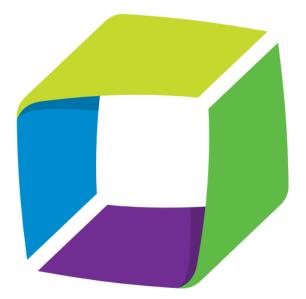


# Dynatrace Software Intelligence Platform for the Enterprise Cloud

Full Service Description Date: July 2020 Submitted by Dynatrace Ltd

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



#### Advanced Observability

0

See it all in context, including metrics, logs, traces, entity relationships, User Experience and behaviour.

#### **Continuous Automation**

Make it easy with automatic deploy, configuration, discovery, topology, performance, updates and more.

#### **AI-Assistance**

Free your time with precise answers for proactive problem resolution and performance improvements.

#### **Cross Team Collaboration**

Eliminate silos and accelerate teamwork with a single source of truth for your business, Dev and Ops teams

3



#### **User Experience and Business Analytics**

Deliver remarkable experience across every user journey and maximise business KPIs.



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 10 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 15 vendors on completeness of vision and ability to execute.



This Magic Quadrant graphic was published by Gartner, Inc. as part of a larger research note and should be evaluated in the context of the entire report. The Gartner report is available upon request from Compuware. Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.



### 3. Dynatrace Software Intelligence Platform Overview

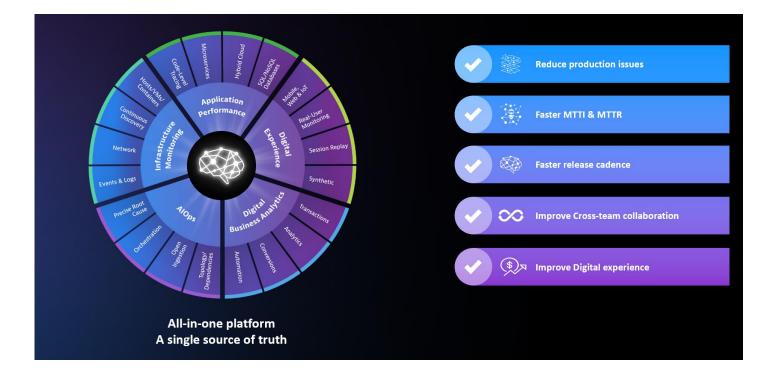
Applications are at the heart of the Government's Digital Transformation and Digital by Default strategy where policy, services, design and delivery are organised around the needs of the user and ensuring they have a high-quality experience.

Application are changing faster than ever, scaling larger than ever, touching more components and 3<sup>rd</sup> 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, All-In-One, Software Intelligence Platform comprising Application Performance Monitoring, Infrastructure Monitoring, Digital Experience and Business Analytics with a deterministic Al engine at the heart of the solution.

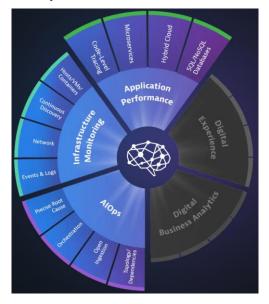
Our customers have typically reduced incident volumes by 30%, troubleshooting time by up to 80% and significantly reduced hardware investment whilst accelerating their application delivery.





### **Application Performance**

Best-in-class APM from the category leader. Advanced observability across cloud and hybrid environments, from microservices to mainframe. Automatic full-stack instrumentation, dependency mapping and AI-assisted answers detailing the precise root-cause of anomalies, eliminating redundant manual work, and letting you focus on what matters. Dynatrace APM includes infrastructure monitoring and AIOps, delivering instant answers across the full stack.



### **Code Level Tracing**

Deep dive application monitoring and performance management. Monitor and optimize application performance and business transactions at scale with gap-free code-level data

#### See all performance metrics in real time

- <u>Application performance monitoring (APM)</u> is critical to business success today. Dynatrace automatically sees and analyzes every single user transaction, all the time. All relevant metrics, environment changes, and application deployments are shown in real-time.
- Dynatrace <u>captures every transaction</u>, across every tier, without gaps or blind spots.
- Pre-configured dashboards provide all relevant metrics down to the SQL statement and code level.
- In under five minutes OneAgent automatically discovers your entire application stack.

#### Follow every single transaction end-to-end

Dynatrace uses patented PurePath Technology® to capture <u>timing and code-level context for every</u> <u>transaction</u>, across every tier, without gaps or blind spots.

- Drill into all services and components called upon with each user interaction.
- Analyze response times and find hotspots at the method level.
- Understand the impact of methods and database statements on user experience using our unique Service backtrace feature.



#### Microservice and Container Monitoring

Tame your dynamic microservices and container architecture with real time observability into dynamic environments. With automatic instrumentation for dynamic microservices, high fidelity data in context throughout every transaction for greater precision, and unique hybrid support to view the entire enterprise cloud and all dependencies in real time with no blind-spots.

#### Many Microservice - One Agent

While other monitoring solutions require an agent for every different technology, Dynatrace sees it all with a single agent. With the Dynatrace OneAgent you don't need to know what's running in every container, and you don't need to modify container images or code. Just install the OneAgent and we do the rest.

#### Auto discover microservices and containers

Dynatrace automatically creates a complete, real-time topology of your containerized microservice architecture. We discover all your containers and what's running inside of them, and we know when containers are spun up or down, so your topology is always up to date.

### Hybrid Cloud

Conquer you're your cloud performance challenges with Dynatrace AI powered insights and actions. Simplify cloud complexity and accelerate digital transformation.

#### Hybrid Multi Cloud: AI powered insights and actions

- All-in-one software intelligence for hybrid cloud ecosystems.
- Automatic deployment, configuration, and intelligence.
- Precise problem detection and root cause analytics.

#### Dynatrace is fully automated, with scale, out of the box

- Install only one agent to discover and map all enterprise cloud components continuously.
- Deterministic AI constantly baselines performance, detects anomalies and serves precise root causation.
- Software intelligence for 100.000+ hosts with Dynatrace web-scale architecture.

#### Cloud DevOps Automation: AI powered continuous delivery and feedback

- Al-powered continuous feedback on quality, performance and scalability.
- Full operational insights for cloud DevOps automation.
- Real time insights into user experience for better decisions.

### Automatic SQL/NoSQL Database Monitoring

Automatically detect and monitor databases, understand how applications are using them, and get detailed health metrics for each database statement. Identify and solve database issues that impact application performance.

#### Detailed health metrics for each database statement

Drill down to the SQL-statement level. With Dynatrace database monitoring you can:

- Find expensive statements (i.e., statements that read a lot of data).
- Understand why some statements are slow performers.
- Receive notifications for increased SQL statement costs and execution.

#### See how every single SQL statement performs

- Detailed usage characteristics make configuration easy. Find out the frequency at which each service calls each database. You'll finally know how services utilize your databases!
- Dynatrace categorizes database activities so you have insight into how your databases are used. Helpful infographics and metrics give you all the information you need to set up high-performing databases.

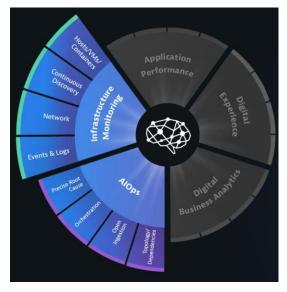
#### Identify and solve database issues that impact application performance

Find out if it's your code that's causing problems and learn how to fix database problems without running to your DBA for support. Dynatrace monitors and analyzes the database activity of your services, providing you with observability down to individual SQL and NoSQL statements. With Dynatrace you see how your application impacts your databases.



### Infrastructure Monitoring

Advanced observability across cloud and hybrid environments with continuous auto-discovery of hosts, VMs, containers and orchestration, network, devices, logs, events and more, all in context, with precise AI-powered answers. Consolidate tools with an all-in-one infrastructure solution that includes AIOps for precise answers about anomalies and degradations, so you don't waste time with alert storms, data silos and war rooms.



### Host, Virtual Machine and Containers

Advanced observability across cloud and hybrid environments with continuous auto-discovery of hosts, VMs, containers and orchestration, network, devices, logs, events and more, all in context with precise, AI-powered answers.

#### Advanced observability at scale for all infrastructure

 Automatically monitor all your infrastructure, including cloud, hybrid, containers, VMs, network, servers, storage and more. Get advanced observability across PaaS and container technologies such as AWS, Azure, GCP, Kubernetes, OpenShift, and Cloud Foundry, process detection and resource utilization, network usage and performance, log monitoring, third-party data and event integration.

#### Find answers faster and make teams more productive

• Al-assistance continuously monitors all your infrastructure to detect anomalies and deliver precise answers prioritized by business impact. Multiply your team's productivity and shift your focus to what matters – proactive action, innovation and business results.

#### Extend observability with custom log metrics

• Extend infrastructure observability to anything that writes to a log file with custom metrics based on log data.

#### Breakdown apps and silos with all-in-one approach

Dynatrace Infrastructure Monitoring is part of our full-stack monitoring solution. One solution
providing a unified view across the full stack, from applications to infrastructure and user
experience, all in context, with our AI, Davis, continuously analyzing billions of dependencies,
providing precise root cause determination. Eliminate alert storms from siloed tool sprawl and
focus resources on proactive actions with the highest impact.

#### Automate Incident Management to solve problems faster



• Dynatrace Infrastructure Monitoring seamlessly integrates with ITSM solutions like ServiceNow, to enable real-time CMDB updates, automatic ticketing and auto-triggering of remediation workflows.

### Events and Log Monitoring

The Dynatrace all-in-one platform includes Log Monitoring and Log Analytics with full stack context, empowering DevOps teams to monitor and troubleshoot from one place.

#### Automatic Log Monitoring and log analytics in context

Dynatrace automatically discovers all log files on your monitored hosts and processes, and puts them in context of the full stack.

- Auto-detection and automated log analytics for important processes
- Filter relevant log files by keywords and time range
- Analyse single or multiple log files at once
- Get full access on-demand on your host or archive all logs via external storage, as well as in the cloud

#### Custom log metrics for smarter AI, faster troubleshooting

• Turn log data into custom metrics for charting, dashboarding and alerting. Custom log metrics are used by the Davis AI engine to support root cause analysis. Easily turn ad hoc log analytics into long-term time series.

#### Central log storage with local access on demand

• Unique approach combining on-demand access with centralized storage for cost-effective log monitoring. Leverage centralized log monitoring for ephemeral microservices and local access for log analytics, complementing the fully automatic root cause analysis.

### Continuous Delivery

Effortless deployment, continuous auto-discovery, automatic dependency mapping and instant answers with precise causation for dynamic architectures. Massive automation is at the heart of the Dynatrace platform

Traditional monitoring approaches can't keep up.

A single cloud native application can consist of thousands of microservices running inside of containers, and millions of interdependencies, adding layers of complexity to an already convoluted digital ecosystem.

The manual effort to deploy, configure, and manage traditional tools is no longer feasible. You need automation every step of the way.

Massive automation is Dynatrace's answer to match the requirement of web-scale dynamic microservice environments.

#### Auto deploy with a single agent

- Through OneAgent, high-fidelity data is automatically and continually gathered in context without manual configuration or scripting.
- The Dynatrace OneAgent discovers all processes running on the host and automatically activates instrumentation specifically for your stack. New components get auto-instrumented on the fly.

#### Continuously auto-discover and map your environment

• With Smartscape, Dynatrace continuously and automatically maps data into a real-time dependency map which shows the relationships and dependencies for all entities, both vertically up and down the stack and horizontally between services, processes and hosts.



#### Proactively identify problems and their impact

• Dynatrace automatically learns normal performance, dynamically adapting as your environment changes. Not only do we proactively alert you to problems, but also eliminate alert noise. Dynatrace automatically determines the severity of an incident in terms of user and business impact, so your team can focus on what matters most.

#### Precise root-cause and auto remediation

• Dynatrace fully automates root cause analysis. Because we understand all the relationships and dependencies in your environment, the Dynatrace AI engine, Davis, can provide precise answers to the root cause of an incident and how we found it. Even better, you can also automate remediation for many issues through integrations with CMDB and continuous delivery tools.

#### Deployments and upgrades are a breeze

- With Dynatrace, the deployment process couldn't be easier. Simply install OneAgent on your hosts or in your PaaS environments, and that's it. In minutes, we auto-discover your entire stack, end-to-end, even those processes running inside containers.
- Upgrades are automated as well. You control when they happen, and we do the rest.

#### **Network Monitoring**

#### Only Dynatrace monitors process-to-process network communications

Monitoring network communications at the host level is no longer enough. That worked fine back when individual services ran on stand-alone machines. For any meaningful analysis today, you need to dig deeper and get network metrics at the process level. But we don't stop there—only Dynatrace can go the extra mile and give you detailed metrics about process-to-process communications.

#### Ensure high quality process communications over networks

- Dynatrace reveals the quality and performance of all network connections between processes in your environment—including processes distributed across virtualized cloud environments and datacenters.
- Know which of your services and processes suffer from network connection problems and enable your DevOps to improve the connections between vital infrastructure components.
- Dynatrace provides a clear picture of all inbound and outbound process connections over your network interfaces (both physical and virtual).

#### Understand your network topology in dynamic environments

- Dynatrace gives you a comprehensive overview of your virtualized network infrastructure.
- You always know the status of your VMs, ESXi hosts, and cloud instances.
- Dynatrace recognizes changes within your infrastructure, and automatically monitors new machines and network interfaces.

#### Process level network capacity monitoring made easy

- Dynatrace monitors your network traffic on both the host and process level. See which processes consume the most network bandwidth and have connection problems.
- Gain insights for capacity planning. Resource-intensive processes are easily identified.

See integrated network health monitoring

- Dynatrace shows you integrated network health metrics along with all other key machine resource metrics.
- You see actual data throughput and quality of network connections between communicating hosts and processes.



• Gain a clear picture of the metrics that really matter: CPU, memory, disk, and network health. All key machine resource metrics are displayed in a single view.

#### Get full stack monitoring with a single tool

- Dynatrace's all-in-one approach seamlessly integrates all kinds of monitoring, from user-experience and application monitoring to server and network monitoring.
- You see the impact and dependencies of issues across tiers and along your entire stack within a single network monitoring tool.
- With a real-time map Dynatrace tells you how your components effectively interact with each other and how end-users are impacted by infrastructure problems.



### **Digital Experience**

Assure consistently better business outcomes and optimize user experience by maintaining an outside-in understanding of how your entire cloud stack supports the outcomes expected – service by service, journey by journey, KPI by KPI. Real user and synthetic monitoring combined with 4k movie-like session replay, provide application optimization, enhanced customer experience and superior customer support across all digital channels. Digital experience includes AIOps, providing intelligence to improve every user experience.



### Synthetic Monitoring - Prevent problems before users see them

With synthetic monitoring, automatically discover problems across production and development environments before your customers are affected and begin to overload your call centers with complaints.

#### **Simulate Business Critical Business Applications**

Using our unique web-based recorder, easily click through and record the business-critical transactions most important to your business and customers.

- Monitor critical workflows without scripting, using a simple web-based recorder.
- Play back scripted transactions, including all the screen, keyboard, and mouse interactions that your real users perform.
- Capture business transactions and run them from real browsers.

#### SLA Monitoring – Monitor your Application 24/7

Ensure that your web application is available and performs well from anywhere in the world to meet your SLAs.

- Ensure that your key web, mobile, cloud, and streaming pages and transactions perform properly from all customer locations, all the time.
- Dynatrace uses all major desktop and mobile browsers to comprehensively simulate customer journeys from thousands of locations around the world.



#### Mange CDN and 3<sup>rd</sup> Party Performance

- Ensure SLA compliance between IT, business stakeholders, and third parties.
- Gather response time and availability by third-party object or host.
- Quantify the benefits that different CDNs provide in your key geographies.

#### **Proactive Problem Analysis**

- <u>Eliminate manual troubleshooting through automation</u>: Analyze hundreds of test executions, thousands of objects, millions of dependencies and billions of events in just seconds!
- Rank problems by importance—issues that impact service quality appear at the top of the list.
- Integrate with Slack, VictorOps, Opsgenie, PagerDuty, ServiceNow, and more. Dynatrace is ChatOps and ITSM friendly!

#### Real User Monitoring – Automatically Resolve Real User Impacting Issues

With real-user monitoring, instantly know when user experiences go wrong and how you can rapidly fix them, so you can eliminate the guesswork. Al powered, full stack, automated - Dynatrace brings new levels of observability and insight into the customer digital experience through the perspective of the end user in real time.

#### **Unmatched Monitoring Visibility**

Dynatrace is the only vendor to capture the full visibility of customer experience across every digital transaction. No sampling of data, Dynatrace gives you a complete picture, from the frontend to the backend.

- Gapless insight map the whole user journey, not just bits and pieces
- Awareness into performance issues and potential business impact
- Resolve problems proactively with real-time data

#### Eliminate Blinds Spots with Dynatrace Visually Complete

Correlate visual performance to digital business outcomes automatically. <u>Dynatrace Visually complete</u> is the only solution to eliminate user experience blind spots and provide the most accurate and relevant measurement of user experience. Core benefits of Visually complete:

- 100% observability to actual real user experiences
- Accelerate performance improvement
- Align IT and business to connect UX with business outcomes
- Optimize decisions across development, operations and user journey



#### **Session Replay**

Capture, index and visually replay the complete digital experience for every user across browsers, interfaces and devices. Session Replay provides the insights into user behavior that organizations require to create perfect user experiences, aligning business and IT with a singular view and source of digital truth.

#### See Exactly What Users See

Intuitively identify, troubleshoot and resolve customer issues with an easy-to-use solution which captures, indexes and visually replays the complete digital experience for every user in a movie-like interface, providing additional visual context to every transaction as part of a fully integrated DEM solution.

- Capture all user sessions
- Replay recordings on demand
- Mobile, web and 3<sup>rd</sup> party applications
- Native support for single page apps and javascript frameworks

#### Mobile, Web and IoT

Dynatrace mobile monitoring gives full insights from mobile to backend services to ensure a positive user experience

#### Monitor your Apps performance

When it comes to mobile user experience, performance is key. Dynatrace lets you understand the level of performance that your customers experience and whether they are using an Android device or latest iPhone. Dynatrace provides:

- Top HTTP requests
- Number of HTTP requests
- Error rate
- Request time
- Action duration

#### Improve mobile user experience

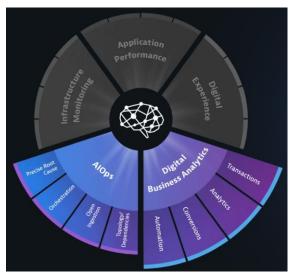
Dynatrace provides integrated monitoring of your native mobile apps, backend services and 3rd party services you depend on. Dynatrace mobile application analytics lets you get to know your user base by monitoring and tracking:

- Users / sessions
- New users
- User path through your app
- App version distribution
- Geographic regions



### **Digital Business Analytics**

Tie full-stack monitoring data to business metrics and get real-time, precise answers about conversion, revenue impact, release validation, customer segmentation and more. Gain real-time visibility into business KPIs, enable more efficient IT and business collaboration and consistently deliver better digital business outcomes across all of your channels.



#### Get Complete Context with full stack data automatically connected with business KPI's

Eliminate the manual work of tying together application performance and user experience data to business KPI's with automatic tracing, segmentation, and data extraction from business transactions for better business insights and results.

#### Prioritise improvements based on business impact

Stop wasting time guessing which optimization efforts are delivering business results with AI-assisted analysis, exploration, and querying of data to get insights on what is driving the greatest business impact, personalized for your industry and business goals.

#### Minimise abandonment and optimise conversions

Proactively optimize the user experience across business milestones and conversion steps to pinpoint where in the user journey you can efficiently improve business outcomes, and drill all the way down to the specific performance by geography, product, customer segment, and more.

#### Instantly Understand and fix problems before business impact

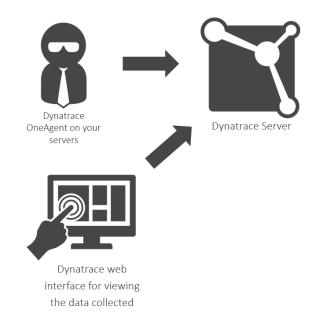
Proactively optimize the user experience across business milestones and conversion steps to pinpoint where in the user journey you can efficiently improve business outcomes, and drill all the way down to the specific performance by geography, product, customer segment, and more.



### 4. 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.



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:

- What device/OS/browser does the user have?
- Where are they accessing from?
- 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.
- 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:

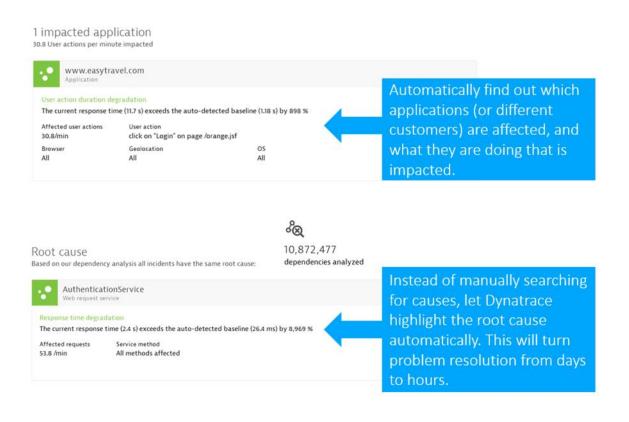
- CPU usage.
- o Memory utilization.
- Network I/O.
- Disk I/O.

# 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:

- 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?





### 5. 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.

	sandra n details related to this u	user profile are outli	ined below.		
25 tagge	d user sessions	with 'aleksa	3 Applications accessed www.openstack.easytravel.com (Web) www.easytravel.com (Web) www.weather.easytravel.com (Web)	]	United States and more  4 Browser and device types used  Desktop  Desktop  Mobile  R Robots  1 more
25 Lagge	a user sessions	WILLI dieksa	IIUIa		
Extended by	10 sessions from the sam	ne user (cookie) ident	tifier More		
Analyze sessi	ons based on user tags	and select a	a second category 👻		
Started at 🔻	User tag	Duration			
14:22:19	aleksandra	1 min 34 s 🖕 🗕			
14:20:21	aleksandra	23 s ແ	146660		
14:16:14	aleksandra	27 s	o-eeceo		

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



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.

lethod							Sample count		Contributi
✓ java.lang.	Thread.run						1.95k	E	100 %
✓ java.uti	il.concurrent.ThreadPoolE	xecutor\$Worker.run [+]					1.95k	-	100 %
✓ org.	apache.tomcat.util.net.Jlo	Endpoint\$SocketProcessor.run [+]					1.94k	-	99.8 %
<b>v</b> o	rg.apache.coyote.ajp.AjpF	Processor.process [+]					1.92k		98.8 %
~	org.springframework.wet	b filter.OncePerRequestFilter.doFilter [+]					1.92k		98.8 %
	✓ javax.servlet.http.HttpS	iervlet.service [+]					1.92k	_	98.8 %
	✓ org.apache.axis2.tr	ansport.http.AxisServlet.doPost [+]					1.81k		92.8 %
	<ul> <li>java.lang.reflect.l</li> </ul>						1.78k	_	91.5 %
		legatingMethodAccessorImpl.invoke					1.78k	_	91.5 %
		ace.easytravel.business.webservice.JourneyService.findJourneys [+]					1.39k		71,4 %
		ace.easytravel.business.webservice.JourneyService.findLocations [+]					374	-	19.2 %
		ansport.http.AxisSerVet.doGet [+]					117		6.01 %
Or-					JavaScript er-		De-		
der 🔺	Туре	User action	Conversion	Action duration	rors	Apdex	tails		
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			-	8	~		
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:

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

	6	<b>)</b> 0.5			53	2		
click on "Search" on page /orange.jsf	5.83 s							
CalculateRecommendations	5.83 s							
header1.png	1.01 s						_	
banner.png	3 ms							
banner_Hawali.png	3 ms						1	
winter.jpeg	755 ms						-	
result_pic_1.png	8 ms							
/	4 ms							
result_pic_1.png	7 ms							
1	4 ms							
result_pic_2.png	7 ms							1

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.

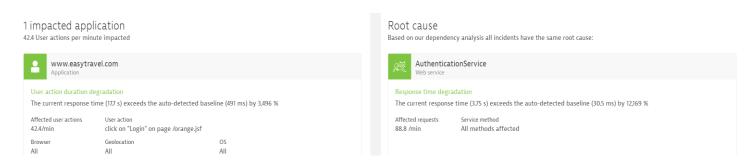


### Example #2: Drilling Down into Application Issues

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.

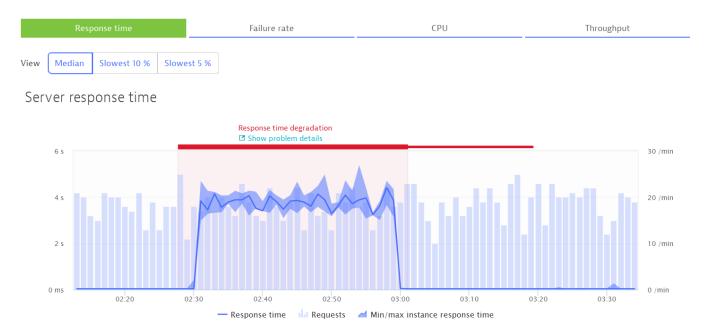
Clicking through on this I can see that inside the service it is a particular request called "authenticate" which is contributing the most to the response time increase.

Requests contributing to this problem



Slow response time 4.34 s authenticate





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 findi	ngs	
	*	Network IO time	1.49 s
0,	۵	{call verify_location(?)} in SQL Modifications	<b>1.01</b> 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	1	26.5 %
> com.sun.proxy.\$Proxy.getUser	400	I	3.61 %
> org.apache.axis2.transport.http.AxisServlet.doGet [+]	2.99k	1	26.9 %



# 6. DYNATRACE SUPPORT SERVICES

# Dynatrace ONE vs. Dynatrace ONE Premium

	Dynatrace ONE	Dynatrace ONE Premium
Onboarding & continued enablement		
Dynatrace community & documentation	<b>Ø</b>	<b>Ø</b>
Digital onboarding & enablement	0	0
Dynatrace University education access	<b>Ø</b>	<b>Ø</b>
Dynatrace University teams		<b>S</b>
Architectural planning & deployment checklist		<b>S</b>
Health & progress visibility		
Service Quality & Availability reports	0	0
Deployment & Product Adoption report, User Adoption report		<b>Ø</b>
Expert review of Service Quality Report and Availability Report		<b>S</b>
Customer product support		
Dynatrace Mission Control	24/7	24/7
Customer Support Center access	<b>Ø</b>	<b>Ø</b>
Hours of operation	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		0
Sev1 guaranteed update frequency		Daily
Communication methods	Web, chat	Web, chat, phone
Proactive engagement & analysis		
Live chat	<b>Ø</b>	0
Prioritized chat availability		<b>Ø</b>
Customer success plan	Self-guided	0
Quarterly business reviews		<b>Ø</b>
Weekly on-boarding or coaching sessions		0
Designated Customer Success Manager		<b>Ø</b>
Designated Product Specialists		0

# 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.