

Szkolenie: Google Cloud Architecting with Compute Engine



Cel szkolenia:

This three-day instructor-led class introduces participants to the comprehensive and flexible infrastructure and platform services provided by Google Cloud, with a focus on Compute Engine. Through a combination of presentations, demos, and hands-on labs, participants explore and deploy solution elements, including infrastructure components such as networks, systems, and application services. This course also covers deploying practical solutions including securely interconnecting networks, customer-supplied encryption keys, security and access management, quotas and billing, and resource monitoring.

Audience:

Cloud Solutions Architects, DevOps Engineers Individuals using Google Cloud to create new solutions or to integrate existing systems, application environments, and infrastructure, with a focus on Compute Engine.

The course includes presentations, demonstrations, and hands-on labs.

Plan szkolenia:

- Introduction to Google Cloud
 - List the different ways of interacting with Google Cloud.
 - Use the Cloud Console and Cloud Shell.
 - Create Cloud Storage buckets.
 - Use the Google Cloud Marketplace to deploy solutions.
- Virtual Networks
 - List the VPC objects in Google Cloud.
 - Differentiate between the different types of VPC networks.
 - Implement VPC networks and firewall rules.
 - Implement Private Google Access and Cloud NAT.
- Virtual Machines
 - Recall the CPU and memory options for virtual machines.
 - Describe the disk options for virtual machines.
 - Explain VM pricing and discounts.

- Use Compute Engine to create and customize VM instances.
- CloudIAM
 - Describe the Cloud IAM resource hierarchy.
 - Explain the different types of IAM roles.
 - Recall the different types of IAM members.
 - Implement access control for resources using Cloud IAM.
- Storage and Database Services
 - Differentiate between Cloud Storage, Cloud SQL, Cloud Spanner, Cloud Firestore and Cloud Bigtable.
 - Choose a data storage service based on your requirements.
 - Implement data storage services.
- Resource Management
 - Describe the cloud resource manager hierarchy.
 - Recognize how quotas protect Google Cloud customers.
 - Use labels to organize resources.
 - Explain the behavior of budget alerts in Google Cloud.
 - Examine billing data with BigQuery.
- Resource Monitoring
 - Describe the services for monitoring, logging, error reporting, tracing, and debugging.
 - Create charts, alerts, and uptime checks for resources with Cloud Monitoring.
 - Use Cloud Debugger to identify and fix errors.
- Interconnecting Networks
 - Recall the Google Cloud interconnect and peering services available to connect your infrastructure to Google Cloud.
 - Determine which Google Cloud interconnect or peering service to use in specific circumstances.
 - Create and configure VPN gateways.
 - Recall when to use Shared VPC and when to use VPC Network Peering.
- Load Balancing and Autoscaling
 - Recall the various load balancing services.
 - Determine which Google Cloud load balancer to use in specific circumstances.
 - Describe autoscaling behavior.
 - Configure load balancers and autoscaling.
- Infrastructure Modernization
 - Automate the deployment of Google Cloud services using Deployment Manager or Terraform.
 - Outline the Google Cloud Marketplace.

- Managed Services
 - Describe the managed services for data processing in Google Cloud.

Wymagania:

Completion of Google Cloud Fundamentals or equivalent experience Basic proficiency with command-line tools and Linux operating system environments Systems operations experience, including deploying and managing applications, either on-premises or in a public cloud environment.

Poziom trudności



Certyfikaty:

The participants will obtain certificates signed by Google Cloud Platform.

This course additionally prepares you for **Associate Cloud Architect** certification exam available at Kryterion test centers.

Prowadzący:

Authorized Google Cloud Platform Trainer.