

# Red Hat Cloud-native Microservices Development with Quarkus - Red Hat Learning Subscription Course (D0378LS)

**Category:** Networking & Security | **Vendor:** Red Hat

**Duration:** 32.00 hours (4 days) **26.0 CPD Hours** **Rating:** ★ 4.6 (5,878 reviews)

## Course Information

|                         |                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------|
| <b>Delivery Format:</b> | Instructor Led - Online                                                                  |
| <b>Related Exam:</b>    | Red Hat Cloud-native Microservices Development with Quarkus; Application Services; D0378 |

## Course Overview

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. 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. RHLS Course Includes: 365-Day RHLS Subscription - Full year of access starting from your purchase date. Official Red Hat Training Curriculum - Learn directly from Red Hat's validated, up-to-date course materials. Hands-On Labs (100 Hours per Course) - Build practical, real-world skills through extensive lab time. One Certification Exam + Free Retake - Includes exam readiness resources to help you prepare with confidence. One Virtual, Instructor-Led Class - Attend a live online class through the Red Hat portal (self-enrollment required using your RHID).

## About This Course

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. 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. RHLS Course Includes: 365-Day RHLS Subscription - Full year of access starting from your purchase date. Official Red Hat Training Curriculum - Learn directly from Red Hat's validated, up-to-date course materials. Hands-On Labs (100 Hours per Course) - Build practical, real-world skills through extensive lab time. One Certification Exam + Free Retake - Includes exam readiness resources to help you prepare with confidence. One Virtual, Instructor-Led Class - Attend a live online class through the Red Hat portal (self-enrollment required using your RHID).

# Who Should Attend

---

This course is designed for application developers.

## Prerequisites & Entry Requirements

### General Prerequisites:

- 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 \(DO101\)](#)

# Learning Outcomes

---

**Upon successful completion of this course, participants will 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 and deploy native Quarkus applications.

## Detailed Course Outline

---

### 1 - 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.

### 2 - Developing Cloud-native Microservices with Quarkus

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

### 3 - Testing Quarkus Microservices

- Implement unit and integration tests for microservices.

### 4 - Developing Reactive and Asynchronous Microservices

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

### 5 - Securing Quarkus Microservices

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

### 6 - Implementing Quarkus Microservices on the Red Hat OpenShift Container Platform

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

### 7 - Implementing Fault Tolerance in Microservices

- Implement fault tolerance in a microservice architecture.

## **8 - Monitoring Quarkus Microservices**

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



# Frequently Asked Questions

---

## **Q: What delivery options are available for Red Hat Cloud-native Microservices Development with Quarkus - Red Hat Learning Subscription Course (DO378LS)?**

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
  - Traditional Instructor-Led Classroom Training (ILT)
  - On-site delivery at your offices anywhere in United Kingdom
  - Private dedicated courses customized for your team
- 

## **Q: Which exam does this course prepare me for?**

This course prepares you for the Red Hat Cloud-native Microservices Development with Quarkus; Application Services; DO378 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

---

## **Q: How many CPD hours does this course provide?**

The 4-day Red Hat Cloud-native Microservices Development with Quarkus - Red Hat Learning Subscription Course (DO378LS) course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

---

## **Q: What is the duration of the Red Hat Cloud-native Microservices Development with Quarkus - Red Hat Learning Subscription Course (DO378LS) training?**

The training takes place over 4 day(s), with each day lasting approximately 32.00 hours including breaks for lunch and refreshments.

---

**Q: Do you provide corporate training for Red Hat Cloud-native Microservices Development with Quarkus - Red Hat Learning Subscription Course (DO378LS)?**

Yes, we provide corporate training, dedicated training, and closed classes for Red Hat Cloud-native Microservices Development with Quarkus - Red Hat Learning Subscription Course (DO378LS). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

**Q: Why choose Nexus Human for Red Hat Cloud-native Microservices Development with Quarkus - Red Hat Learning Subscription Course (DO378LS)?**

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

**Q: Are there any discount codes available?**

Yes! Use discount code **PENPAL5** when booking your Red Hat Cloud-native Microservices Development with Quarkus - Red Hat Learning Subscription Course (DO378LS) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

**Nexus Human**

**Professional Training & Development**

 Email: [info@nexushuman.com](mailto:info@nexushuman.com)

 Website: [www.nexushuman.com](http://www.nexushuman.com)

 Phone: +353 1 XXX XXXX (Ireland) | +44 20 XXXX XXXX (UK)