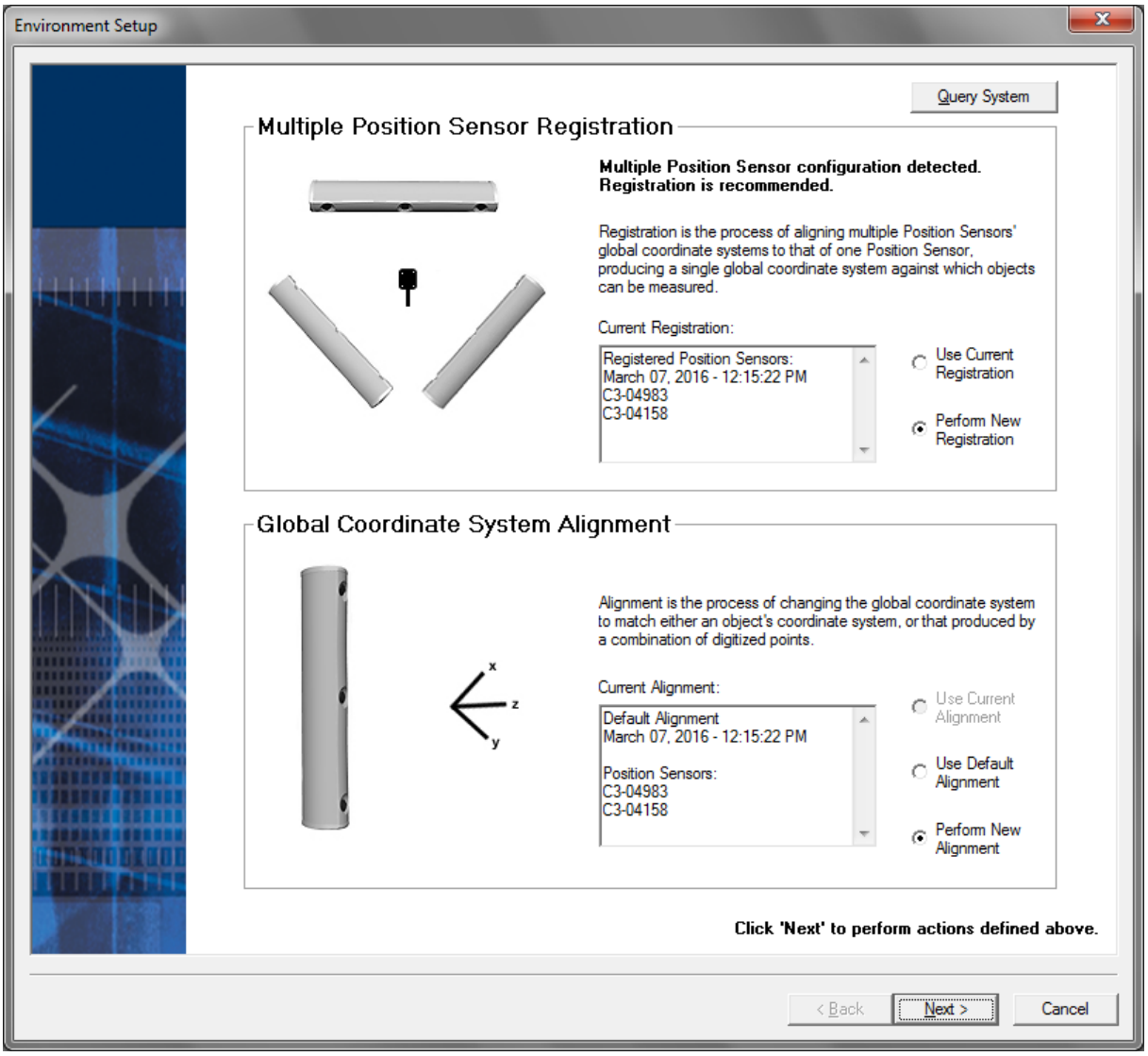
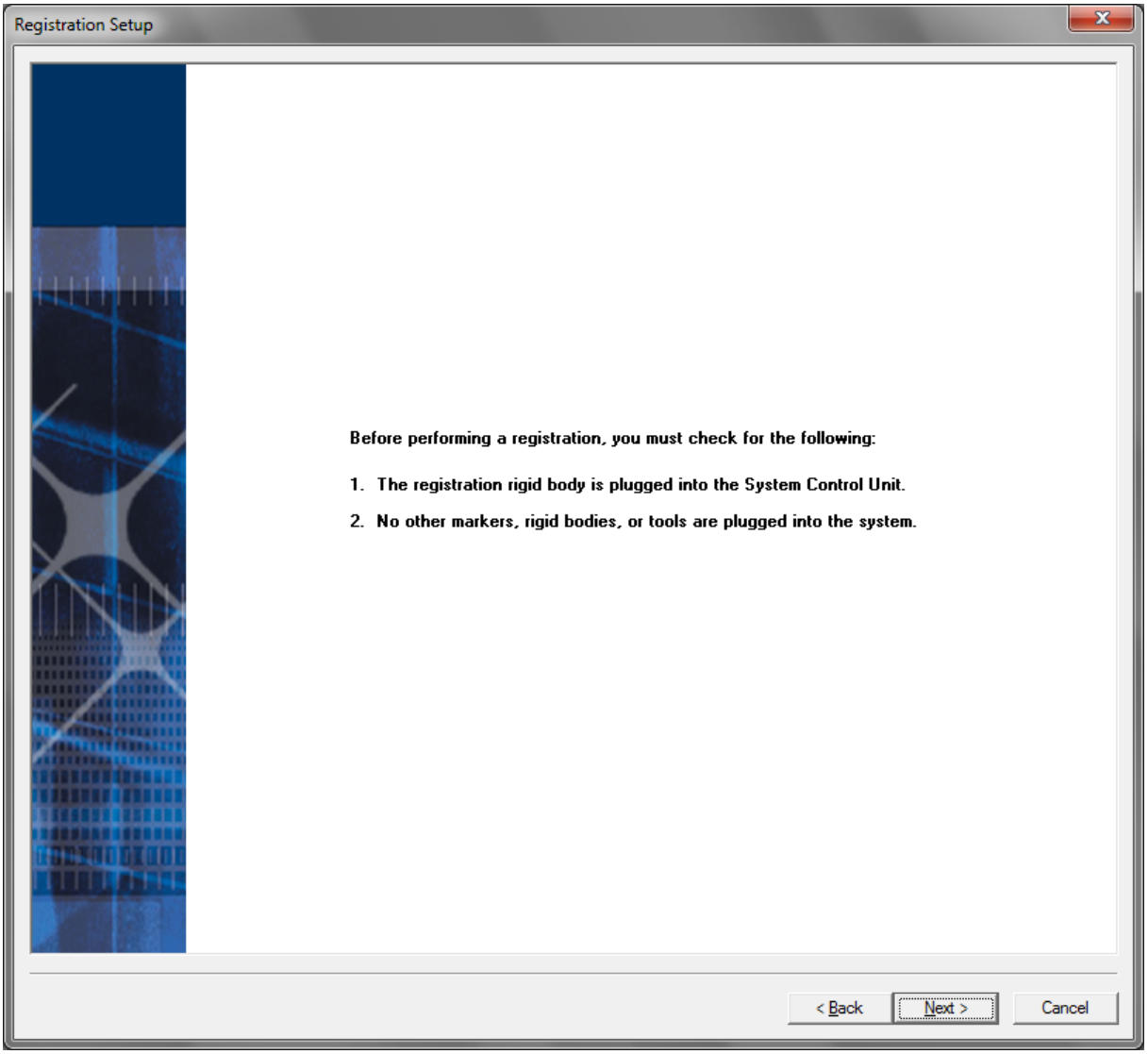
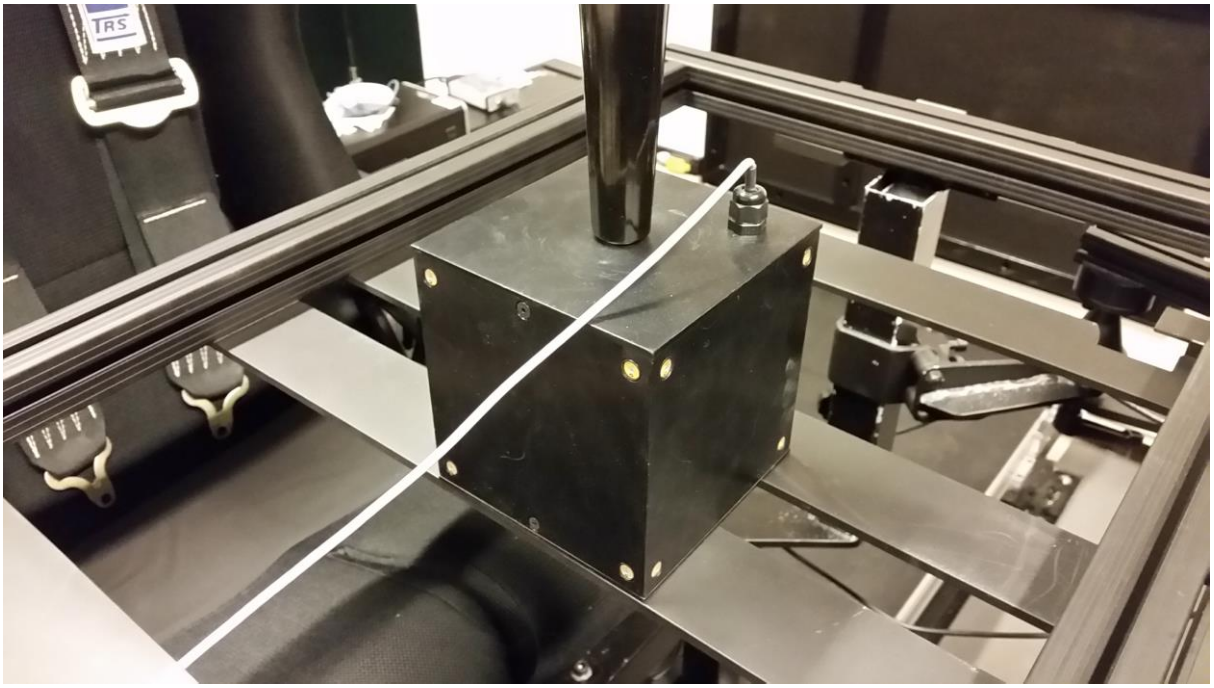
Performing a registration.

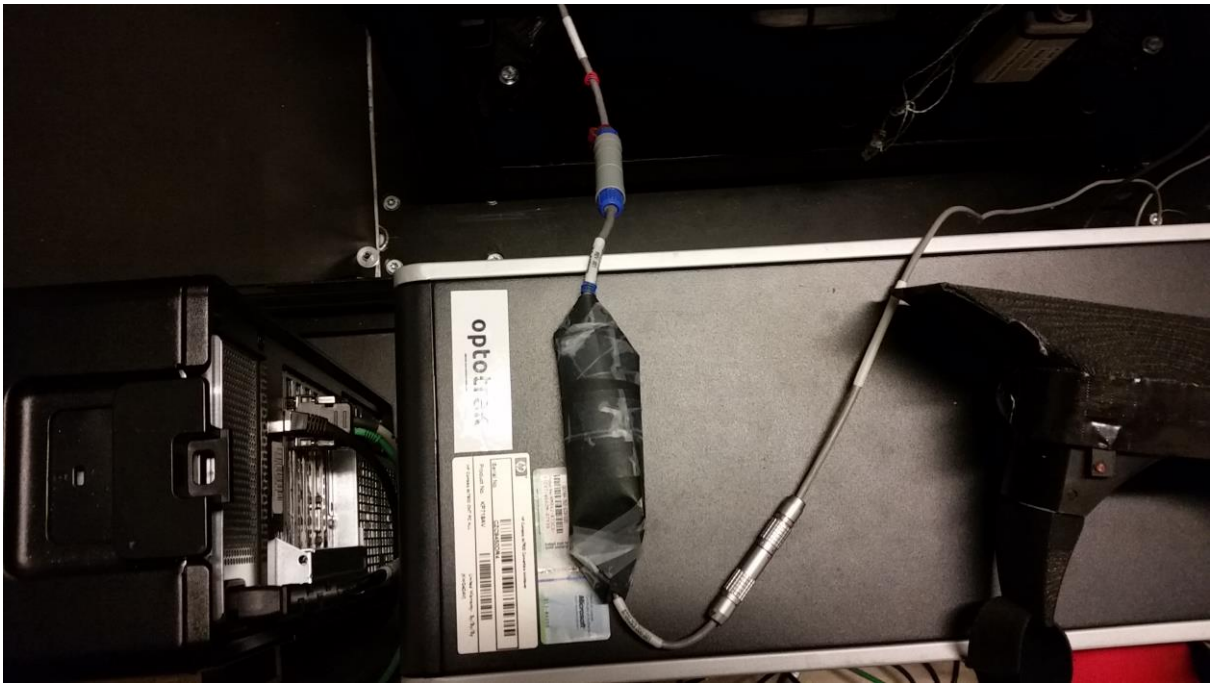
When using more than one position sensor, the position sensors need to know where they are with respect to one and other and the coordinate system needs to be defined (alignment). Choose ‘Perform new registration’ and ‘Perform new alignment’. Press Next.

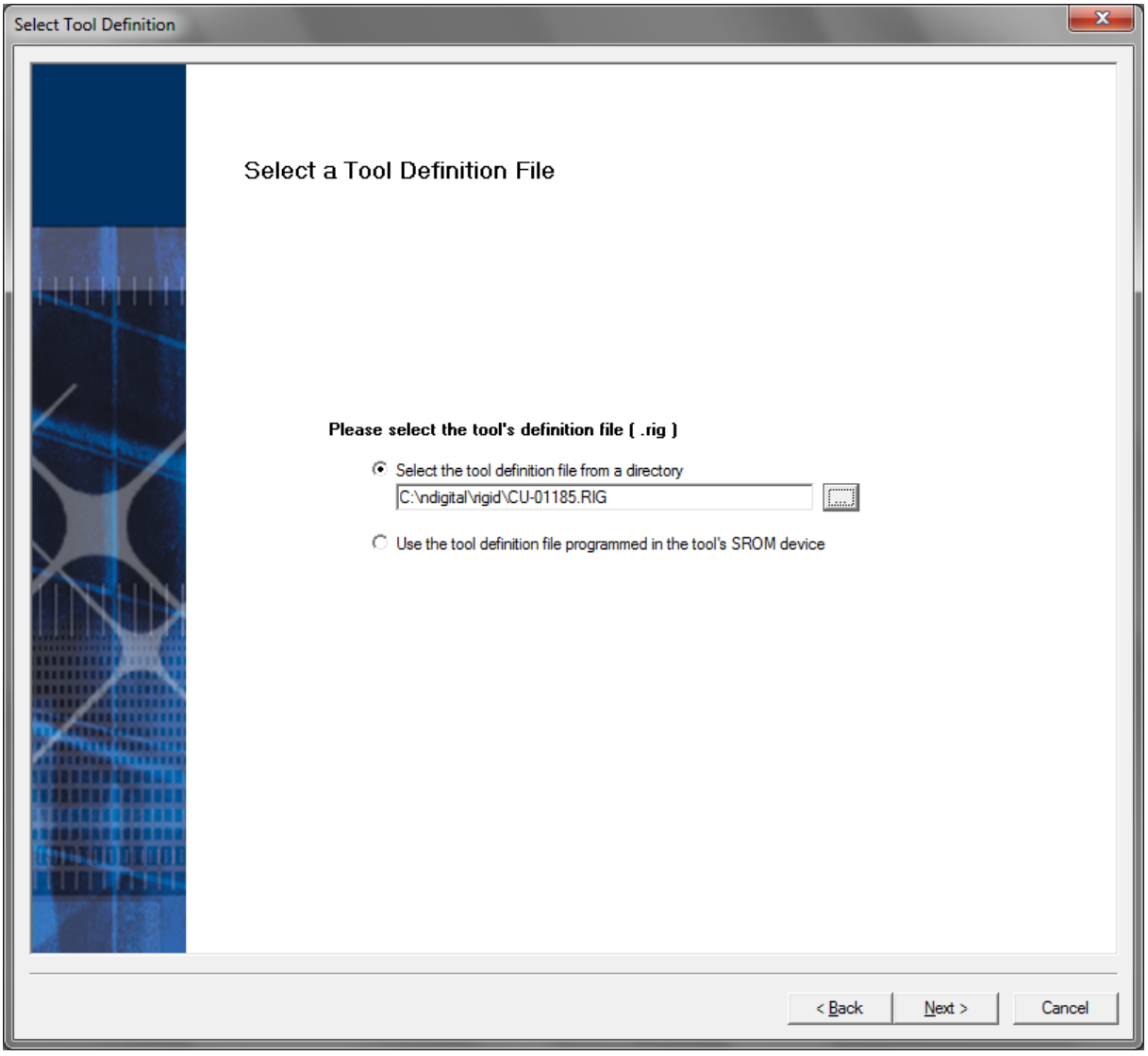




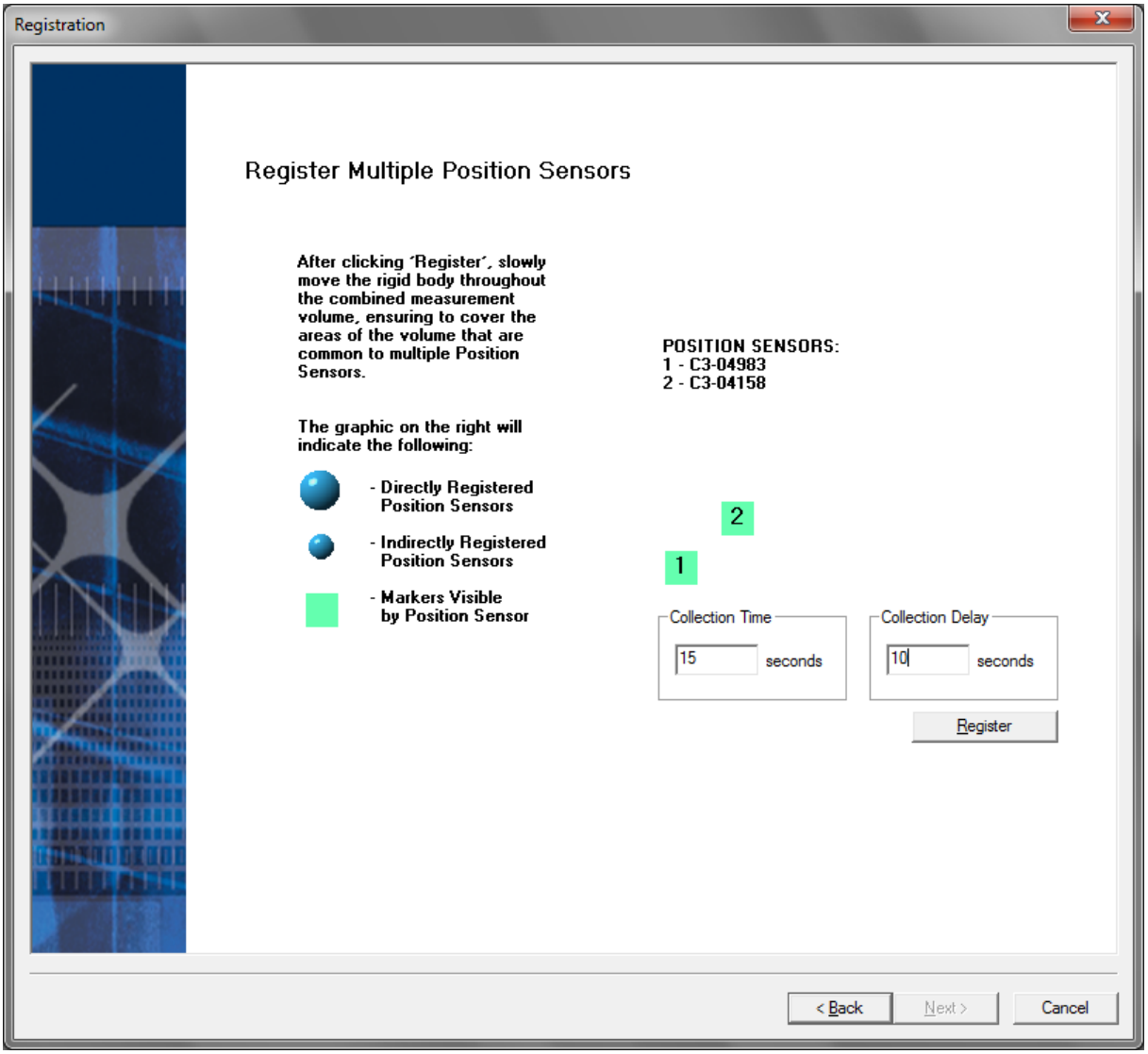
Disconnect any markers that are not part of the cube and connect the cube only.



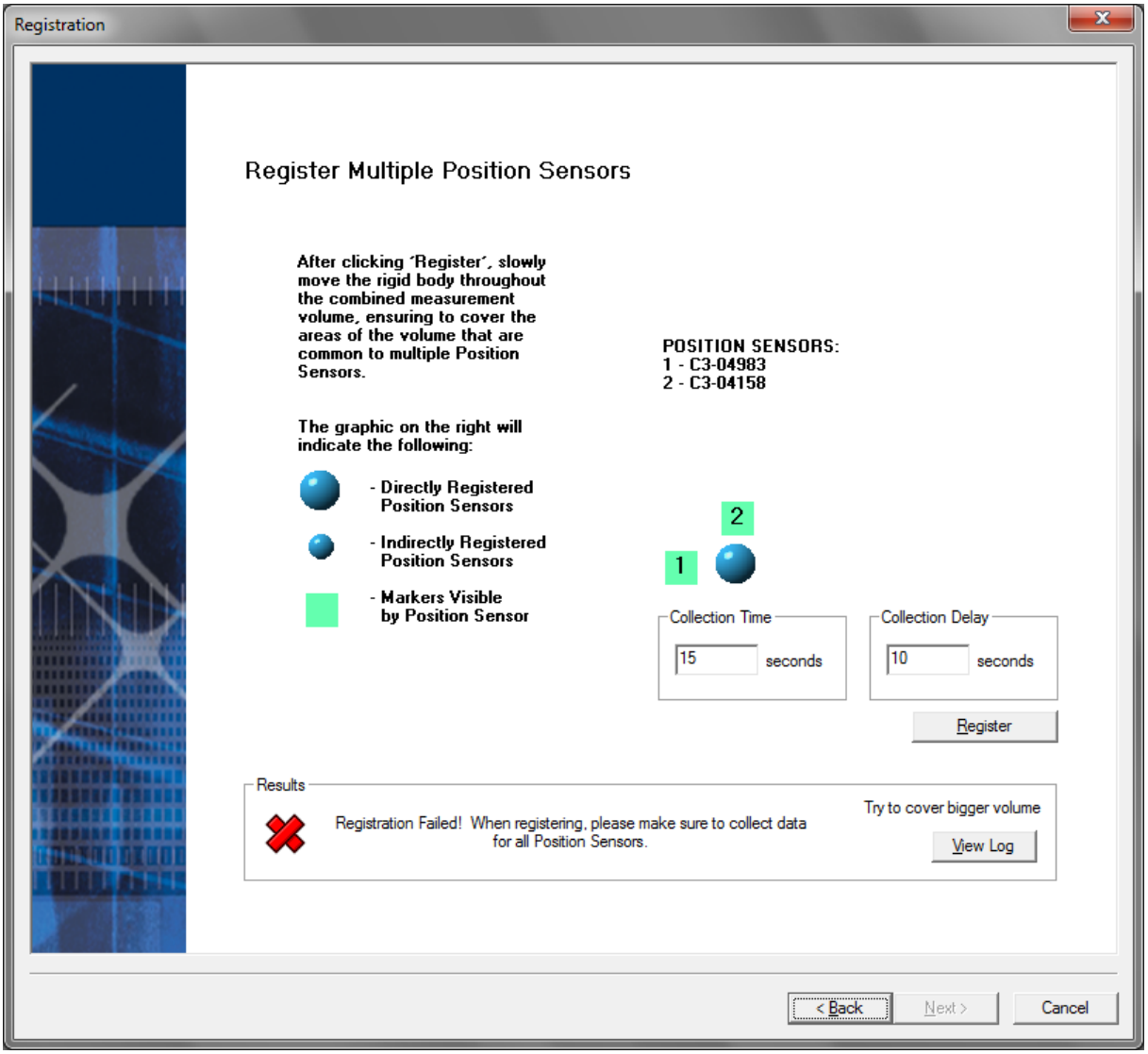




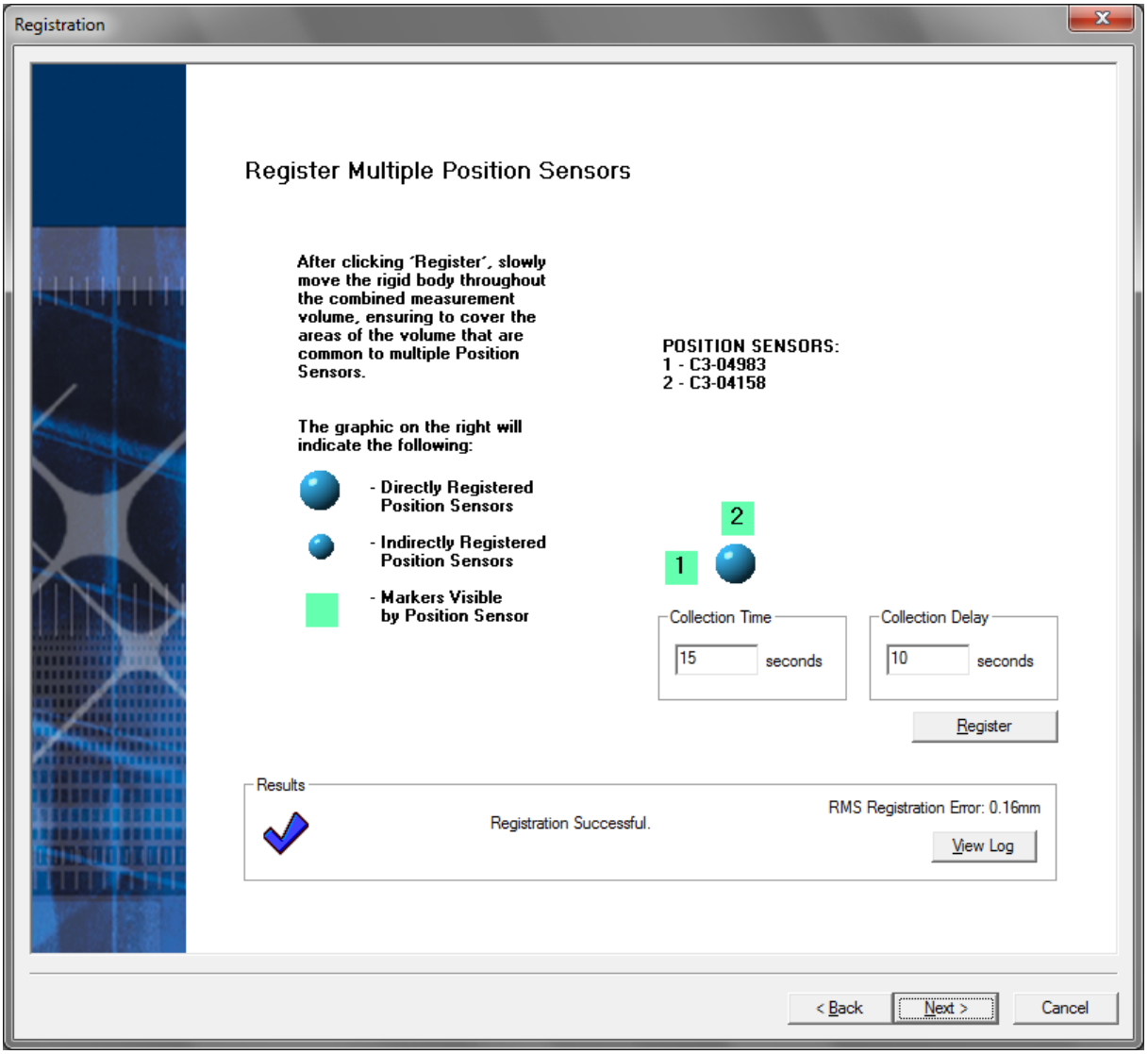
Select the rigid body file that belongs to the cube. It is in c:\ndigital\rigid\CU-01185.rig



Collection time is default 15 seconds. Collection delay will give you some time to go from the computer into the alignment area. The '1' and the '2' should both have green squares, meaning that both position sensors see the cube. After pressing the 'Register' button, make sure to move the cube in at least a 1 meter by 1 meter by 1 meter space. And make sure that there are enough samples where both position sensors see the alignment tool.

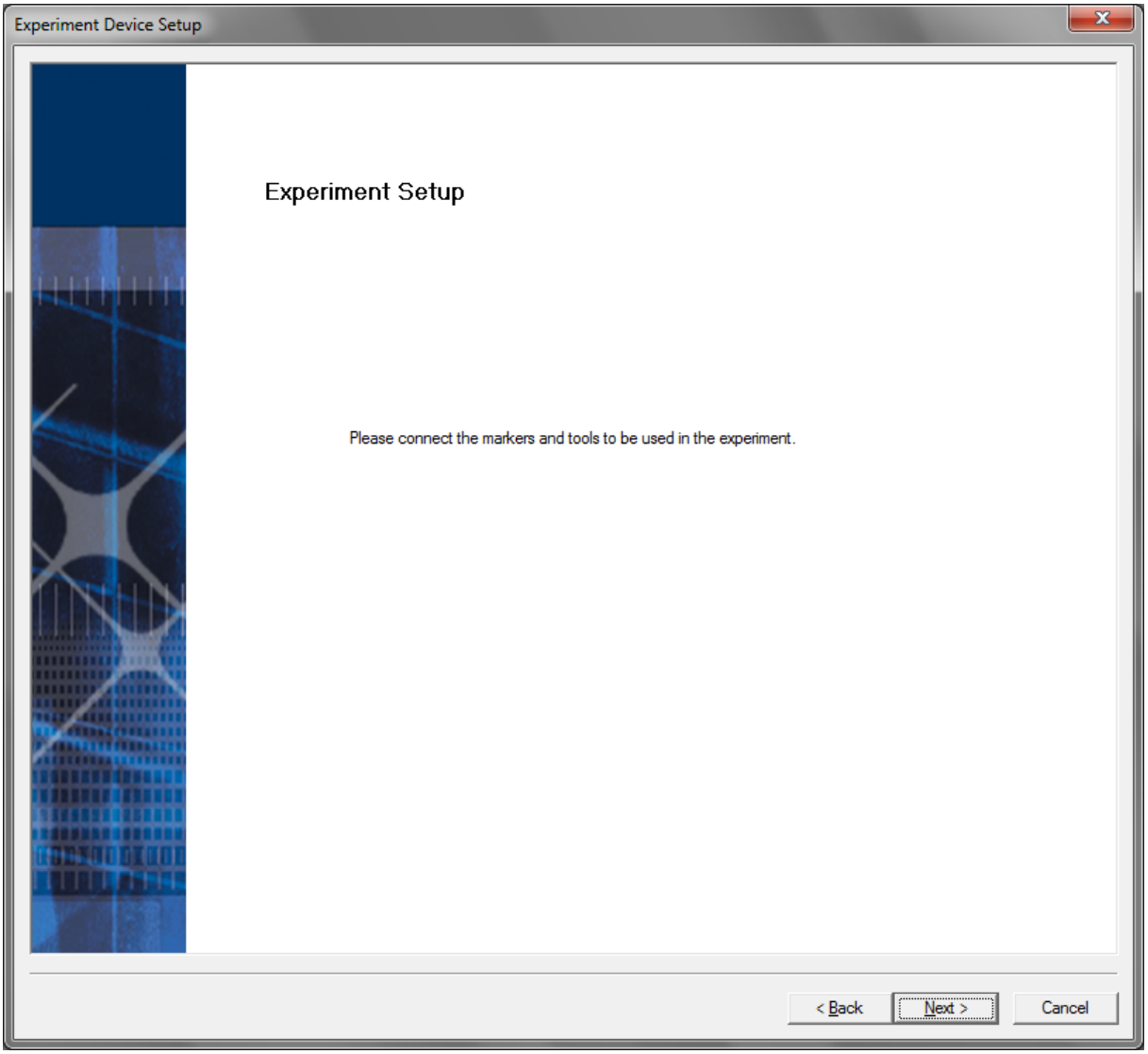


Registration failed. Try again and make sure that the alignment tool is moving in at least a 1 meter by 1 meter by 1 meter space and that both position sensors see the cube.



Registration is successful. RMS Registration Error tells the accuracy of the registration. Lower is better. The RMS registration error should always be below 0.3 mm.

Now you can perform the alignment to define the coordinate system. The cube has an indication where the X, Y and Z axis are. Note that one of them points in the negative direction. Place the cube with its corner that defines the origin of the system in the origin of the coordinate system you want and with the axis pointing towards the axis that you want to define. This can be anywhere where at least three IREDS are visible by one of the position sensor units. Perform the alignment.



Disconnect the cube and connect the IRED markers that you want to use.