

You can use Hibernate ORM with Cloud Spanner using the open source [Cloud Spanner Dialect](https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate) ([SpannerDialect](https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate)). Cloud Spanner Dialect is compatible with [Hibernate ORM 5.4](https://hibernate.org/orm/) for [Google Cloud Spanner](/spanner). Cloud Spanner Dialect produces SQL, DML, and DDL statements for most common entity types and relationships using standard Hibernate and Java Persistence annotations.

### Add the [Apache Maven](#)

(<https://search.maven.org/artifact/com.google.cloud/google-cloud-spanner-hibernate-dialect>) dependencies for Hibernate ORM core, [Cloud Spanner Dialect](https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate) (<https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate>), and the Cloud Spanner officially supported [Open Source JDBC driver](/spanner/docs/use-oss-jdbc) (</spanner/docs/use-oss-jdbc>).

[spanner/hibernate/pom.xml](https://github.com/GoogleCloudPlatform/java-docs-samples/blob/master/spanner/hibernate/pom.xml)

(<https://github.com/GoogleCloudPlatform/java-docs-samples/blob/master/spanner/hibernate/pom.xml>)

[b](https://github.com/GoogleCloudPlatform/java-docs-samples/blob/master/spanner/hibernate/pom.xml) (<https://github.com/GoogleCloudPlatform/java-docs-samples/blob/master/spanner/hibernate/pom.xml>)

Configure `hibernate.cfg.xml` to use Cloud Spanner Dialect and Cloud Spanner JDBC Driver.

[spanner/hibernate/src/main/resources/hibernate.cfg.xml](https://github.com/GoogleCloudPlatform/java-docs-samples/blob/master/spanner/hibernate/src/main/resources/hibernate.cfg.xml)

(<https://github.com/GoogleCloudPlatform/java-docs-samples/blob/master/spanner/hibernate/src/main/resources/hibernate.cfg.xml>)

CloudPlatform/java-docs-samples/blob/master/spanner/hibernate/src/main/resources/hibernate.cfg.xml)

The [service account JSON credentials](#) (`/docs/authentication/getting-started`) file location should be in the `GOOGLE_APPLICATION_CREDENTIALS` environment variable. The driver will use default credentials set in the Google Cloud SDK `gcloud` application otherwise.

For more information about the features and recommendations for Hibernate ORM with Cloud Spanner, please consult the [reference documentation](#)

(<https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate/blob/master/README.adoc>) on GitHub.

- Checkout [code examples](https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate/tree/master/google-cloud-spanner-hibernate-samples)  
(<https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate/tree/master/google-cloud-spanner-hibernate-samples>)  
using Hibernate with Cloud Spanner.
- Try the Cloud Spanner with Hibernate ORM [codelab](https://codelabs.developers.google.com/codelabs/cloud-spanner-hibernate)  
(<https://codelabs.developers.google.com/codelabs/cloud-spanner-hibernate>).
- Learn more about [Hibernate ORM](https://hibernate.org/orm/) (<https://hibernate.org/orm/>).
- View the repository for [Cloud Spanner Dialect](https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate)  
(<https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate>) on GitHub.
- [File a GitHub issue](https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate/issues)  
(<https://github.com/GoogleCloudPlatform/google-cloud-spanner-hibernate/issues>) to report a bug or ask a question about Hibernate ORM with Cloud Spanner.
- Learn more about [Apache Maven](https://search.maven.org/artifact/com.google.cloud/google-cloud-spanner-hibernate-dialect)  
(<https://search.maven.org/artifact/com.google.cloud/google-cloud-spanner-hibernate-dialect>).