Online Upgrade Guide

Version 4.0.0

Revision History

Date	Version	Description
03-03-2020	1.0	Initial version
28-07-2020	2.0	Updates for release 2.5 and above
07-09-2020	2.1	Update apt -o dpkg command
14-12-2021	3.0	Updates for release 3.X and above
26-02-2023	3.1	Downloadable script for 2.X upgrades
06-06-2023	3.2	Quincy upgrade command
17-10-2023	3.2.1	Clarification node order
28-03-2025	4.0.0	Version 4.X

Contents

1. Purpose

The purpose of this document is to describe the online update procedures for existing PetaSAN installations.

It is recommended to always check this document for any version specific instructions before performing any upgrades.

2. PetaSAN releases

Each PetaSAN release will have aversion number consisting of 3 parts x.x.x

- **Major Releases**
    - For major releases the first part of version will be incremented.
    - Major releases are usually with major new Ceph and Ubuntu LTS versions
    - Upgrade will be done via installer

- **Minor Releases**
    - For minor releases the second part of version will be incremented.
    - Minor releases are usually created when new features are added.
    - Upgrade will be done online.

- **Bug Fixing Releases**
    - For Bug Fixing releases the third part of version will be incremented.
    - Bug Fixing releases are created to fix bugs.
    - Upgrade will be done online.

3. Upgrading PetaSAN 2.X to latest v 2.8.X

To begin upgrade, ensure the status of the cluster is OK, active/clean. For each node in the cluster perform the following steps, one node at a time, starting with first 3 management nodes.

Upgrading from v 2.3.1 to latest v 2.8.X

To enable online upgrades on existing PetaSAN 2.3.1 hosts, perform the following steps:

```
apt update
apt install ca-certificates
wget http://archive.petasan.org/repo/2.3.1-enable-updates.tar.gz
tar xzf 2.3.1-enable-updates.tar.gz
cd 2.3.1-enable-updates
./enable-updates.sh

apt update
export DEBIAN_FRONTEND=noninteractive
apt -o Dpkg::Options::="--force-confdef" upgrade
apt install petasan
```

Upgrading from v 2.4.X to latest v 2.8.X

Uncomment /Enable universe repositories.

```
nano /etc/apt/sources.list

# universe
deb http://archive.ubuntu.com/ubuntu/ bionic universe
deb http://archive.ubuntu.com/ubuntu/ bionic-updates universe
deb http://archive.ubuntu.com/ubuntu/ bionic-security universe

apt update
apt install ca-certificates
wget http://archive.petasan.org/repo/updatev2.sh
chmod +x updatev2.sh
./updatev2.sh
```

Upgrading from v 2.5.0 and above to latest v 2.8.X

```
apt update
apt install ca-certificates
wget http://archive.petasan.org/repo/updatev2.sh
chmod +x updatev2.sh
./updatev2.sh
```

4. Upgrading from PetaSAN 2.8.X to PetaSAN 3.0.0

Make sure you are at latest 2.8.X release. To begin upgrade, ensure the status of the cluster is OK, active/clean. For each node in the cluster perform the following steps, one node at a time, starting with first 3 management nodes.

```
apt update
apt install ca-certificates
wget http://archive.petasan.org/repo/petasan3.0.0-upgrade.tar.gz

tar xvf petasan3.0.0-upgrade.tar.gz

cd petasan3.0.0-upgrade

./upgrade.sh
```

5. Upgrading from PetaSAN 3.0.X, 3.1.X, 3.2.X to 3.3.0

To begin upgrade, ensure the status of the cluster is OK, active/clean. For each node in the cluster perform the following steps, one node at a time, starting with first 3 management nodes.

```
apt update
apt install ca-certificates

/opt/petasan/scripts/online-updates/update.sh
```

In case of kernel changes, the update script will recommend a reboot.

When **ALL** nodes are updated, run following command(s) once on any single node:

```
ceph osd require-osd-release quincy
ceph config set mon mon_mds_skip_sanity false
```

6. Upgrading from PetaSAN 3.3.0 to 4.0.0

To begin upgrade, ensure the status of the cluster is OK, active/clean. For each node in the cluster perform the following steps, one node at a time, starting with first 3 management nodes.

```
apt update
apt install ca-certificates

/opt/petasan/scripts/online-updates/update.sh
```

When **ALL** nodes are updated, run following command(s) once on any single node:

```
ceph osd require-osd-release reef
ceph config set mon mon_mds_skip_sanity false
```

7. Upgrading from PetaSAN 4.X and above

To begin upgrade, ensure the status of the cluster is OK, active/clean. For each node in the cluster perform the following steps, one node at a time, starting with first 3 management nodes.

```
/opt/petasan/scripts/online-updates/update.sh
```

In case of kernel changes, the update script will recommend a reboot.

When **ALL** nodes are updated, run following command(s) once on any single node:

```
ceph config set mon mon_mds_skip_sanity false
```