Red Hat Cloud-native Microservices Development with Quarkus

Varighed: 4 Days Kursus Kode: DO378

Beskrivelse:

Develop microservice-based applications with Quarkus and OpenShift.
Enterprises are moving to cloud-native microservices architectures. Quarkus is an exciting new technology that brings the reliability, familiarity, and maturity of Java Enterprise with a container-ready lightning fast deployment time.
Organizations are striving to make the move from monolithic applications to applications based on microservices, as well as how to reorganize their development paradigm to reap the benefits of microservice development in a DevOps economy. With Quarkus, developers can more quickly build, test, and deploy their applications, improving application time to market.
Organizations are also invested in the familiarity of Java™ programming frameworks as well as the stability and benefits Red Hat OpenShift Container Platform. This course teaches developers how to leverage microservice application development with Quarkus for streamlined deployment on OpenShift clusters.
Red Hat Cloud-native Microservices Development with Quarkus (DO378) emphasizes learning architectural principles and implementing microservices based on the Red Hat Build of Quarkus and Red Hat OpenShift.
You will build on application development fundamentals and focus on how to develop, monitor, test, and deploy modern microservices applications.
This course is based on OpenShift 4.14, and Red Hat Build of Quarkus 3.8.
Note: *Starting January 1, 2026, Red Hat introduces RHLS-Course — a flexible subscription model now included with this catalog offering. This replaces the previous direct virtual class enrollment from Global Knowledge.*
When you purchase this item, you'll receive an RHLS subscription at the course level, giving you the freedom to choose the schedule that works best and self-enroll in your selected class.
Your RHLS subscription includes:
• One live, instructor-led virtual session
• 12 months of self-paced learning access
• One certification exam with a free retake
Onsite Classroom-based sessions and closed course options remain unchanged.
Updated Jan2026

Målgruppe:

This course is designed for Java application developers.

Agenda:

- After this course participants should be able to:
- Deploy microservice applications on Red Hat® OpenShift Container Platform.
- Build a microservice application with Quarkus.
- Implement unit and integration tests for microservices.
- Use the config specification to inject data into a microservice.
- Secure a microservice using OAuth.
- Implement health checks, tracing and monitoring of microservices.
- Build reactive and asynchronous applications using Quarkus.

Forudsætninger:

- Experience with Java application development or Red Hat Application Development I: Programming in Java EE (AD183)
- Be proficient in using an IDE such as Visual Studio Code
- Recommended, but not required: experience with Maven and version control.
- Recommended, but not required: experience with OpenShift or Introduction to OpenShift Applications (DO101)

Take Red Hat free assessment to gauge whether this offering is the best fit for your skills Red Hat Skills Assessment

Test og certificering

- Red Certified Cloud-Native Developer Exam (EX378)

Yderligere Kurser:

- Red Hat OpenShift Development I: Introduction to Containers with Podman(DO188)
- Red Hat OpenShift Developer II: Building Kubernetes Applications (DO288)
- Building Resilient Microservices with Red Hat OpenShift Service Mesh (DO328)
- Red Hat DevOps Pipelines and Processes: CI/CD with Jenkins, Git, and Test Driven Development (DO400)
- DO188 - Red Hat OpenShift Development I: Introduction to Containers with Podman
- DO288 - Red Hat OpenShift Developer II: Building and Deploying Cloud-native Applications
- DO328 - Building Resilient Microservices with Istio and Red Hat OpenShift Service Mesh
- DO400 - Red Hat DevOps Pipelines and Processes: CI/CD with Jenkins, Git, and Test Driven Development

Indhold:

Introducing the Red Hat Build of Quarkus

- Describe the components and patterns of microservice-based application architectures and the features of the Red Hat Build of Quarkus.

Developing Cloud-native Microservices with Quarkus

- Implement microservices based applications by using the Red Hat Build of Quarkus runtime and associated developer tooling.

Testing Quarkus Microservices

- Implement unit and integration tests for microservices.

Developing Reactive and Asynchronous Microservices

- Describe the features of reactive architectures and implement reactive services by using Quarkus.

Securing Quarkus Microservices

- Secure microservice communications by applying origin validation, requests authentication and authorization.

Implementing Quarkus Microservices on the Red Hat OpenShift Container Platform

- Develop and deploy cloud-native applications on the Red Hat OpenShift Container Platform.

Implementing Fault Tolerance in Microservices

- Implement fault tolerance in a microservice architecture.

Monitoring Quarkus Microservices

- Monitor the operation of a microservice by using logging, metrics and distributed tracing.

Additional Information:

Official course book provided to participants

Flere Informationer:

For yderligere informationer eller booking af kursus, kontakt os på tlf.nr.: 44 88 18 00

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