

## MicroProfile Health

This cheat sheet covers the basics of MicroProfile Health specification uses.

### DEFINING A HEALTH CHECK

1. Implement `org.eclipse.microprofile.health.HealthCheck` interface.
2. Mark the implementation as a CDI bean (e.g., `@ApplicationScoped`).
3. Mark the implementation with one or more of the defined health qualifiers (`@Readiness`, `@Liveness`, `@Health`).
4. Implement the `call()` method.

### DIFFERENT KINDS OF HEALTH CHECKS

#### Readiness health check

Allows third party services to know if the application is ready to process requests or not.

##### Qualifier

`@Readiness`

##### Endpoint

`/health/ready`

#### Liveness health check

Allows third party services to determine if the application is running. Failure means that application can be discarded.

##### Qualifier

`@Liveness`

##### Endpoint

`/health/live`

#### Backward compatible health check

**Warning:** This kind of health check is currently deprecated and will be removed in the future version of the specification.

##### Qualifier

`@Health`

##### Endpoint

`/health`

**Note:** The `/health` endpoint aggregates all defined procedures (defined with `@Health`, `@Liveness`, `@Readiness`).

**Note:** Multiple kinds of health check can be combined on a single health check procedure.

### CONSTRUCTING A `HealthCheckResponse`

Use one of the static methods of `HealthCheckResponse` to either:

construct the `HealthCheckResponse` object directly:

```
HealthCheckResponse.up("successful-check")

or

HealthCheckResponse.up("failed-check")
```

construct the `HealthCheckResponseBuilder` using following methods for a more detailed response specification:

```
HealthCheckResponse#named(String)

or

HealthCheckResponse#builder()
```

**Note:** Every health check is required to have a name.

#### Adding custom data values to the health check response

With the `HealthCheckResponseBuilder` you can use one of the overloads of the `withData` method to add a custom key-value pairs to your health check response:

```
public class CheckDiskSpace implements HealthCheck {
    @Override
    public HealthCheckResponse call() {
        return HealthCheckResponse.named("diskspace")
            .withData("free", "780mb")
            .up()
            .build();
    }
}
```

## HTTP STATUS CODES OVERVIEW

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**200**

health check with a positive status (UP)

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**503**

health check with a negative status (DOWN)

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**500**

error in the procedure execution

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