Dynatrace Cloud Infrastructure Monitoring

Simplified. AI-powered. All-in-one.

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Adam Dawson

Director, Product Management

Dynatrace

Agenda

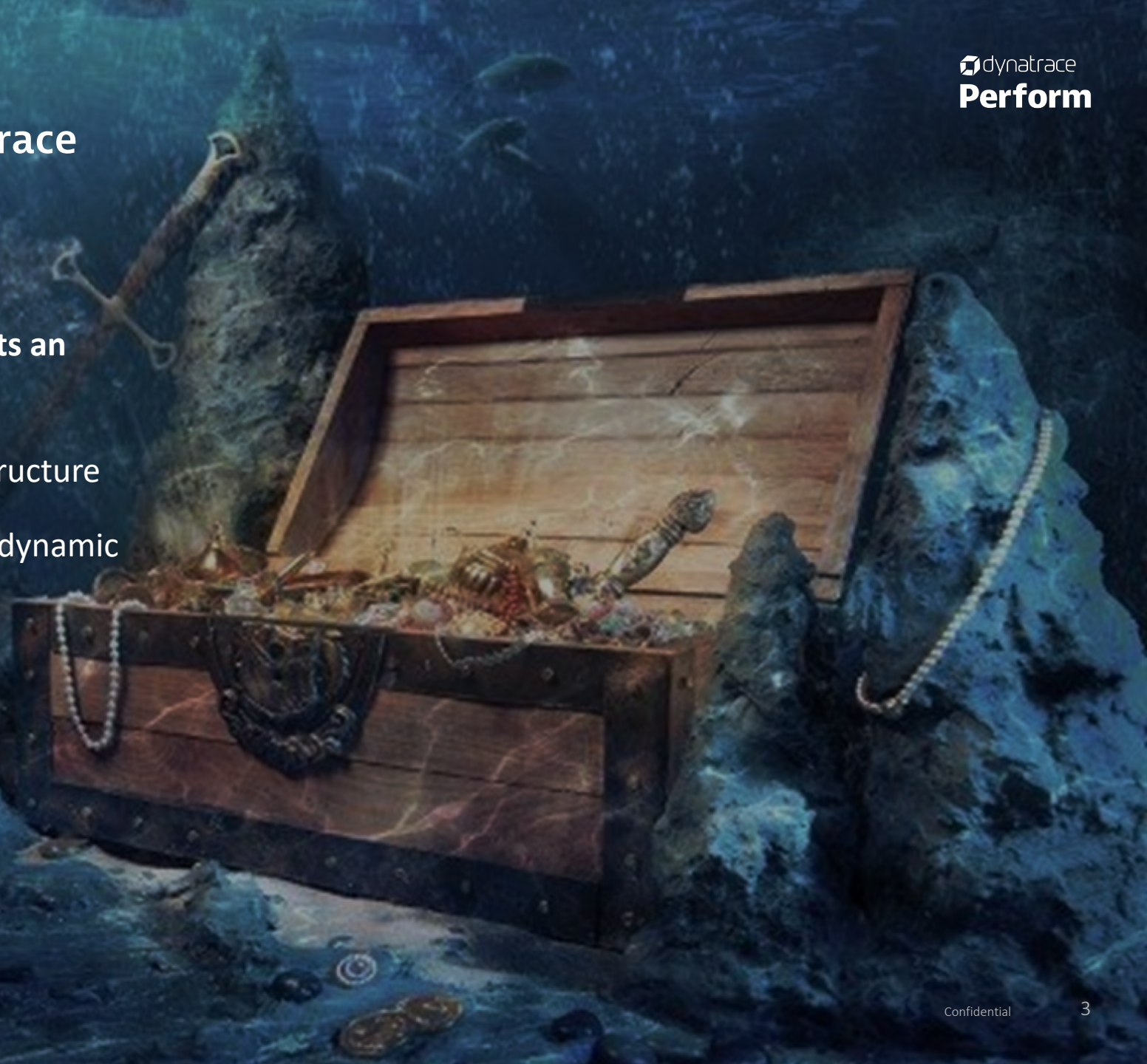
- The Best Kept Secret at Dynatrace
- Simplified, All-in-one, Cloud Monitoring
- Top Use Cases for Cloud Infrastructure Monitoring
- Product Overview / Demo

The Best Kept Secret at Dynatrace

The move to the enterprise cloud presents an opportunity…

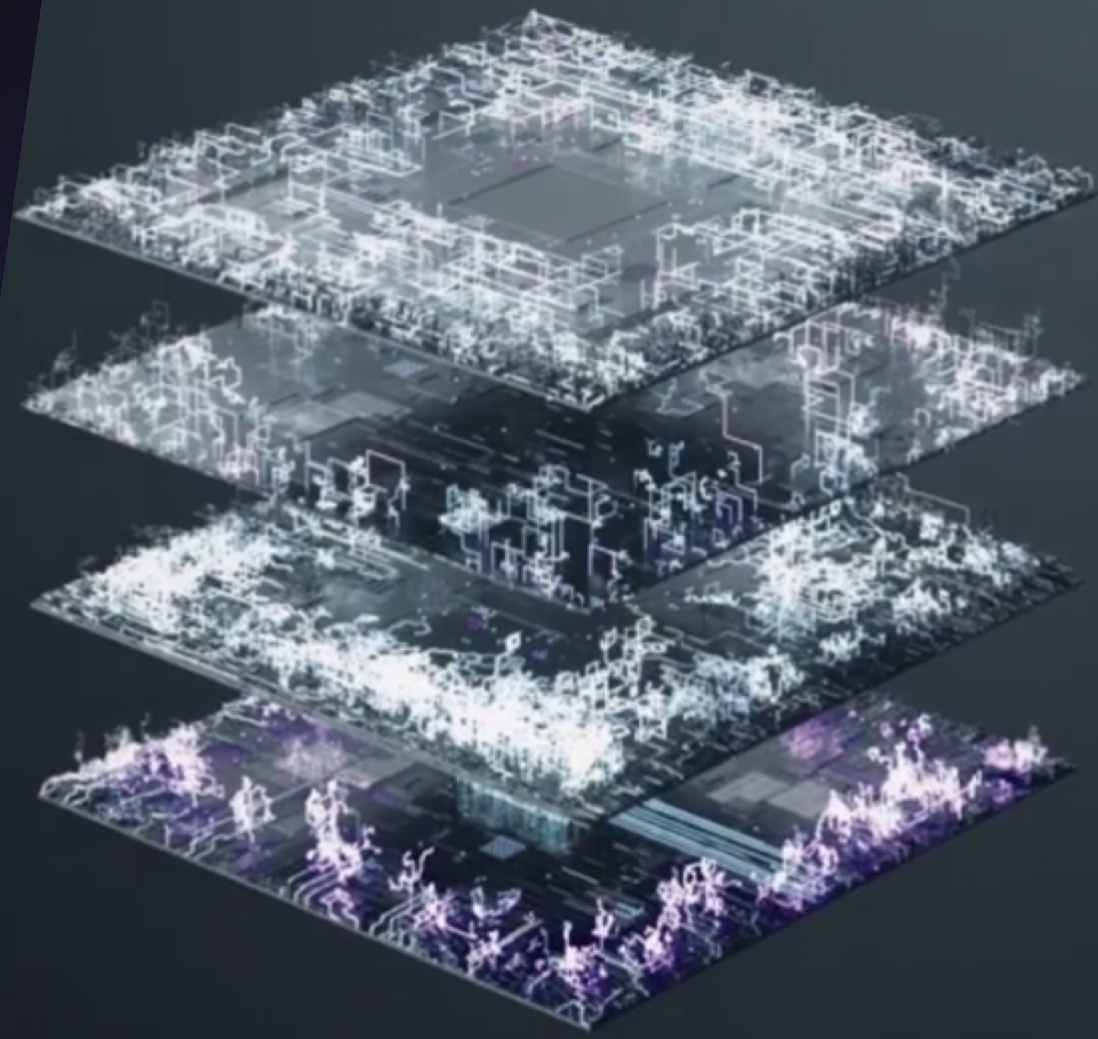
- To apply AI-based monitoring to infrastructure
- To effectively automate monitoring for dynamic cloud environments
- To replace legacy monitoring tools

…All In One Place with Dynatrace



Infrastructure and Applications are now Inextricably Linked

- DevOps and CI/CD
- Microservices and Containers
- Serverless
- Software-defined
  - Servers
  - Storage
  - Networks
- Enterprise Hybrid Cloud



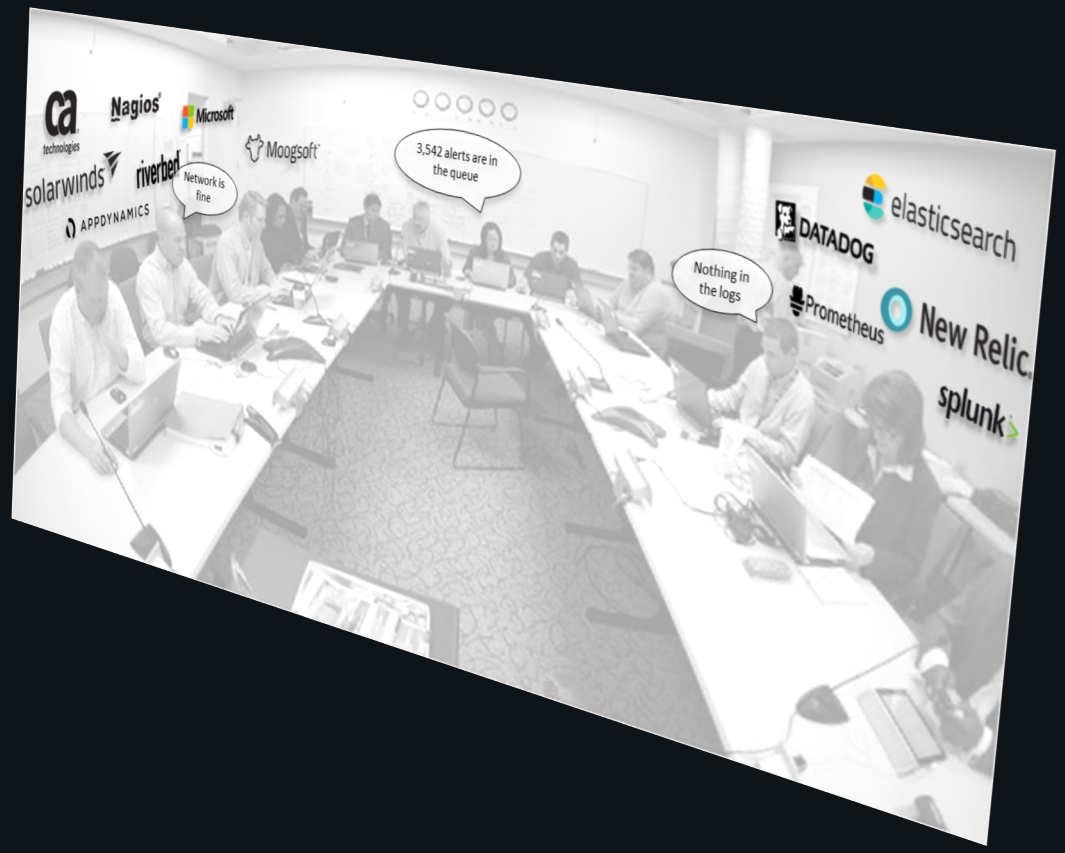
Traditional and Cloudy Monitoring Approaches Aren't Working

Traditional Tools

- Many siloed tools
- Too much manual setup and config
- Not cloud-ready
- Not intelligent

Cloud Point Tools

- Too many tools
- Difficult to set up and integrate
- No answers, just data
- Too much noise/info



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Dynatrace Cloud Infrastructure Monitoring. Simplified. AI-powered. All-in-one.

1. Automatically maps and monitors your enterprise cloud without manual configuration

2. Applies Dynatrace AI magic to infrastructure monitoring

3. A single product with a unified full-stack view for Dev, Ops, and Infra teams

THE SOLUTION

Simplified

AI-powered and Automated

All-in-one

Simplified Enterprise Cloud Monitoring

- **OneAgent** single installer automatically discovers, maps, and monitors infrastructure components anywhere in your enterprise cloud.
- **Reduces the need for legacy and platform-specific point tools** and manual configuration
- **Dynatrace Smartscape** makes understanding and managing your dynamic cloud architecture simple and understandable

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THE SOLUTION

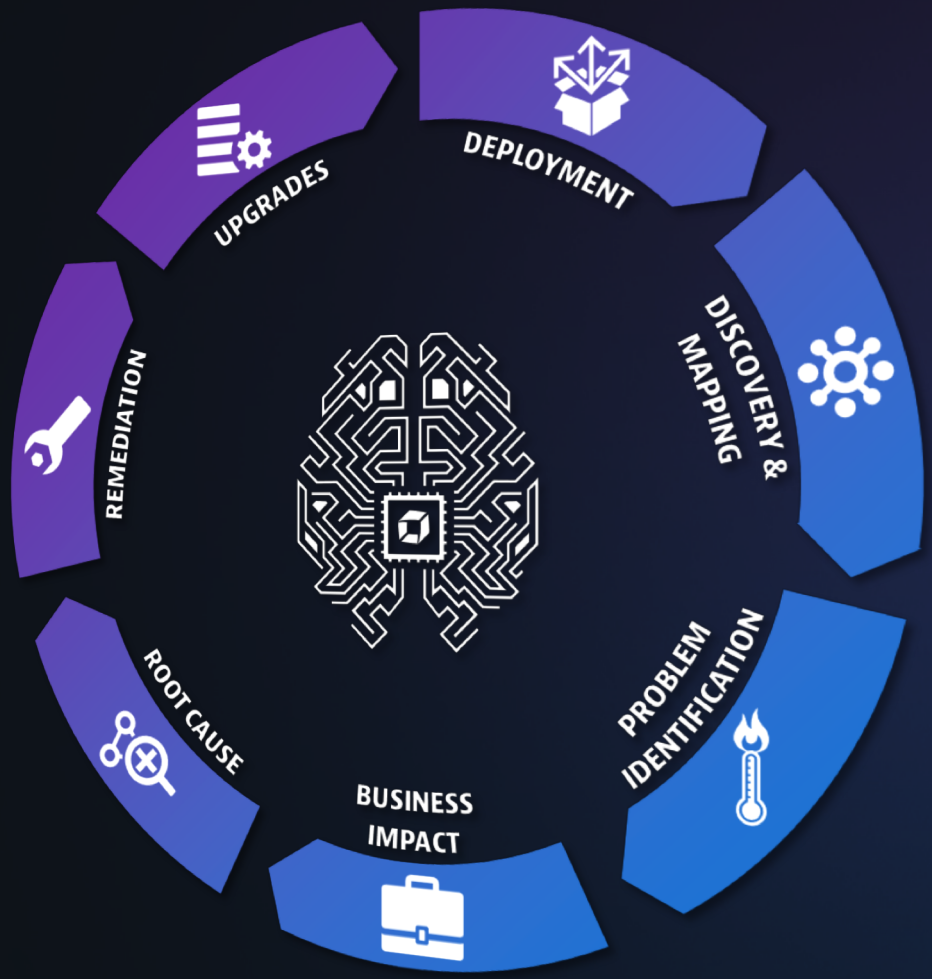
Simplified

AI-powered and Automated

All-in-one

Fully automated, with scale, out of the box.

- **AI** continuously baselines performance and serves precise root causation
- **Automatic** topology mapping in a dynamic environment
- **OneAgent** automated deployment and updates
- **Web-scale** without throttling capture



THE SOLUTION

Simplified

AI-powered and Automated

All-in-one

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One Platform For the Enterprise Cloud

- **Single view** across your entire hybrid-cloud ecosystem from monolithic and mainframe to your new cloud platform.
- **Full stack coverage** for Application Performance, Cloud Infrastructure, Digital Experience and AIOps
- **Deep cloud integrations** with all leading cloud providers.

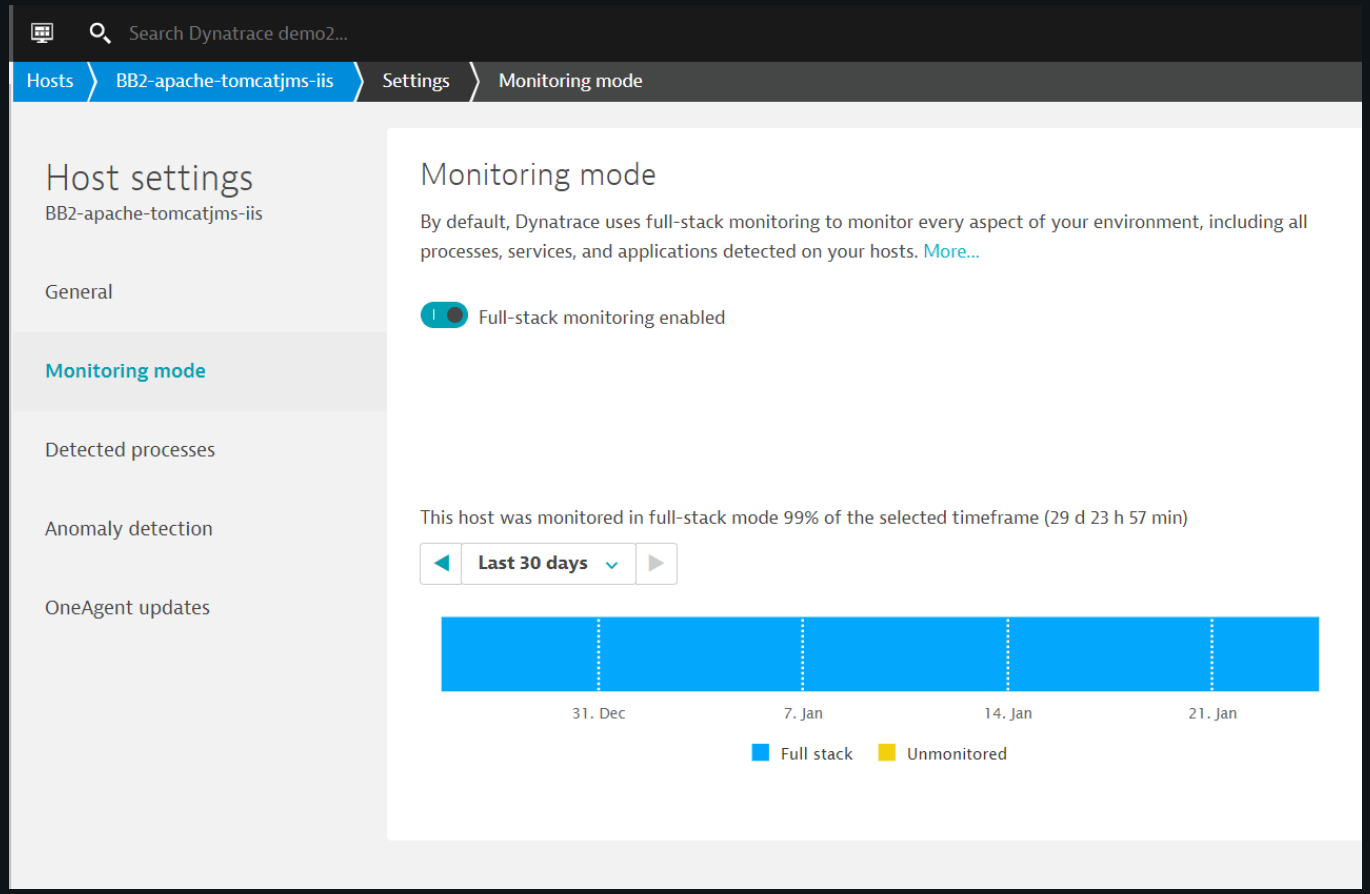
Example Cloud Infrastructure Monitoring Use Cases

Application Services Architecture	Packaged/Business Applications	Secondary Apps and Systems

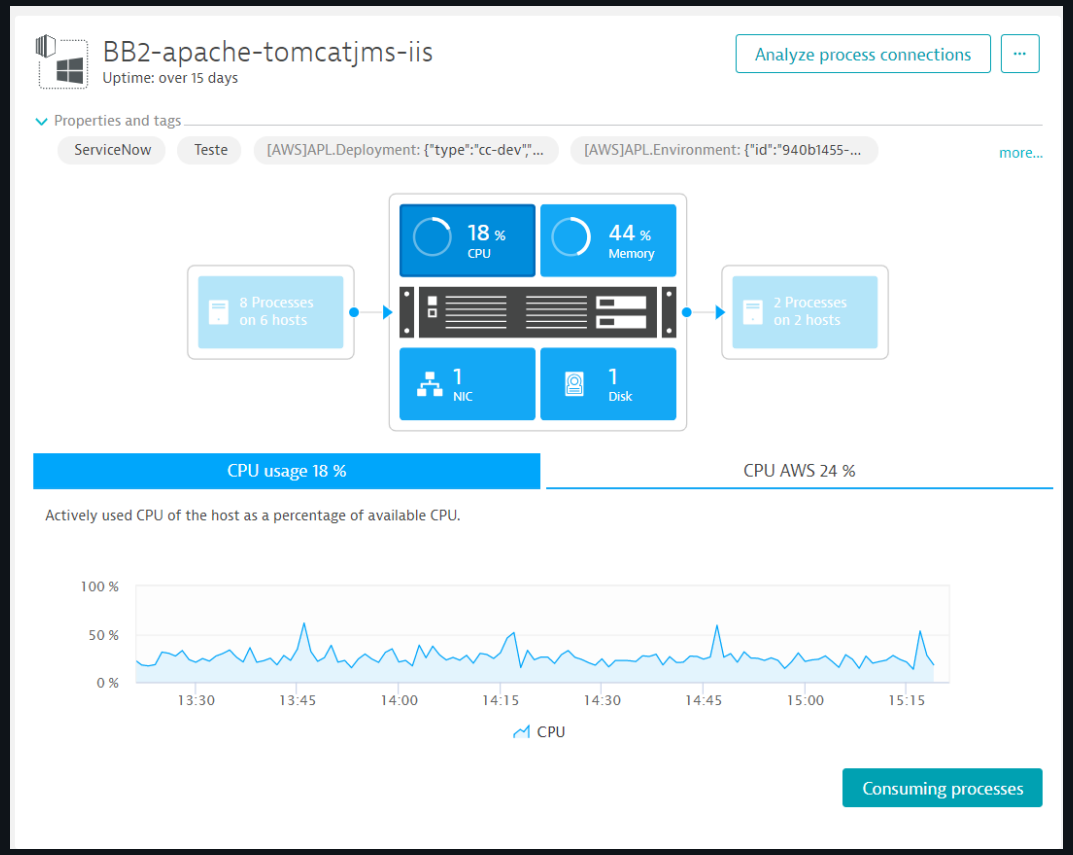
Product Demo

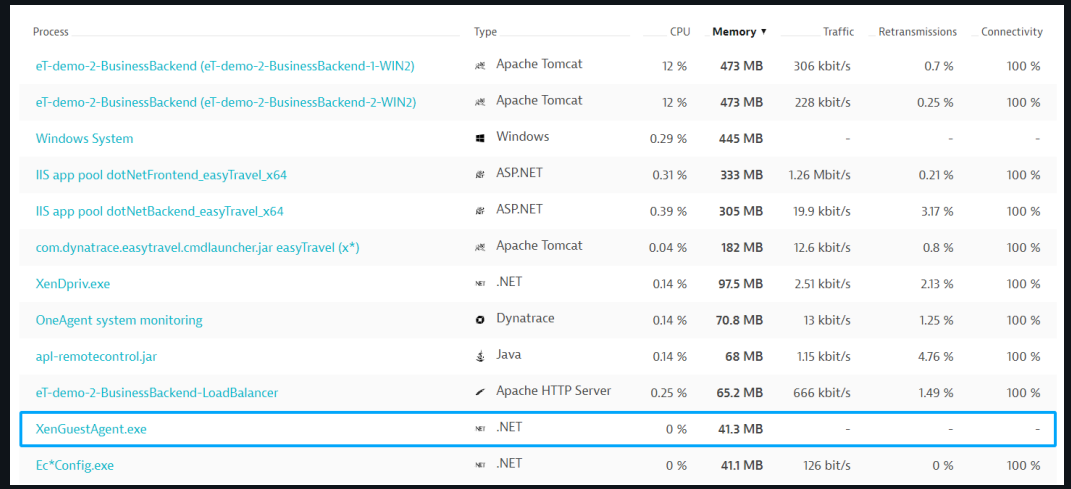
Enabling Infrastructure Only Mode

- Any system with a OneAgent is automatically monitored
- Choose between full-stack and infrastructure-only mode at any time in Dynatrace settings

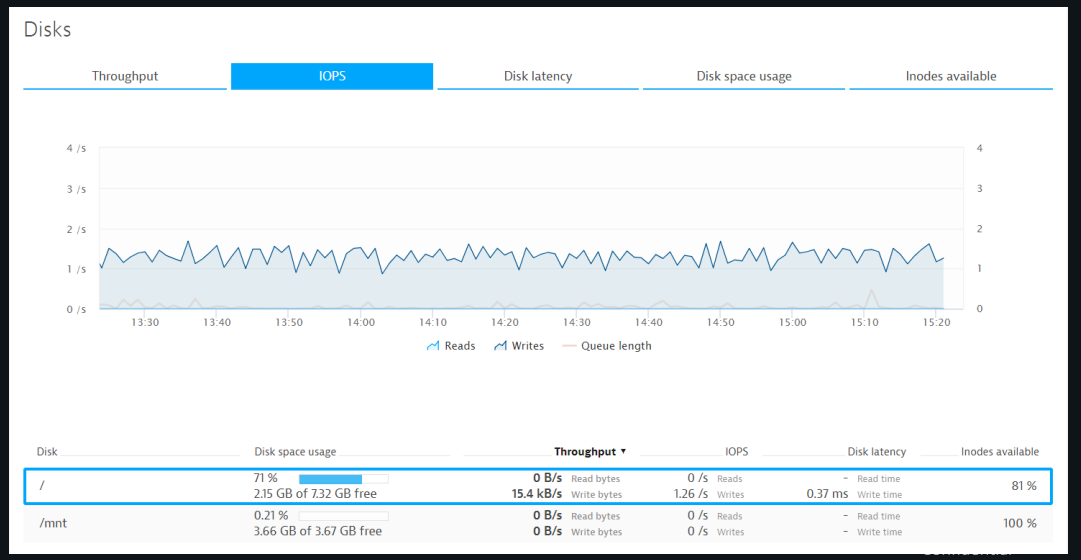


Infrastructure components monitored in Dynatrace Hosts





Process	Type	CPU	Memory ▾	Traffic	Retransmissions	Connectivity
eT-demo-2-BusinessBackend (eT-demo-2-BusinessBackend-1-WIN2)	Apache Tomcat	12 %	473 MB	306 kbit/s	0.7 %	100 %
eT-demo-2-BusinessBackend (eT-demo-2-BusinessBackend-2-WIN2)	Apache Tomcat	12 %	473 MB	228 kbit/s	0.25 %	100 %
Windows System	Windows	0.29 %	445 MB	-	-	-
IIS app pool dotNetFrontend_easyTravel_x64	ASP.NET	0.31 %	333 MB	1.26 Mbit/s	0.21 %	100 %
IIS app pool dotNetBackend_easyTravel_x64	ASP.NET	0.39 %	305 MB	19.9 kbit/s	3.17 %	100 %
com.dynatrace.easytravel.cmdlauncher.jar easyTravel (x*)	Apache Tomcat	0.04 %	182 MB	12.6 kbit/s	0.8 %	100 %
XenDpriv.exe	.NET	0.14 %	97.5 MB	2.51 kbit/s	2.13 %	100 %
OneAgent system monitoring	Dynatrace	0.14 %	70.8 MB	13 kbit/s	1.25 %	100 %
apl-remotecontrol.jar	Java	0.14 %	68 MB	1.15 kbit/s	4.76 %	100 %
eT-demo-2-BusinessBackend-LoadBalancer	Apache HTTP Server	0.25 %	65.2 MB	666 kbit/s	1.49 %	100 %
XenGuestAgent.exe	.NET	0 %	41.3 MB	-	-	-
Ec*Config.exe	.NET	0 %	41.1 MB	126 bit/s	0 %	100 %



Disk	Disk space usage	Throughput ▾	IOPS	Disk latency	Inodes available
/	71 % 2.15 GB of 7.32 GB free	0 B/s Read bytes 15.4 kB/s Write bytes	0 /s Reads 1.26 /s Writes	- Read time 0.37 ms Write time	81 %
/mnt	0.21 % 3.66 GB of 3.67 GB free	0 B/s Read bytes 0 B/s Write bytes	0 /s Reads 0 /s Writes	- Read time - Write time	100 %

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Dynatrace Infrastructure Dashboards

Enterprise Cloud Dashboard

Owned by gavin.hunter@dynatrace.com

Enterprise Cloud Summary

Problems
0/1

Technologies
.NET
24 more

Service health
All fine 124

Application health
All fine 17

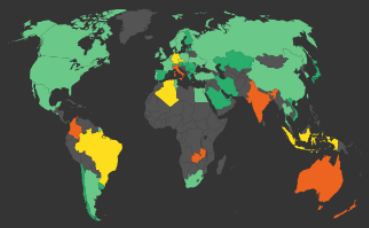
Database health
All fine 15

Host health
All fine 52

Smartscape
221 Services

User Experience

Apdex
www.easytravel.com



Key user actions
www.easytravel.com

4	Excellent apdex rating
6	Good apdex rating
2	Fair apdex rating
1	Poor apdex rating
0	Unacceptable apdex rating
0	Unknown apdex rating

13 Key user actions

Hybrid Cloud

AWS account
AWS

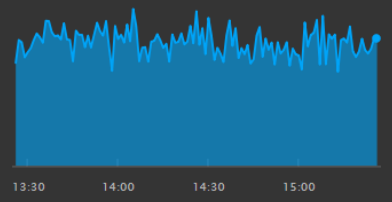
1	2	13
RDS instances	Load balancers	EC2 instances

VMware vCenter
emea-gdn-vc002

	Last Thu	Today	
Migrations	2	0 ↓	2 ESXi hosts
Guests	7	7 –	

Network metrics

Traffic	404 Mbit/s
Retransmissions	0.27 %
Connectivity	98 %



Micro Services

Docker
5 Docker hosts

	17.01	now
Containers	54	54
Images	19	19

Service
easyTravel Customer Frontend

179 /min Dynamic requests

2.8 % Failure Rate

47.5 ms Response Time

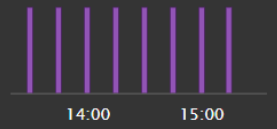
Service
easyTravel Customer Frontend

179 /min	2.8 %	47.5 ms
Dynamic requests	Failure Rate	Response Time

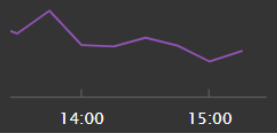
SLA's and Availability

Browser monitor
www.easytravel.com

3 Locations



100 % Availability



4.69 s Duration

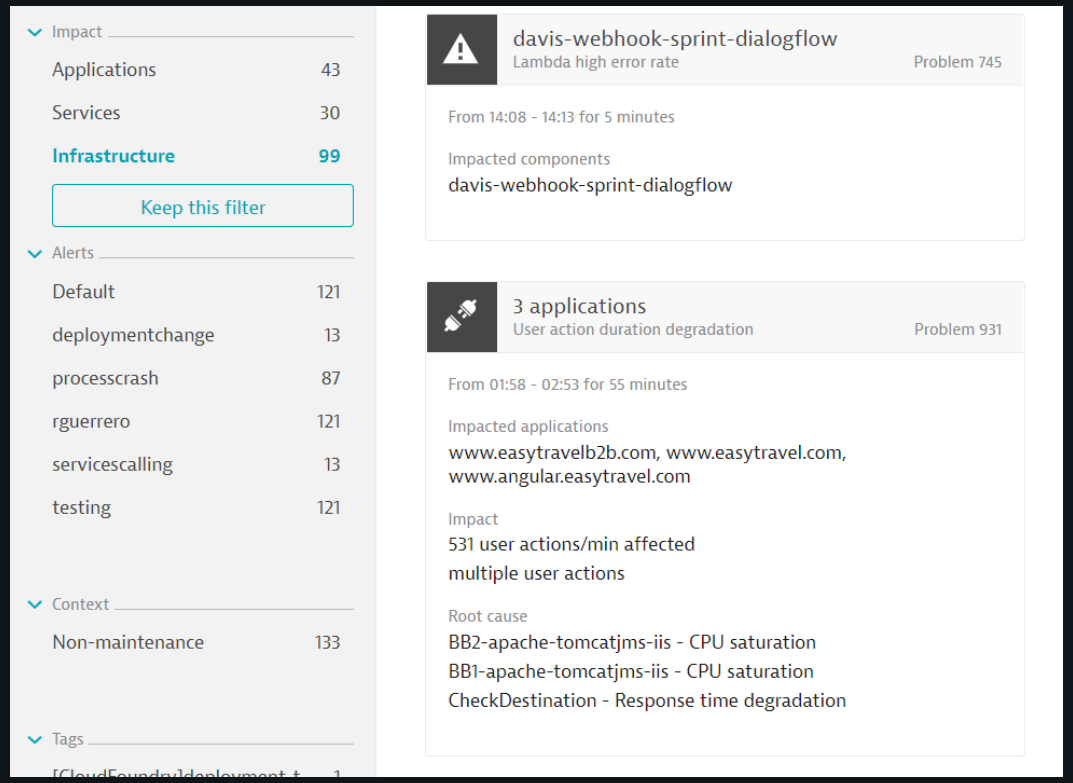
Mobile app
easyTravel Mobile

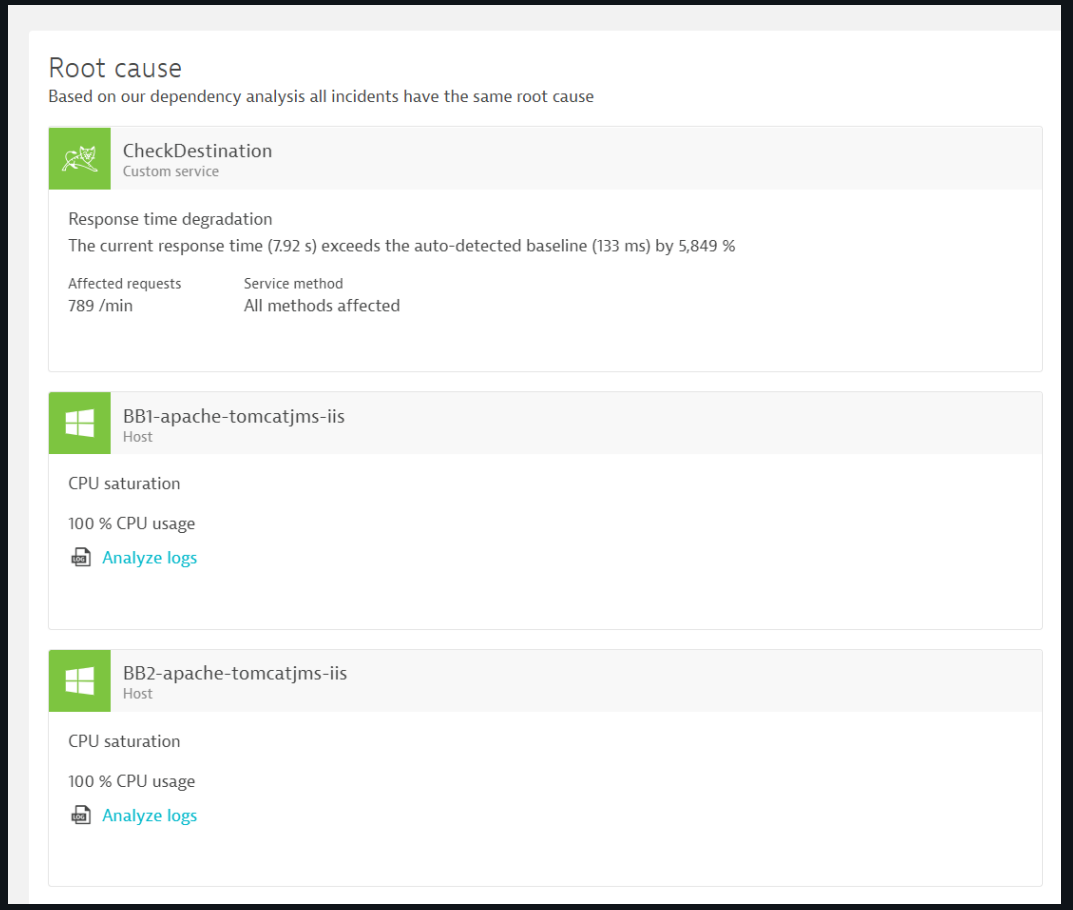
1.2k	100.00 %	0.0
Users	Crash-free users	Crashes

Database
easyTravelOpenShift-Business (MongoDB)

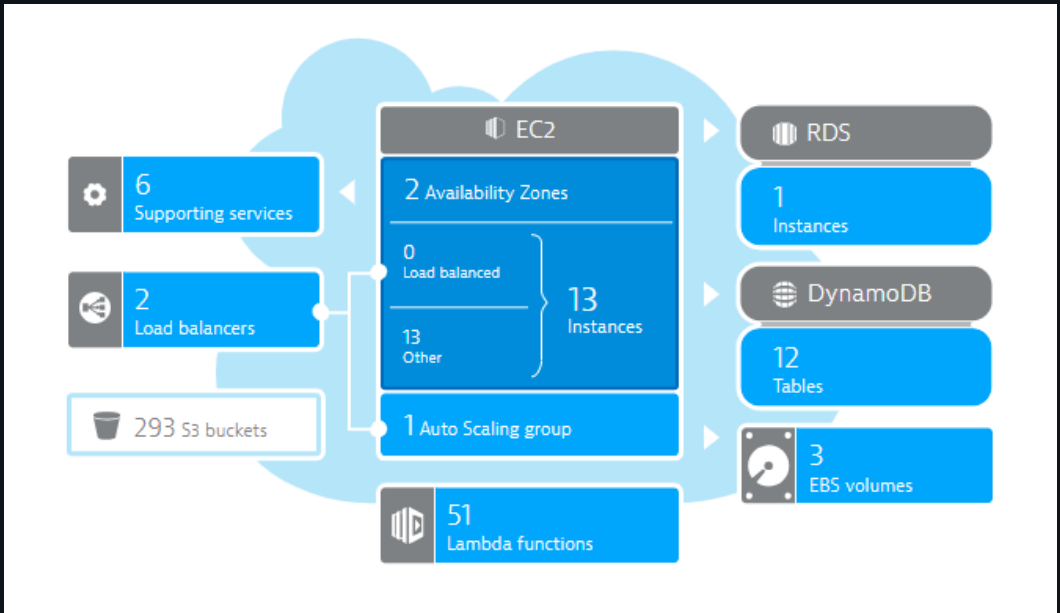
No longer available

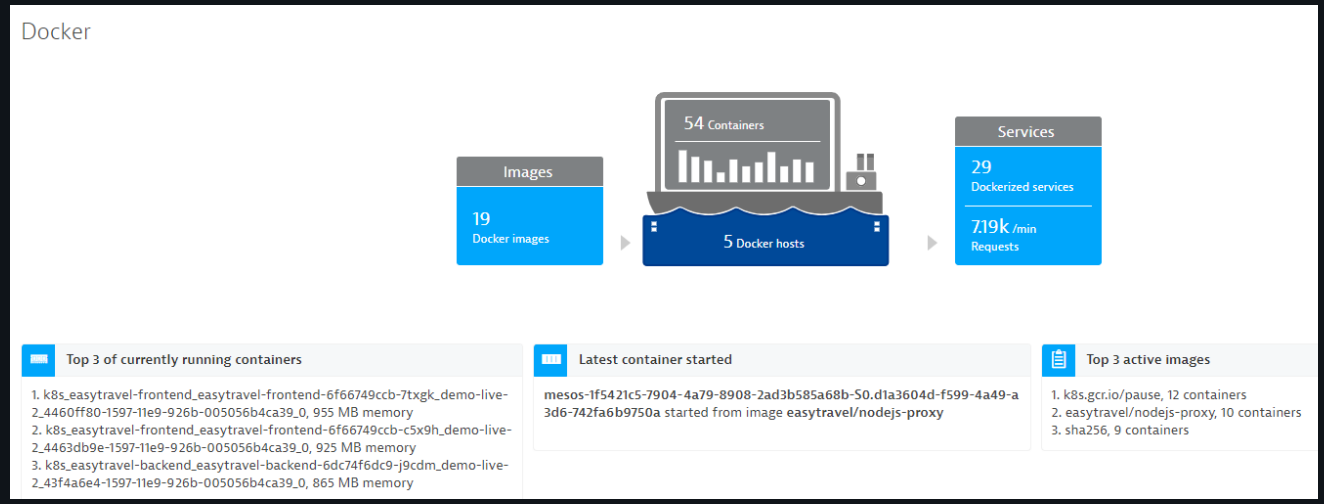
Investigating and Resolving Problems





AWS and Docker Infrastructure Monitoring





Extensions and Plugins

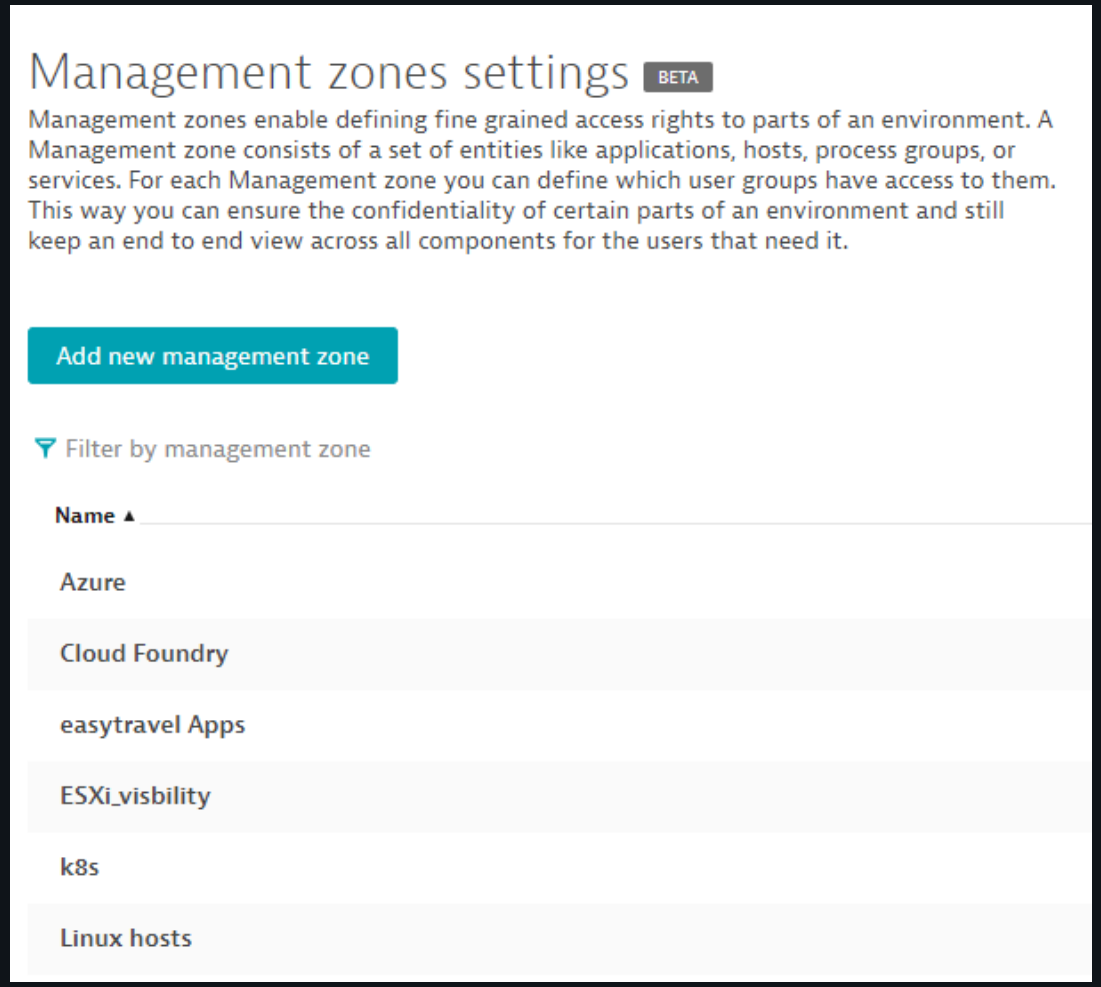
ActiveGate Plugins

Technology
DataPower
F5 BIG-IP LTM
Windows Server 2003

OneAgent Plugins

Technology	Versions
.NET CLR	
ActiveMQ	5.8.0+
Cassandra	2.0+
Couchbase	4.3+
CouchDB	1.5.0+
Elasticsearch	2.3+
Hadoop	2.4.1+
HAProxy	Daemon-mode only (-D option) 1.4, 1.5, 1.6
Kafka	0.9.0.1+
Memcached	1.4.24+
Microsoft SQL Server	2008, 2012, 2014, 2016, 2017
MySQL[1]	5.7
MongoDB	2.6+
PostgreSQL	9.1+
RabbitMQ [3]	3.4.0+
Redis	2.8+
Spark	1.6

Management Zones



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Call to Action: Extend the power of Dynatrace to Cloud Infrastructure!

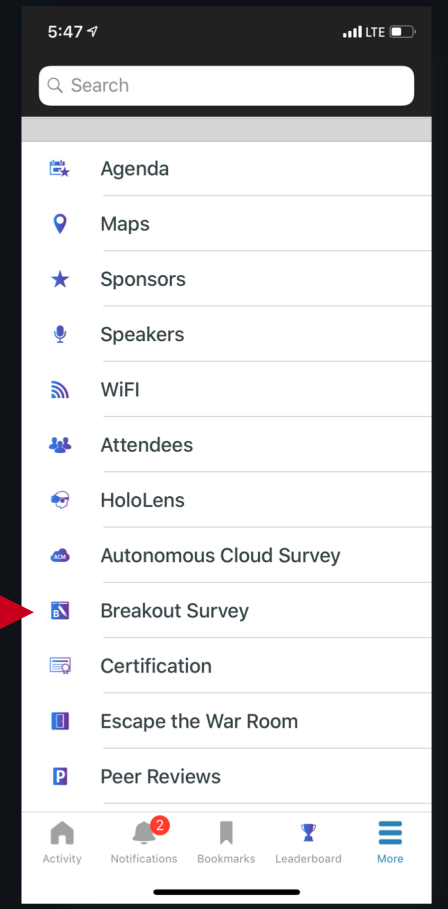
Your To-Do List

- ✓ Deploy a OneAgent in Infrastructure-only mode
- ✓ Try a OneAgent or ActiveGate Extension
- ✓ Finally kick out a legacy tool
- ✓ Meet us in the Marketplace

Let us know how we did!

- 2 minute survey
- Find it from the Perform app menu
- Complete survey for each breakout you attend

Track = Software Intelligence



Thank you
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Backup Slides