Course : Cloud Computing, technical solutions

Synthesis course - 2d - 14h00 - Ref. CLC
Price : 2020 CHF E.T.

★★★★½ **4,7 / 5**

This comprehensive course will help you decipher the issues inherent in setting up a cloud architecture. You'll also learn how to identify the technical solutions and best practices needed to choose and deploy the best solution for your projects.

Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Discover the key principles of cloud computing and its various deployment modes
- ✓ Assess the impact of integrating a cloud architecture into an information system
- ✓ Discover the main cloud computing offers and solutions
- ✓ Identify different management and monitoring solutions

Intended audience
Architects, project managers and technical leaders.

Prerequisites
General knowledge of corporate technical architectures.

Practical details

Demonstration
The course will be punctuated by demonstrations of some of the solutions presented.

Course schedule

1 Introduction

- Reminder of cloud and SaaS principles and deployment modes (public, private, hybrid).
- Overview of virtualization principles (para-virtualization, full virtualization, etc.).
- Different types of offer (IaaS, PaaS, SaaS).

PARTICIPANTS
Architects, project managers and technical leaders.

PREREQUISITES
General knowledge of corporate technical architectures.

TRAINER QUALIFICATIONS
The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS
The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

② Description of cloud architecture issues

- Architectures "multi-tenant". Security. IaC "Infrastucture as Code" and the Cloud.
- Load ramping. Memory cache.
- Message queue.
- Cloud data storage solutions and related challenges.
- IS integration.
- Create virtual machines.
- Administration.
- Difference between "PaaS web" platforms and "PaaS enterprise" platforms.

③ Description of the main cloud offerings

- Public cloud offerings.
- Amazon AWS and its services EC2, S3, SQS, SimpleDB, RDS, SNS, ELB, VPC, etc.
- Microsoft offer with Azure (Compute, Storage, Containers).
- Google offer with GCP (GCE, GCS, GKE, AppEngine).
- IBM Cloud, Oracle cloud and Alibaba cloud offers. Force.com and VMForce offers.
- Other offerings (OVH, Rackspace, Clever Cloud, etc.).
- Private cloud IaaS offerings. OpenStack, Azure Stack, AWS Outposts, GCP GKE OnPrem, Eucalyptus, VMWare, Nutanix, etc.
- Private PaaS cloud offerings: Cloud Foundry, OpenShift, etc.

④ Solutions compatible with private and public clouds

- Platforms "Enterprise PaaS" from Spring/VMWare.
- Clouds that don't yet have a PaaS platform "enterprise friendly".
- Cloud PaaS platforms: Cloud Foundry, OpenShift, etc.
- Microsoft Azure private cloud platforms.
- Offers to build on top of cloud platforms.
- RightScale, CloudBees, etc. Technical solutions for integrating cloud bricks with SaaS offerings.
- Solutions for secure communication between clouds.
- Integrated identification and authorization issues (SAML, OAuth, etc.).

⑤ Management and monitoring solutions

- Overview of management and monitoring solutions.
- HP Assure, CA (deploy/manage, assurance, security), etc.
- Highly-adopted technologies in the cloud: Docker, big data, machine learning, IoT, etc.

Dates and locations

REMOTE CLASS
2026 : 25 June, 17 Dec.