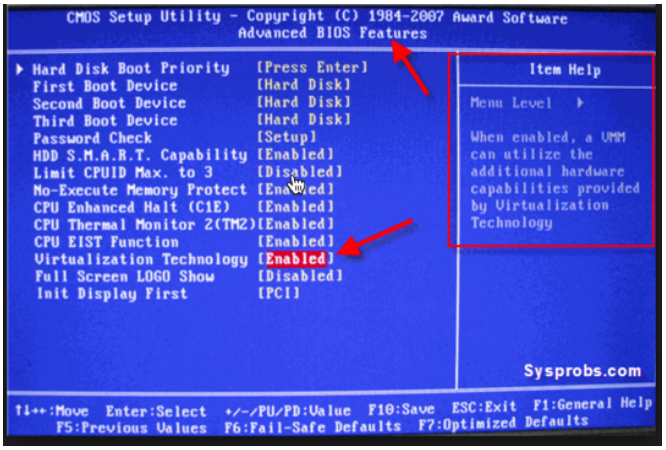
Manual

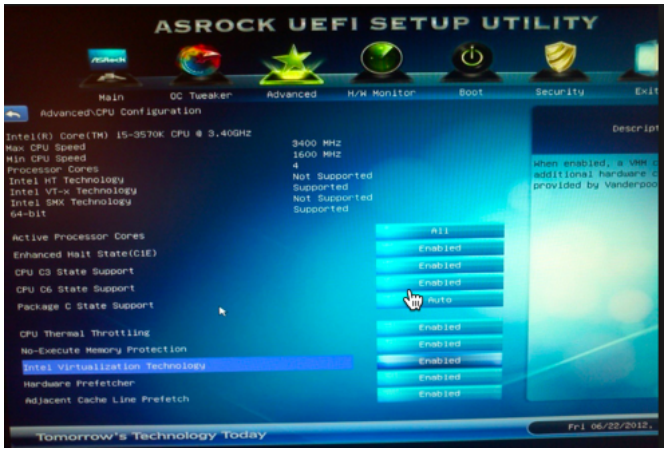
Install Docker Toolbox for Windows

Prerequisite

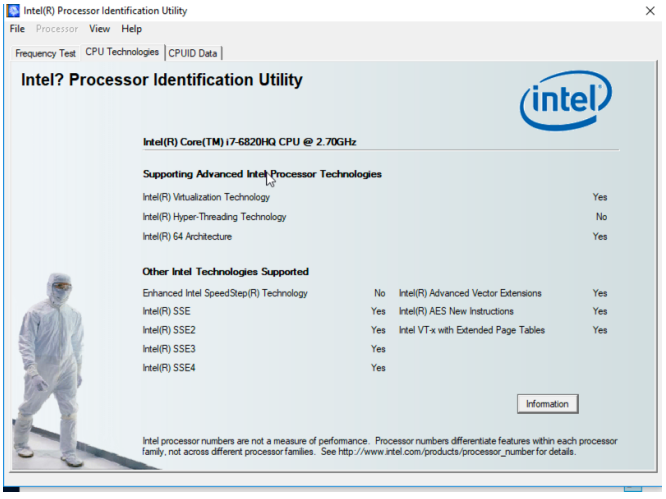
Enable Virtualization Technology (vt-x/AMD-v) on BIOS:

Normally virtualization technology should be enable by default.



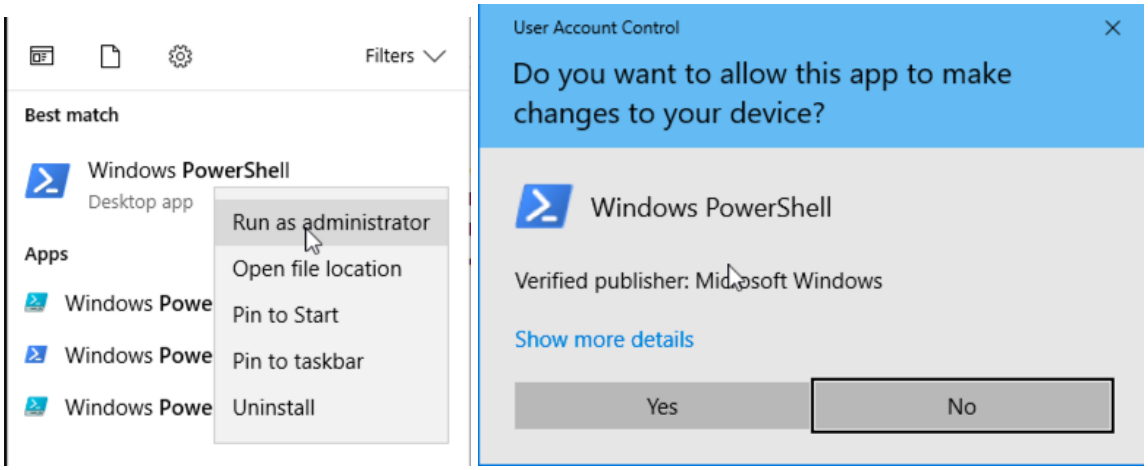


Checking Feature via Utility Tools

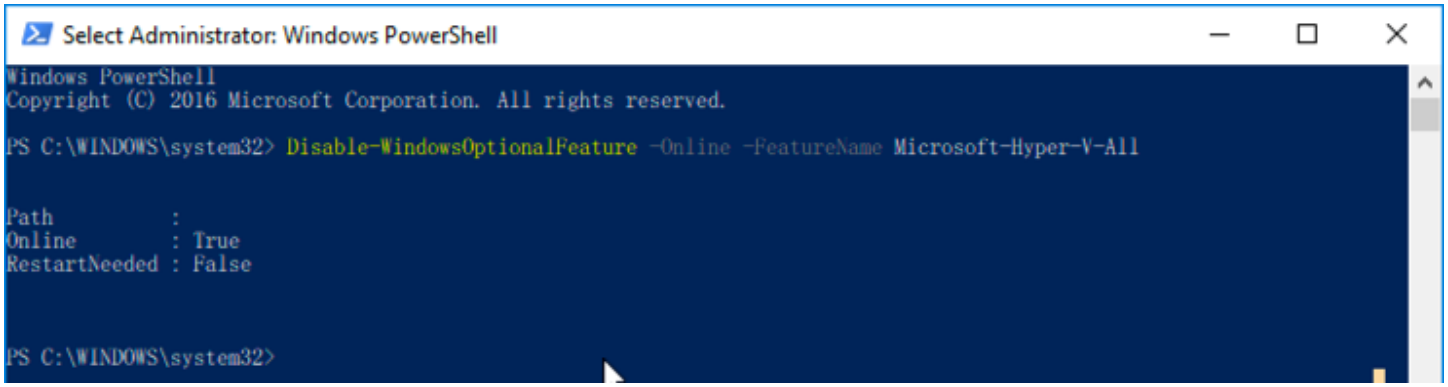


Install Docker Toolbox

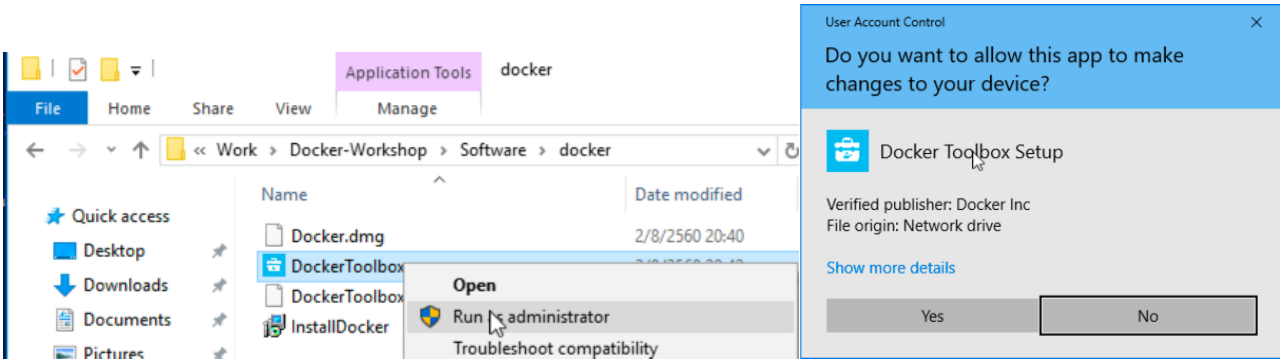
1. Open PowerShell by "select windows powershell" and run as administrator



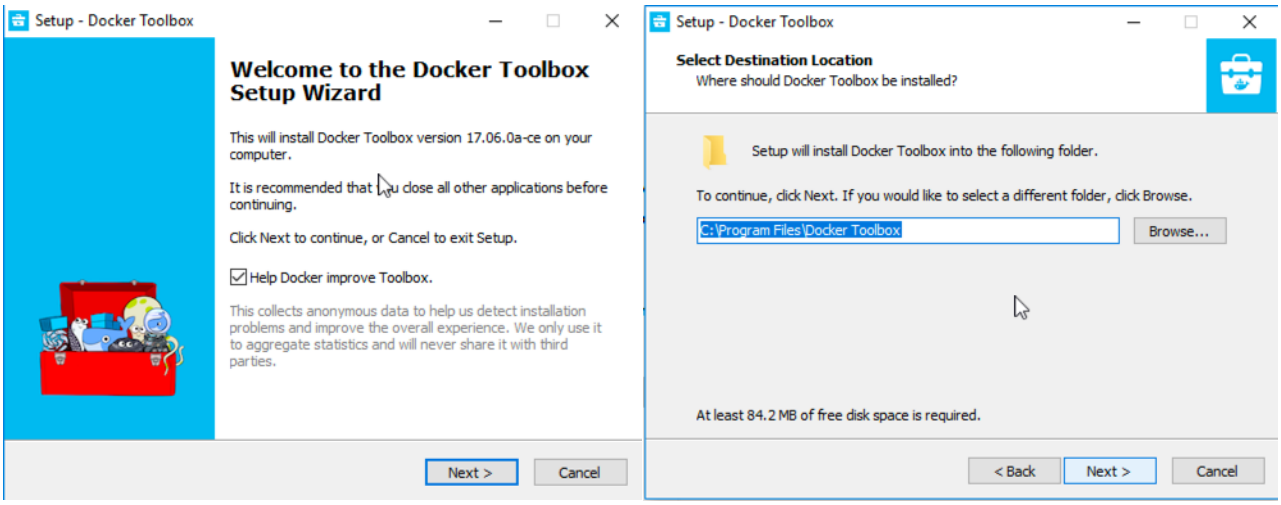
2. Run command " Disable-WindowsOptionalFeature -Online -FeatureName Microsoft-Hyper-V-All"

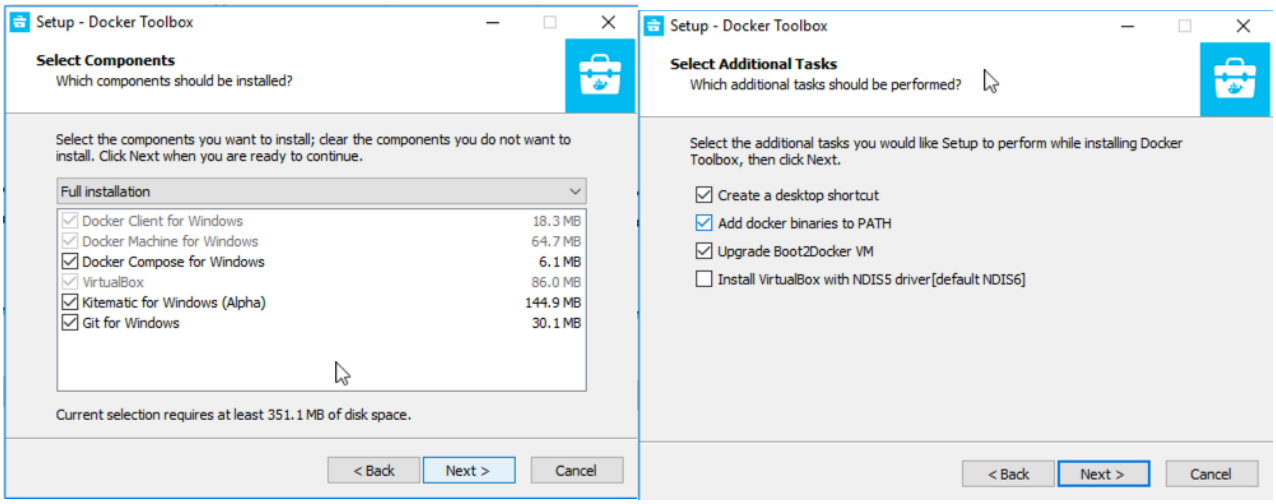


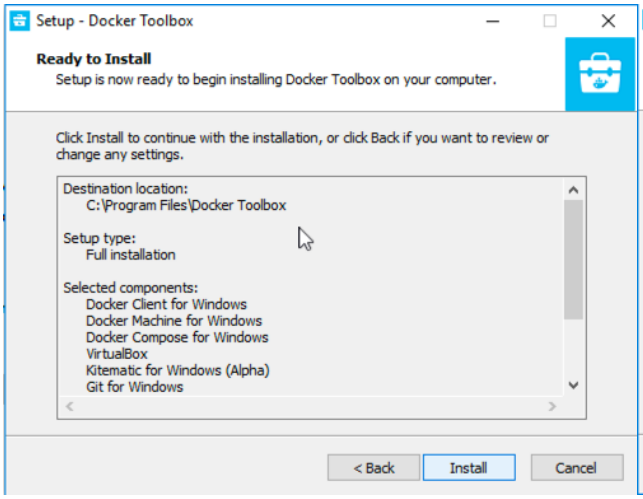
3. Right Click and "Run as administrator" on "DockerToolbox" and confirm "yes" on user account control.

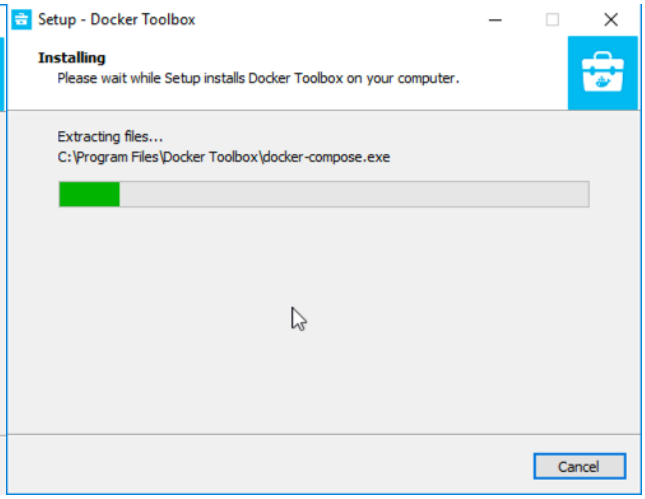


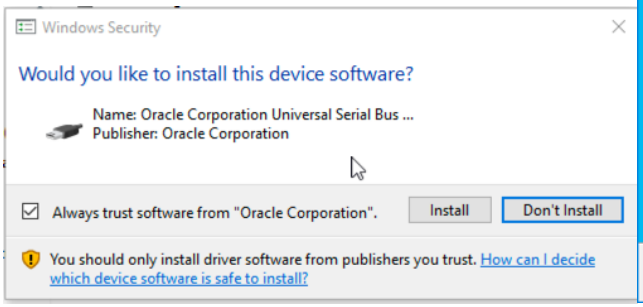
4. Following screen for setup






Setup - Docker Toolbox
Ready to Install
Setup is now ready to begin installing Docker Toolbox on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\Docker Toolbox
Setup type:
Full installation
Selected components:
Docker Client for Windows
Docker Machine for Windows
Docker Compose for Windows
VirtualBox
Kitematic for Windows (Alpha)
Git for Windows
< Back
Install
Cancel


Setup - Docker Toolbox
Installing
Please wait while Setup installs Docker Toolbox on your computer.
Extracting files...
C:\Program Files\Docker Toolbox\docker-compose.exe
Cancel

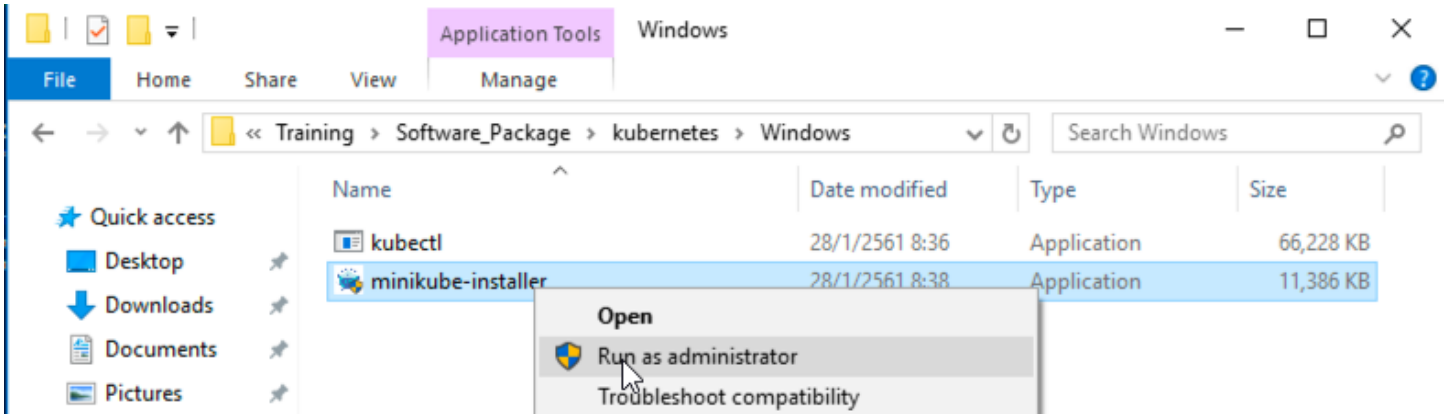

Windows Security
Would you like to install this device software?
Name: Oracle Corporation Universal Serial Bus ...
Publisher: Oracle Corporation
Always trust software from "Oracle Corporation".
Install
Don't Install
You should only install driver software from publishers you trust. How can I decide which device software is safe to install?


Setup - Docker Toolbox
Completing the Docker Toolbox Setup Wizard
Setup has finished installing Docker Toolbox on your computer. The application may be launched by selecting the installed shortcuts.
Click Finish to exit Setup.
View Shortcuts in File Explorer
Finish

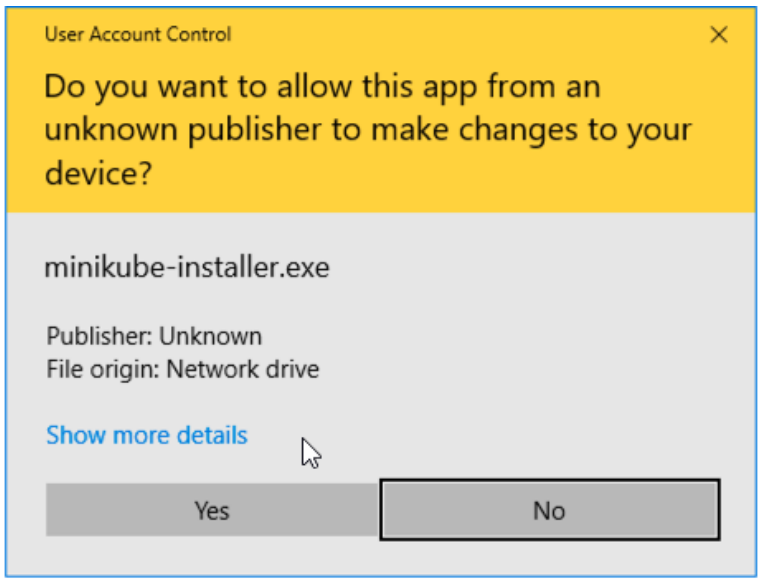
5. Open new powershell (Run as Administrator) and check version of docker by “docker version”

Install minikube

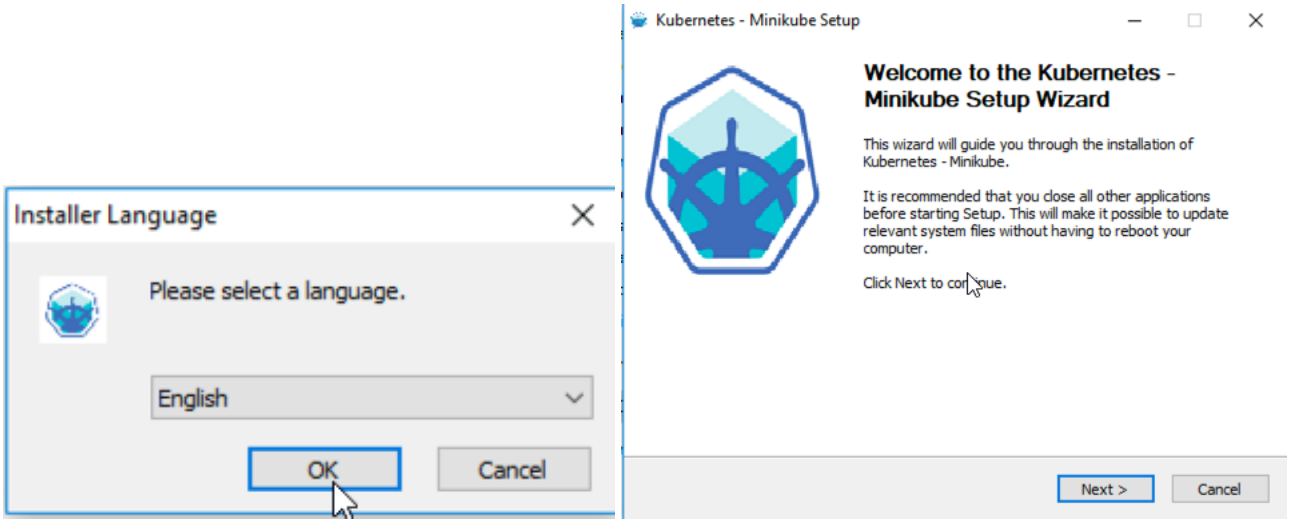
1. Right click on "minikube-installer" and choose "Run as administrator"

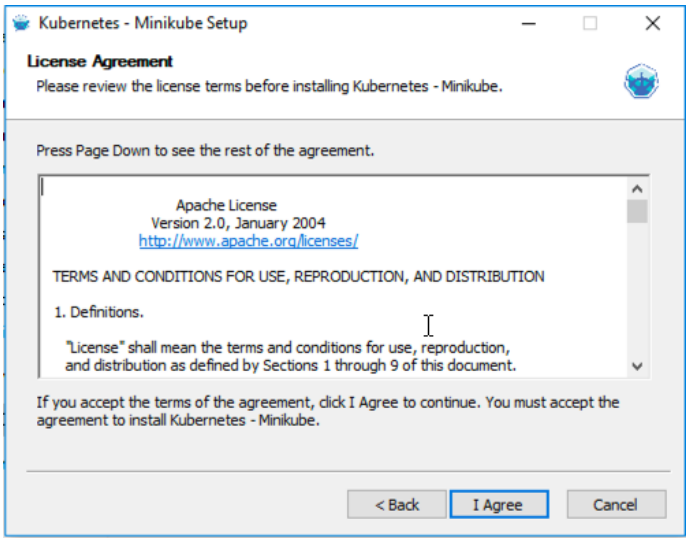


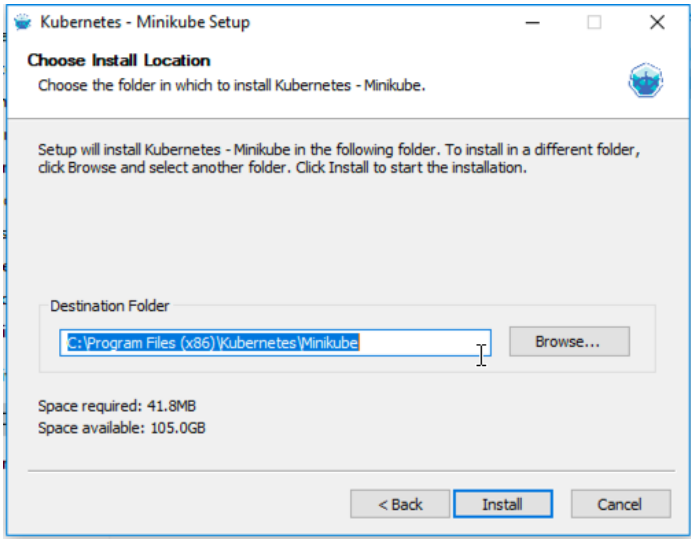
2. Click "Yes" for continute

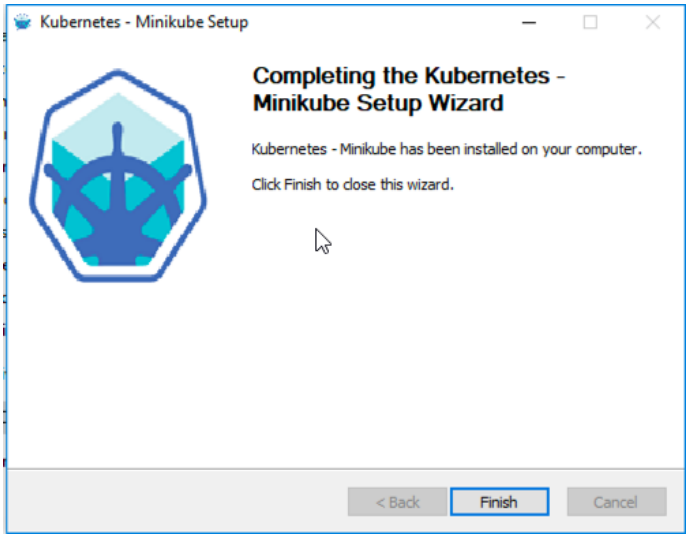


3. Follow screen for continute installation

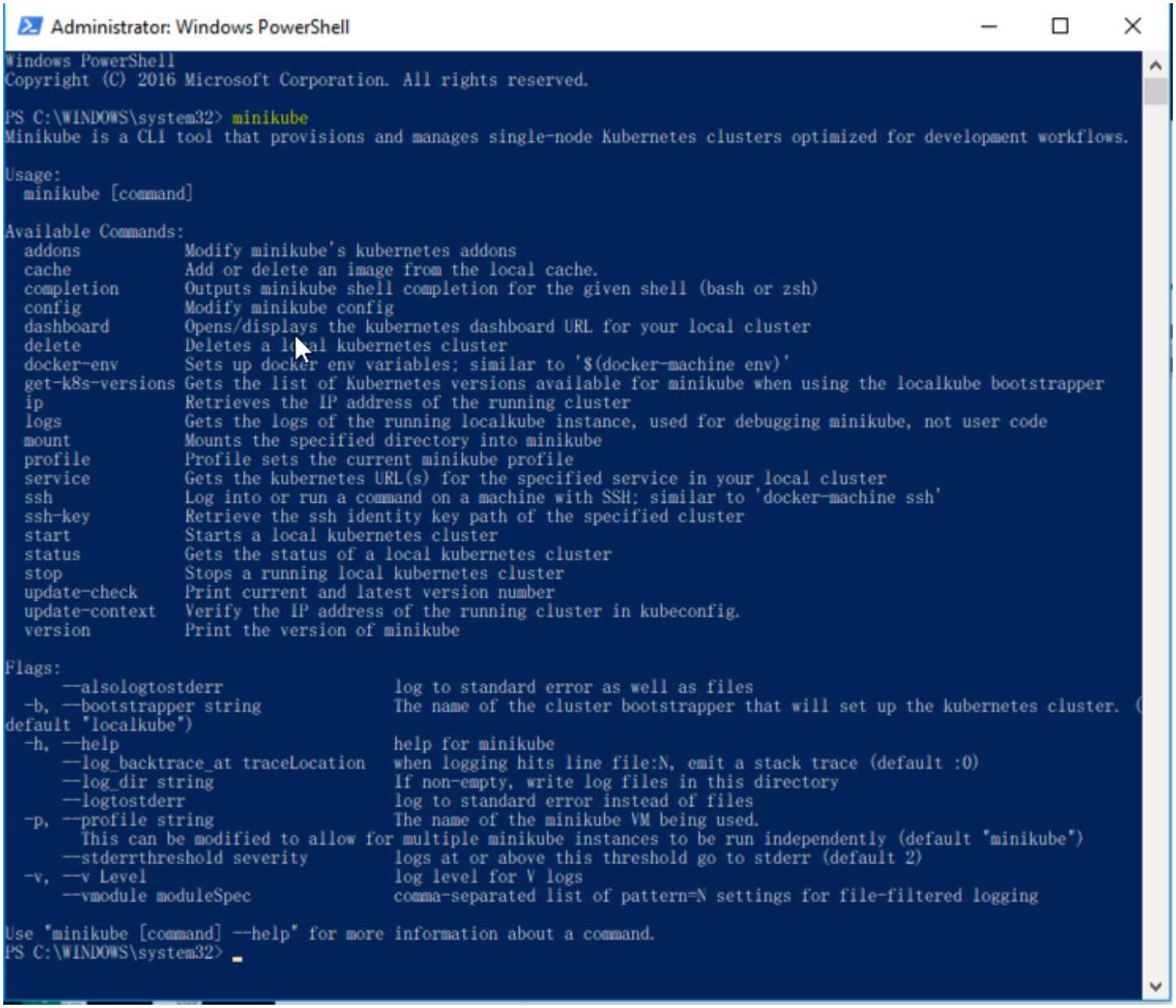






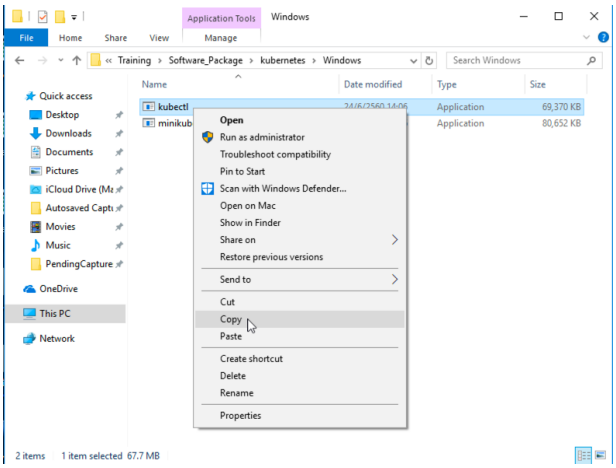


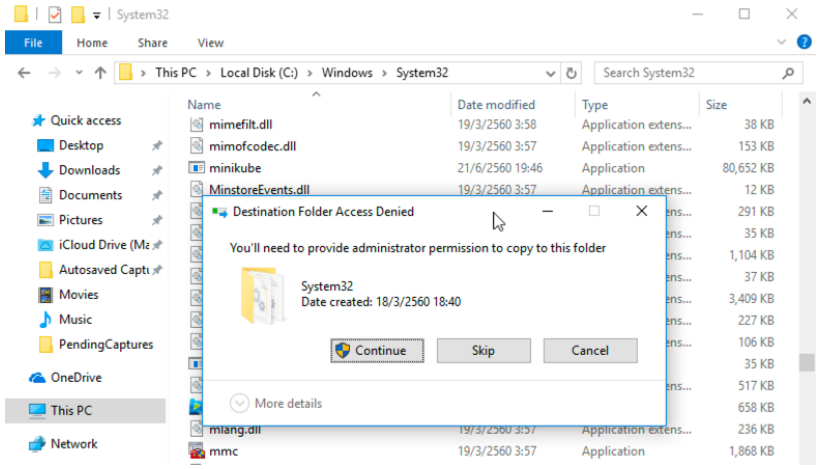
4. Test minikube command on powershell (Open new windows): minikube

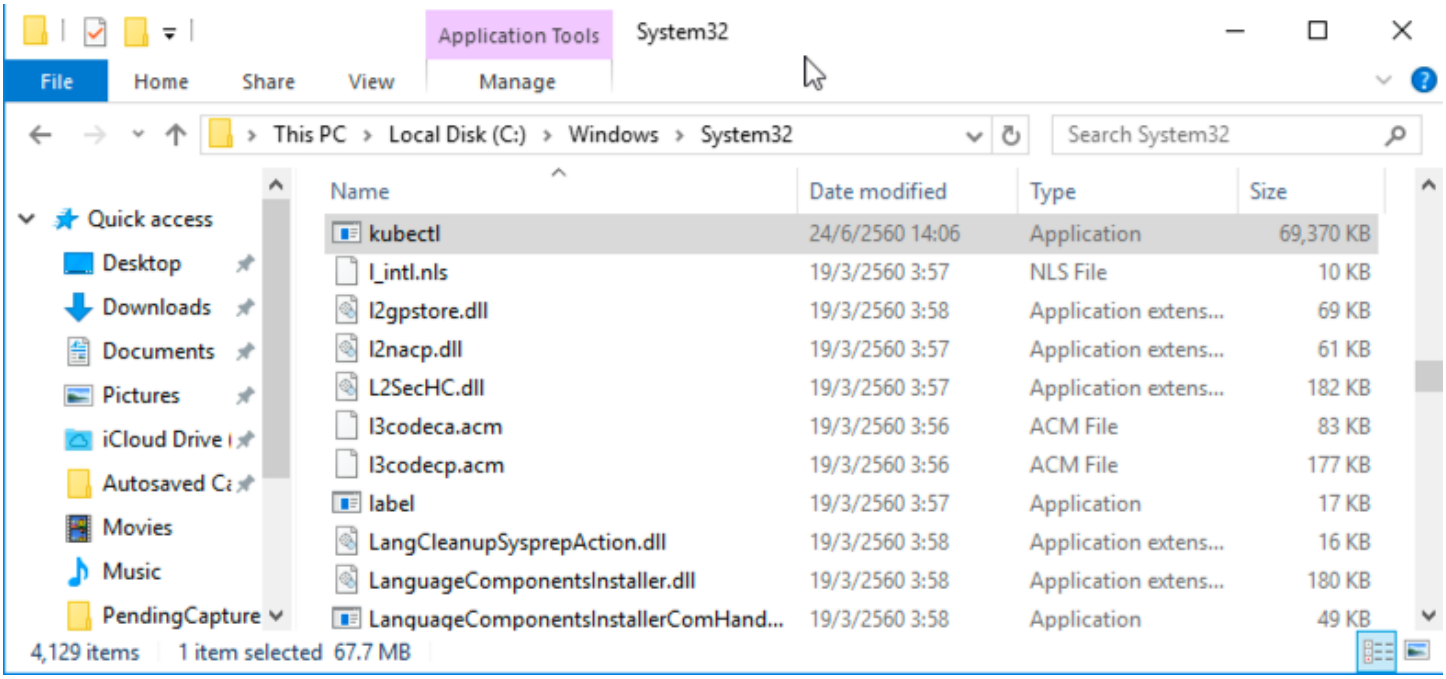


Install kubectl

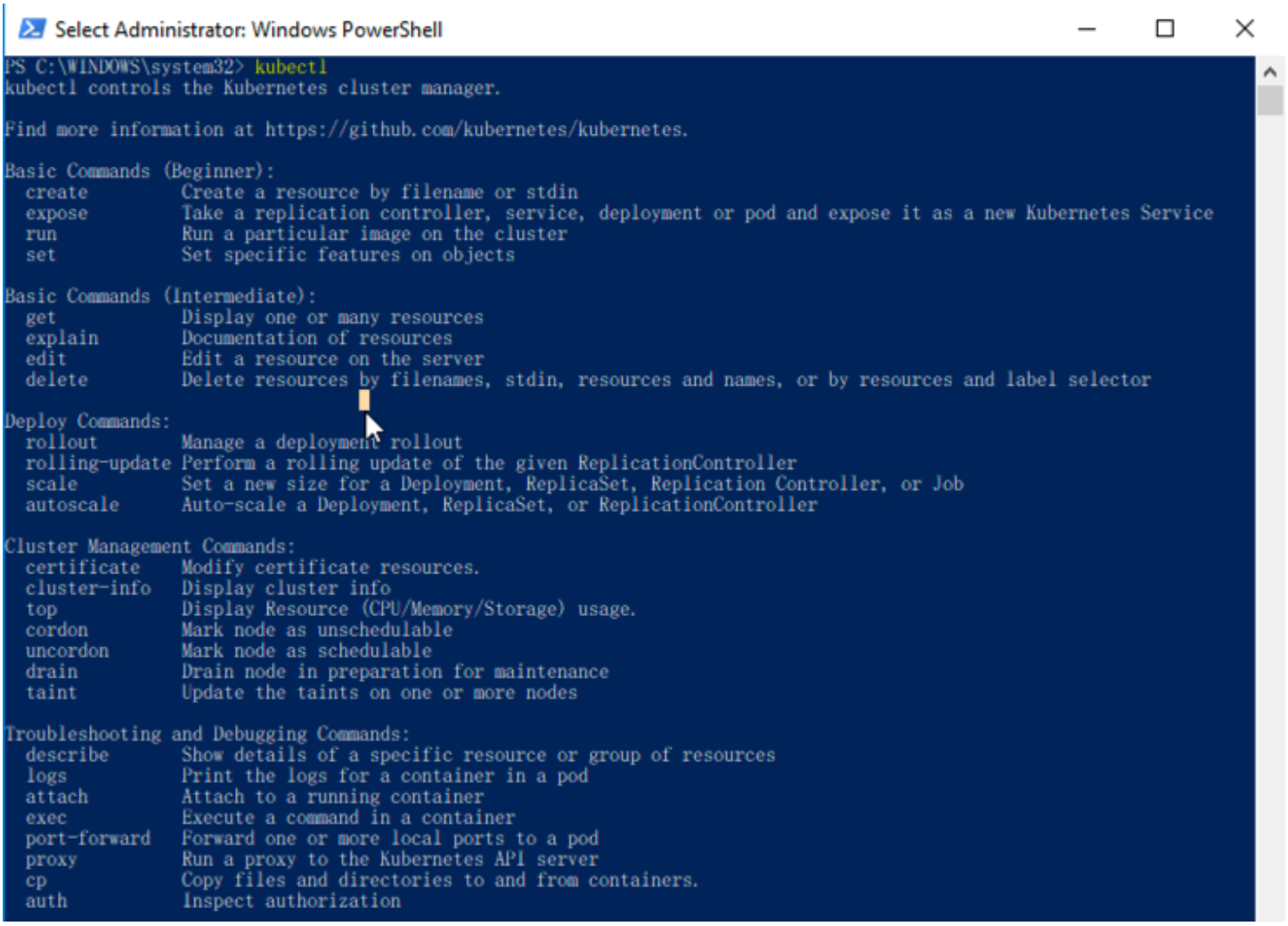
1. Right Click and Copy “kubectl” to c:\windows\system32





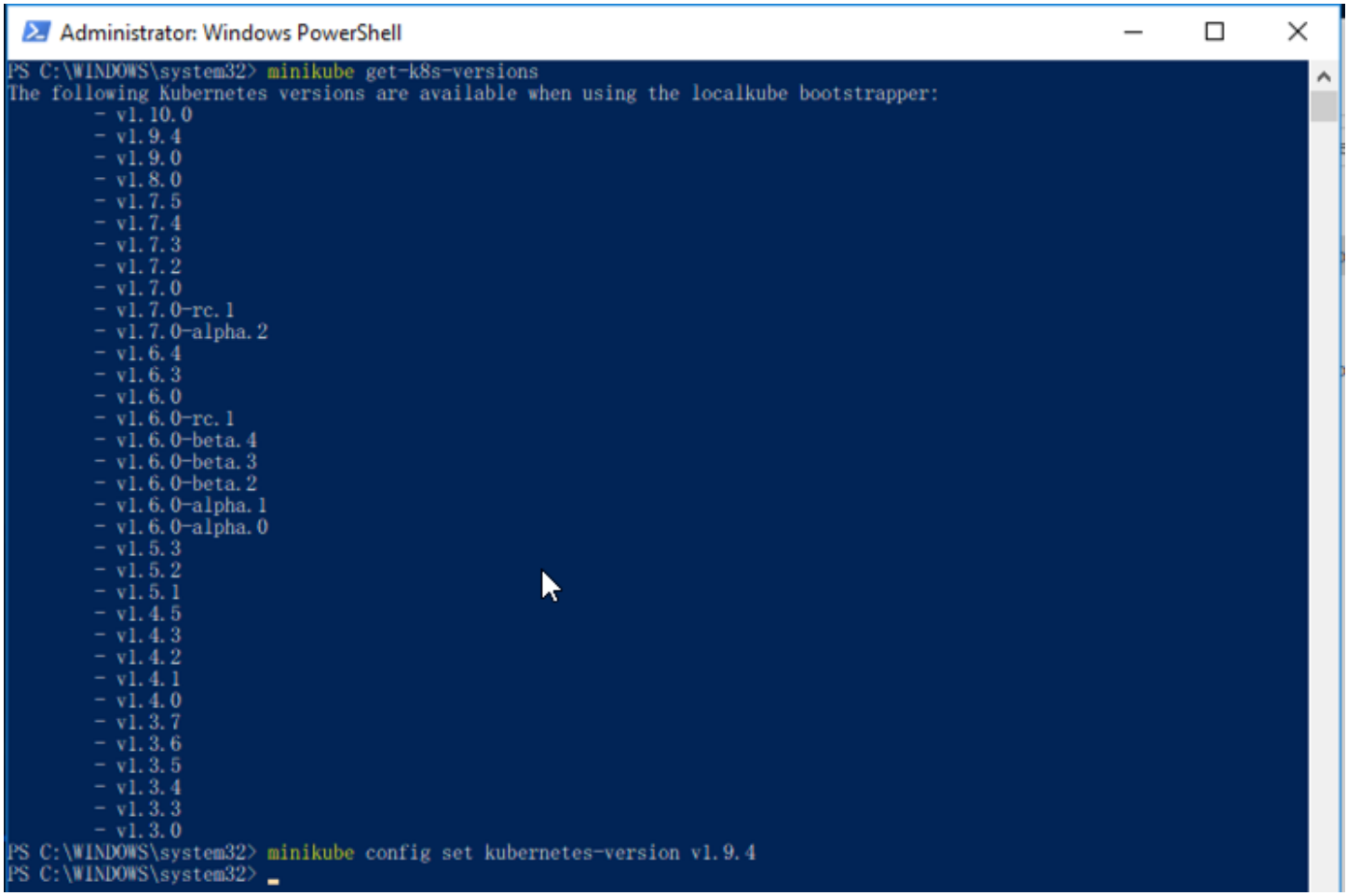


2. Check kubectl active command from powershell



3. Configure minikube for use kubernetes version 1.9.0 on Powershell by command:

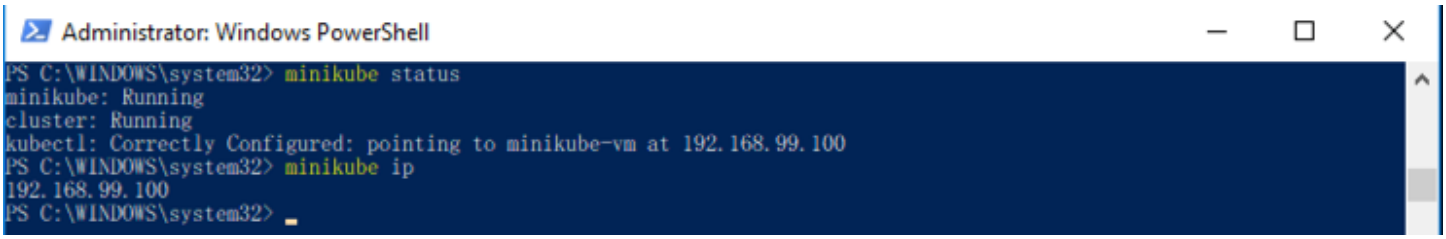
"minikube config set kubernetes-version v1.9.4"



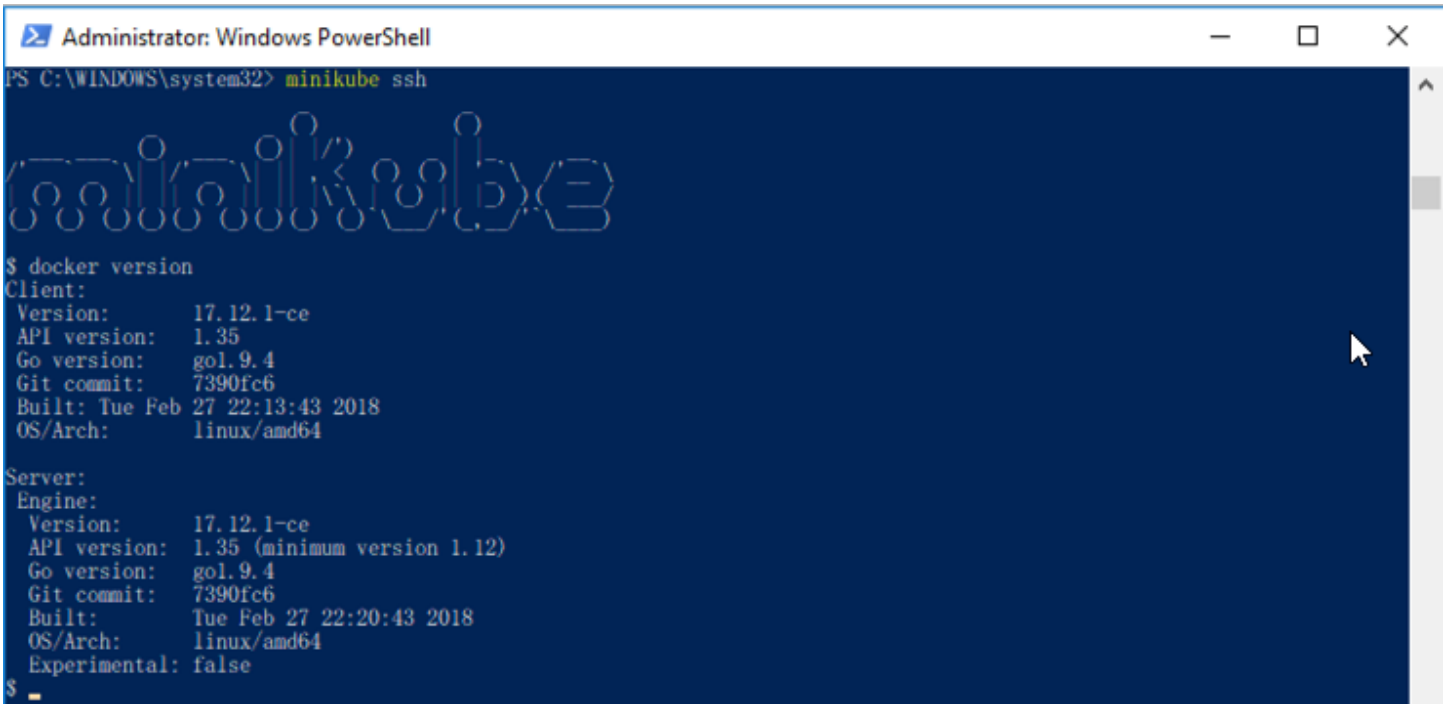
4. Create minikube virtual machine on Powershell by command:

"minikube start --vm-driver=virtualbox profile=minikubelab1"

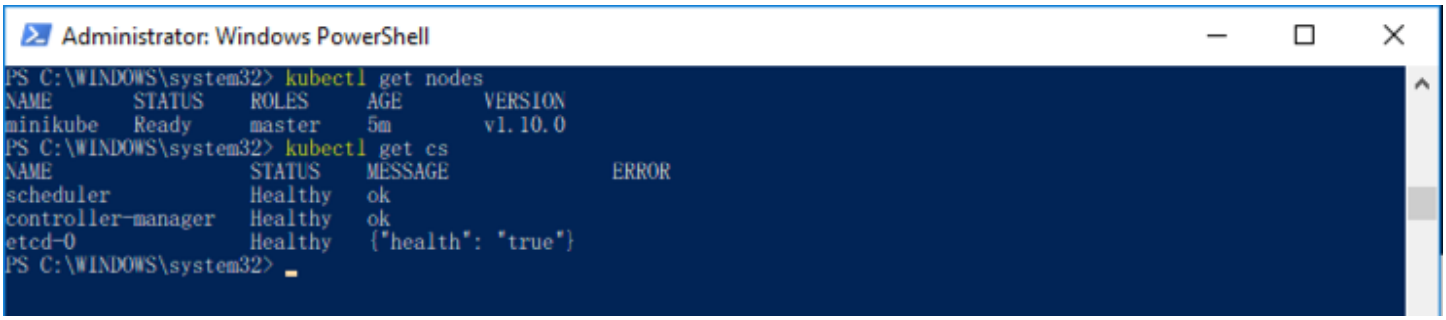
5. Check status of minikube's machine by command: "minikube status","minikube ip"



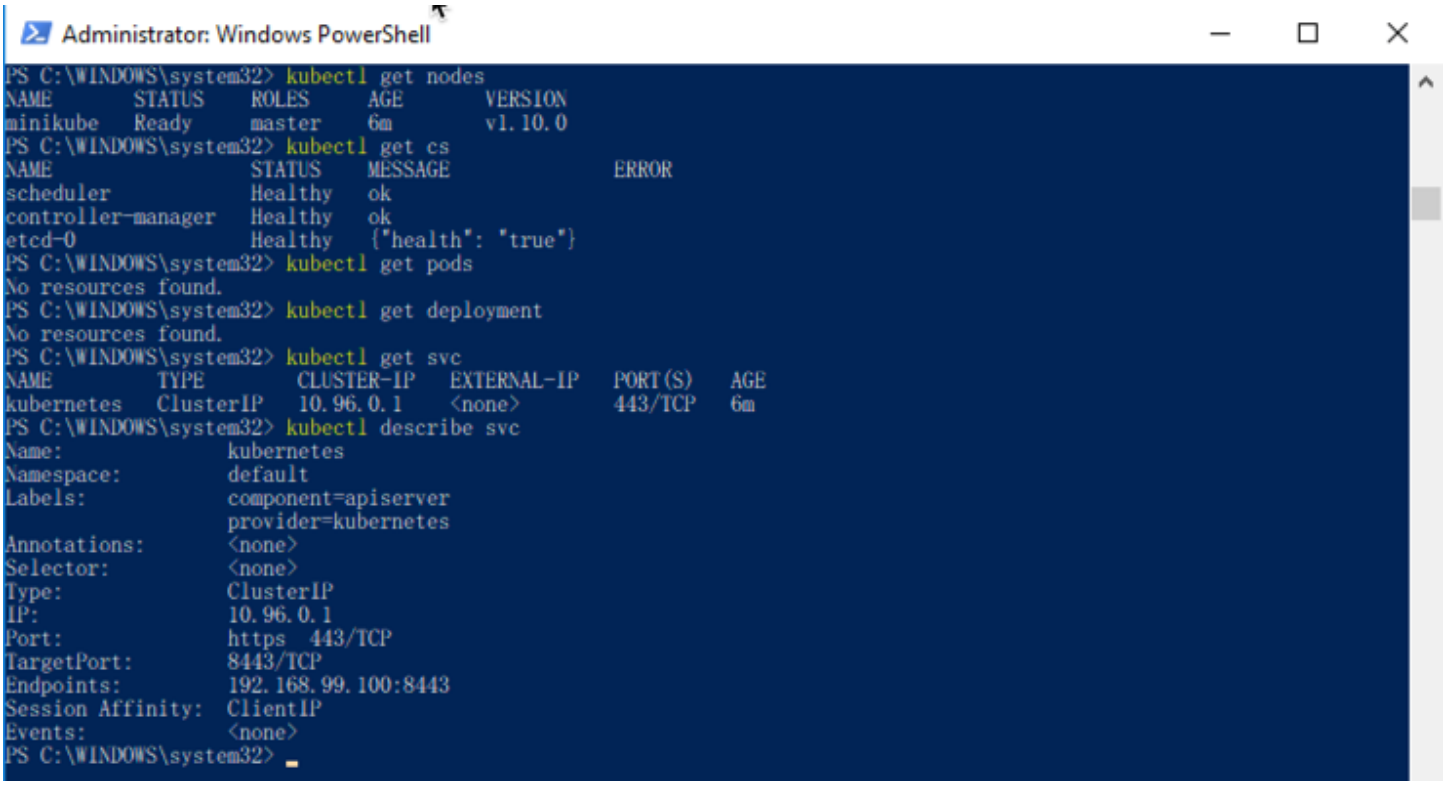
6. Test ssh to minikube's machine by command: minikube ssh, docker version



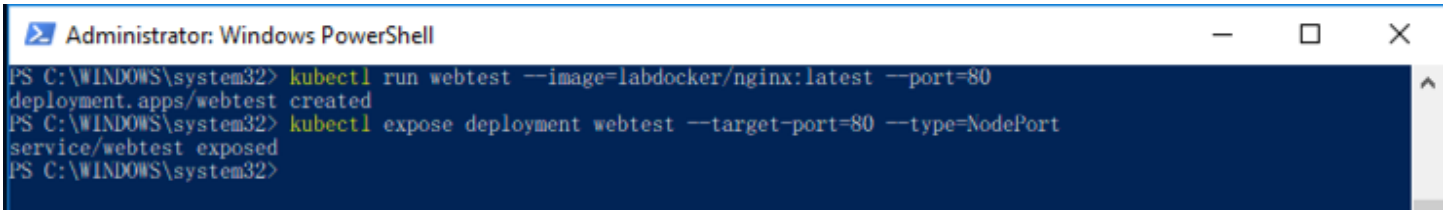
7. Check health of kubenetes cluster by command
    a. kubectl get nodes ➔ check node status
    b. kubectl get cs ➔ check cluster status



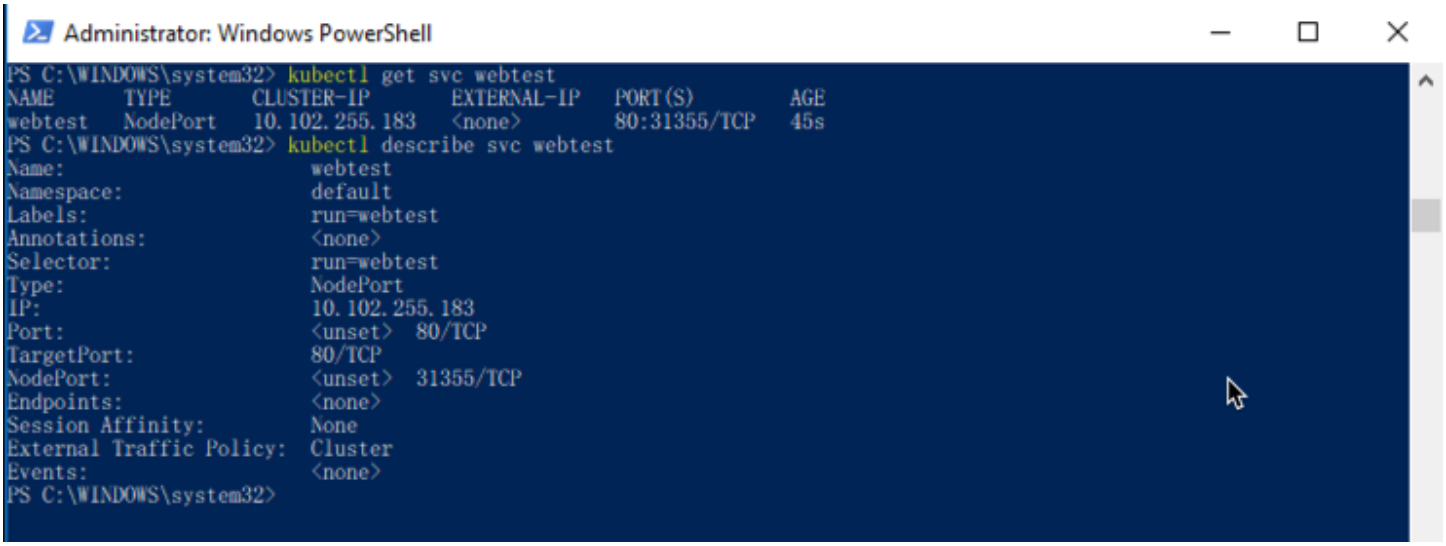
8. Check status of kubenetest's elements by command
    a. kubectl get pods ➔ check pods element
    b. kubectl get deployment ➔ check deployment element
    c. kubectl get svc ➔ check service deploy on kubenetes
    d. kubectl describe svc ➔ check service description on kubenetes



9. Test deployment "nginx" web server by command:
    a. kubectl run webtest --image=labdocker/nginx:latest --port=80 ➔ deployment nginx (image: labdocker/nginx:latest) with port 80 service
    b. kubectl expose deployment webtest --target-port=80 --type=NodePort ➔ expose pods with service 80 (http)



10. Check port mapping for service with host by command:
    a. kubectl get svc webtest ➔ check mapping service
    b. kubectl describe svc webtest ➔ check description of service (Check port for access. This example is "3211



11. Open browser for access test (Default IP: 192.168.99.100)

12. Stop deployment by command and recheck again
    a. kubectl delete svc webtest
    b. kubectl delete deployment webtest