Red Hat Certified Enterprise Microservices Developer exam (EX283)

- **Formato do curso:** Presencial
- **Preço:** 425€
- **Duração:** 2,5 horas

The Red Hat Certified Enterprise Microservices Developer exam (EX283) tests your skills and knowledge to develop reliable, performant JEE applications in a microservices-style environment. The exam focuses on using the Microprofile APIs to develop microservices enterprise Java applications.

If you are a current Red Hat Certified Enterprise Application Developer (RHCEAD), you will become a Red Hat Certified Enterprise Microservices Developer by passing this exam.

If you are a current Red Hat Certified JBoss Developer (RHCJD), you will become a Red Hat Certified Specialist in Enterprise Microservices Development by passing this exam. Anyone can take this exam, but you must be either an RHCEAD or an RHCJD in order to become a Red Hat Certified Enterprise Microservices Developer.

This exam is based on Eclipse MicroProfile 1.3.

Destinatários

- JEE developers who wish to demonstrate their skills and abilities using Java to develop advanced, microservices-oriented enterprise applications.

Pré-requisitos

- Attend Red Hat Application Development II: Implementing Microservice Architectures (JB283)
- Pass Red Hat Certified Enterprise Application Developer Exam (EX183) or have equivalent industry JEE experience
- Be familiar with using Red Hat® JBoss® Developer Studio in a Red Hat® Enterprise Linux environment
- Have a solid background with JEE, including a knowledge and understanding of the core Java concepts and APIs. For example, exceptions, annotations, and the collections API are all required during the exam
- Some familiarity with Openshift is beneficial

Objectivos

Study points for the exam

You should be able to accomplish the tasks below without assistance. While explicitly addressing Microprofile and

microservices, the skills and abilities demonstrated in this exam are also applicable to a wide range of advanced enterprise Java developments:

- Provide and obtain configuration properties through several environment-aware sources both internal and external to the application and made available through dependency injection or lookup using Configuration for Microprofile
    - Externalize data into configured values
    - Inject configured values into beans using the @Inject and the @ConfigProperty qualifier
    - Access or create a certain configuration
    - Understand default and custom ConfigSource and ConfigSource ordering
    - Understand and implement converters
- Separate execution logic from business logic using Microprofile Fault Tolerance
    - Understand the relationship to MicroProfile Config
    - Understand async vs. sync execution type and know the default
    - Use @Timeout
    - Understand retry policies and apply using @Retry
    - Understand and define fallback
    - Understand and apply CircuitBreaker and Bulkhead
    - Understand and set up fault tolerance configuration
- Probe the state of a computing node from another machine using MicroProfile Health Check
    - Understand and implement the Health Check interface and Health Check Response
    - Construct human-friendly Health Check Response
    - Understand protocol and wireformat
- Export monitoring data to management agents using Microprofile Metrics
    - Understand difference with Health Check
    - Understand and use three sets of sub-resource (scopes): base, vendor, and application
    - Understand tags (labels), metric registry, and @Metric
    - Understand metadata and why it is best practice
    - Expose metrics via REST API
    - Know required metrics
    - Understand application metrics programming model
- MicroProfile Interoperable JWT RBAC: OpenID Connect (OIDC)–based JSON Web Tokens (JWTs) for role-based access control (RBAC) of microservice endpoints
    - Understand security tokens in RESTful services and token-based authentication
    - Use JWT bearer tokens to protect services
    - Mark a JAX-RS application as requiring MP-JWT access control
    - Map MP-JWT tokens to Java EE Container APIs

Metodologia

This exam is a hands-on, practical exam that requires you to undertake real-world development tasks.

Internet access is not provided during the exam, and you will not be permitted to bring any hard copy or electronic documentation into the exam. This prohibition includes notes, books, or any other material.

MicroProfile specification and related documentation is available during the exam.