Upgrading to Release 2.3.1 Guide

Version 2.0

Revision History

Date	Version	Description
31-07-2019	1.0	Initial version
24-07-2020	2.0	Handle exception cases when adding new messenger protocol

Contents

1. Purpose

The purpose of this guide is to describe the upgrade from PetaSAN 2.3.0 release which uses Ceph Luminous 12.2.12 to PetaSAN 2.3.1 release which uses Ceph Nautilus 14.2.2.

2. Express Installer

The PetaSAN Express Installer v 2.3.1 needs to be run on all hosts, the installer will detect that an existing 2.3.0 is already present and will perform an upgrade. The installer will upgrade many components such as kernel, Ubuntu core OS, ui interfaces, it will also install an upgrade script for Ceph Nautilus. The Ceph upgrade process needs to be manually performed according to a specific sequence of steps as outlined below.

3. Ceph upgrade steps

3.1 Upgrade /restart monitor service on first 3 hosts

insure cluster status is OK ,pgs active/clean

```
ceph status
```

ssh to host 1

upgrade nautilus packages:

```
/root/upgrade-ceph-nautilus.sh
```

restart monitor service

```
systemctl restart ceph-mon@HOSTNAME
```

repeat for host 2 and host 3

3.2 Enable new messenger protocol

This needs to run from any node

```
ceph mon enable-msgr2
```

In some cases after this command, 1 monitor may be out of quorum, if this happens, perform the following on monitor host:

```
systemctl stop ceph-mon@HOSTNAME

ceph mon getmap -o /tmp/monmap

ceph-mon -i HOSTNAME --inject-monmap /tmp/monmap

systemctl start ceph-mon@HOSTNAME
```

3.3 Restart Manager service on first 3 hosts

ssh to host 1

restart manager service

systemctl restart ceph-mgr@HOSTNAME

repeat for host 2 and host 3

3.4 Restart OSDs on first 3 hosts

insure cluster status is active/clean

ceph status

ssh to host 1

restart OSDs

systemctl restart ceph-osd.target

repeat for host 2 and host 3

3.5 Restart OSDs remaining hosts

insure cluster status is active/clean

ceph status

ssh to host

upgrade nautilus packages:

/root/upgrade-ceph-nautilus.sh

restart OSDs

systemctl restart ceph-osd.target

repeat for host 4 and up

3.6 Upgrade OSDs stats reporting

insure cluster status is active/clean

ceph status

ssh to each host and preform the following on each OSD

systemctl stop ceph-osd@OSD_ID

ceph-bluestore-tool repair --path /var/lib/ceph/osd/ceph-OSD_ID

```
systemctl start ceph-osd@OSD_ID
```

where OSD_ID is the numeric value of the OSD

3.7 Complete the upgrade by disallowing pre-Nautilus OSDs

```
ceph osd require-osd-release nautilus
```