This repository contains source code for an open-source implementation of Common Database (CDB) drivers for osgEarth. The source code for the drivers resides under the src directory that accompanies this file. There are two drivers for incorporating CDB into osgEarth. The driver in the src\cdb directory handles imagery and elevation while the driver in src\cdb\_features handles both geospecific and geotypical features. To date development has been toward the CDB 3.0 specification with the exception that some support has been added to the features driver to support some 3.2 capabilities that Presagis has included in its Camp Pendleton example CDB dataset. (I.E. the utilization of geotypical textures on supposedly geospecific models.) The terrain driver should function in osgEarth versions from 2.4 upward without modifications to the osgEarth libraries however the feature driver does require some modifications to the feature loading path of osgEarth to support the nature of CDB OpenFlight models. The files that need modification in osgEarth to support the feature driver are located in the osgEarth-2.6 directory for osgEarth version 2.6. An osgEarth-2.7 directory has been added which contains the updates for the feature driver required for osgEarth version 2.7. The OpenSceneGraph-3.2.1 directory contains an update to the OpenFlight plugin for osg that is needed to load textures for CDB geospecific models that use the CDB 3.0 specification for OpenSceneGraph version 3.2.1. The OpenSceneGraph-3.4.0 directory has been added and contains the same changes merged into the OpenSceneGraph version 3.4.0 OpenFlight plugin. For the CDB case the model textures are found in a .zip file and require re-pathing of the texture names from the highest lod directory structure that a model may be represented in to the current lod being loaded. (See the CDB 3.0 specification for details on this) The modified OpenFlight plugin supports this if the optional parameters are present.

The tests directory contains an example earthfile that exercises the CDB drivers.

Update 28-May-2015:

Previous limitations of the terrain driver have been removed (I.E. support for above and below 50 degrees either North or South has been added) A workable Global Profile has been added if coverage limits are not specified as well as a completed caching system for tiles below CDB LOD 0. The default caching location is the $root\_dir/osgEarth/cdb\_cache. Create this directory along with a 001\_Elevation and 004\_Imagery subdirectory’s and the driver will cache the lower levels of detail in those directories. If you have a CDB database that has global coverage this will take some time to create the cached files. If you are using a using a local cdb of a few geocells only then limiting the coverage in the earth file is a better option.

Update 19-September-2015

Added updates for utilization with osgEarth 2.7 and OpenSceneGraph version 3.4.0. Updates for CMake and missing round function in Visual Studio versions prior to VS2013 were provided by Rapheal Cuisinier. Updates were added to allow for utilization of GDAL2.0 as well as maintain compatibility with previous versions of GDAL.