DZone

Learn (More) In-Demand Microservices Skills

by Anne Marie Glen 　STAFF · **Jun. 13, 18 · Microservices Zone · Tutorial**

Learn the Benefits and Principles of Microservices Architecture for the Enterprise

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DZone conducted a survey of our readers to find out why they do or don't use microservices, and what aspects of microservices are important to them. Over 87% of respondents say their company is either using microservices in their applications or is actively considering it, and 80% of those who use them say that microservices have made their jobs easier! This article is a follow-up to our first tutorial collection of its kind, aiming to give developers access to the tutorials they want the most. Let's not waste any more time; here are your tutorials:

Testing

Testing is a huge topic for any type of applications, and for microservices, it can be complicated, meaning lots of our readers are concerned about it. These tutorials will answer a lot of your questions.

- Microservice Testing: Coupling and Cohesion (All the Way Down), by Daniel Bryant. This article will walk you through the important points of coupling and cohesion in microservices testing, from the architectural level down.

- Java Microservices Testing — A Minimalist Approach, by Grzegorz Skorupa. In this tutorial, we'll learn about using HttpClient for REST API microservices testing with Java.

- Testing Microservices With JMeter, by Artyom Avetisyan. Learn all about testing microservices using JMeter in this thorough tutorial.

Monitoring

Monitoring microservices was seen as the biggest challenge in our survey, with 46% of respondents choosing this options. These tutorials will help you get a strong start.

- Monitoring Microservices With Health Checks, by Peter Arijs. Learn about the importance of health checks for your microservices, what cases and metrics to check, and how to document them.

- Monitoring Lambda: A Discussion of Serverless Computing and APM, by Steve Waterworth. Learn about monitoring serverless computing with an open-source solution for monitoring and APM of AWS Lambda hybrid environments.

- Istio Tracing and Monitoring: Where Are You and How Fast Are You Going? by on Schenck. See how simple it is to set up stunning monitoring in Red Hat OpenShift with Istio Tracing and Monitoring.

- Go Microservices, Part 6: Health Checks, by Erik Lupander. Learn to provide a health check endpoint for Docker Swarm to monitor a microservice's health.

Service Discovery and Service Mesh

Our survey showed that many developers are not as familiar with these are two concepts. The following articles should get you off to a good start.

Service Mesh

- What Is a Service Mesh? by Floyd Smith. Learn about the components of a service mesh, a configurable infrastructure layer for microservices, and features it supports.

- Introduction to Istio: It Makes a Mesh of Things, by Don Schenck. Learn about the Istio service mesh and its features for creating and managing microservices and a tutorial to help you get started.

- An Overview of the Service Mesh and Its Tooling Options, by Twain Taylor. Learn about the role of service mesh and how it affects load balancing, service discovery, and monitoring for optimal performance.

- The Road Ahead for Service Mesh, by Zach Jory. Learn what might be in the future for microservices technologies as they develop, such as better security and scaling with the help of service mesh.

Service Discovery

- Microservices - Part 3: Spring Cloud Service Registry and Discovery, by Siva Prasad Reddy Katamreddy. Learn about setting up service registry and discovery for Spring Cloud/Spring Boot microservices development.

- Service Discovery With Eureka and Zuul, by Jarrett Lear. Learn how to use Spring Boot with Zuul and Eureka to create a simple discovery service, routing .NET applications through a Zuul gateway.

- Microservices: Service Registration and Discovery, by Alejandro Duarte. See an example of a microservices application developed with Vaadin and Spring Boot to learn about implementing service registration and discovery.

I hope this mini-series has helped you find the resources to learn or brush up on the microservices skills you need

to excel! Keep in mind that you can find more solutions in our Microservices Zone, so don't hesitate to go take a look.

Stay tuned to this zone for a DZone Research article analyzing our full survey results!

Microservices for the Enterprise eBook: Get Your Copy Here

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Microservices Partner Resources

Modern APM in a Containerized World
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Akka A to Z: A Toolkit for Fast Data and Microservices Architectures [Video]

by Oliver White · ⚲ MVB · Jun 22, 18 · Microservices Zone · Presentation

Containerized Microservices require new monitoring. See why a new APM approach is needed to even see containerized applications.

We've all heard of microservices, streaming data, event sourcing and CQRS — these are hot topics these days. But what about the less flashy stuff, like concurrency, routing, self-healing, persistence, clustering, and delivery guarantees?

These are all things you need in order to get distributed systems done right. The Akka toolkit makes all of this simple for Java and Scala developers who don't have time to deal with all the low-level plumbing and manual wiring.

So what makes Akka so special? Well, as an Akka veteran who has built distributed systems with everything but the kitchen sink before discovering Akka nearly a decade ago, our Developer Advocate Hugh McKee is the ideal person to break it all down for us. Check out this illustrated journey that goes deep into how Akka works–from individual Akka actors to fully distributed clusters across multiple datacenters.

Watch the Full Video (60 min.)

Slides

WEBINAR | THURSDAY MAY 24TH, 9:00 AM PT / 4:00 PM UTC

Akka A to Z: A Guide To The Industry's Best Toolkit

For Fast Data and Microservices Architectures

Hugh McKee,
Developer Advocate, Lightbend, Inc.

Akka A to Z: A Guide To The Industry's Best Toolkit for Fast Data and Microservices Architectures from **Lightbend**

To learn more about Akka, visit the Lightbend Tech Hub for docs, guides, rapid project starter and more, as well as links to Akka.io, the Akka team's OSS website. In addition, you can learn a lot from reading the blog of Colin Breck, a frequent speaker at Reactive Summit and Scala Days, who shares his experience with Akka Actors, Akka Streams, and more.

Automatically manage containers and microservices with better control and performance using Instana APM. Try it for yourself today.

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