

續訂RCM Kubernetes證書

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簡介

本檔案介紹在Cisco 5G RCM (備援組態管理員) 中續訂Kubernetes憑證的程式。

必備條件

如果它是RCM高可用性設定，則必須先在備用RCM上執行該過程，然後執行切換，並在新的備用RCM上運行該過程。如果沒有RCM高可用性可用，則在RCM重新啟動期間 (這是證書續訂流程的一部分) 無法使用UP冗餘。

檢查證書是否過期

要確保證書是否過期，請運行**sudo kubeadm alpha certs check-expiration**。

```
ubuntu@rcm:~$ sudo kubeadm alpha certs check-expiration
CERTIFICATE EXPIRES RESIDUAL TIME EXTERNALLY MANAGED
admin.conf Oct 31, 2024 03:34 UTC <invalid> no
apiserver Oct 31, 2024 03:34 UTC <invalid> no
apiserver-etcd-client Oct 31, 2024 03:34 UTC <invalid> no
apiserver-kubelet-client Oct 31, 2024 03:34 UTC <invalid> no
controller-manager.conf Oct 31, 2024 03:34 UTC <invalid> no
etcd-healthcheck-client Oct 31, 2024 03:34 UTC <invalid> no
etcd-peer Oct 31, 2024 03:34 UTC <invalid> no
etcd-server Oct 31, 2024 03:34 UTC <invalid> no
front-proxy-client Oct 31, 2024 03:34 UTC <invalid> no
scheduler.conf Oct 31, 2024 03:34 UTC <invalid> no
```

續訂憑證

運行**sudo kubeadm alpha certs renew all**以續訂證書。

```
ubuntu@rcm:~$ sudo kubeadm alpha certs renew all
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

如果憑證已續訂，請再次檢查

運行 `sudo kubeadm alpha certs check-expiration` 以檢查證書是否已續訂。

```
ubuntu@rcm:~$ sudo kubeadm alpha certs check-expiration
CERTIFICATE EXPIRES RESIDUAL TIME EXTERNALLY MANAGED
admin.conf Nov 01, 2025 03:34 UTC 364d no
apiserver Nov 01, 2025 03:34 UTC 364d no
apiserver-etcd-client Nov 01, 2025 03:34 UTC 364d no
apiserver-kubelet-client Nov 01, 2025 03:34 UTC 364d no
controller-manager.conf Nov 01, 2025 03:34 UTC 364d no
etcd-healthcheck-client Nov 01, 2025 03:34 UTC 364d no
etcd-peer Nov 01, 2025 03:34 UTC 364d no
etcd-server Nov 01, 2025 03:34 UTC 364d no
front-proxy-client Nov 01, 2025 03:34 UTC 364d no
scheduler.conf Nov 01, 2025 03:34 UTC 364d no
```

修改 kubelet.conf

在 kubeadm 版本 1.17 之前，需要手動修改 kubelet.conf。將 `client-certificate-data` 和 `client-key-data` 替換為。

```
/etc/kubernetes/kubelet.conf
```

```
client-certificate:/var/lib/kubelet/pki/kubelet-client-current.pem
client-key: /var/lib/kubelet/pki/kubelet-client-current.pem
```

Copy admin.conf

將 `admin.conf` 複製到 `.kube/config` 中。

```
sudo cp /etc/kubernetes/admin.conf ~/.kube/config
```

重新啟動系統

```
sudo reboot
```

請確定 kubectl 命令是否有效

重新開機後，請確認 `kubectl` 指令是否正常運作。

```
ubuntu@rcm:~$ kubectl get node
```

NAME	STATUS	ROLES	AGE	VERSION
rcm	Ready	master,oam	16d	v1.15.12

關於此翻譯

思科已使用電腦和人工技術翻譯本文件，讓全世界的使用者能夠以自己的語言理解支援內容。請注意，即使是最佳機器翻譯，也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準確度概不負責，並建議一律查看原始英文文件（提供連結）。