Common Spartan Installation/Use Questions

This document contains a trouble-shooting and support data for a handful of common user questions, and is provided as a resource for both new users and customers that have recently updated to the latest version of **Spartan**. Within **Spartan's** **Help** menu (under **Spartan'24 Help**) there is a much longer and more detailed set of Frequently Asked Questions (FAQ's), organized by category. If you don't see your question/answer here, or within the **Help** menu, please contact us via support@wavefun.com.

Activating *Spartan*

-I have been given a Key Update file to upgrade my *Spartan* license, but the license utility prompts for an individual product key.

Upgrades are intended to *replace* older versions of **Spartan** with the current version. If you are attempting to activate the latest version of **Spartan** on the same machine you were running an older version on, the license utility will recognize the older license and allow for use of a **Key Update file** to activate the new version. If you are installing on a *new* machine, you will need a *new* product key, please contact sales@wavefun.com and explain the situation.

-I cannot activate my product key, I receive the error message: Could not generate the license, container is clone detected.

Delete the contents of the 47332 folder, restart, and then attempt to activate, the 47332 folder contains the actual base activation for (and all updates to) the license. It is located:

Windows: C:\Program Files (x86)\Common Files\SafeNet Sentinel\Sentinel LDK\installed\47332
Restart the license manager service from an Admin Level Command Prompt (or Power Shell): net start hasplms
Linux: Computer/var/hasplm/installed/47332
Restart the license manager service with:
systemctl restart aksusbd
Open Spartan, attempt to activate
Macintosh: user's home directory/var/hasplm/installed/47332
Open the Finder
Click on the Go menu
Click on the Go to Folder… entry
In the Go to Folder dialog, type: /var/hasplm/installed/47332 and hit the Return key
Delete the contents of the 47332 folder (*drag* contents to the Trash and *empty* the Trash)
Restart the machine, attempt to activate *Spartan*.

-I have already activated my license, but when I open *Spartan*, no license is found and I am prompted to launch the license utility when I open *Spartan*. I tried to activate the license again but I received an error message "Activation request failed, Product Key exhausted".

"**Product Key exhausted**" means that the product key you are using has already been used to activate a license.

There are a handful of scenarios that might result in a valid license not being seen/recognized. This will result in a prompt to launch the license utility, see next page.

Work through the trouble-shooting steps on the following page(s) below to determine the root cause. Contact support@wavefun.com with specific questions, as needed.

Individual Licenses:

#1 Open a web browser (Chrome, Firefox, Internet Explorer, Edge, Safari, etc.), and go the following location: http://localhost:1947. This will open the web-based interface to the license manager (the Sentinel Admin Control Center). If you receive a page not found error message, this means that either the license manager is installed but the service/daemon is ***not running*** -or- that the license manager program is not installed.

==Windows==: restart the computer, this will restart the license manager service. If you do not wish to restart the machine, there is a Command Prompt operation you can perform: open an Administrator level Command Prompt and type: **net start hasplms** (and hit the Enter key). If you receive an error message, go to step #2.

==Macintosh==: restart the Mac, this will also restart the license manager daemon. If you do not wish to restart the machine, there is a kickstart operation you can perform: open a Terminal Window and type: **sudo /bin/launchctl kickstart –k system/com.aladdin.hasplmd** (and hit the return key). If you receive an error message, go to step #2.

==Linux==: restart the computer, this will restart the license manager service. If you do not wish to restart the machine, from the terminal you can perform: **service aksusbd restart** (and hit return key). If you receive an error message, go to step #2.

Once the license manager service/daemon is running, open ***Spartan***, the license should be found and you should be able to access the program/application. If you are *still* prompted to launch the license utility, skip to step #3.

#2 If you are unable to manually start the license manager service/daemon, it almost certainly means that the license manager was not installed and you will need to install this manually:

==Windows==: From the Windows Control Panel, ***uninstall Spartan***, then download the latest version and ***reinstall Spartan***. Make sure you allow the Sentinel Run-time Installer to complete installation of the license manager program.

==Macintosh==: From the Applications directory, drag ***Spartan*** to the trash, then download the latest version and ***reinstall Spartan*** (***double-click*** on the disk image and drag the application icon to the provided Applications folder shortcut on the disk image. Open ***Spartan***. Upon opening, the application will check to see if the current version of the license manager is installed, if not, the Sentinel Run-time Installer will initiate. Allow this to perform the installation of the license manager program. (Under rare circumstances is may be necessary to manually uninstall and then reinstall the Sentinel Run-time environment, an uninstaller is provided in the **License Utilities** folder on the disk image.

==Linux==:
==RedHat/CentOS==: Instructions to manually install the HASP drivers under **RedHat/CentOS**...First you will need to remove any previously installed license managers (the following steps will need to be performed as root)...

rpm -e aksusbd

If aksusbd is not installed you will receive a 'package not installed' message, this can be ignored. Change directory to the hasp directory found in the Spartan distribution you unpacked from the tar archive (/usr is the default location)...

cd /usr/spartan24.3.0_x86-64/hasp/rpm

Install the 64bit license manager...

rpm -i aksusbd-10.12-1.x86_64.rpm

Next, copy Wavefunction's vendor libraries to the /var/hasplm folder...

cp haspvlib_x86_64_47332.so /var/hasplm
cp haspvlib_47332.so /var/hasplm

Then restart the license manager...

systemctl restart aksusbd.service

You can check the status of the license manager by pointing a local web browser to...
http://localhost:1947   -   The 'Sentinel Admin Control Center' should be displayed.

Ubuntu/Debian: Instructions to manually install the HASP drivers under **Ubuntu/Debian**...Change directory to the hasp directory found in the Spartan distribution you unpacked from the tar archive (/usr is the default location)...

cd /usr/spartan24.3.0_x86-64/hasp/deb

Install the 64bit license manager...

sudo dpkg -i aksusbd_10.12-1_amd64.deb

Next, copy Wavefunction's vendor libraries to the /var/hasplm folder...

sudo cp haspvlib_x86_64_47332.so /var/hasplm
sudo cp haspvlib_47332.so /var/hasplm

Then restart the license manager...

sudo systemctl restart aksusbd.service

You can check the status of the license manager by pointing a local web browser to...
http://localhost:1947-   The 'Sentinel Admin Control Center' should be displayed.

#3 Once the license manager service/daemon are running (which may require reinstalling – step #2 above), open *Spartan*. If you are still prompted to launch the license utility, close *Spartan* and open the web-based interface to the license manager, via: http://localhost:1947 (**Sentinel Admin Control Center**). Under the **Options** column on the left hand side, *click* on three items: **Sentinel Keys**, **Features**, and **Diagnostics**. Take a screen capture of each and send these to support@wavefun.com, along with a description of the problem and any additional relevant information (did you recently migrate to a new machine, are you running on a virtual machine, etc.). This will give our support team the information they need to help get you back up and running.

Network Licenses:

#4 The above 3 steps are also applicable to client machines that are accessing a network license. There is an additional step than can be followed on the client machine -- assuming the license server machine is not displayed/available from the **Sentinel Keys** page from http://localhost:1947 (**Sentinel Admin Control Center**) on the client machine. Under the **Options** column, *click* on the **Configuration** link, then *click* on the 3rd tab titled: **Access to Remote License Managers**. Configure this as follows:

Allow Access to Remote Licenses (On)
Broadcast Search for Remote Licenses (Off)

Remote License Search Parameters: Here you should enter the machine name (or IP address) for your license manager machine, for example: LicenseServer.wavefun.com (or 192.168.2.1). Both IPV4 and IPV6 are permitted, however, because it is not uncommon for IP addresses to be configured as dynamic (meaning they can change) it may be a safer option to use the .machine name for the license server.

Note: you will need to *click* the **Submit** button if you make any changes to this panel. For additional information on options, *click* the Help link in the lower right corner of the Access to Remote License Managers tab.

With the above changes made, *re-open Spartan*, is the network license found? If not, email the 3 screen captures mentioned in step #3 for **BOTH** the **client machine** as well as the **license server machine** to support@wavefun.com and one of our support team will follow up with you.

#5 In rare cases, one may need to manually open port **1947** on either (or both) the client machine and the license server machine. Details on this vary depending on what platform the machines are running under and whether or not they are running under an OS bundled firewall or a firewall from a third party anti-virus package. If a third-party anti-virus package is in place, you might try disabling this to test and see if the network license is picked up by the client machine(s). If this is successful, consult your anti-virus help content for information on opening a port or allowing an application as permitted. You can also contact us via support@wavefun.com and we can open a support ticket with **THALES** (the company that develops and maintains the Sentinel EMS licensing used in our applications).

Opening Spartan:

-(<mark>Windows only</mark>) **Upon attempting to open** *Spartan* **using remote desktop/remote display, the GUI crashes and closes (or in rare cases, attempting to open** *Spartan* **locally, the GUI crashes and closes).**

This can occur if your computer's video settings do not fully support OpenGL, which **Spartan** uses for rendering molecules in 3D, you may need to make the following adjustment in order to access the graphical interface:

#1. Right-click on the **Spartan'24 Shortcut** on your Desktop and Select Properties, from the "**Shortcut**" tab, modify the "**Target**" line like this:
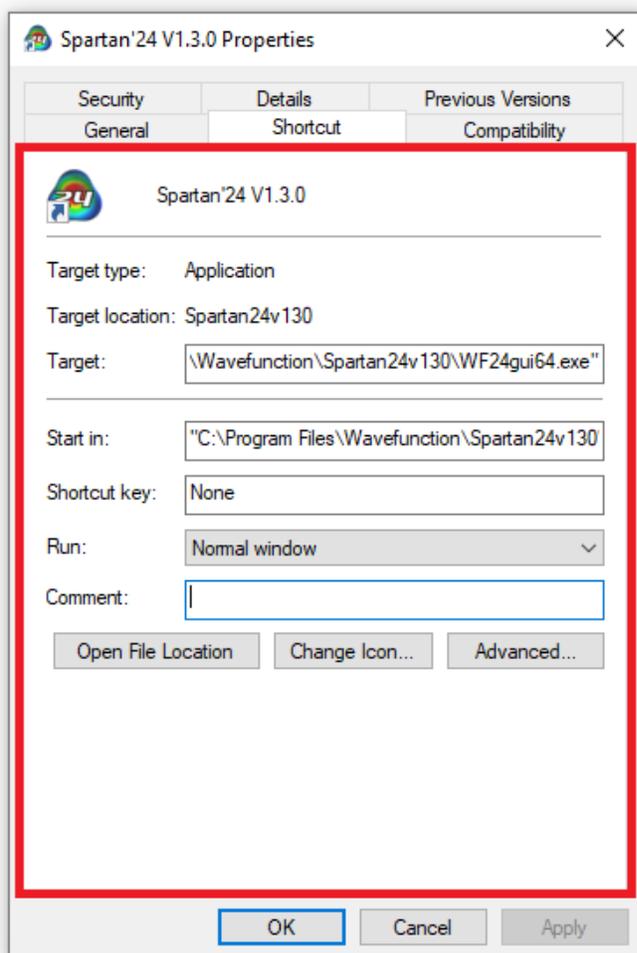
Add a space followed by:
`--useSoftwareOpenGL`

Click OK, then *double-click* on the shortcut to open **Spartan'24**

#2. Alternately, you can initially launch from Command Prompt:

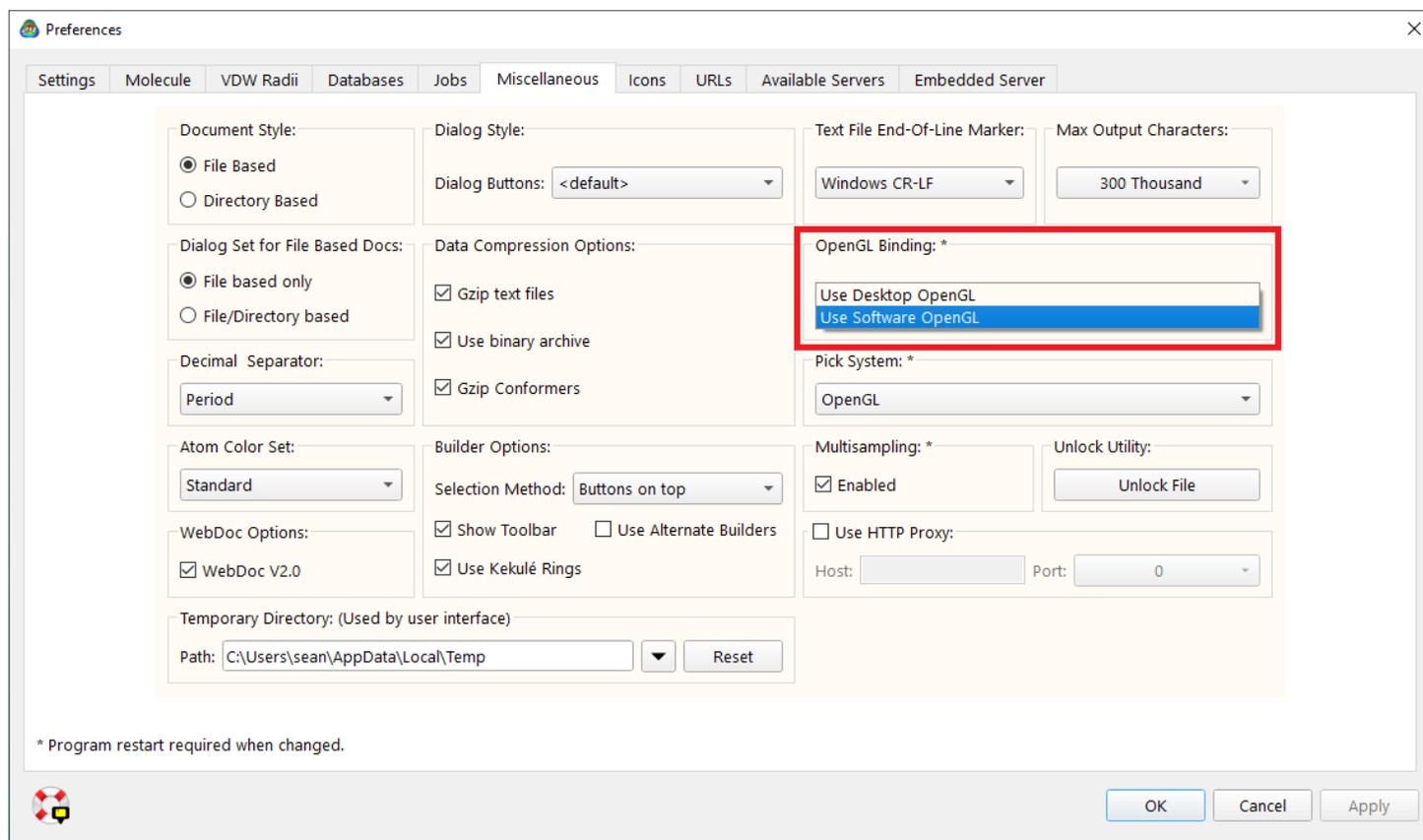From the **Start** menu search for and open the **Command Prompt**.

For **Spartan'24**, type (exactly as shown with quotation marks included):

"C:\Program Files\Wavefunction\Spartan24v130\WF24gui64.exe" --useSoftwareOpenGL

And hit the Enter/Return key

#3. Once you make this change, open *Spartan'24*, Go to:

Options menu > **Preferences** > **Miscellaneous** tab – confirm this is in the **Software OpenGL** mode for **OpenGL Binding**:

This change will use a set of Mesa Libraries to support the OpenGL rendering, rather than the default display adapter drivers associated with your machine (the ""**Use Desktop OpenGL**" option).

Contact support@wavefun.com if you remain unable to access the Spartan'24 GUI.

(Macintosh only) I attempt to open; I see the application icon "bouncing" up and down in the dock, but the application does not open.

This is Apple's verification step for any downloaded application. The intent is to make sure there is no virus/malware attached to something downloaded to your machine. The process is regrettably slow and may take 30 seconds to a minute to complete. In rare cases, if the user has run a clean-up utility (like CleanMyMac or Onyx, for example), this will prevent the application from being verified and you may need to download the disk image again to pass the verification.

3D Building:

I can't build, I am clicking to insert an initial fragment, but no fragment appears in the UI.

The default behavior for building in 3D is now *double-click* to insert the initial fragment. This change was made to keep consistency between the 2D (Sketch) builder and the 3D (Model Kit) builder. If you prefer a *single-click* to initiate building, go to **Options** menu > **Preferences**, and *turn off* the **Double-Click Start** check box under the **Miscellaneous** section of the **Settings** tab:
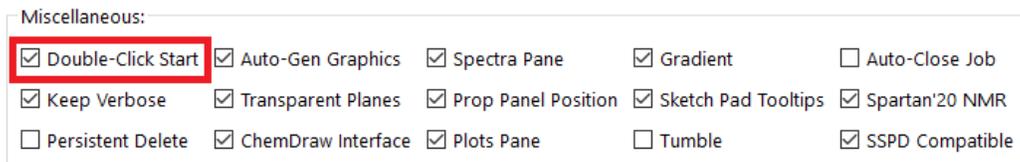
**When I try to add a second fragment to an open valence, nothing is happening.**

If your computer's video settings don't fully support OpenGL, which *Spartan* uses for rendering molecules in 3D, you may need to make the following adjustment in order to build in 3D: go to **Options** menu > **Preferences** > **Miscellaneous** tab, *click* on the **Expert** check box in the lower right of the panel and switch the **Pick System** from OpenGL to Color (or Color + Geometric). You will need to restart Spartan after making this change:

Documentation

Where is the manual / where are the tutorials?

The full **Spartan'24 Manual** [Tutorials, User's Guide (Features & Functions), and Appendices including: an extensive Topics section and Glossary] is available from within the program/application from the **Help** menu. The **Tutorials** (organized by topic area) are also accessible from within the program/application from the **Activities** menu. We encourage new users to review at least the first 9 tutorials, as this will provide a thorough overview of the major feature set in the current release version:
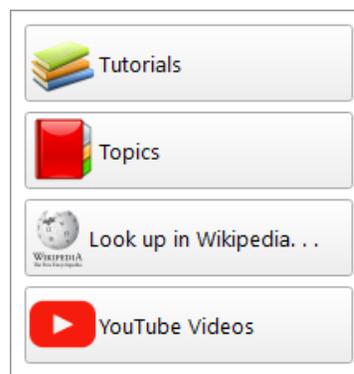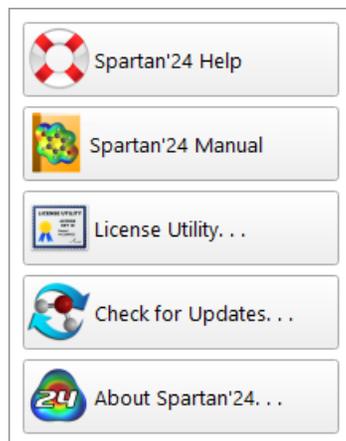
Maintenance and Support Policy - What is maintenance and what does it include?

All purchases of *Spartan* include one year of complimentary maintenance. Maintenance covers: priority technical support, any necessary license transfers (in the case of new hardware) or license resets (in the case of failed hardware). Maintenance provides for all minor point releases (for example: the recent updates to *Spartan'24* [v.1.3.0 for Windows from the prior 1.2.0 release) and major version updates like the move from *Spartan'20* to *Spartan'24* and the upcoming *Spartan Student Edition version 10* (planned for Summer 2025). In the case of Network licensing, maintenance also includes the ability to host licensing on a virtual machine (or access Spartan on VM client machines). As such, *all* new license purchases are issued with a 1-year license term (including maintenance).

License information is available at any time from the About Spartan'24 entry (**Help menu** Windows and Linux, **Spartan menu** for Macintosh). Wavefunction reaches out to customers at ≈ 90, 60, and 30-days prior to expiration with a 3-year maintenance renewal offer. In addition to the benefits described above, renewal of a 3-year maintenance term guarantees at least one major version update. Customers are NOT obligated/required to renew maintenance (although it is the most cost-effective way to keep your Spartan license supported and current with the latest version updates).

- If/when customers *renew maintenance*, they receive a new product key (providing an opportunity to relocate the license to a new machine, if desired), which is termed at 3-years (the new maintenance period), and they continue to receive the benefits of maintenance coverage described above. At present, 60% of our academic customers and roughly 80% of our government and commercial customers renew maintenance.
- If/when customers *decline maintenance*, they are (upon acknowledgement) provided with a new "permanent" license key, which permanently locks the license to the machine it is activated on. This provides an opportunity to relocate the license to a different machine (than previously used, if desired). Network licenses without maintenance must be hosted on a physical machine (rather than a virtual machine). While priority technical support is no longer provided, we answer any and all support requests to the support@wavefun.com email (we have a team of 4-5 staff members that cover this communication). Complimentary version updates or resetsare no longer provided, but as long as the customer is using the current version of the software, license transfers are provided at no charge.

Note, however, once a new major version update is released, support for the previous version is discontinued. License transfers for older versions are no longer available free of charge. Customers have the option to either upgrade to the current release or transfer/reset the license of the existing version. The license transfer or reset fee is ≈ 25% of the purchase price of a new license – and includes a product key generated for the deprecated Spartan version. Alternately, customers can purchase an upgrade to the current version of Spartan (this is ≈ 50% of the new license purchase if the license is one version out of date, ≈ 60% of the new license purchase if the license is 2 versions out of date, ≈ 70% of the new license purchase if the license is 3 versions back, etc. . .).

New Operating System support: Wavefunction policy on new operating system support is that Spartan and Odyssey are *only supported* for the OS versions documented in the program manual, brochure, and our website content at the time the software is released. We cannot guarantee that current (or *any* legacy Spartan or Odyssey version) will be supported under new or future OS updates. If additional development is needed to support use of our code under new OS variants, Wavefunction will undertake this development for the current versions (only). There is only one active development code base for Spartan and Odyssey (currently Spartan'24 and Spartan Student 9 and Odyssey 7, we do not support or develop for deprecated versions).

As a small company (less than 20 employees) in a niche market, we depend on maintenance renewal sales to support current and future development efforts for *Spartan*. This said, in either case (whether customers do or do not have current maintenance coverage), we do our best to assist with all *Spartan* support questions (for both current and deprecated versions) as we continue to promote the use of molecular modeling in the mainstream chemistry community.