



Container Monitoring and Microservices: Three Things to Know

The adoption of microservices and container technologies has increased rapidly as DevOps teams look into faster release cycles for application delivery. However, these ephemeral technologies dramatically increase the complexity of managing, visualizing and mapping dependencies between components in your IT infrastructure.

Microservices are dynamic and can scale horizontally in an instant, which poses challenges in monitoring when the locations of containers and services are constantly changing. For organizations moving from deploying static applications to containers and microservices in a distributed IT environment, they often lack the tools to dynamically monitor these components. Zenoss helps you seamlessly discover and monitor containers and microservices in real time along with your traditional IT infrastructure. Here are three things to keep in mind when setting up monitoring solutions for microservices and containers.

1

Using Machine Learning and Analytics to Monitor Containers

One of the biggest challenges when rolling out new applications is testing them in isolation without impacting the production environment. Iteration creates more complexity in monitoring as additional data is generated in the system. Organizations can automate and enhance the use of machine learning and analytics to leverage data emanating from these microservices, contextualize that data, and proactively identify issues even before they lead to downtime or service degradation. Using Zenoss to monitor your entire container infrastructure, DevOps teams can:

- Get hassle-free monitoring by collecting application metrics and mapping service dependencies
- Quickly see what services and resources are impacted
- Perform root-cause analysis to diagnose and help resolve issues before they impact business

2

Gather Custom Metrics Seamlessly

Monitoring several containers can be simplified using tags, which allow you to track specific metrics, including memory, CPU, network and I/O, by creating a logical blueprint of your application architecture. But to get complete visibility, DevOps teams need automated discovery that builds real-time IT service models to keep up with the dynamic nature of the containers.

With the Zenoss intelligent IT operations management platform, you can gather custom metrics using collectd and statsd agents and get insight into the health and performance of microservices and understand the implications on applications.

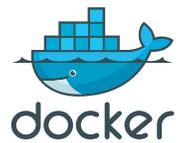
3

The Right Tools for Troubleshooting

The ephemeral nature of containers helps DevOps teams rapidly deploy and iterate faster, but monitoring and troubleshooting them is challenging. With Zenoss container monitoring capabilities, you can easily get contextual insights from your dynamic IT infrastructure.

- Seamlessly discover and monitor containers and microservices in real time along with your traditional IT infrastructure
- Simplify and automate agent-based discovery, building real-time digital models to manage dynamic container environments
- Get complete visibility over all components and service dependencies

Zenoss utilizes ZenPacks — plug-ins that provide support for monitoring Docker, Kubernetes and GKE. Their capabilities include discovery and periodic remodeling of containers, optional status, and performance monitoring.



With Zenoss, exploring the health and performance of any workload across your cloud and on-premises deployments is at your fingertips. The new Zenoss Cloud platform is a fully scalable intelligent IT operations management platform that eliminates blind spots, enabling your DevOps teams to predict service impacts and resolve issues faster across the entire landscape.

To learn more about how Zenoss can seamlessly discover and monitor containers and microservices in real time along with your traditional infrastructure, visit our website at www.zenoss.com.