**Improv Deployments**

# Improv-Control deployment

## Improv-Control Brightspeed GCP(Dev environment):

Project name: qf-project

[Kubernetes clusters – Kubernetes Engine – qf-project – Google Cloud console](https://console.cloud.google.com/kubernetes/list/overview?project=qf-project)

### **Improv-Control**:

Cluster: improv-control-dev-pvt-cluster-1

Repository: [Brightspeed-TechM/brspd-improv-control: IMPROV Repo (github.com)](https://github.com/Brightspeed-TechM/brspd-improv-control)

improv-control-dev-branch

Cloudbuild.yaml:

[Modify CloudBuild Configurations -](https://ctl.atlassian.net/wiki/spaces/PBQ/pages/672755712676/Modify+CloudBuild+Configurations) PCAVS - BrightSpeed QF - Confluence (atlassian.net)

## Improv-Control Brightspeed GCP (Test environment):

### Improv-Control:

#### Test Environment Preparation/Pre-requisites:

1. Enable GCP APIs and Services – You may review the existing APIs on the qf-project  
   <https://console.cloud.google.com/apis/dashboard?referrer=search&project=qf-project>
2. Update the Service Account Roles  
   [PROJECT-ID]@cloudbuild.gserviceaccount.com  
   Refer to the permissions - [IAM – IAM & Admin – qf-project – Google Cloud console](https://console.cloud.google.com/iam-admin/iam?project=qf-project)
3. Setup SECRET - brspd-improv-ctrl-test.endpoints.[project-id].cloud.goog
4. Setup Cloud Build Trigger | Repository

Take note of ZONE vs. REGION

1. Trigger Build
2. Create API Key
3. Test API

#### Details:

##### Private Cluster

* + cluster name: bs-prj-improv-uat-01-improv-gke-pvt-01
  + Project name: bs-prj-improv-uat-01

##### Github Repo

* + Repo name: <https://github.com/Brightspeed-TechM/brspd-improv-control>
  + branch name: master
  + Access to repo should be with **admin role**

##### Cloud Build Trigger

* + trigger name: improv-control-trigger-test
  + Cloud build file: cloudbuild.yaml
  + Environment Variables:
    - \_TARGET\_PROJECT : bs-prj-improv-uat-01
    - \_ENV : TEST
    - \_VERSION : 1.0.0
    - \_CLUSTER\_NAME : bs-prj-improv-uat-01-improv-gke-pvt-01
    - \_REGION : us-east4

##### IAM

* + Owner role to GCP project
  + Cloudbuild service account with these GCP Services enabled
    - Cloud Functions, Cloud Run, App Engine, Kubernetes Engine, Secret Manager, Service Accounts, Cloud Build

##### API-key

* + name: brspd-Improv-Control-test-API-key

##### Secrets

* + run in cloud shell

openssl req -x509 -nodes -days 365 -newkey rsa:2048

-keyout ./nginx.key -out ./nginx.crt

On COMMON - NAME = brspd-improv-ctrl-test.endpoints.qf-project.cloud.goog

gcloud secrets create CRT-nginx-crt-improv-control-test --data-file=nginx.crt --labels=service=improv-test

gcloud secrets create KEY-nginx-key-improv-control-test --data-file=nginx.key --labels=service=improv-test

#### Deployment Actions:

##### Run Cloudbuild trigger

##### Automated creation of GCP components through cloud build

* + (Docker image, workloads, services(internal load balancer)

## TBD Improv-Control Brightspeed GCP (Prod environment):

### Improv-Control:

#### Prod Environment Preparation/Pre-requisites:

1. Enable GCP APIs and Services – You may review the existing APIs on the qf-project  
   <https://console.cloud.google.com/apis/dashboard?referrer=search&project=qf-project>
2. Update the Service Account Roles  
   [PROJECT-ID]@cloudbuild.gserviceaccount.com  
   Refer to the permissions - [IAM – IAM & Admin – qf-project – Google Cloud console](https://console.cloud.google.com/iam-admin/iam?project=qf-project)
3. Setup SECRET - brspd-improv-control-test.endpoints.[project-id].cloud.goog
4. Setup Cloud Build Trigger | Repository

Take note of ZONE vs. REGION

1. Trigger Build
2. Create API Key
3. Test API

#### Details:

##### Private Cluster

* + cluster name: bs-prj-improv-uat-01-improv-gke-pvt-01
  + Project name: bs-prj-improv-uat-01

##### Github Repo

* + Repo name: <https://github.com/Brightspeed-TechM/brspd-improv-control>
  + branch name: master
  + Access to repo should be with **admin role**

##### Cloud Build Trigger

* + trigger name: improv-control-trigger-test
  + Cloud build file: cloudbuild.yaml
  + Environment Variables:
    - \_TARGET\_PROJECT : bs-prj-improv-uat-01
    - \_ENV : TEST
    - \_VERSION : 1.0.0
    - \_CLUSTER\_NAME : bs-prj-improv-uat-01-improv-gke-pvt-01
    - \_REGION : us-east4

##### IAM

* + Owner role to GCP project
  + Cloudbuild service account with these GCP Services enabled
    - Cloud Functions, Cloud Run, App Engine, Kubernetes Engine, Secret Manager, Service Accounts, Cloud Build

##### API-key

* + name: brspd-Improv-Control-test-API-key

##### Secrets

* + run in cloud shell

openssl req -x509 -nodes -days 365 -newkey rsa:2048

-keyout ./nginx.key -out ./nginx.crt

On COMMON - NAME = brspd-improv-control-test.endpoints.qf-project.cloud.goog

gcloud secrets create CRT-nginx-crt-improv-control-test --data-file=nginx.crt --labels=service=improv-test

gcloud secrets create KEY-nginx-key-improv-control-test --data-file=nginx.key --labels=service=improv-test

#### Deployment Actions:

##### Run Cloudbuild trigger

##### Automated creation of GCP components through cloud build

* + (Docker image, workloads, services(internal load balancer)