

# JAKARTA EE

# Jakarta EE Core Profile

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## **Chapter 1. Introduction**

This specification defines the Jakarta<sup>™</sup> EE Core Profile ("Core Profile"), a profile of the Jakarta<sup>™</sup> Platform, Enterprise Edition specifically targeted at smaller applications built around microservices.

#### 1.1. Target and Rationale for the Core Profile

The Core Profile is targeted at developers of modern cloud applications with focus on a minimal set of APIs that support microservices with a focus on enabling implementations that make use of ahead of time compilation build to minimize startup time and memory footprint.

It is worth noting that Core Profile products are allowed to ship with more technologies than the required ones. It is conceivable that products will offer a choice at installation time/or build time between different configurations, some richer in extensions, or even allow for complete customization beyond the required core technologies ("à la carte" installation).

#### **1.2. Determining Applicable Requirements**



Profile definitions can be quite terse, amounting to little more than a list of required technologies and a (possibly empty) set of additional requirements, beyond those entailed by all the referenced specifications.

As dictated by the general rules for Jakarta EE profiles in the Platform specification, products that implement the Core Profile must honor:

- 1. all requirements of the common requirements section that applies to all profiles;
- 2. all requirements of this specification;
- 3. all requirements of the individual component specifications;
- 4. all requirements in the Jakarta EE Platform specification that are conditional on the presence of a specific technology or combinations of technologies.

Let's look at some examples of requirements from each grouping.

For the first one, the Jakarta EE Platform specification mandates support for Java<sup>™</sup> Platform, Standard Edition 17 API. Because of this, all Core Profile 11.0 APIs must support the Java<sup>™</sup> Platform, Standard Edition 17 API.

In the second category one can point out the that Jakarta XML Binding support is not required for Jakarta RESTful Web Services in the Core Profile. (see Additional Requirements).

The third category is hopefully self-explanatory. For example, Core Profile products must implement the Jakarta RESTful Web Services API, which in turn means they need to satisfy all the requirements listed in the Jakarta RESTful Web Services specification.

The fourth category is the most complex. The Jakarta Core Profile TCK attempts to validate the ability to combine the individual component specifications into composite test applications.

#### 1.3. Acknowledgements for Jakarta EE 10 and Beyond

The Jakarta EE Core Profile specification version 10 and beyond were created by the Jakarta EE Platform Specification Project with guidance provided by the Jakarta EE Working Group (*https://jakarta.ee/*).

## **Chapter 2. Core Profile Definition**

This chapter defines the contents of the Jakarta™ EE 11.0 Core Profile.

#### 2.1. Required Components

The following technologies are required components of the Core Profile:

- Jakarta Annotations 3.0\*
- Jakarta Contexts and Dependency Injection (CDI) 4.1 (CDI Lite section)\*
- Jakarta Dependency Injection 2.0
- Jakarta Interceptors 2.2\*
- Jakarta JSON Processing 2.1
- Jakarta JSON Binding 3.0
- Jakarta RESTful Web Services 4.0\*

Note: technologies with an asterisk after them represent updated versions.

#### 2.2. Optional Components

The optional Jakarta XML Binding support in Jakarta RESTful Web Services implementations is not required for the Core Profile.

Jakarta Expression Language support is not required in Jakarta Contexts and Dependency Injection Lite implementations since this is part of the Full CDI specification.

The Java SE section of the CDI 4.1 specification is not required for Core Profile implementations. Only Full CDI implementations are required to support the (CDI) Java SE API classes.

#### 2.3. Additional Requirements

There are currently no requirements on the deployment packaging of core profile based applications.

## **Appendix A: Revision History**

#### A.1. Changes in Final Release for Jakarta EE 11

- Updated Java SE base version to 17.
- Updated "Related Documents" for the updated Specifications in Jakarta EE 11.

#### A.2. Changes in Final Release Jakarta EE 10

• Initial version

### **Appendix B: Related Documents**

This specification refers to the following documents. The terms used to refer to the documents in this specification are included in parentheses.

Jakarta™ EE Platform Specification, Version 11.0. Available at: https://jakarta.ee/specifications/ platform/11/

Java™ Platform, Standard Edition (Java SE specification), v17. Available at: https://www.jcp.org/en/jsr/ detail?id=392

Java™ Platform, Standard Edition, v17 API Specification. Available at: https://docs.oracle.com/javase/ 17/docs/

Jakarta<sup>™</sup> RESTful Web Services Specification, Version 4.0. Available at: https://jakarta.ee/ specifications/restful-ws/4.0/

Jakarta<sup>™</sup> Annotations Specification, Version 3.0. Available at: https://jakarta.ee/specifications/ annotations/3.0/

Jakarta™ Interceptors Specification, Version 2.2. Available at: https://jakarta.ee/specifications/ interceptors/2.2/

Jakarta<sup>™</sup> Contexts and Dependency Injection Specification (CDI Lite section), Version 4.1. Available at: https://jakarta.ee/specifications/cdi/4.1/

Jakarta<sup>™</sup> Dependency Injection Specification, Version 2.0. Available at: https://jakarta.ee/ specifications/dependency-injection/2.0/

Jakarta<sup>™</sup> JSON Processing Specification, Version 2.1. Available at: https://jakarta.ee/specifications/ jsonp/2.1/

Jakarta<sup>™</sup> JSON Binding Specification, Version 3.0. Available at: https://jakarta.ee/specifications/jsonb/ 3.0/

Jakarta™ EE Working Group (https://jakarta.ee/about/working-group/)