

Esia upgrade - Debian 11 to Debian 12

Introduction

The upgrade process depends very much on the customisation that has been done on your Esia in terms of plugins.

The more plugins you have added, the greater the risk that these plugins will go into error after the update. It is therefore all the more important to respect the backup process in addition to the snapshot in order to avoid having to perform a rollback.

The rest of the tutorial covers :

- **2. Prerequisites** Necessary to start the update.
- **3. Updating process** Steps required to complete the update.
- **4. Troubleshooting** Troubleshooting: Refer to this chapter only if you encounter a problem in point 3.
- **5. Cleaning** To recover disk space after the update.

We strongly recommend that you have read this tutorial in its entirety at least once before starting the production update.

Prerequisites

Before starting the update, all of the following points must be met:

- Have an internet connection to download the update packages.
- **Make a snapshot of the VM beforehand** in order to quickly return to the previous state in the event of MAJOR problems.
- Make a backup of certain Esia files. To avoid having to rollback the snapshot in the event of a SMALL problem. **This step is NECESSARY in the event of a support call. See point 3.1.1 « Faire un backup de votre Esia »**

Update steps

Pre-update preparation

The following 3 steps must be carried out in the desired order.

Check available space

Before you start, check that you have enough space for the backup or linux images (partition: /boot).

copy

```
df -h /
```

If you don't have enough space, you'll need to do some clean-up (log files, old linux images, etc).

```
root@debian-bullseye:~# df -h
Filesystem Size Used Avail Use% Mounted on
udev      982M  0 982M  0% /dev
tmpfs     200M  21M 180M 11% /run
/dev/mapper/main--vg-root 8.9G 1.7G 6.7G 21% /
tmpfs     998M  28K 998M  1% /dev/shm
tmpfs      5.0M  0 5.0M  0% /run/lock
tmpfs     998M  0 998M  0% /sys/fs/cgroup
/dev/sda1  472M  49M 399M 11% /boot
tmpfs     200M  0 200M  0% /run/user/1000

root@debian-bullseye:/#
```

Make a backup of your Esia

This will avoid having to return to the snapshot in the event of a simple plugin error or similar. Plugin errors are sometimes unavoidable and make this task necessary.

The steps are as follows:

Check that you have enough disk space for the backup using the command :

copy

```
df -h /
```

The disk space required for the backup depends on your Esia. But if you use less than 50% of your disk space. You are sure to have enough.

backup.sh

```
#!/bin/bash
cd /
mkdir -p /root/BACKUP_ESIA
su postgres -c pg_dumpall > /root/BACKUP_ESIA/pg_database.sql
cp -r /usr/local/esia/plugins /root/BACKUP_ESIA/plugins
cp -r /usr/local/esia/public_html /root/BACKUP_ESIA/public_html
cp -r /etc/apache2 /root/BACKUP_ESIA/apache2
```

```
cp -r /etc/esia /root/BACKUP_ESIA/esia_conf
iptables-save > /root/BACKUP_ESIA/iptables.txt
dpkg -l > /root/BACKUP_ESIA/version.txt
```

You can check whether the backup was successful by entering the following command:

copy

```
du -sh /root/BACKUP_ESIA/*
```

Examples:

On a small esia

```
root@debian-bullseye:~# cd /
root@debian-bullseye:~# mkdir -p /root/BACKUP_ESIA
root@debian-bullseye:~# su postgres -c pg_dumpall >
/root/BACKUP_ESIA/pg_database.sql
root@debian-bullseye:~# cp -r /usr/local/esia/plugins
/root/BACKUP_ESIA/plugins
root@debian-bullseye:~# cp -r /usr/local/esia/public_html
/root/BACKUP_ESIA/public_html
root@debian-bullseye:~# cp -r /etc/apache2 /root/BACKUP_ESIA/apache2
root@debian-bullseye:~# cp -r /etc/esia /root/BACKUP_ESIA/esia_conf
root@debian-bullseye:~# iptables-save > /root/BACKUP_ESIA/iptables.txt
root@debian-bullseye:~# dpkg -l > /root/BACKUP_ESIA/version.txt
root@debian-bullseye:~# du -sh /root/BACKUP_ESIA/*
652K /root/BACKUP_ESIA/apache2
32K /root/BACKUP_ESIA/esia_conf
4,0K /root/BACKUP_ESIA/iptables.txt
660K /root/BACKUP_ESIA/pg_database.sql
7.9M /root/BACKUP_ESIA/plugins
23M /root/BACKUP_ESIA/public_html
96K /root/BACKUP_ESIA/version.txt
root@debian-bullseye:~#
```

On an Esia with 150 nodes/1800 services

```
root@enterprise-v3:~# cd /
root@enterprise-v3:~# mkdir -p /root/BACKUP_ESIA
root@enterprise-v3:~# su postgres -c pg_dumpall >
/root/BACKUP_ESIA/pg_database.sql
root@enterprise-v3:~# cp -r /usr/local/esia/plugins
/root/BACKUP_ESIA/plugins
root@enterprise-v3:~# cp -r /usr/local/esia/public_html
/root/BACKUP_ESIA/public_html
root@enterprise-v3:~# cp -r /etc/apache2 /root/BACKUP_ESIA/apache2
root@enterprise-v3:~# cp -r /etc/esia /root/BACKUP_ESIA/esia_conf
```

```
root@enterprise-v3:/# iptables-save > /root/BACKUP_ESIA/iptables.txt
root@enterprise-v3:/# dpkg -l > /root/BACKUP_ESIA/version.txt
root@enterprise-v3:/# du -sh /root/BACKUP_ESIA/*
692K /root/BACKUP_ESIA/apache2
32K /root/BACKUP_ESIA/esia_conf
4,0K /root/BACKUP_ESIA/iptables.txt
22M /root/BACKUP_ESIA/pg_database.sql
9,1M /root/BACKUP_ESIA/plugins
604M /root/BACKUP_ESIA/public_html
116K /root/BACKUP_ESIA/version.txt
root@enterprise-v3:/#
```

In the event of an error, files/directories are missing or empty

```
root@debian-bullseye:/# cd /
root@debian-bullseye:/# mkdir -p /root/BACKUP_ESIA
root@debian-bullseye:/# su postgres -c pg_dumpall >
/root/BACKUP_ESIA/pg_database.sql
pg_dumpall: could not connect to database "template1": could not connect to
server: No such file or directory
    Is the server running locally and accepting
    connections on Unix domain socket "/var/run/postgresql/.s.PGSQL.5432"?
root@debian-bullseye:/# cp -r /usr/local/esia/plugins
/root/BACKUP_ESIA/plugins
root@debian-bullseye:/# cp -r /usr/local/esia/public_html
/root/BACKUP_ESIA/public_html
root@debian-bullseye:/# cp -r /etc/apache2 /root/BACKUP_ESIA/apache2
root@debian-bullseye:/# cp -r /etc/esia /root/BACKUP_ESIA/esia_conf
root@debian-bullseye:/# iptables-save > /root/BACKUP_ESIA/iptables.txt
root@debian-bullseye:/# dpkg -l > /root/BACKUP_ESIA/version.txt
root@debian-bullseye:/# du -sh /root/BACKUP_ESIA/*
652K /root/BACKUP_ESIA/apache2
32K /root/BACKUP_ESIA/esia_conf
4,0K /root/BACKUP_ESIA/iptables.txt
0 /root/BACKUP_ESIA/pg_database.sql
7.9M /root/BACKUP_ESIA/plugins
23M /root/BACKUP_ESIA/public_html
96K /root/BACKUP_ESIA/version.txt
root@debian-bullseye:/#
```

Make a snapshot of the VM

In order to come back quickly in case of a complete crash.

Disable the alerting system

To avoid receiving false positives during the update.

copy

```
chmod -x /usr/local/esia/plugins/alerting/*
```

Updating

Updating works like this:

1. Modify the package source file to indicate that you are switching to bookworm (command **sed**)
2. Update the system database containing the list of packages (command **apt update**)
3. Update the system (**apt full-upgrade**). Before executing this command, we strongly recommend that you note the time and check the current status of your alerts. This will help you later to check that Esia plugins are working correctly after the update.

Prepare the update :

Check the source apt file, using the following command:

copy

```
cat /etc/apt/sources.list
```

You should get the following lines:

```
deb http://deb.debian.org/debian bullseye main contrib non-free
deb-src http://deb.debian.org/debian bullseye main contrib non-free
deb http://stable.repository.esia-sa.com/esia bullseye contrib non-free
```

If necessary, edit the file with the nano command (ctrl + o to save and ctrl +x to exit).

copy

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

We are now going to replace all bullseye with bookworm and update the list of packages.

copy

```
sed -i s/bullseye/bookworm/g /etc/apt/sources.list
apt update
```

Example

```
root@debian-bullseye:/# sed -i s/bullseye/bookworm/g /etc/apt/sources.list
```

```

root@debian-bullseye:/# apt update
Get:1 http://10.8.0.9 bullseye InRelease [2,271 B]
Get:2 http://10.8.0.9 bullseye/contrib amd64 Packages [7,200 B]
Get:3 http://10.8.0.9 bullseye/non-free amd64 Packages [1,963 B]
Ign http://10.8.0.9 bullseye/contrib Translation-en_US
Ign http://10.8.0.9 bullseye/contrib Translation-en
Ign http://10.8.0.9 bullseye/non-free Translation-en_US
Ign http://10.8.0.9 bullseye/non-free Translation-en
Ign http://ftp.be.debian.org bullseye InRelease
Get:4 http://ftp.be.debian.org bullseye Release.gpg [2,410 B]
Get:5 http://ftp.be.debian.org bullseye Release [118 kB]
Get:6 http://ftp.be.debian.org bullseye/main amd64 Packages [7,080 kB]
Get:7 http://ftp.be.debian.org bullseye/main Translation-en [5,377 kB]
Fetched 12.6 MB in 2s (4,354 kB/s)
Reading package lists... Done
root@debian-bullseye:/#

```

Check the current state of your system:

1. Make a screenshot of the state of your nodes and services.



2. Note what time it is.
3. Check system disk space using the command below:

copy

```
df -h |grep -v tmpfs|grep -v udev|grep -v /boot
```

Example:

```

root@enterprise-v3:/# df -h |grep -v tmpfs|grep -v udev|grep -v /boot
File system Size Used Available Uti% Mounted on
/dev/mapper/bullseye--students--vg-root 19G 7,7G 9,9G 44% /
root@enterprise-v3:/#

```

Running the update :

To download the ESIA + OS update

copy

```
apt -d full-upgrade
```

Before confirming, check that you have enough disk space:

Then run the following command to apply and configure the packages:

copy

```
apt full-upgrade
```

In the example below, 475 MB + 1,195 MB will be required during installation.

The following NEW packages will be installed:

```
cpp-12 cron-daemon-common dbus-bin dbus-daemon dbus-session-bus-common
dbus-system-bus-common dbus-user-session esia-pypsrp g++-12 gcc-11-base
gcc-12 gcc-12-base guile-3.0-libs libabsl20220623 libaom3 libapache2-mod-
php8.2 libasan8
libavif15 libboost-filesystem1.81.0 libboost-program-options1.81.0 libbpf1
libcbor0.8 libdav1d6 libde265-0 libencode-perl libffi8 libfile-find-rule-
perl libgav1-1 libgcc-12-dev libgprofng0 libgsasl18 libgssglue1 libheif1
libicu72
libidn12 libjemalloc2 libjsoncpp25 libldap-2.5-0 liblerc4 libllvm14
libllvm15 libmailutils9 libnuma1 libnumber-compare-perl libperl5.36
libproc2-0 libpython3.11 libpython3.11-dev libpython3.11-minimal
libpython3.11-stdlib librav1e0
libregex-ipv6-perl libsemanage2 libsepol2 libssl3 libstdc++-12-dev
libstring-crc32-perl libsvtavlenc1 libsystemd-shared libtext-glob-perl
libtiff6 libtsan2 liburing2 libwebp7 libx265-199 libxrandr2 libyuv0 linux-
image-6.1.0-29-amd64
ntpsec ntpsec-ntpdig perl-modules-5.36 php8.2-cli php8.2-common php8.2-
curl php8.2-opcache php8.2-pgsql php8.2-readline php8.2-rrd php8.2-ssh2
php8.2-sybase postgresql-15 postgresql-client-15 python3-cffi python3-cffi-
backend
python3-cryptography python3-ntp python3-ply python3-pycparser python3.11
python3.11-dev python3.11-minimal rpcsvc-proto usrmerge util-linux-extra
zstd
```

The following packages will be upgraded:

```
adduser apache2 apache2-bin apache2-data apache2-utils apparmor apt apt-
utils base-files base-passwd bash bind9-dnsutils bind9-host bind9-libs
binutils binutils-common binutils-x86-64-linux-gnu bsextrautils bsutils
busybox bzip2
ca-certificates console-setup console-setup-linux coreutils cpio cpp cron
dash dbus debconf debconf-i18n debian-archive-keyring debianutils
dictionaries-common diffutils dirmngr discover discover-data dmeventd
dmidecode dmsetup
```

dnsutils dpkg dpkg-dev e2fsprogs e2fsprogs-l10n eject emacs-en-common esia-config esia-cron esia-daemon esia-database esia-importation-common esia-keystore esia-plugins-open esia-poller esia-rcm esia-watchdog exim4-base exim4-config

exim4-daemon-light fakeroot file findutils fontconfig fontconfig-config fonts-dejavu-core freeipmi-common freeipmi-tools freetds-common g++ gawk gcc gettext-base gnupg gnupg-agent gnupg-l10n gnupg-utils gpg gpg-agent gpg-wks-client

gpg-wks-server gpgconf gpgsm gpgv grep groff-base grub-common grub-pc grub-pc-bin grub2-common gssapi-common guile-2.2-libs gzip hostname httpd iamerican ibritish ienglish-common ifupdown init init-system-helpers initramfs-tools

initramfs-tools-core installation-report iproute2 iptables iputils-ping isc-dhcp-client isc-dhcp-common ispell kbd keyboard-configuration klbc-utils kmod krb5-locales less libacl1 libaiol1 libalgorithm-c3-perl libalgorithm-diff-xs-perl libalgorithm-merge-perl libapparmor1 libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap libapt-pkg6.0 libargon2-1 libasan6 libassuan0 libatomic1 libattr1 libaudit-common libaudit1 libauthen-pam-perl

libauthen-sasl-perl libauthen-simple-net-perl libauthen-simple-pam-perl libb-hooks-endofscope-perl libb-hooks-op-check-perl libbinutils libblas3 libblkid1 libboost-chrono1.74.0 libboost-filesystem1.74.0 libboost-program-options1.74.0

libboost-random1.74.0 libboost-regex1.74.0 libboost-system1.74.0 libboost-timer1.74.0 libbrotli1 libbsd0 libbz2-1.0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libcairo2 libcap-ng0 libcap2 libcap2-bin libcapture-tiny-perl libcc1-0 libcgi-pm-perl libclass-accessor-perl libclass-c3-perl libclass-c3-xs-perl libclass-dbi-perl libclass-dbi-pg-perl libclass-inspector-perl libclass-load-perl libclass-load-xs-perl

libclass-method-modifiers-perl libclass-singleton-perl libclass-tiny-perl libclass-trigger-perl libclass-xsaccessor-perl libclone-choose-perl libclone-perl libcom-err2 libcommon-sense-perl libconfig-inifiles-perl libconvert-binx-perl libcrypt-dev libcrypt-passwdmd5-perl libcrypt1 libcrypto++8 libcryptsetup12 libctf-nobfd0 libctf0 libcurl4 libdata-dump-perl libdata-optlist-perl libdatetime-format-mail-perl libdatetime-format-strptime-perl

libdatetime-locale-perl libdatetime-perl libdatetime-timezone-perl libdatatriel libdb5.3 libdbd-pg-perl libdbd-pgsql libdbi-perl libdbix-contextualfetch-perl libdbus-1-3 libdebconfclient0 libdeflate0 libdevel-callchecker-perl

libdevel-caller-perl libdevel-globaldestruction-perl libdevel-lexalias-perl libdevel-overloadinfo-perl libdevel-partialdump-perl libdevel-stacktrace-perl libdevmapper-event1.02.1 libdevmapper1.02.1 libdigest-hmac-perl libdiscover2

libdist-checkconflicts-perl libdpkg-perl libdrm-amdgpu1 libdrm-common libdrm-intel1 libdrm-new2 libdrm-radeon1 libdrm2 libdynamloader-functions-perl libedit2 libelf1 libemail-abstract-perl libemail-address-xs-perl

libemail-date-format-perl libemail-messageid-perl libemail-mime-contenttype-perl libemail-mime-encodings-perl libemail-mime-perl libemail-sender-perl libemail-simple-perl libencode-locale-perl libestr0 libeval-closure-perl

libevent-2.1-7 libevent-core-2.1-7 libevent-pthreads-2.1-7 libexception-
class-perl libexpat1 libexpat1-dev libexporter-tiny-perl libext2fs2
libfakeroot libfastjson4 libfcgi-perl libfdisk1 libfido2-1 libfile-
fcntllock-perl
libfile-listing-perl libfile-sharedir-perl libfont-afm-perl libfontconfig1
libfreeipmi17 libfreetype6 libfribidi0 libfstrm0 libfuse2 libgcl libgcc-s1
libgcrypt20 libgd3 libgdbm-compat4 libgdbm6 libgl1 libgl1-mesa-dri libglapi-
mesa
libglib2.0-0 libglib2.0-data libglvnd0 libglx-mesa0 libglx0 libgmp10
libgnutls-dane0 libgnutls30 libgomp1 libgpg-error-l10n libgpg-error0 libgpm2
libgssapi-krb5-2 libharfbuzz0b libhogweed6 libhtml-form-perl libhtml-format-
perl
libhtml-parser-perl libhtml-tagset-perl libhtml-tree-perl libhttp-daemon-
perl libhttp-date-perl libhttp-message-perl libhttp-negotiate-perl libhttp-
server-simple-perl libidn2-0 libima-dbi-perl libimport-into-perl libio-html-
perl
libio-pty-perl libio-socket-ssl-perl libip4tc2 libip6tc2 libipc-run-perl
libipc-shareable-perl libipmiconsole2 libipmidetect0 libiptc0 libisl23
libitm1 libjansson4 libjbig0 libjpeg62-turbo libjs-jquery libjs-jquery-
metadata
libjs-jquery-tablesorter libjs-jquery-ui libjs-sphinxdoc libjs-underscore
libjson-c5 libjson-perl libjson-xs-perl libk5crypto3 libkeyutils1 libklibc
libkmod2 libkrb5-3 libkrb5support0 libksba8 libldap-common liblingua-en-
inflect-perl
liblist-moreutils-xs-perl liblocale-gettext-perl liblog-log4perl-perl
liblognorm5 liblsan0 libltdl7 liblua5.3-0 liblvm2cmd2.03 liblwp-mediatypes-
perl liblz4-1 liblzma5 libmagic-mgc libmagic1 libmail-imapclient-perl
libmail-pop3client-perl libmail-sendmail-perl libmailtools-perl
libmariadb3 libmath-round-perl libmaxminddb0 libmd0 libmime-lite-perl
libmime-tools-perl libmime-types-perl libmodule-implementation-perl
libmodule-pluggable-perl
libmodule-runtime-conflicts-perl libmodule-runtime-perl libmoose-perl
libmoosex-types-mooselike-perl libmount1 libmpc3 libmpfr6 libmro-compat-perl
libnamespace-autoclean-perl libnamespace-clean-perl libncurses5 libncurses6
libncursesw5 libncursesw6 libnet-http-perl libnet-ip-perl libnet-libidn-
perl libnet-openssh-perl libnet-smtp-ssl-perl libnet-smtp-tls-perl libnet-
smtps-perl libnet-snmp-perl libnet-ssleay-perl libnetfilter-contrack3
libnettle8
libnewt0.52 libnfnetlink0 libnftables1 libnftnl11 libnghttp2-14
libnl-3-200 libnl-genl-3-200 libnss-systemd libntlm0 libnumber-format-perl
libonig5 libopts25 libp11-kit0 libpackage-deprecationmanager-perl
libpackage-stash-perl
libpackage-stash-xs-perl libpadwalker-perl libpam-cap libpam-modules
libpam-modules-bin libpam-runtime libpam-systemd libpam0g libpango-1.0-0
libpangocairo-1.0-0 libpangoft2-1.0-0 libparams-classify-perl libparams-
util-perl
libparams-validate-perl libparams-validationcompiler-perl libparse-
recdescent-perl libpcap0.8 libpci3 libpciaccess0 libpcre2-8-0 libpcre3
libpipeline1 libpixmap-1-0 libpng16-16 libpopt0 libpq5 libprotobuf-c1
libpsl5 libpython3-dev
libpython3-stdlib libquadmath0 libreadline8 libref-util-perl libref-util-

xs-perl librrd8 librrds-perl librrdtool-oo-perl libsas2-2 libsas2-modules
libsas2-modules-db libscalar-list-utils-perl libseccomp2 libselinux1
libsemanage-common libsensors-config libsensors5 libsigsegv2 libslang2
libsmartcols1 libsnmp-base libsnmp40 libsocket6-perl libspecio-perl libsql-
abstract-limit-perl libsql-abstract-perl libsqlite3-0 libss2 libssh2-1
libstdc++6
libsub-exporter-perl libsub-exporter-progressive-perl libsub-identify-perl
libsub-install-perl libsub-name-perl libsub-quote-perl libswitch-perl
libsybdb5 libsys-hostname-long-perl libsystemd0 libtasn1-6 libtest-deep-perl
libtest-fatal-perl libtext-charwidth-perl libtext-csv-perl libtext-csv-xs-
perl libtext-iconv-perl libtext-trim-perl libtext-unidecode-perl libtext-
wrap18n-perl libthai-data libthai0 libthrowable-perl libtime-duration-perl
libtinfo5
libtinfo6 libtirpc-common libtirpc-dev libtirpc3 libtry-tiny-perl libtsan0
libubsan1 libudev1 libunbound8 libunistring2 libuniversal-moniker-perl
libunwind8 liburi-perl libusb-1.0-0 libustr-1.0-1 libuuid1 libuv1
libvariable-magic-perl
libvulkan1 libwayland-client0 libwrap0 libwww-mechanize-perl libwww-perl
libx11-6 libx11-data libx11-xcb1 libxapian30 libxaw7 libxcb-dri2-0 libxcb-
dri3-0 libxcb-glx0 libxcb-present0 libxcb-randr0 libxcb-render0 libxcb-shm0
libxcb-sync1 libxcb-xfixes0 libxcb1 libxdamage1 libxext6 libxfixes3
libxfont2 libxml-dom-perl libxml-libxml-perl libxml-namespacesupport-perl
libxml-parser-perl libxml-perl libxml-sax-base-perl libxml-sax-expat-perl
libxml-sax-perl
libxml-simple-perl libxml2 libxmlrpc-epi0 libxmu6 libxmuu1 libxpm4
libxrender1 libxslt1.1 libxstring-perl libxt6 libxtables12 libxxhash0
libz3-4 libzstd1 linux-base linux-image-amd64 linux-libc-dev locales login
logrotate logsave
lsb-base lua-lpeg lvm2 mailcap mailutils mailutils-common man-db manpages
manpages-dev mariadb-common mawk media-types mesa-vulkan-drivers mount
mysql-common nano ncal ncurses-base ncurses-bin ncurses-term ndiff net-tools
netbase
nftables nmap nmap-common ntp openssh-client openssh-server openssh-sftp-
server openssl os-prober passwd pci.ids pciutils perl perl-base perl-
openssl-defaults php-cli php-common php-curl php-pgsql php-rrd php-ssh2 php-
sybase
pinentry-curses postgresql postgresql-client-common postgresql-common
postgresql-contrib procs psmisc python-bareos python3 python3-bs4 python3-
chardet python3-dev python3-distutils python3-lib2to3 python3-lxml python3-
minimal
python3-pip python3-pkg-resources python3-setuptools python3-soupsieve
python3-wheel qemu-guest-agent readline-common rrdcached rrdtool rsyslog
runit-helper sed sensible-utils shared-mime-info snmp snmpd snmp ssl-cert
sudo sysstat
systemd systemd-sysv sysvinit-utils tar task-english task-ssh-server
tasksel tasksel-data thin-provisioning-tools tzdata ucf udev usbutils util-
linux util-linux-locales vim vim-common vim-runtime vim-tiny wamerican wget
whtail
x11-common x11-xkb-utils xauth xdg-user-dirs xfonts-75dpi xfonts-base
xfonts-encodings xkb-data xserver-common xvfb xxd xz-utils zlib1g zlib1g-dev
677 upgraded, 95 newly installed, 46 to remove and 0 not upgraded.

Need to get 475 MB of archives.
 After this operation, 1,195 MB of additional disk space will be used.
 Do you want to continue? [Y/n]

- For all questions, leave the default answer.
- For the question about **GRUB** it is important not to make a mistake and to tick the correct **the correct VM boot disk**. Otherwise the VM may stop booting.

Examples of questions asked

Answer with “Yes” then ENTER



The default answer is always 'N', so all you have to do is press ENTER.

```
Creating config file /etc/php/8.2/mods-available/xmlreader.ini with new version
Creating config file /etc/php/8.2/mods-available/xmlwriter.ini with new version
Creating config file /etc/php/8.2/mods-available/xsl.ini with new version
Sélection du paquet php8.2-mbstring précédemment désélectionné.
(Lecture de la base de données... 92880 fichiers et répertoires déjà installés.)
Préparation du dépaquetage de .../php8.2-mbstring_8.2.26-1-deb12u1_amd64.deb ...
Dépaquetage de php8.2-mbstring (8.2.26-1-deb12u1) ...
Paramétrage de php8.2-mbstring (8.2.26-1-deb12u1) ...

Creating config file /etc/php/8.2/mods-available/mbedtls.ini with new version
Paramétrage de esia-config (3.5.0+0r1) ...
Paramétrage de cron (3.0pl1-162) ...
Paramétrage de snmpd (5.9.3+dfsg-2) ...

Fichier de configuration « /etc/snmp/snmpd.conf »
==> Modifié (par vous ou par un script) depuis l'installation.
==> Le distributeur du paquet a fourni une version mise à jour.
Que voulez-vous faire ? Vos options sont les suivantes :
  Y ou I : installer la version du responsable du paquet
  N ou O : garder votre version actuellement installée
  D      : afficher les différences entre les versions
  Z      : suspendre ce processus pour examiner la situation
L'action par défaut garde votre version actuelle.
*** snmpd.conf (Y/I/N/O/D/Z) [défaut=N] ? [ ]
Progression : [ 42%] [#####.....]
```

The update is complete

```

Paramétrage de libboost-random1.74.0:amd64 (1.74.0+ds1-21) ...
Paramétrage de php-pgsql (2:8.2+93) ...
Paramétrage de python3-bareos (25.0.0~pre77.572c97687-2037) ...
Paramétrage de libmariadb3:amd64 (1:10.11.6-0+deb12u1) ...
Paramétrage de util-linux (2.38.1-5+deb12u3) ...
fstrim.timer is a disabled or a static unit not running, not starting it.
fstrim.service is a disabled or a static unit not running, not starting it.
Paramétrage de libdist-checkconflicts-perl (0.11-2) ...
Paramétrage de libfl2:amd64 (2.6.4-8.2) ...
Paramétrage de php-xmlrpc (3:1.0.0~rc3-6) ...
Paramétrage de libxt6:amd64 (1:1.2.1-1.1) ...
Paramétrage de pciutils (1:3.9.0-4) ...
Paramétrage de libxtables12:amd64 (1.8.9-2) ...
Paramétrage de libgc1:amd64 (1:8.2.2-3) ...
Paramétrage de ntpsec (1.2.2+dfsg1-1+deb12u1) ...
Installation de la nouvelle version du fichier de configuration /etc/apparmor.d/usr.sbin.ntpd ...

Fichier de configuration « /etc/ntpsec/ntp.conf »
==> Fichier du système créé par vous ou par un script.
==> Fichier également présent dans le paquet fourni par le responsable du paquet.
Que voulez-vous faire ? Vos options sont les suivantes :
  Y ou I : installer la version du responsable du paquet
  N ou O : garder votre version actuellement installée
  D      : afficher les différences entre les versions
  Z      : suspendre ce processus pour examiner la situation
L'action par défaut garde votre version actuelle.
*** ntp.conf (Y/I/N/O/D/Z) [défaut=N] ? ☐
Progression : [ 80%] [#####.....]
```

Post-update restart of important modules

Disable the alerting system again

The Esia update automatically reactivates the alerting system. As long as you do not activate the Esia licence, you will not receive any alerts. However, once the licence has been activated, you may receive false positives.

It is therefore advisable to re-execute the following command before activating the licence.

copy

```
chmod -x /usr/local/esia/plugins/alerting/*
```

Remove the old Debian bullseye packages

This step is necessary, in addition to saving disk space, keeping old versions of packages could :

- Cause bugs in Esia
- Cause problems with future updates.

It is therefore strongly recommended that you carry out this step even if your Esia is now working correctly. In addition, this also allows problems/bugs that would have occurred randomly later to be highlighted immediately.

copy

```
apt autoremove
```

Then confirm the deletion.

Updating your Esia database

Use the following commands to update your database. Your Esia is currently running without this step. But if you ignore it, problems will occur in future updates.

Check the presence of the databases :

copy

```
pg_lsclusters
```

Example

```
root@debian-bullseye:/# pg_lsclusters
Ver Cluster Port Status Owner Data directory Log file
13 main 5432 online postgres /var/lib/postgresql/13/main
/var/log/postgresql/postgresql-13-main.log
15 main 5433 online postgres /var/lib/postgresql/15/main
/var/log/postgresql/postgresql-15-main.log
```

root@debian-bullseye:/# Delete the new database

copy

```
pg_dropcluster 15 main --stop
pg_lsclusters
```



For the **pg_dropcluster** be sure to set **15** and not 13!

Example

```
root@debian-bullseye:/# pg_dropcluster 15 main --stop
Redirecting stop request to systemctl
root@debian-bullseye:/# pg_lsclusters
Ver Cluster Port Status Owner Data directory Log file
13 main 5432 online postgres /var/lib/postgresql/13/main
/var/log/postgresql/postgresql-13-main.log
root@debian-bullseye:/#
```

Copy the old database (from your Esia) to the new version

copy

```
pg_upgradecluster 13 main
pg_lsclusters
```

The first command takes some time to run. Once completed, the **pg_lscluster** shows this:

Example

```
root@debian-bullseye:/# pg_lsclusters
Ver Cluster Port Status Owner Data directory Log file
13 main 5433 down postgres /var/lib/postgresql/13/main
/var/log/postgresql/postgresql-13-main.log
15 main 5432 online postgres /var/lib/postgresql/15/main
/var/log/postgresql/postgresql-15-main.log
root@debian-bullseye:/#
```

To avoid bugs in Esia. The command below must be executed after an upgrade to postgresql15, which is your case here.

copy

```
/usr/local/esia/sql/webp/ipam/run_postgres_15.sh
```

Then check that your web interface is working correctly.

Getting the Esia web interface to work

After installation, you need to run the following commands to get the web interface working again.

copy

```
a2dismod php7.4
a2enmod php8.2
service apache2 restart
apt remove php7.4
apt autoremove
```

Go to your Esia main web page

After the update, connect to your Esia server and refresh your browser cache (ctrl +F5 in Firefox). The menu button bugs will be corrected.

Essential tasks at the end of the update

Check if your VM restarts

Restart your VM and check that the restart works. A configuration error in GRUB or in the system update could mean that the VM no longer starts. Or that certain Esia services do not restart automatically.

It is necessary to perform this operation as long as the snapshot is sufficient to avoid losing too much data.

To reboot cleanly, enter the following command:

copy

```
shutdown -r now
```

Check the status of your services

Some monitoring plugins may no longer work after the update. This is often the case when additional plugins have been manually installed. It is therefore advisable to check that these plugins are working in 2 ways:

Method 1: Check the status of nodes and services

Compare the current status of your nodes and services with the screenshot taken earlier. If there is a small or minimal difference, then the update has probably gone well.



If there is a large difference, either :

- There have been breakdowns in your infrastructure.
- Some of your plugins are no longer working after the update. (If this is the case, please contact our support team)

Method 2: Check for new alerts

Go to the current alerts page. If you have a lot of alerts, sort them by date.

You should have noted the start time of the update. Use this information to check the alerts that took place afterwards. For the most part, within 10 minutes of :

- licence activation.

- reboot of the machine.

These alerts can be caused by :

- A problem in your infrastructure.
- A malfunction of the plugin after the update.

Example:

The 7:36 update probably caused the 7:44 error in one of the plugins:

NOM DU NOEUD	GROUPES	ALERTES	SERVICES	DATE
nas-qnap	storage	Inconnu	Etat de santé	22/07/2020 07:44:34

Reactivate the alerting system

Once your Esia is working properly, don't forget to reactivate alerting:

Activation :

copy

```
chmod +x /usr/local/esia/plugins/alerting/*
```

Check if it is activated :

copy

```
ls --color -l /usr/local/esia/plugins/alerting/*
```

In the examples below, the green colour indicates that the scripts are executable. They are therefore activated.

Examples :

Alerting disabled

```
root@debian-jessie:~# ls --color -l /usr/local/esia/plugins/alerting/*
-rw-r--r-- 1 root root 6062 Aug 26 09:44 /usr/local/esia/plugins/alerting/send_mail_html.pl
-rw-r--r-- 1 root root 4372 Aug 26 09:44 /usr/local/esia/plugins/alerting/send_mail.pl
-rw-r--r-- 1 root root 6141 Aug 26 09:44 /usr/local/esia/plugins/alerting/send_sms.pl
root@debian-jessie:~#
```

Alerting on

```
root@debian-jessie:~# ls --color -l /usr/local/esia/plugins/alerting/*
-rwxr-xr-x 1 root root 6062 Aug 26 09:44 /usr/local/esia/plugins/alerting/send_mail_html.pl
-rwxr-xr-x 1 root root 4372 Aug 26 09:44 /usr/local/esia/plugins/alerting/send_mail.pl
-rwxr-xr-x 1 root root 6141 Aug 26 09:44 /usr/local/esia/plugins/alerting/send_sms.pl
root@debian-jessie:~#
```

Now you need to check that you are receiving the alert emails.

copy

```
/usr/local/esia/plugins/alerting/send_mail_html.pl -e min -t
<votre adresse mail> -D
```

Check whether an email has arrived in your inbox.

Troubleshooting

All units are disconnected

The configuration of Esia's internal firewall may have removed the connection authorisation for the unitys. Type the following command line

copy

```
iptables -L
```

If you don't find a line like:

```
ACCEPT tcp -- anywhere anywhere tcp dpt:2080
```

Type the following commands to open the port and save the configuration:

copy

```
iptables -A INPUT -p tcp -m tcp --dport 2080 -j ACCEPT
iptables-save > /etc/iptables.rules
```

The web page is inaccessible

Configuring php7 in Apache

Have you run the following command?

copy

```
a2dismod php7.4
a2enmod php8.2
service apache2 restart
```

Check the status of the Apache2 service

copy

```
service apache2 status
```

Example of a stopped Apache2 service :

```
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Drop-In: /etc/systemd/system/apache2.service.d
            └─override.conf
   Active: failed (Result: exit-code) since Wed 2022-08-31 16:26:53 CEST; 2s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 7330 ExecStart=/usr/sbin/apachectl start (code=exited, status=1/FAILURE)

Aug 31 16:26:53 dev-galaxy systemd[1]: Starting The Apache HTTP Server...
Aug 31 16:26:53 dev-galaxy apachectl[7330]: AH00526: Syntax error on line 23 of /etc/apache2/sites-enabled/esia-ssl.conf
Aug 31 16:26:53 dev-galaxy apachectl[7330]: SSLCertificateFile: file '/usr/local/esia/certs/enterprise-esia.crt' does n
Aug 31 16:26:53 dev-galaxy apachectl[7330]: Action 'start' failed.
Aug 31 16:26:53 dev-galaxy apachectl[7330]: The Apache error log may have more information.
Aug 31 16:26:53 dev-galaxy systemd[1]: apache2.service: Control process exited, code=exited, status=1/FAILURE
Aug 31 16:26:53 dev-galaxy systemd[1]: apache2.service: Failed with result 'exit-code'.
Aug 31 16:26:53 dev-galaxy systemd[1]: Failed to start The Apache HTTP Server.
```

Example of a started Apache2 service :

```

root@dev-galaxy:~# service apache2 status
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Drop-In: /etc/systemd/system/apache2.service.d
            └─override.conf
   Active: active (running) since Wed 2022-08-31 16:21:58 CEST; 3min 11s ago
     Docs: https://httpd.apache.org/docs/2.4/
  Process: 6707 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
 Main PID: 6713 (apache2)
    Tasks: 11 (limit: 540)
   Memory: 40.8M
    CGroup: /system.slice/apache2.service
            └─6713 /usr/sbin/apache2 -k start
              6714 /usr/sbin/apache2 -k start
              6715 /usr/sbin/apache2 -k start
              6716 /usr/sbin/apache2 -k start
              6717 /usr/sbin/apache2 -k start
              6718 /usr/sbin/apache2 -k start
              6727 /usr/sbin/apache2 -k start
              6742 /usr/sbin/apache2 -k start
              6743 /usr/sbin/apache2 -k start
              6760 /usr/sbin/apache2 -k start
              6761 /usr/sbin/apache2 -k start

Aug 31 16:21:57 dev-galaxy systemd[1]: Starting The Apache HTTP Server...
Aug 31 16:21:58 dev-galaxy apachectl[6707]: AH00557: apache2: apr_sockaddr_info_get() failed for dev-galaxy
Aug 31 16:21:58 dev-galaxy apachectl[6707]: AH00558: apache2: Could not reliably determine the server's fully qualified
Aug 31 16:21:58 dev-galaxy systemd[1]: Started The Apache HTTP Server.

```

Try to restart the Apache2 service

copy

```

service apache2 start
service apache2 status

```

Cleaning

This little clean-up is not compulsory. It saves a lot of disk space. It is advisable to carry out the following steps once you are sure that everything has gone smoothly. You may even want to **wait several days** after the update.

- Delete the snapshot
- Deleting the backup

copy

```
rm -R /root/BACKUP_ESIA/
```

- Delete the old database (BE CAREFUL to set 13)

copy

```
pg_dropcluster 13 main
```

From:

<https://wiki.esia-sa.com/> - **Esia Wiki**

Permanent link:

https://wiki.esia-sa.com/en/advanced/update_esia_deb

Last update: **2025/05/12 12:45**

