# Red Hat Certified Enterprise Application Developer Exam (RHCAD) (EX183)

- **Formato do curso:** Presencial
- **Preço:** 425€

The Red Hat® Certified Enterprise Application Developer exam (EX183) tests if you have a basic understanding of the core enterprise Java APIs that are required to implement modern, stateless business services.

The exam focuses on using the default behavior of the minimal set of JEE APIs that are applicable across all modern Enterprise Java application development environments:

- Using JAX-RS for simple REST create, read/search, update, and delete APIs.
- Using JAAS to secure access to services.
- Using stateless EJBs to provide business logic.
- Using CDI to integrate components.
- Using JMS to send and receive messages.
- Using Bean Validation to ensure data format and consistency.
- Using basic JPA to create, read, update, and delete persistent objects and their relationships.

By passing this exam, you become a [Red Hat Certified Enterprise Application Developer](). This certification can be the first step toward becoming a Red Hat Certified Architect.

This exam is based on JBoss Enterprise Application Platform 7.

## Destinatários

This course is designed for experienced JSE developers who want to extend and test their knowledge and skills in modern enterprise Java development.

## Pré-requisitos

This exam has no formal prerequisites but candidates for this exam should:

- Be familiar with using Red Hat JBoss Developer Studio in a Red Hat Enterprise Linux environment.
- Have a solid background with JSE, 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.

- Review the Red Hat Certified Enterprise Application Developer exam objectives and ensure that you are comfortable with all of the topics mentioned.

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# Objectivos

**Study points for the exam**

Using Red Hat JBoss EAP, you should be able to accomplish the tasks below without assistance. The tasks have been grouped into categories to assist your preparation.

**Bean validation**

- Annotate a POJO to enable and set up data validation.
- Use the documentation to find useful standard validators.

**JPA mapping**

- Annotate a POJO to map it to its persistent state representation in the database.
- Apply basic property mapping and be able to use the documentation to identify correct property annotations (e.g., @Temporal).
- Map a bidirectional OneToMany relationship between two entities, including both sides of the association.
- Understand default fetching behavior and be able to override the fetching strategy per association.

**JPA query**

- Implement basic JPA queries using named parameters.
- Create and use a named query.
- Use a query to eager fetch an association.

**Messaging**

- Understand point-to-point vs. publish/subscribe models.
- Understand JMS queues, topics, and connection factories.
- Understand and use the javax.jms.MessageListener interface.
- Implement a message-driven bean.
- Use the @MessageDriven and @ActivationConfigProperty annotations.

**REST services with JAX-RS**

- Understand REST concepts, particularly the application and use of the HTTP PUT, DELETE, GET, and POST methods.
- Know and use standard HTTP return codes.
- Implement RESTful Root resource class.
- Expose a REST service using JAX-RS.
- Demonstrate ability to define @Path.
- Understand and use @Produce and @Consume.
- Be able to both consume and produce xml- and jso-formatted content using JAX-RS.

**Security**

- Understand basic JAAS terms and concepts.
- Understand the JAAS authentication details that will be provided to you.
- Secure server-side services (REST services and EJBs) using JAAS annotations.

**CDI**

- Understand contextual scopes.

As with all Red Hat performance-based exams, configurations must persist after reboot without intervention.