
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

PRT273

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# Modernize faster with serverless and end-to-end observability

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# Agenda

Examining serverless

Optimizing cloud workloads

Accelerating operational excellence with Dynatrace

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# Who is Dynatrace

**#1** Intelligent and automated observability for digital transformation

**#1**







**3,000+ customers**

BT · ADP · SAP · TOYOTA · Cigna · dish · experian

**25** Major releases per year

**Publicly traded** NYSE



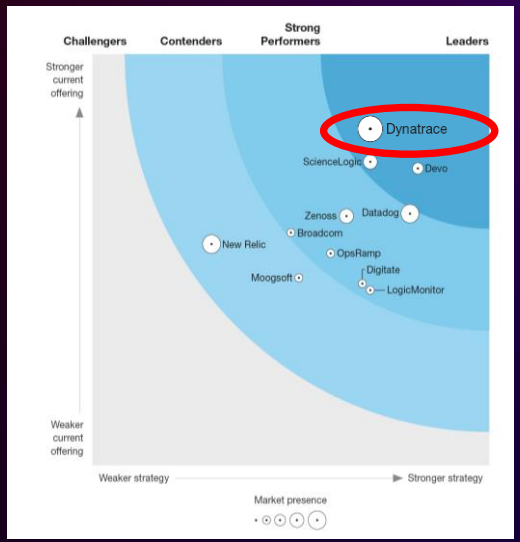

**Leader ISG Provider Lens Cloud-Native Observability**







**Leader Forrester Wave Artificial Intelligence for IT Operations (AIOps)**




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# Strong collaboration with AWS

aws PARTNER

- AWS Lambda Ready
- AWS Outposts Ready
- AWS Graviton Ready
- ML Software Competency
- Govt. Software Competency
- DevOps Software Competency
- Containers Software Competency
- Migration & Modernization Software Competency

## Dynatrace real-time observability into all dynamic AWS environments

Amazon EC2

AWS Lambda

Amazon EKS

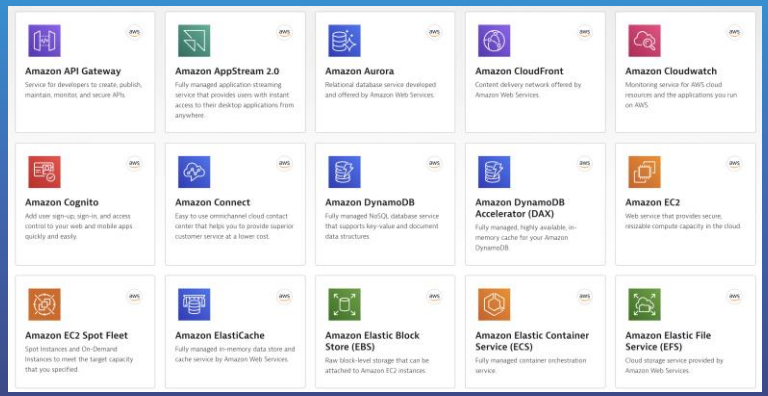
Amazon ECS

AWS Outposts

AWS Elastic Beanstalk

AWS Fargate

## Fully integrated with Amazon CloudWatch (AWS & hybrid cloud)



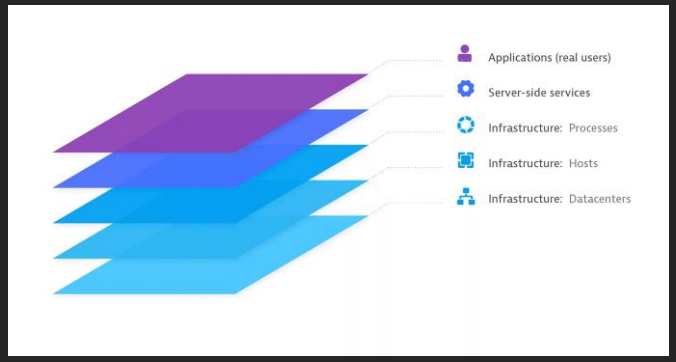

and more…

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# Dynatrace Core Technology

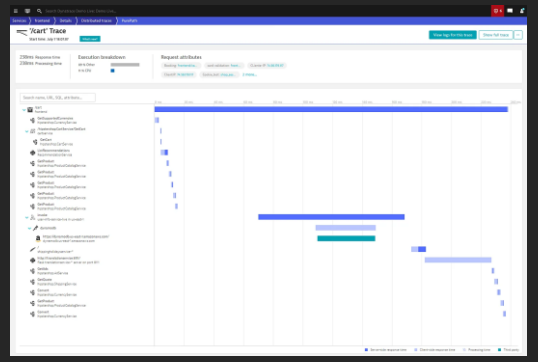
## Dynatrace OneAgent

- Automatically discovers entities across your dynamic AWS environment
- Real-time metrics, traces, and logs on usage and performance for optimization




## Dynatrace PurePath

- End-to-end distributed tracing and code level insights
- Automatically map your end-user's behaviors and transactions to your AWS microservices

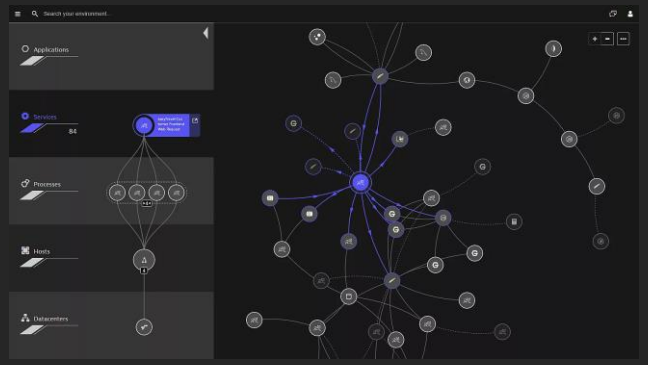


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# Dynatrace Core Technology

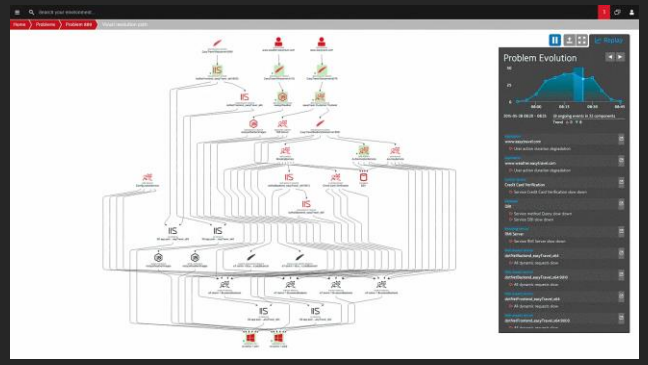
## Dynatrace SmartScape

- Real-time interactive mapping of all services and dependencies
- Process-to-process visualization for a holistic view across AWS cloud environments




## Dynatrace Davis AI

- AIOps powers the Dynatrace platform for causal (not correlative) insights across enterprise-scale data
- Full contextual analysis for intelligent root cause analysis of problems and accurate answers from data

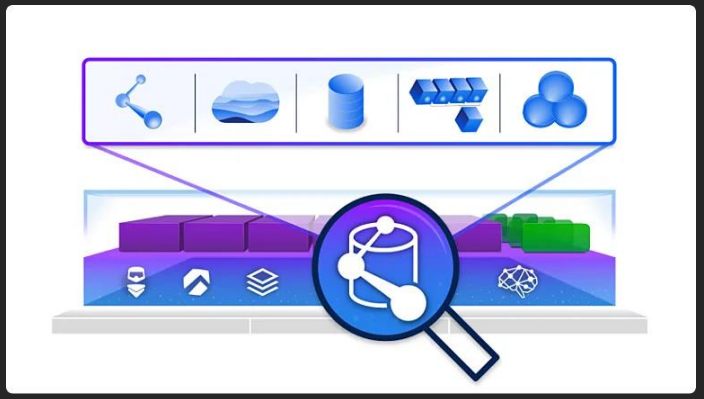



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# Dynatrace Core Technology

## Grail

- Massive parallel processing of data at enterprise scale
- Causational AI and data without re-hydration or re-indexing for on-demand, contextual insights



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# Serverless

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# Reducing operational complexity and cost

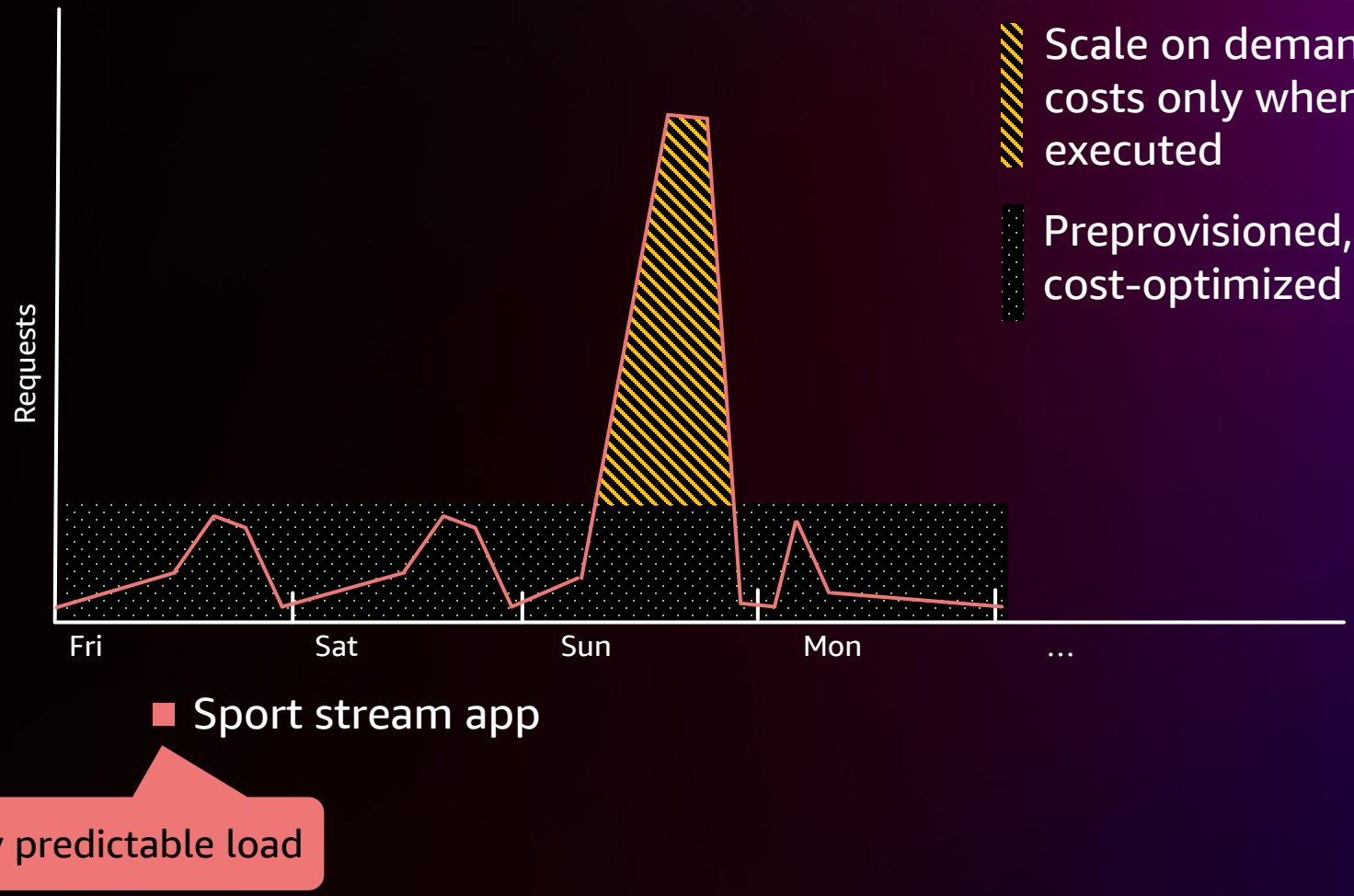
- No servers to manage
- Elastic scaling
- Cost efficiency




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# A serverless application

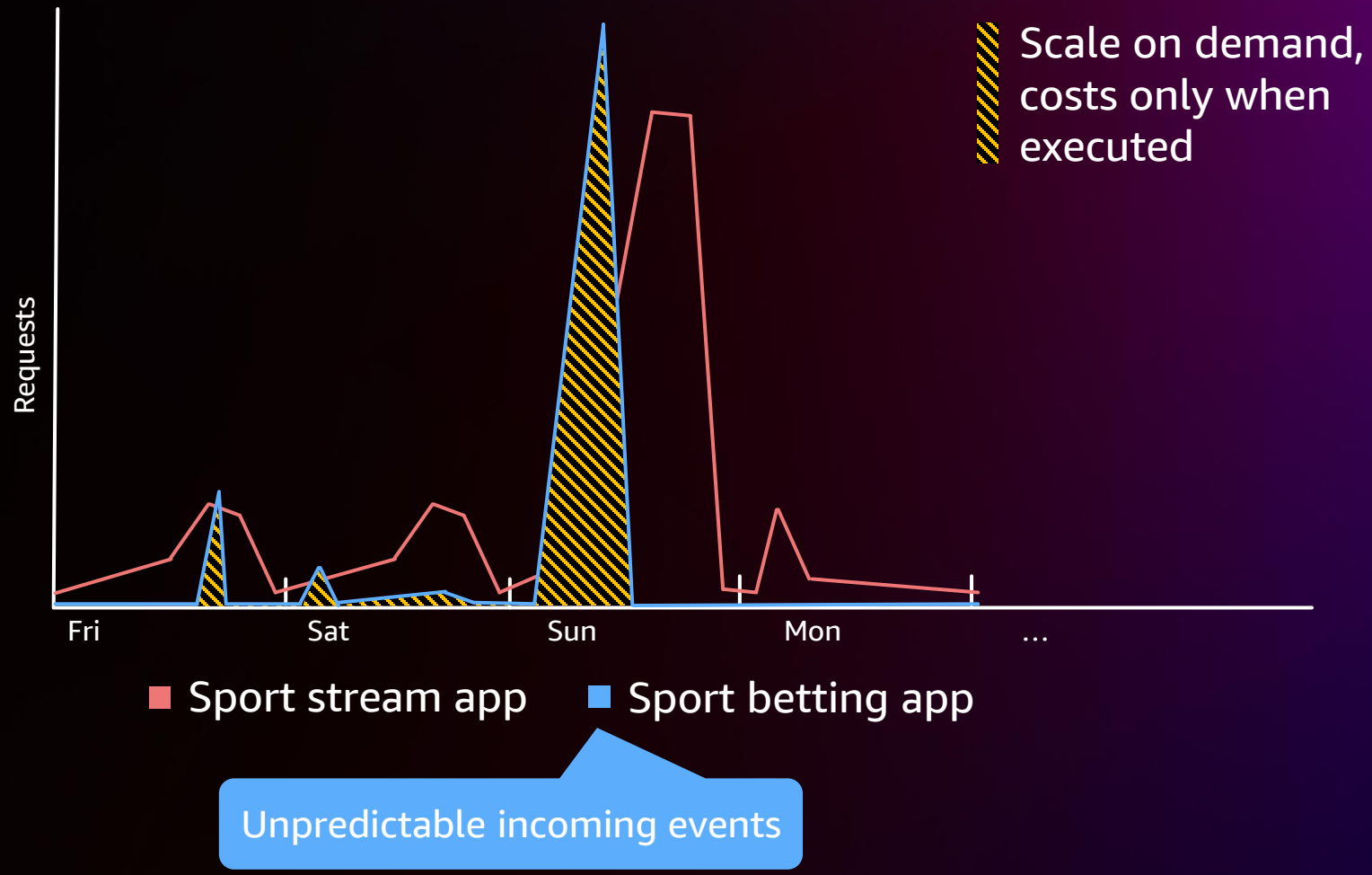
Compare use-cases for serverless functions and containers




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# A serverless application

Compare use cases for serverless functions and containers

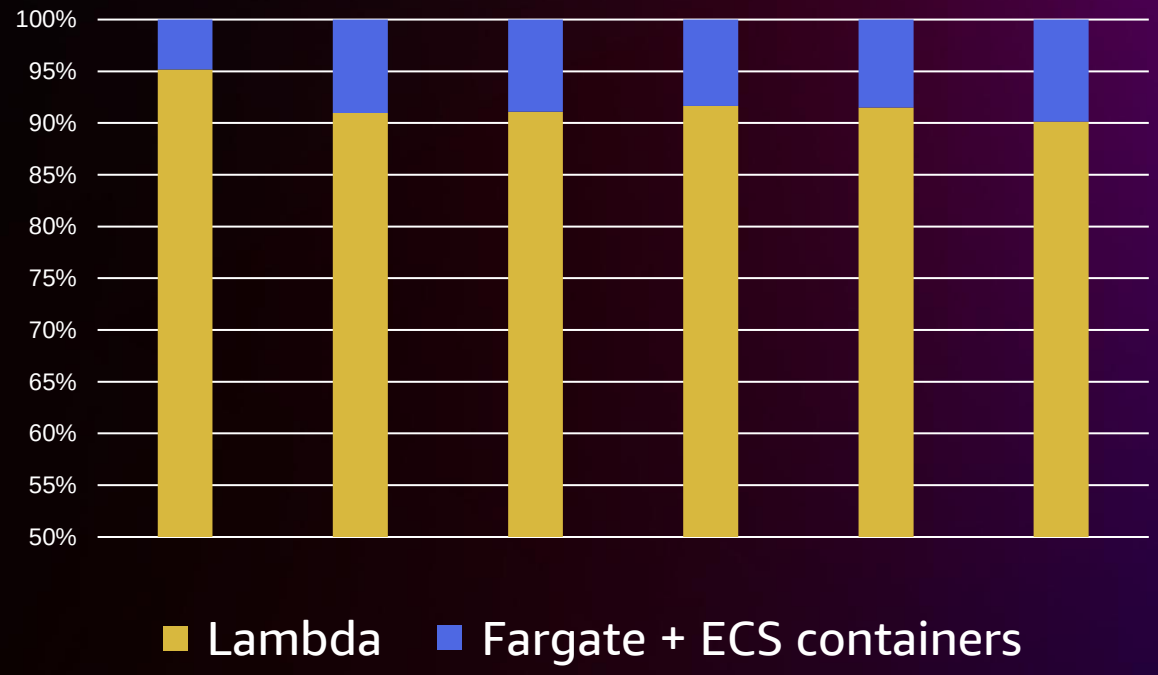



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# Adoption insights

## Average type of app workloads

- With ~90% of workloads deployed, Lambda is by far most popular serverless compute in AWS
- In side-by-side usage, containers are gaining importance




Source: Dynatrace Serverless Report 2022

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# AWS Lambda

Run your code in response to events, fully automatically managed by AWS

**Easy to use**

Integrate with over 200 AWS services

**Easy to deploy**

Run your code from Amazon S3 or via container

**Easy to operate**

Fine-grained control over performance

Integrated security model

**Cost effective**

Only pay for what you use

Up to 34% better price performance with AWS Graviton2

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# Serverless observability is not easy

- Exponential more services/apps in highly dynamic environments
- More logs, traces, and metrics from many tools and sources
- Still need to support hybrid/on-premises architectures




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# How Dynatrace is accelerating your serverless journey

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# Different needs but one goal: Keeping the customer happy













**Desire: Accelerate innovation and move from reactive to proactive**

- Taking care of the SLOs
- Holistic view end-to-end across all services
- High availability

- Ensure quick and frequent delivery of application features
- Providing a tested, reliable and scalable systems
- Accelerate development teams by automating as much as possible
- Minimize production costs

- Identifying patterns to provide elegant solutions to complex problems
- Establishing best practices for the cloud across the organization
- Overseeing governance

- Exceptional end-user experience
- Optimize business outcome
- High automation and scalability
- Visibility on the application's health

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# All data in context



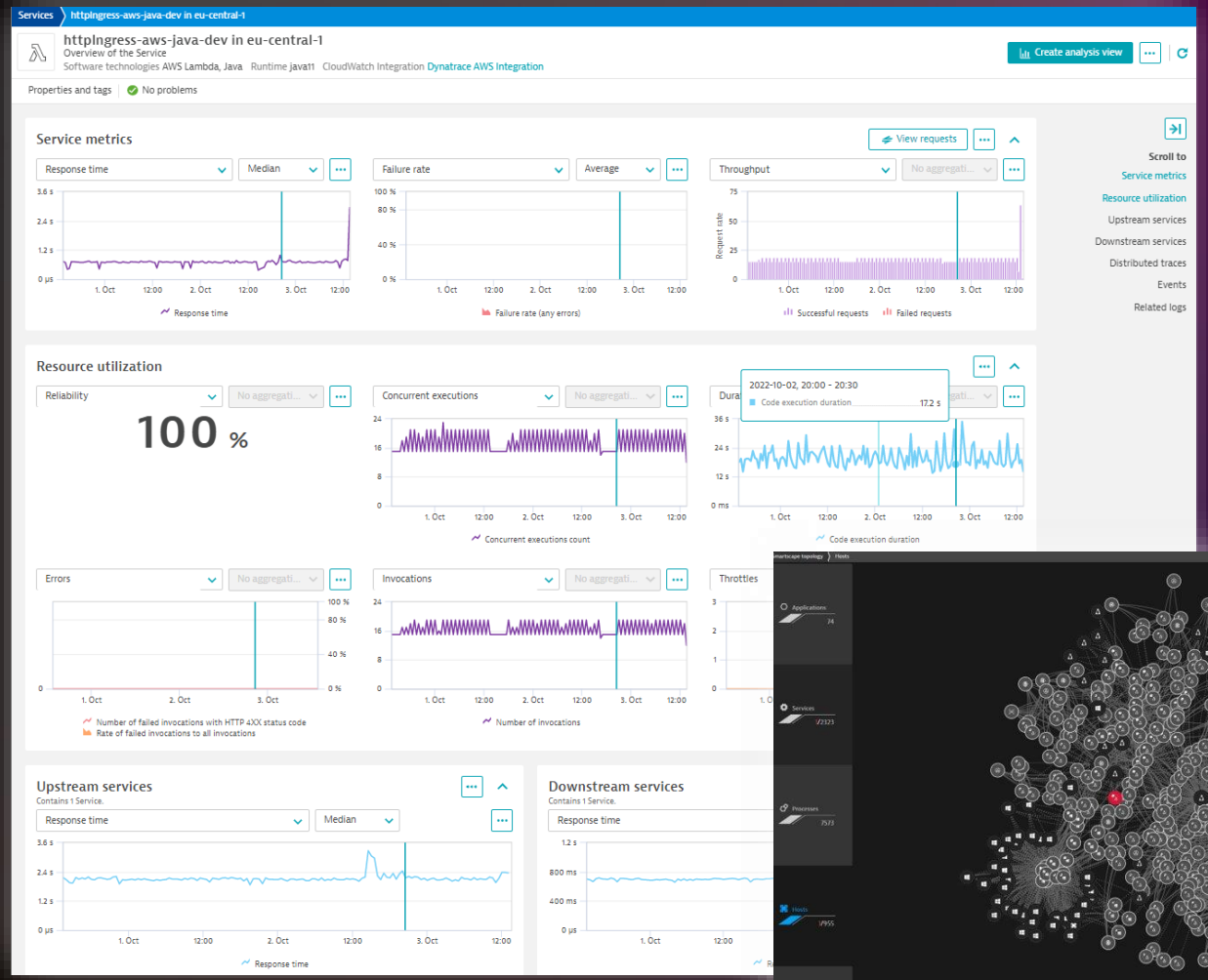

Metrics and metadata

+

Application and resource logs

+

Distributed traces






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# Open platform, broadest out-of-the-box support, and easy extensibility




including

Dynatrace Layer for AWS Lambda

Seemless integration of AWS Distribution for OpenTelemetry

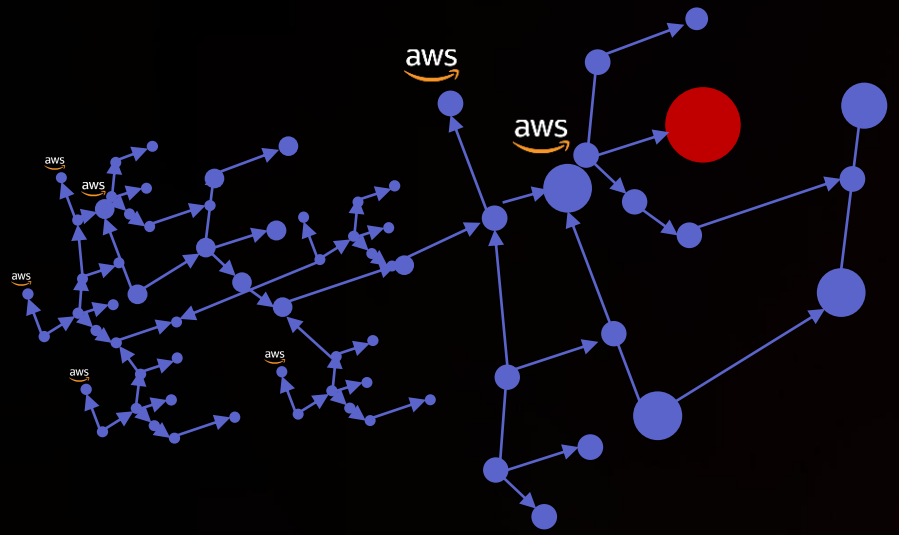
Dynatrace Integration for CloudWatch

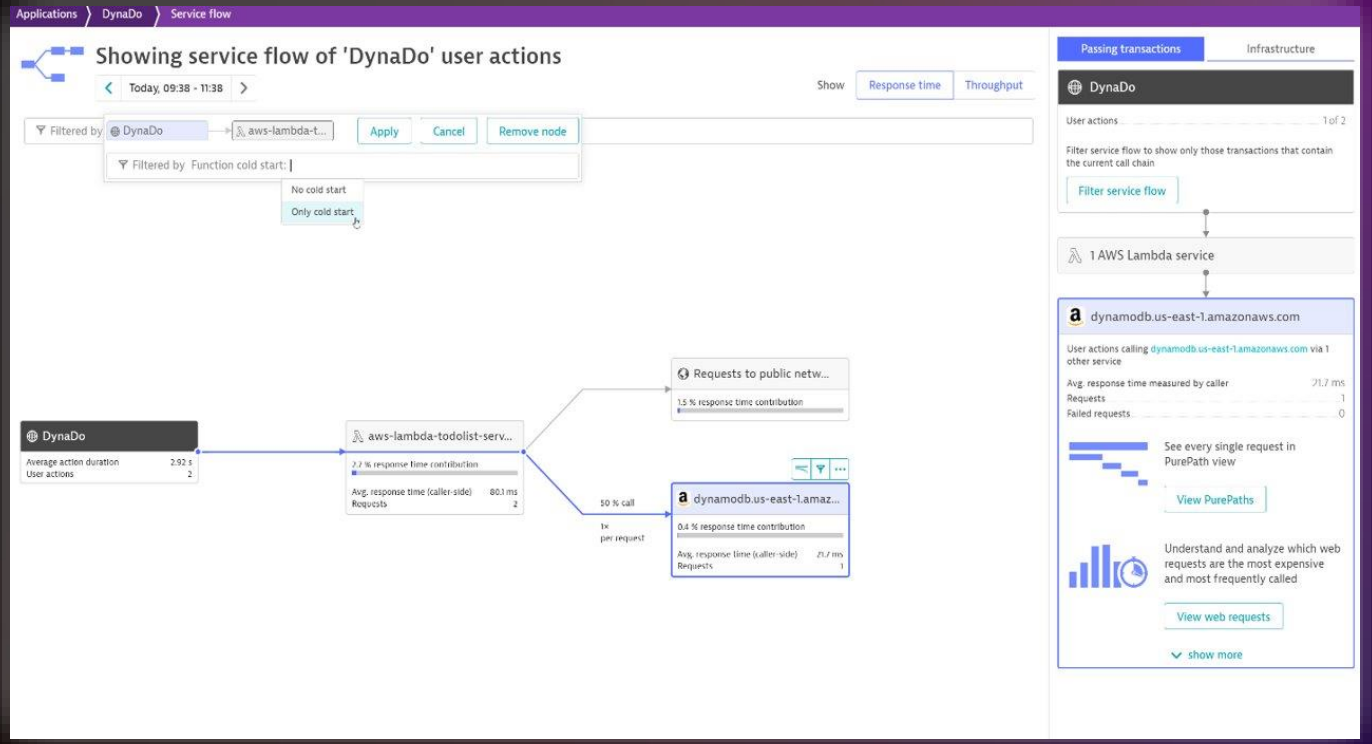
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# End-to-end visibility across the entire stack




Understand dependencies and root cause in distributed applications



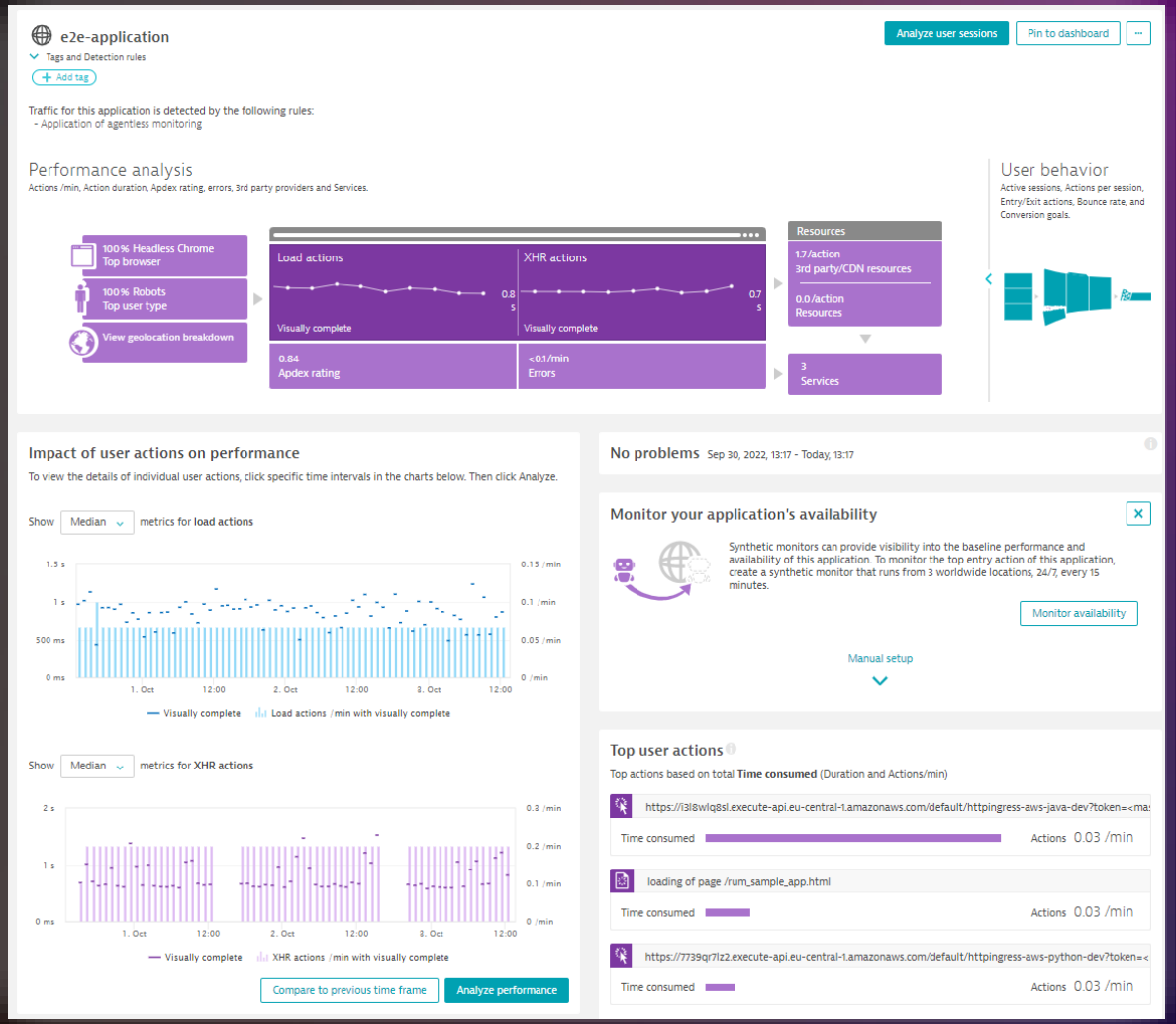




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# Improving customer satisfaction




- Optimize website performance
- Delight customers with the best user experience
- Meet or exceed business objectives
- Proactively resolve issues before they impact users
- Ensure data privacy

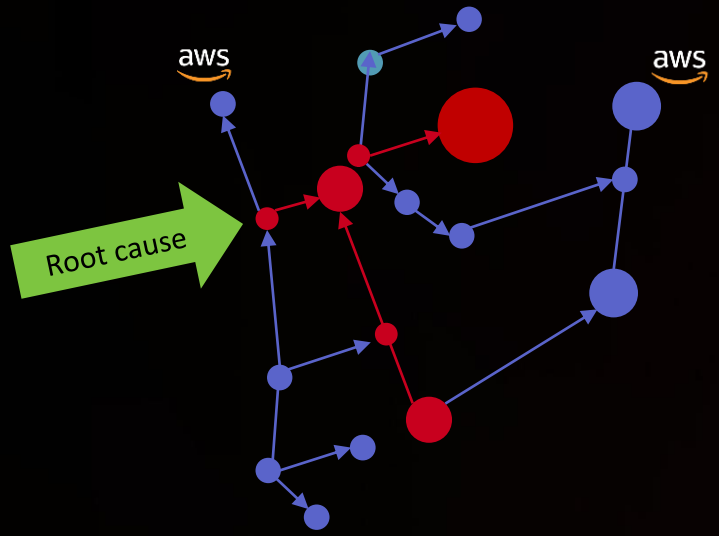


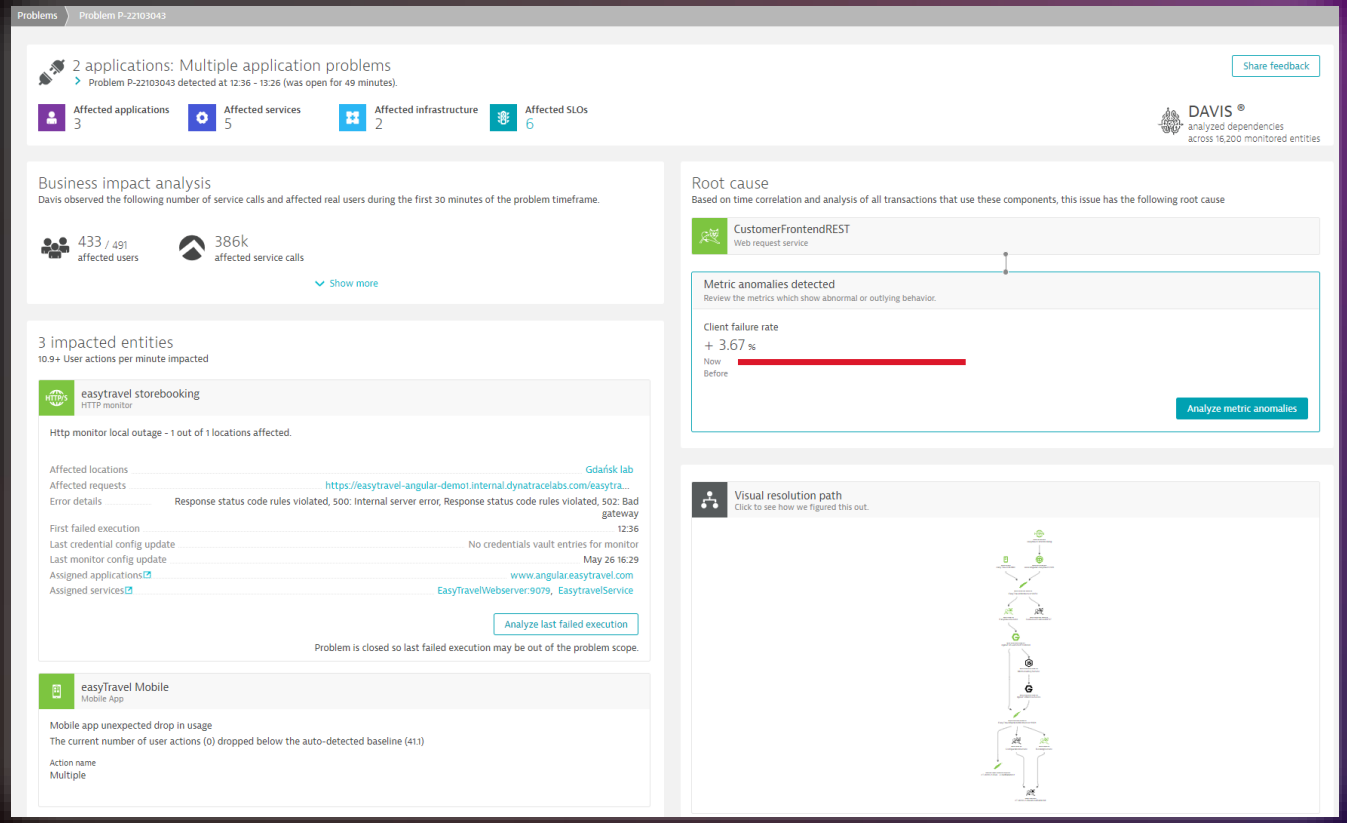

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# Answers to your problems with Davis AI




- Automatic baselining & alerting
- Combine alerts into a problem context to reduce noise
- Automatic root-cause analysis




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# Additional resources



Dynatrace Free Trial
Get started today via AWS Marketplace



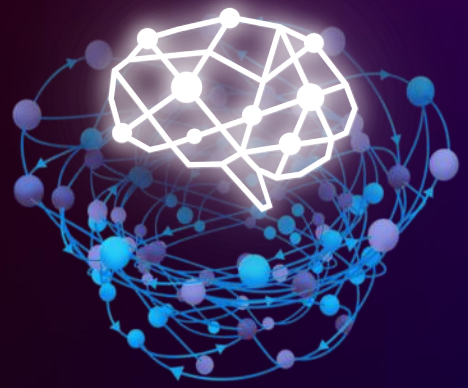
Monitor AWS Lambda with Dynatrace
How-To add observability to your AWS Lambda Functions

**Visit booth #3223 at the Sands Vendor Expo**

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# Key takeaways

- Moving from reactive to pro-active
- Automation with AIOps is key
- Single pane of glass to drive collaboration



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# Thank you!

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