# Configuration-db Restoration Fails in vManage Cluster DR Setup

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## Introduction

This document describes a problem with configuration-db restoration fails in vManage cluster DR setup.

## Problem

Restore vManage NMS from Backup: configuration-db restoration fails in vmanage cluster DR setup

From the CLI, use the request nms configuration-db restore path command. This command restores the configuration database from the file locate datapath. In this example, the destination is the standby vManage NMS. Run these commands on the standby vManage NMS:

```
vmanage-1# request nms configuration-db restore path /home/admin/cluster-backup.tar.gz
Configuration database is running in a cluster mode
!
1
1
line omitted
!
!
1
..... 100%
Backup complete.
Finished DB backup from: 30.1.1.1
Stopping NMS application server on 30.1.1.1
Stopping NMS application server on 30.1.1.2
Stopping NMS application server on 30.1.1.3
Stopping NMS configuration database on 30.1.1.1
Stopping NMS configuration database on 30.1.1.2
Stopping NMS configuration database on 30.1.1.3
Reseting NMS configuration database on 30.1.1.1
Reseting NMS configuration database on 30.1.1.2
Reseting NMS configuration database on 30.1.1.3
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/graph.db-backup Successfully restored DB backup: /opt/data/backup/staging/graph.db-backup Starting NMS configuration database on 30.1.1.1 Waiting for 10s before starting other instances... Starting NMS configuration database on 30.1.1.2 Waiting for 120s for the instance to start... NMS configuration database on 30.1.1.2 has started. Starting NMS configuration database on 30.1.1.3 Waiting for 120s for the instance to start... NMS configuration database on 30.1.1.3 has started. NMS configuration database on 30.1.1.1 has started. Updating DB with the saved cluster configuration data Successfully reinserted cluster meta information Starting NMS application-server on 30.1.1.1 Waiting for 120s for the instance to start... Starting NMS application-server on 30.1.1.2 Waiting for 120s for the instance to start... Starting NMS application-server on 30.1.1.3 Waiting for 120s for the instance to start... Removed old database directory: /opt/data/backup/local/graph.db-backup Successfully restored database vmanage-1#

Step 1. Config-db should restore with those logs but there is a scenario where config\_db backup fails with these error messages.

```
vmanage-1# request nms configuration-db restore path /home/admin/cluster-backup.tar.gz
Configuration database is running in a cluster mode
1
1
line ommited
1
1
2020-08-09 17:13:48.758+0800 INFO [o.n.k.i.s.f.RecordFormatSelector] Selected
RecordFormat:StandardV3_2[v0.A.8] record format from store /opt/data/backup/local/graph.db-
backup
2020-08-09 17:13:48.759+0800 INFO [o.n.k.i.s.f.RecordFormatSelector] Format not configured.
Selected format from the store: RecordFormat:StandardV3_2[v0.A.8]
..... 30%
..... 40%
..... 70%
.....Checking node and relationship counts
..... 10%
..... 20%
..... 40%
..... 50%
..... 100% Backup complete.
Finished DB backup from: 30.1.1.1
Stopping NMS application server on 30.1.1.1
```

Stopping NMS application server on 30.1.1.2 Could not stop NMS application-server on 30.1.1.2 Failed to restore the database

Step 2. In the mentioned failure, scenario Under **cluster management** page in vmanage, navigate to **Administrator > Cluster management > Select neighbor vmanage (...) > Edit** 

ADMINISTRATION   CL	USTER MANAGEMENT							
ervice Configuration	Service Reachability							
Add vManage lick hostname or status icon	n for more information							Sormal 🜖 Warning Scror SDisa
Hostname	IP Address	Status	Application Server	Statistics Database	Configuration Database	Messaging Server	SD-AVC	UUID
vmanage-2	30.1.1.2	Ready	0	0	0	0	0	f4cc18e7-22a5-49af-9710-c6 +++
vmanage-1	30.1.1.1	Ready	0	0	0	0	0	62a1d599-771f-4cF= h14a fa
vmanage-3	30.1.1.3	Ready	0	0	0	0	0	f28b17ba-ad55-4f
							Click here	Edit

While the vManage in cluster management is edited, the error received is: "Failed to get a list of configured ips -Authentication failed"

Edit vManage	×
Failed to get list of configured ips Authentication failed	
vManage IP Address	Select Services         Application Server         Statistics Database         Configuration Database         Messaging Server         SD-AVC
	Update Cancel

# Solution

During the config-db restore operation in a vManage cluster, it is required to start/stop services on the remote nodes. This is done by Netconf requests made to the remote node in the cluster.

If control connection present between vmanages in the cluster then vmanage try to authenticate the remote node with the public key of the remote node to authenticate the Netconf request, which is similar to control connections between devices. If it is not there then it falls back to the credentials stored in the database table which was used to form the cluster.

The issue we have encountered is that the password got changes via CLI however the cluster management password in the database not updated. So whenever we change the password of netadmin account that is used to create the cluster initially, you need to update the password with the help of the **edit** operation of cluster-management too. These are the additional steps you need to follow.

- 1. Log in to each vmanages GUI.
- 2. Navigate to Administrator > Cluster management > Select respective vManage (...) > Edit , as shown in the image.
- 3. Update password equivalent to CLI.

• vManage1 30.1.1.1	
Edit vManage	×
vManage IP Address 30.1.1.1 Username admin Password	Select Services         Application Server         Statistics Database         Configuration Database         Messaging Server         SD-AVC
	Update Cancel

<ul> <li>vManage 30.1.1.2</li> </ul>	
Edit vManage	
vManage IP Address	
30.1.1.2	

vManage IP Address	Select Services
30.1.1.2	Application Server
Username	Configuration Database
admin	Messaging Server
Password	SD-AVC
*****	
	Update Cancel

×

• vManage3 30.1.1.3

Edit vManage	×
vManage IP Address 30.1.1.3 $\checkmark$ Username admin Password	Select Services   Application Server   Statistics Database   Configuration Database   Messaging Server   SD-AVC
	Update Cancel

Note: Rollback of the password from CLI is not feasible in this scenario from the CLI.

#### **Best Practice**

The best practice to change vManage password in the cluster is to navigate to Administrator > Manage users > update password.

This procedure updates the password in all 3 vManages in the cluster as well as the cluster management password as well.

#### **Related Information**

- https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/sdwan-xe-gsbook/manage-cluster.html
- https://www.cisco.com/c/dam/en/us/td/docs/routers/sdwan/knowledgebase/disaster\_recovery\_technote.pdf
- https://www.cisco.com/c/dam/en/us/solutions/collateral/enterprise-networks/sdwan/white-paper-c11-741440.pdf