

1. Install OpenNI, the avin2/SensorKinect driver and NITE.
2. Run the examples: OpenNI->NIViewer is a good starting point.
3. If you want to work offline without a Kinect you can record the data to a file. This can be done either by modifying the xml file (see example xml file). Recording can also be done directly in the NIViewer example.
4. Build the example. It consists of two projects. One is a dll library that accesses the Kinect through OpenNI. The other is an application for displaying the image of the Kinect. It is using the first library. You will have to provide the location of the libraries that are used to the compiler and linker. You have to do that in the settings C/C++ -> General for the compiler and in Linker->General for the Linker. In Linker->Input->Additional Dependencies you have also to provide the name of the .lib files (e.g. openNI.lib)
5. Make sure that your program can find the .dll files. OpenNI adds the own directory to the Path environment variable so that every other application can find it. For glut you have to do this manually.
6. The current example does only allow images with resolution of 640 * 480. Kinect also supports other resolutions, like 1280 * 1024 for the video image. Modify the example such that it supports different resolutions. Modify the KinectTracker such that it reads the resolution from OpenNI. Change the interface of the KinectTracker such that KinectViewer can retrieve the resolution and initialize the textures according to the resolution.
7. Add a visualization of the depth image. For that you will have to add a xn::DepthGenerator to the KinectTracker and implement the function getDepthImage()
8. Make a video of this and upload it to [\\campdata.in.tum.de\public\Students\labcoursekinect\groupx](https://campdata.in.tum.de/public/Students/labcoursekinect/groupx)
A good tool to do this is fraps