Dynatrace

Software Intelligence for the Enterprise Cloud

Full Service Description

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1. What Makes Dynatrace Unique? Massive Automation, AI Powered

Modern hyperscale applications call for a radically different approach to monitoring. Dynatrace was designed from the ground up around artificial intelligence specifically for highly dynamic environments. With zero manual configuration, the Dynatrace AI-powered, full-stack, automated digital performance management solution enables smarter monitoring at scale to simplify operational complexity, optimize customer experience and accelerate innovation.

Massive automation in Dynatrace delivers more value

Faster implementation	Fewer resources	Reduced MTTR	Scalability	Fewer tools
• Single agent implementation • Full stack, continuous auto-discovery • Auto-baselining and dependency mapping	• AI-based problem identification • Automated root cause analysis • Pre-configured dashboards, easy agile customization	• Single root cause identified for fast remediation • Understand business impact – focus on what matters • Auto-remediation with accuracy & confidence	• Horizontally scaling cluster architecture • Scales beyond 100,000 hosts • Only solution with true high availability for web-scale	• End-to-end: all users, all apps, all digital channels • Full-stack: all data, all layers, all technologies • One complete source of truth, vs a "suite" of disparate data sets
100x faster to implement Max coverage, lowest cost	1/10th of the people Easiest, lowest TCO	20x faster MTTR Optimal user experience	100x scale, web-scale Grow w/out barriers	All-in-one Nothing like it

1/10th the TCO of other solutions

The solution is used by over 8,000 customers world-wide who typically use Dynatrace to:

- Optimize customer experience
- Deliver high performing applications
- Scale DevOps to accelerate innovation
- Monitor cloud native applications.

Dynatrace allows you to auto-detect, model, and analyze every single transaction from start to finish. In any environment, Dynatrace automatically traces 100% of transactions, no matter where they go or how they behave, throughout the entire technology stack, covering every user, every application, from any location, 24x7. This ensures that there are no gaps or blind spots in monitoring.

Because Dynatrace sees relationships and dependencies in real-time, the AI engine has the context it needs to tell not only what happened, but why it happened. Other monitoring solutions only correlate disconnected data, whereas Dynatrace automatically detects virtual and physical relationships and changes and so allows us to go beyond correlation and into true causation.

The product is trusted by 72 of the Fortune 100 companies and Dynatrace is the only company consistently recognized as the global leader in Application Performance Management

2. Dynatrace Leadership in the APM Market

Dynatrace is the only company to have been in the leader's quadrant for the past 8 consecutive years.

Gartner positions Dynatrace in the Leaders Quadrant of the APM Magic Quadrant Report

Read Gartner's comprehensive "Magic Quadrant for Application Performance Monitoring (APM)" report. It evaluates 14 vendors on completeness of vision and ability to execute.

Figure 1. Magic Quadrant for Application Performance Monitoring Suites

Source: Gartner (March 2018)

## 3. Dynatrace Digital Performance Platform Overview

Applications are at the heart of the Government's Digital Transformation and Digital by Default strategy where policy, services, design and delivery are organised around the needs of the user and ensuring they have a high-quality experience.

Application are changing faster than ever, scaling larger than ever, touching more components and 3rd party services than ever and delivered through more channels than ever. The application delivery chain is incredible complex and almost exclusively digital. To add to this complexity citizens expectations and demand for high quality, sub-second, digital services are increasing at a time where there is less money.
Dynatrace's Application Performance Management solution is the fabric that holds this together and creates a platform to enable you to innovate, iterate and accelerate your development lifecycle as you take the digital journey from consistently competent, to consistently excellent to consistently trusted.

Dynatrace has developed the industry's most complete, powerful and flexible Digital Performance Platform that views application performance from the perspective of the end user. Dynatrace's solution includes Dynatrace OneAgent, Advanced Synthetic Monitoring, Network Application Monitoring and Real User Management all within a single platform and single UI.

Our customers have typically reduced incident volumes by 30%, troubleshooting time by up to 80% and significantly reduced hardware investment whilst accelerating their application delivery.
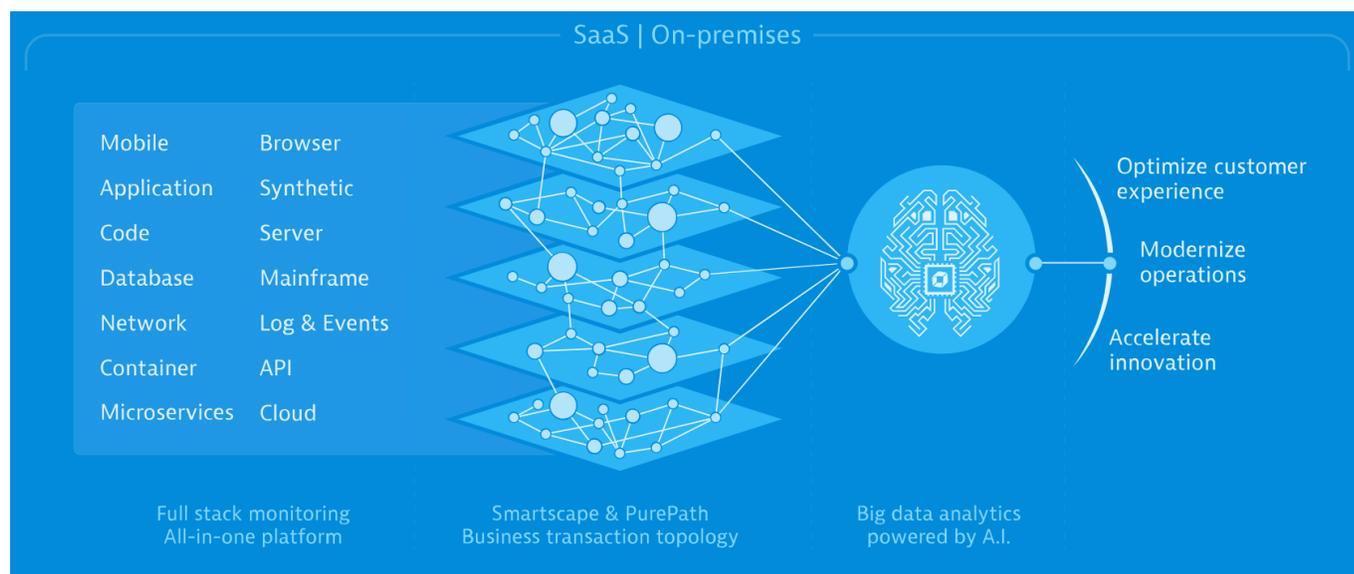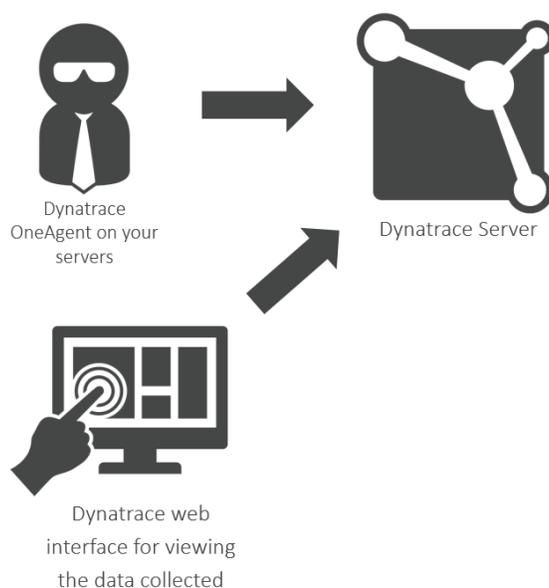
4. Dynatrace SaaS/Managed/Off-Line

How Does it Work?

Dynatrace is an "Agent" based solution. Software Agents are installed onto machines that you wish to monitor and it will identify which application technologies it can monitor in more detail (Java, PHP, .NET, Node.JS etc.) then provide deep monitoring on these processes once they are restarted.

These Agents will not only capture the code level transactions within the application but also the health of the infrastructure (CPU, Memory, Network, Disk) and the log files being produced by the application. To capture the user activity from within the browser, the Agents within the application will automatically inject a piece of JavaScript into the pages being served up to the browser.

Dynatrace
OneAgent on your
servers

Dynatrace Server

Dynatrace web
interface for viewing
the data collected

These Agents will then compress and encrypt the data captured before sending it off to the central Dynatrace Server. This server can either be hosted by Dynatrace in AWS ("SaaS" offering) or hosted somewhere nominated by you ("Managed" offering). Either way, the interface is then accessed through a web browser for monitoring or investigating issues.

Powered by PurePath Technology…

The key underlying technology to Dynatrace is the idea of a "PurePath." This is a full end-to-end transaction which can start either with a user performing a click or right the way down to an API call incoming from another system. Dynatrace's (patented) PurePath technology can then follow this transaction right through your application out to any databases, external services etc. which are called on the other end.

At the user level this will provide:

- o   What device/OS/browser does the user have?
- o   Where are they accessing from?
- o   What are they clicking/loading?
- o   (Where applicable) What was their username?

This will then follow the requests made as a result of these actions right through to the application to provide:

- o Back-end response times for each service being utilised.
- o Details of any errors that are thrown.
- o Code-level visibility into hotspots which are causing bottlenecks in response times.
- o Visibility into database activity called from within the application.

Whilst following these transactions through, Dynatrace also utilises a technology called "PureStack" which will also correlate the health of the infrastructure as the user's transaction is passing through:

- o CPU usage.
- o Memory utilization.
- o Network I/O.
- o Disk I/O.

Ultimately, Dynatrace will help you to understand WHEN performance issues are impacting users, WHO is impacted and WHAT the root cause of the issue is.

In addition to the performance metrics captured, business metrics such as bounce rates, conversions etc. are also correlated – not to replace existing analytical tools but to provide insight for technical teams into areas that the business will be focusing on.

With a business focus, you can answer questions such as:

- o We are seeing a high number of users bounce, have our landed pages degraded in performance?
- o Conversion rates have dropped, is there an error in the user journey?

Key Benefits

Business Insights
Understand the Business Impact of Application Performance in Real Time
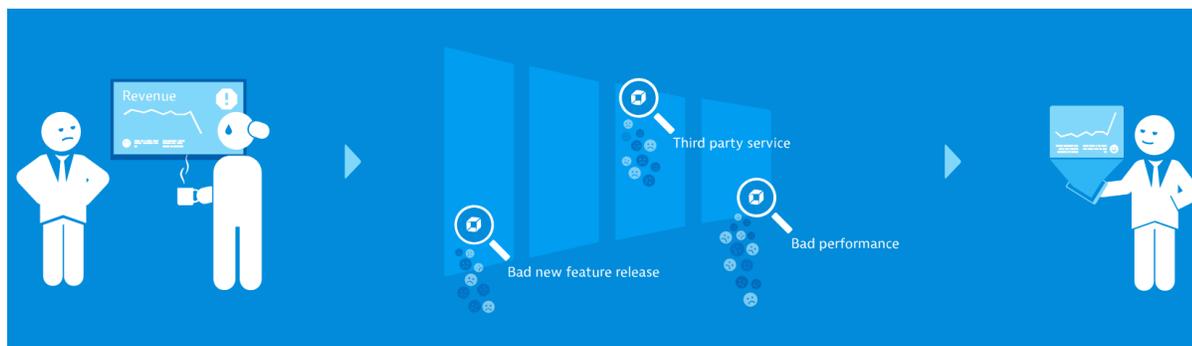
Big data analytics provide critical business information
Digital businesses need continuous insight into what their customers are experiencing.

- o   Monitor the critical stages of your sales-funnel and detect technical issues proactively.

- o   Minimize outages and recovery time.

- o   Avoid negative social-media comments.

Optimize performance of key business transactions
Your digital platform needs high-performing key business transactions to ensure customer experience and stay ahead of the competition.

- o   Auto-detect when key business transactions aren't working as expected.

- o   Track revenue, conversion rates, availability, user experience, drop-off rates and other relevant metrics.

- o   Receive meaningful and actionable reports and notifications.

Don't speculate - just ask Dynatrace for answers
Dynatrace uses big data analytics to provide out-of-the-box insights into the implications of application performance on revenues.

- o   Pre-configured and customizable dashboards provide full insights into your digital business.

- o   Stop spending hours manually correlating metrics from web analytics tools, ERP systems, and log files.

- o   Is your payment provider down or is your latest feature release causing signup problems? Dynatrace proactively answers business-critical questions for you.

Dynatrace Platform

AI Powered + Automation to meet the Challenges of the Enterprise Cloud
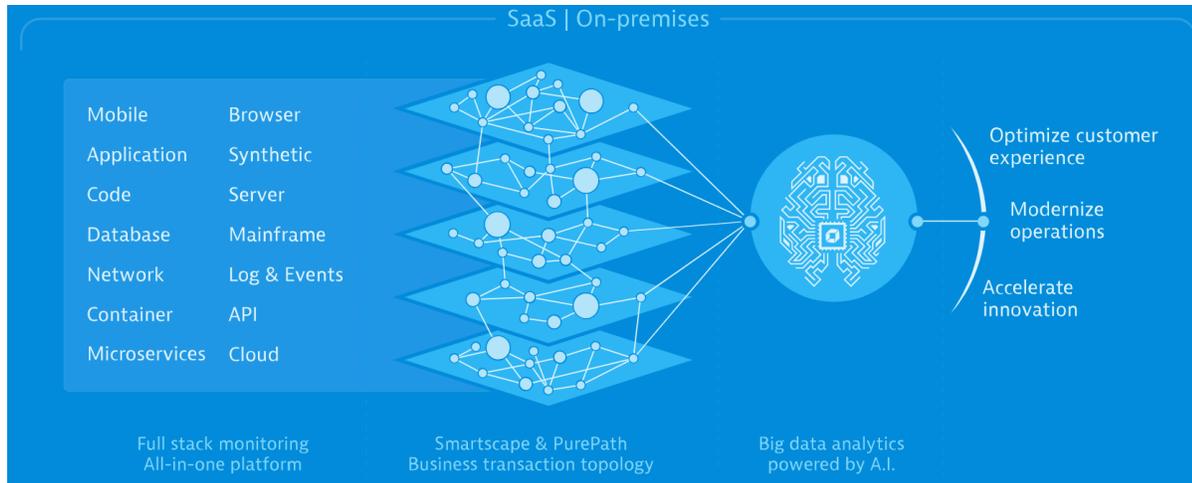
All-in-one Performance Monitoring
Use a single platform to analyse application performance throughout your application's full stack, down to each individual transaction across all layers and technologies.

- o Full stack monitoring provides full insights into customer experience, application performance management, and infrastructure monitoring—including servers, containers, and cloud—end-to-end with no blind spots.

- o Get the deepest, most accurate, granular tracing of every single transaction.

- o Our research and development team of more than 600 experts ensures the broadest and deepest coverage of technologies in the industry.

Automated Monitoring at Scale
Dynatrace was designed for the world's largest environments and scales up to 100,000+ hosts.

- o Pre-configured and automatically adjusted dashboards ensure ease of use. Installation requires no manual configuration at all.

- o Artificial intelligence continuously auto-detects dependencies, learns application behavior, detects anomalies, and proactively pinpoints the root causes of issues.

- o Access permissions done right for the cloud: Management zones

Big Data Analytics
Artificial intelligence delivers answers—not just data—providing actionable insights to your business stakeholders, operations staff, and development teams.

- o Dynatrace ties business outcomes to performance insights so you fully understand the implications of detected problems.

- o Analyse user behaviour to maintain focus on customer experience.

- o Because Dynatrace understands all the components and dependencies of your applications, it can detect and resolve problems before they impact your customers.

Open Ecosystem
Dynatrace—available as SaaS, Managed, or on premises—seamlessly integrates into your IT landscape, natively, with open APIs.

- o Start monitoring in under five minutes with a SaaS, Managed, or on-premises solution.

- o Integrate Dynatrace seamlessly, leveraging APIs and platform extensions.

- o Automate IT by incorporating Dynatrace into your delivery pipeline, production environment, and orchestration layer.

User Behaviour Analytics
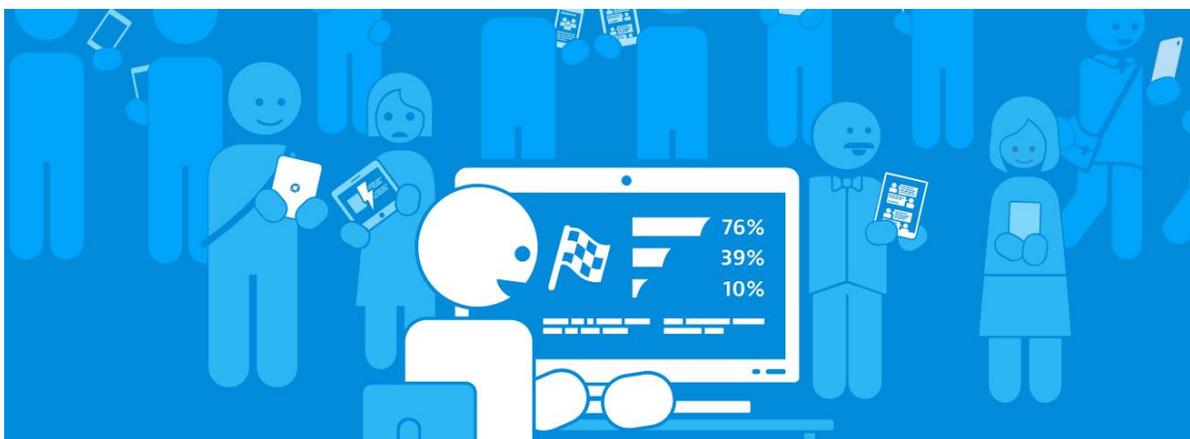
Analyse user behaviour to Optimise Customer Experience
Dynatrace behavioural analytics provides out-of-the-box insights into user behaviour powered by artificial intelligence, leveraging end-to-end monitoring of every single customer journey.

- o Focus on relevant entry points and conversions when optimizing performance.

- o Track customer adoption to maintain focus on important new-feature development.

- o See where your customers are dropping off and eliminate costly technical issues.

Compare Behaviour and Conversions Across All Channels
Customers access your applications from multiple web browsers, mobile devices, and geographic regions.

- o Segment user behaviour analytics by satisfaction, device, location, app version, operating system and many more.

- o Track user experience, conversion metrics, bounce rates and traffic.

- o Drill down into any customer journey.

Resolve user complaints instantly

With Dynatrace you can know why a user is calling your support team even before the conversation starts.

- o   Look into the details of individual user sessions to resolve difficulties.

- o   Whether it's slow performance, errors, or application crashes, Dynatrace pinpoints the underlying root causes.

- o   Share actionable insights with relevant stake holders in operations, development, marketing, and support.

Business Transaction Monitoring

Monitor and Optimise Application Transactions at Scale with Gap-Free, Code Level Data
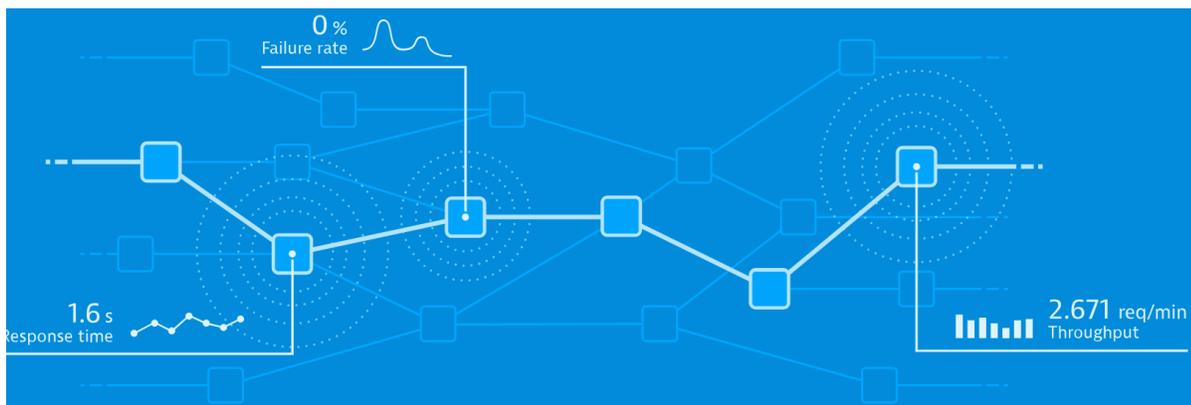
Analyse digital performance in context

"What are my conversion and bounce rates, and what impacts them?", "Are we meeting SLAs with our premium account users?" Answers to these questions and more require insights into each end-to-end customer journey.

- o   Dynatrace uses patented PurePath Technology® to capture timing and code-level context for every transaction.

- o   Track each request across all tiers, with no gaps or blind spots.

- o   Performance metrics for services, tiers, interdependencies, and inter-tier timings are automatically generated in real-time.

Transaction analytics provide actionable facts

Using big data analytics and machine learning, Dynatrace provides actionable reports based on business transactions. You can drill down into any method or statement.

- o   Leverage real-time analytics to automatically detect anomalies.

- o   Optimize your application based on detected response-time bottlenecks, threading, database calls, complexity, or asynchronous calls.

- o   Share the big picture and supporting data with business stakeholders, operations and development.

Get insights into your full stack
Dynatrace tracks every single transaction, from the initiating browser click, tap, or swipe to the backend application, and all the way down to the underlying infrastructure—be it microservices or container based, physical, virtual or in the cloud.

- o   Business-transaction tracking with PurePath Technology® begins with real-user data or synthetic monitoring.

- o   All service calls in your application stack are tied to the corresponding user actions.

- o   Each business transaction is shown in context with microservices, container, infrastructure, and cloud metrics.

Real Full Stack Performance Monitoring

Unified end-to-end monitoring for every component and every dependency, across every tier

Auto-detect, model, and analyse every single transaction from start to finish
A lot of APM vendors say they offer full-stack monitoring. What they mean is, their various tools can eventually be stitched together to monitor your end users, applications, and infrastructure metrics—for some transactions some of the time. But this doesn't give you the full picture of everything that's going on in your environment. This isn't real full-stack monitoring.

Dynatrace automatically traces 100% of transactions—no matter where they go or how they behave—throughout your technology stack—from front-end to back-end and everywhere in-between—every user, every application, everywhere, 24x7.

- o   Actionable intelligence about application performance at your fingertips.

- o   Optimized user experience for ALL customers, not just those encountering problems.

- o   Full insight into dynamic cloud instances and ephemeral microservices.

- o   No gaps or blind spots along the network.

End-to-end monitoring up, down, and across every tier
Monitor every layer of your application environment seamlessly. No matter how complex the application-delivery chain, Dynatrace provides end-to-end visibility down to the method level for every single transaction—no samples or snapshots, no gaps or blind spots.

Monitor Dependencies, not just Components
In today's ultra-complex environments, it's no longer enough just to monitor the individual components in your technology stack. You have to understand how they all work together collectively to deliver your applications.

Dynatrace automatically monitors and maps out the millions of dependencies among application components in real time—and dynamically auto-updates as things change on the fly.

Three patented technologies unique to Dynatrace dovetail with one another to enable automatic discovery, modelling, and analytics of every component, every dependency, across every tier—the hallmark of "real" full-stack monitoring. This unified, end-to-end monitoring is a foundational prerequisite for artificial intelligence–based monitoring.

OneAgent

OneAgent technology uses a single agent to collect and unify operational and business performance metrics for all types of entities—servers, applications, services, databases, etc.—along every layer of your tech stack (even containers).

Smartscape

Smartscape visualization technology maps out everything you have running and detects all causal dependencies between websites, applications, services, processes, hosts, networks, and cloud infrastructure.
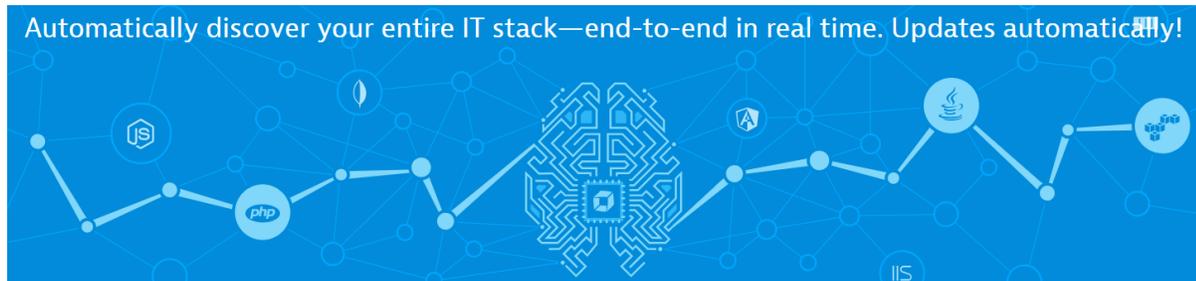
PurePath

Our patented PurePath technology captures timing and code level context for 100% of transactions end to end— every swipe, every click, across every tier, for every user, 24x7x365—no samples, no gaps or blind spots.

Application Topography Discovery and Mapping

Automatically discover your entire IT stack—end-to-end in real time. Updates automatically!

Auto-discover your full technology stack in minutes

In under 5 minutes, with no manual configuration, Dynatrace auto-discovers all the components and dependencies of your entire technology stack end-to-end. All you need to do is install a single agent.

- o Smartscape technology automatically detects your entire web environment.

- o Dynatrace detects billions of causal dependencies between websites, applications, services, processes, hosts, networks, and cloud infrastructure within minutes.

- o Your entire application topology is visualized in an interactive infographic.

Dynatrace automatically learns how your application works

As it discovers your IT architecture topology, Dynatrace automatically learns your environment's normal performance. You don't need to verify baseline thresholds for metrics like response time and CPU health or adjust static alerting thresholds—it's all handled for you automatically.

- o Dynatrace self-learning capabilities automatically identify performance anomalies.

- o Artificial intelligence determines whether or not a problem affects your customers.

- o Big data analytics automatically perform root-cause analysis to pinpoint the reasons behind performance problems.

Get actionable insights into highly dynamic environments

The complexity and speed of change in today's fluid and highly dynamic environments are simply beyond human capability to manage. With Dynatrace, you see how everything works together. Click any component to drill down into its performance details.

- o Dynatrace automatically and continuously recognizes changes to your IT environment on the fly.

- o Always have an up-to-date, real-time dynamic blueprint of your application architecture.

- o Have all information about complex and dynamic IT environments at your fingertips—with no manual assembly or correlation of data.

AI Driven Automatic Root Cause Analysis

Dynatrace artificial intelligence automatically pinpoints the reasons underlying performance issues

Resolve Problems before they Impact your Customers
Dynatrace identifies performance issues before your customers are affected by them. Problems are prioritized based on their impact to your customers. So you always know how severe a problem is and if it's impacting the user experience of your customers.

- When critical performance issues are discovered, you don't have to manually interpret dozens of data sources to know the root cause.

- Dynatrace provides a single problem notification that identifies the root cause of the problem.

- Because you don't need to invest time into finding problems, you can focus on fixing them.

Cut down your mean time to repair by 90% or more
Performance problems are seldom isolated, one-time events—they're usually symptoms of larger issues. Dynatrace artificial intelligence looks at billions of events and helps you address the causes of problems, not the symptoms.

- Artificial intelligence understands causation throughout your entire IT environment.

- Only Dynatrace can reliably uncover the underlying cause of performance issues.

- Gain a head start in bug fixing through deep-dive analysis into source code and database statements.

Resolve highly complex problems visually
Applications in today's increasingly complex and highly dynamic environments have more dependencies than a single person can effectively analyse with traditional monitoring tools.

- Dynatrace artificial intelligence detects causal relationships in elastic application environments automatically and continuously.

- Leverage instant replay of application problems. Watch in detail how the various components of your environment were affected over time.

- View an interactive infographic that tells you where a problem is and what you can do about it.

5. DYNATRACE NETWORK APPLICATION MONITORING

Corporate applications of record like Oracle EBS, SAP, and Microsoft Exchange, along with enterprise delivery architectures such as Citrix and optimized WANs, are the foundation of your business. If they're not working well, your business suffers. Business productivity is impacted because users rely on enterprise apps to do their jobs. Customer experience suffers when customer-facing personnel can't get the information they need.

But monitoring and managing these important applications can be a challenge. Many homegrown, packaged and legacy applications can't be instrumented with conventional APM agents. And complex IT environments obscure the root cause of performance issues, making it difficult to meet service level agreements and increase your return on IT assets.

Dynatrace Data Center Real User Monitoring (DC RUM) applies powerful, real-time analytics to deliver unparalleled insight into performance, availability and the activities of internal and external users of your corporate applications.

- o **Rapidly Troubleshoot Problems.**
  Detect and isolate problems in all kinds of enterprise applications, including legacy, custom, and packaged applications.

- o **Prioritise Based on Business Impact.**
  Powerful on-board analytics rapidly identify the business impact of an incident.

- o **Eliminate Visibility Gaps.**
  Identify hotspots, performance limitations, server and network bottlenecks, and understand WAN usage and optimization efficiency.

- o **Link App & Network Performance.**
  View the health of your enterprise apps & network from a single dashboard.

How does it work?

DCRUM collects network traffic, automatically discovering all applications, servers and clients on the network. Analysis is performed on transactions, application usage, end-user experience, and more. It is the only solution that delivers application and network-layer insight across the industry's most extensive set of enterprise environments.
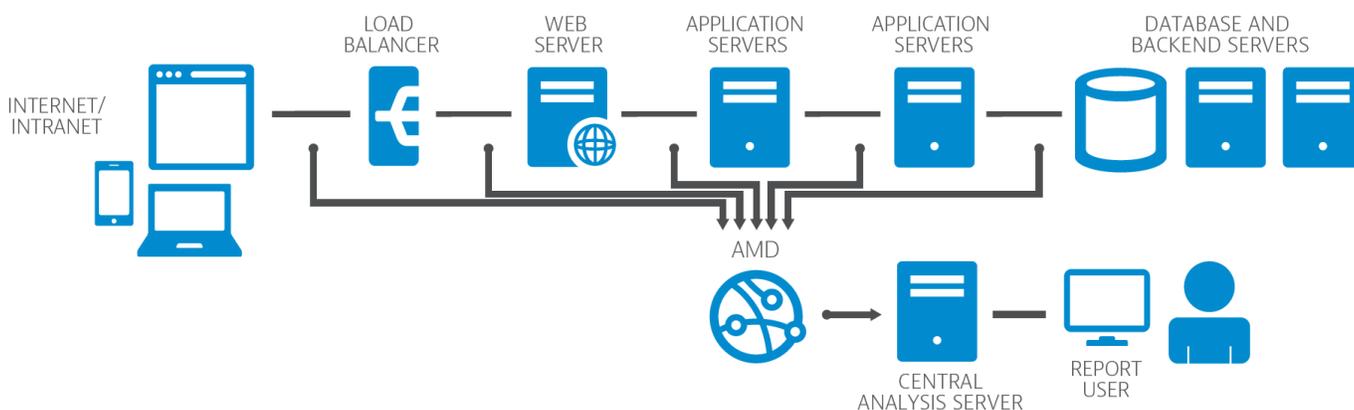
Key Features

- **APM and real user monitoring for all users and data center applications.**
  Monitor every enterprise transaction and user using wire data, for comprehensive visibility and an accurate run-time picture of your entire enterprise application portfolio and supporting infrastructure.

- **Automatically discover applications and infrastructure.**
  Automated and continuous discovery of users, application services, business-level transactions, virtual networks and more.

- **Powerful application performance and user experience analytics.**
  Correlate end-user experience with disparate network, application and transaction performance metrics, capturing diagnostic details to support problem resolution.

- **Minimal configuration.**
  As a passive monitoring solution without agents, Data Center RUM can be implemented quickly and with minimal disruption. Out-of the box dashboards for popular applications including SAP, Oracle EBS, Siebel and MS Exchange deliver immediate ROI.

Application and Decode Support

Many of today's applications depend on technologies that span the entire application delivery chain. DC RUM covers it from end-to-end with a rich portfolio of application decodes. Protocols supported include SAP RFC, SAPGUI, Corba, RMI, MQ, HTTP/HTTPS, Oracle Forms, LDAP, Tuxedo Jolt, Siebel web, SOAP/XML, Citrix ICA, and databases such as Oracle, Microsoft, MySQL, Informix and Sybase.

6. DYNATRACE DIGITAL EXPERIENCE MONITORING

Monitor, analyse and optimise customer experience with an enhanced 360-degree view of every single user journey at every digital touchpoint. Use real browsers from the locations and networks your customers use with the world's most comprehensive performance testing network.

With today's high expectations for speed and availability of applications, there is a need for a deep understanding of real user experiences to make the best business decisions. Only enterprises focusing on digital customer experience will stay relevant in the future.

Dynatrace delivers business-critical analysis and understanding of how your application's performance impacts user experience and your bottom line. Powered by artificial intelligence, Dynatrace redefines digital experience monitoring, giving you the ability to see applications the way your customers do and provides insights to stay competitive in today's market.

Monitoring redefined — every user, every app, everywhere

Dynatrace provides full insight across all channels to bridge the gap between IT and digital business.

- o Full end-to-end monitoring of every single user session

- o Integrated view of the user experience across all mobile/web applications and other digital touchpoints

- o AI-powered resolution of performance problems before customers are impacted

- o Easy to use, zero manual configuration

Analyse every single customer journey and resolve problems proactively

Dynatrace digital experience monitoring combines real user monitoring and synthetic monitoring for mobile and web applications for aunified solution to monitor, analyze and improve customer experience.

- o Analyze each customer's digital journey in real time to evaluate satisfaction
- o Big data driven performance insights
- o Eliminate performance blind spots
- o Drive smarter and fast problem remediation
- o Monitor and analyse web application availability and SLAs
- o Dashboard view globally, 24 hours/day
- o Competitive benchmarking
- o Mobile, web and hybrid application performance management
- o Crash analytics

Dynatrace monitors and improves customer experience for digital business success. With Dynatrace, every user, every action, every device is monitored allowing for continuous performance optimization and consistent business metrics to ensure a successful digital experience.

AI powered, full stack, automated, this is monitoring redefined and the new measure for success.

Dynatrace Digital Experience Insights provide actionable expert advice:

Get specific, personalized evaluation of your digital experience environment along with specific directions on how to instantly improve — all in one easy package.

Digital Experience Insights takes the challenges and complexity out of your digital enterprise with:

- o   Daily email and regular Insight reports — for meaningful, actionable direction
- o   Implement best practices for measurement and management
- o   Daily triage and expertise on-demand with more expert eyes on your site
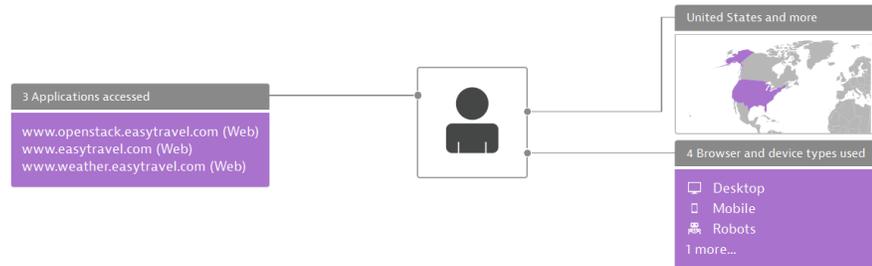
7. Example Use Case #1: Resolving User Issues

As an example of the information available, below is an example of a user issue being resolved. In this case a user may have called up to complain about an issue whilst trying to do a search online – all we have is the time they used the application and their username.

aleksandra
Session details related to this user profile are outlined below.

United States and more

3 Applications accessed

www.openstack.easytravel.com (Web)
www.easytravel.com (Web)
www.weather.easytravel.com (Web)

4 Browser and device types used

- Desktop
- Mobile
- Robots
1 more...

25 tagged user sessions with 'aleksandra'

Extended by 10 sessions from the same user (cookie) identifier More...

Analyze sessions based on   user tags ⌄   and   select a second category ⌄

Started at ▼	User tag	Duration	
14:22:19	aleksandra	1 min 34 s	
14:20:21	aleksandra	23 s	
14:16:14	aleksandra	27 s	

Above you can see that the users' sessions have been identified (in this case multiple!) and we can select an individual one.

Session details

Duration: Today, 14:22 - 14:23 (1 min 34 s)

Desktop
1920 x 1080

Firefox 33
Browser

Windows 7
Operating system
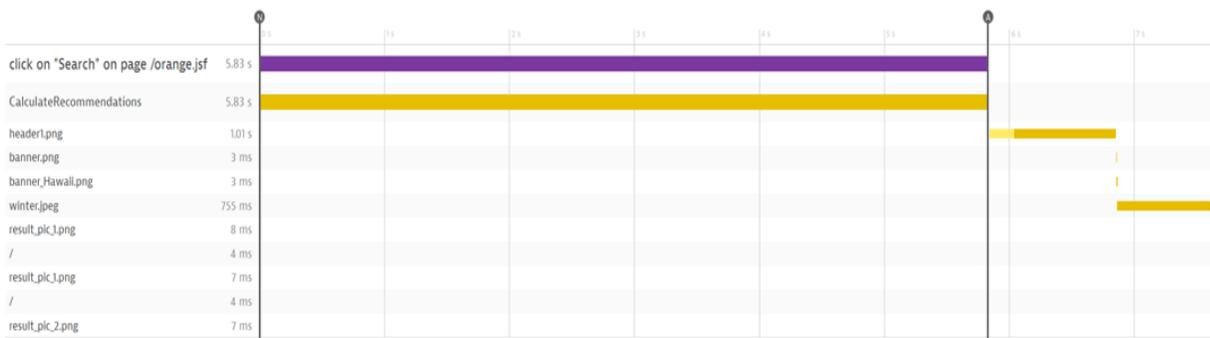
United Kingdom
Geolocation

All the usual troubleshooting information such as browser type, location, OS etc. are automatically captured to avoid having to rely on anecdotal information from the end user. Finally we can take a look at what actions the user was taking at the time which they complained.

Order ▲	Type	User action	Conversion	Action duration	JavaScript errors	Apdex	Details
1	Load action	Loading of page /orange.jsf		10.9 s	0	Tolerated ☺	⌄
2	XHR action	click on "Login" on page /orange.jsf		3.06 s	0	Tolerated ☺	⌄
3	User tag	aleksandra	-	-	-		⌄
4	XHR action	click on "Search" on page /orange.jsf		5.83 s	0	Tolerated ☺	⌄
5	Load action	Loading of page /current		1.89 s	0	Satisfied ☺	⌄

Above we can see what the user was clicking on, in what order and more importantly – if it was slow or broken! Technical details can then be drilled into to solve the problem at a technical level. Firstly, there is the waterfall level which will tell you what content was loaded from the browser and let you know:

- o Was it internal content that was the problem?
- o Was it in fact a slow connection that the user had?
- o Was it third party content that was blocking other content from loading?

click on "Search" on page /orange.jsf	5.83 s	
CalculateRecommendations	5.83 s	
header1.png	1.01 s	
banner.png	3 ms	
banner_Hawaii.png	3 ms	
winter.jpeg	755 ms	
result_pic_1.png	8 ms	
/	4 ms	
result_pic_1.png	7 ms	
/	4 ms	
result_pic_2.png	7 ms	

If an internal cause has been determined, you can then drill down into the technical details on the back-end. In the example below we have gone through the stack trace server-side to understand which piece of code is actually causing the bottleneck.

Method	Sample count		Contribution
⌄ java.lang.Thread.run	1.95k		100 %
⌄ java.util.concurrent.ThreadPoolExecutor$Worker.run [+]	1.95k		100 %
⌄ org.apache.tomcat.util.net.JIoEndpoint$SocketProcessor.run [+]	1.94k		99.8 %
⌄ org.apache.coyote.ajp.AjpProcessor.process [+]	1.92k		98.8 %
⌄ org.springframework.web.filter.OncePerRequestFilter.doFilter [+]	1.92k		98.8 %
⌄ javax.servlet.http.HttpServlet.service [+]	1.92k		98.8 %
⌄ org.apache.axis2.transport.http.AxisServlet.doPost [+]	1.81k		92.8 %
⌄ java.lang.reflect.Method.invoke	1.78k		91.5 %
⌄ sun.reflect.DelegatingMethodAccessorImpl.invoke	1.78k		91.5 %
› com.dynatrace.easytravel.business.webservice.JourneyService.findJourneys [+]	1.39k		71.4 %
› com.dynatrace.easytravel.business.webservice.JourneyService.findLocations [+]	374		19.2 %
› org.apache.axis2.transport.http.AxisServlet.doGet [+]	117		6.01 %
› org.apache.coyote.http11.AbstractHttp11Processor.process [+]	20		1.03 %

Example #2: Drilling Down into Application Issues

If a problem is affecting multiple users, Dynatrace will automatically alert you to this and will show you what the root cause is determined to be. This workflow is shown below.

When a "problem" is raised it will firstly summarise the impact of the issue:

- How many users are affected?
- What were they trying to do?
- What browser were they using?
- Where were they?

With this particular issue it's affecting a variety of users but only once they click the "Login" button, they are then seeing a 17s response time as opposed to 0.4s. From knowledge of the application you might know that a login is required to access the application, so this is an issue which urgently need to be fixed, as opposed to perhaps clicking on "About Us."

On the right, the problem is displaying what the root cause of the issue is, that our users are seeing – the Authentication Service.

Clicking through on this I can see that inside the service it is a particular request called "authenticate" which is contributing the most to the response time increase.

Response time	Failure rate	CPU	Throughput

View | Median | Slowest 10 % | Slowest 5 %

Server response time

Response time degradation
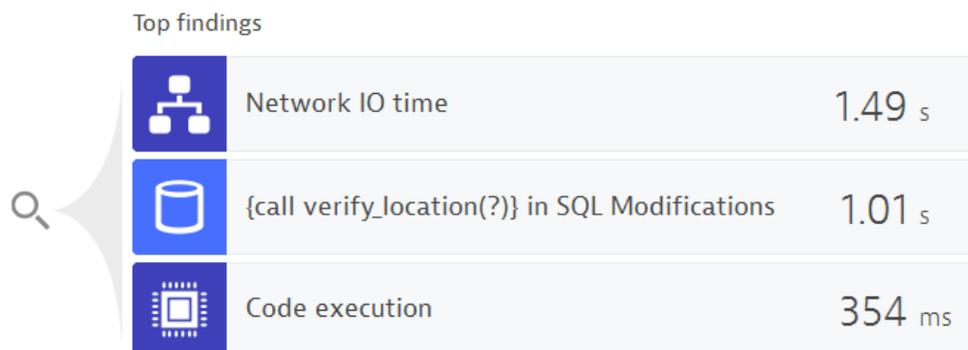⤢ Show problem details

— Response time   ⬛ Requests   ⬈ Min/max instance response time
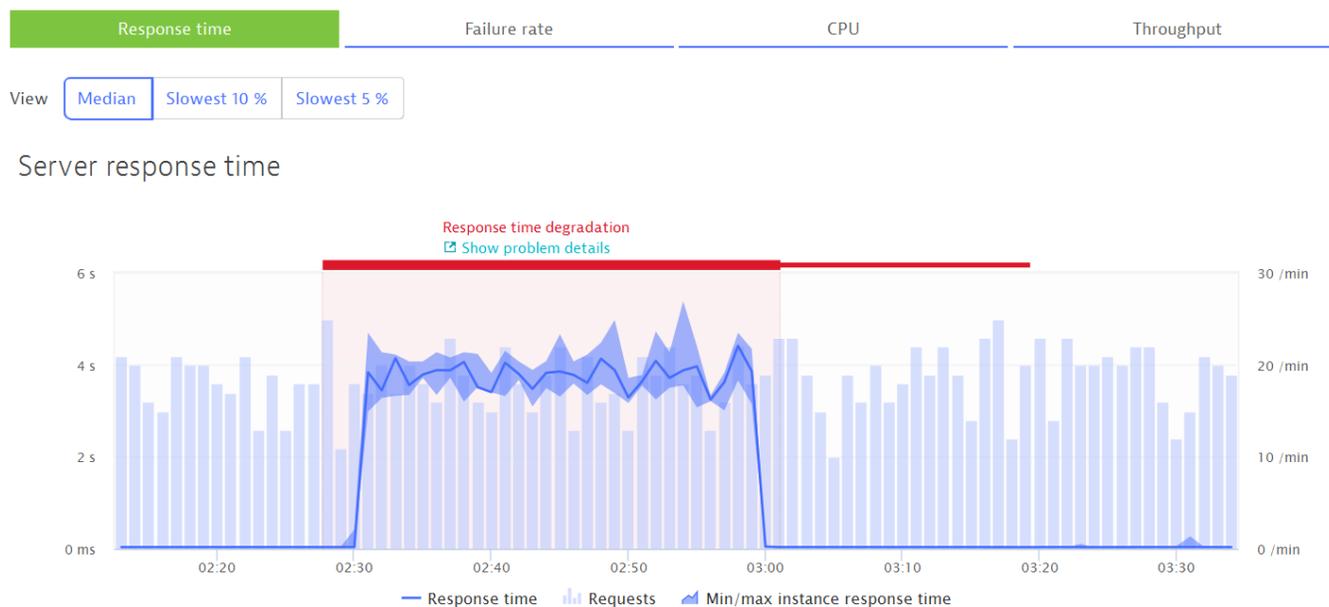
Above you can see the clear increase in response time reported by the problem. From here I can start to look into the response time hotspots in order to find out which parts of the "authenticate" request have slowed down.

Top findings

⬡	Network IO time	1.49 s
⬢	{call verify_location(?)} in SQL Modifications	1.01 s
⬛	Code execution	354 ms

In this case it's network I/O time which is the biggest contributor so you can select this to see which part of the code is the biggest contributor. In this case it's an area of the code which calls off to an external service.

Module	Sample count		Contribution
˅ java.lang.Thread.run	11.1k	■■	100 %
˅ java.util.concurrent.ThreadPoolExecutor$Worker.run [+]	11.1k	■■	100 %
˅ org.apache.tomcat.util.net.JIoEndpoint$SocketProcessor.run [+]	11.1k	■■	100 %
˅ org.springframework.web.filter.OncePerRequestFilter.doFilter [+]	11.1k	■■	100 %
˅ javax.servlet.http.HttpServlet.service [+]	11.1k	■■	100 %
˅ org.apache.axis2.transport.http.AxisServlet.doPost [+]	8.1k	■■	73.1 %
˅ java.lang.reflect.Method.invoke	8.1k	■■	73.1 %
˅ sun.reflect.DelegatingMethodAccessorImpl.invoke	8.1k	■■	73.1 %
˅ com.dynatrace.easytravel.business.webservice.AuthenticationService.authenticate [+]	8.1k	■■	73.1 %
❯ com.sun.proxy.$Proxy.allUsers	4.75k	■	42.8 %
❯ com.dynatrace.easytravel.business.webservice.AuthenticationService.verifyLocation	2.94k	▮	26.5 %
❯ com.sun.proxy.$Proxy.getUser	400	│	3.61 %
❯ org.apache.axis2.transport.http.AxisServlet.doGet [+]	2.99k	▮	26.9 %

8. DYNATRACE SUPPORT SERVICES

Dynatrace ONE vs. Dynatrace ONE Premium

	Dynatrace ONE	Dynatrace ONE Premium
Onboarding & continued enablement		
Dynatrace community & documentation	✓	✓
Digital onboarding & enablement	✓	✓
Dynatrace University education access	✓	✓
Dynatrace University teams		✓
Architectural planning & deployment checklist		✓
Health & progress visibility		
Service Quality & Availability reports	✓	✓
Deployment & Product Adoption report, User Adoption report		✓
Expert review of Service Quality Report and Availability Report		✓
Customer product support		
Dynatrace Mission Control	24/7	24/7
Customer Support Center access	✓	✓
Hours of operation	8/5 x business days	24/7 x 365

	8/5 x business days	24/7 x 365
Hours of operation	8/5 x business days	24/7 x 365
Support ticket response time learn more	Critical: 4 business hours High: next business day Medium: 2 business days Low: 4 business days	Critical: 2 hours High: 4 hours Medium: next business day Low: 2 business days
Priority ticket handling		✓
Sev1 guaranteed update frequency		Daily
Communication methods	Web, chat	Web, chat, phone

Proactive engagement & analysis

Live chat	✓	✓
Prioritized chat availability		✓
Customer success plan	Self-guided	✓
Quarterly business reviews		✓
Weekly on-boarding or coaching sessions		✓
Designated Customer Success Manager		✓
Designated Product Specialists		✓

Response times

Initial contract SLA

	Dynatrace ONE	Dynatrace ONE Premium
1: Critical	4 business hours	2 hours
2: High	Next business day	4 hours
3: Medium	2 business days	Next business day
4: Low	4 business days	4 business days

Severity classifications

Severity	Description
1: Critical	Dynatrace product or mentioned application unavailable. No workaround available.
2: High	Partial product downtime, code functionality not available, or significantly degraded monitored application performance. No workaround available.
3: Medium	Non-critical loss or impact to the Dynatrace product or monitored application. Workaround available.
4: Low	Other Dynatrace product defects, documentation errors, or other low-priority issue.