Using Nexus with Stellarium under Windows

This document describes how to setup your Nexus with a Windows based computer running Stellarium planetarium software using default factory settings.

It is necessary to perform a two star alignment in order to be able to use Nexus with Stellarium.

Two star Alignment

The two star alignment must be performed every time Nexus is turned ON.
- Install (one time only) and run Nexus configuration utility.

- Click 'Load Configuration':
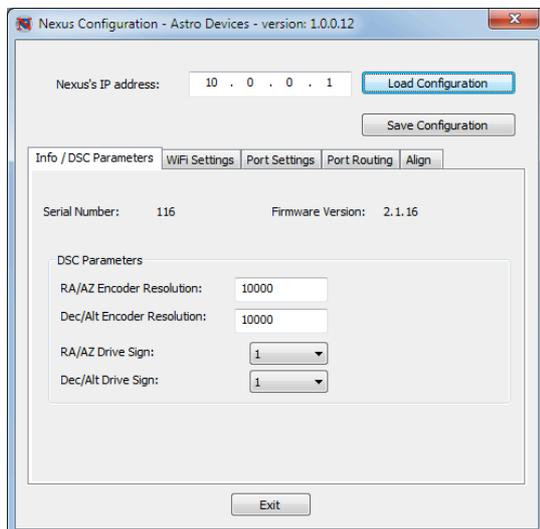
- It is also necessary to make sure that the settings for 'Port Routing' matches the following:

- If any changes were required press 'Save Configuration' button and restart Nexus (turn OFF and ON).
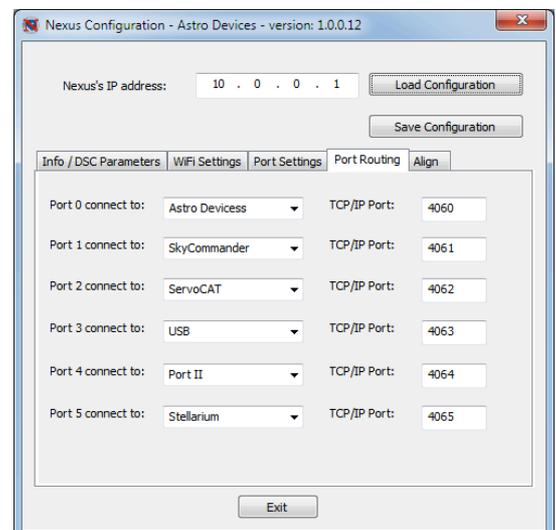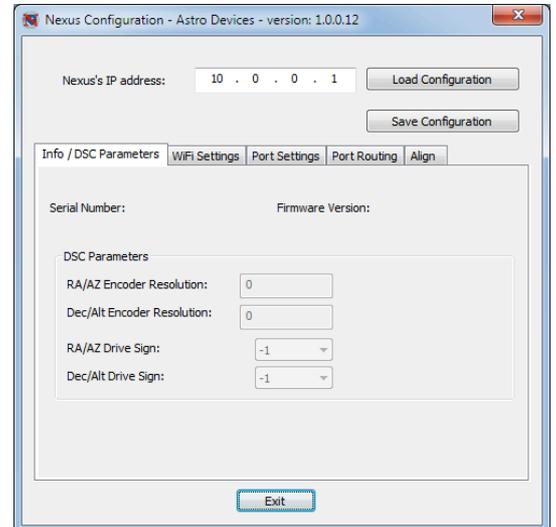
- Press the 'Align' tab. Set encoders steps to the ones used by the telescope. Select the 'Alt Reference' value from the dropdown list. Now it is time to press 'Connect'.
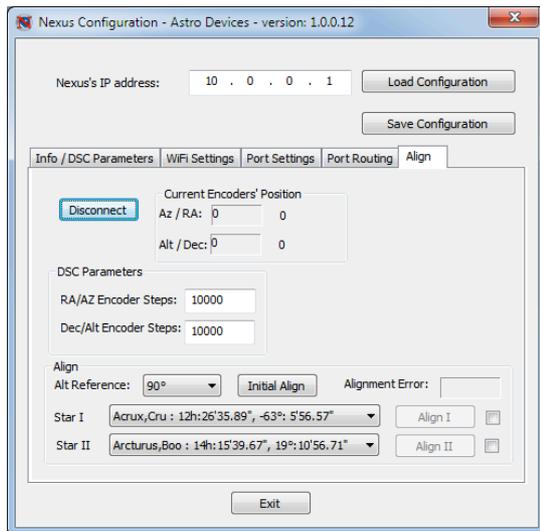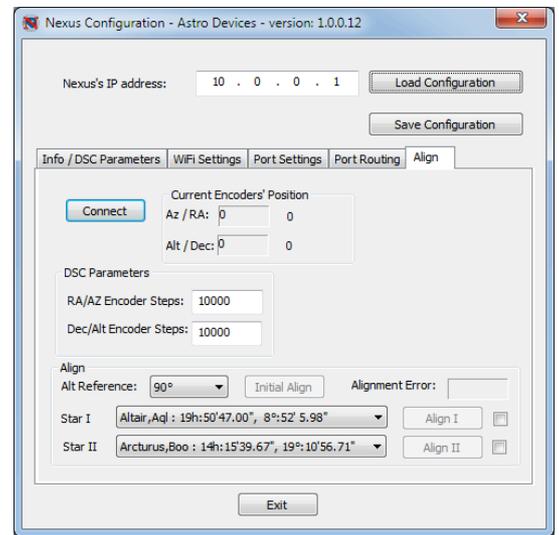
- The 'Initial Align' button will become active as soon as the connection is established. Make sure that the encoders' position values change when moving the telescope. This can also be used to test the encoders.

Note: It is important to make sure that the sign for the encoder steps are set correctly. Once connected, please move the telescope clockwise in azimuth. If the angle in the right field of 'Current Encoders' Position', Az/RA is decreasing then change the sign in the 'RA/AZ Encoder Steps' field to opposite (-10000 instead of 10000). Please follow the same steps for the Alt/Dec encoder.

- Set the telescope at the 'Alt Reference' angle (90 degrees in this example – vertical) and press 'Initial Align' button and wait until the encoders' position values go to 0, 90 (for 90 degrees) or 0, 0 (0 degrees, horizontal). 'Align I' and 'Align II' buttons will now become active.
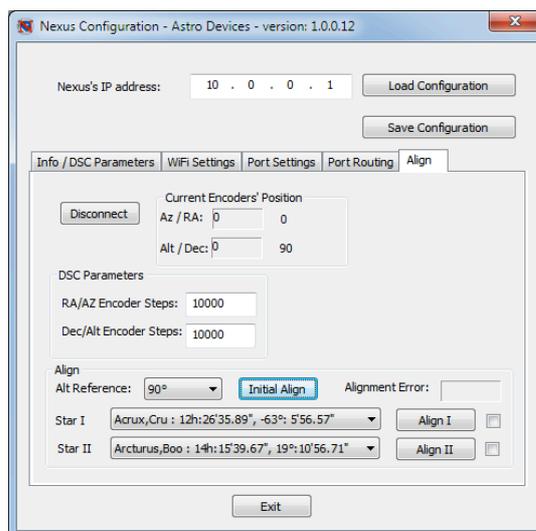
- Select two alignment stars from 'Star I' and 'Star II' dropdown lists. The selected stars will be saved and used next time the configuration utility is run. Point the telescope at the first selected alignment star and press 'Align I' button. A check mark will appear next to the button as soon as Nexus acknowledges it received the command.
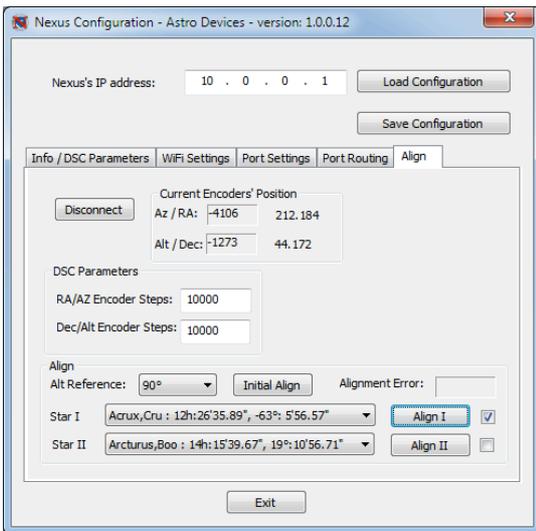
4. Point the telescope at the second selected alignment star and press 'Align II' button. A check mark will appear next to the button as soon as Nexus acknowledges it received the command. The 'Alignment Error' field will show how precise the alignment was achieved.
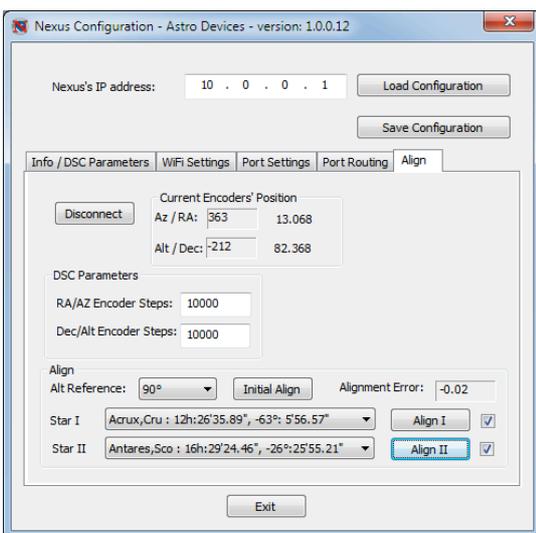
- Done!!!

Now it is time to setup Stellarium.

- Start Stellarium and go to the 'Configuration', select 'Plug Ins' tab and then 'Telescope Control' on the left.
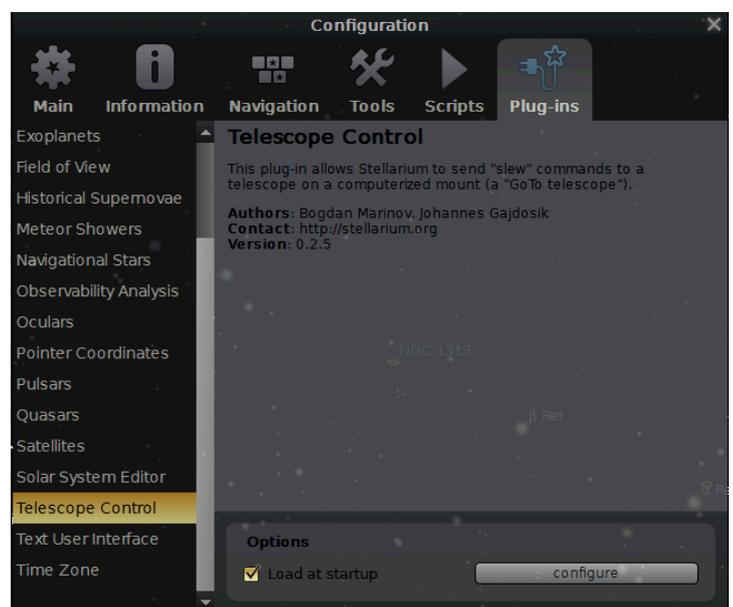
- Click 'Configure' and active the 'Telescope' tab:
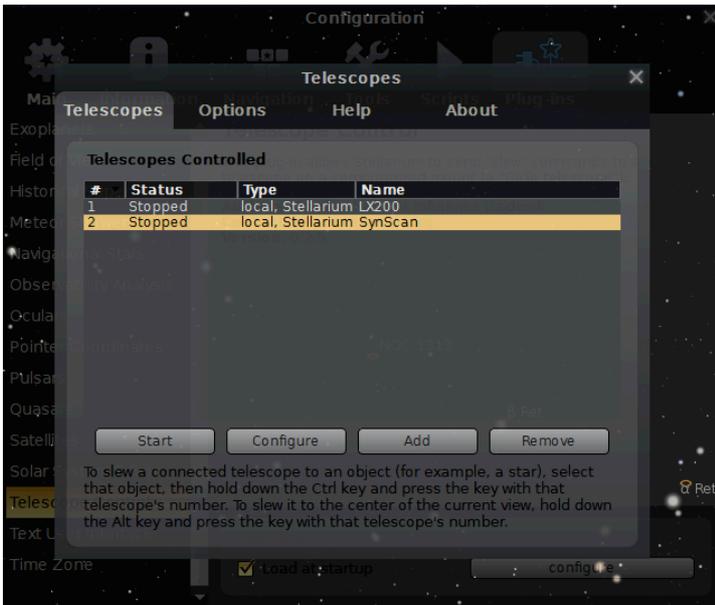
- Click 'Add', select 'External software on a remote computer', give it a name (NexusDSC in this case):
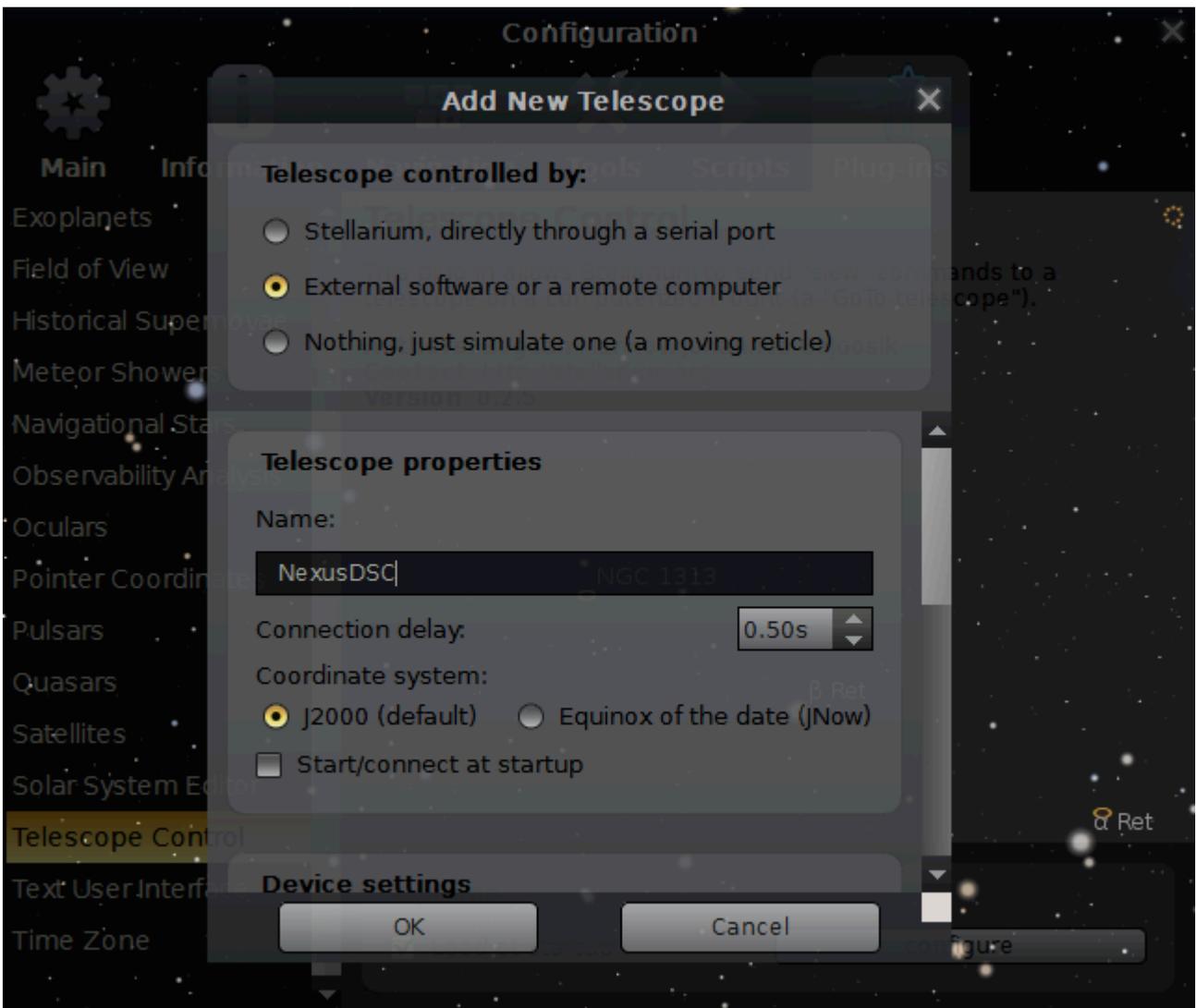
- Scroll down and set 'Host' to 10.0.0.1 and 'TCP port' to 4065, enable 'Use field of view indicators':
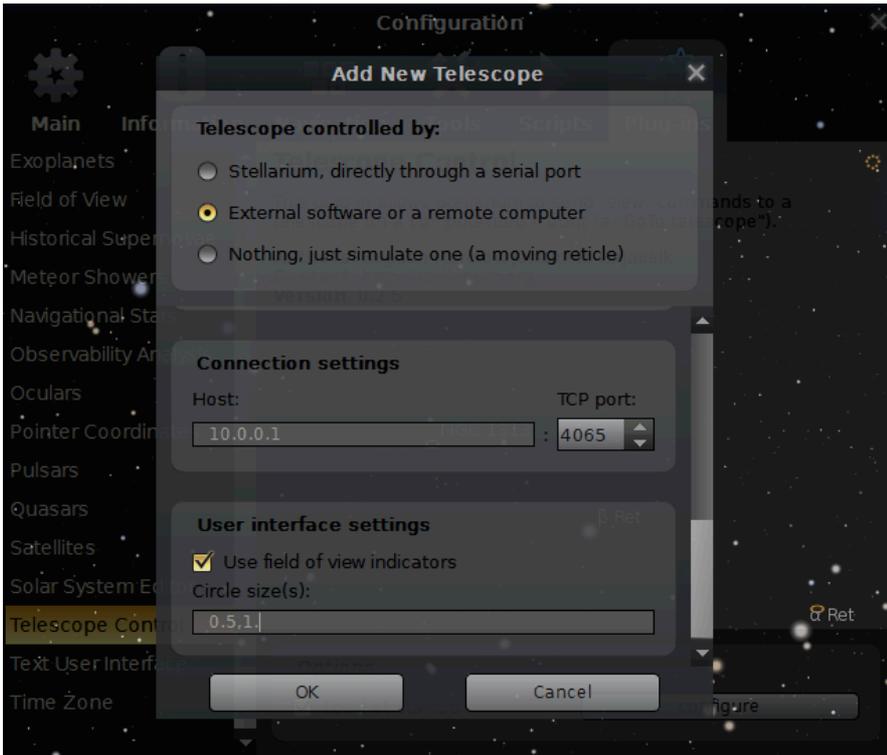
- Press 'OK' and then 'Connect', it will show that Stellarium is connected to NexusDSC:
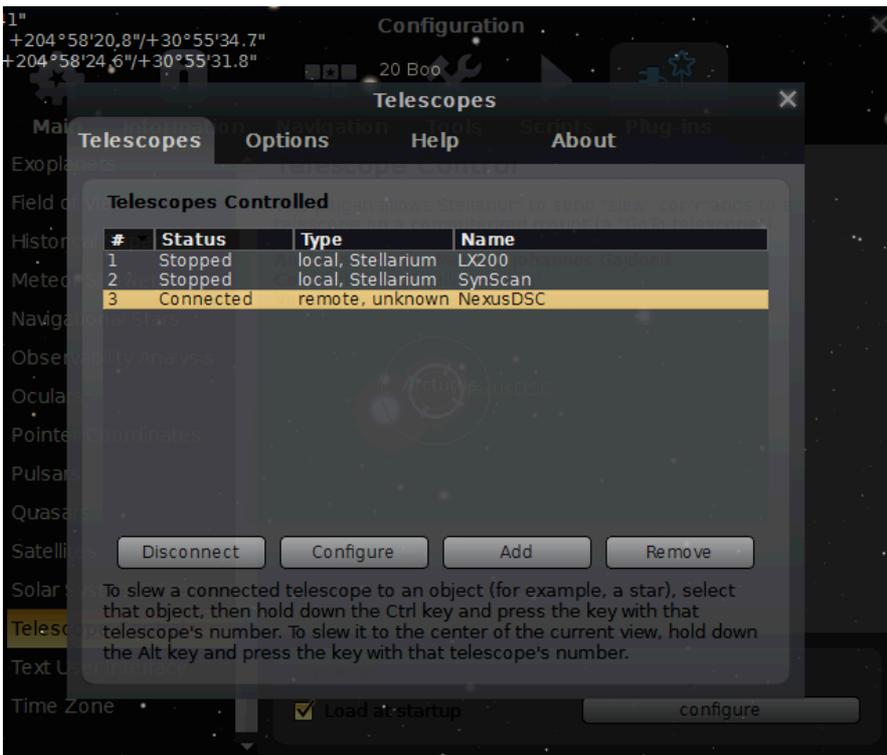
- Close the configuration windows and go back to the main screen, The main screen will show where the telescope is pointing (it should be pointing at the last alignment star if the telescope has not moved much since the alignment – here it is next to Arcturus as a few minutes have passed since the alignment).

DONE!!!