**Docker Compose Basics – Practical**

**Learning Objectives**

* Understand the structure and syntax of a docker-compose.yml file.
* Learn how to define and run multi-container applications.
* Deploy a sample stack (e.g., a web app + database).
* Understand volume mounting and service linking via Compose.

**Part 1: Intro to Docker Compose**

**Docker Compose**

* **Define services** (e.g., web app, database, cache) in a single YAML file.
* **Run all services together** with docker compose up.
* **Automatically sets up a network** between containers.
* **Supports environment variables**, volumes, ports, and dependencies.

Installation check: docker compose version

**Part 2: Compose File Walkthrough**

<https://docs.docker.com/compose/gettingstarted/>   
  
**Helpful links:**

**Docker Compose Samples:** <https://github.com/docker/awesome-compose?tab=readme-ov-file>

# **Video tutorial:** <https://www.youtube.com/watch?v=DM65_JyGxCo> **Runtime Configuration Options (Optional):** https://docs.docker.com/engine/containers/run/

**Overview of Jenkins – Practical**

**Getting Started with Jenkins:**<https://www.jenkins.io/doc/pipeline/tour/getting-started/>

**Helpful links:**

**Official Jenkins Site:** <https://www.jenkins.io/>

# **Video tutorial:** <https://www.youtube.com/watch?v=6YZvp2GwT0A>