SD-WAN CONTROL and DATA PLANE

Document Information: Lab Objective:

This lab is about setting up Control Plane and Data Plane for Sdwan. After the labs, we can see connection control from Vsmart, Vmanage, Vbond and Vedges. For Data Plane, In Vedge, we have IPsec tunnel, BFD session then check the Tlocs info ...

Requirement:

- Software:
 - o eve-nglab version 1.0.2 if eve-nglab still

version 1.0.1, let login vm console with

account root/eve then run command:

wget -O - https://user.eve-

nglab.com/upgrade/1.0.2 | bash

- Hardware requirement:
 - RAM 24Gb Lab topology:



- Setup IP web management for

vManage: Console to vManager

```
config t
vpn 512
interface eth0
ip address 192.168.75.11/24
no shutdown!
ip route 0.0.0.0/0 192.168.75.1
```

Click to User icon -> login vManage web with ip address: 192.168.10.11. Login with account:





Go to Administration -> Setting

	dex.html#/app/administration/settings			\$	0 :
Ξ		10	0	Incalhers	aditilo
Settings					
Organization Name	Not Configured				
Domain ID: 1					
Organization Name					
eve-nglab e	eve-nglab				
Save Cancel					
vBond	Not Configured			View	Edit
vBond Certificate Authorization	Not Configured Manual			View View	Edit
vBond Certificate Authorization Web Server Certificate	Not Configured Manual 26 Nov 2017 1:19:59 AM			View View CSR Cert	Edit Edit Ificate
vBond Certificate Authorization Web Server Certificate Enforce Software Version (ZTP)	Not Configured Manual 26 Nov 2017 1:19:59 AM Disabled			View View CSR Cert View	Edit Edit Ificate Edit
vBond Certificate Authorization Web Server Certificate Enforce Software Version (ZTP) Banner	Not Configured Manual 26 Nov 2017 1:19:59 AM Disabled Disabled			View View CSR Cert View View	Edit Edit ificate Edit Edit

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Settings						
Organization Name	eve-nglab				View	Edit
vBond	Not Configured					
VBond DNS/ IP Address : Port 10.1.1.2	12346					
Save Cancel						
Certificate Authorization	Manual				View	Edit
Web Server Certificate	26 Nov 2017 1:19:59 AM				CSR Cer	ificate
Enforce Software Version (7TD)	Disabled				View	Edit
Entorce Software version (21P)						
Banner	Disabled				View	Edit

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•	Settings					
Þ	Organization Name	eve-nglab			View	Edit
٥,	vBond	10.1.1.2 : 12346			View	Edit
×	Certificate Authorization	Manual			View	Edit
111	Web Server Certificate	26 Nov 2017 1:19:59 AM			CSR Cer	tificate
310	Enforce Software Version (ZTP)	Disabled			View	Edit
	Banner	Disabled			View	Edit
	Statistics Setting				View	Edit

Task2: Lab configuration

vManage

```
vmanage# conf t
Entering configuration mode terminal
vmanage(config) # system
vmanage(config-system) # system-ip
10.1.1.1
vmanage(config-system)# site-id 1000
vmanage(config-system) # organization-name
"eve-nglab"
vmanage(config-system) # vbond
10.1.1.2 vmanage (config-system) #
1
vmanage(config-system) # vpn 0 int eth1
vmanage(config-interface-eth1) # ip add
10.1.1.1/24
vmanage(config-interface-eth1)#
no shut vmanage(config-interface-
eth1) # exit
vmanage(config-vpn-0)# ip route 0.0.0.0/0 10.1.1.254
vmanage(config-vpn-0)# !
vmanage(config-vpn-0)# commit and-guit
```

- vBond

```
vedge# conf t
Entering configuration mode terminal
vedge(config) # system
vedge(config-system) # host-name vBond
vedge(config-system)# system-ip 10.1.1.2
vedge(config-system) # site-id 1000
vedge(config-system) # organization-name "eve-nglab"
vedge(config-system) # vbond 10.1.1.2 local vbond-only
vedge(config-system) # !
vedge(config-system) # vpn 512 int eth0
vedge(config-interface-eth0)# ip add 192.168.75.12/24
vedge(config-interface-eth0) # no shut
vedge(config-interface-eth0)# exit
vedge(config-vpn-512) # ip route 0.0.0.0/0 192.168.75.1
vedge(config-vpn-0) # interface ge0/0
vedge(config-interface-ge0/0) # vpn 0 int ge0/0
vedge(config-interface-ge0/0)# ip add 10.1.1.2/24
vedge(config-interface-ge0/0)# no shut
vedge(config-interface-ge0/0)# exit
vedge(config-vpn-0) # ip route 0.0.0.0/0 10.1.1.254
vedge(config-vpn-0)# commit and-quit
```

- vSmart 1

```
vsmart(config-vpn-0) # system
vsmart(config-system) # system-ip
10.1.1.3
vsmart(config-system) # site-id 1000
vsmart(config-system) # organization-name
"eve-nglab"
vsmart(config-system) # vbond
10.1.1.2 vsmart(config-system) # !
vsmart(config-system) # !
vsmart(config-system) # vpn 512
int eth0
```

```
vsmart(config-interface-eth0)# ip add
192.168.75.13/24 vsmart(config-interface-
eth0) # no shut
vsmart(config-interface-eth0) # exit
vsmart(config-vpn-512)# ip route 0.0.0.0/0
192.168.75.1
vsmart(config-vpn-512)# !
vsmart(config-vpn-512) # vpn 0
int eth1
vsmart(config-interface-eth1) # no int eth0
vsmart(config-interface-eth1) # ip add
10.1.1.3/24
vsmart(config-interface-eth1)#
no shut vsmart(config-interface-
eth1) # exit
vsmart(config-vpn-0)# ip route 0.0.0.0/0
10.1.1.254 vsmart(config-vpn-0)# !
vsmart(config-vpn-0) # commit and-quit
Commit complete.
vsmart#
```

- vSmart 2

```
vsmart(config-vpn-0) # system
vsmart(config-system) # system-ip
10.1.1.4
vsmart(config-system) # site-id 1000
vsmart(config-system) # organization-name
"eve-nglab"
vsmart(config-system) # vbond 10.1.1.2
vsmart(config-system)# !
vsmart(config-system) # vpn 512 int eth0
vsmart(config-interface-eth0) # ip add
192.168.75.14/24
vsmart(config-interface-eth0)#
no shut vsmart(config-interface-
eth0) # exit
vsmart(config-vpn-512)# ip route 0.0.0.0/0
192.168.75.1 vsmart(config-vpn-512)# !
vsmart(config-vpn-512) # vpn 0 int
eth1 vsmart(config-interface-eth1)#
no int eth0
```

```
vsmart(config-interface-eth1)# ip add
10.1.1.4/24 vsmart(config-interface-eth1)#
no shut
vsmart(config-interface-eth1)# exit
vsmart(config-vpn-0)# ip route 0.0.0.0/0
10.1.1.254
vsmart(config-vpn-0)# !
vsmart(config-vpn-0)# l
vsmart(config-vpn-0)# commit and-quit
Commit complete.
vsmart#
```

- vEdge 6 Newyork HQ

```
vedge# conf t
Entering configuration mode terminal
vedge(config)# system
vedge(config-system)# system-ip
10.2.6.1
vedge(config-system)# site-id 100 |
vedge(config-system)# organization-name
eve-nglab vedge(config-system)# vbond
10.1.1.2
```

```
vedge(config-system)# vpn 0 int ge0/0
vedge(config-interface-ge0/0)# ip add
10.2.6.1/24
vedge(config-interface-ge0/0)# no
shutdown vedge(config-interface-
ge0/0)# exit
```

```
vedge(config-vpn-0)# ip route 0.0.0.0/0
10.2.6.254 vedge(config-vpn-0)# commit
and-quit
```

- vEdge7 Singapore

```
vedge# conf t
Entering configuration mode terminal
vedge(config) # system
vedge(config-system) # system-ip
10.2.7.1
vedge(config-system) # site-id 2
vedge(config-system) # organization-name
eve-nglab
vedge(config-system) # vbond 10.1.1.2
vedge(config-system) # vpn 0 int ge0/0
vedge(config-interface-ge0/0)# ip add
10.2.7.1/24 vedge(config-interface-ge0/0)#
no shutdown
vedge(config-interface-ge0/0) # exit
vedge(config-vpn-0)# ip route 0.0.0.0/0
10.2.7.254 vedge(config-vpn-0) # commit and-
quit Commit complete.
```

Task3: Certificate installation

- vManage

Step 1 : Create ROOTCA.key

```
vmanage# vshell
```

```
vmanage:~$ openssl genrsa -out
ROOTCA.key 2048
Generating RSA private key, 2048 bit long modulus
.....+++
e is 65537 (0x10001)
```

vmanage:~\$

```
openssl req -x509 -new -nodes -key ROOTCA.key -sha256 -
days 1024 \ -subj "/C=US/ST=NY/L=NY/O=eve-
nglab/CN=vmanage.lab" \
-out ROOTCA.pem
```

Step 3: Install ROOTCA.pem

exit

vmanage# request root-cert-chain install /home/admin/ROOTCA.pem

```
Uploading root-ca-cert-chain via VPN
0 Copying ... /home/admin/ROOTCA.pem
via VPN 0
Successfully installed the root certificate chain
```

Step 4 : Login vManage to create certificate request

Configuration \rightarrow Certificates \rightarrow Controllers \rightarrow vManage \rightarrow Generate CSR then copy

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User										
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				MDKAMAL-yh2 CQY/DVR0TBJ	Select all	Ctrl+A				
				All March 1997	Search Google for *BEGIN CERT	FICATE REQUEST*				
					Print	Ctrl+₽				
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					Inspect	Ctrl+Shift+I				
						- 30400000000000000000000000000000000000	-8			
	And Shannan A									

Step 5: In the vshell use vim to create a file named vmanage.csr with the text from the popup.

Create vmanage.csr with CSR code copy above. Use vim editor to create this file in Vshell mode of Vmanage. Vi vmanage.csr :qw! To exit the vim file.

Step 6: And create vmanage.crt with ROOTCA.key

```
openssl x509 -req -in vmanage.csr \
-CA ROOTCA.pem -CAkey ROOTCA.key -
CAcreateserial \ -out vmanage.crt -days 500
-sha256
Result:
```

Signature ok

subject=/C=US/ST=California/L=San Jose/OU=vnpro-lab/O=vIPtela Inc/CN=vmanage_07af546c-d136-4f32-9f6daa8e598a3410_0.viptela.com/emailAddress=support@viptela.com Getting CA Private Key Step 7 : Copy content vmanage.crt file by using "cat vmanage.crt" then install certificate on vManage

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(G)	Certificates vijdge	Controllers							
Q.	A tand to visional 2 tratail ten	ifeas		Install Certificate					
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140	Operation Status	Centroller Type	Hostivelin	AQoCgggBAQab4idQr98iisEUK4+ThHZmUpYmQ48M60rr725EaEruHdxH35FbbDum yq2oAlriWQarthFu1RqaAU8hi9C8TH2Gmi2KETtqQwZMxUzLSyQOP5igAKqSpYxj		Invation Date	wEdge Status	Device IP	
er H	ClR Generalist			p) 559-621-2496/8223/9703691-0C.1146/143C-064(9) RQM6mit XX/NaxWey RC005 2280-0280-0280-0280-0280-0280-0280-0280	Cancel				

Configuration \rightarrow Certificates \rightarrow Controllers \rightarrow Install Certificate



- vBon

d: Step 1:

```
vBond# request root-cert-chain install
scp://admin@192.168.75.11:/home/admin/ROOTCA.pem
vpn 512 Result:
Uploading root-ca-cert-chain via VPN 512
Copying ... admin@192.168.10.11:/home/admin/ROOTCA.pem via
VPN 512
Warning: Permanently added '192.168.10.11' (ECDSA) to the
list of
known hosts.
viptela 16.2.11
admin@192.168.10.11's
password 100% 1265
```

ROOTCA.p em 1.2KB/s 00:00 Successfully installed the root certificate chain Step 2: Add vBond to vmanage: And Vbond IP here is IP in VPN0, not VPN 512

Image: Second					30								
Devices	vEdge Ltif	Controllers											
O Add Complet +	Change Mode	*											
velond													
vSmart	with .											Total Rows: 1	1
Controller Type	Hostname		System IP	Site ID	Mode	Assigned Template	Configuration Status	Certificate Status	Policy Name	Policy Version	UUID		
vmanage	AuratraSa		5.1.1.1	7000	di.	3	m Sync	lottafied	17	÷.	074546	c-d135-4/32-9%	
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				admin									
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Step 3 : If vbond adding unsuccessful, lets no tunnel-interface as bellow:

S =	21	40
Commit complete. vBond(config-interface-ge0/0)#		
<pre>vBond(config-interface-ge0/0)# no tunnel- interface vBond(config-interface-ge0/0)# commit</pre>		
<pre>vBond(config) # vpn 0 vBond(config-vpn-0) # interface ge0/0</pre>		
vBond# conf t Entering configuration mode terminal		

S =									E1 /	0	manage	àdmir
Devices	vEdge List Control	lers										
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Contares	Search									τα	tal Rows: 2 of 2	C
Controller Type	Hostname	System IP	Site ID	Mode	Assigned Template	Configuration Status	Certificate Status	Policy Name	Policy Version	UUID		010-
emanage	Autoritide	13.13	1600	;cli	1.0	in Sync.	installed	÷	199	07af545c-	0136-4/32-9/6	=
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Step 4: View vBond CSR:

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Cer	rtificates vEdge L	ist Controllers										
15	Send to vBond 🔔 Install Certific	tate										
	Contains Search										Total Rows: 2	C
	Operation Status	Controller Type	Hostname	System IP	Site ID	Certificate Serial	Expiration Date	vEdge Status		1	Device IP	10-
2	Installed	vmanage	vmanage	1.1.1.1	1000	8836D8CE6DF3384F	10 Sep 2021 4:06:42 PM GMT	Sync		1	1.1.1.1	
2	CSR Generated	vbond	vBond	1.1.1.2	1000	N/A		Sync		1	10.1.1.2	≡
								_		•	View CSR View Certific Generate CS Reset RSA Invalidate	ate iR

 $Configuration \rightarrow Certificates \rightarrow Controllers \rightarrow vBond \rightarrow View \ CSR$

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9	Certificates yeag	e List Controllers							
Q	🗐 Send to vBond 🕹 Install Cen	nificali		CSR					
92	💽 + Contains + Search			IP Address: 1.1.1.2				Total Rows: 2	¢
W.	Operation Status	Controller Type	Hostname	🕹 Download	Expiration Date	vEdge Status		Device IP	
1	Installed	vmanage:	winanage	-jocdtwesten-Endagener/B9266NDV+karXCcmp./fdGUDAc2944TW	10 Sep 2021 4:06:42 PM GMT				
	CSR Generated			PKN3Drvthbc7Psinjm178bc446bcLQ3CL9x1752LunHLArDgL052bu3+RQ5019 Jmm3554aopj5lyMld2FARF0dlRHG5CdC7Psi/K5rej5lyBCvPkw9uNO58pbbe	U K				
J.				Michael go waar heed oor of the Macan Age of Segara is removed an in Advanced to the Advanc					

vManage

Step 5: On vManage, create vbond.csr with content above using VIM editor in Vshell of Vmanage.

Step 6: Create vbond.crt from Vmange Vsell. // Sign the vbond.csr file with the ROOTCA.key

//vi vbond.csr , press i to insert data, then press ESC to escape the insert things, then
press :wq! To save file vbond.csr in Vshell of Vmanage.

```
openssl x509 -req -in vbond.csr \
   -CA ROOTCA.pem -CAkey ROOTCA.key -
   CAcreateserial \ -out vbond.crt -days 500 -
   sha256
Result:
Signature ok
subject=/C=US/ST=California/L=San Jose/OU=eve-nglab/O=vIPtela
Inc/CN=vbond_cdb5c222-0188-4384-a5c2-
```

```
8fa0b76d822f_0.viptela.com/emailAddress=support@viptela.com
Getting CA Private Key
vmanage:~$
```

Step 7 : Using "cat vbond.crt" to see file contents then copy and install certificate on vManage web

ŵ	Certificates 🤤	e List Controllers								
ņ	A Send to v8 and 2 install Co	rolicate		Install Certificate						
Ŭ,	Containt + Search			Certificate Text	6	Select a file			Total Rows 2	C
47	Operation Status	Controller Type	Hostrume	MI04ZmEwYjcZZDgyMmZIMC52aXB0ZWxhLmNvbTeIMC cG9ydEB2aXB0ZWxhLmNvbTCCA5IwDQYjKoZihvcNAQE	AGCSqG5ib3OQEJARYTc3Vw BBQADggEPADCCAQoCggEB	•	Expiration Date	vEdge Status	Device IP	
10	2 installed .	vinariage	vmanage	ANH/9LPq25os957F5ObuDO7TR0BBV/CATLvbj9lg8K9JU DX2adDPmxUZrzizxantTL2a0e775rK+Sir24P5rOM+Cw	80LEuXMk8spKCGdM2NC Mun/6ive#/Gof4kaiw		10 Sep 2021 4:06:42 PM GMT	Sync		
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 $Configuration \rightarrow Certificates \rightarrow Controllers \rightarrow Install Certificate$

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		vManage IP	Device IP	Device Type	Message	Status	
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* 10 × 10 ×	Ĵ	hibbi	10.1.1.2	voona	Lower - non-vestine Los (or 10.1.2 yearing) end Number to all certorologis ficate on device 10.1.12 successful ist of device 10.1.12 (successful ist of device 10.1.12 (subord) sing serial life (level).1.12 (signed) event just for 10.1.12 (stand)	(28-Apr-2020 16-24-37 UTC) Pushing new (28-Apr-2020 16-24-39 UTC) installing Cer (28-Apr-2020 16-24-41 UTC) installing Cer (28-Apr-2020 16-24-41 UTC) Installing Fer (28-Apr-2020 16-24-41 UTC) Completed p (28-Apr-2020 16-24-44 UTC) Completed p (28-Apr-2020 16-24-44 UTC) Completed p	

Send certificate to vBond Configuration \rightarrow Certificates \rightarrow Controllers \rightarrow Send to vBond

Total -	2 Success - 2							
• 🗉	Contains Search						Total Rows 2 of 2	C
	Status	Message	Device Type	Hostname	System IP	Site ID	vManage IP	11
9	© Success	Done - Push vSmart List for 1.1.1.1 (v.,	vmanage	umanage	13.3.3	1000	1.1.1.1	
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vSmart:

```
vsmart# request root-cert-chain install
scp://admin@192.168.75.11:/home/admin/ROOTCA.pem
vpn 512 Result:
Uploading root-ca-cert-chain via VPN 512
Copying ... admin@192.168.10.11:/home/admin/ROOTCA.pem
via VPN 512 Warning: Permanently added '192.168.10.11'
(ECDSA) to the list of known hosts.
viptela 16.2.11
admin@192.168.10.11's
password
ROOTCA.p
em 100% 1265
1.2KB/s 00:00
```

Successfully installed the root certificate chain

Step 2 : Add vSmart to vManage web

 $Configuration \rightarrow Devices \rightarrow Controllers \rightarrow Add \ Controller \rightarrow vSmart$

10.1.1.3		
Username		
admin		
Password		
Protocol	Port	
DTLS 💠		
Generate CSR		

Step 3: View and copy vSmart CSR

Configuration \rightarrow Certificates \rightarrow Controllers \rightarrow vSmart \rightarrow View CSR:

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Cert	ificates verg	e that Controllers									
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0.	Contains - Search									Total Rows 3	c
	Operation Status	Controller Type	Hostname	System IP	Site ID	Certificate Serial	Expiration Date	vEdge Status		Device IP	10.
	vBood Updated	vmanage	alevrenie	1.1.1.1	1000	BR36DBCEEDF338AF	10 Sep 2021 4:06:42 PM GMT	Sync		1.1.1.1	
3	installed	vbond	villorid	1112	1000	BE36DBCE6DF33850	10 Sep 2021 4:22:04 PM GMT	Sync		-10.1.1.2	
3	CSR Generated	vimart	vsmart	1.1.1.3	1000	N/A	-	Sync		10.1.1.3	
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			Proceedings of the control of the co	Cose				

Step 4: in Vmange :

Create vsmart1.csr file on vManage with contents viewed above using VIM editor. (I have 2 vsmarts to make backup) Sign vsmart1.csr with ROOTCA.key (I have 2 Vsmarts)

- vManage:

```
openssl x509 -req -in vsmart.csr \
-CA ROOTCA.pem -CAkey ROOTCA.key -
CAcreateserial \ -out vsmart.crt -days 500
-sha256
Result:
Signature ok
subject=/C=US/ST=California/L=San Jose/OU=eve-nglab/O=vIPtela
Inc/CN=vsmart_f35d4b87-8322-4f81-a63c-
52981f16d5e9_1.viptela.com/emailAddress=support@viptela.com
Getting CA Private Key
```

Using "cat vmsart6.crt" to see contents and copy then install certificate:

 $Configuration \rightarrow Certificates \rightarrow Controllers \rightarrow Install \ Certificate$

0	Install Certificate					
ų e	🗹 • Contains • Searth					Total Rovel: 1 of 1 C
44	Status	Message	Device Type	Device IP	sManage IP	1 []]]+
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1		Installed	vbond	velond	5.1.1.2	1000	B836D8CE6DF33850	10-5ep 2021 4:22:04 PM GMT	Sync	101.1.2	
		official operated	wmant	Volman 1	101.0.0	1000	8836D8CE6DF33851	10 Sep 2021 4:34:28 PM GMT	Sync	10.1.1.3	

I will make for Vsmart 7 with the same procedure

vEdge:

Step 1 : **on vManage,** using "cat ROOTCA.pem" to see contents then create ROOTCA.pem file on vEdge with same contents.

Step 1 : Install ROOTCA.pem on vEdge with command: request root-certchain

```
install /home/admin/ROOTCA.pem
The purpose is to SCP the ROOTCA.pem from Vmanage to Vedge
The interesting here is using VPN 0.
//if we have OAM to this Vedge
Or can use this command : request root-cert-chain install
scp://admin@192.168.75.11:/home/admin/ROOTCA.pe
m vpn 512
```

```
vedge# request root-cert-chain install /home/admin/ROOTCA.pem
```

```
Result:
Uploading root-ca-cert-chain via VPN
0 Copying ... /home/admin/ROOTCA.pem
via VPN 0
Updating the root certificate chain..
```

Successfully installed the root certificate chain

Step 2 : Create vedge01.csr file : Do it on Vedge using below command

request csr upload /home/admin/vedge06.csr
Uploading CSR via VPN 0
Enter organization-unit name : sdwan
Re-enter organization-unit name : sdwan
Generatin private/public pair and CSR for this vedge
g device
Generatin CSR for this vedge
g device[DONE]
Copying /home/admin/vedge01.csr via VPN 0
CSR
upload successful

Step 3: *Using "cat vedge06.csr" to copy contents* and create vedge06.csr file on vManage. Create vedge06.crt with command bellow: vMange:

```
openssl x509 -req -in vedge06.csr\
-CA ROOTCA.pem -CAkey ROOTCA.key -
CAcreateserial\ -out vedge06.crt -days 500
-sha256
Result: Signature
ok
subject=/C=US/ST=California/L=San Jose/OU=eve-
nglab/O=vIPtela Inc/CN=vedge=368755e1=cfc9=4dbe=
984e-
9a8d7e3f41f90.viptela.com/emailAddress=support@vipte
la .com Getting CA Private Key
```

Step 4 : On vedge06, create vedge06.crt same contents with file on vManage then install with

command bellow: Note in Normal mode, not Vshell mode

request certificate install scp://admin@10.1.1.1:/home/admin/vedge06.crt !you can use the command on the box too. But I love to use the command with SCP

```
vedge# request certificate install /home/admin/vedge06.crt
Result:
Installing certificate via VPN 0
Copying ... /home/admin/vedge01.crt via VPN 0
Successfully installed the certificate
```

Check serial number:

```
vedge# show certificate serial
Chassis number: 368755e1-cfc9-4dbe-984e-9a8d7e3f41f9 serial
```

number: BB36DBCE6DF33852

Create text file with code: 368755e1-cfc9-4dbe-984e-

9a8d7e3f41f9,BB36DBCE6DF33852 Do the same with vedge06. Check

serial and add to text file.

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1 b4c28a67-3e06-4f1b-a8e9-18ce5f0f0742,BB36DE	BCE6DF33	853	
2 368755e1-cfc9-4dbe-984e-9a8d7e3f41f9,BB36DE	BCE6DF33	852	
length: 108 lin Ln: 2 Col: 54 Sel: 0 0 Windows (CR LF)	UTF-8	11	NS

Task 4: Upload vEdge list

Method 1: For this lab , you just upload Vedgelist from your computer to Vmanage

Method 2: it is working for SDWAN lab 1 by Rakus. He made PC on EVE.



Upload vedge file to vManage

A Not sective 192146.1011.6433/index.html#rapp(comp)det/kesvedge? A Not sective Provides Pro	S Viptela vManage	× +		-						
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65		OX					
-		No data available					

Send vedge list to controller

Configuration \rightarrow Certificates \rightarrow vEdge List \rightarrow Send to Controllers

and the second	vEdge List Controllers						
send to Controllers	Click Send to Controllers to sync the vEd	ge list on all controllers					
🗹 🔹 Contains 🔹 Se	earth					Total Rows: 3	c
Chassis Number	Certificate Serial		Hostname	IP Address	Validate		it.
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368755e1-cfc9-4dbe-584	e-9a8d7e3f41f9 8836D8CE6DF33	852	-	-	Invalid stragent withd		
						sen de de constanti.	
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Push vEdge List Tetal-3 Success-3						ana aige and another	
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Push vEdge List Tetal-3 Success-3 P + Comains + Sec Status	e d' Message	Device type	Kostname	System IP	site D	Test Row 3 of 3	- 0 4 C
Push vEdge List Tetal-3 Success - 3	ardt Messaga Done - Push vicige L	Device type ast for 1.1.1.1 (v., manage	Hostiname vmanage	Зурбаст IP 1.1.1.1	38e 10 1000	Tool Rose: 3 of 1 Valanage IP 1,1,1,3	a C
Push vEdge List Tetal-3 Success - 3 Tet + (rc-ulain, +) Sea Status 2 © Success 3 © Success	ardt Messaga Done - Push vidge L Done - Push vidge L	Device type ist for 1.1.1.1 (v.,	Matina me Vinanage	System IP 1,1,1,1 -	site D 1009 	Test Rose 3 of 1 Vitarage # 1.1.1.3 1.1.1.5	ана к. С. П.

Validate vEdges

 $Configuration \rightarrow Certificates \rightarrow vEdge\ List \rightarrow (vEdge) \rightarrow Valid$

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0	Certificates vedge List	Controllers							
•	A send to Controllers								
0,	🕝 • Contains • Search							Total Rows: 2	c
*	Chassis Number	Certificate Serial	Hostname	IP Address	validate				100
~	b4c28a67-3e06-4f1b-a8e9-18ce5f0f0742	6036D0CE6DF33853	-	-	Invalid shaping material				
-	368755e1-cfc9-4dbe-984e-9a8d7e3f41f9	BB36DBCE60F33852	-						
				Are you sure you o device?	want to validate the				
				\rightarrow	OK Cancel				

Then send to controller after valid all vedge

3	III							8	40	0	vmanage	admin
a	Pus	h vEdge List										
Q	Total	· 3 Success · 3										
		Contains Search								То	ital Rows: 3 of 3	C
40		Status	Message	Device Type	Hostname	System IP	Site ID		vMa	nage IP		17.4
	3	Success	Done - Push vEdge List for 1.1.1.1 (vM	vmanage	simanage	1.1.1.1	1000		1.1.1	1		
-	3	Success	Done - Push vEdge List for 10.1.1.2 (vB	(96)		000			1, 3, 3	a		
		Success	Done - Push vEdge Ust for 10.1.1.3 (vS	520		14 C	54		1.1.1	a		

- Configure tunnel

vManage/Smart

```
vpn 0 interface eth1
tunnel-interface
```

vBond

```
vpn 0
interface
ge0/0
tunnel-interface encapsulation ipsec
```

Task 5: Verification:

vmanag connec	e# sho tions	w cont	crol						
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6	172.16.0.2	12346	t		up		0:00:00:29
2	vbond dtls	1.1.1.	. 2	0	-	0	10.1.1.2

10.1. 1234 defau 12346 1.2 6 lt up 1.1.1 0:00:00:4 7 1.1.1 3 vbond dtls .2 0 0 10.1.1.2 10.1.1 1234 defaul 12346.2 6 t up 0:00:00:47 vsmart# show control connections PEE PEE SIT PEER R PEER PEER R E DOMAIN PEER PRIVAT PUBLI E PEER C INSTA PROTOCOL SYSTEM NCE TYPE IP ID ID PRIVATE IP REMOTE PORT PUBLIC IP PORT COLOR STATE UPTIME _____ ____ |

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