

Google Cloud Computing hands-on Labs

Cloud computing is a new form of Internet-based computing that provides shared computer processing resources and data to computers and other devices on demand. It is a model for enabling ubiquitous, on-demand access to a shared pool of configurable computing resources (e.g., computer networks, servers, storage, applications and services), which can be rapidly provisioned and released with minimal management effort. Basically, Cloud computing allows the users and enterprises with various capabilities to store and process their data in either privately owned cloud, or on a third-party server in order to make data accessing mechanisms much more easy and reliable. Data centers that may be located far from the user—ranging in distance from across a city to across the world. Cloud computing relies on sharing of resources to achieve coherence and economy of scale, similar to a utility (like the electricity grid) over an electricity network.

Google Cloud Computing Platform is a suite of public cloud computing services offered by Google. The platform includes a range of hosted services for compute, storage and application development that run on Google hardware. Google Cloud Platform services can be accessed by software developers, cloud administrators and other enterprise IT professionals over the public internet or through a dedicated network connection. Google Cloud Platform offers services for compute, storage, networking, big data, machine learning and the internet of things (IoT), as well as cloud management, security and developer tools.

Objectives

This course is designed to introduce you to fundamental Google cloud computing and concepts including infrastructure, building your own solution, management, Security, logging, and development methods. It also covers security-related compliance protocols and risk management strategies.

Target Audience

- Anyone looking to gain knowledge to the Google Cloud Platform

Prerequisites

- You'll need a basic understanding of cloud technologies.

Duration: **2 days** (16 hours)

Module 1 – Day 1

- What is cloud computing?
- Cloud Computing models: SaaS, PaaS, IaaS
- Cloud implementation models: Public, Private, Hybrid
- What's Google Cloud Computing?
- Main services overview (Compute, Storage, DB, Network)
- How to design cloud services?
- Planning and design
- Main services overview
 - Compute
 - Storage
 - DB
 - Network
- App Engine
- Analytics
- Diving into Compute & Storage
- Virtual machines, Load balancers
- Networks
- App Engine
- Storage
- Containers
- Summary

Module 2 – Day 2

- Security
- Management
- Cloud Functions
- Monitoring
- Automation
- Development Model
- SDK
- IDE tools
- CLI
- Summary