UniVirStor Manager v2.16.19-06 Release Notes

This release solves the issue that the ceph services may crash due to tight memory usage. The updater will copy the UVS database in ETCD to SQLite when updating the first monitor node. Therefore, the update time of the first node could take about half an hour if there is much data in the database. After the first monitor is updated, the other node update will take only about 5 to 8 minutes.

We recommend all users update your Mars400 to 2.16.19-04 if you use an older version of 2.16.19.

Users can upgrade the cluster with the UVS version older than version 2.16.19.06. Versions older than 2.15.18 shall upgrade to 2.16.19-03 before you can upgrade to version 2.16.19-06.

The UVS v2.16.19-06 update will only update the UVS Manager. Therefore, there is no ceph service restart and no node reboot is required.

Updates

- 1. Covert ETCD database to SQLite database.
- 2. Increase Monitor memory target to 3000 MB
- 3. Enable scrub error auto repair
- 4. Enable swap memory to 500MB

Upgrade Guide

Prerequisite

1. Your current UVS version shall be any of v2.16.19, 2.16.19-01 \sim 05.

Log in to Ambedded Freshdesk and Download the update file.

https://ambedded.freshdesk.com/en/support/solutions/articles/47001220510-uvs-update-f ile-for-v2-16-19-06

Steps to upgrade the firmware

Step 1. Upgrade the fiest monitor node

- 1. 1.Make sure your cluster is in a healthy state.
- 2. Upload the 2.16.19.02.upd files to the /var/www/html/mars200updat/ folder of your first monitor node by using scp.
- 3. Use ssh to log in to the the monitor node that hosts that has the 2.16.19.06.upd uploades.
- 4. Make sure the required files has been copied to your first monitor node's directory /var/www/html/mars200update.
- 5. Make sure the md5sum of this file is 3ba68281b014bf60501cfca9401d9d18
- 6. Use "su admin" to enter admin console manual. Select 6 to execute the update. Enter the IP address of this node and the 2.16.19.06.upd file name. (Figure 1)

```
MARS400 Version 2.16.19 Rev. 04
                                 (build at 20220407_232042)
 Node: node138-02f0 (Static)
 Node Number(Board ID): 7
  Main Menu
    Q. Quit
    1. Shutdown
    2. Reboot
    3. Change Password
    4. Network Configuration
    5. Change Time Zone
    6. Update
    7. Network Diagnostics
    8. CEPH Diagnostics
    9. Default Restore Check
    d. Disk Diagnostics
Enter Option : 6
Input Update Server IP or
UPD File URL (http:// or https:// ) :192.168.3.138
UPD File Name ? (default is 2.16.20.upd): 2.16.19.06.upd
```

- 7. Wait for the updater to complete the upgrade on this node. The update will take longer than 30 minutes bacause the updater will copy data in ETCD to a rados pool sqlite.
- 8. After the update is complete, it will ask you to hit any key and return to the admin console.
- 9. Make sure the version shown on the top of admin console is Version 2.16.19 Rev. 06. Please refer to the following picture.

```
MARS400 Version 2.16.19 Rev. 06
                                  (build at 20220609 165103)
Node: node138-02f0 (Static)
Node Number(Board ID): 7
 Main Menu
   Q. Quit
   1. Shutdown
   2. Reboot
   3. Change Password
   4. Network Configuration
   5. Change Time Zone
   6. Update
   7. Network Diagnostics
   8. CEPH Diagnostics
   9. Default Restore Check
    d. Disk Diagnostics
Enter Option :
```

Step 2. Update other monitor nodes

- 1. Open the UVS manager web on the monitor node that was just updated.
- 2. Navigate to the Setting \rightarrow Firmware Update page
- 3. Click the check box of node name to select monitor nodes not updated yet.

Node Name	IP Address	Role 🕴	UVS Version	Version
node131-02e2	192.168.3.131	mon mgr	2.16.19.05	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400
node133-02e6	192.168.3.133	osd	2.16.19.05	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400
node134-02e8	192.168.3.134	osd	2.16.19.05	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400
node135-02ea	192.168.3.135	osd	2.16.19.05	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400
node136-02ec	192.168.3.136	osd	2.16.19.05	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400
node137-02ee	192.168.3.137	mgr mon	2.16.19.05	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400
node138-02f0	192.168.3.138	mgr mon	2.16.19.06	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400

Click the Push Update button and select the upd file. Select the Rolling Push Mode and finally click the Push button.

Manag	ger ^{Dashboard}	CEPH 👻	Ceph FS Object Storage - Storage - OpenStack Settings	; -
Φι	Ipload Firmware	⊕Pus	Push UPD to Selected Nodes	×
			Select Push Mode*:	
			Rolling Push (Push One By One)	~
	Node Name	IP	Select Push UPD File*:	
		ï	2.16.19.06.upd	~
	node131-02e2	19	Duch	
	node137-02ee	19	2051 205.337	

The software updater will push changes to these nodes.

After the update is completed, you will find their UVS Versions of monitors are 2.16.19-06.

Node Name	IP Address	Role 🔶	UVS Version	Version			
node131-02e2	192.168.3.131	mon mgr	2.16.19.06	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400			
node133-02e6	192.168.3.133	osd	2.16.19.05	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400			
node134-02e8	192.168.3.134	osd	2.16.19.05	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400			
node135-02ea	192.168.3.135	osd	2.16.19.05	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400			
node136-02ec	192.168.3.136	osd	2.16.19.05	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400			
node137-02ee	192.168.3.137	mgr mon	2.16.19.06	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400			
node138-02f0	192.168.3.138	mgr mon	2.16.19.06	CEPH: 16.2.5 KERNEL: 5.4.100-MARS400			

Step 3: Update all of the OSD nodes Step 4: Update the MDS node if you have one.

*** It is not necessary to keep the UVS manager open all the time during the update. The updater works in the background. You can close the UVS manager and reopen it to check the result later. ***