Kubernetes Setup

- **Minikube setup Prerequisites**
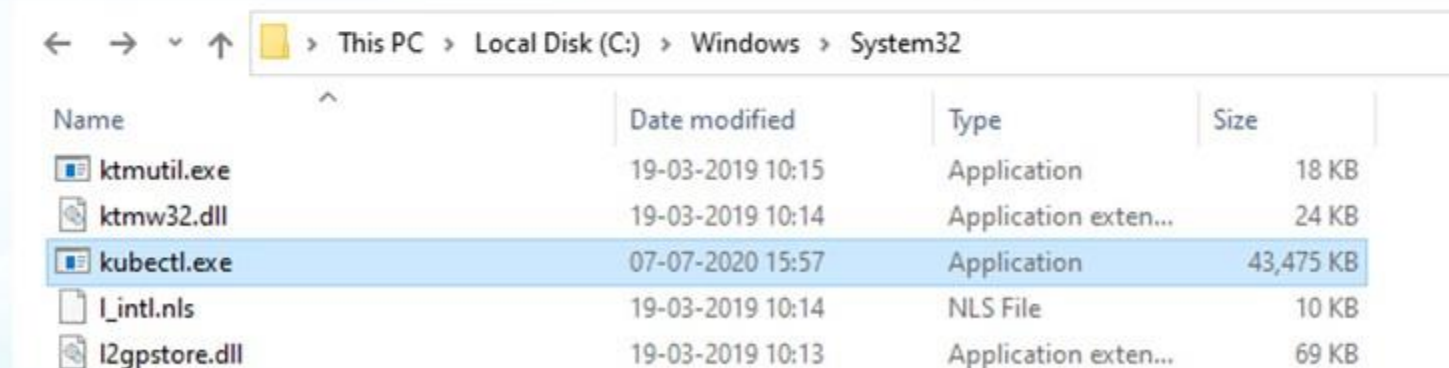 - ✓ VIRTUAL BOX
  - ✓ Minimum 4 GB RAM
  - ✓ Minimum 20 GB Storage

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Download Kubectl tools

- **Open the web browser and access the URL**

✓ https://storage.googleapis.com/kubernetes-release/release/v1.9.0/bin/windows/amd64/kubectl.exe
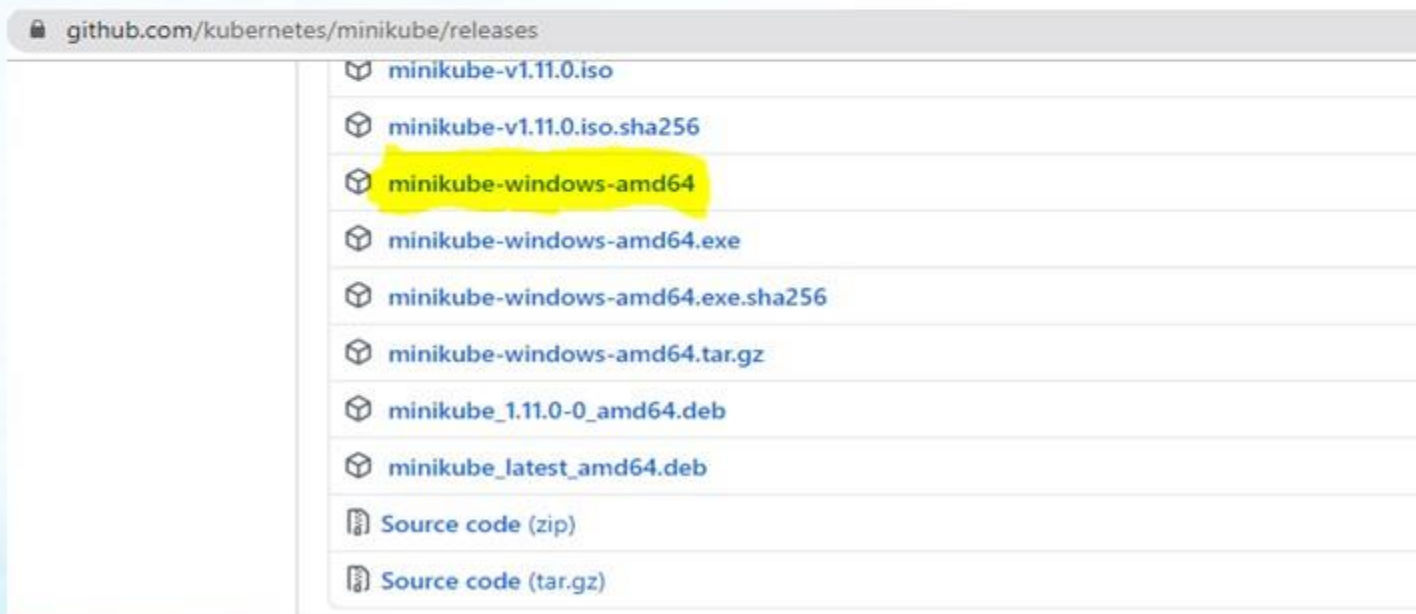
- **Copy the kubectl.exe to the C:\Windows\System32**

Name	Date modified	Type	Size
← → ⌄ ↑	This PC › Local Disk (C:) › Windows › System32		
ktmutil.exe	19-03-2019 10:15	Application	18 KB
ktmw32.dll	19-03-2019 10:14	Application exten...	24 KB
kubectl.exe	07-07-2020 15:57	Application	43,475 KB
l_intl.nls	19-03-2019 10:14	NLS File	10 KB
l2gpstore.dll	19-03-2019 10:13	Application exten...	69 KB

Download Minikube

- **Open the web browser and access the URL and Download (minikube-windows-amd64)**

✓ **https://github.com/kubernetes/minikube/releases**

🔒 github.com/kubernetes/minikube/releases

⬡ minikube-v1.11.0.iso

⬡ minikube-v1.11.0.iso.sha256

⬡ minikube-windows-amd64

⬡ minikube-windows-amd64.exe

⬡ minikube-windows-amd64.exe.sha256

⬡ minikube-windows-amd64.tar.gz

⬡ minikube_1.11.0-0_amd64.deb

⬡ minikube_latest_amd64.deb

🗎 Source code (zip)

🗎 Source code (tar.gz)

Configure Minikube

- Once the download completed, rename the file to minikube.exe
- After renaming the file minikube-windows-amd64 to minikube.exe copy the file in C:\Windows\System32 location

Name	Date modified	Type	Size
minikube.exe	07-07-2020 16:03	Application	54,373 KB
MinstoreEvents.dll	19-03-2019 10:14	Application exten...	12 KB
mintdh.dll	19-03-2019 10:14	Application exten...	404 KB

This PC > Local Disk (C:) > Windows > System32
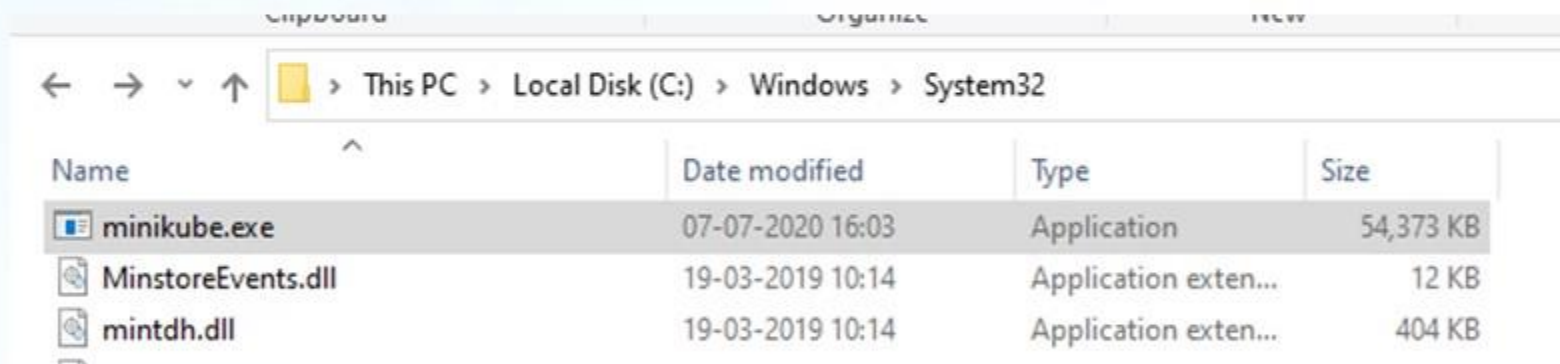
INSTALLING MINIKUBE

Open PowerShell (or) command prompt window and verify the minikube version.

- **minikube version**


```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\sushil> minikube version
minikube version: v1.11.0
commit: 57e2f55f47effe9ce396cea42a1e0eb4f611ebbd
PS C:\Users\sushil>
```

Once the ISO download completes, It starts a new VM

INSTALLING MINIKUBE
Type the command to start minikube VM
➢ **minikube start**

> Windows PowerShell

```
PS C:\Users\sushil> minikube start
* minikube v1.11.0 on Microsoft Windows 10 Pro 10.0.18363 Build 18363
* Using the virtualbox driver based on existing profile
* Starting control plane node minikube in cluster minikube
* virtualbox "minikube" VM is missing, will recreate
```

After several minutes, minikube is ready to use

> Windows PowerShell

```
PS C:\Users\sushil> minikube start
* minikube v1.11.0 on Microsoft Windows 10 Pro 10.0.18363 Build 18363
* Using the virtualbox driver based on existing profile
* Starting control plane node minikube in cluster minikube
* virtualbox "minikube" VM is missing, will recreate.
* Creating virtualbox VM (CPUs=2, Memory=4000MB, Disk=20000MB) ...
! This VM is having trouble accessing https://k8s.gcr.io
* To pull new external images, you may need to configure a proxy: https://
/proxy/
* Preparing Kubernetes v1.18.3 on Docker 19.03.8 ...
* Verifying Kubernetes components...
* Enabled addons: dashboard, default-storageclass, storage-provisioner
* Done! kubectl is now configured to use "minikube"
PS C:\Users\sushil>
```

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VERIFICATION of MINIKUBE
Verify the minikube status
  ➢ **minikube status**

```
 Windows PowerShell
PS C:\Users\sushil> minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

PS C:\Users\sushil>
```

To get the nodes list, type kubectl get nodes command

```
PS C:\Users\sushil> kubectl get nodes
NAME        STATUS   ROLES    AGE   VERSION
minikube    Ready    master   14m   v1.18.3
PS C:\Users\sushil>
```

To get the minikube ip, type minikube ip command

```
PS C:\Users\sushil> minikube ip
192.168.99.101
PS C:\Users\sushil> _
```

Thank You