

# CONFIDENTLY OPERATE MICROSERVICES AT SCALE USING DYNATRACE WITH RED HAT OPENSIFT

Obtain full insights for better business decisions

SOLUTION BRIEF

*“Dynatrace is the best tool for monitoring our fully dockerized application stack. Out of the box, Dynatrace offered deep insights into our hosts, docker containers, and the services they provide.”*

AXEL SPRINGER,  
IDEAS ENGINEERING GmbH



*“OpenShift is a platform to allow you to run decoupled services and applications, which can be a monitoring nightmare, but Dynatrace’s insights makes it less scary.”*

CHRIS MORGAN,  
TECHNICAL DIRECTOR,  
RED HAT OPENSIFT ECOSYSTEM

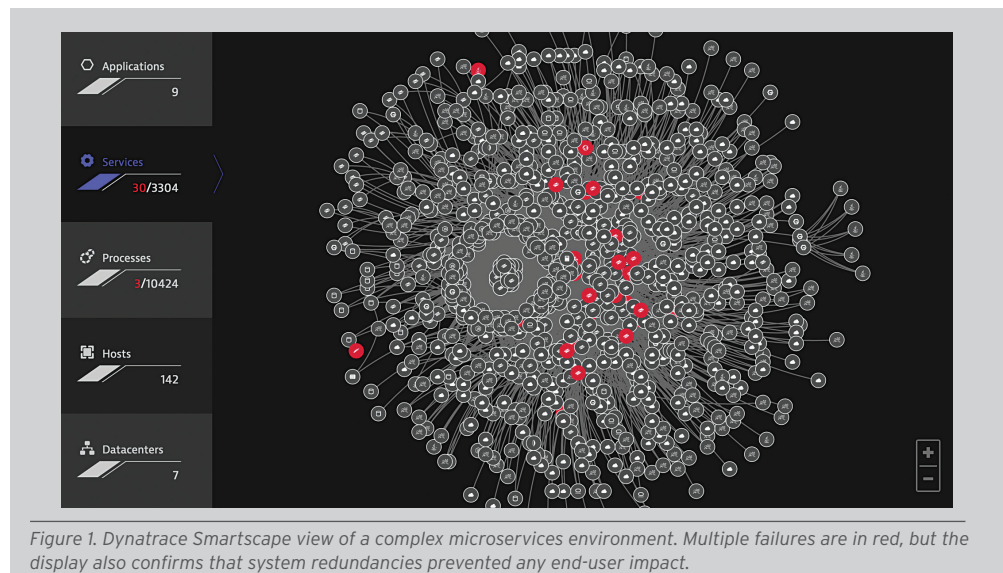
## MICROSERVICES DEMAND BETTER MONITORING

Cloud-based applications rely on microservices for their significant business benefits, including accelerated application development, compartmentalized code streams, and independently scalable services. Industry analysts, such as Gartner in their blog “Microservices: Building Services with the Guts on the Outside,”<sup>1</sup> note that, while microservices simplify an application environment, their complexity makes monitoring core to an implementation’s success.

The decoupled nature of services and applications in Red Hat® OpenShift environments require a more sophisticated application performance monitoring approach. Dynatrace addresses this need with their all-in-one, fully automated, Red Hat OpenShift monitoring solution that allows you to quickly and easily gain insight into the health of your applications and environment. Together, Dynatrace and Red Hat are redefining the way microservice environments are managed and monitored.

## FIND THE PROVERBIAL NEEDLE IN THE HAYSTACK

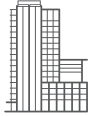
It is impossible for humans to manually manage and troubleshoot such highly dynamic and distributed environments, where systems are composed of hundreds, if not thousands, of microservices. A simple alerting system would be of little help. Dynatrace employs artificial intelligence (AI) to inspect a system in real time, automatically discovering, baselining, and analyzing the architecture to understand the root cause of a problem and analyze the impact to your business.



Dynatrace uses automated machine learning to provide comprehensive visibility into all components quickly and easily. Its unique capabilities include:

- **Auto-discovery.** Dynatrace Smartscape® technology automatically detects and displays all the components and dependencies that comprise your environment, providing you with a real-time blueprint of your application architecture.

<sup>1</sup> Gartner blog, “Microservices: Building Services with the Guts on the Outside”, January, 2015



### ABOUT RED HAT

Red Hat is the world's leading provider of open source software solutions, using a community-powered approach to provide reliable and high-performing cloud, Linux, middleware, storage, and virtualization technologies. Red Hat also offers award-winning support, training, and consulting services. As a connective hub in a global network of enterprises, partners, and open source communities, Red Hat helps create relevant, innovative technologies that liberate resources for growth and prepare customers for the future of IT.

- **Auto-baselining.** Dynatrace uses AI to understand the difference between desirable and unwanted behaviors emerging from each component. It can also dive deep into the code to uncover methods being invoked and how they contribute to the overall performance of the system.
- **Auto-problem analysis.** Dynatrace rapidly identifies failures, component involvement, and root causes. Machine learning helps evaluate issues, determine if it warrants an alert, and provide valuable insights for better business decisions.

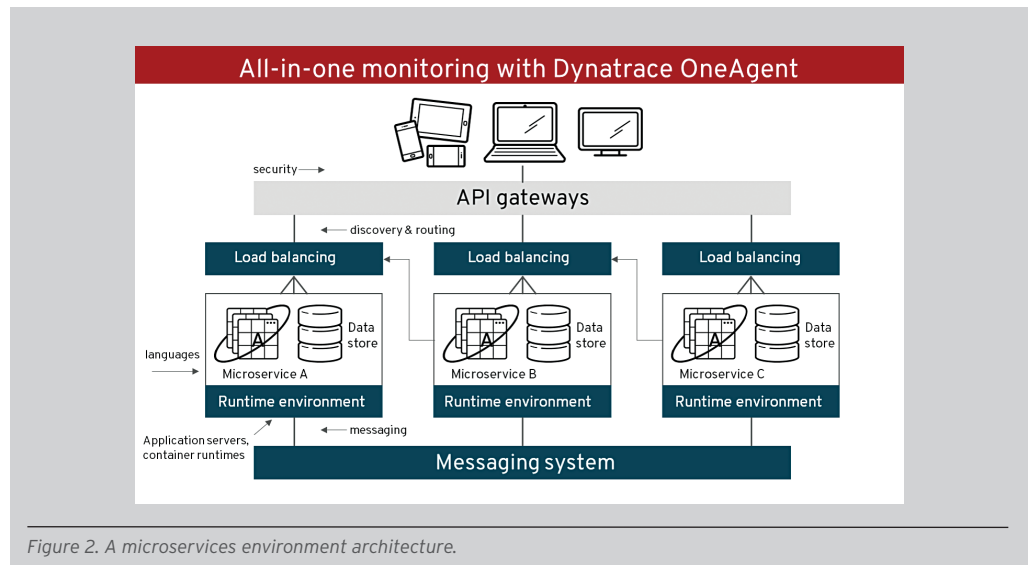


Figure 2. A microservices environment architecture.

**NORTH AMERICA**  
1 888 REDHAT1  
www.redhat.com

**EUROPE, MIDDLE EAST  
AND AFRICA**  
00800 7334 2835  
europe@redhat.com

**ASIA PACIFIC**  
+65 6490 4200  
apac@redhat.com

**LATIN AMERICA**  
+54 11 4329 7300  
info-latam@redhat.com



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## WORKING TOGETHER FOR BETTER SOLUTIONS

Red Hat and Dynatrace collaborate through the Red Hat OpenShift Primed partnership program to ensure optimization of the solution for all Red Hat OpenShift environments—no matter if you're running in a private, public, shared, or dedicated context.

Dynatrace OneAgent is Red Hat Container Certified and certified to run on Red Hat Enterprise Linux® Atomic Host. A sophisticated agent technology, Dynatrace OneAgent is easy to use and deploy, with no configuration required.

## RED HAT OPENSIFT AND ANSIBLE BY RED HAT

Red Hat OpenShift helps you develop, deploy, and manage new and existing applications across physical, virtual, or public cloud infrastructures, providing elastic compute resources for performance scalability. It accelerates application development and deployment with automated workflows that make it easy to move source code from version control into docker-formatted container images for deployment. Built on open source code and made enterprise-ready, Red Hat OpenShift is a secure, proven, and reliable platform for businesses of any size.

Ansible by Red Hat is a simple, agentless IT automation technology that can improve processes, optimize applications, and provide a single language for DevOps practices across your organization. Ansible by Red Hat enables you to provision and configure systems, deploy applications to Red Hat OpenShift, or manage your cloud seamlessly with automated playbooks. Dynatrace offers Ansible by Red Hat roles for the automated roll-out of the Dynatrace OneAgent to the nodes of a Red Hat OpenShift cluster.

## INNOVATION FOR IMPROVED BUSINESS PROCESSES

With our collaborative work and the use of artificial intelligence, Dynatrace and Red Hat together are redefining the way microservice environments are managed and monitored—enabling you to make more informed business decisions.

## TRY DYNATRACE FOR RED HAT OPENSIFT

For more information, visit [www.dynatrace.com/openshift](http://www.dynatrace.com/openshift), and sign up for a free trial.