SHI GCP-DP Architecting with Google Cloud User Guide

Contents

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Product Information

Course Outline

- **Architecting with Google Cloud:** Design and Process Course
- **GCP-DP:** 2 days Instructor-led

About this course
This course features a combination of lectures, design activities, and hands-on labs to show you how to use proven design patterns on Google Cloud to build highly reliable and efficient solutions and operate deployments that are highly available and cost-effective. This course was created for those who have already completed the Architecting with Google Compute Engine or Architecting with Google Kubernetes Engine course.

Audience profile

- Cloud Solutions Architects, Site Reliability Engineers, Systems Operations professionals, DevOps Engineers, IT managers
- Individuals using Google Cloud to create new solutions or to integrate existing systems, application environments, and infrastructure with the Google Cloud

At course completion

After completing this course, students will be able to:

- Apply a tool set of questions, techniques and design considerations
- Define application requirements and express them objectively
- as KPIs, SLO's and SLI's
- Decompose application requirements to find the right microservice boundaries

- Leverage Google Cloud developer tools to set up modern, automated deployment pipelines
- Choose the appropriate Google Cloud Storage services based
- on application requirements
- Architect cloud and hybrid networks
- mplement reliable, scalable, resilient applications balancing
- key performance metrics with cost
- Choose the right Google Cloud deployment services for your applications
- Secure cloud applications, data and infrastructure
- Monitor service level objectives and costs using Stackdriver tools

Course Outline
After completing this course, students will be able to:

1. Define the Service
2. Design and Architecture of Microservices
3. Automate DevOps processes
4. Choose appropriate Storage Solutions
5. Implement Google Cloud and Hybrid Network Architecture
6. Deploy Applications to Google Cloud
7. Design Reliable Systems
8. Ensure Security
9. Maintain and Monitor systems

Specifications

- **Course Name:** Architecting with Google Cloud: Design and Process
- **Course Code**: GCP-DP
- **Duration**: 2 days (Instructor Led)

Product Usage Instructions

Defining the Service
In this section, you will learn how to define the service requirements and objectives. You will understand the importance of clearly defining the service and its functionalities.

Microservice Design and Architecture
This section will cover the design and architecture principles of microservices. You will learn how to design scalable and fault-tolerant microservices using Google Cloud.

DevOps Automation
Here, you will explore the automation of DevOps processes. You will understand how to streamline application development, testing, and deployment using Google Cloud tools and services.

Choosing Storage Solutions
In this section, you will learn about different storage solutions provided by Google Cloud. You will understand how to choose the appropriate storage solution based on your application requirements.

Google Cloud and Hybrid Network Architecture
This section focuses on integrating Google Cloud with hybrid network architectures. You will learn how to establish secure connections between on-premises infrastructure and Google Cloud.

Deploying Applications to Google Cloud
In this section, you will learn how to deploy applications to Google Cloud. You will understand the deployment process and best practices for ensuring scalability and availability.

Designing Reliable Systems
This section covers the design principles for building reliable systems on Google Cloud. You will learn how to handle failures, implement redundancy, and ensure high availability.

Security
Here, you will explore the security features and best practices provided by Google Cloud. You will understand how to secure your applications and data in the cloud environment.

Maintenance and Monitoring
This section focuses on the maintenance and monitoring of systems deployed on Google Cloud. You will learn how to monitor performance, troubleshoot issues, and perform regular maintenance tasks.

Frequently Asked Questions

Who is this course designed for?

This course is designed for individuals who have already completed the Architecting with Google Compute Engine or Architecting with Google Kubernetes Engine course.

What will I be able to do after completing this course?

After completing this course, you will be able to design and build highly reliable and efficient solutions on Google Cloud. You will also learn how to operate deployments that are highly available and cost-effective.

How long is the course?

The course duration is 2 days for instructor-led training.

Documents / Resources

	SHI GCP-DP Architecting with Google Cloud [pdf] User Guide GCP-DP, GCP-DP Architecting with Google Cloud, Architecting with Google Cloud, Google Cloud, Cloud

References

- User Manual

Manuals+, Privacy Policy