```
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$ echo "This is a test file for uploading to Google Cloud Storage" > test-file.txt
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$ gcloud storage cp test-file.txt gs://gaureshs-cloud-function-bucket/
Copying file://test-file.txt to gs://gaureshs-cloud-function-bucket/test-file.txt
  Completed files 1/1 | 58.0B/58.0B
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$
```

```
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$ gcloud functions logs read process_file --region=us-central1
LEVEL: WARNING
NAME: process-file
EXECUTION_ID:
TIME_UTC: 2025-03-13 06:30:28.118
LOG: The request was not authenticated. Either allow unauthenticated invocations or set the proper Authorization header. Read more at https://cloud.google.com/run/docs/securing/authenticating Addition
al troubleshooting documentation can be found at: https://cloud.google.com/run/docs/troubleshooting#unauthorized-client

LEVEL: WARNING
NAME: process-file
EXECUTION_ID:
TIME_UTC: 2025-03-13 06:30:13.391
LOG: The request was not authenticated. Either allow unauthenticated invocations or set the proper Authorization header. Read more at https://cloud.google.com/run/docs/securing/authenticating Addition
al troubleshooting documentation can be found at: https://cloud.google.com/run/docs/troubleshooting#unauthorized-client

LEVEL: WARNING
NAME: process-file
EXECUTION_ID:
TIME_UTC: 2025-03-13 06:27:30.223
LOG: The request was not authenticated. Either allow unauthenticated invocations or set the proper Authorization header. Read more at https://cloud.google.com/run/docs/securing/authenticating Addition
al troubleshooting documentation can be found at: https://cloud.google.com/run/docs/troubleshooting#unauthorized-client

LEVEL: WARNING
NAME: process-file
EXECUTION_ID:
TIME_UTC: 2025-03-13 06:27:30.004
LOG: The request was not authenticated. Either allow unauthenticated invocations or set the proper Authorization header. Read more at https://cloud.google.com/run/docs/securing/authenticating Addition
al troubleshooting documentation can be found at: https://cloud.google.com/run/docs/troubleshooting#unauthorized-client

LEVEL: I
NAME: process-file
EXECUTION_ID:
TIME_UTC: 2025-03-13 06:27:28.553
LOG: Default STARTUP TCP probe succeeded after 1 attempt for container "worker" on port 8080.

LEVEL: I
NAME: process-file
EXECUTION_ID:
TIME_UTC: 2025-03-13 06:24:15.669
LOG: Default STARTUP TCP probe succeeded after 1 attempt for container "worker" on port 8080.
```

```
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$ gcloud functions deploy process_file --region=us-central1
Preparing function...done.
X  Updating function (may take a while)...
  OK [Build] Logs are available at [https://console.cloud.google.com/cloud-build/builds;region=us-central1/2e9e4883-afe4-43df-9973-aa73394d0dc2?project=195837401262]
     [Service]
  .  [Trigger]
  .  [ArtifactRegistry]
  .  [Healthcheck]
  .  [Triggercheck]
Completed with warnings:
  [INFO] A new revision will be deployed serving with 100% traffic.
You can view your function in the Cloud Console here: https://console.cloud.google.com/functions/details/us-central1/process_file?project=exp1-452205

buildConfig:
  automaticUpdatePolicy: {}
  build: projects/195837401262/locations/us-central1/builds/2e9e4883-afe4-43df-9973-aa73394d0dc2
  dockerRegistry: ARTIFACT_REGISTRY
  dockerRepository: projects/exp1-452205/locations/us-central1/repositories/gcf-artifacts
  entryPoint: process_file
  runtime: python310
  serviceAccount: projects/exp1-452205/serviceAccounts/195837401262-compute@developer.gserviceaccount.com
  source:
    storageSource:
      bucket: gcf-v2-sources-195837401262-us-central1
      generation: '1741847488857327'
      object: process_file/function-source.zip
  sourceProvenance:
    resolvedStorageSource:
      bucket: gcf-v2-sources-195837401262-us-central1
      generation: '1741847488857327'
      object: process_file/function-source.zip
createTime: '2025-03-13T06:15:23.8272187772Z'
environment: GEN_2
eventTrigger:
  eventFilters:
  - attribute: bucket
    value: gaureshs-cloud-function-bucket
  eventType: google.cloud.storage.object.v1.finalized
```

4

```
      object: process_file/function-source.zip
  sourceProvenance:
    resolvedStorageSource:
      bucket: gcf-v2-sources-195837401262-us-central1
      generation: '1741847488857327'
      object: process_file/function-source.zip
createTime: '2025-03-13T06:15:23.827218772Z'
environment: GEN_2
eventTrigger:
  eventFilters:
  - attribute: bucket
    value: gaureshs-cloud-function-bucket
  eventType: google.cloud.storage.object.v1.finalized
  pubsubTopic: projects/exp1-452205/topics/eventarc-us-central1-process-file-087636-271
  retryPolicy: RETRY_POLICY_DO_NOT_RETRY
  serviceAccountEmail: 195837401262-compute@developer.gserviceaccount.com
  trigger: projects/exp1-452205/locations/us-central1/triggers/process-file-087636
  triggerRegion: us-central1
labels:
  deployment-tool: cli-gcloud
name: projects/exp1-452205/locations/us-central1/functions/process_file
satisfiesPzi: true
serviceConfig:
  allTrafficOnLatestRevision: true
  availableCpu: '0.1666'
  availableMemory: 256M
  environmentVariables:
    LOG_EXECUTION_ID: 'true'
  ingressSettings: ALLOW_ALL
  maxInstanceCount: 100
  maxInstanceRequestConcurrency: 1
  revision: process-file-00003-rox
  service: projects/exp1-452205/locations/us-central1/services/process-file
  serviceAccountEmail: 195837401262-compute@developer.gserviceaccount.com
  timeoutSeconds: 60
  uri: https://process-file-d2vey3nbga-uc.a.run.app
state: ACTIVE
updateTime: '2025-03-13T06:32:04.330416122Z'
url: https://us-central1-exp1-452205.cloudfunctions.net/process_file
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$
```

```
gaureshgpai@cloudshell:~ (exp1-452205)$ gcloud services enable cloudfunctions.googleapis.com storage.googleapis.com
sh
CopyEdit
gcloud services enable cloudfunctions.googleapis.com storage.googleapis.com


Operation "operations/acf.p2-195837401262-ed831d63-e142-4b6e-b40c-4d9cf149f665" finished successfully.
```

```
gaureshgpai@cloudshell:~ (exp1-452205)$ gcloud storage buckets create gs://gaureshs-cloud-function-bucket --location=us-central1
Creating gs://gaureshs-cloud-function-bucket/...
gaureshgpai@cloudshell:~ (exp1-452205)$
```

```
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$ cat > main.py <<EOF
import functions_framework

@functions_framework.cloud_event
def process_file(event):
    """Triggered by a file upload to a Cloud Storage bucket."""

    # Extract bucket name and file name from the Cloud Event data
    bucket = event.data.get("bucket")
    file_name = event.data.get("name")

    # Print information about the uploaded file
    print(f"File {file_name} uploaded to bucket {bucket}")
EOF
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$
```

```
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$ gcloud functions deploy process_file \
  --runtime python310 \
  --trigger-event google.storage.object.finalize \
  --trigger-resource gaureshs-cloud-function-bucket \
  --entry-point process_file \
  --region us-central1 \
  --gen2
Preparing function...done.
X  Updating function (may take a while)...
  OK [Build] Logs are available at [https://console.cloud.google.com/cloud-build/builds;region=us-central1/950dbd2f-07dd-4bba-9c2c-4061b8e31c22?project=195837401262]
    [Service]
  OK [Trigger]
  .  [ArtifactRegistry]
  .  [Healthcheck]
  .  [Triggercheck]
Completed with warnings:
  [INFO] A new revision will be deployed serving with 100% traffic.
You can view your function in the Cloud Console here: https://console.cloud.google.com/functions/details/us-central1/process_file?project=exp1-452205

buildConfig:
  automaticUpdatePolicy: {}
  build: projects/195837401262/locations/us-central1/builds/950dbd2f-07dd-4bba-9c2c-4061b8e31c22
  dockerRegistry: ARTIFACT_REGISTRY
  dockerRepository: projects/exp1-452205/locations/us-central1/repositories/gcf-artifacts
  entryPoint: process_file
  runtime: python310
  serviceAccount: projects/exp1-452205/serviceAccounts/195837401262-compute@developer.gserviceaccount.com
  source:
    storageSource:
      bucket: gcf-v2-sources-195837401262-us-central1
      generation: '1741847189382628'
      object: process_file/function-source.zip
  sourceProvenance:
    resolvedStorageSource:
      bucket: gcf-v2-sources-195837401262-us-central1
      generation: '1741847189382628'
      object: process_file/function-source.zip
createTime: '2025-03-13T06:15:23.827218772Z'
```

```
      object: process_file/function-source.zip
  sourceProvenance:
    resolvedStorageSource:
      bucket: gcf-v2-sources-195837401262-us-central1
      generation: '1741847189382628'
      object: process_file/function-source.zip
createTime: '2025-03-13T06:15:23.827218772Z'
environment: GEN_2
eventTrigger:
  eventFilters:
  - attribute: bucket
    value: gaureshs-cloud-function-bucket
  eventType: google.cloud.storage.object.v1.finalized
  pubsubTopic: projects/exp1-452205/topics/eventarc-us-central1-process-file-087636-271
  retryPolicy: RETRY_POLICY_DO_NOT_RETRY
  serviceAccountEmail: 195837401262-compute@developer.gserviceaccount.com
  trigger: projects/exp1-452205/locations/us-central1/triggers/process-file-087636
  triggerRegion: us-central1
labels:
  deployment-tool: cli-gcloud
name: projects/exp1-452205/locations/us-central1/functions/process_file
satisfiesPzi: true
serviceConfig:
  allTrafficOnLatestRevision: true
  availableCpu: '0.1666'
  availableMemory: 256M
  environmentVariables:
    LOG_EXECUTION_ID: 'true'
  ingressSettings: ALLOW_ALL
  maxInstanceCount: 100
  maxInstanceRequestConcurrency: 1
  revision: process-file-00002-sox
  service: projects/exp1-452205/locations/us-central1/services/process-file
  serviceAccountEmail: 195837401262-compute@developer.gserviceaccount.com
  timeoutSeconds: 60
  uri: https://process-file-d2vey3nbga-uc.a.run.app
state: ACTIVE
updateTime: '2025-03-13T06:27:41.829871034Z'
url: https://us-central1-exp1-452205.cloudfunctions.net/process_file
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$
```

```
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$ gcloud functions delete process_file --region=us-central1
2nd gen function [projects/exp1-452205/locations/us-central1/functions/process_file] will be deleted.

Do you want to continue (Y/n)?  Y

Preparing function...done.
OK Deleting function...
  OK [Artifact Registry]
  OK [Service]
  OK [Trigger]
Done.
Deleted [projects/exp1-452205/locations/us-central1/functions/process_file].
gaureshgpai@cloudshell:~/cloud-function-storage (exp1-452205)$
```