

U++ - Feature #858

Sql: Adopt With

09/13/2014 04:58 PM - Miroslav Fidler

Status:	Approved	Start date:	09/13/2014
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Description			

History

#1 - 09/16/2014 03:36 PM - Miroslav Fidler

/* WITH query (from PostgreSQL manual)

<http://www.postgresql.org/docs/8.4/static/queries-with.html>

Should work also in other SQL */

```
class SqlWith {
    String prefix;
    String table;
    String columns;
public:
    class SqlWithAs {
        String text;
    public:
        SqlWithAs(const String& t) : text(t) {}
        SqlWith With(SqlId table) const { return SqlWith(table, text + ", "); }
        SqlStatement operator()(const SqlSelect& s) { return SqlStatement("with " + text + " " + SqlStatement(s).GetText()); }
    };
    SqlWith(SqlId table, String prefix = "") : table(table.ToString()), prefix(prefix) {}
    void Column(SqlId col) { if(!IsNull(columns)) columns << ", "; columns << "\t" << col.ToString() << "\t"; }
#define E__SqlId(I) const SqlId& p##I
#define E__Column(I) Column(p##I)
#define E__Braces(I) SqlWith& operator()(__List##I(E__SqlId)) { __List##I(E__Column); return *this; }
    __Expand(E__Braces)
#undef E__Braces
#undef E__SqlId
#undef E__SqlId

    SqlWithAs As(const SqlSelect& s) {
        String c;
        if (!IsNull(columns)) c << "(" << columns << ")";
        return SqlWithAs("\t" + table + "\t" + c + " as (" + SqlStatement(s).GetText() + ")");
    }
};

inline SqlWith With(SqlId table) { return SqlWith(table); }
inline SqlWith WithRecursive(SqlId table) { return SqlWith(table, "recursive"); }
```

#2 - 09/17/2014 09:29 AM - Miroslav Fidler

SQL example (that has to be supported):

```
with RECURSIVE tn as (  
select id, name, parent_id from treenode where parent_id = -1  
union ALL  
select treenode.id, treenode.name, treenode.parent_id from treenode, tn where treenode.PARENT_id = tn.ID  
)  
tng as (select parent_id, (select name from treenode where id = tn.parent_id), count(*) from tn group by parent_id)  
select * from tng;
```

#3 - 09/20/2014 09:35 AM - Miroslav Fidler

- Status changed from New to Approved