

Appendix

Version 5.0.17.RELEASE

Chapter 1. XML Schemas

This part of the appendix lists XML schemas for data access.

1.1. The `tx` schema

The `tx` tags deal with configuring all of those beans in Spring's comprehensive support for transactions. These tags are covered in the chapter entitled [Transaction Management](#).



You are strongly encouraged to look at the '`spring-tx.xsd`' file that ships with the Spring distribution. This file is (of course), the XML Schema for Spring's transaction configuration, and covers all of the various tags in the `tx` namespace, including attribute defaults and suchlike. This file is documented inline, and thus the information is not repeated here in the interests of adhering to the DRY (Don't Repeat Yourself) principle.

In the interest of completeness, to use the tags in the `tx` schema, you need to have the following preamble at the top of your Spring XML configuration file; the text in the following snippet references the correct schema so that the tags in the `tx` namespace are available to you.

```
<?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:aop="http://www.springframework.org/schema/aop"
       <em>xmlns:tx="http://www.springframework.org/schema/tx"</em>
       xsi:schemaLocation="
           http://www.springframework.org/schema/beans
           https://www.springframework.org/schema/beans/spring-beans.xsd
           <em>http://www.springframework.org/schema/tx
           http://www.springframework.org/schema/tx/spring-tx.xsd</em>
           http://www.springframework.org/schema/aop
           https://www.springframework.org/schema/aop/spring-aop.xsd"> <!-- bean definitions here
-->

</beans>
```



Often when using the tags in the `tx` namespace you will also be using the tags from the `aop` namespace (since the declarative transaction support in Spring is implemented using AOP). The above XML snippet contains the relevant lines needed to reference the `aop` schema so that the tags in the `aop` namespace are available to you.

1.2. The `jdbc` schema

The `jdbc` tags allow you to quickly configure an embedded database or initialize an existing data source. These tags are documented in [Embedded database support](#) and [Initializing a DataSource](#)

respectively.

To use the tags in the `jdbc` schema, you need to have the following preamble at the top of your Spring XML configuration file; the text in the following snippet references the correct schema so that the tags in the `jdbc` namespace are available to you.

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

</beans>
```