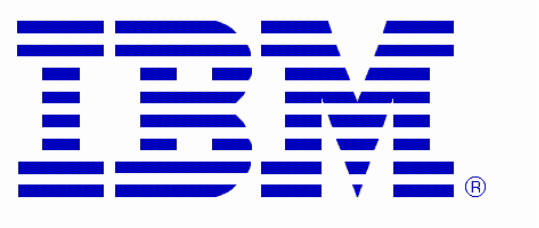

WebSphere Application Server Troubleshooting and Performance Lab on Docker - Lab Preparation

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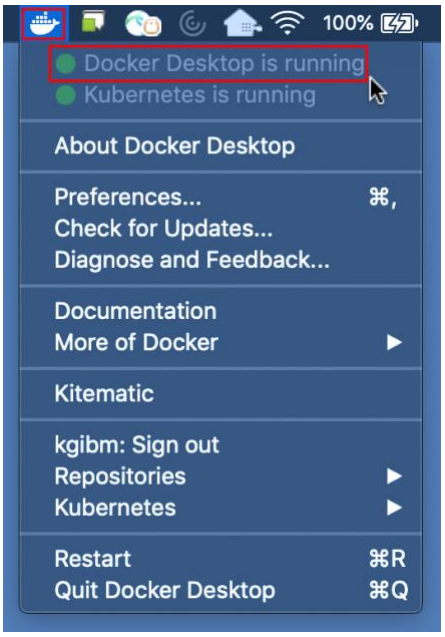
Contents

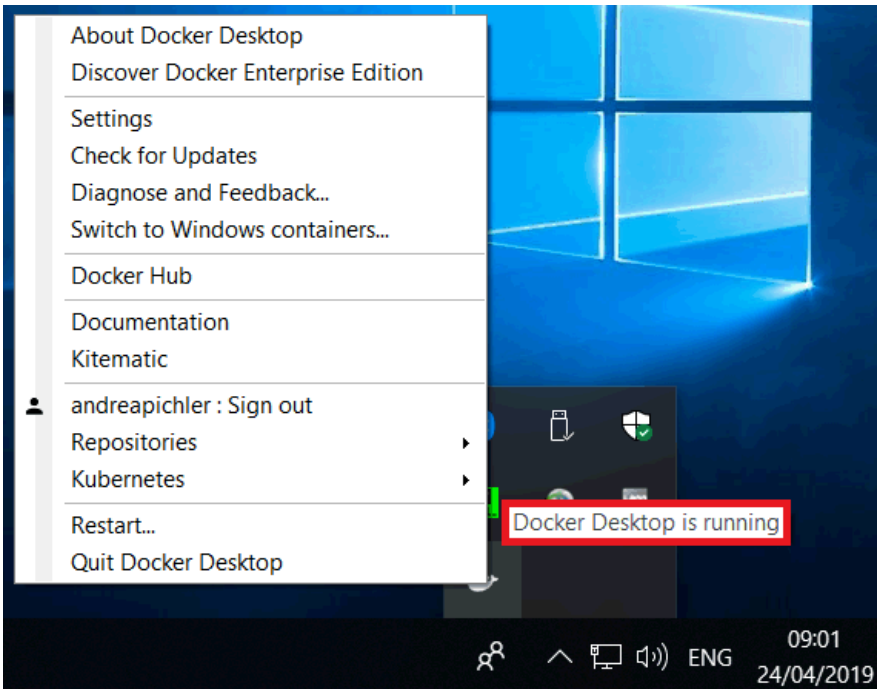
1 Lab Preparation

1. Install Docker:
    a. Windows ("Requires Microsoft Windows 10 Professional or Enterprise 64-bit.")
        - Download: https://hub.docker.com/editions/community/docker-ce-desktop-windows
        - For details, see https://docs.docker.com/docker-for-windows/install/
    b. Mac ("Requires Apple Mac OS Sierra 10.12 or above")
        - Download: https://hub.docker.com/editions/community/docker-ce-desktop-mac
        - For details, see https://docs.docker.com/docker-for-mac/install/
    c. For a Linux host, simply install and start Docker (sudo systemctl start docker):
        - For an example, see https://docs.docker.com/install/linux/docker-ce/fedora/
2. Ensure that Docker is started. For example, start Docker Desktop and ensure it is running:

    macOS:

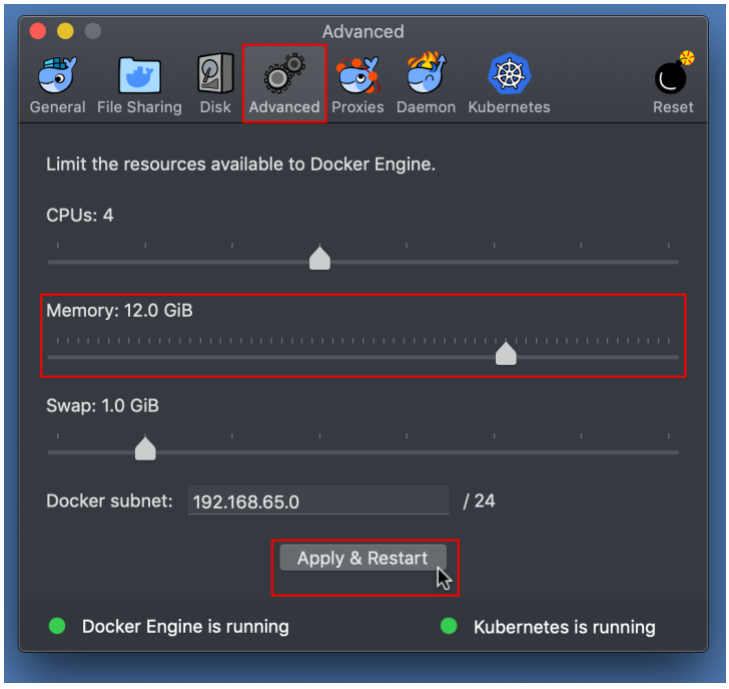


Windows:

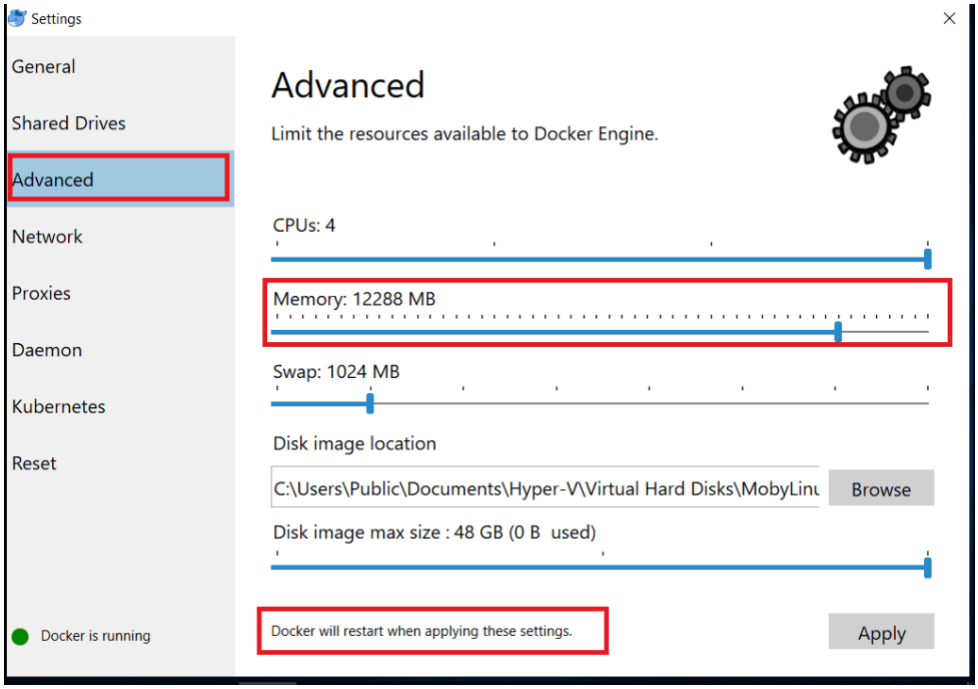


3. Ensure that Docker receives sufficient resources, particularly memory:
    a. Click the Docker Desktop icon and select "Preferences…" (on macOS) or "Settings" (on Windows)
    b. Select the Advanced tab.
    c. Increase Memory, ideally to at least 8GB.
    d. Click Apply

    macOS:

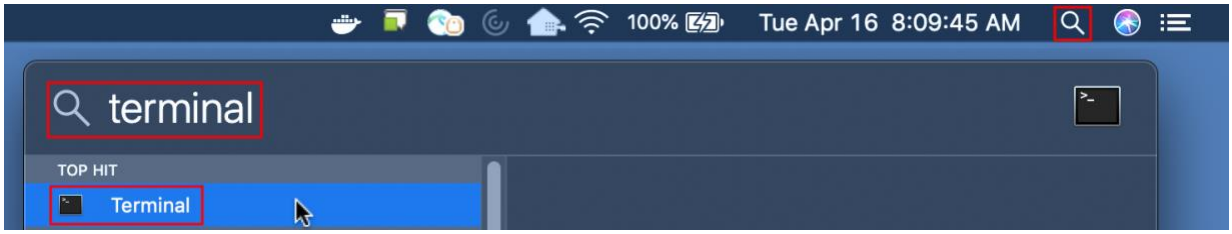


Windows:

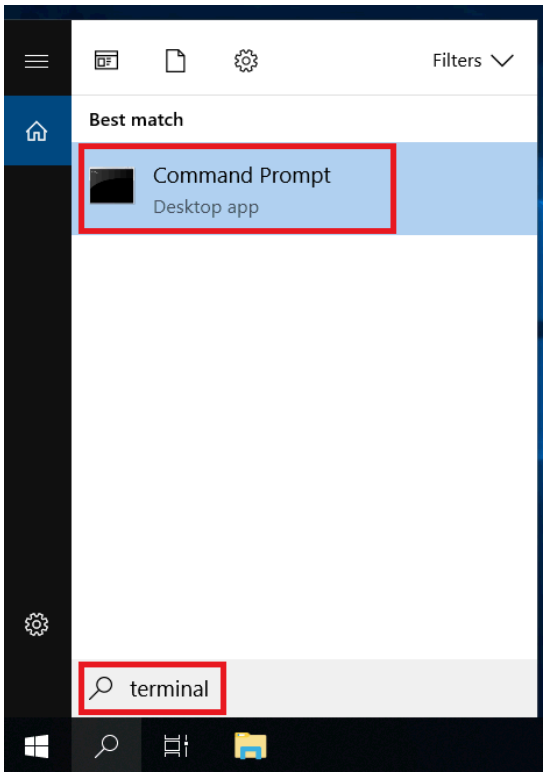

Settings
General
Shared Drives
Advanced
Network
Proxies
Daemon
Kubernetes
Reset
Docker is running
Advanced
Limit the resources available to Docker Engine.
CPUs: 4
Memory: 12288 MB
Swap: 1024 MB
Disk image location
C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks\MobyLinu
Browse
Disk image max size : 48 GB (0 B used)
Docker will restart when applying these settings.
Apply

4. Open a terminal or command prompt:

   macOS:



   Windows:



5. Download the images:

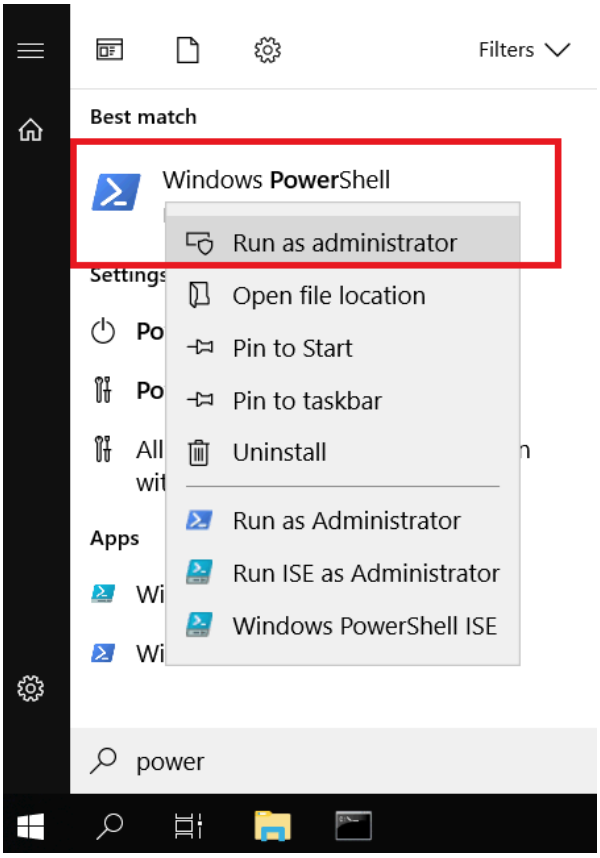
```
docker pull kgibm/fedorawasdebug
```

   e. Note that these images are about 20GB. If you plan to run this in a classroom setting, consider performing all the steps up to and including this item before arriving at the classroom.

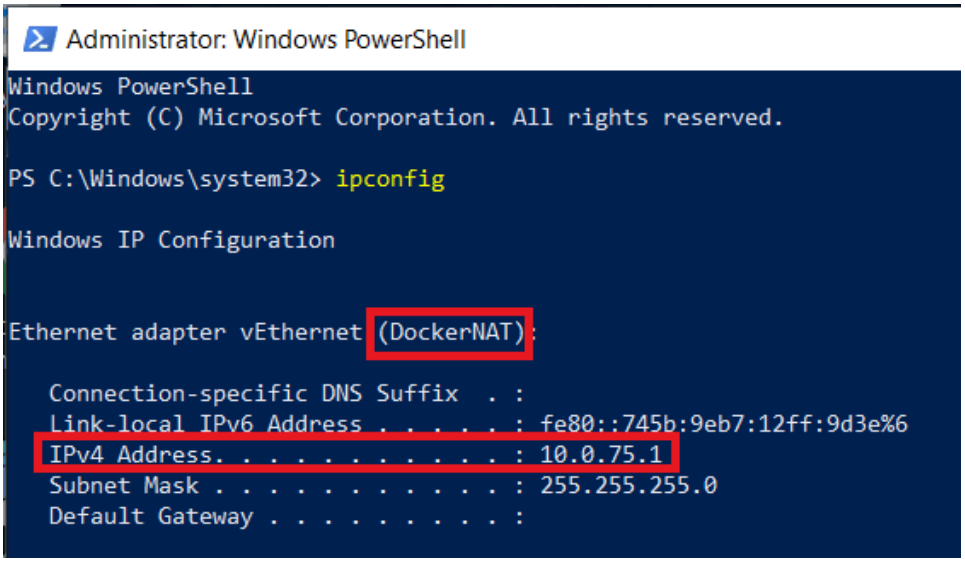
2 Appendix

2.1 Windows Remote Desktop Client

1. Open PowerShell as Administrator:



2. Run ipconfig and copy the IPv4 address of the DockerNAT adapter. For example:



3. Run the following command in PowerShell:

```
New-NetFirewallRule -Name "myRDP" -DisplayName "Remote Desktop Protocol" -Protocol
```

```
TCP -LocalPort @(3389) -Action Allow
```

4. Run the following command in PowerShell:

```
New-NetFirewallRule -Name "myContainerRDP" -DisplayName "RDP Port for connecting to
Container" -Protocol TCP -LocalPort @(3390) -Action Allow
```