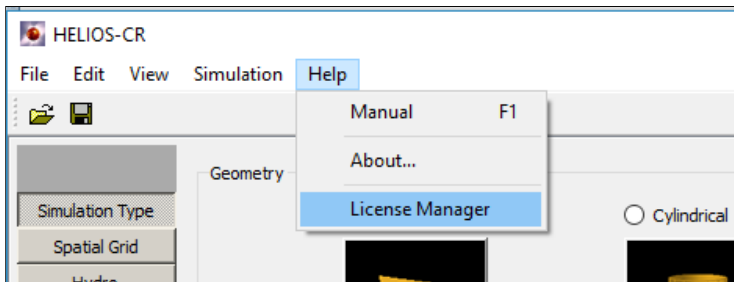




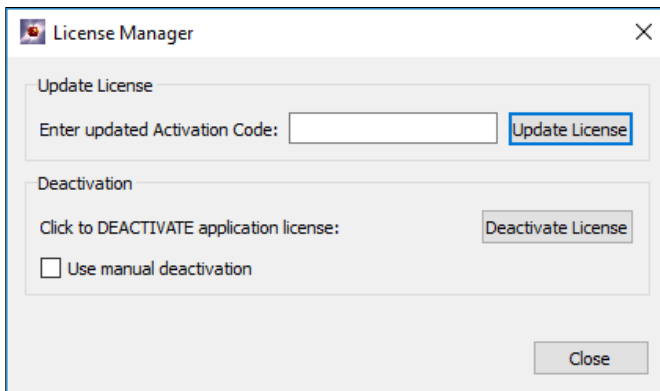
HELIOS USER'S GUIDE

Revisions for HELIOS version 7.4.0

- Electron beam option under *Particle Beam* tab has been made available to all users.
- Fusion reactions tab has been made available to all Helios CR users.
Fusion rates for reactions are computed using the local density of deuterium and tritium nuclei and the fuel ion temperature for each volume element. All neutrons are assumed to escape the capsule. Detailed transport of protons and alpha particles is not considered. So the fusion product modeling is applicable to targets that are small and have yields that are sufficiently low that fusion particle transport can be neglected. The following reactions are supported:
 - DD \rightarrow nHe3
 - DT \rightarrow nHe4
 - DD \rightarrow pT
 - DHe3 \rightarrow pHe4
 - TT \rightarrow nnHe4
- License agreement for Helios was updated. Please read new terms and conditions carefully.
- Enabled support for new sets of Prism atomic data and EOS/opacity tables.
- Users with activated-based licensure may now *deactivate* their license, in order to use that license seat on a different computer instead. The option is located under License Manager in the Help menu:



A button is available for online deactivation. Alternatively, manual deactivation is available via email contact with Prism.



- Bug fixes:
 - Various issues with tables have been fixed, including unexpected clearing of bad user-entered data when sorting and saving.
 - Fixed issue with tabulated data for initial temperature not being loaded properly to the table when read from an old workspace.
 - Prevent erroneous warning messages to appear when a table with inconsistent data was created but not used.
- *HydroPLOT*:
 - Colorbar and legend visibility graphics items can now be hidden and shown with Text menubar options.
 - Layer properties editing has been disabled for lineout plots.
 - Bug fixes:
 - Fixed crashes when plotting MHD related quantities from an *.exo output file.