<u>Serverless Computing</u> (https://cloud.google.com/products/serverless/) <u>Cloud Run: Serverless Computing</u> (https://cloud.google.com/run/) <u>Documentation</u> (https://cloud.google.com/run/docs/) <u>Guides</u>

Connecting to Google Cloud services

This page lists Google Cloud services that work well with Cloud Run and those that are not-yet supported for the fully managed version of Cloud Run. Cloud Run for Anthos on Google Cloud can use any service that Google Kubernetes Engine can use.

Connecting to Google Cloud services in code

You can use Cloud Run (fully managed) with the supported Google Cloud services using the client libraries they provide. For code samples showing how to connect with a particular Google Cloud service, refer to the documentation provided for that Google Cloud service.

You do not need to provide credentials manually inside Cloud Run (fully managed) container instances when using the Google Cloud client libraries.

Note that Cloud Run (fully managed) uses a <u>default runtime service account</u> (https://cloud.google.com/run/docs/securing/service-identity) that has the *Project > Editor* role, which means it is able to call all Google Cloud APIs and have read and write access on all resources in your Google Cloud project. You can restrict this by <u>assigning a service account with a minimal</u> <u>set of permissions</u> (https://cloud.google.com/run/docs/securing/service-identity#per-service-identity) to your Cloud Run services. For example, if your Cloud Run service is only reading data from Firestore, we recommend assigning it a service account that only has the *Firestore User* IAM role.

Services and tools recommended for use

The following table lists services recommended for Cloud Run (fully managed). These services also work well with Cloud Run for Anthos on Google Cloud, but in addition, Cloud Run for Anthos on Google Cloud can use any service that Google Kubernetes Engine can use.

Service

Description

Service	Description
<u>Cloud Build</u> (https://cloud.google.com/cloud-build/)	Build container images, continuous integration and delivery.
<u>Container Registry</u> (https://cloud.google.com/container- registry/)	Store container images.
<u>Stackdriver</u> (https://cloud.google.com/stackdriver/)	<u>Monitoring</u> (https://cloud.google.com/run/docs/monitoring) and <u>logging</u> (https://cloud.google.com/run/docs/logging) of Cloud Run services.
<u>Firestore</u> (https://cloud.google.com/firestore/)	Fully managed NoSQL database.
<u>Cloud Storage</u> (https://cloud.google.com/storage/)	Object storage. Store objects and serve static content.
<u>Pub/Sub</u> (https://cloud.google.com/pubsub/)	Push events to Cloud Run services. Refer to the <u>Using Pub/Sub</u> <u>with Cloud Run Tutorial</u> (https://cloud.google.com/run/docs/tutorials/pubsub).
<u>Cloud Scheduler</u> (https://cloud.google.com/scheduler/)	Trigger Cloud Run services on a schedule.
<u>Cloud Tasks</u> (https://cloud.google.com/tasks/)	Execute asynchronous tasks on Cloud Run. Refer to <u>HTTP</u> <u>Target tasks with authentication tokens</u> (https://cloud.google.com/tasks/docs/creating-http-target- tasks#http_target_tasks_with_authentication_tokens)
<u>Identity Platform</u> (https://cloud.google.com/identity-cp/)	Login your users.
<u>Secret Manager</u> (https://cloud.google.com/secret-manager	Create and access secrets. /)
<u>BigQuery</u> (https://cloud.google.com/bigquery/)	Fully managed cloud data warehouse for analytics.
<u>Firebase Hosting</u> (https://firebase.google.com/docs/hosting	Fully managed hosting service for static and dynamic content /)with configurable CDN caching.

Service	Description
<u>Cloud Endpoints</u> (https://cloud.google.com/endpoints/) (Beta)	API management including routing, authentication, API keys, rate limiting, and quota. <u>Endpoints for Cloud Run</u> (https://cloud.google.com/endpoints/docs/openapi/get- started-cloud-run) are in Beta.

Connecting to Cloud SQL

You can use Cloud Run with <u>Cloud SQL</u> (https://cloud.google.com/sql/). For details, refer to <u>Connecting to Cloud SQL instances</u> (https://cloud.google.com/run/docs/configuring/connect-cloudsql)

Services not yet supported

The following table lists services that are not yet supported by Cloud Run (fully managed). Note that Cloud Run for Anthos on Google Cloud can use any service that Google Kubernetes Engine can use.

Service	Notes
<u>Virtual Private Cloud</u> (https://cloud.google.com/vpc/)	Cloud Run (fully managed) cannot connect to VPC network.
<u>Memorystore</u> (https://cloud.google.com/memorystore/)	Cloud Run (fully managed) cannot connect to VPC network.
<u>Filestore</u> (https://cloud.google.com/filestore/) (NAS)	Filestore is not Firestore , which is supported.
<u>Cloud Load Balancing</u> (https://cloud.google.com/load-balancing/)	Cloud Run (fully managed) does not work with Cloud Load Balancing.
<u>Google Cloud Armor</u> (https://cloud.google.com/armor/)	Cloud Run (fully managed) does not work with Cloud Load Balancing.
<u>Cloud CDN</u> (https://cloud.google.com/cdn/)	Cloud Run (fully managed) does not work with Cloud Load Balancing.

Service	Notes
<u>Identity-Aware Proxy</u> (https://cloud.google.com/iap/)	Cloud Run (fully managed) does not work with Cloud Load Balancing.
<u>VPC Service Controls</u> (https://cloud.google.com/vpc-service-controls/) <u>Cloud Asset Inventory</u> (https://cloud.google.com/resource-manager/docs/cloud-asset inventory/overview)	Cloud Run (fully managed) cannot be deployed into a VPC network.

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