

How can I make SLIC look for XML schemas in a local directory

Start by creating a local directory for the schemas.

```
mkdir /scratch/slicSchemas
```

Next set the **GDML_SCHEMA_DIR** environment variable to point to the directory. The **init_ilcsoft.sh** script itself sets **GDML_SCHEMA_DIR**, so this command must be run after **init_ilcsoft.sh** (or replace the corresponding line in **init_ilcsoft.sh**).

```
export GDML_SCHEMA_DIR=/scratch/slicSchemas
```

SLIC also searches automatically in the current directory for schemas.

The entity resolver in GDML should find the schemas if the structure has been flattened (all **.xsd** files in the local directory).

It should also be able to find the schemas when the path component of the URL is preserved, i.e. **./schemas/lcdd/1.0/lcdd.xsd**.

Copying LCDD schemas from ilcinstall build

The GDML & LCDD schemas are already present in the **ilcinstall** installation, so they can be directly copied into your local directory.

```
. $ILCSOFT/init_ilcsoft.sh
cd /scratch/slicSchemas
cp $G4INSTALL/source/persistency/gdml/schema/*.xsd .
cd $LCDD/schemas/lcdd/1.0/*.xsd .
```

The above instructions assume that SLIC has already been successfully installed with **ilcinstall**.

Getting the LCDD schemas from SVN

To copy the schemas into a local directory without using any **ilcinstall** installation, execute the following commands.

```
cd /scratch
svn co svn://svn.freehep.org/lcdet/projects/lcdd/trunk lcdd
cp lcdd/schemas/**/*.xsd slicSchemas
```

If you want to keep the schema directory structure, use this command instead.

```
cd lcdd
cp -R schemas /scratch/slicSchemas
```

The LCDD schemas can also be found online at <http://www.lcsim.org/schemas/lcdd/1.0/>.

Downloading the GDML schemas

Go into the local schema directory.

```
cd /scratch/slicSchemas
```

Now create a file **schemaFiles.txt** with the following contents in it. (Just copy and paste into the file in your editor and then save it.)

```
gdml.xsd
gdml_core.xsd
gdml_define.xsd
gdml_extensions.xsd
gdml_materials.xsd
gdml_parameterised.xsd
gdml_replicas.xsd
gdml_solids.xsd
```

Then execute the following command to pull the schemas from the standard URL location.

```
wget -i schemaFiles.txt -B 'http://service-spi.web.cern.ch/service-spi/app/releases/GDML/schema/'
```

Now you should see all of the GDML XSD files in the local directory.