Oracle Cloud Infrastructure Architect Professional Workshop

Description

Prix : 3 650 €HT

Durée : 5 jours

Code de Référence : D1102590

Catalogue Cloud Infrastructure

This course will help you gain strong knowledge in architecting infrastructure using Oracle Cloud Infrastructure services. It will provide you hands-on experience in working with core OCI service.

Building on your skills obtained from the Oracle Cloud Infrastructure Architect Associate Workshop course, explore deeper into the Oracle Cloud Infrastructure services to design and implement a secure and scalable cloud solution that meets HA and DR requirements.

Design secure networks with disaster recovery options, explore advanced database features on OCI, N-Tier Applications, Microservices, and Serverless Architecture.

Cette formation permet de préparer la certification **1Z0-997-22: Oracle Cloud Infrastructure 2022 Architect Professional.**

Objectifs de la formation

A l’issue de cette formation Oracle Cloud Infrastructure, vous serez capable de :

- Make architectural decisions based on OCI best practices and principles
- Design highly available, secure networks with disaster recovery options using advanced features of OCI services
- Explore and leverage multiple ways of connecting to cloud networks based on security and performance requirements
- Database Sizing/Capacity Planning for Performance
- Oracle Database Cloud Migration Solutions
- Understand Metrics, Alarms, monitoring query language

- Creating a K8s cluster in OCI using ‘quickstart’

Public

Cette formation Oracle Cloud Infrastructure s’adresse aux administrateurs cloud, architectes cloud et managers IT.

Prérequis

Avoir suivi la formation Oracle Cloud Infrastructure Architect Associate Workshop ou disposer des connaissances et compétences équivalentes.

Compréhension de l’anglais et du vocabulaire anglais spécifique IT. Avoir suivi la formation Oracle Cloud Infrastructure Fundamentals ou disposer de compétences équivalentes. Fundamental knowledge of IP Networking. Basic familiarity with the Linux command line. Existing experience managing Linux or Windows Servers. Experience working with n-tier or distributed application.

Vous souhaitez faire vérifier vos prérequis ? Contactez-nous pour l’organisation d’un entretien téléphonique avec un de nos consultants formateurs.

Programme de la formation

Module 1 : Design and Implement a Real-World Network Architecture

- Networking Workshop

Module 2 : Design Scalable and Resilient Solutions for HA & DR

- High Availability
- High Availability – moving to a highly available architecture
- Disaster Recovery
- Disaster Recovery planning

Module 3 : Design Cloud-Native, Microservices, and Serverless Architecture

- Microservices Architecture Overview
- Design Methodology of Microservices
- Introduction to Containerization
- Oracle Cloud Infrastructure Registry OCIR: Introduction

- Managing Oracle Cloud Infrastructure Registry (OCIR)
- Demo Managing OCIR
- Introduction to Kubernetes
- Introduction to OKE
- Prerequisite to Create an OKE Cluster
- Creating OKE Cluster on OCI
- Demo Creating OKE Cluster on OCI
- Setting Up Cluster Access
- Demo – Setting Up Cluster Access Deploying an Application to OKE Demo – Deploying an Application to OKE
- Tagging Cluster Resources
- User-Managed Keys
- Custom cloud-init Scripts
- File Storage for PVCs
- Capacity Reservations
- Network Security Groups
- Overview of Serverless Functions
- Serverless Functions – Triggers
- Serverless Functions – Use Cases
- Serverless Functions – Concepts
- Demo – Functions QuickStart on Cloud Shell
- Demo – Creating a Function from a custom Dockerfile
- Introduction to API Management
- Setting Up API Gateway
- Creating an API
- Monitoring APIs
- Network Security Groups
- Custom Trust Store
- Mutual TLS (mTLS) Support

Module 4 : Deliver infrastructure as a code

- Introduction to Terraform and Terraform Configurations
- OCI Resource Manager Basics
- Syncing Resource Manager and Infrastructure
- Extending the console

Module 5 : Deploy Oracle Database Cloud Service

- Oracle DBCS – Custom Database Software Image
- Oracle DBCS – Security
- DBCS – Custom Database Software Image
- Connect VM DBCS in Private Subnet – Using Bastion Service
- Move VM DBCS
- Oracle ExaCS DB Changes
- Database Cloud Service [Monitoring Metrics and Events]
- Cloning in VM DBCS
- Autonomous Database – Monitoring Metrics and Events

Module 6 : Deploy Oracle Autonomous Database

- Oracle Autonomous Database – Auto Provisioning
- Oracle Autonomous Database – Auto Configuration
- Oracle Autonomous Database – Auto Indexing
- Oracle Autonomous Database – Automatic Partitioning
- Oracle Autonomous Database – Optimizer Statistics
- Oracle Autonomous Database – Initialization Parameters
- Oracle Autonomous Database – Scaling
- Autonomous Database – Shared Scale Up Operation (Demo: Scaling)
- Autonomous Database – Auto Start and Stop Feature
- Oracle Autonomous Database – Controlled Access
- Oracle Autonomous Database – Encryption
- Oracle Autonomous Database – TDE Master Key Encryption
- Oracle Autonomous Database – Patching
- Oracle Autonomous Database – Auditing
- Autonomous Database (Shared) – Using Customer -Managed Keys
- Autonomous Database (Shared) – Authentication Using IAM
- Oracle Autonomous Database -Self -Repairing
- Oracle Autonomous Database (Deployment Options)
- Oracle Autonomous Database (Shared Provisioning)
- Autonomous Database (Shared) – Network Access
- Oracle Autonomous Database [Dedicated | Provisioning]
- Autonomous Database (Dedicated) – Provisioning (Demo)
- Oracle Autonomous Database – Cloning
- Autonomous Database (Shared) – Cloning (Demo)
- Oracle Autonomous Database – Backup and Recover
- Oracle Autonomous Database [Patching and Updates]

- Oracle Autonomous Database – Disaster Recovery
- Autonomous Database (Shared) – Autonomous Data Guard (Demo)
- Oracle Autonomous Database – Database Actions
- Autonomous Database – Database Actions (Demo)

Module 7: Design for Hybrid Cloud Architecture

- VMware Product Overview
- Use Cases, Key Benefits, & Values
- SDDC Deployment
- Designing a Hybrid Cloud
- Demo – OCVS
- Demo – Accessing SDDC
- Access to Microsoft Azure

Module 8: Migrate On-Premises Workloads to OCI

- Data Migration
- Data Migration – Data Transfer Appliance and Disk
- Data Migration – Online migration
- Demo: Storage Gateway
- Database Migration to OCI
- Database Migration to OCI DBCS – UI Based Migration Tools
- Database Migration to OCI DBCS –Remote Cloning
- Database Migration to OCI DBCS – RMAN
- Database Migration to OCI DBCS –Datapump
- Database Migration to OCI DBCS – Other Tools and Methods
- Database Migration to OCI DBCS – Automated Migration Methods

Module 9: Design for Secuirty and Compliance

- OCI Web Application Firewall
- WAF Components
- Demo Load Balancer and WAF policies
- Demo Creating WAF Policy: Demo – Creating a WAF Access Control
- Demo – Enabling Protection Rules and XSS
- Demo – Creating a WAF Bot Management.pptx
- Demo – Adding Access Control Rule
- Certificates
- Demo – Certificates

- Demo – Certificate Authority – Part 1
- Demo – Certificate Authority – Part 2
- OS Management with Oracle Cloud Infrastructure
- Demo – OS Management
- Vulnerability Scanning
- Demo – Cloud Guard integration with Vulnerability Scanning
- Oracle Data Safe
- Oracle Data Safe in OCI
- Oracle Data Safe – Security Assessment
- Oracle Data Safe – User Assessment
- Oracle Data Safe – Activity Auditing
- Oracle Data Safe – Data Discovery
- Oracle Data Safe – Data Masking
- Oracle Data Safe – Architecture
- Oracle Data Safe – Targets DB Connectivity

Module 10: Implement Real-World Architectures

- Reference Architecture 1: Architecture Overview
- Reference Architecture 2 Hub-Spoke Architecture
- Reference Architecture 3 HPC Architecture
- Reference Architecture 4 Security Architecture

Méthodes pédagogiques

Alternance d’apports théoriques et d’exercices avec un vaste choix d’exercices pratiques et de scénarios d’atelier permettent de mettre en œuvre les connaissances acquises.

La dernière version du support en anglais est accessible en ligne. Vous aurez à votre disposition un accès contenant tous les matériels de cours de votre formation, ainsi qu’un accès à 5 h de visionnage d’une autre formation de votre choix dans la même thématique. L’ensemble sera disponible pendant 90 jours.

Méthodes d’évaluation des acquis

Afin d’évaluer l’acquisition de vos connaissances et compétences, il vous sera envoyé un formulaire d’auto-évaluation, qui sera à compléter en amont et à l’issue de la formation. Un certificat de réalisation de fin de formation est remis au stagiaire lui permettant de

faire valoir le suivi de la formation.