

2019-07-09 Intro to Docker

https://cornell.sabacloud.com/Saba/Web_spf/NA1PRD0089/common/ledetail/cours00000000016680

See the course description and outline below.

Register for class using the link above.



We need to confirm with the instructor by **Monday, June 3**, so please forward the information below to anyone you know of that may be interested in registering.

***Bring your own laptop - remote instructor (Chrome browser recommended)**

****Attend in person OR via Zoom (link to be provided later)**

Note: All cancellations must be received prior to **June 3** to cancel without incurring charges.

Delivery Method: Instructor-led Classroom Learning

Duration: 1 Day

Description:

Introduction to Docker is a one-day course designed to provide attendees with the basics of microservices and containerization. No prior experience is required. The course will provide attendees with the core knowledge of Docker, including: docker images, docker containers, the Docker CLI, Docker engine underpinnings, security, Dockerfiles, and running multi-container applications. Challenge labs are distributed throughout the course to give attendees real experience managing containerized applications.

Outline:

1. Introduction to Docker

- a. What is Docker?
- b. Legacy Apps vs. Microservices
- c. VMs vs. Containers
- d. Benefits of Containerization

2. The Docker CLI

- a. Running applications as containers
- b. Best-practices
- c. Networking
- d. Volumes

3. Technical Underpinnings

- a. Images vs. Containers
- b. Image layered filesystem
- c. Host and named volumes
- d. Automatic DNS and Networking
- e. Security

4. Building Docker Images

- a. Docker Images
- b. Dockerfiles
- c. Best-practices

- d. Directives

- e. Multi-Stage builds

5. Container Best-Practices

- a. Foreground vs. Background

- b. Networking

- c. Volumes

- d. Environment Variables

6. Challenge Lab

- a. Deploy a multi-tier application

- b. Frontend/PHP/Webserver

- c. Database