This page describes the SDKS and client libraries available for the Cloud Firestore API. While you can make direct HTTP and RPC calls to the Cloud Firestore API, the Cloud Firestore client libraries implement best practices for you and make it easier to access your database.

Cloud Firestore supports mobile/web SDKs and server client libraries.

Cloud Firestore supports SDKs for Android, IOS, and Web. Combined with <u>Cloud Firestore</u> <u>security rules</u> (https://cloud.google.com/firestore/docs/security/get-started) and <u>Firebase Auth</u> (https://firebase.google.com/docs/auth/), the mobile and web SDKs support serverless app architectures where clients connect directly to your Cloud Firestore database. With a serverless architecture, you do not need to maintain an intermediary server between your clients and your Cloud Firestore database.

The mobile and web SDKs also support <u>realtime updates</u> (https://cloud.google.com/firestore/docs/query-data/listen) and <u>offline data persistence</u> (https://firebase.google.com/docs/firestore/manage-data/enable-offline).

To get started with the Android, iOS, or Web SDK see the <u>Quickstart using a Mobile/Web Client</u> <u>Library</u> (/firestore/docs/quickstart-servers).

For more on each SDK see the following resources:

Cloud Firestore supports server client libraries for C#, Go, Java, Node.js, PHP, Python, and Ruby. Use these client libraries to set up privileged server environments.

Unlike the Mobile and Web SDKs, the server client libraries create a privileged Cloud Firestore environment with full access to your database. In this environment, requests are not evaluated against your Cloud Firestore security rules. Privileged Cloud Firestore servers are secured using Cloud Identity and Access Management, see <u>Security for server client libraries</u> (https://cloud.google.com/firestore/docs/security/iam).

Use the server client libraries for administrative database tasks or if you prefer an architecture with an intermediary server between your users and your Cloud Firestore database.

Cloud Firestore server client libraries are available as <u>Firebase Admin SDKs</u> (https://firebase.google.com/docs/admin/setup) and as Google Cloud client libraries. Both sets of libraries provide the same Cloud Firestore features. The Firebase Admin SDKs bundle access to Cloud Firestore and several other Firebase products, like Firebase Auth and Firebase Cloud Messaging, in a single library.

The <u>Firebase Admin SDKs</u> (https://firebase.google.com/docs/admin/setup) bundle the Google Cloud client libraries for Cloud Firestore alongside client libraries and SDKs for several other Firebase features. Using one of the Admin SDKs, you can initialize access to Cloud Firestore and several other services from a single SDK. The Firebase Admin SDKs support Cloud Firestore access in Java, Python, Node.js, and Go.

To get started with a Firebase Admin SDK, see <u>Add the Firebase Admin SDK to Your Server</u> (https://firebase.google.com/docs/admin/setup).

For more on each Firebase Admin SDK see the following resources:

The Google Cloud client libraries support Cloud Firestore access in Java, Python, Node.js, Go, PHP, C#, and Ruby. To get started with one of the Google Cloud client libraries, see the <u>Quickstart using a Server Client Library</u> (https://cloud.google.com/firestore/docs/quickstart-servers).

For more on each Google Cloud client library for Cloud Firestore see the following resources:

Cloud Firestore offers a number of integrations with open-source libraries in addition to the mobile/web SDKs and server client libraries, see <u>Library and framework integrations</u> (https://firebase.google.com/docs/firestore/library-integrations).