

Onboarding a New vEdge

By Don Chen

Description

We are onboarding a new office, the vEdge device has already arrived. We need to onboard it so that we can manage it using our SD-WAN network.

Requirements

- Physical access to the new vEdge.
- Remote access to the vManage.
- Remote access to the vBond
- Remote access to the vSmart

Step-by-Step Instructions

1. Plug into the console port.
2. Using a terminal emulation program, like PuTTY, access the CLI of the vEdge.
3. Log in with the default credentials: admin/admin. If it asks you to set a new password, set it to a new password.
4. Paste the following command into the CLI:

```
config
system
system-ip 172.16.1.1
site-id 2
organization-name seaice
vbond 10.1.0.2
exit
vpn 0
ip route 10.1.0.0/24 10.50.0.1
ip route 10.1.0.0/24 10.50.0.5 20
interface ge0/0
ip address 10.50.0.2/30
tunnel-interface
encapsulation ipsec
```

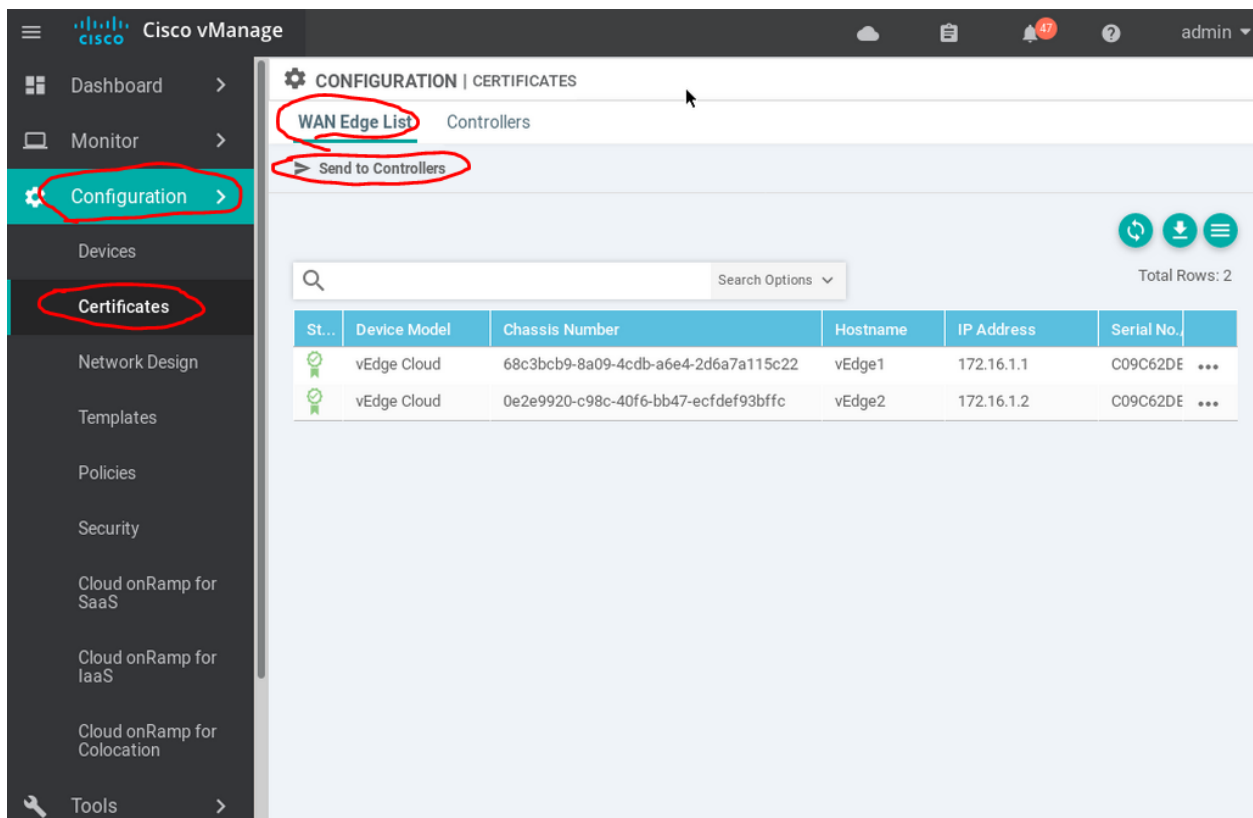
```

color biz-internet
allow-service all
no shutdown
exit
exit
interface ge0/1
ip address 10.50.0.6/30
tunnel-interface
encapsulation ipsec
color public-internet
allow-service all
no shutdown
exit
exit
commit
end

```

5. Download the root CA cert from vManage by pasting the following command: request download scp://admin@10.1.0.3:/home/admin/ROOT-CA.pem
6. It will ask you if you want to continue, type yes. It will prompt for the password to vManage, type in the password.
7. Install the root certificate by pasting this: request root-cert-chain install /home/admin/ROOT-CA.pem
8. Create a CSR for the vEdge by pasting this: request csr upload home/admin/vedge1_csr
9. When prompted for the organization name, use: seaice
10. Remote into the vManage CLI. Type in the username and password.
11. Enter into the Linux CLI of vManage by pasting: vshell
12. Download the CSR from the new vEdge by pasting this command including the period at the end: scp admin@10.50.0.2:/home/admin/vedge1_csr .
13. When prompted, type in the password for the new vEdge.
14. Sign the certificate by pasting this command 1 line at a time:
openssl x509 -req -in vedge1_csr \
-CA ROOT-CA.pem -CAkey ROOT-CA.key -CAcreateserial \
-out vedge1.crt -days 2000 -sha256
15. Go back to the vEdge CLI.
16. Download the certificate by pasting: request download
scp://admin@10.1.0.1:/home/admin/vedge1.crt
17. When prompted for the password, type in the password of the vManage.
18. Install the certificate by pasting: request certificate install home/admin/vedge1.crt
19. Copy the chassis and serial number of the vEdge from pasting in this command: show certificate serial
20. Remote into vManage.

21. Paste this command, replacing the bracketed info with the chassis and serial number from earlier: `request vedge add chassis-num <chassis number> serial-num <serial number>`
22. Remote into vBond, log in.
23. Paste this command, replacing the bracketed info with the chassis and serial number from earlier: `request vedge add chassis-num <chassis number> serial-num <serial number>`
24. Remote into the vManage GUI and log in.
25. Navigate to Configuration -> Certificates -> WAN Edge List. Then click on send to controllers. It will look similar to the picture below.



26. Wait for the success messages.

Cisco vManage TASK VIEW

Push vEdge List Initiated By: admin From: 10.1.0.4

Total Task: 3 | Success : 3

Search Options

Status	Message	Device Type	Hostname	System IP	Site ID	vManage IP
Success	Pushed serial...	vBond	vBond1	2.2.2.2	1	1.1.1.1
Success	Pushed serial...	vManage	vManage1	1.1.1.1	1	1.1.1.1
Success	Pushed serial...	vSmart	vSmart1	3.3.3.3	1	1.1.1.1

Total Rows: 3

Verification

1. Access the CLI of the vEdge and log in.
2. Ping the vSmart (10.1.0.1), vBond (10.1.0.2), and vManage (10.1.0.3).
3. Access the CLI of vSmart and log in.
4. Paste in: show omp peers
5. Look for the new peer at 172.16.1.1. It will look similar to the image below.

```
vSmart1# show omp peers
R -> routes received
I -> routes installed
S -> routes sent
```

PEER	TYPE	DOMAIN ID	OVERLAY ID	SITE ID	STATE	UPTIME	R/I/S
172.16.1.1	vedge	1	1	2	up	1:01:11:39	2/0/4

Backout Plan

1. Access the CLI of the vEdge and log in.
2. Paste in this command to reset the configurations: `request reset configuration`
3. When prompted to confirm, type yes.
4. Remote into the vManage.
5. Delete the certificate associated with the new vEdge.