Docker Installation Report on Ubuntu 22.04 System

System Overview

- **Username**: abhilash

- **Hostname**: dell-Inspiron-3505

- **OS Version**: Ubuntu 22.04 (Jammy Jellyfish)

- **Docker Version Installed**: 28.5.1, build e180ab8

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1. Objective

The goal of this installation was to install and verify Docker CE (Community Edition) on a Ubuntu 22.04 system using the APT package manager. This allows the user to run containers for application development, testing, and deployment.

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2. Commands Executed

Step 1: Confirm User Identity

```
whoami
```

- **Output**: `abhilash`

- Purpose: Confirms the current user executing the installation.

```
1rv24mc002_abhilash@dell-Inspiron-3505:~$ sudo apt install docker-ce -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
docker-ce is already the newest version (5:28.5.1-1~ubuntu.22.04~jammy).
The following packages were automatically installed and are no longer required:
  bridge-utils linux-headers-6.8.0-79-generic linux-hwe-6.8-headers-6.8.0-79 linux-hwe-6.8-tools-6.8.0-79 linux-image-6.8.0-79-generic linux-modules-6.8.0-79-generic linux-modules-extra-6.8.0-79-generic
  linux-tools-6.8.0-79-generic ubuntu-fan
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 24 not upgraded.
1rv24mc002_abhilash@dell-Inspiron-3505:~$ docker --version
Docker version 28.5.1, build e180ab8
1rv24mc002_abhilash@dell-Inspiron-3505:~$ 
```

Step 2: Update Package Index

```
sudo apt update
```

- Purpose: Updates the local APT package index from repositories to ensure the latest packages are available.

- **Output**: Several repositories were successfully hit, indicating a stable internet connection and access to required repositories.

- **Note**: The system indicated that **24 packages can be upgraded**.

```
1rv24mc002_abhilash@dell-Inspiron-3505:~$ whoami
1rv24mc002_abhilash
1rv24mc002_abhilash@dell-Inspiron-3505:~$ sudo apt update
[sudo] password for 1rv24mc002_abhilash:
Hit:1 https://download.docker.com/linux/ubuntu jammy InRelease
Hit:2 https://screenrec.com/download/ubuntu stable InRelease
Hit:3 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Hit:4 https://dl.google.com/linux/chrome/deb stable InRelease
Hit:5 https://deb.nodesource.com/node_18.x nodistro InRelease
Hit:6 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:7 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:8 https://repo.mongodb.org/apt/ubuntu jammy/mongodb-org/7.0 InRelease
Hit:9 https://brave-browser-apt-release.s3.brave.com stable InRelease
Hit:10 http://security.ubuntu.com/ubuntu jammy-security InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
24 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

Step 3: Install Docker CE

```
sudo apt install docker-ce -y
```

- Purpose: Installs the Docker Community Edition.
- **Output**:
  - Docker CE version 5:28.5.1-1~ubuntu.22.04~jammy is already the newest version.
  - Several old packages (related to Linux kernel 6.8.0-79) were marked as no longer required.
  - Suggestion to run `sudo apt autoremove` to clean up unused packages.

Step 4: Verify Docker Installation

```
docker --version
```

- **Output**: Docker version 28.5.1, build e180ab8
- Confirms that Docker was correctly installed and is functional.

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3. Observations

- Docker was already installed on the system before this execution, as confirmed by the output of the `apt install` and `docker --version` commands.

- System repositories and keys for Docker, MongoDB, Brave Browser, Google Chrome, Node.js, and others were successfully accessed.

- No installation errors were encountered.

- Some cleanup is advised by the system using `sudo apt autoremove` to free disk space.

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4. Recommendations

- **Post-Installation Cleanup**:
  Run the following command to remove unused packages:

  ```
  sudo apt autoremove
  ```

- **Upgrade Outdated Packages**:
  To upgrade the 24 packages marked as upgradable:

  ```
  sudo apt upgrade
  ```

- **Test Docker Functionality**:
  To ensure Docker is functioning properly:

  ```
  sudo docker run hello-world
  ```

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5. Conclusion

Docker CE version 28.5.1 is successfully installed and operational on the Ubuntu 22.04 system. The system is ready for Docker container operations. Some system maintenance is recommended to ensure optimal performance.