Recover Standalone vManage by Disaster Recovery

Contents

Introduction

Background Information

- Backup Configuration-db

Recover vManage

- Step 1. Minimum Configuration on vManage
- Step 2. Copy Backup Configuration and Root Certificate
- Step 3. Install Root Certificate
- Step 4. Update BasicInformation
- Step 5. Install vManage Certificate
- Step 6. Restore The Database
- Step 7. Check Services
- Step 8. Reauthenticate Controllers
- Step 9. Send Updates to Controllers

Introduction

This document describes the steps involved to restore vManage by utilization of a configuration-db backup.

Background Information

This document assumes that a configuration-db backup has been taken periodically and for some reason, the standalone vManage is irrecoverable and needs a software reset or a new install.

This document helps you to recover all the policies, templates, configurations, and Edge device certificates.

Backup Configuration-db

```
vManage_rcdn01# request nms configuration-db backup path 05_08_20_configdb
Starting backup of configuration-db
config-db backup logs are available in /var/log/nm/neo4j-backup.log file
Successfully saved database to /opt/data/backup/05_08_20_configdb.tar.gz
```

scp to an external server.

```
vManage_rcdn01# vshell
vManage_rcdn01:~$ scp /opt/data/backup/05_08_20_configdb.tar.gz user@10.2.3.1://home/ftpuser/ftp/amaugu
amaugust@10.2.3.1's password:
```

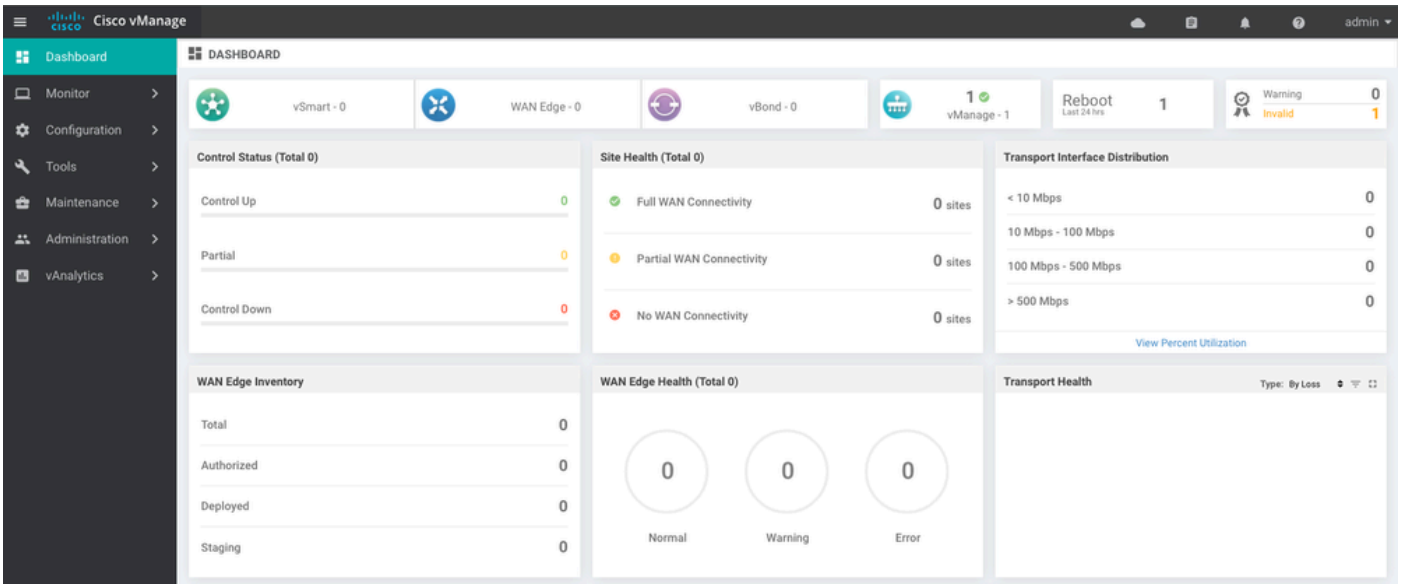
```
05_08_20_configdb.tar.gz                    100%  484KB  76.6MB/s   00
```

Recover vManage

Simulate a disaster by a reset of the vManage by the command:

```
vManage_rcdn01# request software reset
```

Now that you have a fresh vManage that looks like the one shown, it is advisable to adhere to the recovery process in the correct sequence before you restore the backup.



Step 1. Minimum Configuration on vManage

```
system
 host-name             vManage_rcdn01
 system-ip             xx.xx.xx.xx
 site-id               100
 organization-name     ****.cisco
 vbond vbond.list
 !
!
vpn 0
 host vbond.list ip 10.2.3.4 10.2.3.5
 interface eth0
  ip address 10.1.3.8/24
  tunnel-interface
  no shutdown
 !
 ip route 0.0.0.0/0 10.1.3.1
!
vpn 512
```

```
 interface eth1
  ip address 10.11.3.8/24
  no shutdown
 !
 ip route 0.0.0.0/0 10.1.3.1
!
```

Step 2. Copy Backup Configuration and Root Certificate

<#root>

```
vManage_rcdn01:~$ scp am****@xx.xx.xx.xx://home/ftpuser/ftp/am****/05_08_20_configdb.tar.gz  .
am****@xx.xx.xx.xx's password:
05_08_20_configdb.tar.gz                                                    100%  484KB  76.6MB/s   00:
```

Verify

```
vManage_rcdn01:~$ ls -lh
total 492K
-rw-r--r-- 1 admin admin  394 May  8 15:20 archive_id_rsa.pub
-rwxr-xr-x 1 admin admin 485K May  8 15:3905_08_20_configdb.tar.gz
```

Copy root certificate from other controller:

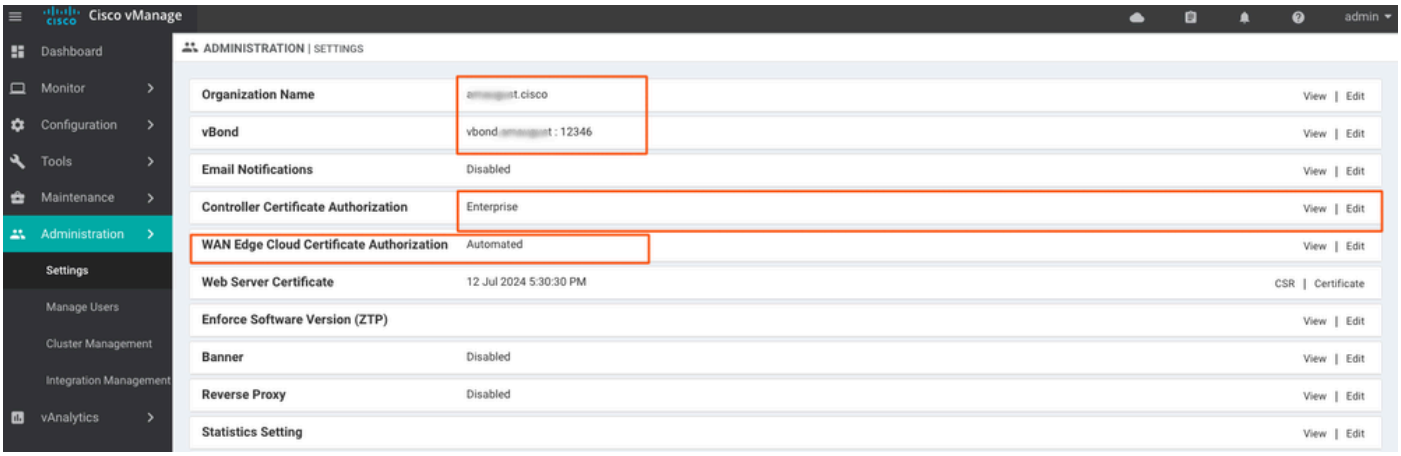
```
vManage_rcdn01:~$ scp admin@vbond://home/admin/root.crt .
viptela 18.4.4
admin@vbond's password:
root.crt                                                                    100% 1380     2.8MB/s   00:0
```

Step 3. Install Root Certificate

```
vManage_rcdn01# request root-cert-chain install /home/admin/root.crt
Uploading root-ca-cert-chain via VPN 0
Copying ... /home/admin/root.crt via VPN 0
Updating the root certificate chain..
Successfully installed the root certificate chain
```

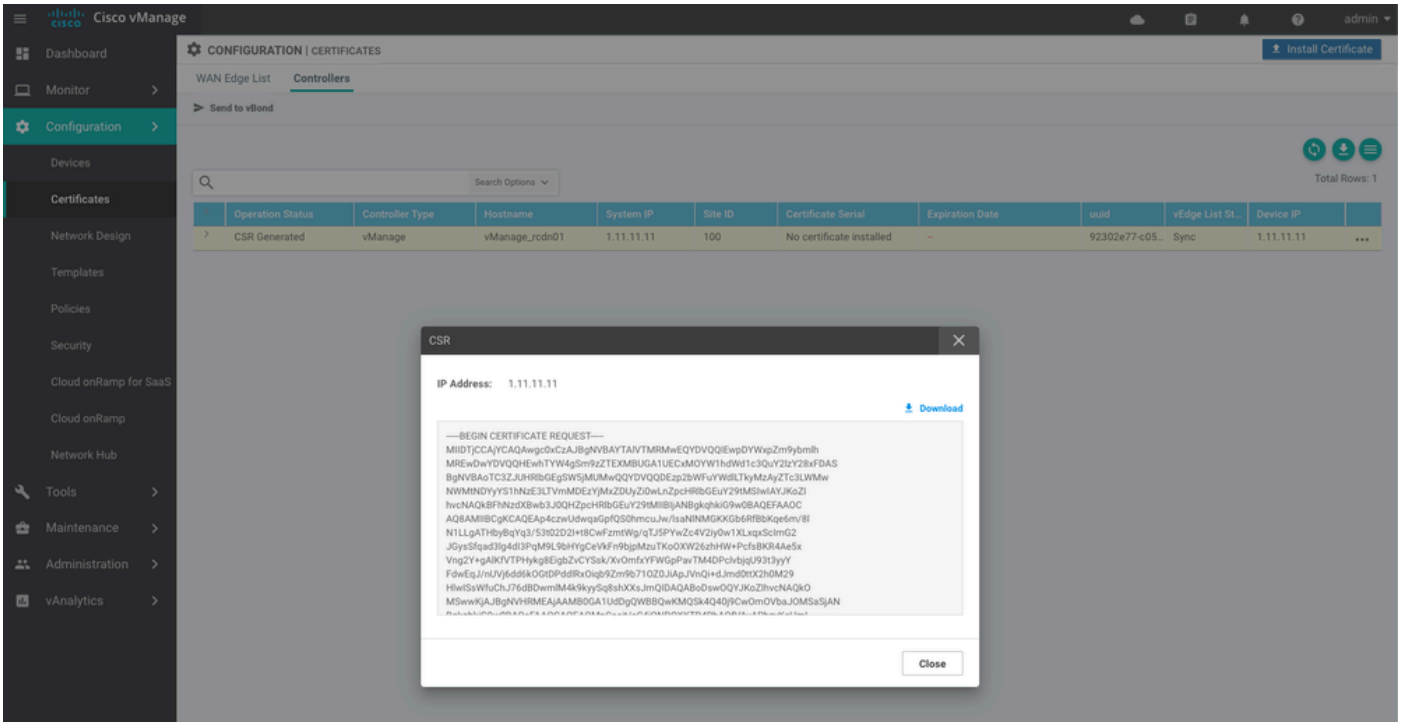
Step 4. Update Basic Information

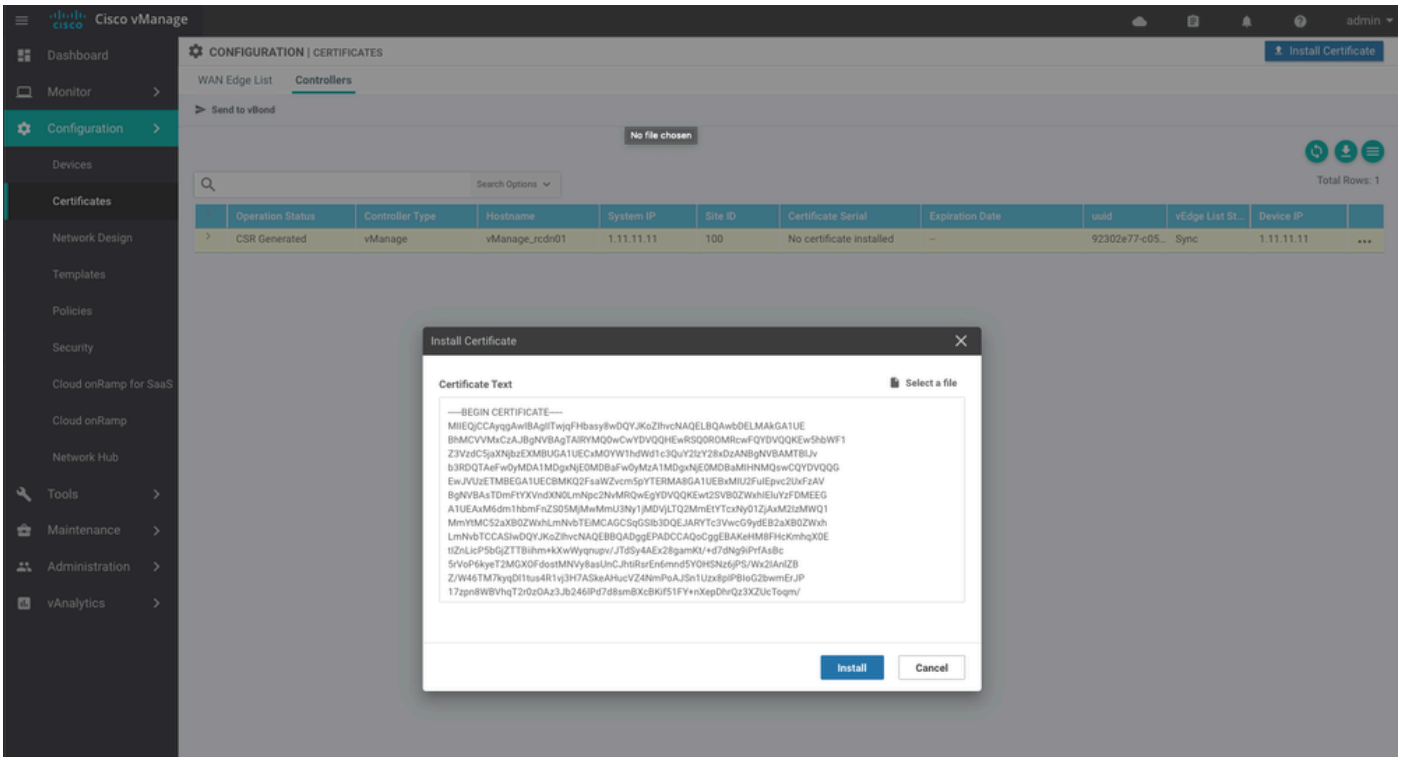
Navigate to Administration > Settings and configure the basic information for vBond IP, Organization Name, and certificate.

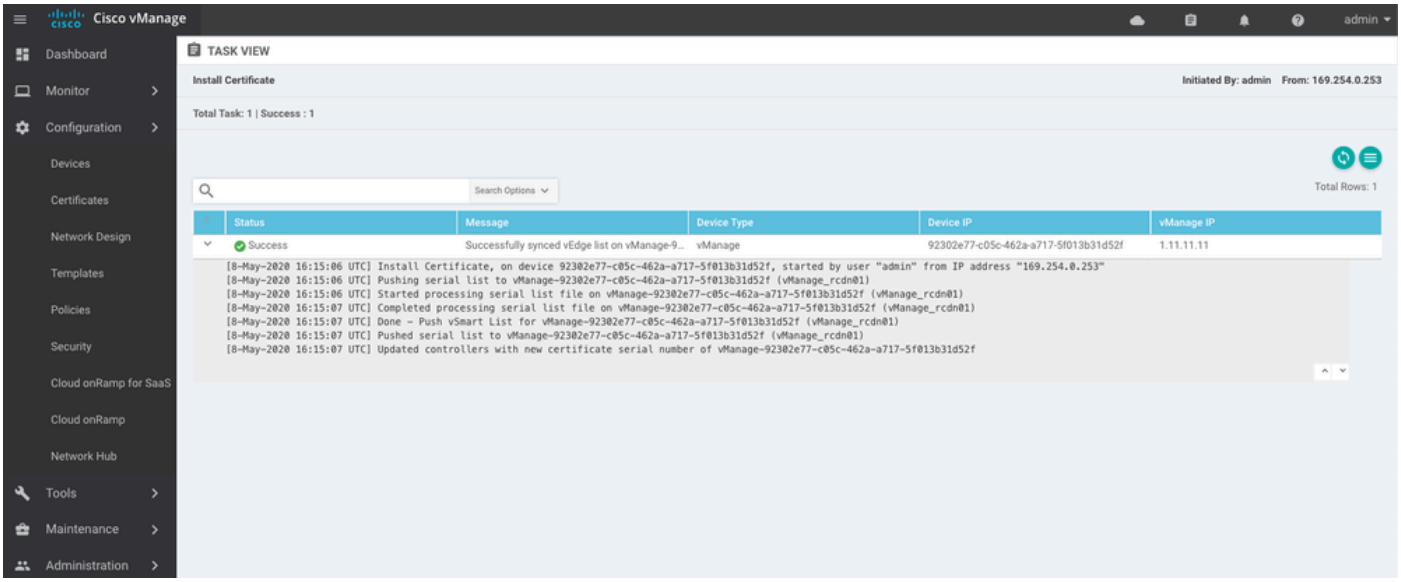


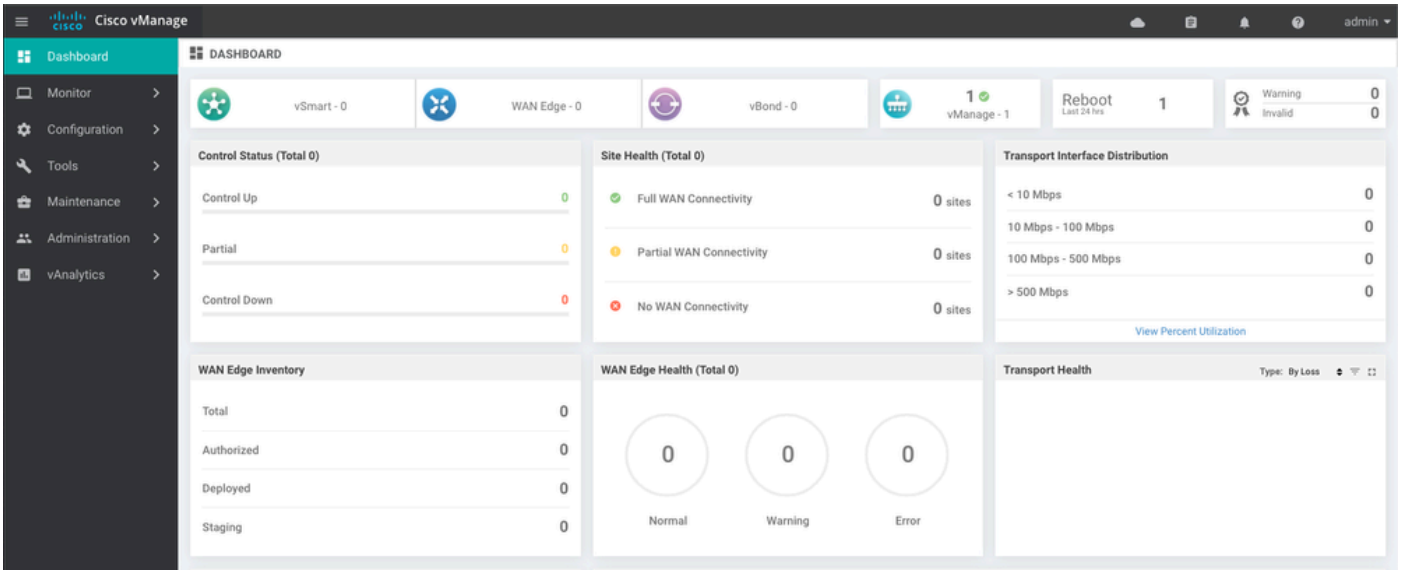
Step 5. Install vManage Certificate

Use the root.crt that is installed in Step 2.




Cisco vManage
admin
Dashboard
Monitor
Configuration
Devices
Certificates
Network Design
Templates
Policies
Security
Cloud onRamp for SaaS
Cloud onRamp
Network Hub
Tools
Maintenance
Administration
vAnalytics
CONFIGURATION | CERTIFICATES
Install Certificate
WAN Edge List
Controllers
Send to vBond
No file chosen
Search Options
Total Rows: 1
Operation Status
Controller Type
Hostname
System IP
Site ID
Certificate Serial
Expiration Date
uuid
vEdge List St...
Device IP
CSR Generated
vManage
vManage_rcdn01
1.11.11.11
100
No certificate installed
92302e77-c05...
Sync
1.11.11.11
Install Certificate
Certificate Text
Select a file
-----BEGIN CERTIFICATE-----
MIIEQjCCAyqgAwIBAgIITwjqFHbasy8wDQYJKoZIhvcNAQELBQAwbDELMAkGA1UE
BhMCVVMxCzAJBgNVBAgTAlRYMQ0wCwYDVQQHEwRSQ0ROMRcwFQYDVQQKEw5hbWF1
Z3VzdC5jaXNjbzEXMBUGA1UECxMOYW1hdWd1c3QuY2lzY28xDzANBgNVBAMTBlJv
b3RDQTAeFw0yMDA1MDgxNjE0MDBaFw0yMzA1MDgxNjE0MDBaMIHNMQswCQYDVQQG
EwJVUzETMBEGA1UECBMKQ2FsaWZvcm5pYTERMA8GA1UEBxMIU2FuIEpvc2UxFzAV
BgNVBAsTDmFtYXVndXN0LmNpc2NvMRQwEgYDVQQKEwt2SVB0ZWxhIEluYzFDMEEG
A1UEAxM6dm1hbmFnZS05MjMwMmU3Ny1jMDVjLTQ2MmEtYTcxNy01ZjAxM2IzMWQ1
MmYtMC52aXB0ZWxhLmNvbTEiMCAGCSqGSIb3DQEJARYTc3VwcG9ydEB2aXB0ZWxh
LmNvbTCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAKeHM8FHcKmhqX0E
tlZnLJcP5bGjZTTBiihm+kXwWyqnupv/JTdSy4AEx28gamKt/+d7dNg9iPrfAsBc
5rVoP6kyeT2MGX0FdostMNVy8asUnCJhtiRsrEn6mnd5Y0HSNz6jPS/Wx2IAnlZB
Z/W46TM7kyqDl1tus4R1vj3H7ASkeAHucVZ4NmPoAJSn1Uzx8pIPBloG2bwmErJP
17zpn8W8VhqT2r0zOAz3Jb246IPd7d8sm8XcBKif51FY+nXepDhrQz3XZUcToqm/
Install
Cancel


Cisco vManage
admin
Dashboard
Monitor
Configuration
Devices
Certificates
Network Design
Templates
Policies
Security
Cloud onRamp for SaaS
Cloud onRamp
Network Hub
Tools
Maintenance
Administration
TASK VIEW
Install Certificate
Initiated By: admin
From: 169.254.0.253
Total Task: 1 | Success : 1
Search Options
Total Rows: 1
Status
Message
Device Type
Device IP
vManage IP
Success
Successfully synced vEdge list on vManage-9...
vManage
92302e77-c05c-462a-a717-5f013b31d52f
1.11.11.11
[8-May-2020 16:15:06 UTC] Install Certificate, on device 92302e77-c05c-462a-a717-5f013b31d52f, started by user "admin" from IP address "169.254.0.253"
[8-May-2020 16:15:06 UTC] Pushing serial list to vManage-92302e77-c05c-462a-a717-5f013b31d52f (vManage_rcdn01)
[8-May-2020 16:15:06 UTC] Started processing serial list file on vManage-92302e77-c05c-462a-a717-5f013b31d52f (vManage_rcdn01)
[8-May-2020 16:15:07 UTC] Completed processing serial list file on vManage-92302e77-c05c-462a-a717-5f013b31d52f (vManage_rcdn01)
[8-May-2020 16:15:07 UTC] Done - Push vSmart List for vManage-92302e77-c05c-462a-a717-5f013b31d52f (vManage_rcdn01)
[8-May-2020 16:15:07 UTC] Pushed serial list to vManage-92302e77-c05c-462a-a717-5f013b31d52f (vManage_rcdn01)
[8-May-2020 16:15:07 UTC] Updated controllers with new certificate serial number of vManage-92302e77-c05c-462a-a717-5f013b31d52f


Cisco vManage
admin
Dashboard
Monitor
Configuration
Tools
Maintenance
Administration
vAnalytics
DASHBOARD
vSmart - 0
WAN Edge - 0
vBond - 0
1
vManage - 1
Reboot
Last 24 hrs
1
Warning
0
Invalid
0
Control Status (Total 0)
Control Up
0
Partial
0
Control Down
0
Site Health (Total 0)
Full WAN Connectivity
0 sites
Partial WAN Connectivity
0 sites
No WAN Connectivity
0 sites
Transport Interface Distribution
< 10 Mbps
0
10 Mbps - 100 Mbps
0
100 Mbps - 500 Mbps
0
> 500 Mbps
0
View Percent Utilization
WAN Edge Inventory
Total
0
Authorized
0
Deployed
0
Staging
0
WAN Edge Health (Total 0)
0
Normal
0
Warning
0
Error
Transport Health
Type: By Loss

Step 6. Restore The Database

<#root>

```
vManage_rcdn01# request nms configuration-db restore path /home/admin/05_08_20_configdb.tar.gz

Configuration database is running in a standalone mode
0 [main] INFO com.viptela.vmanage.server.deployment.cluster.ClusterConfigurationFileHandler  - Trying t
4 [main] INFO com.viptela.vmanage.server.deployment.cluster.ClusterConfigurationFileHandler  - Working
Successfully saved cluster configuration for localhost
Starting DB backup from: localhost
Creating directory: local
cmd to backup db: sh /usr/bin/vconfd_script_nms_neo4jwrapper.sh backup localhost /opt/data/backup/local
Finished DB backup from: localhost
Stopping NMS application server on localhost
Stopping NMS configuration database on localhost
Reseting NMS configuration database on localhost
Restoring from DB backup: /opt/data/backup/staging/graph.db-backup
cmd to restore db: sh /usr/bin/vconfd_script_nms_neo4jwrapper.sh  restore /opt/data/backup/staging/grap
Successfully restored DB backup: /opt/data/backup/staging/graph.db-backup
Starting NMS configuration database on localhost
Waiting for 10s before starting other instances...
Polling neo4j at: localhost
NMS configuration database on localhost has started.
Updating DB with the saved cluster configuration data
Successfully reinserted cluster meta information
Starting NMS application-server on localhost
Waiting for 120s for the instance to start...
Removed old database directory: /opt/data/backup/local/graph.db-backup
Successfully restored database
```

This step takes more time and it depends on the backup.

You can verify the process by tailing the logs on vShell.

<#root>

```
vManage_rcdn01:~$

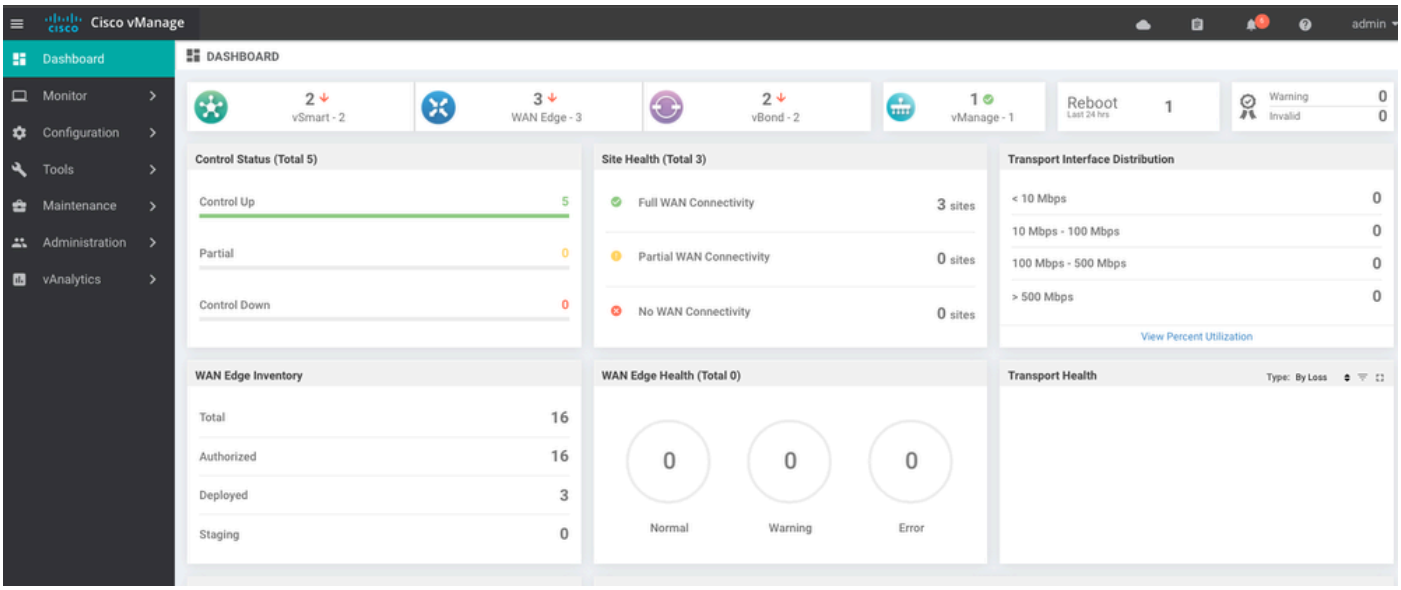
tail -fq /var/log/nms/vmanage-server.log /var/log/nms/neo4j-out.log
```

Step 7. Check Services

```
vManage_rcdn01# request nms all status
```

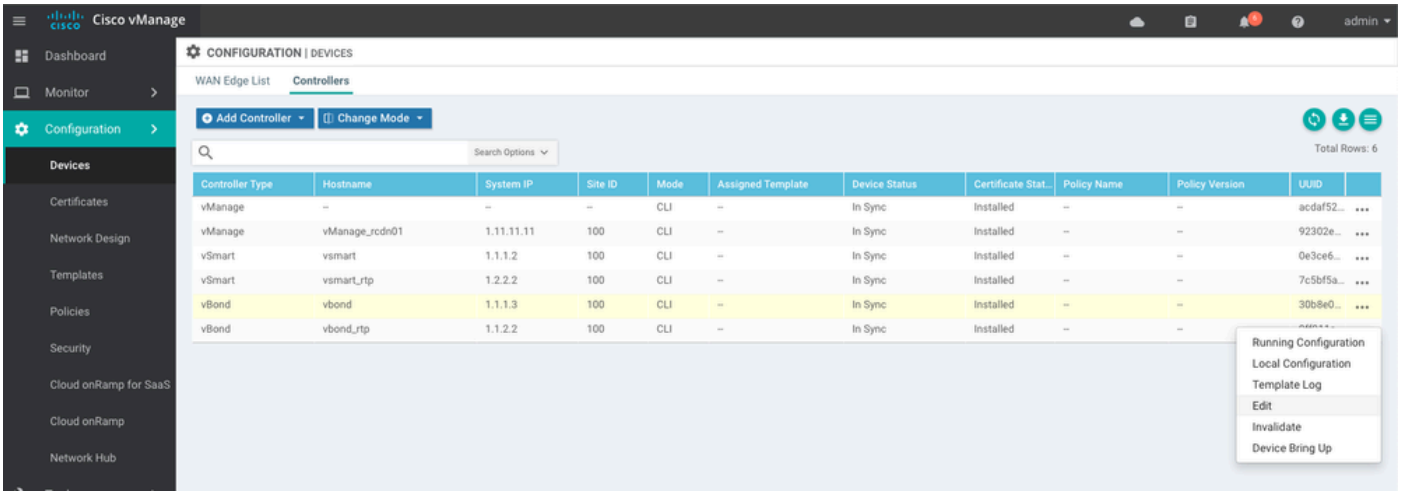
Step 8. Reauthenticate Controllers

Currently, you can observe that all policies, templates, and configurations have been loaded onto vManage, but all controllers are down.

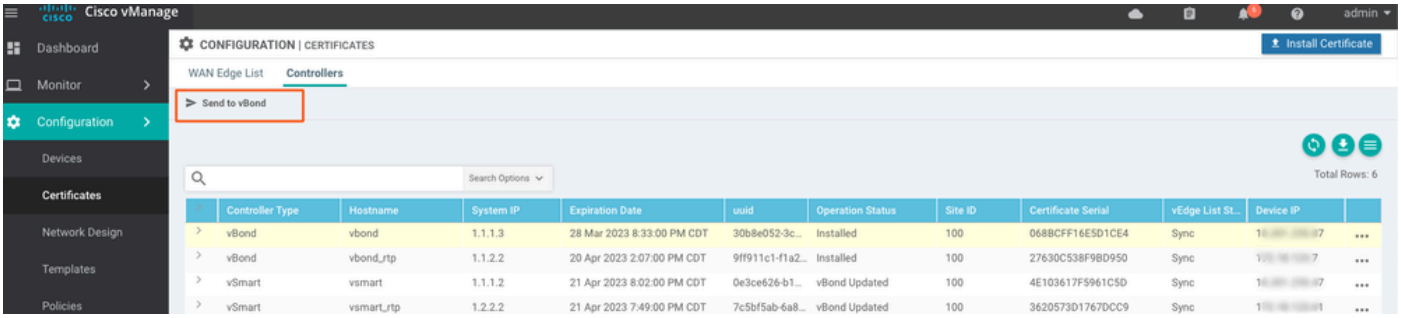


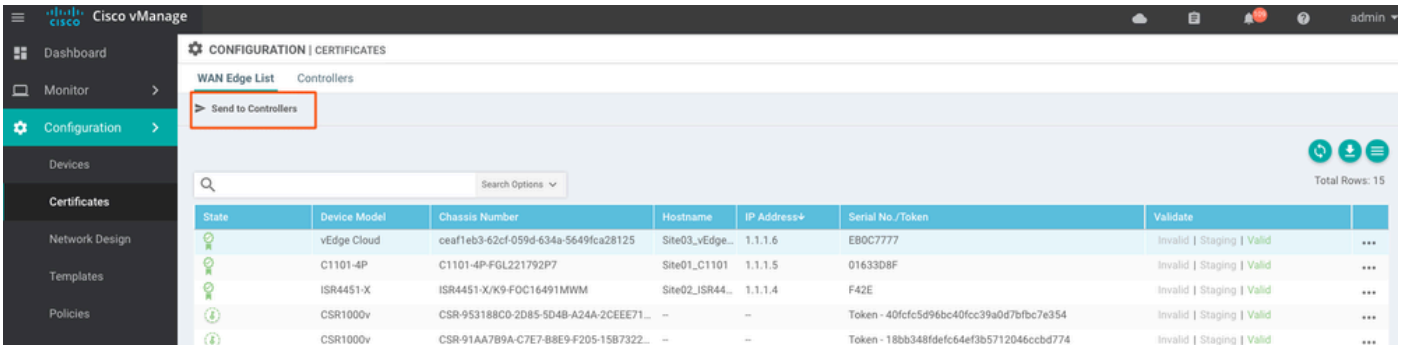
You need to re-authenticate all the controllers.

Navigate to Configuration > Devices. Edit each controller and fill in the management IP address (management IP can be found in the local configuration) username and password.



Step 9. Send Updates to Controllers





Now, you see all the devices can be managed by vManage.

