

### ### Step-by-Step Guide to Setting Up Application Default Credentials

[https://cloud.google.com/sdk/docs/install-sdk?\\_gl=1\\*14l3bp6\\*\\_up\\*MQ..&gclid=CjwKCAjwnqK1BhBvEiwAi7o0XxYcFiEivH-fl5hj6rAWjhZCNwerYta696v12gpSWPcLw3bKdBS45BoC31MQAvD\\_BwE&gclsrc=aw.ds](https://cloud.google.com/sdk/docs/install-sdk?_gl=1*14l3bp6*_up*MQ..&gclid=CjwKCAjwnqK1BhBvEiwAi7o0XxYcFiEivH-fl5hj6rAWjhZCNwerYta696v12gpSWPcLw3bKdBS45BoC31MQAvD_BwE&gclsrc=aw.ds)

#### 1. \*\*Install the Google Cloud SDK:\*\*

- If you haven't already, download and install the Google Cloud SDK from the [Google Cloud SDK download page](https://cloud.google.com/sdk/docs/install).

#### 2. \*\*Initialize the SDK:\*\*

- Open a terminal or command prompt and run:

```
``sh
gcloud init
...
```

#### 3. \*\*Authenticate with Google Cloud:\*\*

- Run the following command to authenticate:

```
``sh
gcloud auth application-default login
...
```

#### 4. \*\*Verify the Credentials:\*\*

- Ensure that the credentials are properly set up by running:

```
``sh
gcloud auth application-default print-access-token

...
```

### ### Update Your Environment

Ensure that your environment is set up correctly and the credentials are accessible by your application. The above steps should create a `credentials.json` file in the appropriate location.

### ### Updated Code with Environment Variables

You can also explicitly set the path to your service account key file in your code. Here's how:

#### 1. \*\*Download a Service Account Key File:\*\*

- Go to the [Google Cloud Console](https://console.cloud.google.com/), navigate to IAM & Admin > Service Accounts, and create a service account if you don't have one.
- Create a new key for the service account and download it as a JSON file.

#### 2. \*\*Set the `GOOGLE\_APPLICATION\_CREDENTIALS` Environment Variable:\*\*

- Set the environment variable to point to your downloaded service account key file. This can be done within your script or in the terminal before running your script.

```
```python
import os

os.environ['GOOGLE_APPLICATION_CREDENTIALS'] =
r"C:\path\to\your\service-account-file.json"
```
```

Make sure to replace `C:\path\to\your\service-account-file.json` with the actual path to your service account key file.

#### ### Summary

##### 1. **\*\*Install Google Cloud SDK and authenticate:\*\***

```
``sh

gcloud init

gcloud auth application-default login

...
```

##### 2. **\*\*Set the `GOOGLE\_APPLICATION\_CREDENTIALS` environment variable in your script:\*\***

```
``python

os.environ['GOOGLE_APPLICATION_CREDENTIALS'] =
r"C:\path\to\your\service-account-file.json"

...
```

##### 3. **\*\*Run your application.\*\***

##### **\*\*Next Steps:\*\***

**\*\*a.\*\*** Ensure your environment is properly set up with the correct credentials.

**\*\*b.\*\*** Test the integration to verify that the credentials issue is resolved.

# You are now authenticated with the gcloud CLI!

The authentication flow has completed successfully. You may close this window, or check out the resources below.

## Information about command-line tools and client libraries

To learn more about Google Cloud CLI commands, see the [gcloud CLI guide](#).

To learn more about the command-line tools for App Engine, Compute Engine, Cloud Storage, BigQuery, Cloud SQL, and Cloud DNS (which are all bundled with the gcloud CLI), see [Accessing services with the gcloud CLI](#).

If you're a client application developer and want to find out more about accessing Google Cloud services with a programming language or framework, see [Client Libraries Explained](#).

## Tutorials

Here are some links to help you get started with Google Cloud services:

- **Build and deploy a web service to Cloud Run.**  
To get started, follow the [walkthrough in Cloud Shell Editor](#).
- **Launch large compute clusters on Compute Engine.**  
To get started, follow a [Compute Engine quickstart](#).
- **Store vast amounts of data on Cloud Storage.**  
To get started, follow the [gcloud storage tool quickstart](#).
- **Analyze Big Data in the cloud with BigQuery.**  
To get started, follow the [BigQuery command-line tool quickstart](#).
- **Store and manage data using a MySQL database with Cloud SQL.**  
To get started, see [Managing instances using the gcloud CLI](#).
- **Make your applications and services available to your users with Cloud DNS.**  
To get started, see [Getting started with Cloud DNS](#).

```
C:\WINDOWS\SYSTEM32\cmd
Welcome to the Google Cloud CLI! Run "gcloud -h" to get the list of available commands.
---
Welcome! This command will take you through the configuration of gcloud.

Settings from your current configuration [default] are:
accessibility:
  screen_reader: 'False'
core:
  account: oldbright22@gmail.com
  disable_usage_reporting: 'False'
  project: speech-to-text-429823

Pick configuration to use:
[1] Re-initialize this configuration [default] with new settings
[2] Create a new configuration
Please enter your numeric choice: |
```

```
C:\WINDOWS\SYSTEM32\cmd
account: oldbright22@gmail.com
disable_usage_reporting: 'False'
project: speech-to-text-429823

Pick configuration to use:
[1] Re-initialize this configuration [default] with new settings
[2] Create a new configuration
Please enter your numeric choice: 2

Enter configuration name. Names start with a lower case letter and contain only lower case letters a-z, digits 0-9, and
hyphens '-': lessonapptutor2024
Your current configuration has been set to: [lessonapptutor2024]

You can skip diagnostics next time by using the following flag:
  gcloud init --skip-diagnostics

Network diagnostic detects and fixes local network connection issues.
Checking network connection...done.
Reachability Check passed.
Network diagnostic passed (1/1 checks passed).

Choose the account you want to use for this configuration.
To use a federated user account, exit this command and sign in to the gcloud CLI with your login configuration file,
then run this command again.

Select an account:
[1] oldbright22@gmail.com
[2] Sign in with a new Google Account
[3] Skip this step
Please enter your numeric choice:
```

```
C:\WINDOWS\SYSTEM32\cmd.exe
Network diagnostic detects and fixes local network connection issues.
Checking network connection...done.
Reachability Check passed.
Network diagnostic passed (1/1 checks passed).

Choose the account you want to use for this configuration.
To use a federated user account, exit this command and sign in to the gcloud CLI with your login configuration file,
then run this command again.

Select an account:
[1] oldbright22@gmail.com
[2] Sign in with a new Google Account
[3] Skip this step
Please enter your numeric choice: 1

You are signed in as: [oldbright22@gmail.com].

Pick cloud project to use:
[1] com-firgia-soc-dev
[2] ondemand-studycoach
[3] quizapp-ae93c
[4] speech-to-text-429823
[5] Enter a project ID
[6] Create a new project
Please enter numeric choice or text value (must exactly match list item): 6

Enter a Project ID. Note that a Project ID CANNOT be changed later.
Project IDs must be 6-30 characters (lowercase ASCII, digits, or
hyphens) in length and start with a lowercase letter. LiveRecording2024
```

```
C:\WINDOWS\SYSTEM32\cmd.exe
{
  "url": "https://cloud.google.com/resource-manager/reference/rest/v1/projects"
}
]
}
}
}
>
Please make sure to create the project [LiveRecording2024] using
$ gcloud projects create LiveRecording2024
or change to another project using
$ gcloud config set project <PROJECT ID>
The Google Cloud CLI is configured and ready to use!

* Commands that require authentication will use oldbright22@gmail.com by default
Run 'gcloud help config' to learn how to change individual settings

This gcloud configuration is called [lessonapptutor2024]. You can create additional configurations if you work with multiple accounts and/or projects.
Run 'gcloud topic configurations' to learn more.

Some things to try next:

* Run 'gcloud --help' to see the Cloud Platform services you can interact with. And run 'gcloud help COMMAND' to get help on any gcloud command.
* Run 'gcloud topic --help' to learn about advanced features of the CLI like arg files and output formatting
* Run 'gcloud cheat-sheet' to see a roster of go-to 'gcloud' commands.

C:\Program Files (x86)\Google\Cloud SDK>gcloud projects create LiveRecording2024
```

```
C:\WINDOWS\SYSTEM32\cmd.exe
This gcloud configuration is called [lessonapptutor2024]. You can create additional configurations if you work with multiple accounts and/or projects.
Run 'gcloud topic configurations' to learn more.

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* Run 'gcloud topic --help' to learn about advanced features of the CLI like arg files and output formatting
* Run 'gcloud cheat-sheet' to see a roster of go-to 'gcloud' commands.

C:\Program Files (x86)\Google\Cloud SDK>gcloud projects create LiveRecording2024
ERROR: (gcloud.projects.create) argument PROJECT_ID: Bad value [LiveRecording2024]: Project IDs are immutable and can be set only during project creation. They must start with a lowercase letter and can have lowercase ASCII letters, digits or hyphens. Project IDs must be between 6 and 30 characters.
Usage: gcloud projects create [PROJECT_ID] [optional flags]
optional flags may be --enable-cloud-apis | --folder | --help | --labels |
--name | --organization | --set-as-default | --tags

For detailed information on this command and its flags, run:
gcloud projects create --help


C:\Program Files (x86)\Google\Cloud SDK>gcloud projects create liverecording2024
Create in progress for [https://cloudresourcemanager.googleapis.com/v1/projects/liverecording2024].
Waiting for [operations/cp.6611290628661467588] to finish...done.
Enabling service [cloudapis.googleapis.com] on project [liverecording2024]...
Operation "operations/acet.p2-95369417803-9eae894e-ba30-42ea-bf81-998f6f7e5178" finished successfully.

C:\Program Files (x86)\Google\Cloud SDK>
```

 [https://accounts.google.com/signin/oauth/consent?as=S167873104:1722393464663058&authuser=0&client\\_id=764086051850-6qr4p6gpi6hn50](https://accounts.google.com/signin/oauth/consent?as=S167873104:1722393464663058&authuser=0&client_id=764086051850-6qr4p6gpi6hn50)

Sign in with Google

## Google Auth Library wants to access your Google Account

 oldbright22@gmail.com

This will allow **Google Auth Library** to:

- See, edit, configure, and delete your Google Cloud data and see the email address for your Google Account. ⓘ
- View and sign in to your Google Cloud SQL instances ⓘ

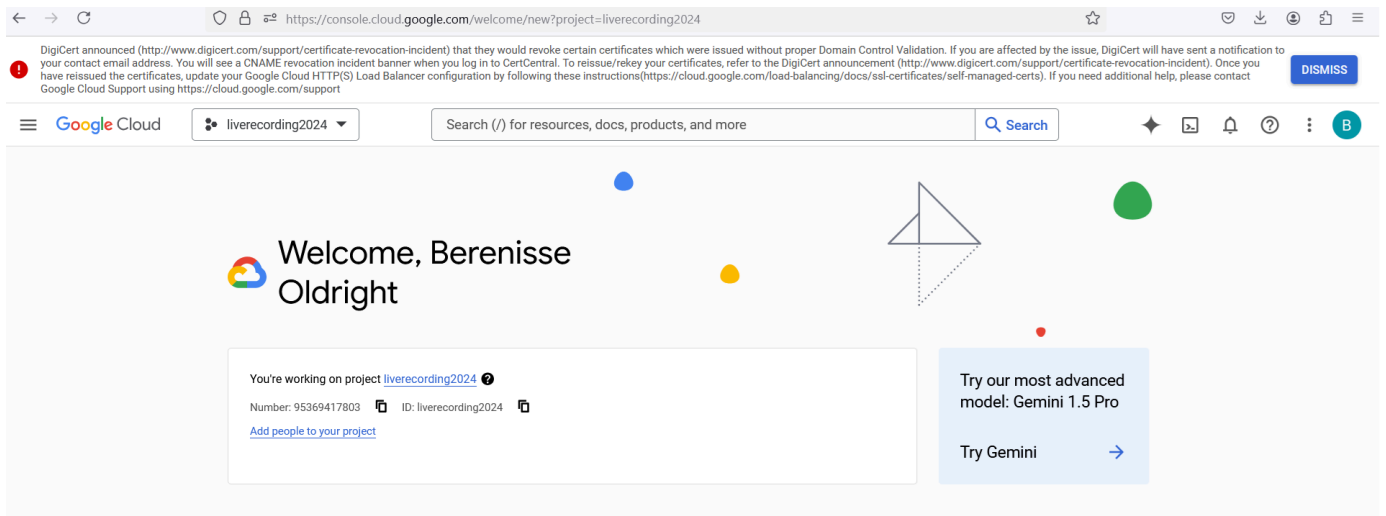
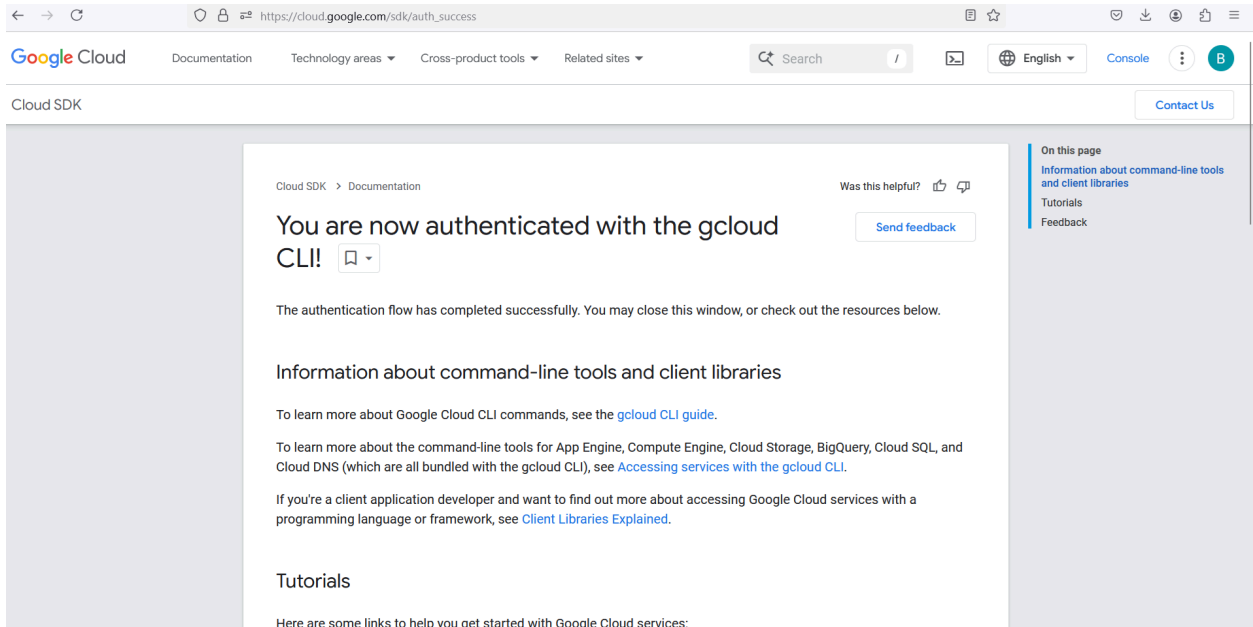
### Make sure you trust Google Auth Library

You may be sharing sensitive info with this site or app. Learn about how Google Auth Library will handle your data by reviewing its [terms of service](#) and [privacy policies](#). You can always see or remove access in your [Google Account](#).

[Learn about the risks](#)

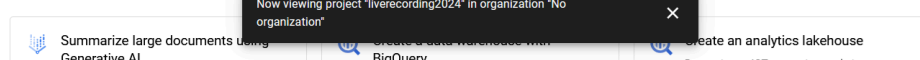
Cancel

Allow



## Recommended based on your interest in Data, AI/ML

### Pre-built solution templates







← → ↻ https://console.cloud.google.com/iam-admin/serviceaccounts/details/110108690823489591211/keys?project=liverecording2024 ☆ ⌵ ⌵ ⌵ ⌵ ⌵

DigiCert announced (<http://www.digicert.com/support/certificate-revocation-incident>) that they would revoke certain certificates which were issued without proper Domain Control Validation. If you are affected by the issue, DigiCert will have sent a notification to your contact email address. You will see a CNAME revocation incident banner when you log in to CertCentral. To reissue/rekey your certificates, refer to the DigiCert announcement (<http://www.digicert.com/support/certificate-revocation-incident>). Once you have reissued the certificates, update your Google Cloud HTTP(S) Load Balancer configuration by following these instructions(<https://cloud.google.com/load-balancing/docs/ssl-certificates/self-managed-certs>). If you need additional help, please contact Google Cloud Support using <https://cloud.google.com/support> **DISMISS**

Google Cloud liverecording2024 Search (/) for resources, docs, products, and more Search

← liverecord-serviceaccount2024

DETAILS PERMISSIONS KEYS METRICS LOGS

**Keys**

Service account keys could pose a security risk if compromised. We recommend you avoid downloading service account keys and instead use the [Workload Identity Federation](#). [Learn more about the best way to authenticate service accounts on Google Cloud](#).

Google automatically disables service account keys detected in public repositories. You can customize this behavior by using the 'iam.serviceAccountKeyExposureResponse' organization policy. [Learn more](#)

Add a new key pair or upload a public key certificate from an existing key pair.

Block service account key creation using [organization policies](#). [Learn more about setting organization policies for service accounts](#)

ADD KEY

Create new key

Upload existing key

| Creation date | Expiration date |
|---------------|-----------------|
|---------------|-----------------|

← → ↻ https://console.cloud.google.com/iam-admin/serviceaccounts/details/110108690823489591211/keys?project=liverecording2024 ☆ ⌵ ⌵ ⌵ ⌵ ⌵

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ADD KEY

Create private key for "liverecord-serviceaccount2024"

Downloads a file that contains the private key. Store the file securely because this key can't be recovered if lost.

Key type

☒ JSON  
Recommended


☐ P12  
For backward compatibility with code using the P12 format

CANCEL CREATE


| Type               | Status | Key | Creation date | Expiration date |
|--------------------|--------|-----|---------------|-----------------|
| No rows to display |        |     |               |                 |





 Free trial status: \$300.00 credit and 79 days remaining. [Activate your full account to get unlimited access to all of Google Cloud—use any remaining credits, then pay only for what you use.](#)

DISMISS [ACTIVATE](#)

 DigiCert announced (<http://www.digicert.com/support/certificate-revocation-incident>) that they would revoke certain certificates which were issued without proper Domain Control Validation. If you are affected by the issue, DigiCert will have sent a notification to your contact email address. You will see a CNAME revocation incident banner when you log in to CertCentral. To reissue/rekey your certificates, refer to the DigiCert announcement (<http://www.digicert.com/support/certificate-revocation-incident>). Once you have reissued the certificates, update your Google Cloud HTTP(S) Load Balancer configuration by following these instructions(<https://cloud.google.com/load-balancing/docs/ssl-certificates/self-managed-certs>). If you need additional help, please contact Google Cloud Support using <https://cloud.google.com/support>

DISMISS

API

OAuth consent screen

Learn [>](#)

liverecording2024app [EDIT APP](#)

Publishing status ⓘ

Testing

[PUBLISH APP](#)

User type

External ⓘ

MAKE INTERNAL

OAuth user cap ⓘ

While publishing status is set to "Testing", only test users are able to access the app. Allowed user cap prior to app verification is 100, and is counted over the entire lifetime of the app. [Learn more?](#)

Google OAuth consent screen

What is the OAuth consent screen? ▾

What are OAuth consent scopes? ▾

What are sensitive API scopes? ▾

What are restricted API scopes? ▾

The app registration process

What information do I need? ▾

Will my app need to be verified by Google? ▾

What if I don't verify my app? ▾