

SQL Stored Procedure

SQL Stored Procedure Component

Available as of Camel 2.17

The **sql-stored**: component allows you to work with databases using JDBC Stored Procedure queries. This component is an extension to the [SQL Component](#) but specialized for calling stored procedures.

This component uses `spring-jdbc` behind the scenes for the actual SQL handling.

Maven users will need to add the following dependency to their `pom.xml` for this component:

```
<dependency>
  <groupId>org.apache.camel</groupId>
  <artifactId>camel-sql</artifactId>
  <version>x.x.x</version>
  <!-- use the same version as your Camel core version -->
</dependency>
```

URI format

The SQL component uses the following endpoint URI notation:

```
sql-stored:template[?options]
```

Where `template` is the stored procedure template, where you declare the name of the stored procedure and the IN and OUT arguments.

You can also refer to the template in an external file on the file system or classpath such as:

```
sql-stored:classpath:sql/myprocedure.sql[?options]
```

Where `sql/myprocedure.sql` is a plain text file in the classpath with the template, as show:

```
SUBNUMBERS(
  INTEGER ${headers.num1},
  INTEGER ${headers.num2},
  OUT INTEGER resultofsub
)
```

You can append query options to the URI in the following format, `?option=value&option=value&...`

Options

Option	Type	Default	Description
<code>batch</code>	boolean	false	Enables or disables batch mode
<code>dataSource</code>	string		Reference to a <code>DataSource</code> to look up in the registry.
<code>noop</code>	boolean	false	If set will ignore the results of the template and use the existing IN message as the OUT message for the continuation of processing
<code>outputHeader</code>	string		Store the template result in a header instead of the message body. By default <code>outputHeader == null</code> and the template result is stored in the message body any existing content in the message body is discarded. If <code>outputHeader</code> is set the value is used as the name of the header to store the template result and the original message body is preserved.
<code>useMessageBodyForTemplate</code>	boolean	false	Whether to use the message body as the template and then headers for parameters. If this option is enabled then the template in the uri is not used.

Declaring the stored procedure template

The template is declared using a syntax that would be similar to a Java method signature. The name of the stored procedure, and then the arguments enclosed in parenthesis. An example explains this well:

```
<to uri="sql-stored:SUBNUMBERS(INTEGER ${headers.num1},INTEGER ${headers.num2},OUT INTEGER resultofsub)"/>
```

The arguments is declared by a type and then the mapping to the Camel message using simple expression. So in this example the first two parameters are IN values that are INTEGER type, that maps to the message headers. The last parameter is the OUT value, also an INTEGER type.

In SQL term the stored procedure could be declared as:

```
CREATE PROCEDURE SUBNUMBERS(VALUE1 INTEGER, VALUE2 INTEGER,OUT RESULT INTEGER)
```

See Also

- [Configuring Camel](#)
- [Component](#)
- [Endpoint](#)
- [Getting Started](#)

- [SQL Component](#)