

Observability v éře digitální komplexity



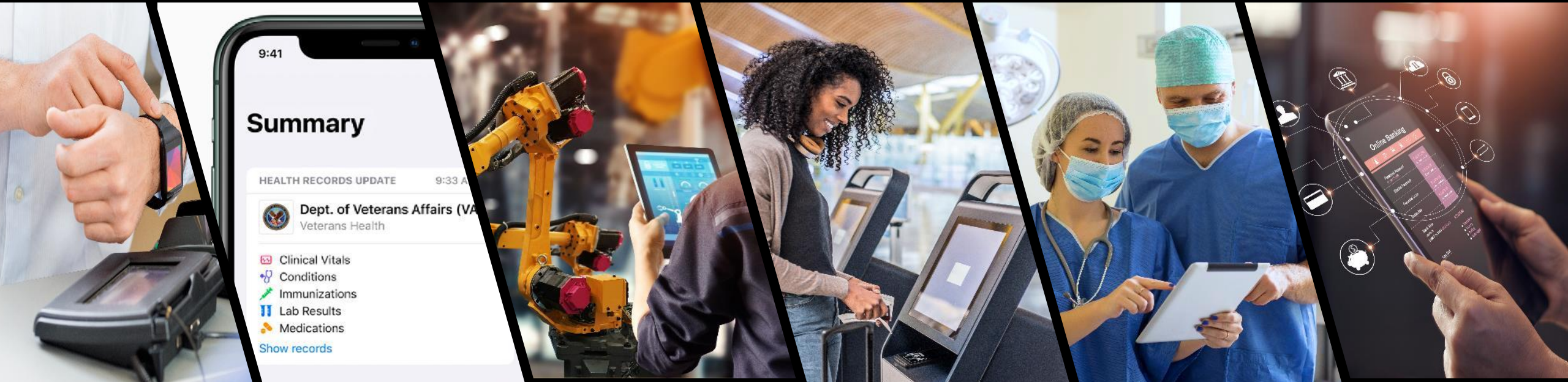
Július Loman,
Dynatrace Ambassador
Alanata



Roman Roštár,
Business Development
Alanata

DIGITÁLNA TRANSFORMÁCIA

Alanata



RETAIL

GOVERNMENT

MANUFACTURING

TRAVEL

HEALTHCARE

FINANCE

Digitalizácia transformuje biznis v každom odvetví



Výzvy, ktorým čelia organizácie



Digitálna skúsenosť musí byť bezchybná – aj malé zlyhanie znamená riziko straty zákazníka



Nové služby musia byť dodávané čoraz rýchlejšie, aby držali krok s konkurenciou



Nástup AI – ešte vyššie tempo, ale aj vyššia komplexita a menšia viditeľnosť do systémov

PREVÁDZKOVÁŤ APLIKÁCIE JE NÁROČNÉ...

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1

Aplikácie sú viac dynamické a kontajnerizované,
čo vytvára komplexnosť a škálu ďaleko väčšiu ako poznáme z minulosti.

2

Zväčšujúci sa objem, typy ako aj rýchlosť tvorby dát
narástli za hranicu, kedy nestačí dáta zobrazíť na dashboarde.

3

Zvyšujúca sa frekvencia zmien
rúca staré prístupy k monitoringu, change a release managementu,
bezpečnosti

4

Aplikácie sú dôležitejšie ako kedykoľvek predtým
a tak ako sa biznis stáva viac digitálny, organizácie a zákazníci sa
stávajú závislými na tom, aby aplikácie fungovali bezchybne.

5

Zdroje ostávajú limitované
aj keď zvyšujúca sa komplexnosť a ladenie berú stále viac času
potrebného na inovácie.

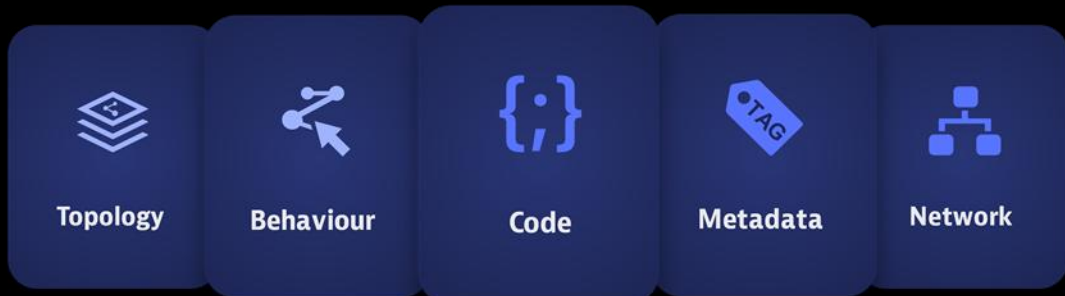


ČO JE OBSERVABILITY?

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+



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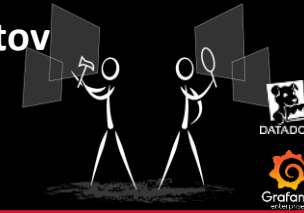
Metriky, logy, trace dáta nepostačujú

Kompletný ucelený pohľad

Potrebná previazanosť – vzťahy aj metadáta
Informácie z aplikačného kódu
Metriky a udalosti z infraštruktúry, siete
Cloud Native platformy
Rozšíriteľnosť a automatizácia

5. Tvorba dashboardov a reportov

Výstupy a prezentácia dát pre vývoj,
Prevádzku či biznis podľa potrieb



1. Zozbieranie dát

Skriptovanie, špecifické nástroje pre rôzne domény, konfigurovanie



2. Uloženie dát

Často samotné dáta rôzneho typu bez širšieho kontextu. Kontext dát nástroje riešia rôzne.



3. Organizácia dát

Dopĺňanie vzťahov a závislostí, definovanie normálnych a problémových stavov



4. Potlačenie šumu

Kontinuálne nastavovať, korelovať, filtrovať alerty.



6. Škálovanie riešenia

Aktualizácie nástrojov, nové aplikácie, zmeny, nové technológie, zvýšenie objemu dát, nové vzťahy, externé závislosti, ...

Vyžaduje značné úsilie a skúsenosti na vybudovanie a udržiavanie riešenia – uberá z Vášho času. Problémové škálovanie a udržiavanie. Vyťažuje kľúčových špecialistov.

DYNATRACE. FULL-STACK OBSERVABILITY

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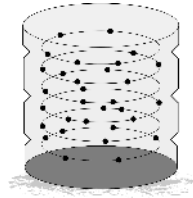
5. Dashboards a analytické obrazovky

Vizualizácie dát presne podľa potrieb jednotlivých oblastí.



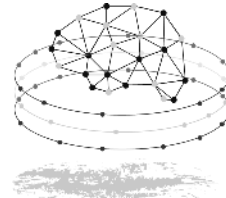
1. Automaticky zbierať dáta

Bez skriptovania, konfigurácie, ďalších nástrojov. Kontinuálne a automaticky



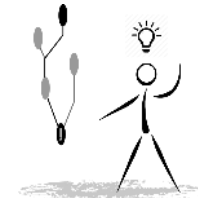
2. Vstavané dátové úložisko pre typy dát

Podpora rôznych typov dát, veľkých objemov a rýchlostí vkladania. Bez nutnosti ďalších zdrojov.



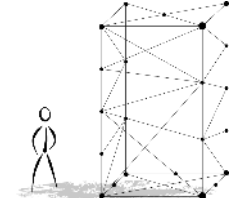
3. Automatická organizácia dát

Vzťahy v prostredí sú nepretržite sledované a aktualizované. Dáta sú vkladané už s kontextom.



4. Automatické potlačenie šumu

Iba problémy vyžadujúce pozornosť a vždy s vysvetlením príčiny a dopadu.



6. Škálované

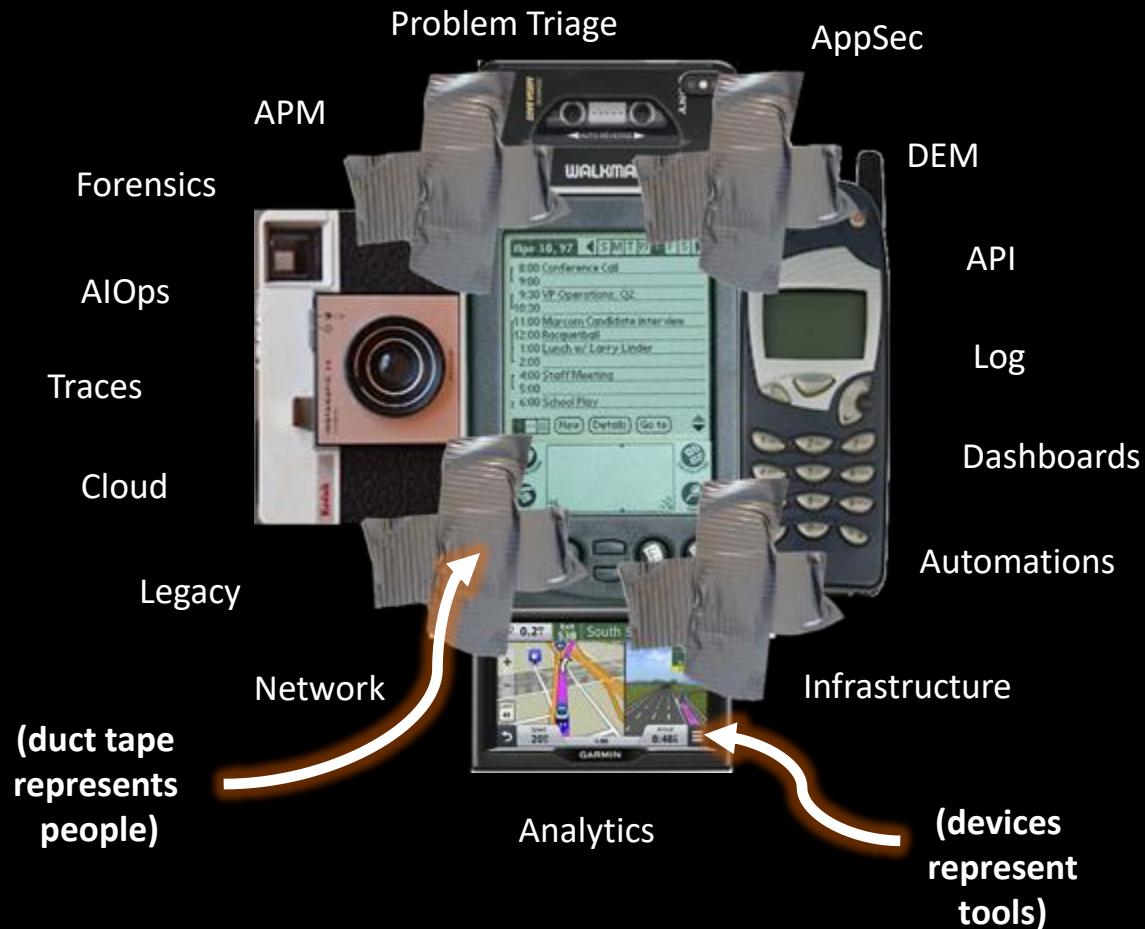
Jednoducho škálovateľné pre ľubovoľne veľké prostredia, aplikácie, masívne objemy dát.

Minimálne úsilie na prevádzku a údržbu riešenia. Uvoľní čas vašim expertom. Ľubovoľne škálovateľné.

ROZDIELNY PRÍSTUP

DIY / Multi-Tool approach

Siloed, Disconnected, Blind Spots, Ineffective and Costly



Automated Platform Approach

Unified, Collaborative, Cost Effective, Efficient



Extend coverage with automated discovery and configuration

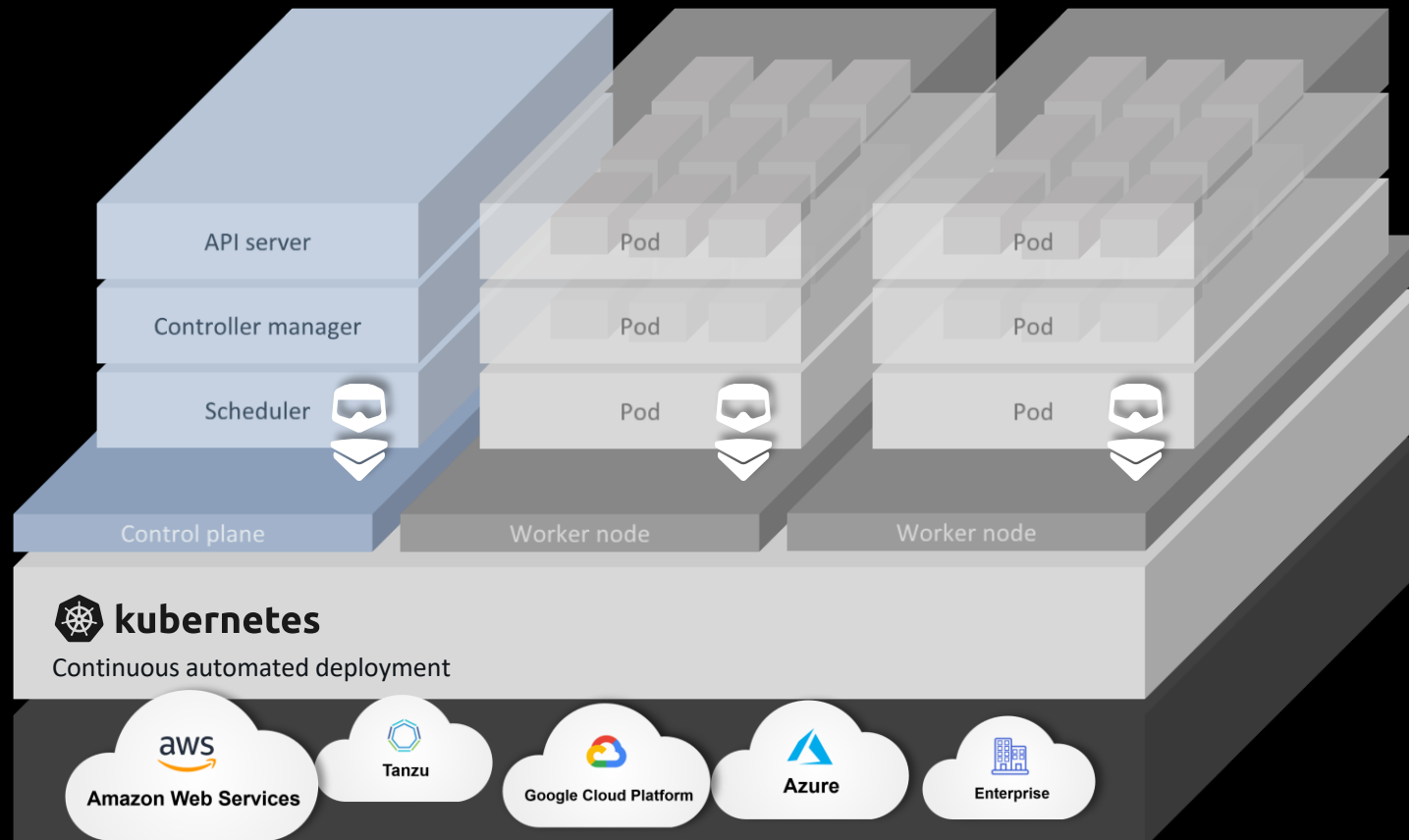
Enhance collaboration with AIOps-delivered Answers and root cause identification

Minimize disruptions with Automated Resolutions

Deliver healthy digital experiences and happy customers with End-to-End Observability and Security

1. OneAgent

Industry's fastest mean time to observability with zero configuration.
OneAgent continuously auto-adapts to your ever-changing environment.
Say goodbye to changing code, container images, scripts or deployments.

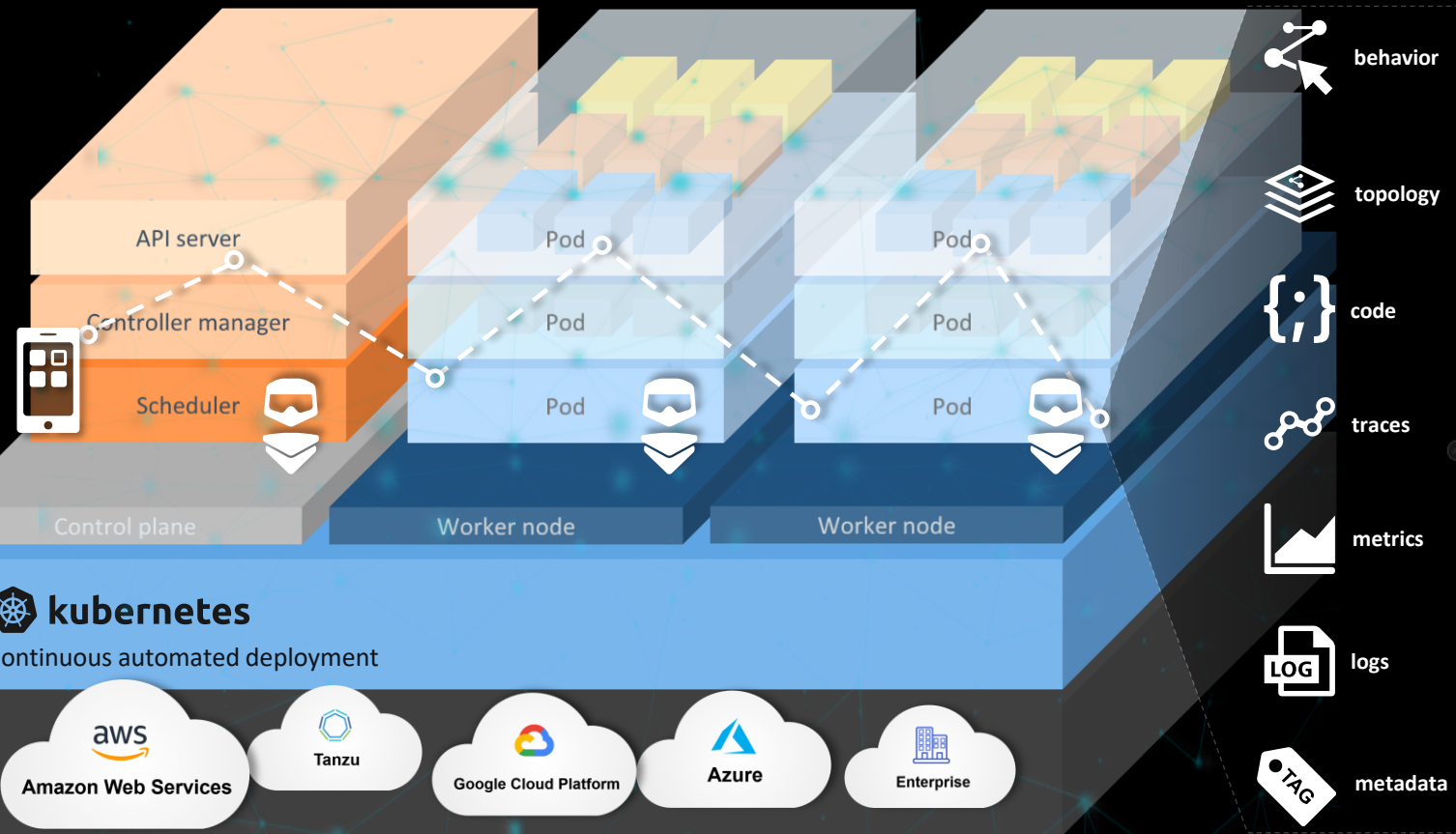


AKO TO FUNGUJE

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2. PurePath

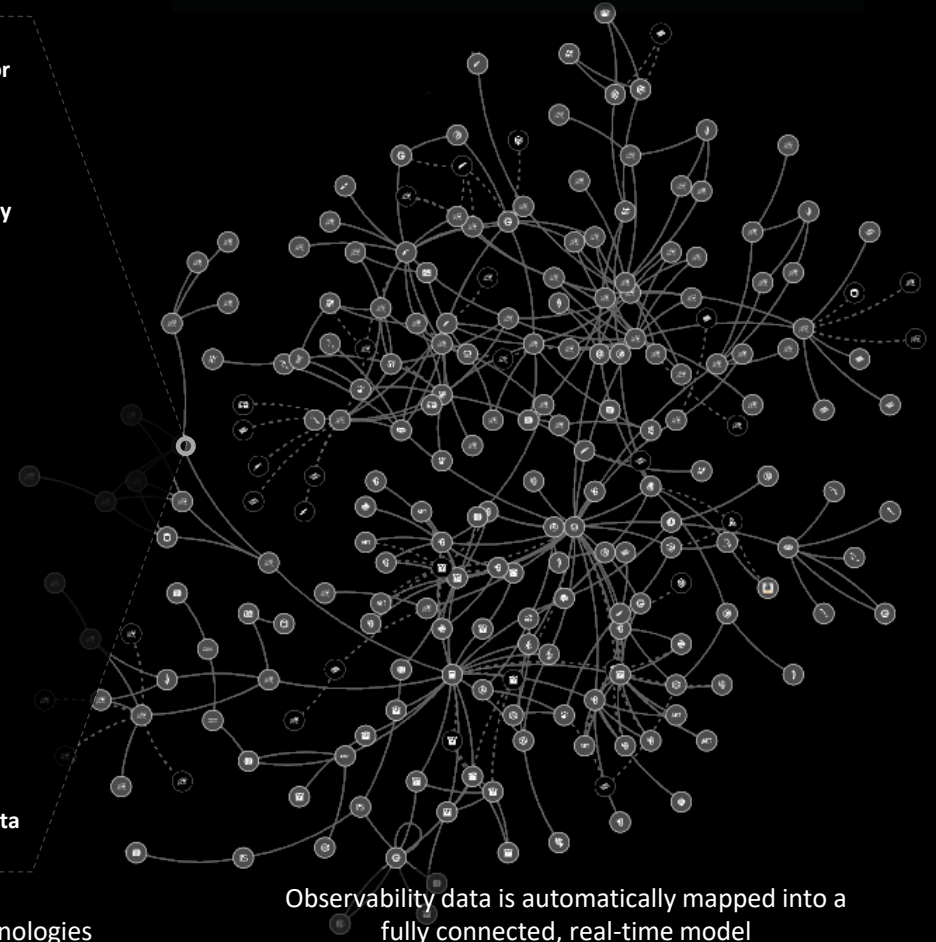
Automatic, end-to-end, deep code-level tracing at scale.



750+ supported technologies

3. SmartScape

Auto-discovered topology and dependency mapping in real-time.

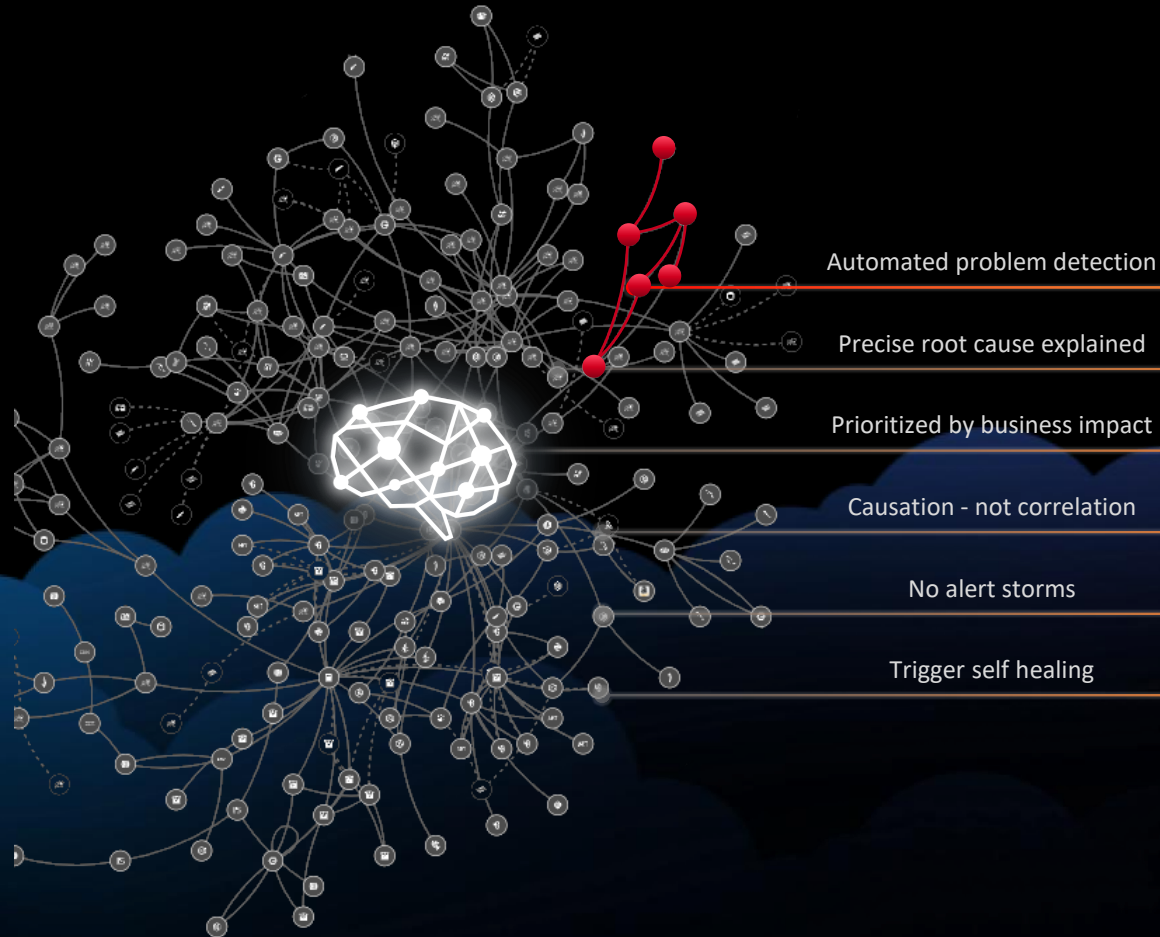


Observability data is automatically mapped into a fully connected, real-time model

AKO TO FUNGUJE

4. Dynatrace Intelligence

Dynatrace continuously observes, learns and auto-adapts to changes in real-time to detect problems automatically (even the ones you never thought of).



Automated problem detection

Precise root cause explained

Prioritized by business impact

Causation - not correlation

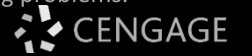
No alert storms

Trigger self healing

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“Dynatrace’s AI-driven answers are helping the business to remediate problems quicker, meaning we’re able to spend more time innovating and less time solving problems.”

Anish Patel, Principal Systems Engineer



www.easytravel.com: User action duration degradation
Problem 694 detected at 02:03 - 02:29 (was open for 26 minutes). This problem affects real users.

Affected applications: 1 | Affected services: 10 | Affected infrastructure: 2

DAVIS™ analyzed 2,942,317,092 dependencies

Business impact analysis
An analysis of all affected service calls and impacted real users during the first 36 minutes of the problem shows the following potential impact.

276 Impacted users (show first 100) | 4.33mil Affected service calls | Show more

1 impacted application
73.6 User actions per minute impacted

www.easytravel.com (Web application)
User action duration degradation
The current response time (4.49 s) exceeds the auto-detected baseline (1.18 s) by 279 %

Affected user actions: 73.6 /min	User action: 2 User actions
Browser: All	Geolocation: All OS: All

Root cause
Based on time correlation and analysis of all transactions that use these components, this issue has the following root cause

- CheckDestination (Custom service)
- Deployment (Deployment change) Today, 01:57 - 02:03
- 2 Response time degradations (Service CheckDestination slow down) Today, 01:58 - 02:18

Events on: Service CheckDestination
Analyze code level, database calls, and outgoing requests. | Analyze response time degradation

Metric anomalies detected
Review the metrics which show abnormal or outlying behavior.

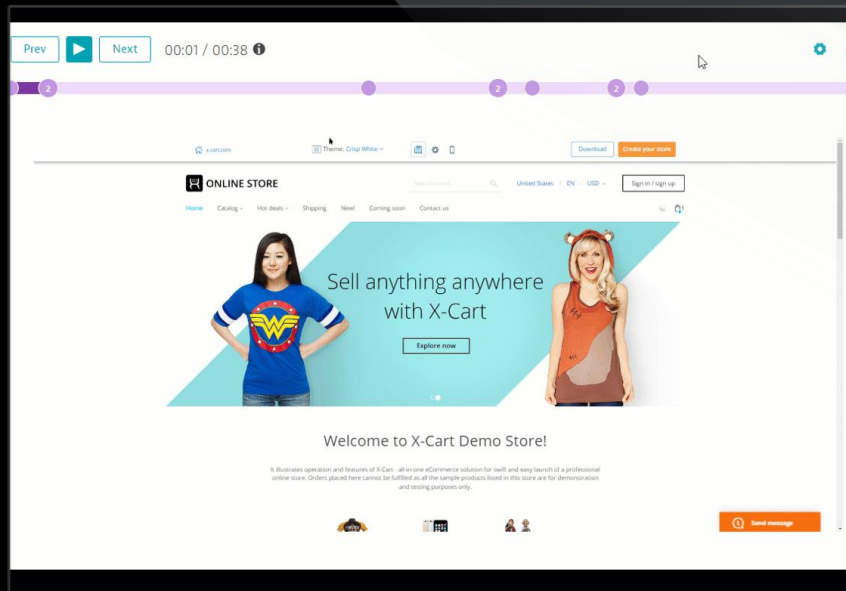
Visual resolution path
Click to see how we figured this out.

Comments: No comments posted | Add comment

DIGITÁLNY BIZNIS

Alanata

Je potrebné doplnenie observability aj do biznisových interakcií používateľov. Vedieť ako používajú aplikácie, získať plnenie biznisových cieľov KPI v reálnom čase, zefektívniť kolaboráciu medzi IT a biznisom. Pomôže to dosahovať lepšie výsledky digitálnych služieb poskytovaných cez elektronické kanály a zlepšiť používateľskú skúsenosť zákazníkov.



! Rage clicks detected

Adobeid: 5398762..

Timefromlastvisit: 11.2

viewname: page.autopay..

producttype: coffemug

Addressstype: residential

pagetype: PDP

cartvalue: \$14.50

loyaltystatus: Gold

pagename: autopay.checkout

Successful conversion



FLEXIBILNÉ MOŽNOSTI NASADENIA

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Your cloud

Dynatrace Managed (on Premise)

Dynatrace cloud

Your apps, services, and infrastructure in your hybrid cloud

OneAgent automatically and continuously discovers, instruments, and observes

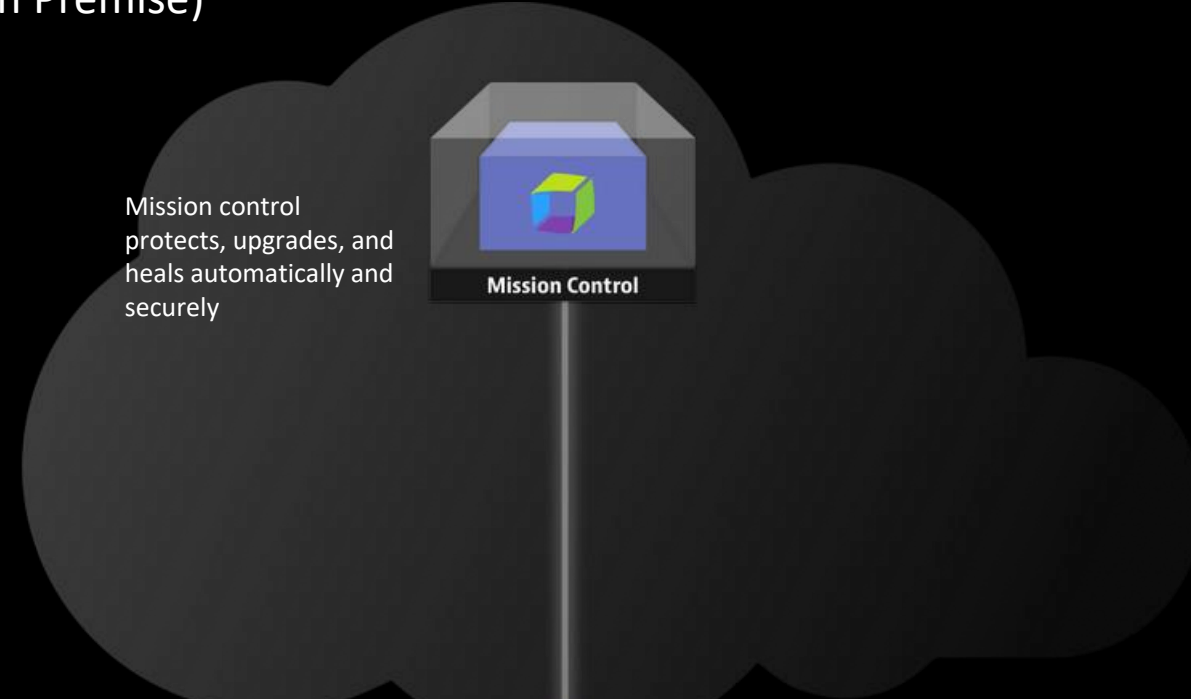
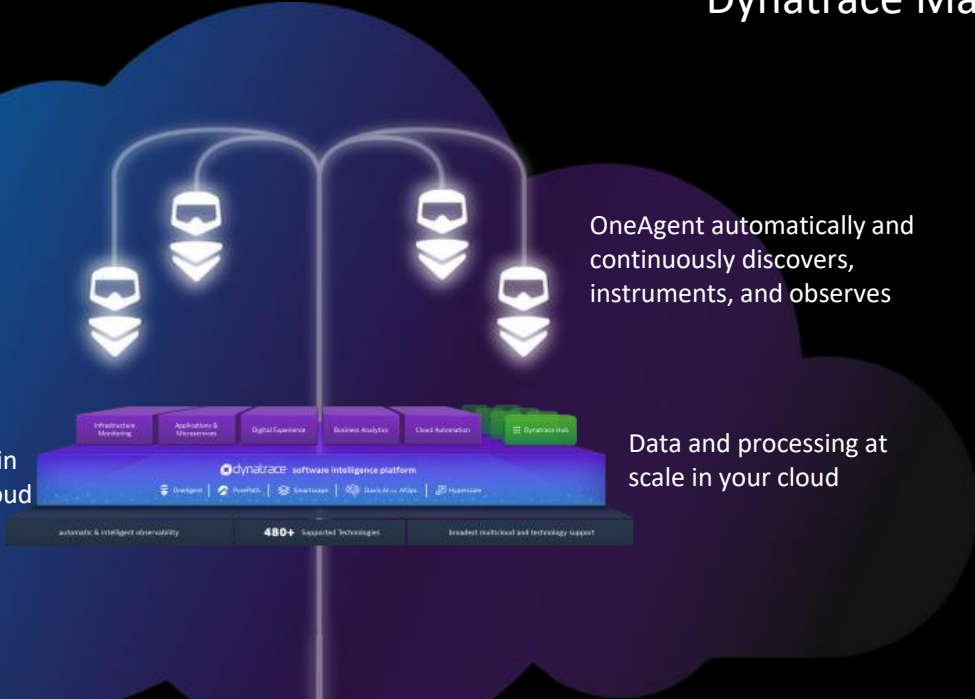
Data and processing at scale in your cloud

Mission control protects, upgrades, and heals automatically and securely



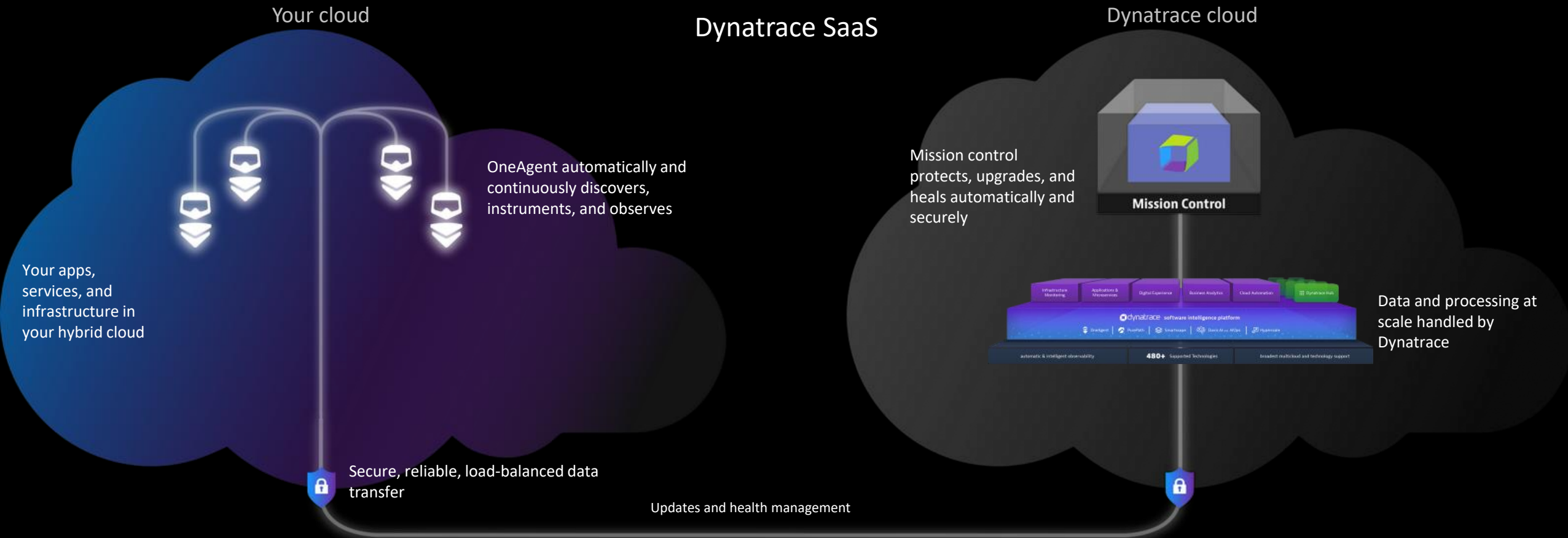
Secure, reliable, load-balanced data transfer

Updates and health management



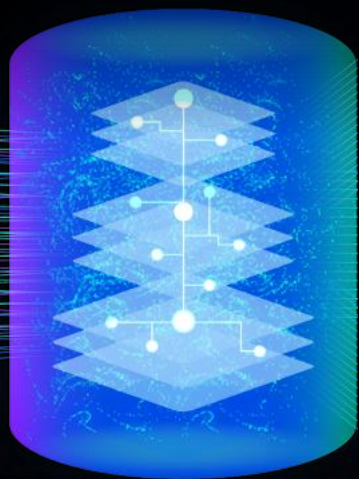
FLEXIBILNÉ MOŽNOSTI NASADENIA

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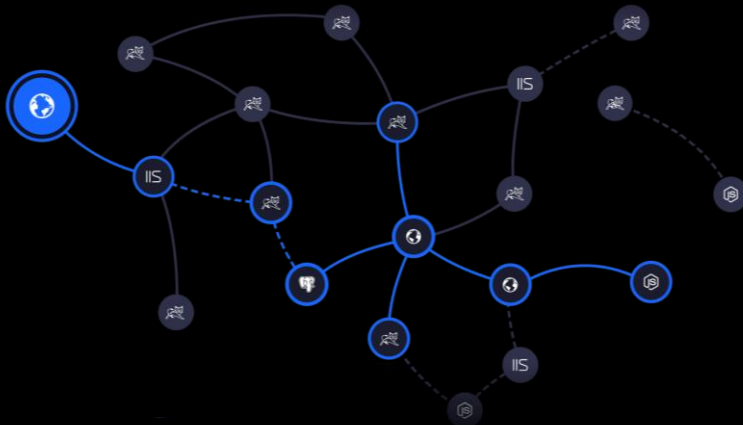




The Dynatrace difference



Unified data lakehouse
Grail

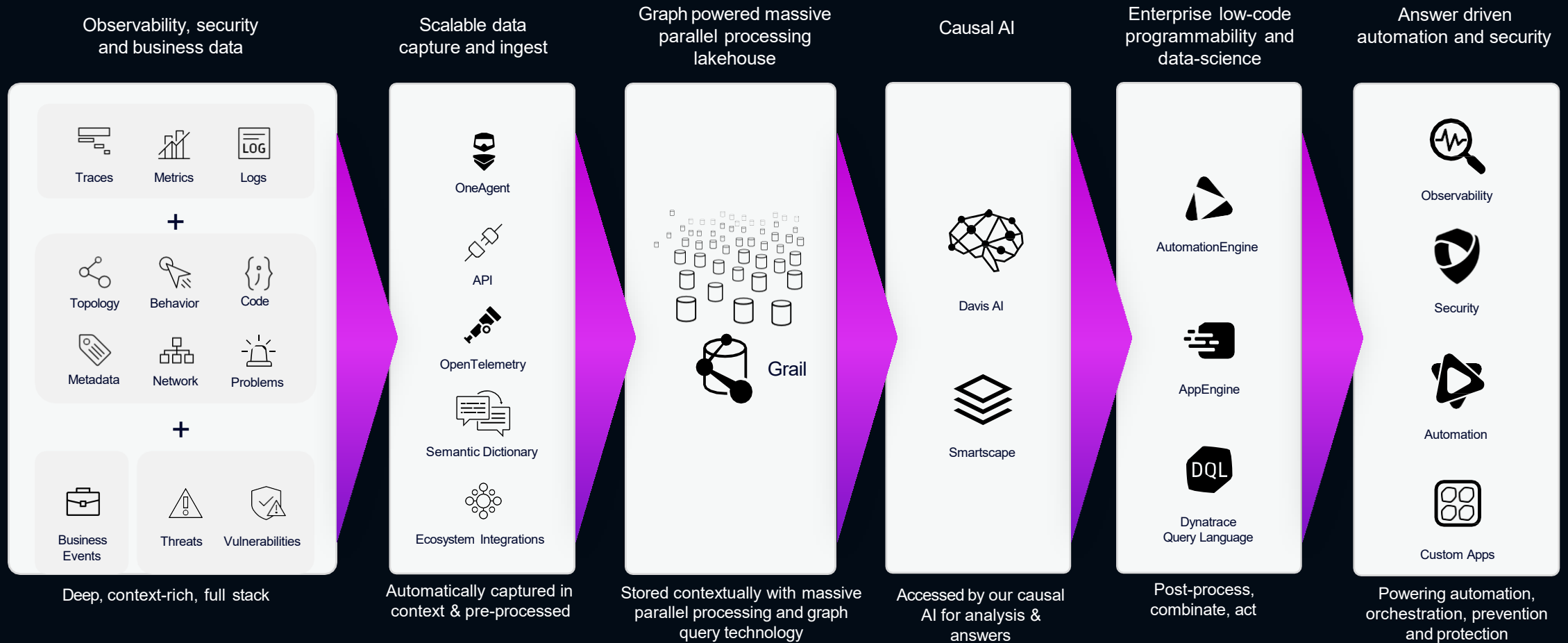


Real-time dependency graph
Smartscape



Agentic operations system
Dynatrace Intelligence

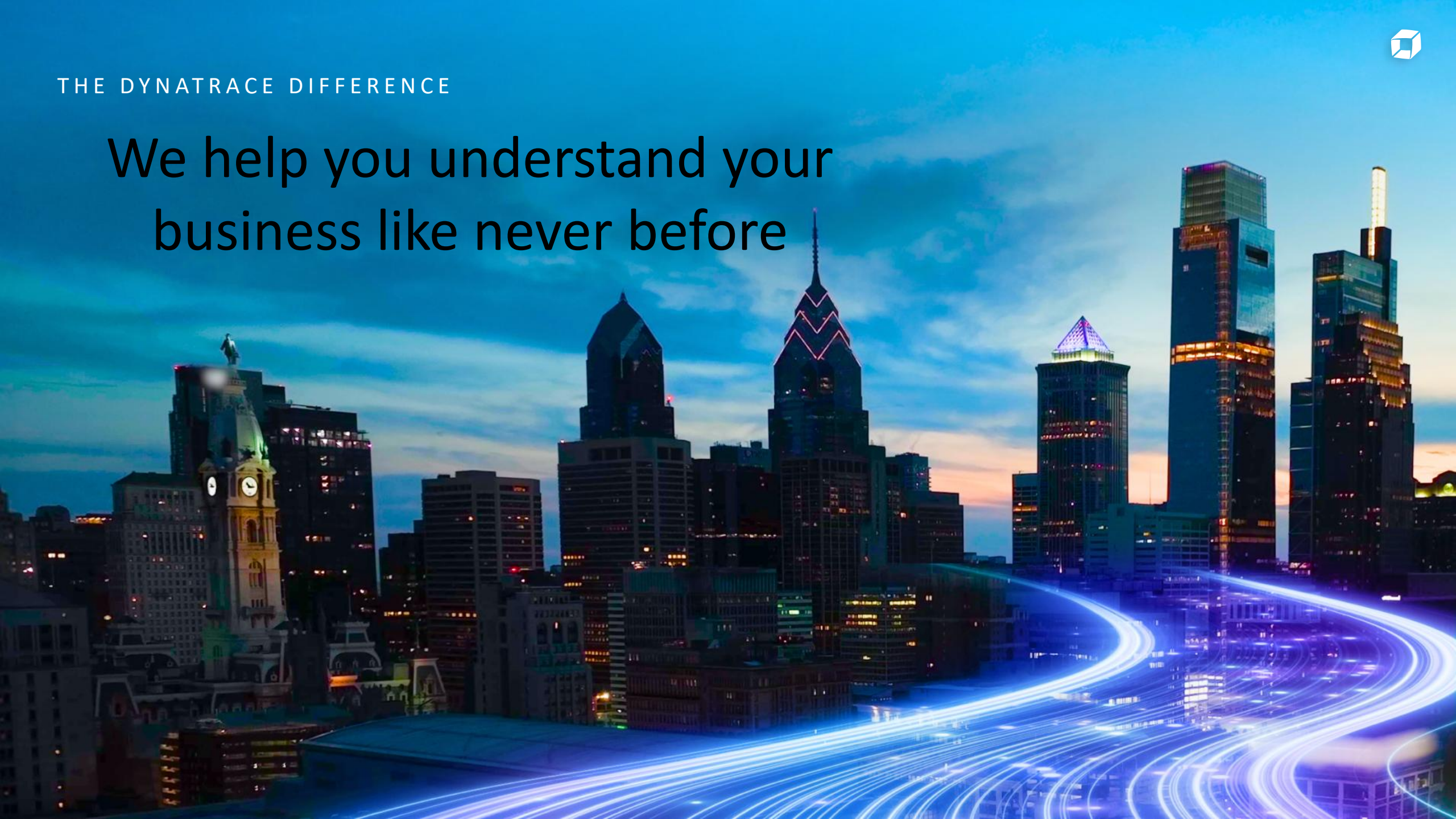
Dynatrace platform architecture





THE DYNATRACE DIFFERENCE

We help you understand your
business like never before



The value Dynatrace delivers



- **Be faster**
- **Be adaptive**



- **Be efficient**
- **Be sustainable**



- **Be in control**
- **Be compliant**

Infrastructure observability

The image displays a cloud observability dashboard with two main panels. The left panel shows a list of virtual machines, and the right panel details a 'User action duration degradation' incident.

Virtual machines

Name	Resource Type	CPU
aws_ag_xw_ik	Amazon EC2 Instance	
aws_core_node_group	Amazon EC2 Instance	
aws_core_node_group	Amazon EC2 Instance	
aws_I-0ed2ca48fee18c4f2	Amazon EC2 Instance	
aws_flomair-ag-tests	Amazon EC2 Instance	
aws_core_node_group	Amazon EC2 Instance	
aws_Activegate	Amazon EC2 Instance	
aws_fmiguel-ag	Amazon EC2 Instance	
aws_core_node_group	Amazon EC2 Instance	
aws_test-cloud-trail	Amazon EC2 Instance	
aws_bmrozinski-ag-ikl070...	Amazon EC2 Instance	
aws_dd-test-instance	Amazon EC2 Instance	
aws_I-0d6858b2927bf1be5	Amazon EC2 Instance	
aws_bmrozinski-asg	Amazon EC2 Instance	
aws_lp-ag	Amazon EC2 Instance	
aws_lhz-ag	Amazon EC2 Instance	
aws_neo4j	Amazon EC2 Instance	
aws_fmiguel-cloudsimulator	Amazon EC2 Instance	
aws_siwek20220620-test	Amazon EC2 Instance	
aws_core_node_group	Amazon EC2 Instance	
aws_payrollbackend-api	Amazon EC2 Instance	
aws_gorkowski-e2etests-d...	Amazon EC2 Instance	
aws_core_node_group	Amazon EC2 Instance	
aws_core_node_group	Amazon EC2 Instance	

User action duration degradation

Overview | Deployment | Events | Logs | Troubleshooting

Frontends: 1 | Services: 2 | Infrastructure: 2 | Synthetic monitors: - | Users: 82 | Sessions: 360 | Business flows: 2 | Events: 27

Impact

Frontends | Services | Infrastructure | Synthetic monitors | Environment

- EasyTrade** (Web application)
 - Slowdown: User action duration degradation

Root cause

- NET [eks-playground][easytrade] NotMiningBitcoin (Service: **Root cause**)
 - Slowdown: Response time degradation
 - Info: EasyTrade version change
- easytrade-broker-service (Kubernetes workload)
 - Info: Deployment spec change




Visual resolution path

EasyTrade - CALLS - eks-playground[environment] of NotMiningBitcoin - CALLS - eks-playground[environment] of BrokerService - CALLS - eks-playground[environment] of NotMiningBitcoin - CALLS - eks-playground[environment] of BrokerService - CALLS - eks-playground[environment] of TradeManagement

Automation and remediation

Workflow	Last execution	State
No workflow triggers found.		

Infrastructure observability

Feature	Value	Outcome
Unified Platform	Enable collaboration with a single source of truth	 Drive innovation
Cloud Discovery	Speed cloud adoption for faster transformation	 Optimize cost
Log Centralization	Reduce tool sprawl and simplify troubleshooting	
Forecast Capacity	Prevent overprovisioning and control spend	 Mitigate risk
Workflows	Eliminate downtime with automated fixes	
Smartscape	Map the environment in real time and detect exposures	

Application observability




The image displays three overlapping dashboards from an application observability platform. The top-left dashboard, titled "JavaScript error rate increase", shows a closed incident (P-25105785) that started on Oct 29, 2025, at 11:52 AM and lasted for 36 minutes. It provides a high-level overview with metrics for affected frontends (1), services (4), infrastructure (4), synthetic monitors, users (1.44K), SLOs (7), and events (39).

The top-right dashboard, "Distributed Tracing Explorer", shows a search for requests with the criteria "HTTP status" >= 500 AND "HTTP status" <= 599. It displays a table of 850 requests with columns for start time, endpoint, service, duration, request status, HTTP status, span source, process group, Kubernetes workload, namespace, and host. Several requests are highlighted as failures with a 500 status code.

The bottom dashboard provides a detailed view of a specific POST request. It includes a trace diagram showing the flow of the request through various services: /getquote, calculate-quote, oteldemo.CurrencyService/Convert, oteldemo.PaymentService/Charge, and /api/checkout. The trace shows a 500 error at the /api/checkout endpoint. Below the trace, there are 6 log records and 5 exceptions. The log records show a sequence of events: a charge request received, a failed feature flag check, successful conversions, and a call to GetCartAsync.

On the right side of the bottom dashboard, a "POST" details panel is visible, showing the endpoint, service (loadgenerator), duration (168.33 ms), and error status (500). It also lists core, networking, and HTTP attributes for the request.

Application observability

Feature	Value	Outcome
Full-stack OneAgent	Accelerate delivery with end-to-end visibility	 Drive innovation
OpenTelemetry Support	Ensure long-term flexibility with open standards	
Code Profiling	Reduce compute waste with code-level insights	 Optimize cost
Database Insights	Cut database costs and boost responsiveness	
Root Cause Analysis	Minimize outages with AI-driven analysis	 Mitigate risk
Vulnerability Detection	Prevent breaches with continuous checks	

Developer experience

Co-Pilot enabled Self-Service Dashboard for Technical Service Owners

This dashboard gives you a quick access to all relevant services, detected problems, critical exceptions, key availability and resiliency metrics as well as one-click access to relevant logs and traces to troubleshoot any issues!

TO START: Select the services you are interested in in the top-left Service drop down. ASK CoPilot via Open-With for Exceptions and Logs!

SERVICE HEALTH: Open Service, Analyzed Failed Spans or Analyze Service Failure

Analyze Service	Requests	Failure Rate	Latency_p50	Latency_p90	Latency_p99	Failed Spans	Service Failures
astroshop-payment	80	63.75%	2.08 ms	6.14 ms	7.48 ms	Analyze	Analyze
astroshop-payment	16,882	4.21%	1.11 ms	1.81 ms	7.67 ms	Analyze	Analyze

TRACES WITH EXCEPTIONS: Click on Endpoint


Time	Service	Endpoint	ExceptionClass	ExceptionMessage
10/26/2025, 12:00:17 PM	oteldemo.PaymentService	Charge	Error	[Sorry, we cannot process American Express or Visa
10/26/2025, 12:00:09 PM	oteldemo.PaymentService	Charge	Error	[Sorry, we cannot process American Express or Visa
10/26/2025, 11:59:49 AM	oteldemo.PaymentService	Charge	Error	[Sorry, we cannot process American Express or Visa
10/26/2025, 11:59:15 AM	oteldemo.PaymentService	Charge	Error	[Sorry, we cannot process American Express or Visa

LOGS WITH ERRORS: Use Open-With on

Time	Status	Content
10/26/2025, 6:20:28 AM	WARN	warn 1761459628321 17 payment-54469cbf9f-qbkxx payment {\"type\":\"Error\", \"message\": \"Sorry, we cannot process American Express credit cards. American Express are accepted Mastercard or American Express. Please use a different card type.\"} module.exports.chargeService.process.processTicks(node:internal/process_tick_callbacks:105:17) Object {chargeService: {/usr/src/app/index.js


The screenshot displays a development environment with the following components:

- Code Editor:** Shows the source code for `charge.js`. The code defines an asynchronous `charge` function that validates credit card information, checks for supported card types, and logs transaction details. A breakpoint is set at line 70.
- File Explorer:** Shows a directory structure for `opentelemetry-demo-928607a`, including folders like `github`, `dynatrace`, `internal`, `kubernetes`, `pb`, `src`, `accounting`, `ad`, `cart`, `checkout`, `currency`, `dapr`, `email`, `flagd`, `flagd-ui`, `fraud-detection`, `frontend`, `frontend-proxy`, `grafana`, `image-provider`, `kafka`, `load-generator`, `otel-collector`, and `payment`.
- Debugger:** Shows a "Snapshots" window with a list of 51 snapshots. The selected snapshot is a "Hit on /usr/src/app/charge.js:71".
- Debugger Variables:** Shows the state of variables at the breakpoint:
 - `baggage = null`
 - `cardNiceType = "American Express"`
 - `cardType = "american-express"`
 - `cardValid = true`
 - `cardValidation = {card: Object, isPotential: true, isValid: true}`
 - `currencyCode = null`

A large, stylized quotation mark icon in a gradient of purple and blue, positioned to the left of the main text.A vertical purple bar that serves as a decorative element, separating the quotation mark from the text.

66% of developers struggle
with AI-generated code that's
'almost right, but not quite.'

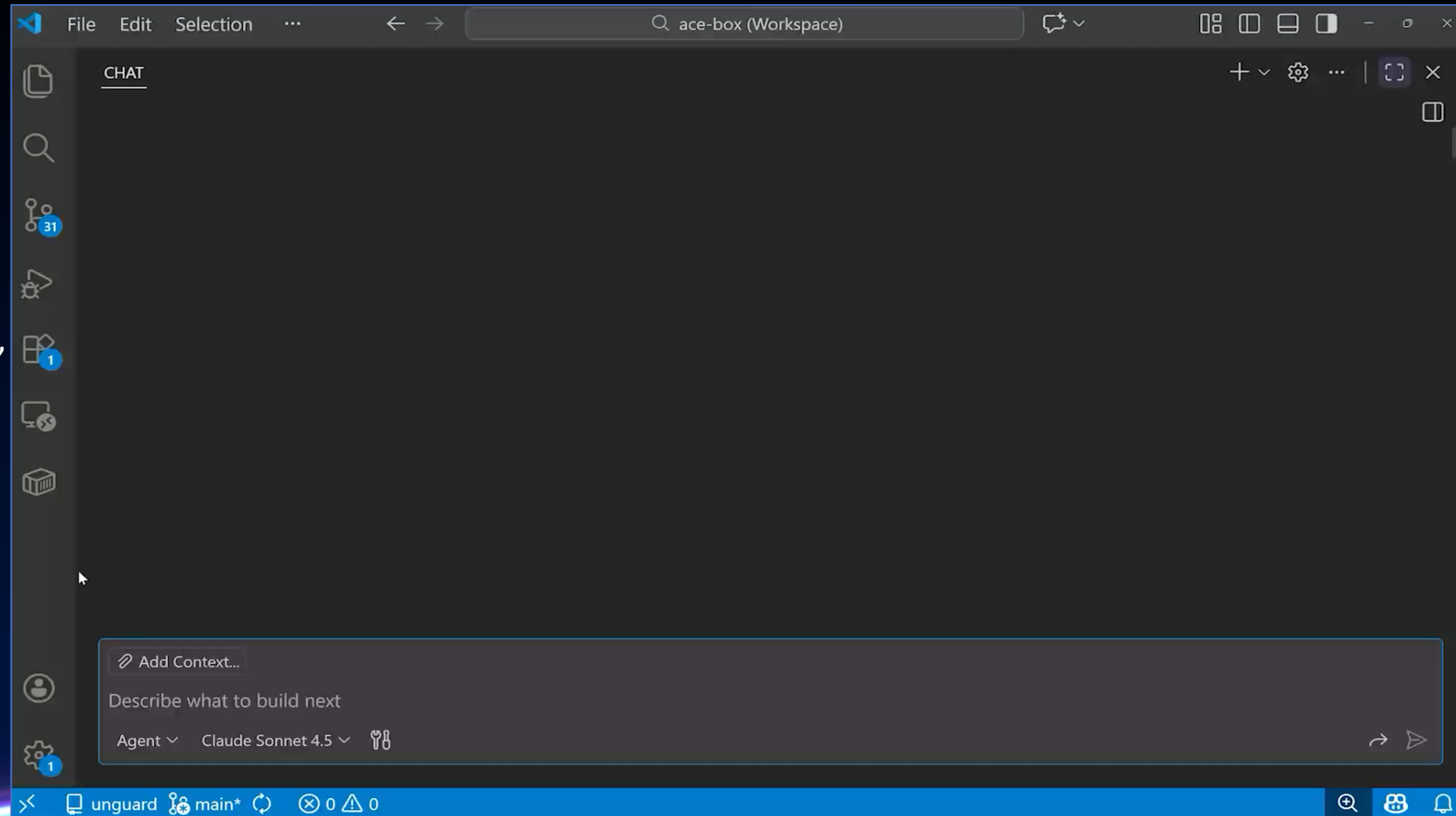
STACK OVERFLOW'S 2025 DEVELOPER SURVEY

The background features a dark blue and purple gradient with abstract, glowing digital patterns resembling data waves or particle trails at the bottom.




Add Dynatrace to your AI development workflow

“Use Dynatrace to identify whether I have the N+1 Query Problem”

“Create the before and after comparison chart in Dynatrace”



Developer experience

Feature	Value	Outcome
CI/CD Observability	Full pipeline visibility to accelerate reliable releases	 Drive innovation
Developer Workflow Integration	Embed observability into workflows for faster releases	
Automatic Instrumentation	Zero-code setup to cut complexity and save time	 Optimize cost
Green Code Analysis	Reduce energy waste and cut infrastructure costs	
Live Debugger	Resolve issues faster with zero impact	 Mitigate risk
Quality Gates	Enforce code quality and security to prevent risky releases	

Customer experience

The image displays the Dynatrace Performance Explorer interface, divided into three main sections:

- Left Panel (Saved filter sets):** Shows a list of saved filter sets under "My Frontends" and "Rob's Frontends". Under "Quick filters", "Web" is selected. The "Platform" section shows "All" selected. The "Tags" section includes "Account management" and "Spine Admin".
- Middle Panel (Error Group Overview):** Displays an "Error Group Overview" for the error group "404: dynatracelabs.com/lang/en.json". It lists various error messages and their counts, such as "Error: ResizeObserver loop completed with undelivered notifications" (497) and "Error: '0': Trying to execute an empty query for getPreviousErrorCountsQuery" (32).
- Right Panel (Error details):** Provides a detailed view of the "404: dynatracelabs.com/lang/en.json" error. It includes an "Error overview" with a bar chart showing the total count (589) and affected users (568) over time. Below this, a "Failed request" section shows the message "404: dynatracelabs.com/lang/en.json" and the status "404".

Customer experience

Feature	Value	Outcome
Real User Monitoring (RUM)	Improve engagement with real user insights	 Drive innovation
Session Replay	Fix UX friction faster to reduce abandonment	
Core Web Vitals	Improve performance and SEO rankings	 Optimize cost
Conversion Analysis	Stop revenue leaks and boost conversions	
Synthetic Monitoring	Prevent outages before they impact customers	 Mitigate risk
Error & Crash Analytics	Resolve failures fast to protect trust	



UNIFIED PLATFORM

Real-time business data in context of IT



Real-time insight

Make data-driven decisions quickly



No-code access to business grade data

No sampling, no aggregations, no extrapolations



IT topology context

Tie business impact to underlying IT systems



Direct access to AI and automation

Intelligently take action on business data





Powered by business events



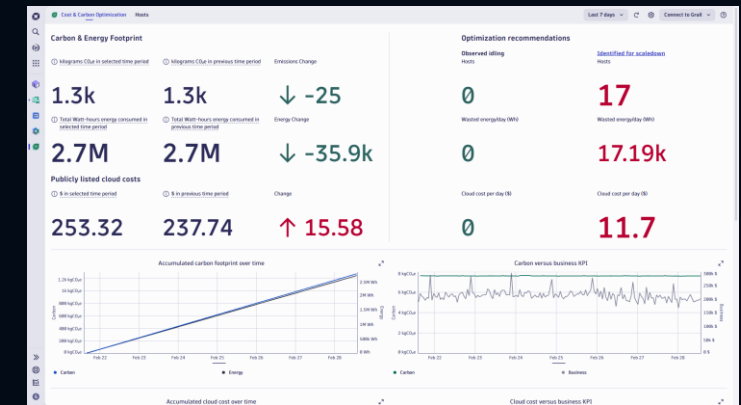
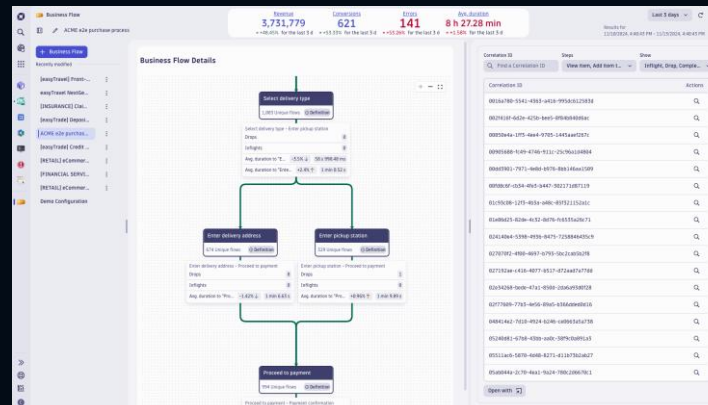
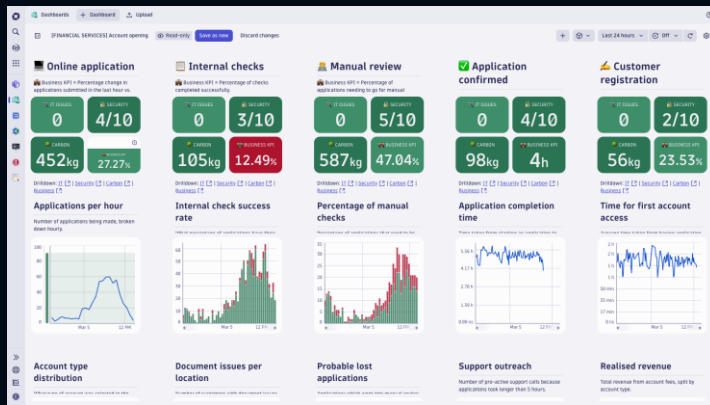


Unlock use cases in your business areas

Drive real-time business decisions with IT context

Track and optimize business processes

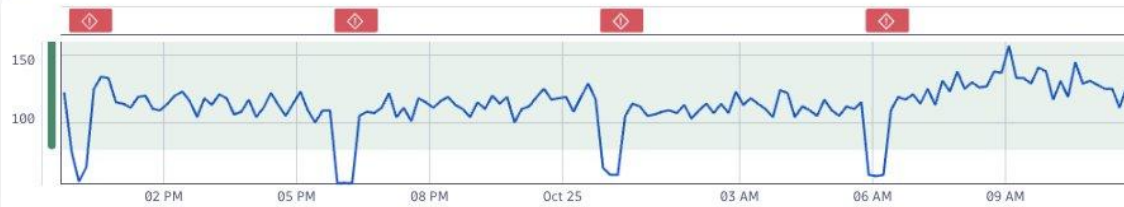
Accelerate sustainability and reduce costs



Automate tasks and remediate issues

Business observability

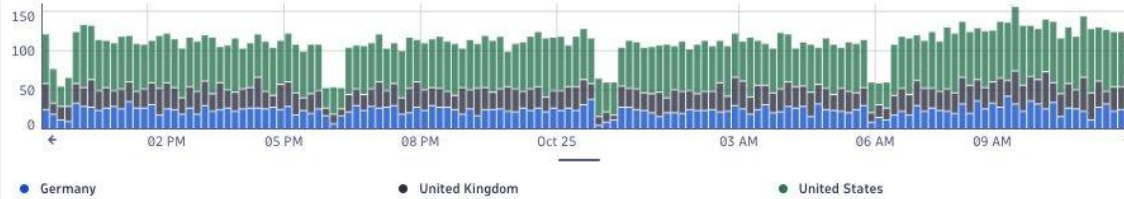
Order Volume



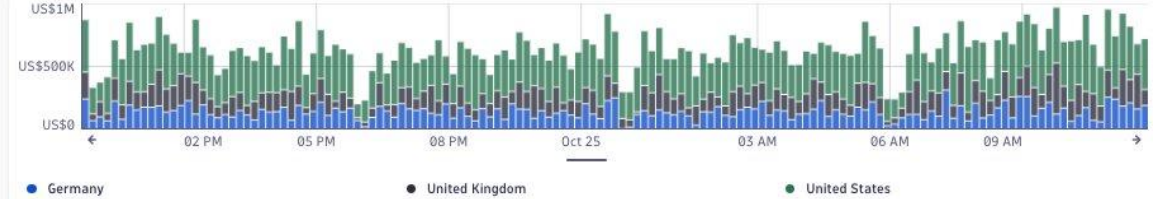
(\$) Order Revenue



Order Volume by Country

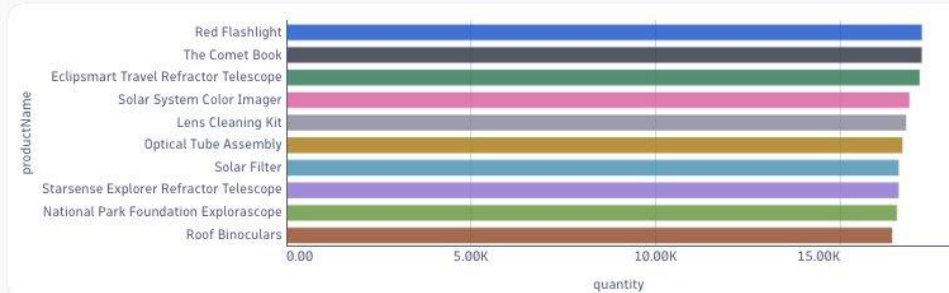


(\$) Revenue by Country



Top Product Category and Product Names Sales

categories	quantity
accessories, telescopes	33,498.00
telescopes	33,158.00
accessories, flashlights	17,230.00
books	17,226.00
telescopes, travel	17,171.00
accessories	16,805.00
accessories, telescopes,...	16,708.00
binoculars	16,429.00



Top Product Revenue

productName	subTotalAmountU...	subTot...
The Comet Book	18,516.08	18,516.08
Red Flashlight	18,487.26	18,487.26
Eclipsmart Travel Refractor Telescope	18,485.35	18,485.35
Solar System Color Imager	18,190.06	18,190.06
Lens Cleaning Kit	18,050.55	18,050.55
Optical Tube Assembly	17,976.91	17,976.91
Starsense Explorer Refractor Telescope	17,864.22	17,864.22
Solar Filter	17,863.68	17,863.68
National Park Foundation Exploroscope	17,811.98	17,811.98

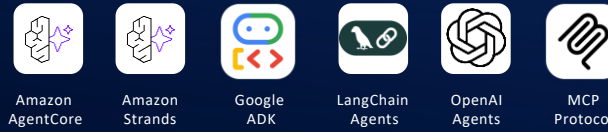
Business observability

Feature	Value	Outcome
Business Insights	Enable faster data-driven decisions	 Drive innovation
Real-time Transaction Monitoring	Deliver seamless digital transactions for faster growth	
Business Process Monitoring	Streamline processes to cut delays and costs	 Optimize cost
Cost & Carbon Analysis	Achieve sustainability targets and reduce energy use	
SLO Monitoring	Avoid SLA breaches and costly penalties	 Mitigate risk
Compliance Checks	Stay audit-ready with continuous validation	

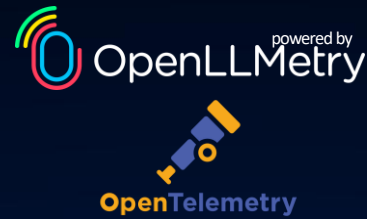
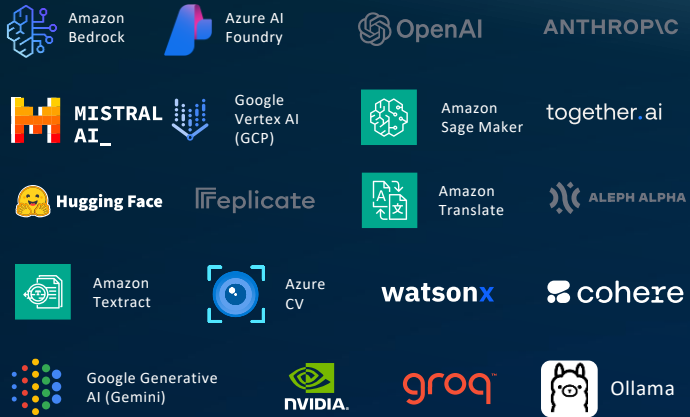
AI Observability



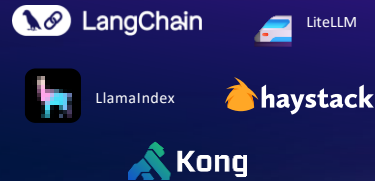
Agentic Frameworks



Platforms and model deployment



Orchestration frameworks



Vector databases






Hardware and computer resources



45+
integrations

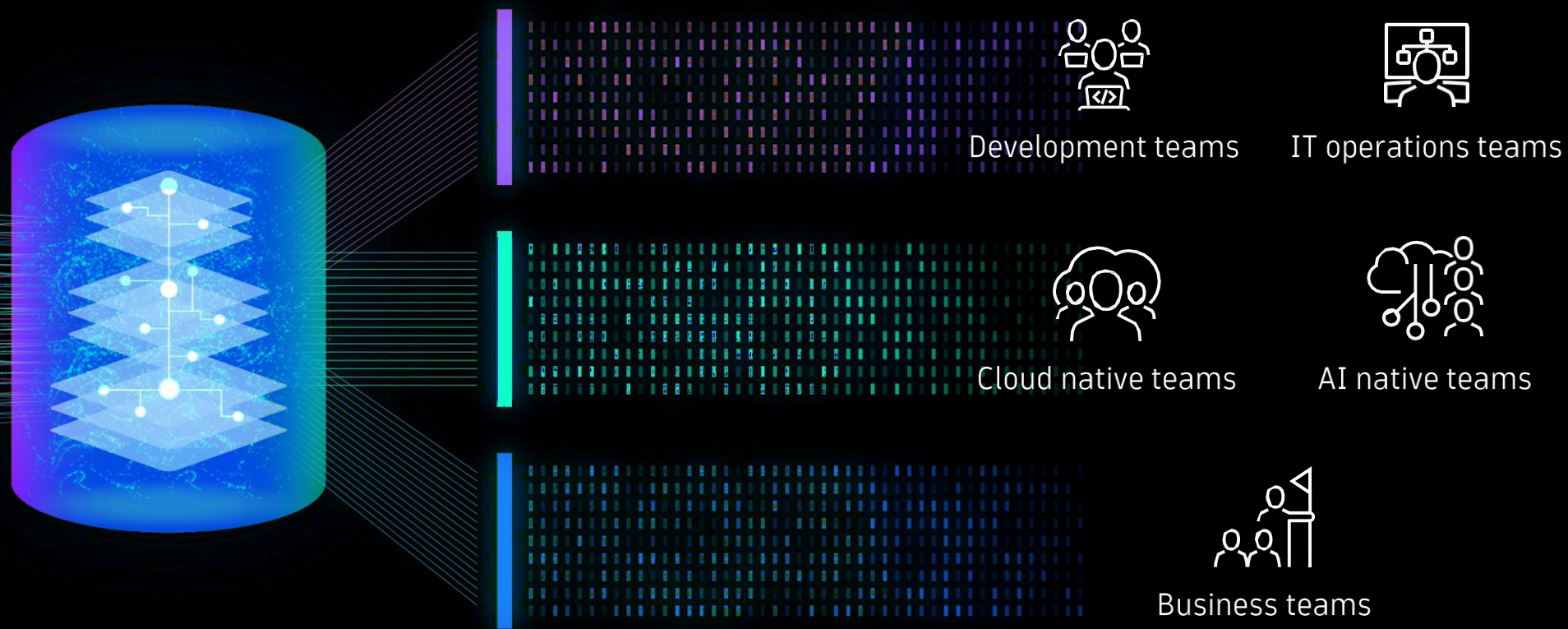
More integrations
than any other
vendor on the market

AI and LLM observability

Feature	Value	Outcome
Pipeline Tracing	Accelerate delivery with full traceability	 Drive innovation
Prompt Monitoring	Improve AI reliability for faster innovation	 Optimize cost
Cost Tracking	Control spend and optimize usage	
Model Benchmarking	Optimize ROI with model performance comparisons	 Mitigate risk
Guardrail Enforcement	Prevent harmful or non-compliant outputs	
Bias & explainability Insights	Ensure fairness and compliance with transparent AI	



The Dynatrace difference



Understand all your data in context

Get precise answers from causal, predictive, and generative AI

Empower every team in the enterprise to automate