# UVS Manager v2.14.17-03 Release Notes

Release version 2.14.17-03 is a bug fix release of UVS manager v2.14.17. We also update the Ceph version to Nautilus 14.2.16. We recommend all customers using UVS v2.14.16 and 2.14.17 upgrade to this new version. If you are upgrading from v2.14.16, or any 2.14.17-x you can upgrade to this version directly. Please also refer to the <u>release note of 2.14.17</u>, <u>2.14.17-01</u>, and <u>2.14.17-02</u>.

You have to login in Ambedded help desk portal <u>ambedded.freshdesk.com</u> to download the upgrade file from the following link.

https://ambedded.freshdesk.com/en/support/solutions/articles/47001178571-uvs-manager-2-14-17-3-update-file

Please read this release note carefully before you upgrade the UVS manager.

# Changelog

- Upgrade the Ceph version to the latest Nautilus version 14.2.16.
- **[Enhancement]** Resolve the issue that sometimes the UVS manager RADOS Gateway page hangup.
- [Enhancement] Manage all logs to avoid over consume storage
- [Enhancement] Support pg balancer
- [Bug Fixed] Miss some data when creating UVS license request
- [Bug Fixed] Fix the wrong setting for the cephfs max\_mds.

# **Upgrade Guide**

There are three major software upgrades. Please read this upgrade notes carefully before you start to upgrade your Mars 400 appliance software.

- 1. UVS manager: Upgrade to version v2.14.17-03.
- 2. **Upgrade the Ceph:** Upgrade Ceph version from Nautilus 14.2.x to Nautilus 14.2.16. The UVS manager upgrade assistant will automatically restart the Ceph daemons after pushing the upgrade package to the specified nodes.

You can select multiple nodes for one push. UVS will do the rolling update one node at a time. There will be no downtime during the upgrade. But, please do follow the following procedure. The steps to completely upgrade the software are

- 1. Download the update file from here and rename it as "2.14-17.upd".
- 2. Upgrade the first monitor node by the firmware update feature of the UVS manager. The first monitor node is the node you are using UVS manager for the upgrade.
- 3. Upgrade the rest of the monitor & OSD nodes.
- 4. Upgrade MDS nodes if you have MDS nodes in use.
- 5. Check the UVS software versions.
- 6. Upgrade the external RADOS gateways.
- 7. Upgrade the external iSCSI gateways.
- 8. Update the cluster timezone.
- 9. Finally, please upgrade your ceph clients.

Please follow the following sections for details of each step. Also, we put a video about the upgrade on youtube. Here is the link <u>https://youtu.be/6aCplqCfb6o</u>.

Step1: Upgrade the First Monitor Node

- 1. Make sure your cluster is in a healthy state.
- 2. Open your UVS manager on a browser and click the menu "Settings" -> "Firmware Update".
- 3. Use the UVS "**Upload Firmware**" feature to **upload** the "2.14-17.upd" package to this monitor node.

| Upload New Firmware                  | × |
|--------------------------------------|---|
| Select File*:<br>Browse 2.14-17.upd  |   |
| Upload<br>Existing Firmware in Cache |   |

4. After uploading the .upd file, select the current monitor node, select the **rolling push** and press "**Push Update**" to push the .upd file for the updating.

| 2 | UniVirStore Manager Dasi | hboard CEPH <del>-</del> Object Sto | rage <del>-</del> Storage - | OpenStack Settings <del>-</del> |                                 | 1 | admin <del>-</del> |
|---|--------------------------|-------------------------------------|-----------------------------|---------------------------------|---------------------------------|---|--------------------|
|   |                          |                                     |                             |                                 | Search                          | Ø | III •              |
|   | Node Name                | IP Address                          | Role                        | UVS Version                     | Version                         |   |                    |
|   | node138-103c             | 192.168.1.138                       | mon<br>mds<br>mgr           | 2.14-16.20200408                | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |                    |
|   | node137-103a             | 192.168.1.137                       | mon<br>mds<br>mgr           | 2.14-16.20200408                | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |                    |
|   | node136-1038             | 192.168.1.136                       | mon<br>mds<br>mgr           | 2.14-16.20200408                | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |                    |
|   | node135-1036             | 192.168.1.135                       | mds                         | 2.14-16.20200408                | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |                    |
|   | node134-1034             | 192.168.1.134                       | osd                         | 2.14-16.20200408                | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |                    |
|   | node133-1032             | 192.168.1.133                       | osd                         | 2.14-16.20200408                | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |                    |
|   | node132-1030             | 192.168.1.132                       | osd                         | 2.14-16.20200408                | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |                    |
|   | node131-102e             | 192.168.1.131                       | osd                         | 2.14-16.20200408                | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |                    |

| ر<br>م | UniVirStore Manager | Dashboard CEPH -<br>Push UPD to Sele |             | Storage 👻 OpenStack | Settinas <del>-</del><br>X | _                               |
|--------|---------------------|--------------------------------------|-------------|---------------------|----------------------------|---------------------------------|
|        |                     | Select Push Mode*:                   | One By One) |                     | ~                          | Search                          |
|        | Node Name           | Push                                 |             |                     |                            | Version                         |
|        | demo4-117a          | 192.168.1.154                        | osd         | 2.14-16.20200317    |                            | CEPH: 14.2.5<br>KERNEL: 4.12.14 |
|        | demo5-117c          | 192.168.1.155                        | osd         | 2.14-16.20200317    |                            | CEPH: 14.2.5<br>KERNEL: 4.12.14 |

5. A few minutes later, you'll see the current node has been updated to version 2.14.17-03

|   |              |               |  |                   |                  | Search                           | Ø |  |
|---|--------------|---------------|--|-------------------|------------------|----------------------------------|---|--|
|   | Node Name    | IP Address    |  | Role              | UVS Version      | Version                          |   |  |
|   | node138-103c | 192.168.1.138 |  | mon<br>mds<br>mgr | 2.14.17-03       | CEPH: 14.2.16<br>KERNEL: 4.12.14 |   |  |
|   | node137-103a | 192.168.1.137 |  | mon<br>mds<br>mgr | 2.14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14  |   |  |
|   | node136-1038 | 192.168.1.136 |  | mon<br>mds<br>mgr | 2.14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14  |   |  |
|   | node135-1036 | 192.168.1.135 |  | mds               | 2.14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14  |   |  |
|   | node134-1034 | 192.168.1.134 |  | osd               | 2.14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14  |   |  |
|   | node133-1032 | 192.168.1.133 |  | osd               | 2.14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14  |   |  |
|   | node132-1030 | 192.168.1.132 |  | osd               | 2.14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14  |   |  |
| _ |              |               |  |                   |                  | <b>CEPH:</b> 14.2.8              |   |  |

### Step 2: Upgrade Other Monitors

Please upgrade all other monitors by pushing updates to all of the monitors at the same time. One monitor will take 5 minutes to complete the update.

You can enter the role name in the search box to filter the nodes you want to push updates. For example, type "mon" will show only monitor nodes on the list. Select the nodes that you want to update the firmware.

| ۲   | Upload Firmware      | sh Update 🕜 Pu | ush RPM           |                  |  |   |       |
|-----|----------------------|----------------|-------------------|------------------|--|---|-------|
|     |                      |                |                   |                  | mon  | Θ | III • |
|     | Node Name 🔻          | IP Address     | Role              | UVS Version      | Version  |   |       |
|     | node138-103c         | 192.168.1.138  | mon<br>mds<br>mgr | 2.14.17-03       | <b>CEPH:</b> 14.2.16<br><b>KERNEL:</b> 4.12.14 |   |       |
|     | node137-103a         | 192.168.1.137  | mon<br>mds<br>mgr | 2.14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14                |   |       |
|     | node136-1038         | 192.168.1.136  | mon<br>mds<br>mgr | 2.14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14                |   |       |
| how | ing 1 to 3 of 3 rows |                |                   |                  |  |   |       |

Click the **Push Update** button. Select the **Rolling Push** and **2.14-17.upd** file. Finally click the **Push button**.

| Push UPD to Selected Nodes     | × |
|--------------------------------|---|
| Select Push Mode*:             |   |
| Rolling Push (Push One By One) | ~ |
| Select Push UPD File*:         |   |
|                                |   |

# Step 3: Upgrade the OSD node.

Repeat the same steps as updating the Monitors for all of the OSD.

| ۲ | Upload Firmware | ⊕Pus | h Update      | Push RP | м    |     |                |                                 |   |   |
|---|-----------------|------|---------------|---------|------|-----|----------------|---------------------------------|---|---|
|   |                 |      |               |         |      |     |                | osd                             | Ø | ₩ |
|   | Node Name       | *    | IP Address    |         | Role | ÷ U | VS Version     | Version                         |   |   |
| 2 | node131-102e    |      | 192.168.1.131 |         | osd  | 2.  | 14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |   |
| 2 | node132-1030    |      | 192.168.1.132 |         | osd  | 2.  | 14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |   |
| 2 | node133-1032    |      | 192.168.1.133 |         | osd  | 2.  | 14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |   |
| 2 | node134-1034    |      | 192.168.1.134 |         | osd  | 2.  | 14-16.20200408 | CEPH: 14.2.8<br>KERNEL: 4.12.14 |   |   |

## Step 4: Upgrade the MDS Nodes

If you have MDS in use, you shall also upgrade the MDS nodes after the OSD. Select the MDS nodes and upgrade them by rolling push. You only need to upgrade the active MDS nodes as the standby MDS nodes have been upgraded during the Monitor nodes upgrade.

Step 4: Check the software version after upgrade.

After you complete the upgrade and reboot, please check the firmware version of each node by navigating to the Settings -> Firmware Update.

The correct software versions after this upgrade shall be

- 1. UVS: 2.14.17-03
- 2. Ceph: 14.2.16
- 3. Kernel: 4.12.14

|              |               |                   |             | Search   | Θ | III · |
|--------------|---------------|-------------------|-------------|--|---|-------|
| Node Name    | IP Address    | Role              | UVS Version | Version  |   |       |
| node131-102e | 192.168.1.131 | osd               | 2.14.17-03  | CEPH: 14.2.16<br>KERNEL: 4.12.14               |   |       |
| node132-1030 | 192.168.1.132 | osd               | 2.14.17-03  | CEPH: 14.2.16<br>KERNEL: 4.12.14               |   |       |
| node133-1032 | 192.168.1.133 | osd               | 2.14.17-03  | CEPH: 14.2.16<br>KERNEL: 4.12.14               |   |       |
| node134-1034 | 192.168.1.134 | osd               | 2.14.17-03  | CEPH: 14.2.16<br>KERNEL: 4.12.14               |   |       |
| node135-1036 | 192.168.1.135 | mds               | 2.14.17-03  | CEPH: 14.2.16<br>KERNEL: 4.12.14               |   |       |
| node136-1038 | 192.168.1.136 | mon<br>mds<br>mgr | 2.14.17-03  | <b>CEPH:</b> 14.2.16<br><b>KERNEL:</b> 4.12.14 |   |       |
| node137-103a | 192.168.1.137 | mon<br>mds<br>mgr | 2.14.17-03  | CEPH: 14.2.16<br>KERNEL: 4.12.14               |   |       |
| node138-103c | 192.168.1.138 | mon<br>mds<br>mgr | 2.14.17-03  | CEPH: 14.2.16<br>KERNEL: 4.12.14               |   |       |

## Step 5: Upgrade the external RADOS Gateway.

During the firmware update, we've updated the internal RADOS Gateway daemons collocated with monitor nodes. If you have external RADOS gateways, you can upgrade the external RGW one by one by deleting and re-deploying them. The UVS manager "Delete" external gateway feature purges only the ceph information on the RGW container; this will not delete RADOS data. Please refer to the UVS document section "<u>Creating RADOS</u> <u>Gateways on x86 servers</u>" for details about pulling the new docker image for Ceph Nautilus.

#### Step 6: Upgrade the external iSCSI Gateway.

During the firmware update, we've updated the internal iSCSI Gateway daemons collocated with monitor nodes. For the external iSCSI gateways, you could upgrade your Ceph packages manually. You don't have to re-deploy the iSCSI sessions.

- CentOS: # yum update ceph-common
- Debian/Ubuntu: # sudo apt upgrade ceph-common

#### Step 7: Change cluster timezone

UVS uses "UTC" as the UVS default timezone. Since UVS 2.14.17, UVS provides a new function for changing your timezone of the Ceph cluster & UVS. After changing the timezone, the logs and services' time will match your local timezone. For your convenience, please go to the "**Settings**" >> "**NTP**" page and set the cluster timezone as the last step for the upgrade.