

# Spring JPA

- description :
- author :
- email : hylee@repia.com
- lastupdate : 2020-12-16

## JPA

- SQL?
- ( )
- ?
- DB
- - Table
- 가 가

## JPA

- JPA . -
- . ( )
- JPA .

## JPA

- or

## JPA

- ( , )
- ( )
- 
- 1 ( )
- ( )
- 
- SQL 가
- 
- (Dirty Checking)
- 
- 
- ,
-

- (Lazy Loading)

```
@Entity : JPA가
public, protected
@Table(name = " ")

가
create, create-drop, update, validate, auto, none
create, update
update, validate
validate, none
@Column JPA, ddl
updatable = false,
nullable = false
unique = true,
```

- 
- 가
- mappedBy
- mappedBy
- 
- 
- 
- , 가 . ( )

- context-hibernate.xml
- context-jpa-respository.xml

## context-hibernate.xml

### Tip

3 .

```
<property name="dataSource" ref="" />
```

- context-datasource.xml JPA DB bean ID

```
<property name="packagesToScan" value="" >
```

- values

```
<prop key="hibernate.dialect">
```

- JPA가 DB
- 

```
<?xml version="1.0" encoding="utf-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
  xmlns:context="http://www.springframework.org/schema/context"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans-4.0.xsd
http://www.springframework.org/schema/context
http://www.springframework.org/schema/context/spring-context-4.0.xsd">

  <!--      가      EntityManager      , @PersistenceContext      -->
  <bean id="entityManagerFactory"
class="org.springframework.orm.jpa.LocalContainerEntityManagerFactoryBean">
    <property name="dataSource" ref="egov.dataSource" />
    <!--      -->
    <property name="packagesToScan" value="com" />
    <!--      -->
    <property name="jpaVendorAdapter">
      <bean
class="org.springframework.orm.jpa.vendor.HibernateJpaVendorAdapter">
        <property name="showSql" value="true" />
        <property name="generateDdl" value="true" />
      </bean>
    </property>
  <!-- persistence.xml      가      -->
  <property name="jpaProperties">
    <props>
      <!-- <prop
key="hibernate.ejb.naming_strategy">org.hibernate.cfg.EJB3NamingStrategy</pr
op> -->
      <prop
key="hibernate.ejb.naming_strategy">org.hibernate.cfg.ImprovedNamingStrategy
</prop>
      <!-- hibernate 5      (4      )-
      <prop key="hibernate.naming.implicit-
strategy">org.hibernate.boot.model.naming.ImplicitNamingStrategyLegacyJpaImp
l</prop>
      <prop key="hibernate.naming.physical-
strategy">org.hibernate.boot.model.naming.PhysicalNamingStrategyStandardImpl
</prop>
      -->
      <prop key="hibernate.hbm2ddl.auto">validate</prop>
      <prop
key="hibernate.dialect">org.hibernate.dialect.Oracle10gDialect</prop>
```

```

        <prop key="hibernate.show_sql">true</prop>
        <prop key="hibernate.format_sql">true</prop>
        <prop key="hibernate.use_sql_comments">true</prop>
        <prop key="hibernate.jdbc.batch_size">5</prop>
    </props>
</property>
</bean>

</beans>

```

## hibernate.dialect

|                           |                                             |
|---------------------------|---------------------------------------------|
| DB2                       | org.hibernate.dialect.DB2Dialect            |
| DB2 AS/400                | org.hibernate.dialect.DB2400Dialect         |
| DB2 OS390                 | org.hibernate.dialect.DB2390Dialect         |
| PostgreSQL                | org.hibernate.dialect.PostgreSQLDialect     |
| MySQL5                    | org.hibernate.dialect.MySQL5Dialect         |
| MySQL5 with InnoDB        | org.hibernate.dialect.MySQL5InnoDBDialect   |
| MySQL with MyISAM         | org.hibernate.dialect.MySQLMyISAMDialect    |
| Oracle (any version)      | org.hibernate.dialect.OracleDialect         |
| Oracle 9i                 | org.hibernate.dialect.Oracle9iDialect       |
| Oracle 10g                | org.hibernate.dialect.Oracle10gDialect      |
| Oracle 11g                | org.hibernate.dialect.Oracle10gDialect      |
| Sybase                    | org.hibernate.dialect.SybaseASE15Dialect    |
| Sybase Anywhere           | org.hibernate.dialect.SybaseAnywhereDialect |
| Microsoft SQL Server 2000 | org.hibernate.dialect.SQLServerDialect      |
| Microsoft SQL Server 2005 | org.hibernate.dialect.SQLServer2005Dialect  |
| Microsoft SQL Server 2008 | org.hibernate.dialect.SQLServer2008Dialect  |
| SAP DB                    | org.hibernate.dialect.SAPDBDialect          |
| Informix                  | org.hibernate.dialect.InformixDialect       |
| HypersonicSQL             | org.hibernate.dialect.HSQLDialect           |
| H2 Database               | org.hibernate.dialect.H2Dialect             |
| Ingres                    | org.hibernate.dialect.IngresDialect         |
| Progress                  | org.hibernate.dialect.ProgressDialect       |
| Mckoi SQL                 | org.hibernate.dialect.MckoiDialect          |
| Interbase                 | org.hibernate.dialect.InterbaseDialect      |
| Pointbase                 | org.hibernate.dialect.PointbaseDialect      |
| FrontBase                 | org.hibernate.dialect.FrontbaseDialect      |
| Firebird                  | org.hibernate.dialect.FirebirdDialect       |

## context-jpa-respository.xml

Tip

```
<jpa:repositories base-package="">
```

- base-package=""

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
  xmlns:jpa="http://www.springframework.org/schema/data/jpa"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans-4.0.xsd
http://www.springframework.org/schema/data/jpa
http://www.springframework.org/schema/data/jpa/spring-jpa.xsd">

  <jpa:repositories base-package="com"></jpa:repositories>

</beans>
```

## POM.xml

```
<properties>
  <egovframework.jpa.version>3.7.0</egovframework.jpa.version>
  <hibernate.version>4.3.11.Final</hibernate.version>
</properties>
<dependencies>
  <dependency>
    <groupId>egovframework.rte</groupId>
    <artifactId>egovframework.rte.psl.data.jpa</artifactId>
    <version>${egovframework.jpa.version}</version>
  </dependency>

  <!-- Hibernate -->
  <dependency>
    <groupId>org.hibernate</groupId>
    <artifactId>hibernate-core</artifactId>
    <version>${hibernate.version}</version>
  </dependency>

  <dependency>
    <groupId>org.hibernate</groupId>
    <artifactId>hibernate-validator</artifactId>
    <version>5.4.2.Final</version>
  </dependency>
  <dependency>
    <groupId>org.springframework.data</groupId>
    <artifactId>spring-data-jpa</artifactId>
```

```
<version>1.11.10.RELEASE</version>
<exclusions>
  <exclusion>
    <groupId>org.slf4j</groupId>
    <artifactId>slf4j-api</artifactId>
  </exclusion>
  <exclusion>
    <groupId>org.slf4j</groupId>
    <artifactId>jcl-over-slf4j</artifactId>
  </exclusion>
</exclusions>
</dependency>
</dependencies>
```

## Builder

- [\[SpringBoot + JPA\] Lombok @Builder](#)

, [spring](#), [jpa](#),

From:

<http://rwiki.repia.com/> -

. - 2023.12

Permanent link:

<http://rwiki.repia.com/doku.php?id=wiki:spring:jpa&rev=1656066183>



Last update: **2022/06/24 19:23**