



The bridge to possible

# What is Full Stack Observability and How It Can Help You

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# Cisco Webex App

## Questions?

Use Cisco Webex App to chat with the speaker after the session

## How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click “Join the Discussion”
- 3 Install the Webex App or go directly to the Webex space
- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated until February 24, 2023.





# Agenda

- Introduction
- What is Cisco Full Stack Observability?
- What are the use cases of Cisco FSO?
- Customer Interview – EasyJet
- Technology – Looking forward
- Conclusion

# Introduction







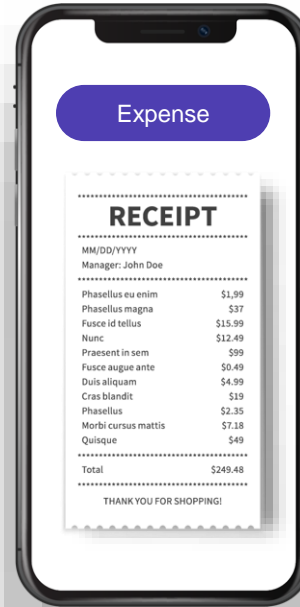
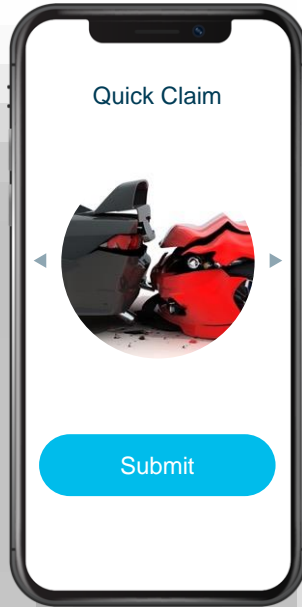
More than ever,  
digital experiences are our way of life



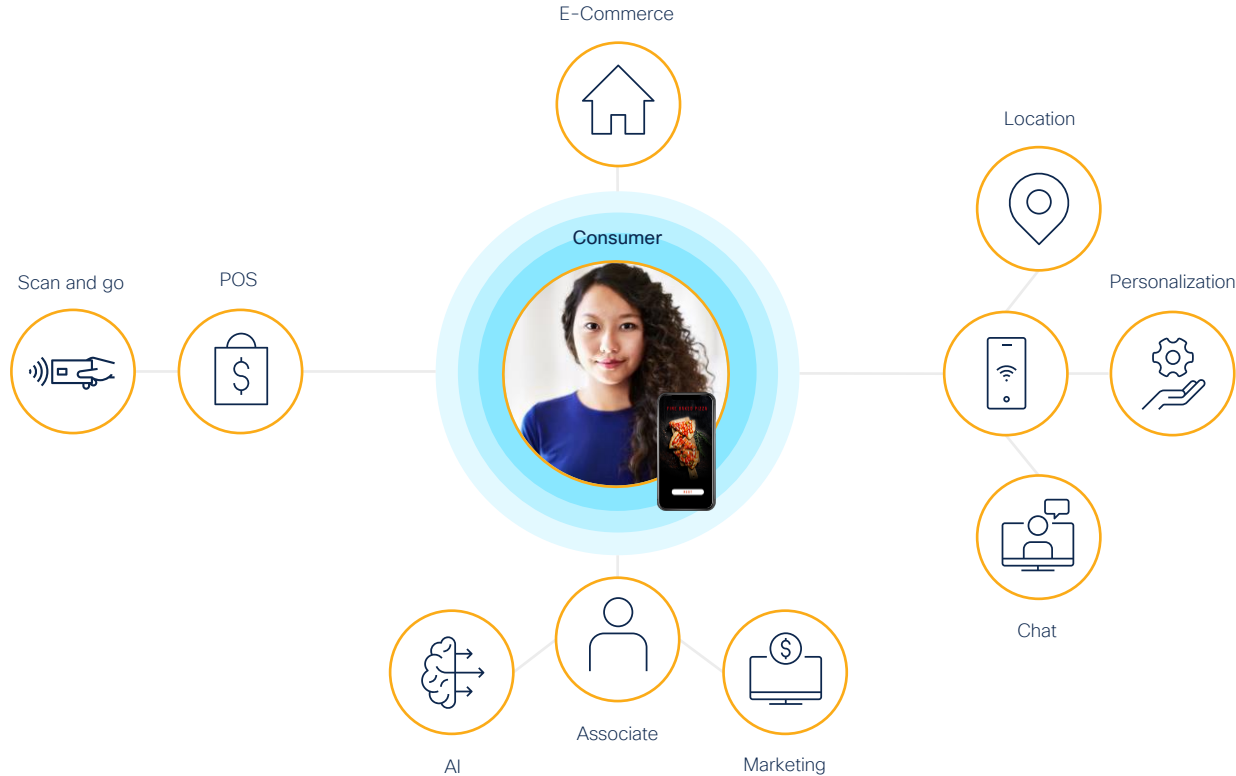
*of customer interactions are now  
digital in nature.*



# Applications are the front door



# ...to an evolving and expanding digital experience





# But the app landscape is complex



75%

Wrestle overwhelming 'data noise', without the resources and support they need

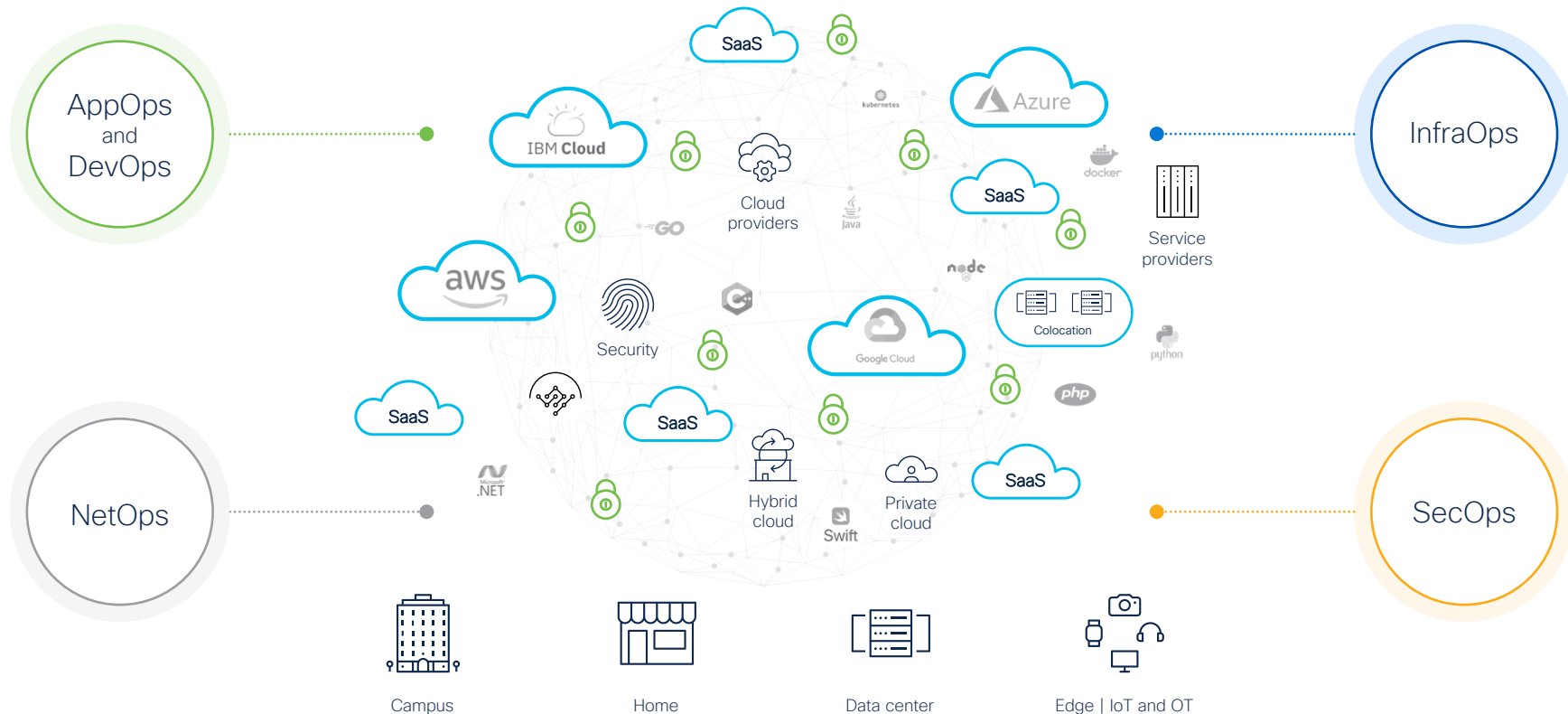
85%

Struggle to quickly cut through noise to identify root causes of performance issues

96%

Face negative consequences of not having genuine visibility and insight into the performance of the whole technology stack

# Islands of operations are inefficient and ineffective



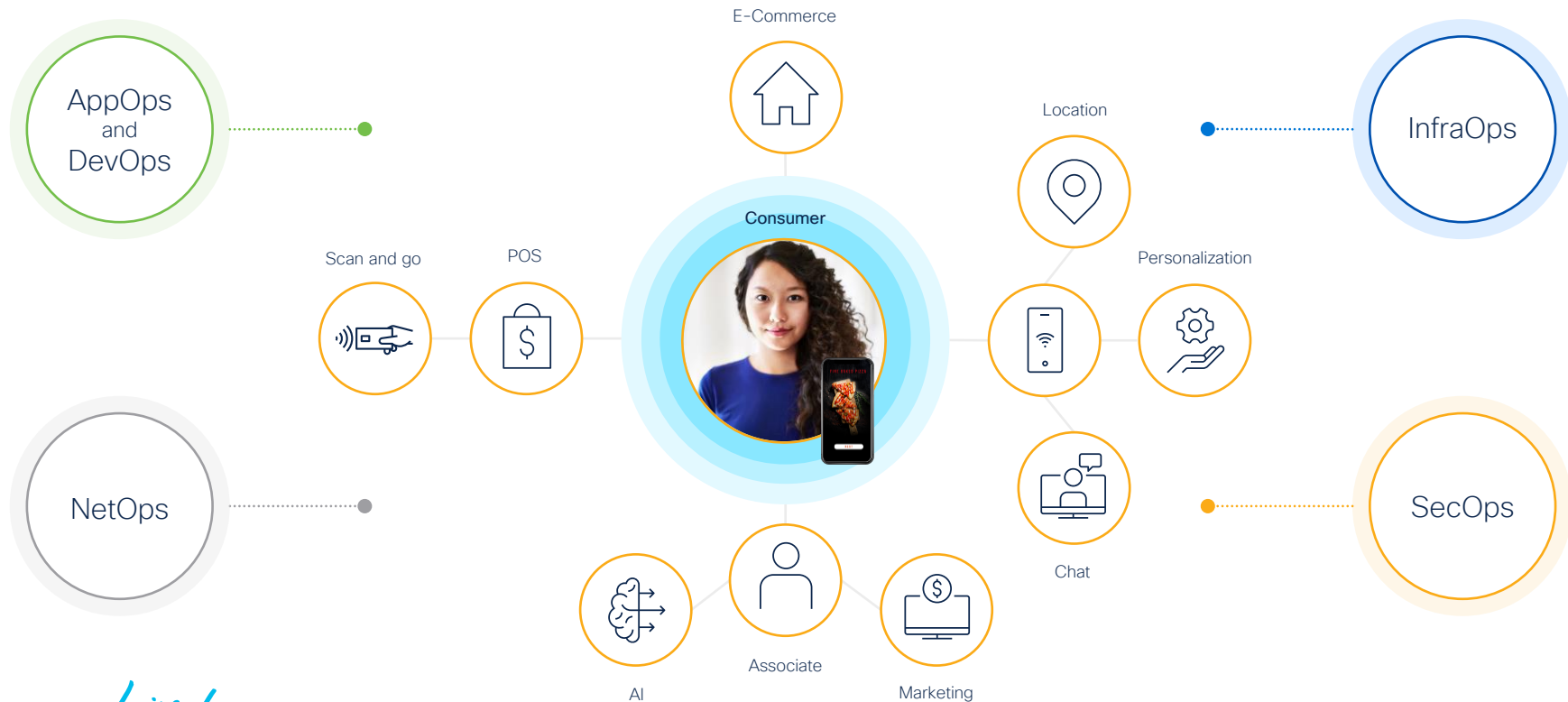
There is no **business context**



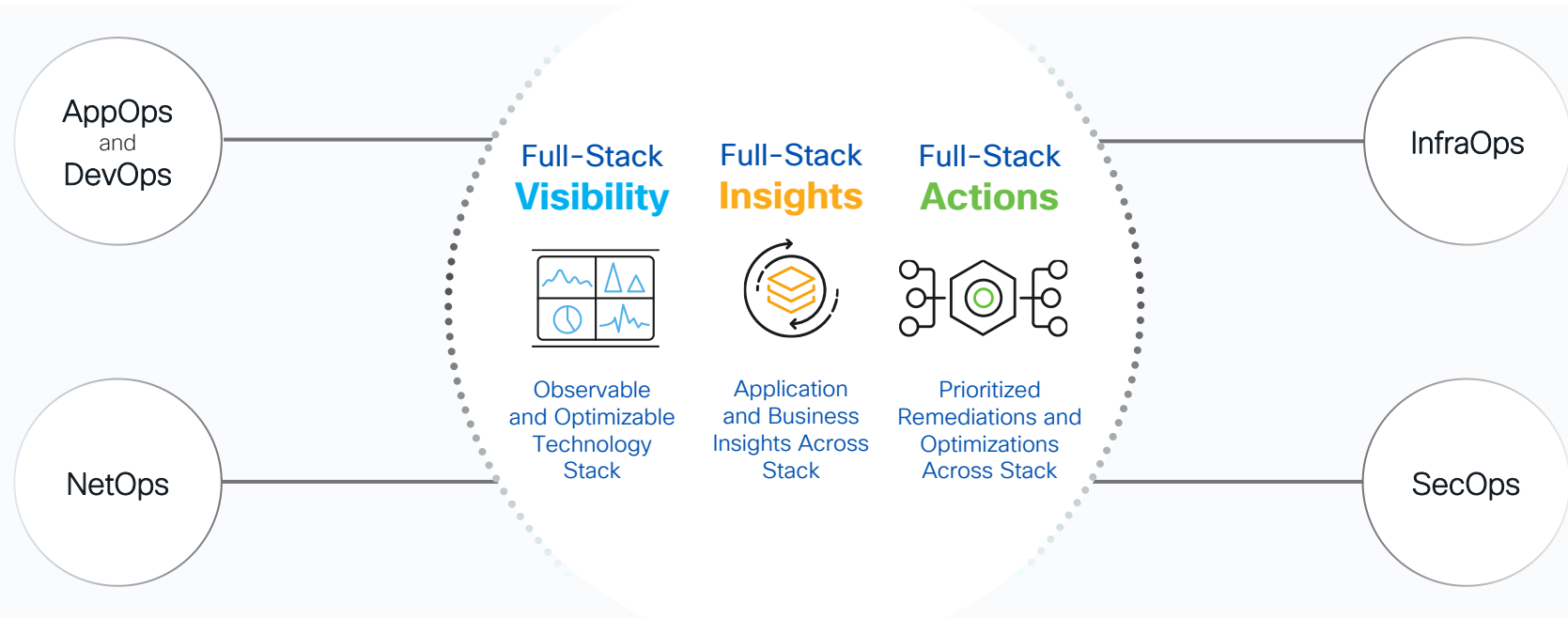
You need to see more to solve more.

# Your teams need to see the full stack of available data

## Business context across the digital experience



# Cisco Full-Stack Observability



# Cisco Full-Stack Observability

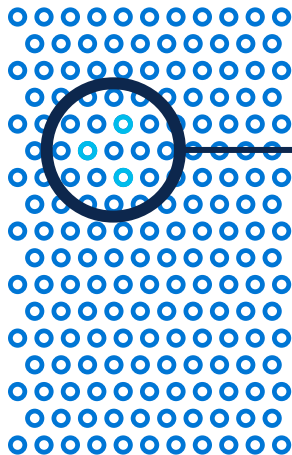
with Business Context

Prioritize issues with Business Context



## Full-Stack Visibility

Tech Stack M.E.L.T & OTL



## Full-Stack Insights

Application

Business & Experiences



Log in



Review options



Select Toppings



Add to cart



Pay with Credit Card



Revenue



Conversion



3rd Party SaaS service



User journey

## Full-Stack Actions

Remediations & Optimizations



App API Call Remediations



Payment Service Routing Optimization



Cloud Instance Scale Down

Full-Stack actions for the business



# Full Stack Observability Use Cases



# Hybrid Application Monitoring

Correlate performance and application experience to business results and proactively remediate issues.

- Gain deep app insight to continually improve performance and user experience.
- Understand the correlation between app performance, user experience, and business impact.
- Connect teams across domains and correlate risk with outcomes.

*Make better decisions from the code-level to the C-Suite and beyond.*



# Modern Application Monitoring

Monitor performance of cloud native applications that leverage distributed cloud hosted technologies.

- Identify and resolve infrastructure-related performance issues across cloud hosted environments.
- Empower dev teams with future-ready capabilities that accelerate innovation.
- Efficiently optimize distributed cloud hosted resources and minimize costs.

*Cut through the complexity and future-proof your investments.*



# Application Dependency Monitoring

Understand external network dependencies negatively impacting user experience through increased visibility.

- Eliminate blind spots with real-time visibility from the end user to the application.
- Identify dependencies from the internet to the public cloud to enterprise networks.
- Correlate insights across application transactions—all the way down through the network path and internet routing.
- Deeper integration between AppDynamics and ThousandEyes to support assessment and urgency of issues.

*Ensure app performance is driving business outcomes.*





# Digital Experience Monitoring

End-to-end visualization of user, application, hybrid cloud, and internet performance.

- Visualize in one place the user, application, hybrid cloud, and internet performance.
- Manual correlation of business performance with application and internet performance.
- Deeper integration between AppDynamics and ThousandEyes for end-to-end experience and faster remediation

*See and take action across the entire digital experience with relevant context.*



# Hybrid Cost Optimization

Lower costs by paying only what you need in public clouds and safely increasing utilization of on-premises assets.

- Avoid public cloud over-provisioning and the associated cost overruns.
- Ensure application performance without incurring unpredictable public cloud costs.
- Avoid the underutilization of on-premises infrastructure.

*Ensure application performance and operational efficiency.*





# App Resource Optimization

## Tie infrastructure resourcing decision to the user experience

- Dynamically optimize resources and maximize positive business impact.
- Get visibility into how infrastructure resources are impacting user experience.
- Always deliver the best experience, no matter the load/stress put on the system.

*Focus on your digital innovation initiatives and not infrastructure resources.*



# Application Security

Simplify the lifecycle of vulnerability fixes and security incidents by creating shared context across application and security teams.

- Identify vulnerabilities and threats within applications in production.
- Protect applications against threats and attacks in real-time
- Correlate security and business impact to prioritize remediations and compliance.
- Business Risk Observability - integrating Kenna Risk Meter Score Distribution, Panoptica for API Security, plus Talos to integrate threat feed intelligence, all directly into Full-Stack Observability.

*Catch exploits in moments, not months.*



# Customer Interview with EasyJet



# INTRODUCING easyJet

 **+96MILLION**  
passengers annually\*

 **14,500**  
employees and growing

 **152**  
Airports

 **36**  
Countries

 **986**  
Routes

 **327**  
Aircraft

\*2019 data



**THE MOST AMBITIOUS  
AIRLINE ROADMAP TO-DATE**

**easyJet**

We want to be Europe's most loved airline – winning for our customers, shareholders and our people, by making low cost travel easy.



**INNOVATING  
WITH DATA**

Using the millions of data-points we collect to make smart decisions and shape the future of travel, as the world's leading data driven airline.



**BRILLIANT PACKAGE  
HOLIDAYS AT  
UNBEATABLE PRICES.**

**easyJet  
holidays**

**easyJet**

A decorative graphic in the top right corner consisting of a dense cluster of circles in various sizes and colors, including shades of blue, green, orange, and red. The circles are arranged in a way that they appear to be floating or expanding from the right edge of the frame.

# New Feature!!





## Available now

**CONSUMER:** AppOps + SecOps

**OBJECTIVE:** Protect organizations and users from attacks, outbreaks and vulnerabilities with unified business performance and security observability

- Protect against vulnerabilities in runtime
- Identify vulnerabilities and threats and tie to business context (via business transactions) to prioritize remediation
- Business Risk Observability

## Breaking news

- ✓ Elevate engagements w/ Business Risk, extend to new opportunities (regulatory, compliance)
- ✓ Integrate Business Risk scoring into dashboards & offers



# Business Risk Observability

Application  
Security

KENNA  
Security

TALOS



Runtime Business Transactions (AppDynamics) + API security (Panoptica) +  
Vulnerabilities Scoring (Kenna Security) + Threat Response (Talos)

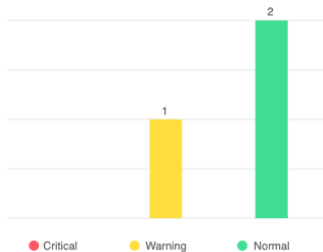




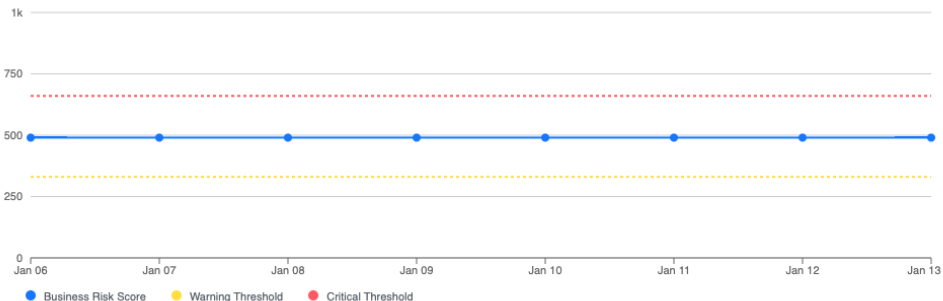
## Business Transactions

Last 1 Week

## Business Transactions By Risk Status



## Daily Highest Business Risk Score Detected



## Top 3 Recommended Actions

These remediations will reduce the most business risk across all your business transactions.

1. Upgrade org.apache.logging.log4j:log4j-core to ver 2.13.2 in application tier1
2. Upgrade commons-collections:commons-collections to ver 3.2.2 in application tier1



Export All

Business Transaction

Search...

Showing 1 - 3 of 3 Business Transactions

Business Transaction	Application (Tiers)	Entry Tier	Business Risk ⓘ ↓	Total Vulnerabilities	Total Attacks
/argentoDemoApp/execute	Argento-21.5	(1)  tier1	<span>490</span> Warning	20	10
_APPDYNAMICS_DEFAULT_TX_	Argento-21.5	(1)  tier1	<span>280</span> Normal	20	0
/argentoDemoApp/excute	Argento-21.5	(1)  tier1	<span>280</span> Normal	20	0

Show 10



## Business Transactions &gt; /argentoDemoApp/execute

## Details

## Business Risk Score ⓘ

490 Warning

## Business Transaction

/argentoDemoApp/execute

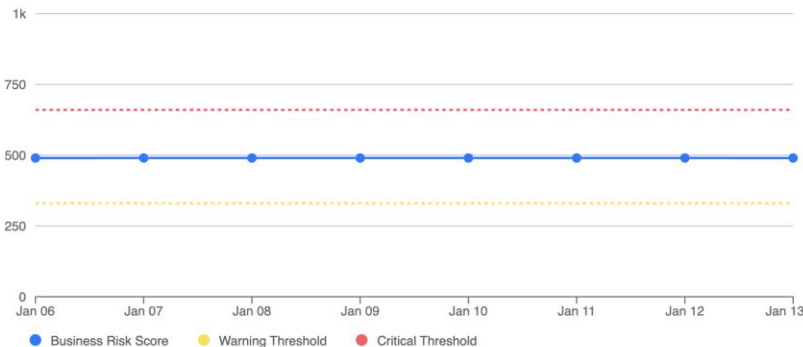
## Application

Argento-21.5

## Entry Tier

tier1

## Daily Highest Business Risk Score Detected



## Top 5 Recommended Actions

These remediations will reduce the most business risk in /argentoDemoApp/execute

1. Upgrade org.apache.logging.log4j:log4j-core to ver 2.13.2 in application tier1
2. Upgrade commons-collections:commons-collections to ver 3.2.2 in application tier1
3. Upgrade org.apache.tomcat:tomcat-coyote to ver 9.0.68 in application tier1
4. Upgrade org.apache.tomcat:tomcat-util to ver 9.0.69 in application tier1

Vulnerabilities (21)

Attacks (0)

External APIs (1)



Export All

Panoptica Findings Search...

Showing 1 - 1 of 1 External API

Panoptica Findings	Category	Severity	API Name	Tier
Security configuration	network	Critical	api.twitter.com	payment-service

Show 10

## Details

Source:

shodan

Description:

An insecure service was observed

Mitigation:

Review the SSL configuration to ensure the communication is made over a secured SSL / TLS route.

Occurrences:

[Showing 2 occurrences](#)

# Complete your Session Survey

- Please complete your session survey after each session. Your feedback is important.
- Complete a minimum of 4 session surveys and the Overall Conference survey (open from Thursday) to receive your Cisco Live t-shirt.
- All surveys can be taken in the Cisco Events Mobile App or by logging in to the Session Catalog and clicking the "Attendee Dashboard" at <https://www.ciscolive.com/emea/learn/sessions/session-catalog.html>



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Attend any of the related sessions at the DevNet, Capture the Flag, and Walk-in Labs zones.



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The bridge to possible

# Thank you

CISCO *Live!*



CISCO *Live!*

ALL IN