Introduction to Docker

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Agenda

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- Docker Platform Tools
- Docker Benefits
- Docker Desktop
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Introduction to Docker

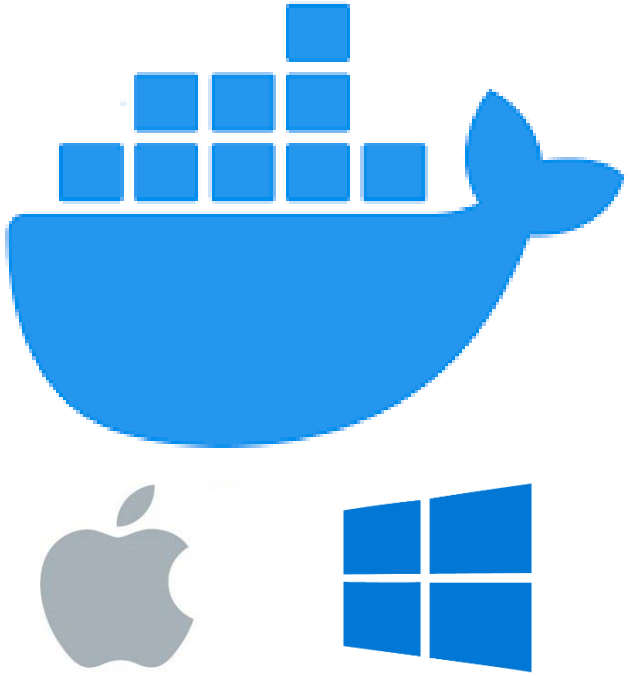
- A light weight, open and secure platform for developing, shipping and running applications using container technology.
- Provides Container solutions for developers, architects, DevOps, and IT People.
- Run on most Linux distributions, Windows and Mac OS.
- Supported by most of cloud providers like AWS, Azure, Google etc.
- Provide Dev/Test, CI and DevOps platform for many use cases.

Docker Benefits

- Infrastructure Cost Savings
- Standardization and Productivity
- Isolation
- Security
- Makes app lifecycle efficient and consistent
- Continuous Deployment and Testing
- On Demand Scaling
- Multi-Cloud Platforms Support

Docker Desktop

- An application for Mac and Windows to build production-ready container applications
- Enables to build and test Linux & Windows based applications at local machine
- Available in two editions:
  - Desktop Community
  - Desktop Enterprise



Docker Desktop Installation : Windows

- Windows 10 64-bit: Pro, Enterprise, Education (Build 15063 or later)
- Hyper-V and Containers Windows features must be enabled.
- 4GB system RAM and BIOS-level hardware virtualization support must be enabled in the BIOS settings.

Docker Desktop Installation : Windows Home

Step 1- Install the docker desktop for Windows 10 home from the following URL:
https://hub.docker.com/editions/community/docker-ce-desktop-windows/

- Click on 'Get Stable' button and the download should start.
- Please ensure you run or execute the installation using Admin privileges.
- Post-installation if you face that the Linux kernel is giving you some sort of error message, you will have to install the following update package

Step 2 - Install the update patch/package
https://docs.microsoft.com/en-us/windows/wsl/wsl2-kernel

Docker Desktop Installation : Mac

- Mac hardware must be a 2010 or newer model with Intel's hardware support for virtualization.
- macOS must be version 10.13 or newer

Docker Desktop Installation

- The Docker Desktop installation includes :
  - Docker Engine
  - Docker CLI client
  - Docker Compose
  - Docker Machine
  - Kitematic/Dashboard
- Containers and images created with Docker Desktop are shared between all user accounts on machines where it is installed.

Getting Started with Docker

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