

Google Cloud Security Administrator

Duration: 2 Days

Course Description:

In this course, you will learn about the different components that make up the Google Cloud infrastructure and the security challenges these environments present, including high availability (HA), load balancing, and software-defined network (SDN) connectors, as well as how to manage traffic in the cloud with Fortinet products.

Target Audience:

Anyone who is responsible for the deployment or day-to-day management of Fortinet solutions in Google Cloud should attend this course.

Prerequisites:

To run the labs in Google Cloud, students must have their own Google Cloud accounts with the following:

- A Google Cloud account with:
 - A free trial account with a valid payment method some charges may still apply for deploying Fortinet and Microsoft Compute Engine instances
 - A paid cloud billing account with a valid payment method
- Permissions to enable APIs to deploy Fortinet products from Google Cloud Marketplace
- Permissions to allow metadata API access for Compute Engine
- Deployment service account (or permissions to create one) with the following roles:
 - o config.agent
 - o compute.networkAdmin
 - compute.admin
 - iam.serviceAccountUser
- Permissions to create the following:
 - New projects (optional)
 - Cloud storage bucket
 - o Virtual private cloud (VPC) networks
 - Subnets
 - IP addresses
 - Firewall rules
 - Custom routes
 - Compute Engine VM instances from Google Cloud
 - Marketplace (up to four vCPUs)
 - Instance groups
 - Health checks
 - Load balancers

- The ability to do the following:
 - o Access Google Cloud Shell
 - o Access Google Cloud Shell Editor
 - o Clone a GitHub repository in Google Cloud Shell
 - Editor
 - Deploy Terraform templates using Google Cloud
 - Shell
 - Disable billing for projects (optional)
- Permissions to delete the following:
 - All resources created
 - o Projects (optional)
 - Solution deployments
 - o Deployments under Deployment Manager

Course Objectives:

- Explain the concept of the public cloud
- Define public cloud service terms
- Identify threats and challenges in the public cloud
- Secure Google Cloud
- Identify various public cloud deployment types
- Explain Fortinet licensing models
- Describe Fortinet GitHub
- Describe Google Cloud service components
- Identify Google Cloud core networking components
- Identify Google Cloud security components
- Identify FortiGate architectures
- Examine use cases for deploying FortiGate
- Describe traffic flow for FortiGate Google Cloud architectures
- Identify the Fortinet products on Google Cloud Marketplace
- Understand FortiGate Google Cloud SDN integration
- Identify Fortinet WAF solutions for Google Cloud
- Describe FortiWeb Cloud
- Identify different types of load balancers
- Understand various load balancing operations
- Understand symmetric hashing
- Explore load balancing NAT
- Identify supported protocols
- Explain different HA architectures in Google Cloud
- Describe FGCP A-P HA
- Describe FGSP A-A HA
- · Define auto scaling in Google Cloud

Course Outlines:

- Introduction to the Public Cloud
- Google Cloud Components
- Fortinet Products and Deployments for Google Cloud
- Load Balancers in Google Cloud
- High Availability in Google Cloud