

## *How to upgrade Cluster EVE PE (Professional Edition) version 5 to version 6*

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*The EVE-NG Professional Edition (PE) Cluster upgrade can be done in two ways. Actual EVE upgrade, or the new EVE V6 installation restoring all data from backup.*

## I. Actual EVE Cluster V5 upgrade to the EVE Cluster V6

⚠ **Mandatory Prerequisites:** Internet and DNS must be reachable from your Server. This upgrade process requires internet access to get updates and install the latest EVE PE version from the EVE-NG repository. DNS must resolve names!

### 1. Upgrade current Master EVE PE to the latest version 5.0.1-144

- ⚠ **Important NOTE:** Make sure all labs/nodes are stopped in your EVE cluster system, and nothing is running on it.
- ⚠ **Important NOTE:** DO NOT run upgrade simultaneously/parallel sessions on Master and Satellite servers at the same time. EVE Cluster System upgrade must be done in following sequence:
- Master upgrade (completed)
  - Satellite upgrade (completed)
  - Next Satellite upgrade (completed)

1.1. Check your current Master EVE PE version.

SSH to your EVE CLI as root user and issue: `dpkg -l eve-ng-pro` This will display your PE EVE current version. It must be version **5.0.1-XX**

```
root@eve-pe5:~# dpkg -l eve-ng-pro
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-
pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version          Architecture Description
+++-=====
=====
ii  eve-ng-pro      5.0.1-131       amd64          A new generation software
for networking labs.
root@eve-pe5:~#
```

1.2. Update your current EVE to the latest version **EVE PE 5.0.1-144**.

SSH to your EVE CLI as root user and issue following commands:

```
apt update
apt upgrade
[answer y if required]
apt dist-upgrade
[answer y if required]
apt autoremove
[answer y if required]
reboot
```

1.3. Check your updated EVE PE version. It must be 5.0.1-144.

```

root@eve-pe5:~# dpkg -l eve-ng-pro
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-
pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version          Architecture Description
+++-=====
ii eve-ng-pro      5.0.1-144        amd64          A new generation software
for networking labs.
root@eve-pe5:~#

```

## 2. Upgrade current Satellite EVE PE to the latest version 5.0.1-144

*Repeat the following procedure for all satellite servers*

- ⚠ **Important NOTE:** Make sure all labs/nodes are stopped in your EVE cluster system, and nothing is running on it.
- ⚠ **Important NOTE:** DO NOT run upgrade simultaneously/parallel sessions on Master and Satellite servers at the same time. EVE Cluster System upgrade must be done in following sequence:
  - Master upgrade (completed)
  - Satellite upgrade (completed)
  - Next Satellite upgrade (completed)

### 2.1. Check your current Satellite EVE PE version.

SSH to your EVE CLI as root user and issue: `dpkg -l eve-agent` This will display your PE EVE current version. It must be version **5.0.1-XX**

```

root@eve-sat01:~# dpkg -l eve-agent
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-
pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version          Architecture Description
+++-=====
ii eve-agent      5.0.1-131        amd64          Agent for EVE-NG Sat Cluster
member
root@eve-sat01b:~#

```

### 2.2. Update your current EVE to the latest version **EVE PE 5.0.1-144**.

SSH to your EVE CLI as root user and issue following commands:

```

apt update

apt upgrade
[answer y if required]

apt dist-upgrade
[answer y if required]

apt autoremove
[answer y if required]

reboot

```

### 2.3. Check your updated EVE PE version. It must be 5.0.1-144.

```
root@eve-sat01:~# dpkg -l eve-agent
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-
pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version          Architecture Description
+++-+-----+-----+-----+-----+
ii eve-agent      5.0.1-144        amd64          Agent for EVE-NG Sat Cluster
member
root@eve-sat01:~#
```

## 3. Upgrade Master EVE PE to the EVE version 6.0.1-XX

⚠ **Important NOTE:** Make sure all labs/nodes are stopped in your EVE server, and nothing is running on it.

⚠ **Important NOTE:** DO NOT run upgrade simultaneously/parallel sessions on Master and Satellite servers at the same time. EVE Cluster System upgrade must be done in following sequence:

- Master upgrade (completed)
- Satellite upgrade (completed)
- Next Satellite upgrade (completed)

### 3.1. Check your current EVE PE version.

SSH to your EVE CLI as root user and issue: `dpkg -l eve-ng-pro`, It must be version 5.0.1-144

```
root@eve-pe5:~# dpkg -l eve-ng-pro
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-
pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version          Architecture Description
+++-+-----+-----+-----+-----+
ii eve-ng         5.0.1-144        amd64          A new generation software for
networking labs.
root@eve-pe5:~#
```

### 3.2. Start the upgrade with a single command. After the upgrade process is completed, the reboot prompt will appear.

```
wget -O - http://www.eve-ng.net/jammy/update-eve-pro.sh > /tmp/update-eve-
pro.sh && chmod +x /tmp/update-eve-pro.sh && /tmp/update-eve-pro.sh
```

```
root@eve-pe5:~# wget -O - http://www.eve-ng.net/jammy/update-eve-pro.sh
> /tmp/update-eve-pro.sh && chmod +x /tmp/update-eve-pro.sh && /tmp/update-
eve-pro.sh
```

This will launch the Major upgrade to EVE 6.0

Requirements:

- EVE must be up to date ( 5.0.1-144 )
- All Ubuntu packages must be up to date
- External repositories are no supported ( only ubuntu and eve-ng are valids )

```

type yes to continue: yes
---Output ommitted---
Reading state information...
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Upgrade process done. Press Enter to reboot

```

### *If the upgrade process is rejected!*

3.3. If your EVE has extra Linux applications and repositories installed, they must be removed before upgrading. Example below is showing that **megacmd** apt is installed.

```

root@eve-pe5:~# wget -O - http://www.eve-ng.net/jammy/update-eve-pro.sh >
/tmp/update-eve-pro.sh && chmod +x /tmp/update-eve-pro.sh && /tmp/update-eve-pro.sh
---Output ommitted---

Upgrade REJECT !!!!!
external repository detected
Fresh install is recommended
rejected repository:
/var/lib/apt/lists/mega.nz_linux_repo_xUbuntu%5f20.04_._Packages
root@eve-pe5:~#

```

3.4. Extra repo and package removal. (Example, megacmd app)

- Find the app repo belongs to this apt installation.
- Remove app repo from your EVE
- Find the app package name
- Remove apt, y

```

root@eve-pe5:~# grep mega -r /etc/apt
/etc/apt/sources.list.d/megasync.list:deb
[signed-by=/usr/share/keyrings/meganz-archive-keyring.gpg]
https://mega.nz/linux/repo/xUbuntu_20.04/ ./
root@eve-pe5:~# rm /etc/apt/sources.list.d/megasync.list
root@eve-pe5:~# dpkg -l mega*
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-
pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name Version Architecture Description
+++-=====
=====
ii megacmd 1.6.3-2.1 amd64 MEGA Command Line Interactive
and Scriptable Application
root@eve-pe5:~# apt remove megacmd
Reading package lists... Done
Building dependency tree
--- Output ommitted ---
After this operation, 39.7 MB disk space will be freed.
Do you want to continue? [Y/n] y
(Reading database ... 118032 files and directories currently installed.)
Removing megacmd (1.6.3-2.1) ...
root@eve-pe5:~#

```

3.4.1. Complete the steps above if you have other apps installed to your EVE.

3.5. Re-run upgrade script 3.2

## 4. Upgrade Satellite EVE PE to the EVE version 6.0.1-XX

⚠ **Important NOTE:** Make sure all labs/nodes are stopped in your EVE server, and nothing is running on it.

⚠ **Important NOTE:** DO NOT run upgrade simultaneously/parallel sessions on Master and Satellite servers at the same time. EVE Cluster System upgrade must be done in following sequence:

- Master upgrade (completed)
- Satellite upgrade (completed)
- Next Satellite upgrade (completed)

### 4.1. Check your current EVE PE version.

SSH to your EVE CLI as root user and issue: `dpkg -l eve-agent` , It must be version 5.0.1-144

```
root@eve-sat-01:~# dpkg -l eve-agent
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-
pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version          Architecture Description
++-=====
=====
ii  eve-agent       5.0.1-144        amd64          Agent for EVE-NG Sat Cluster
member
root@eve-sat-01:~#
```

### 4.2. Start the upgrade with a single command. After the upgrade process is completed, the reboot prompt will appear.

```
wget https://www.eve-ng.net/jammy/update-sat-pro.sh -O /tmp/upgrade.sh &&
chmod +x /tmp/upgrade.sh && /tmp/upgrade.sh
```

```
root@eve-sat-01:~# wget https://www.eve-ng.net/jammy/update-sat-pro.sh -
O /tmp/upgrade.sh && chmod +x /tmp/upgrade.sh && /tmp/upgrade.sh
```

```
This will launch the Major upgrade to EVE 6.0
Requirements:
- EVE must be up to date ( 5.0.1-144 )
- All Ubuntu packages must be up to date
- External repositories are no supported ( only ubuntu and eve-ng are
valids )
type yes to continue: yes
---Output omitted---
Reading state information...
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Upgrade process done. Press Enter to reboot
```

### *If the upgrade process is rejected!*

4.3. If your EVE has extra Linux applications and repositories installed, they must be removed before upgrading. example below is showing that **megacmd** apt is installed.

```
root@eve-sat-01:~# wget https://www.eve-ng.net/jammy/update-sat-pro.sh -O
/tmp/upgrade.sh && chmod +x /tmp/upgrade.sh && /tmp/upgrade.sh
```

```
---Output omitted---
```

```
Upgrade REJECT !!!!!
```

```
external repository detected
Fresh install is recommended
rejected repository:
/var/lib/apt/lists/mega.nz_linux_repo_xUbuntu%5f20.04_._Packages
root@eve-sat-01:~#
```

#### 4.4. Extra repo and package removal. (Example, megacmd app)

- Find the app repo belongs to this apt installation.
- Remove app repo from your EVE
- Find the app package name
- Remove apt, y

```
root@eve-sat-01:~# grep mega -r /etc/apt
/etc/apt/sources.list.d/megasync.list:deb
[signed-by=/usr/share/keyrings/meganz-archive-keyring.gpg]
https://mega.nz/linux/repo/xUbuntu_20.04/ ./
root@eve-sat-01:~# rm /etc/apt/sources.list.d/megasync.list
root@eve-sat-01:~# dpkg -l mega*
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-
pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name Version Architecture Description
+++-+-----+-----+-----+-----+
=====
ii  megacmd 1.6.3-2.1 amd64 MEGA Command Line Interactive
and Scriptable Application
root@eve-sat-01:~# apt remove megacmd
Reading package lists... Done
Building dependency tree
--- Output omitted ---
After this operation, 39.7 MB disk space will be freed.
Do you want to continue? [Y/n] y
(Reading database ... 118032 files and directories currently installed.)
Removing megacmd (1.6.3-2.1) ...
root@eve-sat-01:~#
```

4.5. Complete the steps above if you have other apps installed to your EVE.

4.6. Re-run upgrade script [3.2](#)

## 5. Troubleshooting Cluster EVE PE after upgrade

5.1. Cannot Login in the Web UI or HTML5 Console does not work after upgrade. SSH to your EVE CLI as root user and issue:

```
systemctl stop tomcat9
sync
rm -fr /var/lib/tomcat9/webapps/guacamole
sync
systemctl start tomcat9
```

5.2. Master EVE has <none> dockers in the list.

```
root@eve-ng-mas:~# dc images
REPOSITORY TAG IMAGE ID CREATED SIZE
registry 2 9363667f8aec 6 weeks ago 25.4MB
```

```
eve-gui-server      latest      d819486ab729    6 weeks ago    7.07GB
eve-desktop         latest      aaab99abf9b9    6 weeks ago    6.88GB
eve-firefox          latest      01c3151ae759    6 weeks ago    4.69GB
eve-wireshark        latest      030d66992f3d    2 months ago   4.24GB
eve-dind-rootless    latest      02520db653e4    12 months ago  382MB
<none>              <none>      8db46f9d7550    13 months ago  24.2MB
root@eve-ng-mas:~#
```

SSH to your EVE CLI as root user and remove:

```
eve-wireshark        latest      030d66992f3d    2 months ago   4.24GB
eve-dind-rootless    latest      02520db653e4    12 months ago  382MB
<none>              <none>      8db46f9d7550    13 months ago  24.2MB
root@eve-ng-mas:~# dc rmi -f 8db46f9d7550
```

5.3. Satellite EVE has <none> or old dockers in the list. **NOTE: It is strongly recommended to remove all dockers from satellite server.**

```
root@eve-sat-01:~# dc images
REPOSITORY          TAG          IMAGE ID          CREATED           SIZE
registry             2            9363667f8aec     6 weeks ago      25.4MB
eve-gui-server        latest       d819486ab729     6 weeks ago      7.07GB
<none>              <none>       8db46f9d7550     13 months ago    24.2MB
root@eve-sat-01:~#
```

SSH to your EVE CLI as root user and remove:

```
eve-gui-server        latest       d819486ab729     6 weeks ago      7.07GB
<none>              <none>       8db46f9d7550     13 months ago    24.2MB
root@eve-sat:~# dc rmi -f 8db46f9d7550
root@eve-sat:~# dc rmi -f d819486ab729
```

## II. New EVE V6 installation with backup restore

**⚠ Mandatory Prerequisites:** Internet and DNS must be reachable from your Server. This upgrade process requires internet access to get updates and install the latest EVE PE version from the EVE-NG repository. DNS must resolve names!

### 1. Upgrade your current Cluster EVE PE to the latest version 5.0.1-144

**⚠ Important NOTE:** Make sure all labs/nodes are stopped in your EVE server, and nothing is running on it.

#### 1.1. Check your current Master EVE PE version.

SSH to your EVE CLI as root user and issue: `dpkg -l eve-ng` This will display your CE EVE current version. It must be version **5.0.1-XX**

```
root@eve-pe5:~# dpkg -l eve-ng-pro
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
```



```

||/ Name                Version          Architecture Description
+++-----
=====
ii  eve-ng              5.0.1-131      amd64          A new generation software for
networking labs.
root@eve-pe5:~#

```

## 1.2. Update your current EVE to the latest version **EVE PE 5.0.1-144**.

SSH to your EVE CLI as root user and issue following commands:

```

apt update

apt upgrade
[answer y if required]

apt dist-upgrade
[answer y if required]

apt autoremove
[answer y if required]

reboot

```

## 1.3. Check your updated Master EVE PE version. Must be 5.0.1-144.

```

root@eve-pe5:~# dpkg -l eve-ng-pro
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-
pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name                Version          Architecture Description
+++-----
=====
ii  eve-ng              5.0.1-144      amd64          A new generation software for
networking labs.
root@eve-pe5:~#

```

## 2. Upgrade EVE PE backup manager.

### 2.1. Upgrade EVE PE backup manager.

```

root@eve-pe5:~# apt install --reinstall eve-backup-manager
---Output Ommitted---
Unpacking eve-backup-manager (5.0.1-143-12) over (5.0.1-143-12) ...
Setting up eve-backup-manager (5.0.1-143-12) ...
root@eve-pe5:~#reboot

```

## 3. Create the EVE backup

### 3.1. Follow the EVE PE Cookbook, chapter 18

<https://www.eve-ng.net/index.php/documentation/professional-cookbook/>

## 4. Install new EVE PE

### 4.1. Follow the EVE PE Cookbook, chapter 3

<https://www.eve-ng.net/index.php/documentation/professional-cookbook/>

## 5. Restore all data from backup

5.1. Follow the EVE PE Cookbook, chapter 18

<https://www.eve-ng.net/index.php/documentation/professional-cookbook/>