  
  
How to renewal kubeadm cluster certificate?

[root@K8s-Agam-Master1 ~]# kubectl get pods -n qa

E0904 02:25:59.207142 30831 memcache.go:265] couldn't get current server API group list: Get "https://192.168.1.81:6443/api?timeout=32s": tls: failed to verify certificate: x509: certificate has expired or is not yet valid: current time 2024-09-04T02:25:59-04:00 is after 2024-09-04T02:53:11Z

E0904 02:25:59.211902 30831 memcache.go:265] couldn't get current server API group list: Get "https://192.168.1.81:6443/api?timeout=32s": tls: failed to verify certificate: x509: certificate has expired or is not yet valid: current time 2024-09-04T02:25:59-04:00 is after 2024-09-04T02:53:11Z

E0904 02:25:59.216518 30831 memcache.go:265] couldn't get current server API group list: Get "https://192.168.1.81:6443/api?timeout=32s": tls: failed to verify certificate: x509: certificate has expired or is not yet valid: current time 2024-09-04T02:25:59-04:00 is after 2024-09-04T02:53:11Z

E0904 02:25:59.220641 30831 memcache.go:265] couldn't get current server API group list: Get "https://192.168.1.81:6443/api?timeout=32s": tls: failed to verify certificate: x509: certificate has expired or is not yet valid: current time 2024-09-04T02:25:59-04:00 is after 2024-09-04T02:53:11Z

E0904 02:25:59.225625 30831 memcache.go:265] couldn't get current server API group list: Get "https://192.168.1.81:6443/api?timeout=32s": tls: failed to verify certificate: x509: certificate has expired or is not yet valid: current time 2024-09-04T02:25:59-04:00 is after 2024-09-04T02:53:11Z

Unable to connect to the server: tls: failed to verify certificate: x509: certificate has expired or is not yet valid: current time 2024-09-04T02:25:59-04:00 is after 2024-09-04T02:53:11Z

[root@K8s-Agam-Master1 ~]# kubeadm certs check-expiration

[check-expiration] Reading configuration from the cluster...

[check-expiration] FYI: You can look at this config file with 'kubectl -n kube-system get cm kubeadm-config -o yaml'

[check-expiration] Error reading configuration from the Cluster. Falling back to default configuration

CERTIFICATE EXPIRES RESIDUAL TIME CERTIFICATE AUTHORITY EXTERNALLY MANAGED

admin.conf Sep 04, 2024 02:53 UTC <invalid> ca no

apiserver Sep 04, 2024 02:53 UTC <invalid> ca no

apiserver-etcd-client Sep 04, 2024 02:53 UTC <invalid> etcd-ca no

apiserver-kubelet-client Sep 04, 2024 02:53 UTC <invalid> ca no

controller-manager.conf Sep 04, 2024 02:53 UTC <invalid> ca no

etcd-healthcheck-client Sep 04, 2024 02:53 UTC <invalid> etcd-ca no

etcd-peer Sep 04, 2024 02:53 UTC <invalid> etcd-ca no

etcd-server Sep 04, 2024 02:53 UTC <invalid> etcd-ca no

front-proxy-client Sep 04, 2024 02:53 UTC <invalid> front-proxy-ca no

scheduler.conf Sep 04, 2024 02:53 UTC <invalid> ca no

CERTIFICATE AUTHORITY EXPIRES RESIDUAL TIME EXTERNALLY MANAGED

ca Sep 02, 2033 02:53 UTC 8y no

etcd-ca Sep 02, 2033 02:53 UTC 8y no

front-proxy-ca Sep 02, 2033 02:53 UTC 8y no

[root@K8s-Agam-Master1 ~]# cp -R /etc/kubernetes/ssl /etc/kubernetes/ssl.backup

cp: cannot stat ‘/etc/kubernetes/ssl’: No such file or directory

[root@K8s-Agam-Master1 ~]# cd /etc/kubernetes/

[root@K8s-Agam-Master1 kubernetes]# ll

total 32

-rw-------. 1 root root 5648 Sep 4 2023 admin.conf

-rw-------. 1 root root 5680 Sep 4 2023 controller-manager.conf

-rw-------. 1 root root 2008 Sep 4 2023 kubelet.conf

drwxr-xr-x. 2 root root 113 Sep 4 2023 manifests

drwxr-xr-x. 3 root root 4096 Sep 4 2023 pki

-rw-------. 1 root root 5624 Sep 4 2023 scheduler.conf

[root@K8s-Agam-Master1 kubernetes]# cd

[root@K8s-Agam-Master1 ~]# cp /etc/kubernetes/admin.conf /etc/kubernetes/admin.conf.backup

[root@K8s-Agam-Master1 ~]# cp /etc/kubernetes/controller-manager.conf /etc/kubernetes/controller-manager.conf.backup

[root@K8s-Agam-Master1 ~]# cp /etc/kubernetes/kubelet.conf /etc/kubernetes/kubelet.conf.backup

[root@K8s-Agam-Master1 ~]# cp /etc/kubernetes/scheduler.conf /etc/kubernetes/scheduler.conf.backup

[root@K8s-Agam-Master1 ~]# cd /etc/kubernetes/

[root@K8s-Agam-Master1 kubernetes]# ll

total 60

-rw-------. 1 root root 5648 Sep 4 2023 admin.conf

-rw-------. 1 root root 5648 Sep 4 02:28 admin.conf.backup

-rw-------. 1 root root 5680 Sep 4 2023 controller-manager.conf

-rw-------. 1 root root 5680 Sep 4 02:28 controller-manager.conf.backup

-rw-------. 1 root root 2008 Sep 4 2023 kubelet.conf

-rw-------. 1 root root 2008 Sep 4 02:28 kubelet.conf.backup

drwxr-xr-x. 2 root root 113 Sep 4 2023 manifests

drwxr-xr-x. 3 root root 4096 Sep 4 2023 pki

-rw-------. 1 root root 5624 Sep 4 2023 scheduler.conf

-rw-------. 1 root root 5624 Sep 4 02:29 scheduler.conf.backup

[root@K8s-Agam-Master1 kubernetes]# cd

[root@K8s-Agam-Master1 ~]# kubeadm certs renew all

[renew] Reading configuration from the cluster...

[renew] FYI: You can look at this config file with 'kubectl -n kube-system get cm kubeadm-config -o yaml'

[renew] Error reading configuration from the Cluster. Falling back to default configuration

certificate embedded in the kubeconfig file for the admin to use and for kubeadm itself renewed

certificate for serving the Kubernetes API renewed

certificate the apiserver uses to access etcd renewed

certificate for the API server to connect to kubelet renewed

certificate embedded in the kubeconfig file for the controller manager to use renewed

certificate for liveness probes to healthcheck etcd renewed

certificate for etcd nodes to communicate with each other renewed

certificate for serving etcd renewed

certificate for the front proxy client renewed

certificate embedded in the kubeconfig file for the scheduler manager to use renewed

Done renewing certificates. You must restart the kube-apiserver, kube-controller-manager, kube-scheduler and etcd, so that they can use the new certificates.

[root@K8s-Agam-Master1 ~]# kubectl -n kube-system delete pod -l 'component=kube-apiserver'

E0904 02:30:51.294869 30921 memcache.go:265] couldn't get current server API group list: the server has asked for the client to provide credentials

E0904 02:30:51.296742 30921 memcache.go:265] couldn't get current server API group list: the server has asked for the client to provide credentials

E0904 02:30:51.298025 30921 memcache.go:265] couldn't get current server API group list: the server has asked for the client to provide credentials

E0904 02:30:51.299373 30921 memcache.go:265] couldn't get current server API group list: the server has asked for the client to provide credentials

E0904 02:30:51.300678 30921 memcache.go:265] couldn't get current server API group list: the server has asked for the client to provide credentials

error: You must be logged in to the server (the server has asked for the client to provide credentials)

[root@K8s-Agam-Master1 ~]# mkdir -p $HOME/.kube

[root@K8s-Agam-Master1 ~]# sudo cp -i /etc/kubernetes/admin.conf $HOME/.kube/config

cp: overwrite ‘/root/.kube/config’? yes

[root@K8s-Agam-Master1 ~]# sudo chown $(id -u):$(id -g) $HOME/.kube/config

[root@K8s-Agam-Master1 ~]# kubectl -n kube-system delete pod -l 'component=kube-apiserver'

pod "kube-apiserver-k8s-agam-master1" deleted

[root@K8s-Agam-Master1 ~]# kubectl -n kube-system delete pod -l 'component=kube-controller-manager'

pod "kube-controller-manager-k8s-agam-master1" deleted

[root@K8s-Agam-Master1 ~]# kubectl -n kube-system delete pod -l 'component=kube-scheduler'

pod "kube-scheduler-k8s-agam-master1" deleted

[root@K8s-Agam-Master1 ~]# kubectl -n kube-system delete pod -l 'component=etcd'

pod "etcd-k8s-agam-master1" deleted

[root@K8s-Agam-Master1 ~]# reboot

Remote side unexpectedly closed network connection

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Session stopped

- Press <Return> to exit tab

- Press R to restart session

- Press S to save terminal output to file

root@192.168.1.81's password:

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│ • MobaXterm Personal Edition v23.6 • │

│ (SSH client, X server and network tools) │

│ │

│ ⮞ SSH session to root@192.168.1.81 │

│ • Direct SSH : ✓ │

│ • SSH compression : ✓ │

│ • SSH-browser : ✓ │

│ • X11-forwarding : ✗ (disabled or not supported by server) │

│ │

│ ⮞ For more info, ctrl+click on help or visit our website. │

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Last login: Wed Sep 4 02:25:51 2024 from gateway

[root@K8s-Agam-Master1 ~]# kubectl get pods -n qa

NAME READY STATUS RESTARTS AGE

agam-ntb-api-4-reports-7d77598788-4hppm 2/2 Running 16 (28d ago) 117d

agam-ntb-api-apigateway-9978f89c7-whb8m 2/2 Running 0 7d22h

agam-ntb-api-corporate-7bf7c7ff94-jz6w6 2/2 Running 16 (28d ago) 117d

agam-ntb-api-evaluation-5d5cb947fd-66f9h 2/2 Running 0 12d

agam-ntb-api-product-7766d66c68-7r857 2/2 Running 0 11d

agam-ntb-api-users-78d9d87b4b-hggsk 2/2 Running 2 (28d ago) 40d

agam-saas-api-4-assessment-696fbd5446-487zg 2/2 Running 0 7d22h

agam-saas-api-4-assessment-agam-58f54f4dfb-8rt75 2/2 Running 0 18h

agam-saas-api-4-reports-6759b4c94c-468dv 2/2 Running 18 (28d ago) 165d

agam-saas-api-5-sdkconfigurator-54c46c6ccb-rzpwl 2/2 Running 16 (28d ago) 146d

agam-saas-api-common-65cbbccd69-8vxs9 2/2 Running 0 4d17h

agam-saas-api-corporate-6864977f5f-pt849 2/2 Running 18 (28d ago) 167d

agam-saas-api-crashreport-6f7c6796c5-fq6sl 2/2 Running 26 (28d ago) 307d

agam-saas-api-crashreport-agam-86479748bc-7nqkk 2/2 Running 16 (28d ago) 137d

agam-saas-api-customer-6b6cdf77cd-mbp88 2/2 Running 0 7d16h

agam-saas-api-customer-agam-77c688c459-s7r85 2/2 Running 0 7d23h

agam-saas-api-customer-communitybank-575fd9f8dd-jtlw5 2/2 Running 16 (28d ago) 139d

agam-saas-api-files-798d7f7c4b-bclrw 2/2 Running 20 (28d ago) 208d

agam-saas-api-gateway-7f6dd9d69d-q4b8j 2/2 Running 0 7d22h

agam-saas-api-keygenerator-787c85585b-jlvg7 2/2 Running 20 (28d ago) 224d

agam-saas-api-keygenerator-agam-67dc788fbc-66sqm 2/2 Running 16 (28d ago) 133d

agam-saas-api-mobilegateway-68dcc48dd4-9n4jb 2/2 Running 0 7d16h

agam-saas-api-mobilegateway-agam-6b6dfdc79-2c4hn 2/2 Running 0 7d

agam-saas-api-notification-6f74867b6f-nr5ql 2/2 Running 16 (28d ago) 144d

agam-saas-api-notification-agam-58f748f747-67k4k 2/2 Running 0 4d18h

agam-saas-api-product-6d698d7cf9-sf6xk 2/2 Running 20 (28d ago) 200d

agam-saas-api-referral-7cfdf69fdf-478kw 2/2 Running 16 (28d ago) 131d

agam-saas-api-referral-agam-664ff75f5c-pnld5 2/2 Running 16 (28d ago) 126d

agam-saas-api-transaction-75445d5979-ptrsn 2/2 Running 16 (28d ago) 144d

agam-saas-api-transaction-agam-8454d59979-gvqp2 2/2 Running 16 (28d ago) 137d

agam-saas-api-tutorial-6d5bbb968d-kkwn7 2/2 Running 25 (28d ago) 130d

agam-saas-api-users-5bc56b44c7-n5dkx 2/2 Running 20 (28d ago) 171d

[root@K8s-Agam-Master1 ~]# kubeadm certs check-expiration

[check-expiration] Reading configuration from the cluster...

[check-expiration] FYI: You can look at this config file with 'kubectl -n kube-system get cm kubeadm-config -o yaml'

CERTIFICATE EXPIRES RESIDUAL TIME CERTIFICATE AUTHORITY EXTERNALLY MANAGED

admin.conf Sep 04, 2025 06:29 UTC 364d ca no

apiserver Sep 04, 2025 06:29 UTC 364d ca no

apiserver-etcd-client Sep 04, 2025 06:29 UTC 364d etcd-ca no

apiserver-kubelet-client Sep 04, 2025 06:29 UTC 364d ca no

controller-manager.conf Sep 04, 2025 06:29 UTC 364d ca no

etcd-healthcheck-client Sep 04, 2025 06:29 UTC 364d etcd-ca no

etcd-peer Sep 04, 2025 06:29 UTC 364d etcd-ca no

etcd-server Sep 04, 2025 06:29 UTC 364d etcd-ca no

front-proxy-client Sep 04, 2025 06:29 UTC 364d front-proxy-ca no

scheduler.conf Sep 04, 2025 06:29 UTC 364d ca no

CERTIFICATE AUTHORITY EXPIRES RESIDUAL TIME EXTERNALLY MANAGED

ca Sep 02, 2033 02:53 UTC 8y no

etcd-ca Sep 02, 2033 02:53 UTC 8y no

front-proxy-ca Sep 02, 2033 02:53 UTC 8y no

[root@K8s-Agam-Master1 ~]#