

DESENVOLVIMENTO WEB

**Implantação de Aplicação Web
na Google Cloud**

ROTEIRO

- Overview da Google Cloud
- Requisitos necessários
- Recursos importantes utilizados
- Implantação da aplicação Web

OVERVIEW DA GOOGLE CLOUD

- **Características**

- Uma infraestrutura gigantesca que permite implantar e escalar aplicações
- Requisitos que ela garante: velocidade, localização, muitos dados
- Rede de data center que engloba o mundo inteiro

OVERVIEW DA GOOGLE CLOUD

- **Características**

- O GCP é construído na mesma infraestrutura dos serviços e produtos do Google
- O serviços da GCP envolvem:
 - IaaS (Infrastructure as a Service)
 - PaaS (Platform as a Service)

OVERVIEW DA GOOGLE CLOUD

- **Características**
 - **Computação:** App Engine, Compute Engine
 - **Storage:** Cloud Storage, Cloud SQL, Cloud Data Store
 - **Serviços:** Bigquery, Cloud Endpoints

REQUISITOS NECESSÁRIOS

- **Aplicação Web da Atividade Prática**
 - Ter uma conta de e-mail cadastrada na GCP
 - Habilitar os créditos de \$300 dólares que podem ser usados em até 90 dias
 - Após este período, ocorrerá cobrança no cartão de crédito que foi associado no momento da criação da conta na GCP

REQUISITOS NECESSÁRIOS

Aplicação Web da Atividade Prática

- Ter o Cloud SDK instalado
- Recomendo rever os materiais utilizados na COM310 em que são discutidos o processo de instalação e configuração do Cloud SDK

REQUISITOS NECESSÁRIOS

Aplicação Web da Atividade Prática

- Ter um ambiente docker previamente instalado e configurado no ambiente local (pode ser em Windows ou no Linux)
- Caso optar por utilizar o Linux, reveja o material prático abordado na COM310 sobre Dockers, Containers, Docker Hub, etc.

RECURSOS IMPORTANTES UTILIZADOS

- **O que é importante?**
 - Quando logamos no site da GCP temos diversas opções disponíveis para uso. Alguns exemplos envolvem:
 - App Engine, Trace, Monitoring, BigQuery, SQL, Cloud Storage, etc.

RECURSOS IMPORTANTES UTILIZADOS

- **O que é importante?**
 - No nosso escopo vamos utilizar apenas:
 - *Kubernetes Engine*
 - *Load Balancers*
 - *Vms simples com poucos recursos de memória e processamento (custo mais baixo)*
 - *Google shell para habilitar arquivos de configuração dentro da GCP (isso é feito diretamente no browser)*

IMPLANTAÇÃO DA APLICAÇÃO WEB

The screenshot displays the Google Cloud Platform (GCP) console dashboard. The browser address bar shows the URL: `console.cloud.google.com/home/dashboard?project=bold-bastion-323318&authuser=1`. The top navigation bar includes the Google Cloud Platform logo, the project name 'My First Project', a search bar, and a 'CUSTOMIZE' link. The left sidebar lists various services: Home, Recent, and a 'PINNED' section containing Billing, APIs & Services, IAM & Admin, Marketplace, Compute Engine, Cloud Storage, VPC network, App Engine, SQL, Kubernetes Engine, and BigQuery. The main content area is divided into three columns. The left column contains 'Project info' (Project name: My First Project, Project ID: bold-bastion-323318, Project number: 784184025657), 'Resources' (This project has no resources), 'Trace' (No trace data from the past 7 days), and 'Getting Started' (Explore and enable APIs, Deploy a prebuilt solution, Add dynamic logging to a running application, Monitor errors with Error Reporting). The middle column shows 'API APIs' with a line chart for 'Requests (requests/sec)' and a message 'No data is available for the selected time frame.' The right column includes 'Google Cloud Platform status' (All services normal), 'Monitoring' (Create my dashboard, Set up alerting policies, Create uptime checks), 'API Error Reporting' (No sign of any errors. Have you set up Error Reporting?), and 'News' (Build and run a Discord bot on top of Google Cloud, Migrating table schemas from Apache HBase to Cloud Bigtable).

Join us October 12-14 for Google Cloud Next. Register [here](#). DISMISS

Project info

Project name
My First Project

Project ID
bold-bastion-323318

Project number
784184025657

[ADD PEOPLE TO THIS PROJECT](#)

[Go to project settings](#)

Resources

This project has no resources

Trace

No trace data from the past 7 days

[Get started with Trace](#)

Getting Started

- Explore and enable APIs
- Deploy a prebuilt solution
- Add dynamic logging to a running application
- Monitor errors with Error Reporting

API APIs

Requests (requests/sec)

No data is available for the selected time frame.

[Go to APIs overview](#)

Google Cloud Platform status

All services normal

[Go to Cloud status dashboard](#)

Monitoring

- Create my dashboard
- Set up alerting policies
- Create uptime checks
- View all dashboards

[Go to Monitoring](#)

API Error Reporting

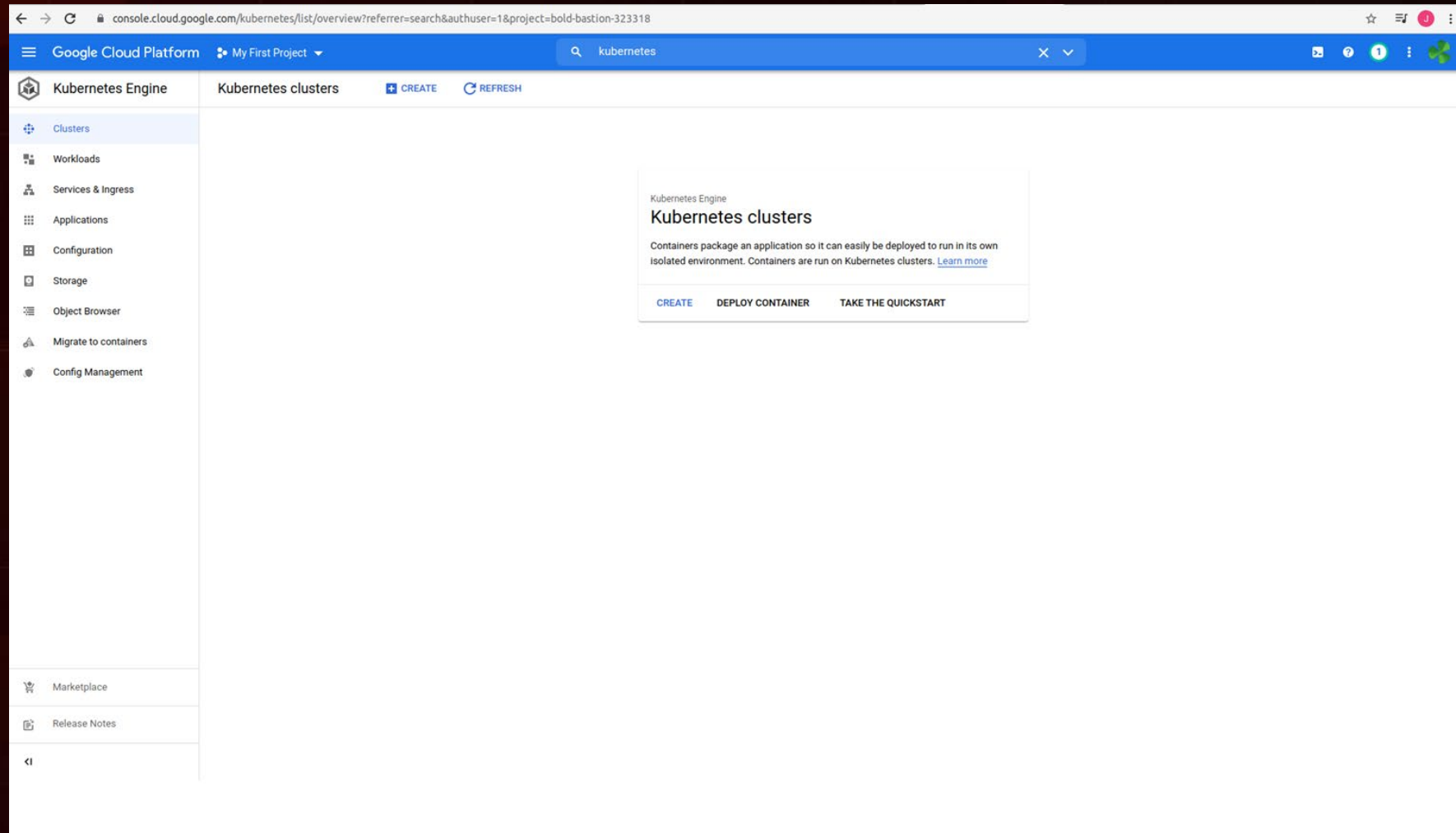
No sign of any errors. Have you set up Error Reporting?

[Learn how to set up Error Reporting](#)

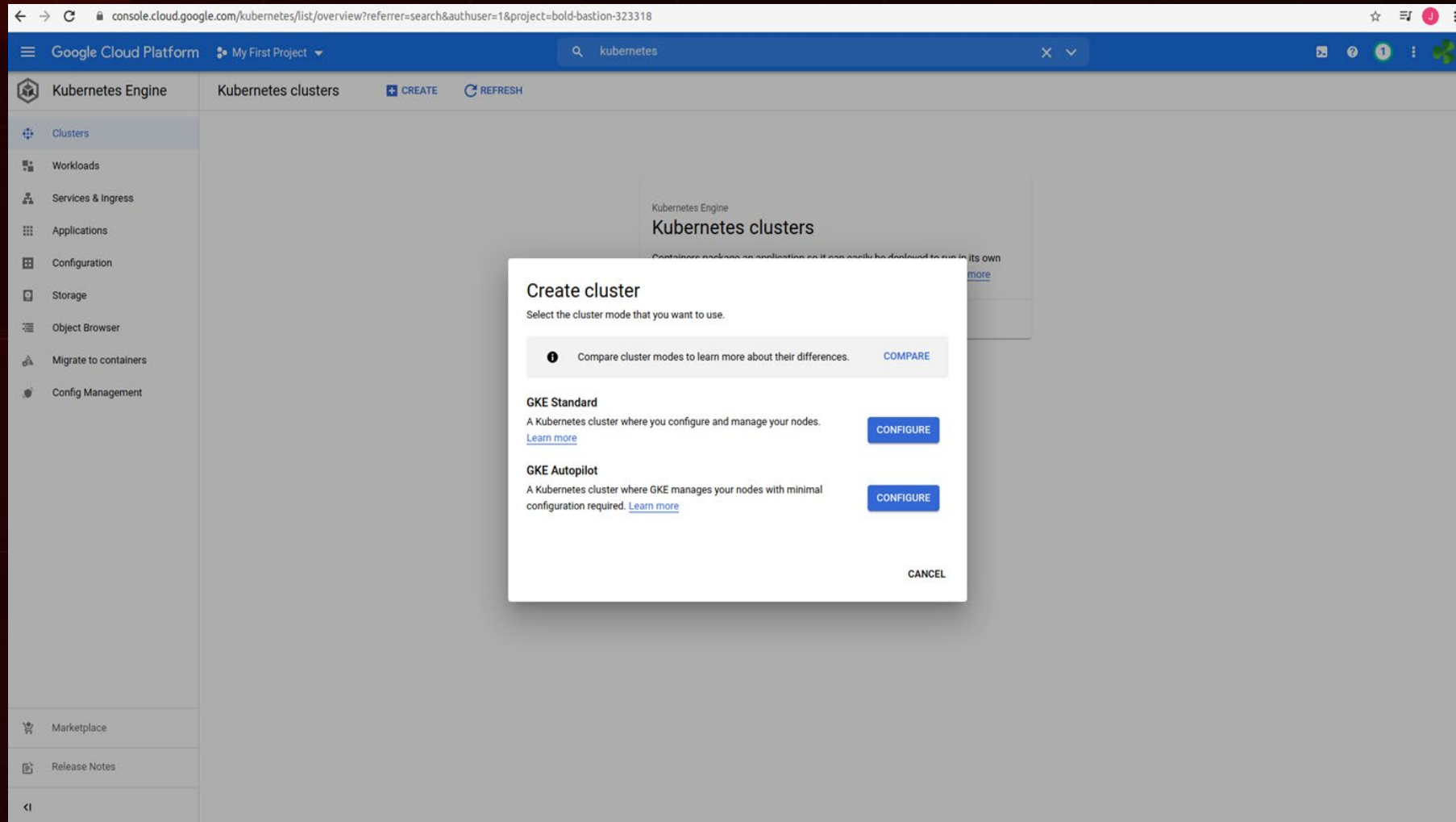
News

- Build and run a Discord bot on top of Google Cloud
2 hours ago
- Migrating table schemas from Apache HBase to Cloud Bigtable
3 hours ago

IMPLANTAÇÃO DA APLICAÇÃO WEB



IMPLANTAÇÃO DA APLICAÇÃO WEB



IMPLANTAÇÃO DA APLICAÇÃO WEB

console.cloud.google.com/kubernetes/add?project=bold-bastion-323318&isCreateAndRegister=false&authuser=1

Google Cloud Platform My First Project kubernetes

Create a Kubernetes cluster

ADD NODE POOL REMOVE NODE POOL

- Cluster basics

NODE POOLS

- default-pool

CLUSTER

- Automation
- Networking
- Security
- Metadata
- Features

Cluster basics

The new cluster will be created with the name, version, and in the location you specify here. After the cluster is created, name and location can't be changed.

To experiment with an affordable cluster, try **My first cluster** in the **Cluster set-up guides**

Name
cluster-1

Location type
☒ Zonal
☐ Regional

Zone
us-central1-c

☐ Specify default node locations
Current default: us-central1-c

Control plane version
Choose a release channel for automatic management of your cluster's version and upgrade cadence. Choose a static version for more direct management of your cluster's version. [Learn more](#).

☐ Static version
☒ Release channel

Release channel
Regular channel (default)

Version
1.20.9-gke.1001 (default)

These versions have passed internal validation and are considered production-quality, but don't have enough historical data to guarantee their stability. Known issues generally have known workarounds. [Release notes](#)

Cluster set-up guides

- My first cluster**
An affordable cluster to experiment with
- Cost-optimized cluster**
A cluster designed for maximum cost efficiency

CREATE


CANCEL Equivalent REST or COMMAND LINE

IMPLANTAÇÃO DA APLICAÇÃO WEB

← → ↻ 🔒 console.cloud.google.com/marketplace/product/google/artifactregistry.googleapis.com?returnUrl=%2Fartifacts%3Fauthuser%3D1%26project%3Dbold-bastion-323318&authuser=1&project=bold-bastion-323318 ☆ 📄 🔍 1 🌐

☰ Google Cloud Platform 🌐 My First Project 🔍 📄 ? 1 🌐

←



Artifact Registry API
Google Enterprise API

ENABLE

TRY THIS API 🔗

OVERVIEW

PRICING

DOCUMENTATION

Overview

With Artifact Registry you can store and manage your build artifacts (e.g. Docker images, Maven packages, npm packages), in a scalable and integrated repository service built on Google infrastructure. You can manage repository access with IAM and interact with repositories via gcloud, Cloud Console, and native package format tools. The service can also be integrated with Cloud Build and other CI/CD systems. Artifact Registry abstracts away infrastructure management, so you can focus on what matters most – delivering value to the users of your services and applications. Note: Enabling the Artifact Registry API will not affect your use of Container Registry in the same project.

[Learn more](#) 🔗

Additional details

Type: [SaaS & APIs](#)

Last updated: 7/22/21

Category: [Developer tools](#), [Google Enterprise APIs](#)

Service name: artifactregistry.googleapis.com

Pricing

	FREE	TIER 1
Artifact Registry Storage	BRL 0.00 /gibibyte month	BRL 0.552877787 /gibibyte month
Artifact Registry GOOGLE-API Egress		
Artifact Registry Network HTTP Load Balancing Egress to Load Balancer	Starting from: 0 gibibyte month/month	Starting from: 0.5 gibibyte month/month
Artifact Registry Network Egress via Carrier Gateway Network API Prefix		

IMPLANTAÇÃO DA APLICAÇÃO WEB

← → ↺

console.cloud.google.com/gcr/images/univesp-gcloud?project=univesp-gcloud

🔍 Pesquisar produtos e recursos

📧 ⓘ 🔔 👤

☰ Google Cloud Platform


🔗 ubuntu-infra-gcp

📦 Container Registry

📁 Imagens

⚙️ Configurações

Repositórios



Transition to Artifact Registry

Artifact Registry is the recommended service for managing container images. Container Registry is still supported but will only receive critical security fixes. Learn more about options to transition to Artifact Registry.

[TRY ARTIFACT REGISTRY](#) [SAIBA MAIS](#)

ubuntu-infra-gcp

🔍 Filtro

Insira o nome ou o valor da propriedade

Nome ↑	Nome do host ⓘ	Visibilidade ⓘ
■ ubuntu-infra-gcp	gcr.io	Particular

🛒 Marketplace

📄 Notas de lançamento

⏪

REFERÊNCIAS

1. <https://www.qlik.com/us/-/media/files/resource-library/global-us/direct/datasheets/ds-qlik-solutions-for-google-cloud-platform-en.pdf>
2. <https://cloud.google.com/docs/overview/?hl=pt-br>

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