
Subject: Re: How to share a schema .sch with multiple header and source files

Posted by [mirek](#) on Fri, 09 Aug 2019 08:56:47 GMT

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Actually, SQL_Sqlite3 example has it already right:

This goes to header:

```
#define SCHEMADIALECT <plugin/sqlite3/Sqlite3Schema.h>
#define MODEL <SQL_Sqlite3/simple.sch>
#include "Sql/sch_header.h"
```

(hint, hint, see "_header" :)

This goes to some C++ file:

```
#ifdef _DEBUG
#include <Sql/sch_schema.h>
#endif

#include <Sql/sch_source.h>
```

Now above provides two things. "_schema" part creates script generation routines that create sql scripts to actually create the schema in the database. Usually we are using script with "alter table add column" commands so that incremental changes can be added to database (we just ignore "thing already exists" errors when performing that script). In the example, this corresponds to

```
#ifdef _DEBUG
SqlSchema sch(SQLITE3);
All_Tables(sch);
if(sch.ScriptChanged(SqlSchema::UPGRADE))
    SqlPerformScript(sch.Upgrade());
if(sch.ScriptChanged(SqlSchema::ATTRIBUTES)) {
    SqlPerformScript(sch.Attributes());
}
if(sch.ScriptChanged(SqlSchema::CONFIG)) {
    SqlPerformScript(sch.ConfigDrop());
    SqlPerformScript(sch.Config());
}
sch.SaveNormal();
#endif
```

(SaveNormal saves scripts files to the disk, so that they can be used e.g. for the production machine).

Not that this is usually excluded in release (#ifdef _DEBUG) version of application... (but not necessary).

"_source" part creates code to support S_TABLE structures (e.g. mapping between column names and C++ variables) and is always needed.

Mirek
