Docker Swarm – Docker Machine Installation

Note :
Docker-machine will be installed by default in Windows and Mac OS and there is no need to get it installed specifically. This can be verified by using **docker-machine version** command in the terminal.

<u>Commands for Installation of Docker-machine in Linux</u> :

Internet connection is required to do this setup.

Type the command in the terminal (highlighted in red) and press enter.

sudo apt update
This command updates the local package index, which allows the system to know about the latest versions of packages available for installation.

sudo apt install apt-transport-https ca-certificates curl gnupg lsb-release
This command installs necessary packages required for securely downloading packages over HTTPS, managing certificates, handling URL transfers, managing cryptographic keys, and providing information about the Linux Standard Base (LSB).

curl -fsSL https://download.docker.com/linux/ubuntu/gpg
This command retrieves the Docker repository GPG key using 'curl', a command-line tool for transferring data with URLs. It's fetching the GPG key from the specified URL.

echo "deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
This command adds the Docker repository to the system's list of package sources. It echoes a repository entry string into a file named 'docker.list' under '/etc/apt/sources.list.d/' directory, which 'apt' will use to fetch Docker packages.

sudo apt update
This command updates the local package index again after adding the Docker repository to ensure that 'apt' is aware of the packages available from the newly added repository.

sudo apt install docker-ce docker-ce-cli containerd.io
This command installs Docker Community Edition (CE), which includes the Docker daemon (dockerd), the Docker CLI (docker), and containerd, an industry-standard core container runtime.

curl -L https://github.com/docker/machine/releases/download/v0.16.2/docker-

machine-$(uname -s)-$(uname -m) >/tmp/docker-machine
This command downloads Docker Machine binary from the specified URL using 'curl', and saves it to '/tmp/docker-machine'.

sudo mv /tmp/docker-machine /usr/local/bin/docker-machine
This command moves the downloaded Docker Machine binary from '/tmp/docker-machine' to '/usr/local/bin/docker-machine', making it executable system-wide.

sudo chmod +x /usr/local/bin/docker-machine
This command adds executable permission to the Docker Machine binary, allowing users to run it as a command.

docker-machine version
This command checks the version of Docker Machine installed on the system, confirming that the installation was successful.