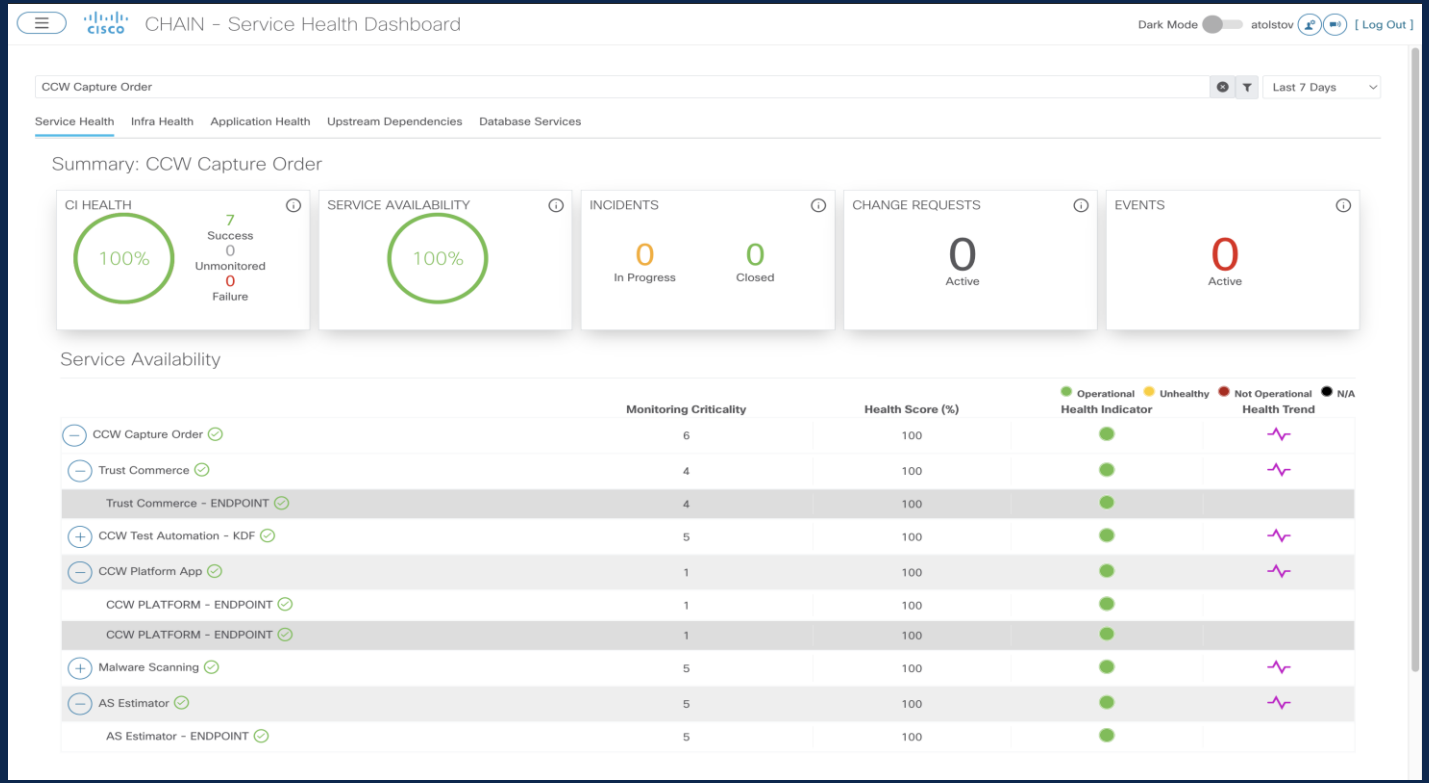
Health Insights and Application and End point level



Domain teams

DevOps

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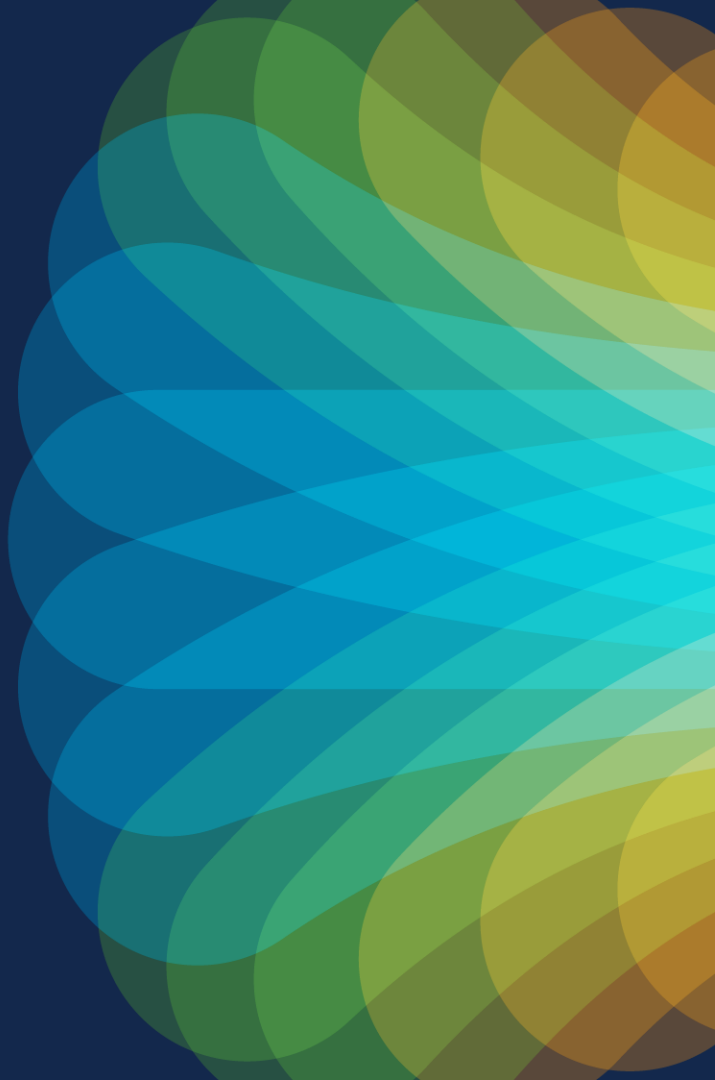
The bridge to possible

Thank you



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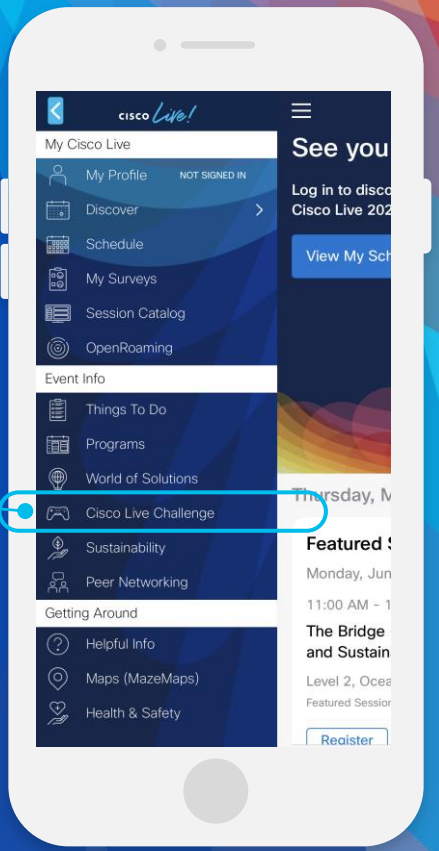

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