



# MicroProfile

MicroProfile Team, <https://microprofile.io>

7.1, April 11, 2025: Final

# Table of Contents

Copyright .....	2
Eclipse Foundation Specification License - v1.1 .....	2
Disclaimers .....	3
Architecture .....	4
MicroProfile 7.1 .....	4
MicroProfile 7.0 .....	5
MicroProfile 6.1 .....	5
MicroProfile 6.0 .....	6
MicroProfile 5.0 .....	7
MicroProfile 4.1 .....	9
MicroProfile 4.0 (Q42020) .....	10
MicroProfile 3.3 (Q12020) .....	11
MicroProfile 3.2 (3Q2019) .....	12
MicroProfile 3.1 (3Q2019) .....	12
MicroProfile 3.0 (2Q2019) .....	13
MicroProfile 2.2 (1Q2019) .....	14
MicroProfile 2.1 (4Q2018) .....	15
MicroProfile 2.0.1 (3Q2018) .....	16
MicroProfile 2.0 (2Q2018) .....	16
Required APIs .....	18
Java SE .....	18
Jakarta EE Core Profile 10 .....	18
MicroProfile Config 3.1 .....	19
MicroProfile Fault Tolerance 4.1 .....	19
MicroProfile Health 4.0 .....	19
MicroProfile JWT Authentication 2.1 .....	19
MicroProfile OpenAPI 4.1 .....	19
MicroProfile Telemetry 2.1 .....	19
MicroProfile Rest Client 4.0 .....	20
Notices .....	21
Compatibility Disclaimer .....	21
Contribution .....	21
Feedback .....	21

Specification: MicroProfile

Version: 7.1

Status: Final

Release: April 11, 2025

# Copyright

Copyright (c) 2016 , 2025 Eclipse Foundation.

## Eclipse Foundation Specification License - v1.1

By using and/or copying this document, or the Eclipse Foundation document from which this statement is linked or incorporated by reference, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions:

Permission to copy, and distribute the contents of this document, or the Eclipse Foundation document from which this statement is linked, in any medium for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the document, or portions thereof, that you use:

- link or URL to the original Eclipse Foundation document.
- All existing copyright notices, or if one does not exist, a notice (hypertext is preferred, but a textual representation is permitted) of the form: "Copyright (c) [\$date-of-document] Eclipse Foundation AISBL [[url to this license](#)] "

Inclusion of the full text of this NOTICE must be provided. We request that authorship attribution be provided in any software, documents, or other items or products that you create pursuant to the implementation of the contents of this document, or any portion thereof.

No right to create modifications or derivatives of Eclipse Foundation documents is granted pursuant to this license, except anyone may prepare and distribute derivative works and portions of this document in software that implements the specification, in supporting materials accompanying such software, and in documentation of such software, PROVIDED that all such works include the notice below. HOWEVER, the publication of derivative works of this document for use as a technical specification is expressly prohibited.

The notice is:

"Copyright (c) [\$date-of-document] Eclipse Foundation AISBL. This software or document includes material copied from or derived from [title and URI of the Eclipse Foundation specification document]."

# Disclaimers

THIS DOCUMENT IS PROVIDED "AS IS," AND TO THE EXTENT PERMITTED BY APPLICABLE LAW THE COPYRIGHT HOLDERS AND THE ECLIPSE FOUNDATION AISBL MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR TITLE; THAT THE CONTENTS OF THE DOCUMENT ARE SUITABLE FOR ANY PURPOSE; NOR THAT THE IMPLEMENTATION OF SUCH CONTENTS WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

TO THE EXTENT PERMITTED BY APPLICABLE LAW THE COPYRIGHT HOLDERS AND THE ECLIPSE FOUNDATION AISBL WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE DOCUMENT OR THE PERFORMANCE OR IMPLEMENTATION OF THE CONTENTS THEREOF.

The name and trademarks of the copyright holders or the Eclipse Foundation AISBL may NOT be used in advertising or publicity pertaining to this document or its contents without specific, written prior permission. Title to copyright in this document will at all times remain with copyright holders.

# Architecture

The MicroProfile pom will identify the contents of each MicroProfile release. The contents include those features and versions agreed to by the MicroProfile community. These features may be external to the MicroProfile community, like those provided by Jakarta EE Core Profile or the Cloud Native Computing Foundation (like OpenTelemetry), or they are component specifications of the MicroProfile project (such as Config).

Since the MicroProfile repo is an "umbrella" project, no individual API or TCK is generated for this specification. This specification documents the component specification contents of each release. An implementation can use later patch releases of component specifications.

The specifications for each release are listed in reverse chronological order.

## MicroProfile 7.1

Based on MicroProfile's time-boxed release process, this is a minor release that does not include backward incompatible changes. This release includes minor updates to MicroProfile Telemetry and MicroProfile OpenAPI.

If you are still dependent on the Jakarta EE specifications from Jakarta EE 9.1, please consider using the [5.0 release of MicroProfile](#). If you are still dependent on the Jakarta EE specifications from Jakarta EE 8, please consider using the [4.1 release of MicroProfile](#). If you are still dependent on the Java EE specifications from Java EE 8, please consider using the [3.3 release of MicroProfile](#). If you are still dependent on the Java EE specifications from Java EE 7, please consider using the [1.4 release of MicroProfile](#).

The complete list of MicroProfile 7.1 specifications includes:

- [MicroProfile Config 3.1](#)
- [MicroProfile Fault Tolerance 4.1](#)
- [MicroProfile Health 4.0](#)
- [MicroProfile Telemetry 2.1](#)
- [MicroProfile OpenAPI 4.1](#)
- [MicroProfile JWT Authentication 2.1](#)
- [MicroProfile Rest Client 4.0](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>7.1</version>
  <type>pom</type>
  <scope>provided</scope>
```

```
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 7.0

Based on MicroProfile's time-boxed release process, this is a major release that does include backward incompatible changes. This release no longer packages Jakarta EE 10 Core Profile. Instead, it specifies the dependency on Jakarta EE 10 Core Profile. This release replaces MicroProfile Metrics with MicroProfile Telemetry 2.0 which offers the Metrics capabilities in addition to Logs and Tracing.

If you are still dependent on the Jakarta EE specifications from Jakarta EE 9.1, please consider using the [5.0 release of MicroProfile](#). If you are still dependent on the Jakarta EE specifications from Jakarta EE 8, please consider using the [4.1 release of MicroProfile](#). If you are still dependent on the Java EE specifications from Java EE 8, please consider using the [3.3 release of MicroProfile](#). If you are still dependent on the Java EE specifications from Java EE 7, please consider using the [1.4 release of MicroProfile](#).

The complete list of MicroProfile 7.0 specifications includes:

- [MicroProfile Config 3.1](#)
- [MicroProfile Fault Tolerance 4.1](#)
- [MicroProfile Health 4.0](#)
- [MicroProfile Telemetry 2.0](#)
- [MicroProfile OpenAPI 4.1](#)
- [MicroProfile JWT Authentication 2.1](#)
- [MicroProfile Rest Client 4.0](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>7.0</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project

## MicroProfile 6.1

Based on MicroProfile's time-boxed release process, this is a minor release that does not include backward incompatible changes. Like MicroProfile 6.0, this release requires Jakarta EE Core Profile

10.

If you are still dependent on Jakarta EE 9.1, please consider using the [5.0 release of MicroProfile](#). If you are still dependent on Jakarta EE 8, please consider using the [4.1 release of MicroProfile](#). If you are still dependent on Java EE 8, please consider using the [3.3 release of MicroProfile](#). If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

The complete list of MicroProfile 6.1 specifications includes:

- [Jakarta EE 10 Core Profile](#)
- [MicroProfile Config 3.1](#)
- [MicroProfile Fault Tolerance 4.0](#)
- [MicroProfile Metrics 5.1](#)
- [MicroProfile Health 4.0](#)
- [MicroProfile Telemetry 1.1](#)
- [MicroProfile OpenAPI 3.1](#)
- [MicroProfile JWT Authentication 2.1](#)
- [MicroProfile Rest Client 3.0](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>6.1</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 6.0

MicroProfile 6.0 replaces required individual Jakarta specifications in prior releases like Jakarta Restful Web Services and JSON Binding with the Jakarta EE 10 Core Profile.

Based on MicroProfile's time-boxed release process, this is a major release that includes backward incompatible changes. This release requires Jakarta EE Core Profile 10, which uses the **jakarta** namespace introduced in Jakarta EE 9.

If you are still dependent on Jakarta EE 9.1, please consider using the [5.0 release of MicroProfile](#). If you are still dependent on Jakarta EE 8, please consider using the [4.1 release of MicroProfile](#). If you are still dependent on Java EE 8, please consider using the [3.3 release of MicroProfile](#). If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).



The complete list of MicroProfile 6.0 specifications includes:

- [Jakarta EE 10 Core Profile](#)
- [MicroProfile Config 3.0](#)
- [MicroProfile Fault Tolerance 4.0](#)
- [MicroProfile Metrics 5.0](#)
- [MicroProfile Health 4.0](#)
- [MicroProfile Telemetry 1.0](#)
- [MicroProfile OpenAPI 3.1](#)
- [MicroProfile JWT Authentication 2.1](#)
- [MicroProfile Rest Client 3.0](#)

MicroProfile 6.0 has the following backward incompatible changes compared to MicroProfile 5.0.

- [MicroProfile Metrics Incompatible changes](#)
- MicroProfile OpenTracing replaced by MicroProfile Telemetry
- Includes Jakarta EE 10 Core Profile

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>6.0</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 5.0

MicroProfile 5.0 aligns with the following specifications from Jakarta EE 9.1:

- Jakarta Contexts and Dependency Injection 3.0
- Jakarta Annotations 2.0
- Jakarta RESTful Web Services 3.0
- Jakarta JSON Binding 2.0
- Jakarta JSON Processing 2.0

Based on MicroProfile's time-boxed release process, this is a major release that includes backwards incompatible changes. This means that this release will not work with previous versions of Jakarta EE, such as Jakarta EE 8, due to the namespace change from `javax` to `jakarta` in the code. This

release contains no other functional updates when compared to MicroProfile Release 4.1.

- [Config](#)
- [Fault Tolerance](#)
- [Health](#)
- [Metrics](#)
- [OpenAPI](#)
- [Rest Client](#)
- [JWT](#)
- [OpenTracing](#)

If you are still dependent on Jakarta EE 8, please consider using the [4.1 release of MicroProfile](#). If you are still dependent on Java EE 8, please consider using the [3.3 release of MicroProfile](#). If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

The complete list of MicroProfile 5.0 specifications includes:

- [MicroProfile Config 3.0](#)
- [MicroProfile Fault Tolerance 4.0](#)
- [MicroProfile Metrics 4.0](#)
- [MicroProfile Health 4.0](#)
- [MicroProfile OpenTracing 3.0](#)
- [MicroProfile OpenAPI 3.0](#)
- [MicroProfile JWT Authentication 2.0](#)
- [MicroProfile Rest Client 3.0](#)
- [Jakarta Contexts and Dependency Injection 3.0](#)
- [Jakarta Annotations 2.0](#)
- [Jakarta RESTful Web Services 3.0](#)
- [Jakarta JSON Binding 2.0](#)
- [Jakarta JSON Processing 2.0](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>5.0</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 4.1

MicroProfile 4.1 aligns with the following specifications from Jakarta EE 8:

- Jakarta Contexts and Dependency Injection 2.0
- Jakarta Annotations 1.3
- Jakarta RESTful Web Services 2.1
- Jakarta JSON Binding 1.0
- Jakarta JSON Processing 1.1

Based on MicroProfile's time-boxed release process, this is an incremental release that includes an update to [MicroProfile Health 3.1](#)

If you are still dependent on Java EE 8, please consider using the [3.3 release of MicroProfile](#). If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

The complete list of MicroProfile 4.1 specifications includes:

- [MicroProfile Config 2.0](#)
- [MicroProfile Fault Tolerance 3.0](#)
- [MicroProfile Health 3.1](#)
- [MicroProfile JWT Authentication 1.2](#)
- [MicroProfile Metrics 3.0](#)
- [MicroProfile OpenAPI 2.0](#)
- [MicroProfile OpenTracing 2.0](#)
- [MicroProfile Rest Client 2.0](#)
- [Jakarta Contexts and Dependency Injection 2.0](#)
- [Jakarta Annotations 1.3](#)
- [Jakarta RESTful Web Services 2.1](#)
- [Jakarta JSON Binding 1.0](#)
- [Jakarta JSON Processing 1.1](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>4.1</version>
  <type>pom</type>
  <scope>provided</scope>
```

```
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 4.0 (Q42020)

MicroProfile 4.0 is based on Jakarta EE 8, the first MicroProfile release to be based on Jakarta EE (replacing the role of Java EE). Although Jakarta EE 8 is API backwards compatible with Java EE 8, Jakarta EE replaces Java EE dependencies with Jakarta EE dependencies for all MicroProfile specifications.

The following specifications include API incompatible changes:

- [Config](#)
- [Fault Tolerance](#)
- [Health](#)
- [Metrics](#)
- [OpenAPI](#)

If you are still dependent on Java EE 8, please consider using the [3.3 release of MicroProfile](#). If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

The complete list of MicroProfile 4.0 specifications includes:

- [MicroProfile Config 2.0](#)
- [MicroProfile Fault Tolerance 3.0](#)
- [MicroProfile Health 3.0](#)
- [MicroProfile JWT Authentication 1.2](#)
- [MicroProfile Metrics 3.0](#)
- [MicroProfile OpenAPI 2.0](#)
- [MicroProfile OpenTracing 2.0](#)
- [MicroProfile Rest Client 2.0](#)
- [Jakarta Contexts and Dependency Injection 2.0](#)
- [Jakarta Annotations 1.3](#)
- [Jakarta RESTful Web Services 2.1](#)
- [Jakarta JSON Binding 1.0](#)
- [Jakarta JSON Processing 1.1](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>  
  <groupId>org.eclipse.microprofile</groupId>
```

```
<artifactId>microprofile</artifactId>
<version>4.0</version>
<type>pom</type>
<scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 3.3 (Q12020)

MicroProfile 3.3 is the 13th platform release for the [Eclipse MicroProfile project](#). Based on MicroProfile's time-boxed release process, this is an incremental release that includes an update to [MicroProfile Config 1.4](#), [MicroProfile Fault Tolerance 2.1](#), [MicroProfile Health 2.2](#), [MicroProfile Metrics 2.3](#), and [MicroProfile Rest Client 1.4](#).

MicroProfile 3.x releases build upon a small subset of Java EE 8 features. If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

Thus, the complete list of functional components for MicroProfile 3.3 includes:

- [MicroProfile Config 1.4](#)
- [MicroProfile Fault Tolerance 2.1](#)
- [MicroProfile Health 2.2](#)
- [MicroProfile JWT Authentication 1.1](#)
- [MicroProfile Metrics 2.3](#)
- [MicroProfile OpenAPI 1.1](#)
- [MicroProfile OpenTracing 1.3](#)
- [MicroProfile Rest Client 1.4](#)
- [CDI 2.0](#)
- [Common Annotations 1.3](#)
- [JAX-RS 2.1](#)
- [JSON-B 1.0](#)
- [JSON-P 1.1](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>3.3</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 3.2 (3Q2019)

MicroProfile 3.2 is the 12th platform release for the [Eclipse MicroProfile project](#). Based on MicroProfile's time-boxed release process, this is an incremental release that includes an update to [MicroProfile Metrics 2.2](#)

MicroProfile 3.x releases build upon a small subset of Java EE 8 features. If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

Thus, the complete list of functional components for MicroProfile 3.2 includes:

- [MicroProfile Config 1.3](#)
- [MicroProfile Fault Tolerance 2.0](#)
- [MicroProfile Health 2.1](#)
- [MicroProfile JWT Authentication 1.1](#)
- [MicroProfile Metrics 2.2](#)
- [MicroProfile OpenAPI 1.1](#)
- [MicroProfile OpenTracing 1.3](#)
- [MicroProfile Rest Client 1.3](#)
- [CDI 2.0](#)
- [Common Annotations 1.3](#)
- [JAX-RS 2.1](#)
- [JSON-B 1.0](#)
- [JSON-P 1.1](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>3.2</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 3.1 (3Q2019)

MicroProfile 3.1 is the 11th platform release for the [Eclipse MicroProfile project](#). Based on MicroProfile's time-boxed release process, this is an incremental release that includes an update to

## [MicroProfile Health 2.1](#) and [MicroProfile Metrics 2.1.0](#)

MicroProfile 3.x releases build upon a small subset of Java EE 8 features. If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

Thus, the complete list of functional components for MicroProfile 3.1 includes:

- [MicroProfile Config 1.3](#)
- [MicroProfile Fault Tolerance 2.0](#)
- [MicroProfile Health 2.1](#)
- [MicroProfile JWT Authentication 1.1](#)
- [MicroProfile Metrics 2.1.0](#)
- [MicroProfile OpenAPI 1.1](#)
- [MicroProfile OpenTracing 1.3](#)
- [MicroProfile Rest Client 1.3](#)
- [CDI 2.0](#)
- [Common Annotations 1.3](#)
- [JAX-RS 2.1](#)
- [JSON-B 1.0](#)
- [JSON-P 1.1](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>3.1</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 3.0 (2Q2019)

MicroProfile 3.0 is the tenth platform release for the [Eclipse MicroProfile project](#). Based on MicroProfile's time-boxed release process, this is an incremental release that includes an update to [MicroProfile Health 2.0](#), [MicroProfile Metrics 2.0.0](#), and [MicroProfile Rest Client 1.3](#).

**Note:** Health 2.0 and Metrics 2.0.0 introduce **breaking API changes** in their respective releases. Thus, the overall MicroProfile platform release also increased the major version number to 3.0. Please consult the individual Component release documentation for information on the breaking changes. If these changes cause an issue with your applications, you may want to consider staying

on [MicroProfile 2.2 \(1Q2019\)](#).

MicroProfile 3.x and 2.x releases build upon a small subset of Java EE 8 features. If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

Thus, the complete list of functional components for MicroProfile 3.0 includes:

- [MicroProfile Config 1.3](#)
- [MicroProfile Fault Tolerance 2.0](#)
- [MicroProfile Health 2.0](#)
- [MicroProfile JWT Authentication 1.1](#)
- [MicroProfile Metrics 2.0.0](#)
- [MicroProfile OpenAPI 1.1](#)
- [MicroProfile OpenTracing 1.3](#)
- [MicroProfile Rest Client 1.3](#)
- [CDI 2.0](#)
- [Common Annotations 1.3](#)
- [JAX-RS 2.1](#)
- [JSON-B 1.0](#)
- [JSON-P 1.1](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>3.0</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 2.2 (1Q2019)

MicroProfile 2.2 is the ninth platform release for the [Eclipse MicroProfile project](#). Based on MicroProfile's time-boxed release process, this is an incremental release that includes an update to [Fault Tolerance 2.0](#), [OpenAPI 1.1](#), [OpenTracing 1.3](#), and [Rest Client 1.2.0](#). MicroProfile 2.x releases build upon a small subset of Java EE 8 features. If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

Thus, the complete list of functional components for MicroProfile 2.2 includes:

- [MicroProfile Config 1.3](#)



- [MicroProfile Fault Tolerance 2.0](#)
- [MicroProfile Health 1.0](#)
- [MicroProfile JWT Authentication 1.1](#)
- [MicroProfile Metrics 1.1](#)
- [MicroProfile OpenAPI 1.1](#)
- [MicroProfile OpenTracing 1.3](#)
- [MicroProfile Rest Client 1.2.0](#)
- [CDI 2.0](#)
- [Common Annotations 1.3](#)
- [JAX-RS 2.1](#)
- [JSON-B 1.0](#)
- [JSON-P 1.1](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>2.2</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 2.1 (4Q2018)

MicroProfile 2.1 is the eighth release for the [Eclipse MicroProfile project](#). Based on MicroProfile's time-boxed release process, this is an incremental release that includes an update to [OpenTracing 1.2](#). MicroProfile 2.x releases build upon a small subset of Java EE 8 features. If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

Thus, the complete list of functional components for MicroProfile 2.1 includes:

- [MicroProfile Config 1.3](#)
- [MicroProfile Fault Tolerance 1.1](#)
- [MicroProfile Health 1.0](#)
- [MicroProfile JWT Authentication 1.1](#)
- [MicroProfile Metrics 1.1](#)
- [MicroProfile OpenAPI 1.0](#)
- [MicroProfile OpenTracing 1.2](#)

- [MicroProfile Rest Client 1.2](#)
- [CDI 2.0](#)
- [Common Annotations 1.3](#)
- [JAX-RS 2.1](#)
- [JSON-B 1.0](#)
- [JSON-P 1.1](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>2.1</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 2.0.1 (3Q2018)

MicroProfile 2.0.1 is the seventh release for the [Eclipse MicroProfile project](#). This is a patch release to correct an issue with the JSON-B maven dependency in the pom.xml. The defined content for [MicroProfile 2.0](#) did not change — MicroProfile 2.0 was a major release since the subset of Java EE dependencies are now based on Java EE 8. If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>2.0.1</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

## MicroProfile 2.0 (2Q2018)

MicroProfile 2.0 is the sixth release for the [Eclipse MicroProfile project](#). This is a major new release for MicroProfile since the subset of Java EE dependencies are now based on Java EE 8. If you are still dependent on Java EE 7, please consider using the [1.4 release of MicroProfile](#).

Based on our time-boxed process, the content for MicroProfile 2.0 will be MicroProfile 1.4 plus Java EE 8. Thus, the complete list of functional components for MicroProfile 2.0 includes:

- [MicroProfile Config 1.3](#)
- [MicroProfile Fault Tolerance 1.1](#)
- [MicroProfile Health 1.0](#)
- [MicroProfile JWT Authentication 1.1](#)
- [MicroProfile Metrics 1.1](#)
- [MicroProfile OpenAPI 1.0](#)
- [MicroProfile OpenTracing 1.1](#)
- [MicroProfile Rest Client 1.1](#)
- [CDI 2.0](#)
- [Common Annotations 1.3](#)
- [JAX-RS 2.1](#)
- [JSON-B 1.0](#)
- [JSON-P 1.1](#)

The Maven coordinates for this Eclipse release are as follows:

```
<dependency>
  <groupId>org.eclipse.microprofile</groupId>
  <artifactId>microprofile</artifactId>
  <version>2.0</version>
  <type>pom</type>
  <scope>provided</scope>
</dependency>
```

Here is the link to [the github repository](#) for this Eclipse-based project.

# Required APIs

MicroProfile implementations must include the following specifications:

- [Jakarta EE Core Profile 10](#)
- [MicroProfile Config 3.1](#)
- [MicroProfile Fault Tolerance 4.1](#)
- [MicroProfile Health 4.0](#)
- [MicroProfile JWT Authentication 2.1](#)
- [MicroProfile OpenAPI 4.1](#)
- [MicroProfile Rest Client 4.0](#)
- [MicroProfile Telemetry 2.1](#)

A MicroProfile compatible implementation must pass **all** required TCKs provided by each MicroProfile specification, including the Jakarta EE Core Profile 10 TCK. Passing the MicroProfile optional TCKs is not required.

These APIs and versions guarantee application developers a minimum set of APIs, but they are not intended to be restrictive.

## Java SE

This MicroProfile platform specification requires Java SE 11 for both source and target compatibility. Some component specifications may still support a Java SE 8 minimum version when used standalone. MicroProfile implementations that support the MicroProfile platform specification can provide support Java SE 11 or higher.

## Jakarta EE Core Profile 10

MicroProfile 6.0 and above requires [Jakarta EE 10 Core Profile](#) support.

- Jakarta Annotations 2.1
- Jakarta Contexts and Dependency Injection (Lite Section) 4.0\*\*
- Jakarta Dependency Injection 2.0
- Jakarta Interceptors 2.1
- Jakarta JSON Binding 3.0
- Jakarta JSON Processing 2.1
- Jakarta RESTful Web Services 3.1

\*\* Full CDI support is not required. CDI SE support is not required.

## MicroProfile Config 3.1

MicroProfile Config provides applications and microservices means to obtain configuration properties through several environment-aware sources both internal and external to the application and made available through dependency injection or lookup.

- <https://github.com/eclipse/microprofile-config>
- <https://github.com/eclipse/microprofile-config/releases/tag/3.1>

## MicroProfile Fault Tolerance 4.1

MicroProfile Fault Tolerance provides the ability to separate execution logic from business logic. Key aspects of the API include Timeout, RetryPolicy, Fallback, Bulkhead, and Circuit Breaker processing.

- <https://github.com/eclipse/microprofile-fault-tolerance>
- <https://github.com/eclipse/microprofile-fault-tolerance/releases/tag/4.1.2>

## MicroProfile Health 4.0

MicroProfile Health provides the ability to expose the health of an application to the underlying platform (ex: Kubernetes)

- <https://github.com/eclipse/microprofile-health>
- <https://github.com/eclipse/microprofile-health/releases/tag/4.0.1>

## MicroProfile JWT Authentication 2.1

MicroProfile JWT Authentication provides role based access control (RBAC) microservice endpoints using OpenID Connect (OIDC) and JSON Web Tokens (JWT).

- <https://github.com/eclipse/microprofile-jwt-auth>
- <https://github.com/eclipse/microprofile-jwt-auth/releases/tag/2.1>

## MicroProfile OpenAPI 4.1

MicroProfile OpenAPI provides a unified Java API for the [OpenAPI v3.1 specification](#) that all application developers can use to expose their API documentation.

- <https://github.com/eclipse/microprofile-open-api>
- <https://github.com/eclipse/microprofile-open-api/releases/tag/4.1>

## MicroProfile Telemetry 2.1

MicroProfile Telemetry provides an adoption of the [OpenTelemetry](#) specification (currently for

Distributed Tracing and Baggage in that context only).

Telemetry data is needed to power observability products. Traditionally, telemetry data has been provided by either open-source projects or commercial vendors. With a lack of standardization, the net result is the lack of data portability and the burden on the user to maintain the instrumentation.

The [OpenTelemetry](#) project solves these problems by providing a single, vendor-agnostic solution.

- <https://github.com/eclipse/microprofile-telemetry>
- <https://github.com/eclipse/microprofile-telemetry/releases/tag/2.1>

## MicroProfile Rest Client 4.0

MicroProfile Rest Client provides a type-safe approach to invoke RESTful services over HTTP. As much as possible MicroProfile Rest Client attempts to use [Jakarta RESTful Web Services APIs](#) for consistency and easier re-use.

- <https://github.com/eclipse/microprofile-rest-client>
- <https://github.com/eclipse/microprofile-rest-client/releases/tag/4.0>

# Notices

## Compatibility Disclaimer

APIs originating from the MicroProfile community, such as Config 1.0, should be considered pre-standard and experimental in nature. While these APIs are developed collaboratively and generally considered best-of-breed, the MicroProfile community reserves the right to make backwards incompatible changes based on substantial user feedback.

It is the overarching goal of the MicroProfile community to iterate quickly and prioritize innovation over legacy. Thus, APIs included are offered with the express purpose of feedback and rapid innovation through proven real-world usage. Developers should use these APIs with this knowledge in mind and are encouraged to provide feedback of any kind, including proposals of fundamental change to the design of the APIs themselves.

## Contribution

The MicroProfile community is an open source community part of the Eclipse Foundation. We accept contributions from corporations or individuals. To learn how to contribute to MicroProfile see:

- <https://wiki.eclipse.org/MicroProfile/FeatureInit>

## Feedback

Comments, questions or feedback on this document should be directed to The MicroProfile community as a whole at [microprofile@googlegroups.com](mailto:microprofile@googlegroups.com). Archives are available via the Google Group page:

- <https://groups.google.com/forum/#!forum/microprofile>