



Coherence Spring Reference Documentation

Gunnar Hillert

Table of Contents

Legal	1
1. Coherence Spring Documentation	2
1.1. About the Documentation	2
1.2. Getting Help	2
1.3. What is new?	2
1.4. First Steps	3
1.5. Working with Coherence Spring	3
1.6. Learning about Spring Boot Features	3
2. Coherence Spring Core	4
2.1. Getting Started	4
3. Coherence Spring Cache	5
3.1. Introduction	5
3.2. Configuring Coherence Cache for Spring	5
4. Coherence Spring Session	7
4.1. Getting Started	7
5. Coherence Spring Data	8
5.1. Getting Started	8
6. Appendices	9

Legal

Oracle licenses the Oracle Coherence Spring project under the [The Universal Permissive License \(UPL\), Version 1.0](#).

The Universal Permissive License (UPL), Version 1.0

Subject to the condition set forth below, permission is hereby granted to any person obtaining a copy of this software, associated documentation and/or data (collectively the "Software"), free of charge and under any and all copyright rights in the Software, and any and all patent rights owned or freely licensable by each licensor hereunder covering either (i) the unmodified Software as contributed to or provided by such licensor, or (ii) the Larger Works (as defined below), to deal in both

(a) the Software, and (b) any piece of software and/or hardware listed in the `lrgwrks.txt` file if one is included with the Software (each a "Larger Work" to which the Software is contributed by such licensors),

without restriction, including without limitation the rights to copy, create derivative works of, display, perform, and distribute the Software and make, use, sell, offer for sale, import, export, have made, and have sold the Software and the Larger Work(s), and to sublicense the foregoing rights on either these or other terms.

This license is subject to the following condition: The above copyright notice and either this complete permission notice or at a minimum a reference to the UPL must be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Chapter 1. Coherence Spring Documentation

Welcome to the reference documentation of Coherence Spring, a collection of several libraries that will help you to integration Coherence with the wider Spring ecosystem.

This section provides a brief overview of the Coherence Spring reference documentation.

1.1. About the Documentation

The Coherence Spring reference guide is available as:

- [Multi-page HTML](#)
- [Single page HTML](#)
- [PDF](#)

The latest copy is available at github.com/coherence-community/coherence-spring.

1.2. Getting Help

If you have trouble with Spring Coherence, we would like to help.

- Try the [How-to documents](#). They provide solutions to the most common questions.
- Learn the Coherence basics. All Spring Coherence module directly support Oracle Coherence. Check the [Coherence CE](#) web-site for general Coherence targeted reference documentation.
- Learn the Spring basics. Spring Coherence builds on several other Spring projects. Check the [spring.io](#) web-site for general reference documentation. If you are starting out with Spring, try one of the [guides](#).
- Ask a question. Chat with us directly on [Slack](#). We also monitor [stackoverflow.com](#) for questions tagged with [coherence](#).
- Report bugs with Spring Coherence via [GitHub Issues](#).



All of Coherence Spring is open source, including the documentation. If you find problems with the docs or if you want to improve them, please [get involved](#).

1.3. What is new?

Instructions for how to upgrade from earlier versions of Spring Boot are provided on the project [wiki](#). Follow the links in the in the [release notes](#) section to find the version that you want to upgrade to.

Upgrading instructions are always the first item in the release notes. If you are more than one release behind, please make sure that you also review the release notes of the versions that you jumped.

You should always ensure that you are running a [supported version](#) of Spring Boot.

1.4. First Steps

If you are getting started with Spring Boot or 'Spring' in general, start with [the following topics](#):

- **From scratch:** [Overview](#) | [Requirements](#) | [Installation](#)
- **Tutorial:** [Part 1](#) | [Part 2](#)
- **Running your example:** [Part 1](#) | [Part 2](#)

1.5. Working with Coherence Spring

Ready to actually start using Spring Boot? [We have you covered](#):

- **Build systems:** [Maven](#) | [Gradle](#) | [Ant](#) | [Starters](#)
- **Best practices:** [Code Structure](#) | [@Configuration](#) | [@EnableAutoConfiguration](#) | [Beans and Dependency Injection](#)
- **Running your code:** [IDE](#) | [Packaged](#) | [Maven](#) | [Gradle](#)
- **Packaging your app:** [Production jars](#)
- **Spring Boot CLI:** [Using the CLI](#)

1.6. Learning about Spring Boot Features

Need more details about Spring Boot's core features? [The following content is for you](#):

- **Core Features:** [SpringApplication](#) | [External Configuration](#) | [Profiles](#) | [Logging](#)
- **Web Applications:** [MVC](#) | [Embedded Containers](#)
- **Working with data:** [SQL](#) | [NO-SQL](#)
- **Messaging:** [Overview](#) | [JMS](#)
- **Testing:** [Overview](#) | [Boot Applications](#) | [Utils](#)
- **Extending:** [Auto-configuration](#) | [@Conditions](#)

Chapter 2. Coherence Spring Core

This section dives into the Coherence Spring Core module. Coherence Spring Core provides the basic support support for the [Spring Framework](#).

2.1. Getting Started

TBD

Chapter 3. Coherence Spring Cache

This section dives into the Coherence Spring Cache module. It explains how to use Coherence's support for the Spring Framework's [Cache Abstraction](#).

3.1. Introduction

Spring provides its own cache abstraction, allowing you to add caching to Java methods. Coherence Spring provides an implementation of this abstraction for Oracle Coherence.



Spring's Cache abstraction also supports JSR-107 which is also supported by Oracle Coherence. As such you have another alternative for setting up caching.

3.2. Configuring Coherence Cache for Spring

As a start, please familiarize yourself with Spring's Cache Abstraction by reading the [relevant section](#) of Spring's reference documentation.

Properties

```
example.property.alpha=a
```

Yaml

```
example:
  property:
    alpha: a
```

Properties

```
spring.devtools.restart.exclude=static/**,public/**
```

Yaml

```
spring:
  devtools:
    restart:
      exclude: "static/**,public/**"
```

Example 1. Creating a CoherenceInstance

Java

```
@Configuration
@EnableCaching
public class CacheConfiguration {

    @Bean
    public CoherenceInstance coherenceInstance() {
        return new CoherenceInstance();
    }

    @Bean
    public CacheManager cacheManager(CoherenceInstance coherenceInstance) {
        return new CoherenceCacheManager(coherenceInstance);
    }
}
```

XML

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cache="http://www.springframework.org/schema/cache"
    xsi:schemaLocation="
        http://www.springframework.org/schema/beans
        https://www.springframework.org/schema/beans/spring-beans.xsd
        http://www.springframework.org/schema/cache
        https://www.springframework.org/schema/cache/spring-cache.xsd">

    <cache:annotation-driven/>

    <bean id="coherenceInstance"
class="com.oracle.coherence.spring.CoherenceInstance"/>

    <bean id="cacheManager"
class="com.oracle.coherence.spring.cache.CoherenceCacheManager">
        <constructor-arg ref="coherenceInstance"/>
    </bean>
</beans>
```


Chapter 4. Coherence Spring Session

This section dives into the Coherence Spring Session module. It explains how to use Coherence's support for [Spring Session](#).

4.1. Getting Started

TBD

Chapter 5. Coherence Spring Data

This section dives into the Coherence Spring Data module. It explains how to use Coherence's support for [Spring Data](#) repositories.

5.1. Getting Started

TBD

Chapter 6. Appendices