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**Subject:** How do I load sqlite3 .sql with triggers on it?  
**Posted by** rxantos **on Fri, 31 Aug 2012 13:38:02 GMT**  
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How do I load a .sql with triggers?

I tried to load the .sql to a String and then use Sqlite3PerformScript;

I also tried SQL.Execute, but that only executes one line.

Sqlite3PerformScript runs until it gets to statements like this:

```
create trigger if not exists ti_usuario after insert on USUARIO begin
    update USUARIO set UTIME = datetime('now') where ID = new.ID;
end;
```

and gives me an error like this:

```
ERROR near "ID": syntax error(0): Preparing: create trigger if not exists ti_usuario after insert on
USUARIO begin
    update USUARIO set UTIME = datetime('now') where ID = new.ID
```

The same .sql compiles flawlessly to a db when using the sqlite3 program.

What call shall I use to load a .sql directly?

Update:

It seems that the error is caused because Sqlite3PerformScript dives the trigger statement into two. Eating the ';' in the process.

Note that a trigger is ended by a "; end;" and not by a simple ';'. Thus its a single statement.

[http://www.sqlite.org/lang\\_createtrigger.html](http://www.sqlite.org/lang_createtrigger.html)

The following is a work around hack based on Sqlite3PerformScript.

Hack, because it will just work for statements started with "create trigger "

Updated the hack.

Now it needs "create trigger " at the start of the line and "end;" on its own line. That way multi statement triggers are possible. Still a hack though.

```
bool Sqlite3PerformScript_hack(const String& txt, StatementExecutor& se, Gate2<int, int>
progressCanceled)
{
```

```

const char* text = txt;
const char * p;
static const char szCreateTrigger[] = "create trigger ";
static const size_t szCreateTrigger_len = sizeof(szCreateTrigger) - 1;

for(;*text; text++) {
    String stmt;
    bool isTrigger = false;

    while(*text <= ' ' && *text > '\0') {
        text++;
    }

    if('\0' == *text) {
        break;
    }

    isTrigger = (0 == _strnicmp(szCreateTrigger, text, szCreateTrigger_len));

    for(;*text;) {
        if(';' == *text) {
            if(isTrigger) {
                p = text - 3;
                if(!_strnicmp("end;", p, 4)) {
                    --p;
                    if((32 >= *p)||(';' == *p)) {
                        break;
                    }
                }
                stmt.Cat(*text++);
                continue;
            }
            break;
        } else if('"' == *text) {
            text = Upp::Sqlite3ReadString(text, stmt);
        } else if('`' == *text) {
            text = Upp::Sqlite3ReadString(text, stmt);
        } else {
            stmt.Cat(*text++);
        }
    }

    if(progress_canceled(text - txt.Begin(), txt.GetLength())) {
        return false;
    }

    if(!se.Execute(stmt)) {
        return false;
    }
}

```

```
}

return true;
}
```

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Subject: Re: How do I load sqlite3 .sql with triggers on it?

Posted by [mirek](#) on Fri, 07 Sep 2012 09:20:30 GMT

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Sorry for confusion, some "deprecating" work to do here, anyway DB specific \*RunScripts have been replaced by common

SqlPerformScript

some time ago.

I yet have to change reference examples and add comments...

Mirek

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