

[Serverless Computing](https://cloud.google.com/products/serverless/) (https://cloud.google.com/products/serverless/)

[Cloud Run: Serverless Computing](https://cloud.google.com/run/) (https://cloud.google.com/run/)

[Documentation](https://cloud.google.com/run/docs/) (https://cloud.google.com/run/docs/) [Guides](#)

Mapping custom domains

Beta

This feature is in a pre-release state and might change or have limited support. For more information, see the [product launch stages](https://cloud.google.com/products/#product-launch-stages) (https://cloud.google.com/products/#product-launch-stages).

You can use a custom domain rather than the default address that Cloud Run provides for a deployed service.

To use a custom domain for a service, you map your service to the custom domain, then update your DNS records. You can map a service to a domain, such as `example.com` or to a subdomain, such as `subdomain.example.com`.

If you are using HTTPS, the following considerations apply:

- For *Cloud Run (fully managed)*, a managed certificate for HTTPS connections is automatically issued and renewed when you map a service to a custom domain. Note that provisioning the SSL certificate should take about 15 minutes. You cannot upload and use your own certificates.
- For *Cloud Run for Anthos on Google Cloud*, only HTTP is available by default. You can install a wildcard SSL certificate to enable SSL for all services mapped to domains included in the wildcard SSL certificate. For more information see [Enabling HTTPS](https://cloud.google.com/run/docs/gke/enabling-cluster-https) (https://cloud.google.com/run/docs/gke/enabling-cluster-https).

You can map multiple custom domains to the same Cloud Run service.

Before you begin

Purchase a new domain, unless you already have one that you want to use. You can use any domain name registrar, but if you use [Google Domains](https://domains.google.com/) (https://domains.google.com/), the domain is automatically verified for Cloud Run, so you won't have to go through the domain verification process.

Mapping a custom domain to a service

You can use the `gcloud` command line to map a custom domain to a service.

CONSOLE

COMMAND LINE

1. Go to the Cloud Run domain mappings page:

DOMAIN MAPPINGS PAGE ([HTTPS://CONSOLE.CLOUD.GOOGLE.COM/RUN/DOMAINS](https://console.cloud.google.com/run/domains))

Note that if your display window is too small, if you navigate to the *Domain Mappings* page from the main Cloud Run page, the *Mapping Custom Domains* button isn't displayed: you have to click the 3-dot vertical ellipse icon at the right of the page.

2. In the *Domain Mappings* page, click **Add Mapping**.
3. From the dropdown list in the *Add Mapping* form, select the service you are mapping the custom domain to:

Add mapping

You can map domains and subdomains to the selected Cloud Run service. [Learn more](#)

1 Enter domain — 2 Update DNS records

Select a service to map to *

Enter domain name *
e.g. mydomain.com

CANCEL CONTINUE

4. Enter the domain name.
5. Click **Continue**.
6. For Cloud Run (fully managed), you will need to verify the ownership of a domain before being able to use it, unless you purchased your domain from Google. If you want to map `subdomain.example.com`, you should verify ownership of `example.com`. For more information on

verifying domain ownership, refer to [Webmaster Central help](https://support.google.com/webmasters/answer/9008080?hl=en) (<https://support.google.com/webmasters/answer/9008080?hl=en>)

7. [Update your DNS records](#) (#dns_update) at your domain registrar web site using the DNS records displayed in the last step. You can display the records at any time by clicking **DNS Records** in the "..." action menu for a domain mapping.
8. Click **Done**.

Base path mapping

The term *base path* refers to the URL path name that is after the domain name. For example, `users` is the base path of `example.com/users`. Cloud Run only allows you to map a domain to `/`, not to a specific base path. So any path routing has to be handled by using a router inside the service's container or by using [Firebase Hosting](https://firebase.google.com/docs/hosting) (<https://firebase.google.com/docs/hosting>).

Add your DNS records at your domain registrar

After you've mapped your service to a custom domain in Cloud Run, you need to update your DNS records at your domain registrar. As a convenience, Cloud Run generates and displays the DNS records you need to enter. You must add these records that point to the Cloud Run service at your domain registrar for the mapping to go into effect.

1. Retrieve the DNS record information for your domain mappings using:

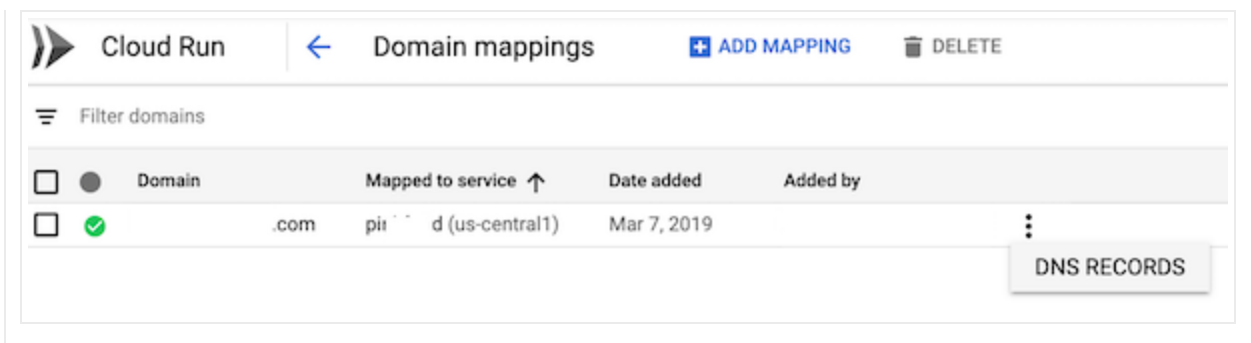
CONSOLE

COMMAND LINE

- a. Go to the Cloud Run domain mappings page:

[DOMAIN MAPPINGS PAGE](https://console.cloud.google.com/run/domains) ([HTTPS://CONSOLE.CLOUD.GOOGLE.COM/RUN/DOMAINS](https://console.cloud.google.com/run/domains))

- b. Click the 3-dot vertical ellipse icon to the right of your service, then click **DNS RECORDS** to display all the DNS records:



2. Log in to your account at your domain registrar and then open the DNS configuration page.
3. Locate the host records section of your domain's configuration page and then add each of the resource records that you received when you mapped your domain to your Cloud Run service.
4. When you add each of the above DNS records to the account at the DNS provider:
 - Select the type returned in the DNS record in the previous step: A, or AAAA, or CNAME.
 - Use the name `www` to map to `www.example.com`.
 - Use the name `@` to map `example.com`.
5. Save your changes in the DNS configuration page of your domain's account. In most cases, it takes only a few minutes for these changes to take effect, but in some cases it can take up to several hours, depending on the registrar and the Time-To-Live (TTL) (<https://support.google.com/a/answer/48090?hl=en>) of any previous DNS records for your domain. You can use a dig ([https://en.wikipedia.org/wiki/Dig_\(command\)](https://en.wikipedia.org/wiki/Dig_(command))) tool, such as this online dig version (<https://toolbox.googleapps.com/apps/dig/#A/>), to confirm the DNS records have been successfully updated.
6. Test for success by browsing to your service at its new URL, for example `https://www.example.com`. Note that it can take several minutes for the automatic SSL certificate to be issued.

Adding verified domain owners to other users or service accounts

When a user verifies a domain, that domain is only verified to that user's account. This means that only that user can add more domain mappings that use that domain. So, to enable other users to add mappings that use that domain, you must add them as verified owners.

If you need to add verified owners of your domain to other users or service accounts, you can add permission through the *Webmaster Central* page:

1. Navigate to this address in your web browser:

<https://www.google.com/webmasters/verification/home>

(<https://www.google.com/webmasters/verification/home>)

2. Under **Properties**, click the domain for which you want to add a user or service account.

3. Scroll down to the **Verified owners** list, click **Add an owner**, and then enter a Google Account email address or service account ID.

To view a list of your service accounts, open the Service Accounts page in the Cloud Console:

[GO TO SERVICE ACCOUNTS PAGE \(HTTPS://CONSOLE.CLOUD.GOOGLE.COM/IAM-ADMIN/SERVICEA](https://console.cloud.google.com/iam-admin/serviceaccounts)

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