## 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_replicas.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.