



Docker Containerization Mentored Learning Workshop

Overview

The focus of Veritas' Mentored workshops is to Mentor/Train IT Professionals by transferring real-world knowledge and aiding in the Development Strategies in the advanced instruction of applicable technologies that are utilized within your environment by your in-house technology teams. Heavy concentration is placed on simplifying application deployment, IT Workflow, version control, production support within Docker Containerization. In addition, we cover the Best Practices within Installation, Configuration, Design, Customization and Troubleshooting as it relates to your environment and industry standards.

Our sessions are facilitated by IT professionals with extensive real-world knowledge (15 year minimum consulting experience) and team driven personalities (5 year minimum training experience) that enable them to successfully transfer their knowledge and experience so that your internal organization can effectively manage and perform day to day tasks and mission critical projects.

The curriculum and mentored framework will include live exercises and demonstrations focusing on heavy participation with your internal staff. The exercises and demonstrations will allow the Mentor and the students to explore, test, and reinforce various theories/topics presented during the engagement.

A list of set-up requirements will be sent to a contracted client at least 3 weeks prior to commencement.

Topics of Expertise for Training Framework

INTRODUCTION

- Segregation of Duties
- Relationship between Docker and SOA
- Docker and the Development Lifecycle
- Consistency from Development to Production

INSTALLATION & SETUP

- Container Naming
- Containers – Starting & Stopping
- Attaching to a Container
- What is going on in a Container
- Run a Process in a Container
- Automatic Restarts
- Deleting Containers

COMPONENTS

- Underlying Technology
- Client & Server
- Filesystem Images
- Registries & Containers
- Networking

IMAGES & REPOSITORIES

- How Docker images function
- Getting a list of Images
- Pulling an Image
- Creating Images
- Building and Specifying Images in Dockerfile
- Templating using the Build Cache
- Viewing created Images
- Launching a Container with a New Image



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REGISTRIES

- Docker Hub
- Pushing Images to the Docker Hub
- Running an internal Docker Registry
- Testing Internal Registries

INTEGRATION

- CI Enablement & Support
- Jenkins & Docker Set up
- Exploring a Jenkins Job
- Multi-configuration Jobs
- Drone & Shippable

ORCHESTRATION & SERVICE DISCOVERY

- Fig Set up
- Fig.yml File Configuration
- Using Fig
- Console
- Running a Console Cluster

CONFIGURATION MANAGEMENT INTEGRATION

- Managing Docker Hosts with Chef/Puppet/Ansible
- Configuration management Tools to build Containers
- Managing Running Containers with Configuration Management

DEV-OPS & DOCKER

- Collaboration Enablement with Docker
- Streamline Workflow using Docker
- Enabling Experimentation & Learning with Version Control capabilities
- Role in the IT Value Chain
- Value and Quality Creation
- Enabling a smoother flow of work

USER SCENARIO 1

- Single Container Static Website
- Setting up a Container running Nginx
- Launching a static site
- Updating the static site from git or bitbucket

USER SCENARIO 2

- Container for a NodeJS application
- Base Image for Redis Containers
- Creating a Redis Back-End-Cluster
- Capturing Logs
- Managing Containers