

Unity upgrade Debian 11 to Debian 12

This procedure explains how to upgrade one of our old ARM Unity (green boxes) to our new Debian Bookworm-based OS.

If you are unsure, please contact our support team.



Avoid unplugging the box during the operation A power cut or interruption could cause the Unity OS to fail.

Prerequisites

Your Unity must be in Bullseye

Your Unity must be based on Debian Bullseye and be up to date. Otherwise the command **esia-update-unity** command cannot be used.

You can check the OS version via the Unity web interface.

The screenshot shows the GESA Unity web interface. On the left, there's a sidebar with icons for general information, diagnostics, and packages. The main content area is divided into several sections:

- INFORMATIONS GÉNÉRALES**: A table showing system details. A blue box highlights the 'Version de l'OS' field, which is 'Debian 11.9'.
- DIAGNOSTIQUE**: A table showing system health checks. All checks (Résolution DNS, Accès internet, Connexion au serveur, Liaison ECATP) are marked 'OK'.
- MISES À JOUR**: A section with a 'Mettre à jour' button. It shows the last update details.
- PAQUETS**: A table listing installed packages and their versions.
- INTERFACES**: A table showing network interface status.

INFORMATIONS GÉNÉRALES			
Adresse IP publique	/	Numéro de série	Serveur lié
Adresse IP locale	192.168.219.1	Type	Unity
Masque de sous-réseau	255.255.255.0	Modèle	PI 3 Model B Rev 1.2
Passerelle	192.168.219.254	Version de l'OS	Debian 11.9
DNS			

DIAGNOSTIQUE			
Résolution DNS	OK		
Accès internet	OK		
Connexion au serveur	OK		
Liaison ECATP	OK		

MISES À JOUR			
Dernière mise à jour - Début	22/03/24 00:23:01	Heure de mise à jour journalière	Pas configurées
Dernière mise à jour - Fin	22/03/24 00:23:28		

PAQUETS			
STATUS	NOM	VERSION	DESCRIPTION
✓	esia-plugins-basic	1.6.5+11r0	The Esia plugins for galaxy
✓	esia-plugins-common	3.6.4+22r0	The Esia main plugins
✓	esia-plugins-open	2.2.8+3r0	Community Opensource plugins
✓	esia-rcm	0.0.3+1r0	Remote Control Manager
✓	esia-watchdog	2.3.3+4r0	Used to restart esia important systems after crash
✓	gesa-base	3.0.9+3r0	GESA configurations initiales
✓	gesa-ecatp-client	2.0.20+0r0	Client Ecatp

INTERFACES									
IF INDEX	ADRESSE IP	NOM	STATUS	NOMBRE D'OCTETS REÇU	NOMBRE D'OCTETS ENVOYÉS	ERREURS EN ENTRÉE (CRC)	ERREURS EN SORTIE	MTU	VITESSE
2	192.168.219.1	eth0	up	49.68 MB	16.75 MB	0	0	1500	1000 Mb/s
3		wlan0	down	0	0	0	0	1500	1000 Mb/s

The blue frame indicates that it is Debian version 11.9. 11 means Bullseye. You can therefore update it to Bookworm (Debian version 12).

First check that it is in this latest version by clicking on the button in the red frame in the screenshot above.

Older Unity

If you have an older Unity, you will need to run the following procedure to update it to Bullseye.

Updating an older Unity via USB key

Updating your Bullseye Unity to Bookworm

- ssh connection to the old Unity: (port 2222, login 'esia', password 'gesa')
- Run the following command line:

```
esia-update-unity
```

And then answer the questions

If this command line is not present, your Unity Bullseye is not in its latest version. Update it via the web interface or leave it connected for 24 hours.

See below for an example.

```
esia@unity:~ $ esia-update-unity
OK - All repositories are accessible

RUN - Get last bullseye hotfix :
Reading package lists... Done
Build dependency tree... Done
Read status information... Done
Update calculation... Done
The following packages have been retained:
  libc6
0 updated, 0 newly installed, 0 to be removed and 1 not updated.
OK - Last bullseye Unity hotfix are present

RUN - Set repositories for bookworm :
OK - Your repository is ok to update for bookworm

RUN - Start Unity update :
- Get packages list ...
- Upgrade validation check (Please wait 5/10 minutes) ...
- Packages download ...
```

This level takes some time, so please wait a few minutes before continuing. Then you'll have to answer the following question:

```
The following packages have been installed automatically and are no longer
required:
  libcbor0 libcrypt-rijndael-perl libevent-core-2.1-7 libevent-
pthread-2.1-7 libfl2 libfmt7 libfuse2 libhttp-server-simple-perl libicu67
libidn11 libjim0.79 libldap-2.4-2 libmpdec3 libnet-ip-perl libntfs-3g883
libopts25
  libpcr2-posix2 libperl5.32 libpython3.9-minimal libpython3.9-stdlib
libtevent0 ntpsec-ntpdig perl-modules-5.32 pigz python-pip-whl python3-pip
```

python3-wheel python3.9 python3.9-minimal sntp
Please use "sudo apt autoremove" to remove them.

The following packages will be REMOVED:

fuse hardlink libapache2-mod-php7.4 libraspberrypi-bin libsemanag1
php7.4-cli php7.4-common php7.4-curl php7.4-json php7.4-opcache php7.4-pgsql
php7.4-readline php7.4-snmp php7.4-xml

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 dconf-cli esia-pypsrp firmware-
intel-graphics firmware-intel-misc firmware-marvell-prestera
firmware-mediatek firmware-nvidia-graphics freetds-common fuse3 gcc-11-
base gcc-12 gcc-12-base gcc-12-base:armhf libabsl20220623 libaom3
libapache2-mod-php8.2 libasan8 libavif15 libbpf1 libc-dev-bin libc-devtools
libc6-dev libcbor0.8 libcrypt-dev libdav1d6 libdconf1 libde265-0
libdeflate0 libduktape207 libencode-perl libffi8 libfile-find-rule-perl
libfmt9 libfuse3-3 libgav1-1 libgcc-12-dev libgd3 libgprofng0 libheif1
libhwasan0
libicu72 libidn12 libimport-into-perl libjbig0 libjemalloc2 libjim0.81
libjpeg62-turbo libldap-2.5-0 liblerc4 libmbim-utils libmoo-perl libnsl-dev
libntfs-3g89 libnuma1 libnumber-compare-perl libossp-uuid16 libperl5.36
libpkgconf3 libproc2-0 libpython3.11-minimal libpython3.11-stdlib libqmi-
utils libqrtr-glib0 librav1e0 libregex-ipv6-perl libsemanage2 libsepol2
libssl3 libstring-crc32-perl libsvtav1enc1 libsybdb5 libsystemd-shared
libtext-glob-perl libtiff6 libtirpc-dev libtsan2 libwebp7 libx265-199
libxmlrpc-epi0 libxpm4 libyuv0 linux-libc-dev manpages manpages-dev ntpsec
ntpsec-ntpdig pastebinit perl-modules-5.36 php-soap php-sybase php-xmlrpc
php8.2-cli php8.2-common php8.2-curl php8.2-opcache php8.2-pgsql php8.2-
readline php8.2-snmp php8.2-soap php8.2-sybase php8.2-xml php8.2-xmlrpc
pkexec pkgconf pkgconf-bin polkitd polkitd-pkla python3-bareos python3-cffi
python3-cffi-backend python3-charset-normalizer python3-configargparse
python3-cryptography python3-ntp python3-ply python3-pycparser python3-
pycryptodome python3.11 python3.11-minimal raspi-utils raspi-utils-core
raspi-utils-dt raspi-utils-eeprom raspi-utils-otp raspinfo rpcsvc-proto
sgml-base usrmerge util-linux-extra uuid xml-core zstd

The following packages will be updated:

adduser alsa-utils apache2 apache2-bin apache2-data apache2-utils apt apt-
utils at base-files base-passwd bash bash-completion bind9-dnsutils bind9-
host bind9-libs binutils binutils-aarch64-linux-gnu binutils-common
bsdextrautils bsdtls busybox bzip2 ca-certificates cifs-utils console-
setup console-setup-linux coreutils cpio cpp cron curl dash dbus dc debconf
debconf-i18n debconf-utils debian-archive-keyring debianutils
device-tree-compiler diffutils dirmngr distro-info-data dmidecode dmsetup
dns-root-data dnsmasq-base dnsutils dos2unix dphys-swapfile dpkg dpkg-dev
e2fsprogs ed esia-plugins-basic esia-plugins-common esia-plugins-open
esia-rcm esia-watchdog ethtool fake-hwclock fakeroot fbset fdisk file
findutils firmware-atheros firmware-brcm80211 firmware-libertas firmware-
misc-nonfree firmware-realtek fontconfig fontconfig-config fonts-dejavu-core
freeipmi-common freeipmi-tools gcc gesa-base gesa-ecatk-client gesa-
import-common gesa-network-scripts gesa-plugins gesa-updates-critic gesa-
web-interface gettext-base gnupg gnupg-l10n gnupg-utils gpg gpg-agent
gpg-wks-client gpg-wks-server gpgconf gpgsm gpgv grep gzip hostname httpd

ifupdown init init-system-helpers initramfs-tools initramfs-tools-core
iproute2 iptables iptables-persistent iputils-ping isc-dhcp-client
isc-dhcp-common iso-codes iw kbd keyboard-configuration keyutils klibc-
utils kmod kms++-utils krb5-locales less libacl1 libalgorithm-c3-perl
libalgorithm-diff-xs-perl libalgorithm-merge-perl libapache2-mod-php
libapparmor1 libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap
libapt-pkg6.0 libargon2-1 libasan6 libasound2 libasound2-data libassuan0
libatomic1 libatopology2 libattr1 libaudit-common libaudit1
libauthen-sasl-perl libb-hooks-endofscope-perl libb-hooks-op-check-perl
libbinutils libblas3 libblkid1 libbluetooth3 libbrotli1 libbsd0 libbz2-1.0
libc-bin libc-l10n libc6 libc6:armhf libcairo2 libcap-ng0 libcap2
libcap2-bin libcc1-0 libcgi-pm-perl libclass-c3-perl libclass-c3-xs-perl
libclass-inspector-perl libclass-method-modifiers-perl libclass-singleton-
perl libclass-xsaccessor-perl libclone-perl libcom-err2
libcommon-sense-perl libconfig-inifiles-perl libcrypt-des-perl libcrypt-
rijndael-perl libcrypt1 libcrypt1:armhf libcryptsetup12 libctf-nobfd0
libctf0 libcurl3-gnutls libcurl4 libdata-dump-perl libdata-optlist-perl
libdatetime-format-strptime-perl libdatetime-locale-perl libdatetime-perl
libdatetime-timezone-perl libdatatrie1 libdb5.3 libdbus-1-3 libdebconfclient0
libdevel-callchecker-perl libdevel-caller-perl
libdevel-globaldestruction-perl libdevel-lexalias-perl libdevel-
stacktrace-perl libdevmapper1.02.1 libdigest-hmac-perl libdist-
checkconflicts-perl libdpkg-perl libdrm-common libdrm2 libdynamloader-
functions-perl libedit2
libelf1 libemail-address-xs-perl libemail-date-format-perl libemail-
messageid-perl libemail-mime-contenttype-perl libemail-mime-encodings-perl
libemail-mime-perl libemail-simple-perl libencode-locale-perl liberror-perl
libestr0 libeval-closure-perl libevent-core-2.1-7 libevent-pthreads-2.1-7
libexception-class-perl libexpat1 libexporter-tiny-perl libext2fs2
libfakeroot libfastjson4 libfcgi-perl libfdisk1 libfdt1 libfftw3-single3
libfido2-1 libfile-fcntllock-perl libfile-listing-perl libfile-sharedir-
perl libfl2 libfont-afm-perl libfontconfig1 libfreeipmi17 libfreetype6
libfribidi0 libfstrm0 libfuse2 libgcc-s1 libgcc-s1:armhf libgcrypt20
libgdbm-compat4 libgdbm6 libglib2.0-0 libgmp10 libgnutls30 libgomp1
libgpg-error0 libgssapi-krb5-2 libgudev-1.0-0 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 libio-html-
perl libio-pty-perl libio-socket-inet6-perl libio-socket-ssl-perl
libip4tc2 libip6tc2 libipc-run-perl libipc-shareable-perl libipmiconsole2
libipmidetect0 libisl23 libitm1 libiw30 libjansson4 libjson-c5 libjson-xs-
perl libk5crypto3 libkeyutils1 libklibc libkmod2 libkms++0
libkrb5-3 libkrb5support0 libksba8 libldap-common liblist-compare-perl
liblist-moreutils-xs-perl liblocale-gettext-perl liblog-log4perl-perl
liblognorm5 liblsan0 liblua5.3-0 libluajit-5.1-2 liblua5.1-common
liblwp-mediatypes-perl liblz4-1 liblzma5 libmagic-mgc libmagic1 libmail-
imapclient-perl libmail-pop3client-perl libmail-sendmail-perl libmariadb3
libmath-round-perl libmaxminddb0 libmbim-glib4 libmbim-proxy libmd0
libmime-types-perl libmm-glib0 libmodule-implementation-perl libmodule-

runtime-perl libmount1 libmpc3 libmpfr6 libmro-compat-perl libnamespace-autoclean-perl libnamespace-clean-perl libncurses6 libncursesw6 libndp0 libnet-address-ip-local-perl libnet-dns-perl libnet-dns-sec-perl libnet-http-perl libnet-ip-perl libnet-libidn-perl libnet-netmask-perl libnet-nslookup-perl libnet-openssh-perl libnet-snmp-perl libnet-ssleay-perl libnetfilter-contrack3 libnetsnmptrapd40 libnettle8 libnewt0.52 libnfnetworklink0 libnftables1 libnftnl11 libnghttp2-14 libnl-3-200 libnl-genl-3-200 libnl-route-3-200 libnm0 libnumber-format-perl libopts25 libp11-kit0 libpackage-stash-perl libpackage-stash-xs-perl libpadwalker-perl libpam-chkshpwd 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-validationcompiler-perl libparse-recdescent-perl libparted2 libpcap0.8 libpci3 libpci3 libpci3 libpci3 libpcsc-lite1 libperl4-corelibs-perl libpixman-1-0 libpng16-16 libpolkit-agent-1-0 libpolkit-gobject-1-0 libpopt0 libpq5 libprotobuf-c1 libpsl5 libpython3-stdlib libqmi-glib5 libqmi-proxy libraspberrypi0 libreadline8 libref-util-perl libref-util-xs-perl librrd8 librrds-perl librrdtool-oo-perl libsamplerate0 libsasl2-2 libsasl2-modules libsasl2-modules-db libseccomp2 libselinux1 libsemanage-common libsensors-config libsensors5 libslang2 libsmartcols1 libsnmp-base libsnmp-perl libsnmp40 libsocket6-perl libspecio-perl libsqlite3-0 libss2 libssh2-1 libstdc++6 libstring-mkpasswd-perl libsub-exporter-perl libsub-exporter-progressive-perl libsub-identify-perl libsub-install-perl libsub-name-perl libsub-quote-perl libswitch-perl libsys-hostname-long-perl libsystemd0 libtalloc2 libtasn1-6 libtevent0 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 libtime-duration-perl libtinfo6 libtirpc-common libtirpc3 libtry-tiny-perl libtsan0 libubsan1 libudev1 libunistring2 liburi-perl libusb-1.0-0 libuuid1 libuv1 libvariable-magic-perl libwbclient0 libwrap0 libwww-mechanize-perl libwww-perl libx11-6 libx11-data libxcb-render0 libxcb-shm0 libxcb1 libxext6 libxml-libxml-perl libxml-namespacesupport-perl libxml-parser-perl libxml-sax-base-perl libxml-sax-expat-perl libxml-sax-perl libxml-simple-perl libxml2 libxrender1 libxslt1.1 libxstring-perl libxtables12 libxxhash0 libyaml-0-2 libzstd1 linux-base locales login logrotate logsave lsb-base lsb-release lua-lpeg lua5.1 luajit mailcap mariadb-common mawk media-types modemmanager mount mysql-common nano ncd ncd ncurses-base ncurses-bin ncurses-term net-tools netbase netfilter-persistent network-manager nmap nmap-common ntfs-3g ntp openresolv openssh-client openssh-server openssh-sftp-server openssl parted passwd pci.ids pciutils perl perl-base perl-openssl-defaults php-cli php-common php-curl php-pgsql php-snmp php-xml pinentry-curses pkg-config policykit-1 ppp procs psmisc publicsuffix python-apt-common python-is-python3 python3 python3-apt python3-certifi python3-chardet python3-debconf python3-distro python3-distutils python3-idna python3-lib2to3 python3-minimal python3-pip python3-pkg-resources python3-requests python3-setuptools python3-six python3-toml python3-urllib3 python3-wheel raspberrypi net-mods raspberrypi sys-mods raspi-config readline-common rfc2818 rpi-eeprom rpi-update rsyslog runit-helper sed sensible-utils snmp snmpd snmp ssh ssl-cert strace sudo systemd systemd-sysv

```
sysvinit-utils tar tasksel tasksel-data triggerhappy tzdata ucf udev
usb-modeswitch usb-modeswitch-data usbutils userconf-pi util-linux vim-
common vim-tiny wget whiptail wireless-regdb wireless-tools wpasupplicant
xkb-data xxd xz-utils zlib1g
594 updated, 139 newly installed, 14 to be removed and 0 not updated.
It is necessary to take 416 MB from the archives.
After this operation, 564 MB of additional disk space will be used.
Would you like to continue? [Y/n]
```

Answer 'Y + ENTER' (For Yes) to continue. Once the download is complete, you will be prompted to cancel the update (CTRL + C) or to start it (ENTER key).

Do not switch off your Unity during this process.

Download complete and in download mode only

Now, Your Unity is ready to upgrade to bookworm
Press ENTER to continue or CTRL + C to exit



It is essential to avoid shutting down the terminal or a power cut, as the SD card in the unity will be damaged and will no longer boot.

Once you have finished, the process will ask you to restart your Unity. This step is necessary.

OK - Update unity to bookworm SUCCESS

Unity is now up to date - Restart ?
Press ENTER to continue or CTRL + C to exit

Now you just have to wait a few minutes. Unity will then be accessible again via its web interface and via ssh. The update is now complete.

From:

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

Permanent link:

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

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