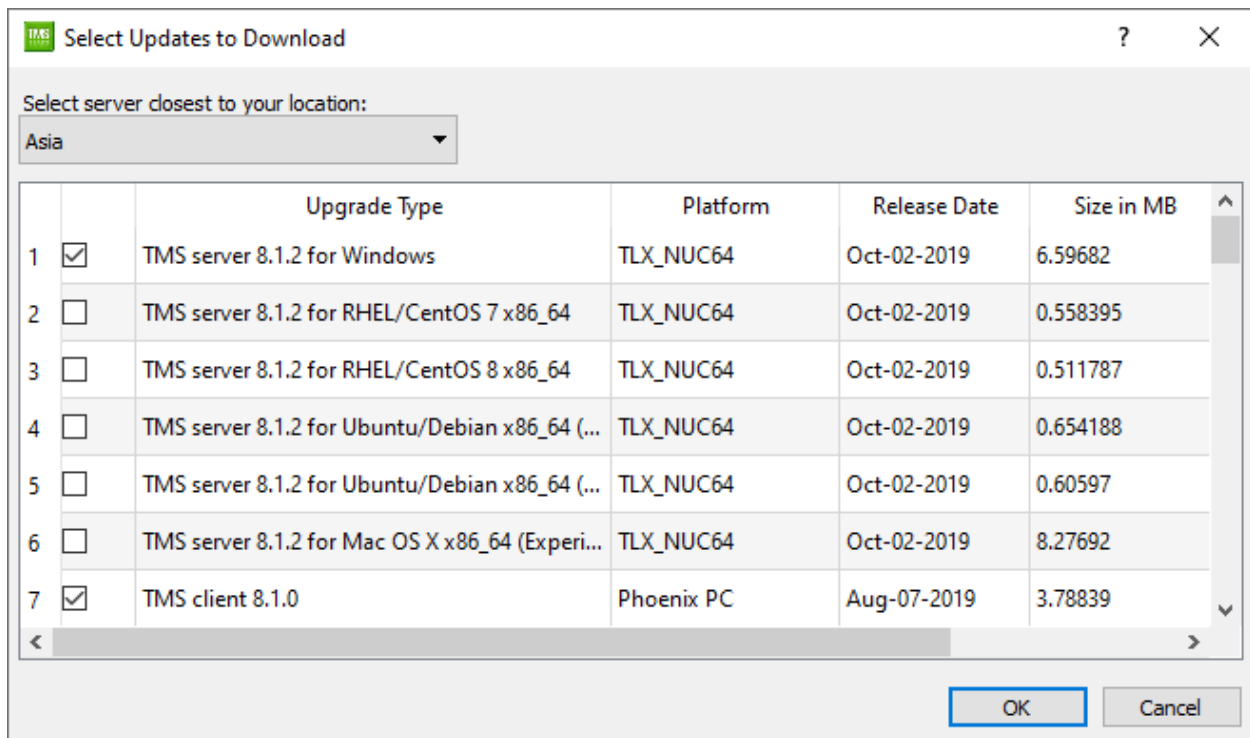# THINLINX

Thank you for buying TLXOS licenses, your license Entitlement was automatically stored in the ThinLinX license Server when you purchased TLXOS licenses at the ThinLinX online store. Your details, the license Device type, license Quantity, the email address and password you registered are all stored in the ThinLinX Database.
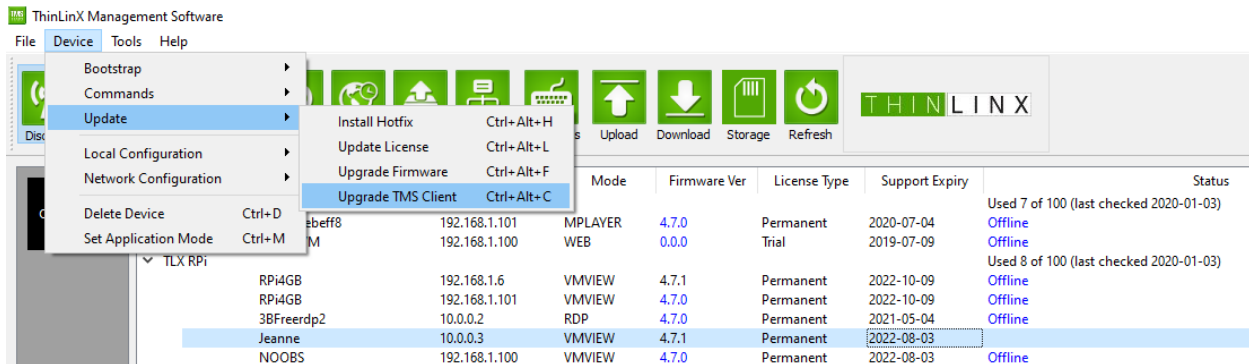
When you license selected TLXOS devices the devices send unique hardware information to the license Server which then sends an encrypted license Key back to each device where it is stored locally. If you ever change or erase the storage on the device you will need to re-license the device after re-installing TLXOS. The license Server will detect that the device is already licensed and send back the same license Key as was originally sent to the device.

After buying licenses the next step is to use the free ThinLinX Management Software (TMS) which you can download from https://thinlinx.com/download to license your TLXOS devices. At the time of writing this document, the latest version of TMS is TMS 8.1.2. The latest TMS client end of the TMS SSL connection to TLXOS is TMS client 8.1.0. You can keep these both up to date by clicking on the TMS Download Icon, see example below

		Upgrade Type	Platform	Release Date	Size in MB
1	☑	TMS server 8.1.2 for Windows	TLX_NUC64	Oct-02-2019	6.59682
2	☐	TMS server 8.1.2 for RHEL/CentOS 7 x86_64	TLX_NUC64	Oct-02-2019	0.558395
3	☐	TMS server 8.1.2 for RHEL/CentOS 8 x86_64	TLX_NUC64	Oct-02-2019	0.511787
4	☐	TMS server 8.1.2 for Ubuntu/Debian x86_64 (...	TLX_NUC64	Oct-02-2019	0.654188
5	☐	TMS server 8.1.2 for Ubuntu/Debian x86_64 (...	TLX_NUC64	Oct-02-2019	0.60597
6	☐	TMS server 8.1.2 for Mac OS X x86_64 (Experi...	TLX_NUC64	Oct-02-2019	8.27692
7	☑	TMS client 8.1.0	Phoenix PC	Aug-07-2019	3.78839

Select Updates to Download

Select server closest to your location:
Asia

OK   Cancel

In the image above you can see that TMS server 8.1.2 for Windows and TMS client 8.1.0 for Phoenix PC (Re-Purpose PC) have been selected for download, click on OK to download these. The Windows version of TMS will install over the current Windows version updating TMS automatically. The Linux versions will be downloaded but will have to be installed manually using your Linux distro package management tools.
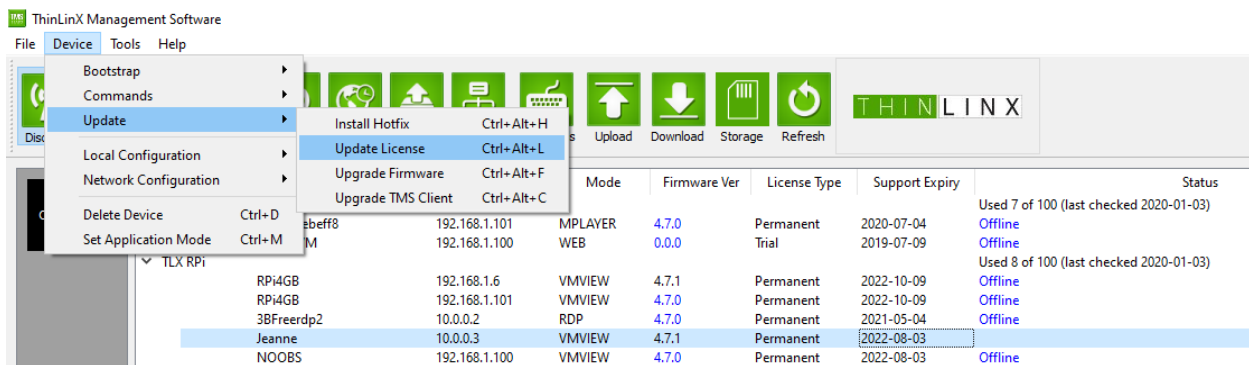
To update a client device running TLXOS with the downloaded TMS client you need to highlight the TLXOS devices on TMS and then select Device -> Update -> Upgrade TMS Client
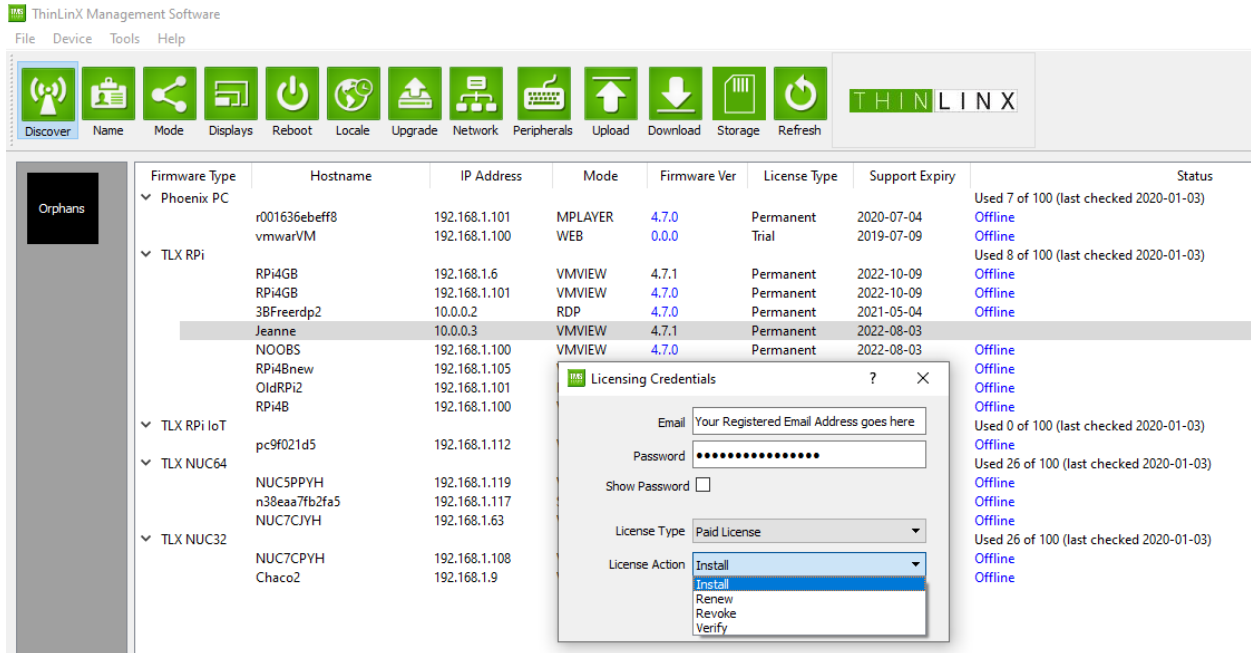

Licensing your TLXOS devices

Most of our customers License their TLXOS devices as shown below using TMS but in the case that TMS is not available you can use the local Tlxconfig menu on the TLXOS device itself. Click on the Configure button, you will see the Device Tab has Licensing Dialogs at the bottom of the screen, enter your Registered Email Address and Password, change the **Action** from Buy to Install, ensure **License Type** is Paid, click on Perform Action

To use TMS to install your License, highlight the devices which you wish to License, then use TMS → Device → Update → Update License

Enter the Email Address and Password that you Registered at the ThinLinX Store into the Dialog Box, leave the default Paid version selected. You will note that there is also a Free Trial option, you can use this to License the 30 Day Free TLXOS trial if the auto licensing of the Free Trial failed during installation
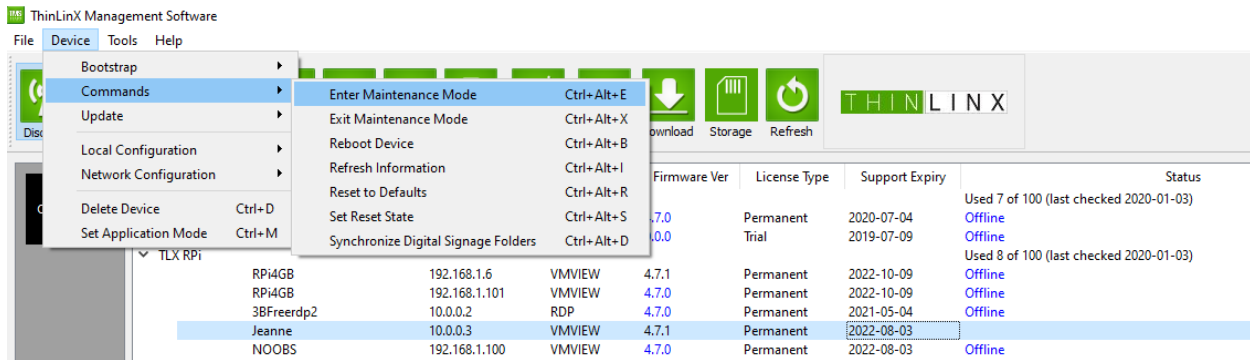

Click on OK, within about five seconds you will see "Product Licensed" appear in the TMS Status line on the right side of the screen on each Highlighted Device

After your devices are Licensed, click on the Refresh Icon to see the updated License Status, you will see "Permanent" under License Type and the Support Expiry date has changed to reflect the three Year License date. We have decided to make all TLXOS Licenses perpetual removing the three Year Support expiry, this column will be removed on the upcoming newer version of TMS

If your Trial License had expired and your device is in ThinLinX Firmware Maintenance Mode, you must now use TMS to return to Normal mode. You do this by selecting TMS → Device → Commands → Exit Maintenance Mode. Your device will reboot running TLXOS

You will note that under the License Action selection in the image above, you currently have four choices**, Install, Renew, Revoke and Verify**. The **Renew** option will be removed on the new upcoming TMS as all Licenses are now perpetual. The **Verify** option will check your License status and at the same time will update the number of Licenses of each class which you have purchased and how many have been used of each class. The **Revoke** option should be treated with caution as when a TLXOS License is **Revoked** it can never be installed on the same device again. You should only **Revoke** a License on a device which has failed or a device that will never be used for TLXOS again. A **Revoked** License goes back into your License pool allowing you to reuse it on another device of the same class

You can also force a TLXOS device into Maintenance Mode by selecting Device → Commands → Enter Maintenance Mode, this is used to repair a damaged SD Card by automatically running the Linux FSCK program on entering Maintenance mode. This will repair any SD Card corruption, you then use the commands in the image above to Exit Maintenance Mode.

TMS is a powerful Management console, it has many features including the ability to update the TLXOS firmware, apply Hotfixes, and apply TMS client upgrades. TMS is available for Windows and Linux and is also integrated into TLXADM, which is the ThinLinX Administration Virtual Appliance. TLXADM also includes a Desktop Shadowing feature which allows the Administrator to view and interact with any TLXOS device even before connecting to a Remote Desktop Session.

TMS may be used to manage devices located anywhere in the World including TLXOS devices located behind multiple Firewalls, this is possible as the client opens the connection to TMS

At the moment we have a number of different types of Licenses which only work with the same class of device, Raspberry Pi, Intel Small Form Factor, Re-Purpose PC etc. A RePC License only works on a RePC device, it will not work on a Raspberry Pi. Due to customer requests we have plans to change to a single universal License which will work on any TLXOS device, this will be useful for customers transitioning from RePC to a newer device since as a Raspberry Pi or Intel NUC. In this case the RePC Licenses would be Revoked at end of life of the hardware and could then be reused on say a Raspberry Pi

If you are using the Windows version of TMS to License your TLXOS devices you may in rare cases see a message "SSL handshake error All product registration requests have been cancelled"

Some older versions of Windows are missing the SSL Certificate that TMS needs, you can fix this easily by using Internet Explorer to connect to the ThinLinX License Server at https://tls.thinlinx.com Windows will download and install the missing SSL Certificate, close TMS, reopen TMS and now you will be able to License your TLXOS devices

Please read the TLXOS & TMS guides below, updated versions will be released shortly

TLXOS User Guide

ThinLinX Management Software (TMS) User Guide