Connecting to Docker in Nano Server

Objective:

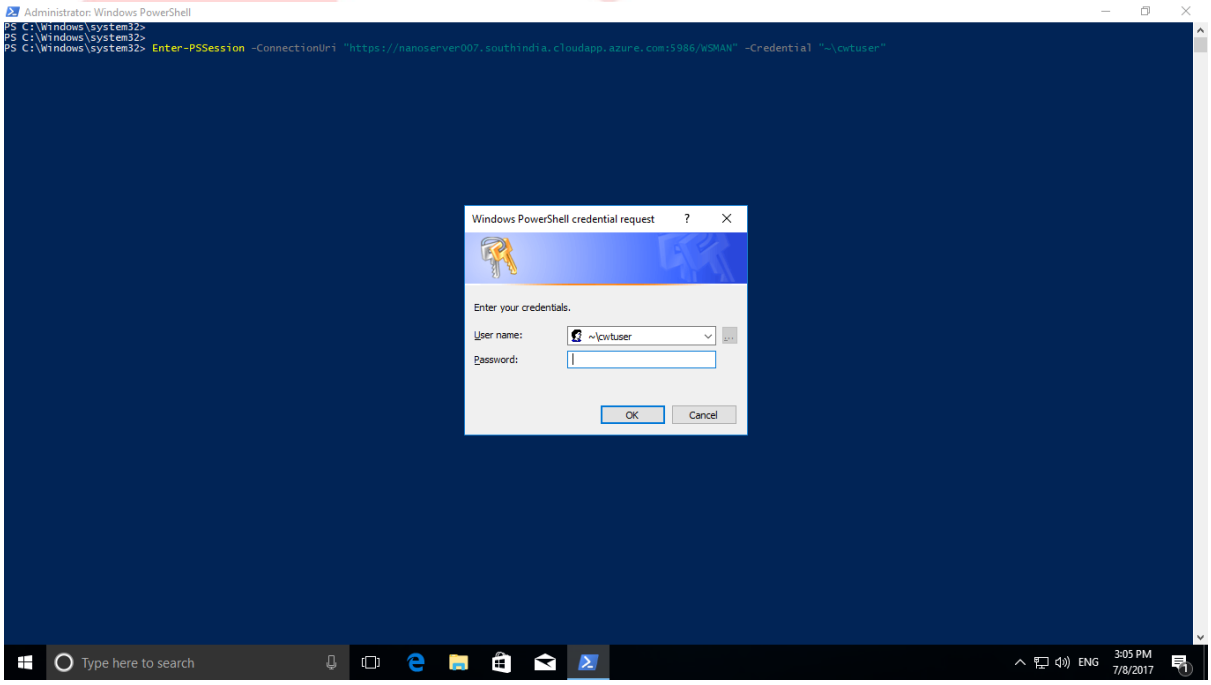
This is about creating a firewall path in between the local machine and the Nano server to get connected with the Docker. This will let access for local machines to access the Docker.

Step 1: Connecting to Nano Server using PowerShell

- Open PowerShell with administrator privileges. Run the following code to connect with the Nano Server.

  Enter-PSSession -ConnectionUri "https://nanoserver007.southindia.cloudapp.azure.com:5986/WSMAN" -Credential (Get-Credential)

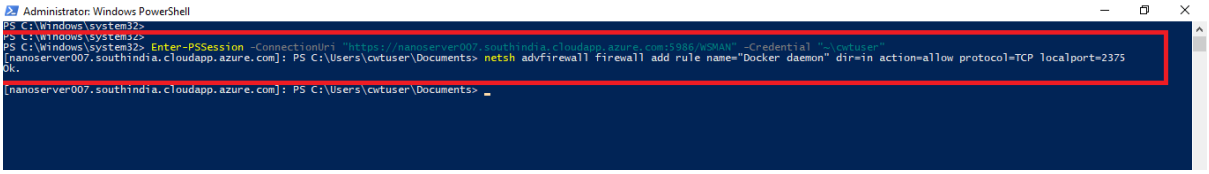
- This will ask you for the user name and password of the Nano Server VM. Enter them and login.



Step 2: Adding firewall rule

- Now we are going to add a firewall rule for incoming requests using the TCP port **2375.** This will help you to make Docker to respond to the requests from that port number. Run the following command to create the firewall rule.

  netsh advfirewall firewall add rule name="Docker daemon" dir=in action=allow protocol=TCP localport=2375



Step 3: Creating Host Configuration

- Our next activity is to create the Host configuration file that holds the host key. This will be saying to allow all the IP ranges through **TCP port 2375.** First, we shall create an empty JSON file in the Nano Server. Run this command for that.

new-item -Type File c:\ProgramData\docker\config\daemon.json

- Now add the host key into the daemon.json file which was created previously. For this run the below code.

Add-Content 'c:\ProgramData\docker\config\daemon.json' '{ "hosts": ["tcp://0.0.0.0:2375", "npipe://"] }'

- The above code will now create a firewall rule allowing all IP address ranges since we have used 0.0.0.0.
- Use the command **Get-Content 'c:\ProgramData\docker\config\daemon.json'** to get the host configuration which you saved now.

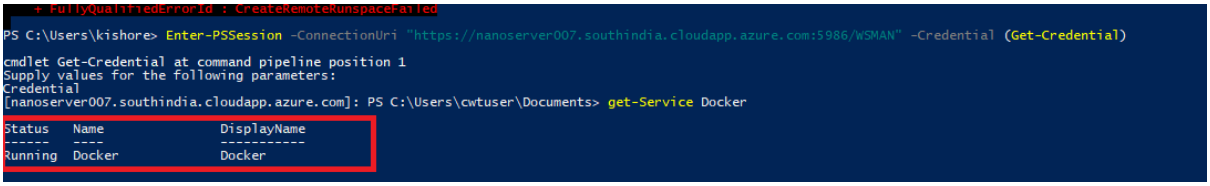
Step 4: Checking the Connectivity with Docker

- After saving the profile, restart the Docker using the command

Restart-Service docker

- Now check whether Docker is running by using the command

Get-Service docker



We have successfully created a Docker service in the Nano Server.