

Spring Professional Exam Tutorial v5.0

Question 06

Question 06 - When does the JDBC template acquire (and release) a connection, for every method called or once per template? Why?

Connection lifecycle in JDBC Template depends on transactions being involved or not.

If JDBC Template is used without transaction, then connection is acquired and released for every method call. Reason for this strategy, is to minimize amount of time when resource (connection) has to be held.

If JDBC Template is used together with transaction, then `DataSourceUtils` which is using `TransactionSynchronizationManager` will reuse connection between method calls as long as transaction is not committed or rolled back. Reason for this strategy is that connection cannot be closed when transaction is in progress, since closing connection would also rollback any changes made.

JDBC Template uses `getConnection()` method from `DataSource` class through `DataSourceUtils` class. If `DataSource` is plain JDBC Connection source, then connection is actually opened/closed, however if Connection Pool, like DBCP or C3P0 is used, then connection is not being opened/closed, however it is acquired or released from/to the pool.

