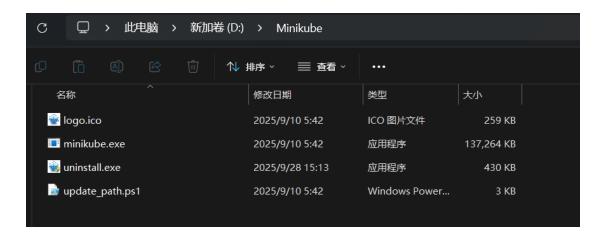
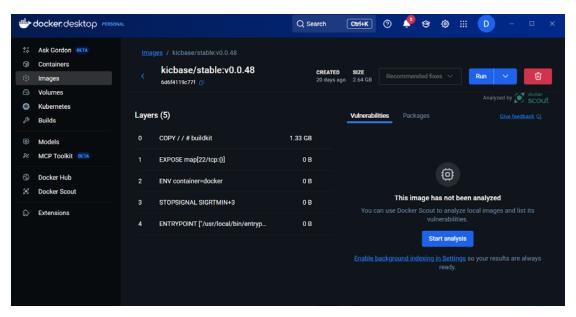
1. download minikube from official website



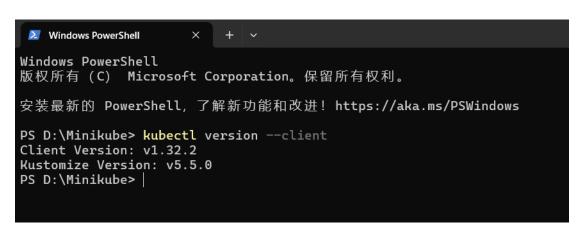
2. load the kicbase image into Docker Desktop





3. download kubectl and test its version

C	<u> </u>	> 此	刨脑 >	新加	卷 (D:)	> Mi	nikube >				
O					♦	排序 ~	畫 查看 ∨				
名	称					修改日期	1		类型	大小	
TAR	ᠷ kicbase.tar					2025/9/28 12:30			TAR 压缩文件	1,283,994	
	kubectl.kubectl						29 9:18		KUBECTL 文件	60,402 KB	
₩	logo.icc)				2025/9/	10 5:42		ICO 图片文件	259 KB	
	minikube.exe					2025/9/10 5:42			应用程序	137,264 KB	
*	uninstall.exe					2025/9/28 15:13			应用程序	430 KB	
	update_	path.ps1				2025/9/	10 5:42		Windows Power	3 KB	



4. install minikube

```
PS D:\Minikube> minikube start --image-repository='registry.aliyuncs.com/google_containers' --driver=docker --kubernetes
-version=v1.28.0

* Microsoft Windows 11 Home China 10.9.26100.6584 Build 26100.6584 上的 minikube v1.37.0

* Mizpha docker work

* 正在使用镜像存储库 registry.aliyuncs.com/google_containers

* 使用具有 root 权限的 Docker Desktop 驱动程序

* 在生耕中 "minikube" 启动节点 "minikube" primary control-plane

* 正在按取其础镜像 v0.9.48 ...

! The image 'registry.aliyuncs.com/google_containers/k8s-minikube/storage-provisioner:v5' was not found; unable to add i t to cache.
! minikube was unable to download registry.aliyuncs.com/google_containers/k8s-minikube/kicbase:v0.0.48, but successfully downloaded docker:io/kicbase/stable:v0.0.48 as a fallback image

* 创建 docker container (CPU=2, 内存=8100MB) ...|

* 找到的网络选项:
- NO_PROXY=*
- NO_PROXY=*
- NO_PROXY=*
- NO_PROXY=*
- NO_PROXY=*
- ET Docker 28.4.0 中准备 Kubernetes v1.28.0...|
- env NO_PROXY=*

X 无法加载缓存的镜像: LoadCachedImages: CreateFile C:\Users\beibe\.minikube\cache\images\amd64\registry.aliyuncs.com\google_containers/com\square\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainers\cache\noglecontainer
```

```
* 配置 bridge CNI (Container Networking Interface) ...

* 正在验证 Kubernetes 组件...

- 使用镜像 registry.aliyuncs.com/google_containers/k8s-minikube/storage-provisioner:v5 (全局镜像仓库)

* 启用插件: storage-provisioner, default-storageclass

! C:\Program Files\Docker\Docker\Docker\resources\bin\kubectl.exe 的版本为 1.34.1, 可能与 Kubernetes 1.28.0 不兼容。

- 想要使用 kubectl v1.28.0 吗? 尝试使用 'minikube kubectl -- get pods -A' 命令

* 完成! kubectl 现在已配置,默认使用"minikube"集群和"default"命名空间
```

5. create new deployments

```
PS D:\Minikube> kubectl create deployment hello-node --image=registry.k8s.io/e2e-test-images/agnhost:2.53 -- /agnhost ne texec --http-port=8080 deployment.apps/hello-node created PS D:\Minikube> kubectl get deployments NAME READY UP-TO-DATE AVAILABLE AGE hello-node 0/1 1 0 8s
```

6. view pods and events

```
PS D:\Minikube> kubectl get pods
READY
                                                                                                                        STATUS
ImagePullBackOff
                                                                                                                                                                                      RESTARTS
    nello-node-b8688cb56-9xh4r 0/1
         D:\Minikube> kubectl get events
ST SEEN TYPE REASON
m Normal Scheduled
PS D:\Minikube> kubectl get events
LAST SEEN TYPE REASON OBJECT

27m Normal Scheduled pod/hello-node-b8688cb56-9xh4r Successfully assigned default/hello-node-b8688cb56-9xh4r to minikube
25m Warning Failed pod/hello-node-b8688cb56-9xh4r Failed to pull image "registry.k8s.io/e2e-test-images/agnhost:2.53": Error response from daemon: Get "https://registry.k8s.io/v2/": proxyconnect tcp: dial tcp
127.0.0.1:7890: connect: connection refused
25m Warning Failed pod/hello-node-b8688cb56-9xh4r Error: ErrImagePull
17m Normal BackOff pod/hello-node-b8688cb56-9xh4r Back-off pulling image "registry.k8s.io/e2e-test-imagePull pulling image "registry.k8s.io/e2e-test-imagePull pulling image "regist
 Normal Backnown
O/e2e-test-images/agnhost:2.53"
26m Warning Failed
25m Normal Pulling
t-images/agnhost:2.53"
                                                                                                                                                            pod/hello-node-b8688cb56-9xh4r
pod/hello-node-b8688cb56-9xh4r
                                                                                                                                                                                                                                                                         Error: ImagePullBackOff
Pulling image "registry.k8s.io/e2e-tes
                                                                       SuccessfulCreate
                                                                                                                                                            replicaset/hello-node-b8688cb56
                                                                                                                                                                                                                                                                        Created pod: hello-node-b8688cb56-9xh4
27m
cb56 to 1
69m
                                                                      ScalingReplicaSet
                                                                                                                                                                                                                                                                         Scaled up replica set hello-node-b8688
                                       Normal
                                                                                                                                                            deployment/hello-node
                                       Normal
                                                                      Starting
NodeHasSufficientMemory
                                                                                                                                                            node/minikube
                                                                                                                                                                                                                                                                         Starting kubelet.
Node minikube status is now: NodeHasSu
                                                                                                                                                            node/minikube
                                                                      NodeHasNoDiskPressure
                                                                                                                                                            node/minikube
                                                                                                                                                                                                                                                                         Node minikube status is now: NodeHasNo
 DiskPressure
                                                                       NodeHasSufficientPID
                                                                                                                                                            node/minikube
                                                                                                                                                                                                                                                                         Node minikube status is now: NodeHasSu
 69m
fficientPID
                                       Normal
                                                                       NodeNotReady
                                                                                                                                                            node/minikube
                                                                                                                                                                                                                                                                         Node minikube status is now: NodeNotRe
 ady
69m
                                       Normal
                                                                      NodeAllocatableEnforced node/minikube
                                                                                                                                                                                                                                                                         Updated Node Allocatable limit across
```

7. view configuration

```
PS D:\Minikube> kubectl config view
apiVersion: v1
clusters:
- cluster:
    certificate-authority: C:\Users\beibe\.minikube\ca.crt
    extensions:
    - extension:
        last-update: Mon, 29 Sep 2025 11:34:56 CST
        provider: minikube.sigs.k8s.io
        version: v1.37.0
      name: cluster_info
    server: https://127.0.0.1:57958
  name: minikube
contexts:
 context:
    cluster: minikube
    extensions:
    - extension:
        last-update: Mon, 29 Sep 2025 11:34:56 CST
        provider: minikube.sigs.k8s.io
        version: v1.37.0
      name: context_info
    namespace: default
    user: minikube
  name: minikube
current-context: minikube
kind: Config
users:
 name: minikube
```

8. create new services

```
PS D:\Minikube> kubectl expose deployment hello-node --type=LoadBalancer --port=8080
service/hello-node exposed
PS D:\Minikube> kubectl get services
NAME
                            CLUSTER-IP
             TYPE
                                            EXTERNAL-IP
                                                          PORT(S)
                                                                            AGE
hello-node
             LoadBalancer
                            10.100.62.233
                                            <pending>
                                                          8080:30324/TCP
                                                                           10s
                            10.96.0.1
                                                          443/TCP
kubernetes
             ClusterIP
                                                                            72m
                                            <none>
```

9. view addons

```
PS D:\Minikube> minikube addons list
             ADDON
                    NAME
                                         PROFILE
                                                          STATUS
                                                                                          MAINTAINER
                                                                        3rd party (Ambassador)
3rd party (AMD)
minikube
                                         minikube
                                                       disabled
   amd-gpu-device-plugin
                                         minikube
                                                        disabled
                                                       disabled
disabled
  auto-pause
cloud-spanner
                                         minikube
                                         minikube
                                                                        Google
   csi-hostpath-driver
                                         minikube
                                                       disabled
                                                                         Kubernetes
                                                       enabled v
                                                                        Kubernetes
   dashboard
                                         minikube
   default-storageclass
                                         minikube
                                                                        Kubernetes
                                                                        3rd party (Elastic)
Google
   efk
freshpod
                                                       disabled
                                         minikube
                                                       disabled
                                         minikube
                                                       disabled
  gcp-auth
                                         minikube
                                                                        Google
   gvisor
                                                                        minikube
                                         minikube
                                                       disabled
                                                                        3rd party (kinvolk.io)
3rd party (InAccel [info@inaccel.com])
   headlamp
                                         minikube
                                                       disabled
                                                       disabled
                                         minikube
   inaccel
                                                       disabled
                                                                        Kubernetes
                                         minikube
   ingress
   ingress-dns
                                         minikube
                                                        disabled
                                                                        minikube
                                                                        3rd party (inspektor-gadget.io)
3rd party (Istio)
3rd party (Istio)
3rd party (Kong HQ)
   inspektor-gadget
                                         minikube
                                                       disabled
                                                       disabled
   istio
                                         minikube
                                                       disabled
   istio-provisioner
                                         minikube
   kong
kubeflow
                                         minikube
                                                       disabled
                                         minikube
                                                        disabled
                                                                        3rd party
                                                                        3rd party (kubetail.com)
3rd party (KubeVirt)
3rd party (unknown)
3rd party (MetalLB)
                                                       disabled
disabled
   kubetail
                                         minikube
                                         minikube
   kubevirt
                                         minikube
                                                       disabled
   logviewer
                                                        disabled
   metallb
                                                       enabled <a href="#">M</a>
<a href="#">disabled</a>
   metrics-server
                                         minikube
                                                                        Kubernetes
                                                                        3rd party (NVIDIA)
   nvidia-device-plugin
                                         minikube
```

10. enable addons metrics-server

```
PS D:\Minikube> minikube addons enable metrics-server
* metrics-server 是由 Kubernetes 维护的插件。如有任何问题,请在 GitHub 上联系 minikube。
您可以在以下链接查看 minikube 的维护者列表: https://github.com/kubernetes/minikube/blob/master/OWNERS
- 使用镜像 registry.aliyuncs.com/google_containers/metrics-server/metrics-server:v0.8.0@sha256:89258156d0e9af60403eafd
444da9676f66f6067079344468ccc17e42b199aee2 (全局镜像合库)
** 启动 'metrics-server' 插件
PS D:\Minikube> kubectl get pod,svc -n kube-system
NAME READY STATUS
                                                                                                                                                 RESTARTS
                                                                                                                                                     (40m ago)
(40m ago)
(40m ago)
(40m ago)
(40m ago)
(40m ago)
pod/coredns-66f779496c-g5hqm
                                                                                                       Running
Running
Running
pod/etreans our/79490c gondm
pod/etd-minikube
pod/kube-apiserver-minikube
pod/kube-controller-manager-minikube
                                                                                                       Running
Running
pod/kube-proxy-6hskt
pod/kube-scheduler-minikube
pod/metrics-server-f4b5f5cdc-5bgb5
                                                                                                        Running
ImagePullBackOff
 pod/storage-provisioner
                                                                                                        ImagePullBackOff
                                                                                                                                              PORT(S)
53/UDP,53/TCP,9153/TCP
443/TCP
                                                                                CLUSTER-IP
                                                      TYPE
ClusterIP
ClusterIP
                                                                                                               EXTERNAL-IP
NAME
service/kube-dns
service/metrics-server
                                                                                 10.96.0.10
10.96.58.63
```

11. clean up everything

```
PS D:\Minikube> kubectl delete service hello-node service "hello-node" deleted from default namespace PS D:\Minikube> kubectl delete deployment hello-node deployment.apps "hello-node" deleted from default namespace PS D:\Minikube> minikube stop * 正在停止节点 "minikube"... * 正在通过 SSH 关闭"minikube"... * 1 个节点已停止。
PS D:\Minikube> minikube delete * 正在删除 docker 中的"minikube"... * 正在删除 ocker 中的"minikube"... * 正在删除 docker 中的"minikube"... * 正在删除 Tminikube"... * 正在删除 Tminikube"... * 正在删除 Tminikube"... * 正在删除所有关于 "minikube" 集群的痕迹。
```