## Cloud Training: Docker Implementation from A to Z (DOCK, 3 jours)

## Description

The course The Complete Docker Implementation Course (Cloud Training) teaches you how to design, and implement a Docker environment. The training includes a general introduction to Docker including persistent storage, shared state, networking and isolation. The course also covers build automation, advanced imaging, custom registries & Docker Compose. This Docker course concludes with a discussion on clusters & swarms.

## Tarifs

- Tarification: \$3,350/person
- Rabais de 10% lorsque vous inscrivez 3 personnes.

## Plan de cours

Introduction to Docker
What is Docker and what Problems does it Solve?
Where and when should I use Docker?
Docker versus Application Virtualization: A Key Difference
The Docker Application Execution Workflow
Building a Web Site Monitor
Exploring the PID Namespace
Eliminating Meta-conflicts
Building Environment Agnostic Systems
Building Durable Containers
About Software Installation
About Software Identification
Finding and Installing Software
Installation Files and Isolation
Pros and Cons of Union File Systems
Persistent Storage and Shared State with Volumes
Exploring Volumes
About Volume Types
Sharing Volumes
The Managed Volume Lifecycle
Advanced Container Patterns with Volumes
Networking
The Network Ecosystem
Docker Container Networking
Closed Containers
Bridged Containers
Joined Containers
Open Containers
Inter-Container Dependencies
Implementing Isolation
Exploring Resource Allowances
Managing Shared Memory
About Users

Adjusting OS Features Access with Capabilities Running a Container with Full Privileges Enhanced Tools **Exploring Concrete Use Cases** Packaging Software in Images -----\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ Building Docker Images from a Container Docker Images and Layers Working with Flat File Systems Managing Versioning Build Automation and Advanced Imaging **Exploring Dockerfile** Pakaging Git with a Dockerfile Injecting Downstream Build-Time Behaviour Working with Startup Scripts Working with Multiprocess Containers **Application Image Hardening** Public and Private Software Distribution Choosing a Distribution Method Publishing with Hosted Registries **Exploring Private Registries** Manual Image Publishing and Distribution Image Source Distribution Workflows Running Customized Registries ------Running a Personal Registry **Enhancements for Centralized Registries Durable BLOB Storage** Scaling Access and Latency Improvements Integrating through Notifications Docker Compose Working with Docker Compose Iterating within an Environment Starting a New Project Clusters and Swarms **Exploring Docker Machine** Exploring Docker Swarm Swarm Scheduling