

Hibernate Tip: Use query comments to identify a query

Question:

My application performs a lot of similar queries and I need to find the output of a specific query in my log file. Is there any way to identify a specific query in the log output?

Solution:

Hibernate can add a comment when it generates an SQL statement for a [JPQL](#) or Criteria query or executes a [native SQL query](#). You can see it in your application log file, when you [activate SQL statement logging](#) and in your database logs.

You need to activate SQL comments by setting the configuration parameter *hibernate.use_sql_comments* to true. The following code snippet shows an example configuration in the persistence.xml file.

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```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<persistence xmlns="http://xmlns.jcp.org/xml/ns/persistence"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" version="2.1"
    xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/persist
ence
http://xmlns.jcp.org/xml/ns/persistence/persistence_2_1.xsd"
>

    <persistence-unit name="my-persistence-unit">
        <description>Hibernate Tips</description>
        <provider>
            org.hibernate.jpa.HibernatePersistenceProvider
        </provider>
        <exclude-unlisted-classes>
            false
        </exclude-unlisted-classes>

        <properties>
            <property name="hibernate.dialect"
value="org.hibernate.dialect.PostgreSQLDialect" />
            <property
name="hibernate.use_sql_comments" value="true" />

            ....
        </properties>
    </persistence-unit>
</persistence>
```

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The generated comments are often not useful to find a specific query. You should, therefore, use the *org.hibernate.comment* query hint to provide your own comment.

I use it in the following example to set the SQL comment for my query to “This is my comment”.

```
TypedQuery q = em.createQuery("SELECT a FROM Author  
a WHERE a.id = :id", Author.class);  
q.setParameter("id", 1L);  
q.setHint("org.hibernate.comment", "This is my comment");  
Author a = q.getSingleResult();
```

Hibernate adds this comment to the generated SQL statement and writes it to the log file.

```
08:14:57,432 DEBUG [org.hibernate.SQL] – /* This is my  
comment */ select author0_.id as id1_0_, author0_.firstName  
as firstNam2_0_, author0_.lastName as lastName3_0_,  
author0_.version as version4_0_ from Author author0_ where  
author0_.id=?
```

Learn more:

I got into a lot more details about Hibernate’s logging capabilities in [Hibernate Logging Guide – Use the right config for development and production.](#)

Hibernate and JPA support a lot more hints than I showed you in this post. I summarized the most interesting ones in [11 JPA and Hibernate query hints every developer should know.](#)