2° Encontro GoInfra - Google Cloud e API Zabbix

15% desconto e-book Casa do codigo:
GoInfra

Patrocinadores:

Casa do Código

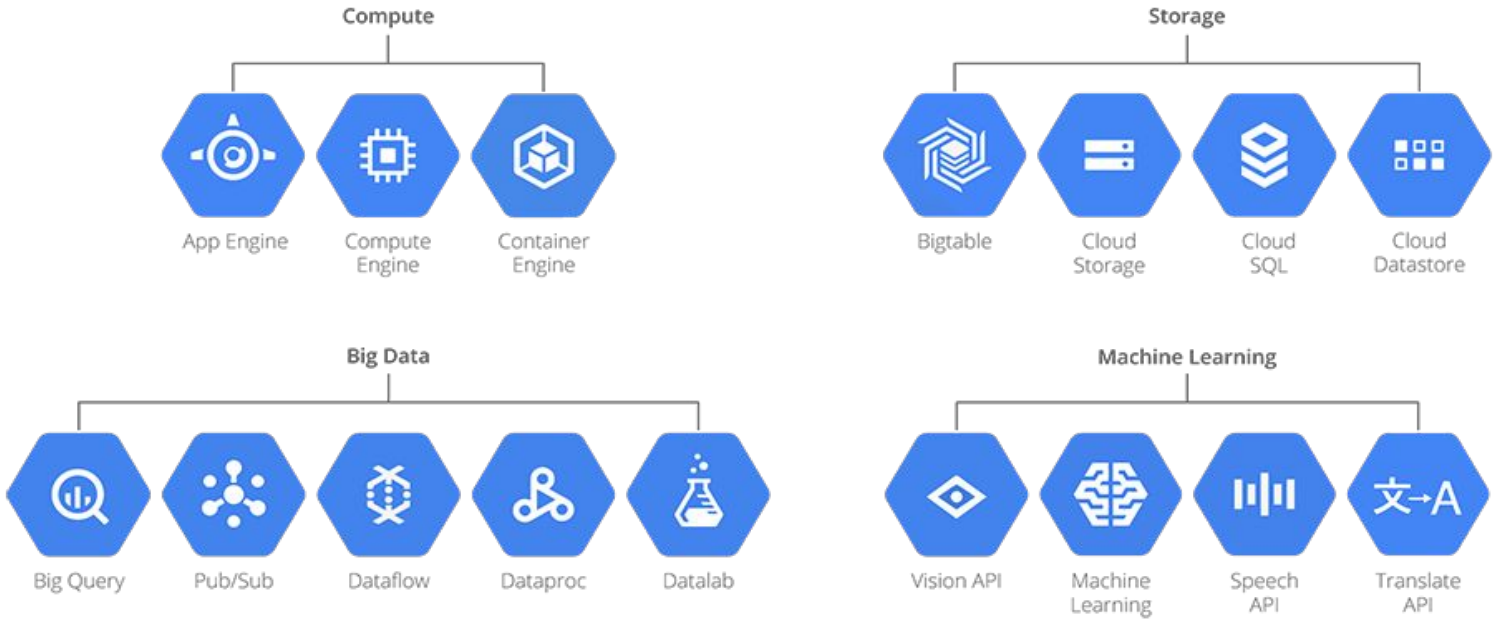
alura

Google Cloud Plataform: Computer Engine what is?

Google Cloud Platform

Bezaleel Ramos da Silva
Onx Solutions

Google Cloud Plataform



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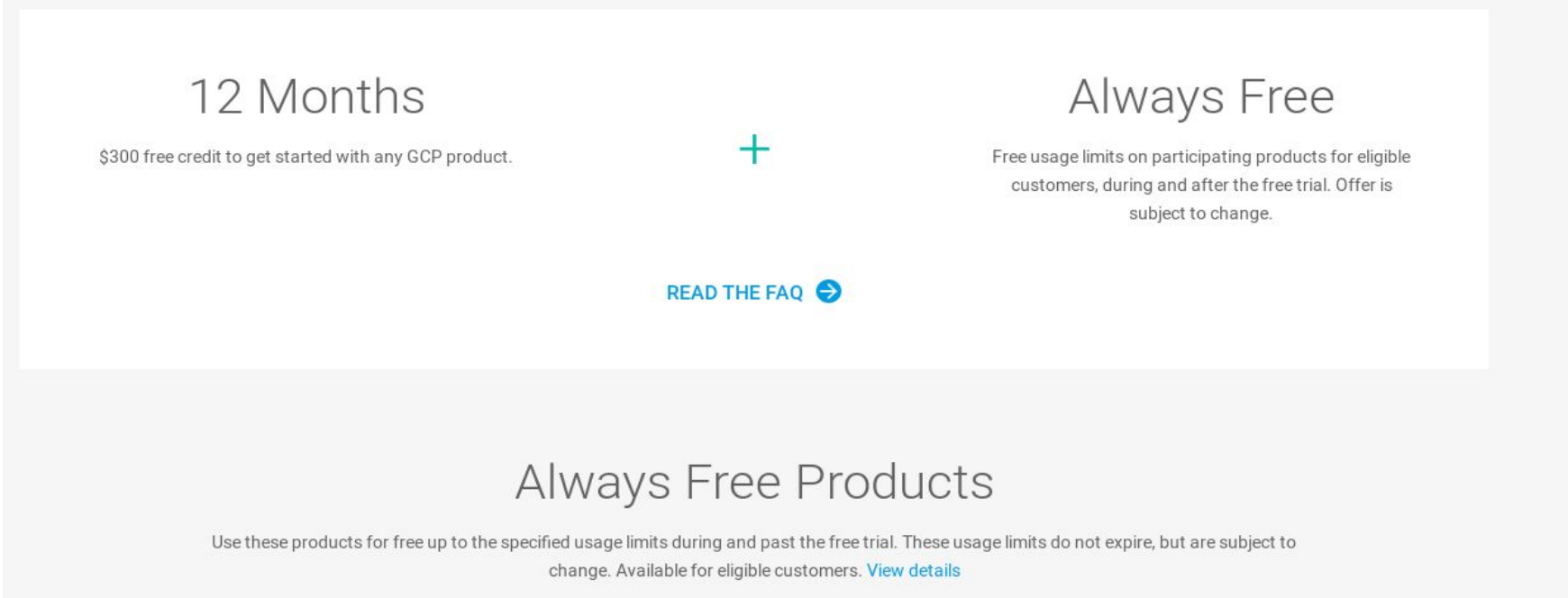
$ 300,00 free credit + Always Free



https://cloud.google.com/free/

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Pricing

- Per - minute billing
- Sustained-use discounts
- Automatically reward users who run virtual machine for over 25% of any calendar month
- Compute Engine custom machine type
- High throughput to storage at no extra cost

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Region and Zone

** While some regions may launch with 2 zones, all regions are planned for a minimum of 3 zones.*

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Project

- All Google cloud plataform service are associated with a project:
  - Track resource and quota usage
  - Enable billing
  - Manage permissions and credentials
  - Enable Services and API’s.
- Project use three identifying attributes:
  - Project Name
  - Project Number
  - Project ID

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Interacting with Google Cloud

- Cloud Console - Web user Interface
  - Centralized console for all project data;
  - Developer tools
    - Cloud Source repository
    - Cloud Shell.
  - Managar, create Project
- Cloud SDK/Cloud Shell (command-line interfaces)
  - Include CLI tools
  - gcloud,gsutil(Cloud storage),bq
  - Available as docker image
  - Available cloud shell
- REST-based API
  - Programmatic access to products and service
    - Typically use JSON as an interchange format
    - Use OAuth 2.0 for authentication and authorization

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Client libraries

- Google Cloud client libraries
  - Open Source,generated
  - Support varius languages
    - Java,python, javascript, php, .net, go , noje.js, ruby, objective-c, dart

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Demo- Cloud Shell

IAM

Identity and Access Management

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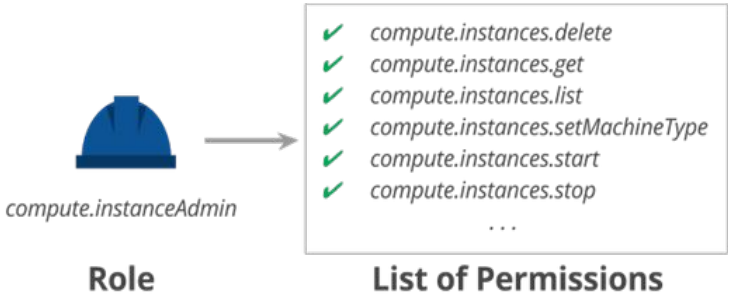
IAM Roles: Concepts related to identity

Members can be of following types:

- Google account - (developer, administrator)
  - ex: teste@gmail.com
- Service account(Application, calls APIs)
  - ex: teste@project_id.iam.gserviceaccout.com
- Google group(associated with the group.)
  - ex:teste@googlegroup.com
- G Suite domain(virtual group)
  - ex:username@yourdomain.com
- Cloud Identity domain(IDaaS,don't need G Suite Services)
  - ex: bramos@onxsolutions.net



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Permission

- **Viewer**
  - Permissions for read-only actions that preserve state.
- **Editor**
  - All viewer permissions and permissions for actions that modify state.
  - Deploy
  - Modify code
  - Configure service
- **Owner:**
  - All editor permissions and permissions for the following actions:
  - Manage access control for a project and all resources within the project.
  - Set up billing (for a project).

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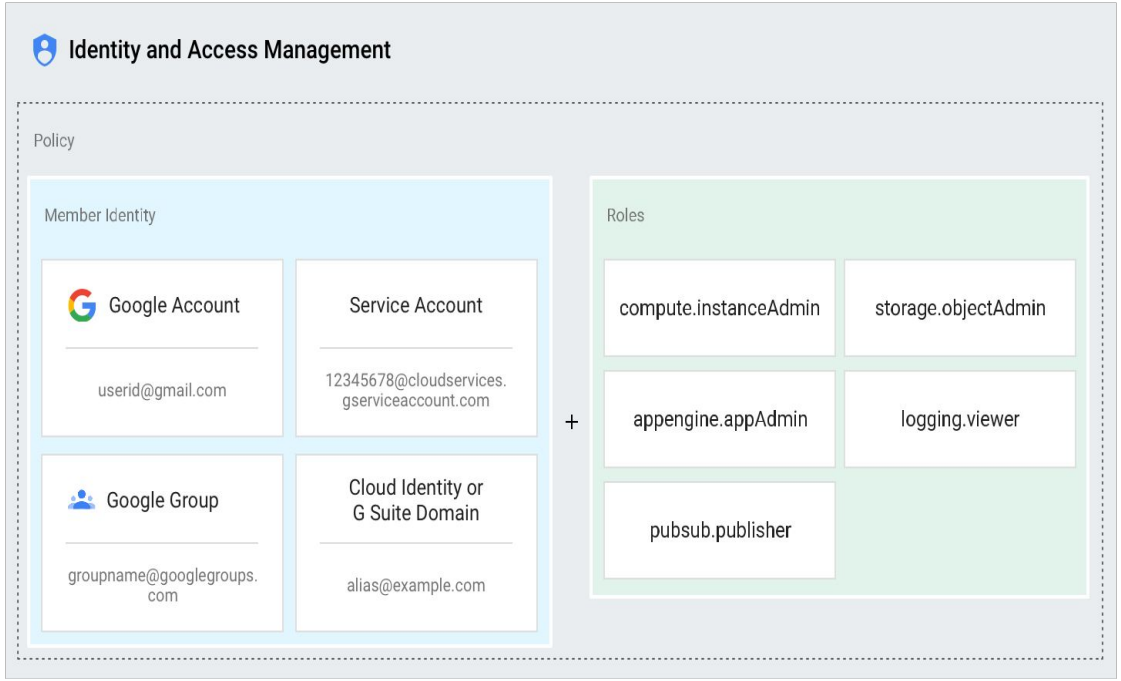
Permission



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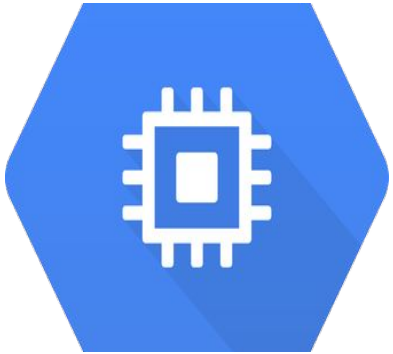

Computer Engine

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Compute Engine

- Scalable, High-Performance Virtual machine.
- Linux & Windows Support.
- Predefined and custom machine Types.
  - Persistent disk.
  - Standard, SSD, local SSD
  - Resize disks, migrate instances with no downtime.
  - Startup scripts.

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Instance lifecycle

- **Provisioning:** Resources are being reserved;
- **Staging:** Resources have been acquired;
- **Running:** The instance is booting up or running;
- **Stopping:** The instance is being stopped;
- **Terminated:** The instance was shutdown or encountered a failure.

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Type of machine

- **Standard**
  - Standard machine types are suitable for tasks that have a balance of CPU and memory needs. Ex(n1-standard)
- **High-memory**
  - High-memory machine types are ideal for tasks that require more memory relative to virtual CPUs.Ex(n1-highmem)
- **High-CPU machine types**
  - High-CPU machine types are ideal for tasks that require more virtual CPUs relative to memory Ex:(n1-highcpu)
- **Shared-core**
  - Shared-core instances can be more cost-effective for running small. Ex(f1-micro)

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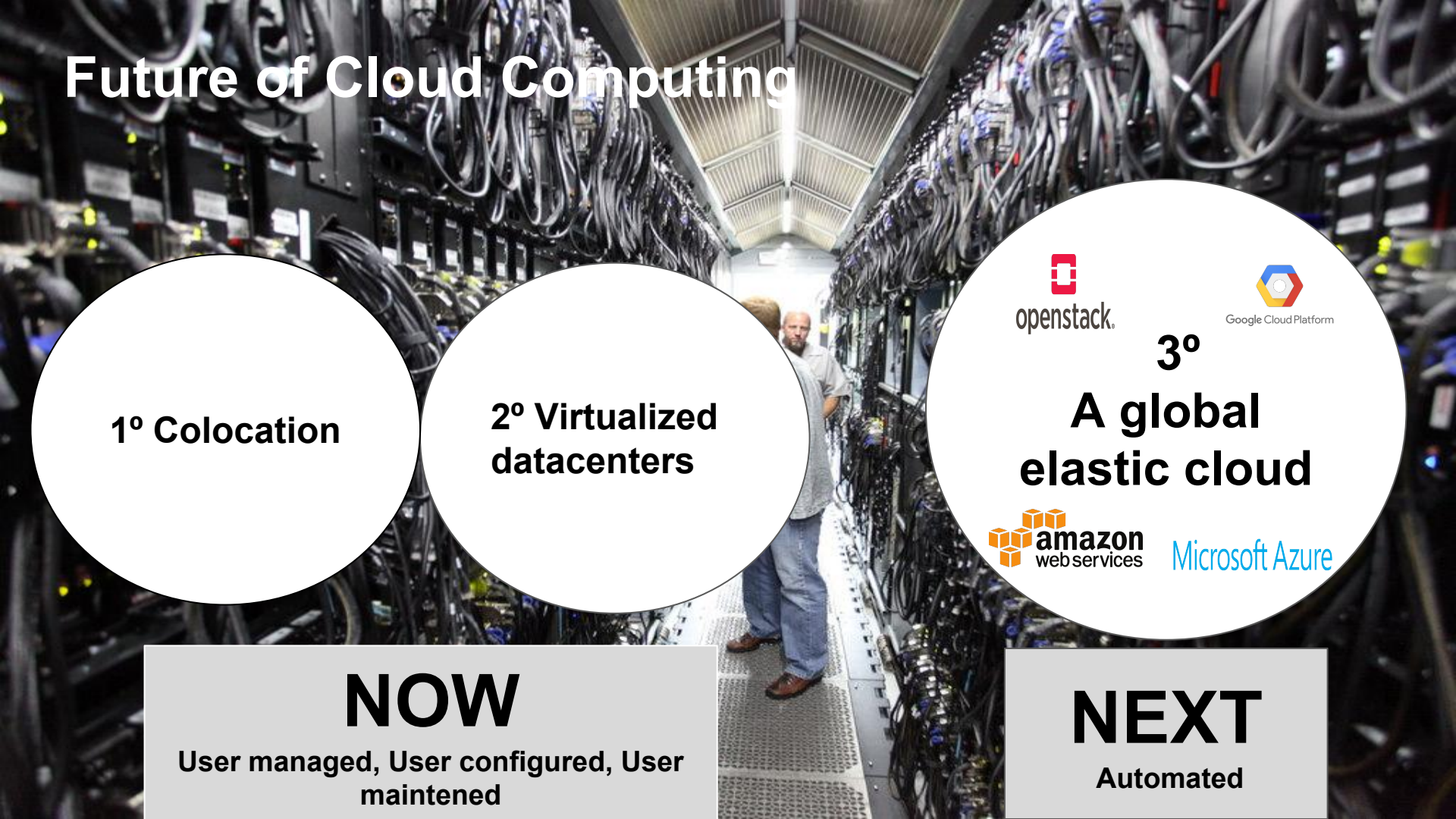
Demo- Create instance

Future of Cloud Computing



1º Colocation

2º Virtualized datacenters

3º A global elastic cloud

openstack

Google Cloud Platform

amazon web services

Microsoft Azure

NOW

User managed, User configured, User maintened

NEXT

Automated

Reference

https://cloud.google.com/compute/

https://cloud.google.com/iam/

https://cloud.google.com/free/

Free Course - Google Cloud Fundamentals

https://www.coursera.org/voucher/GoogleSummitBrazil

Labs

https://google.qwiklabs.com/

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