Subject: Postgres library improvements
Posted by Zbych on Mon, 27 Jul 2009 08:44:41 GMT
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1. Client code page

Functions PostgreSQLConnection::ErrorMessage and PostgreSQLSession::ErrorMessage use FromSystemCharset to convert code page. Unfortunately PQerrorMessage AFAIK does not use client's system code page but the code page that is declared in lc_messages (postgresql.conf), or the code page explicit set by the client (function PQsetClientEncoding).

So I think those functions should be modified:

```
String PostgreSQLConnection::ErrorMessage()
{
 // no code page conversion, leave it to postgres
 return AsString(PQerrorMessage(conn));
}

String PostgreSQLSession::ErrorMessage()
{
 // no code page conversion, leave it to postgres
 return AsString(PQerrorMessage(conn));
}
```

And of course postgres should be informed about the code page:

```
bool PostgreSQLSession::Open(const char *connect)
{
 Close();
 conn = PQconnectdb(connect);
 if(PQstatus(conn) != CONNECTION_OK)
 {
  SetError(ErrorMessage(), "Opening database");
  Close();
  return false;
 }
 level = 0;

 // set client's code page
 int stat = PQsetClientEncoding(conn, CharsetName(GetDefaultCharset()));
 ASSERT(stat == 0);
 LOG( String("Postgresql client encoding: ") + pg_encoding_to_char( PQclientEncoding(conn) ) );

 return true;
```

}

I made some tests with UTF-8 and WIN1250, and it appears that postgres accepts code page names from ultimate

2. Re-establishing connection

It would be nice to have function that reconnects to database, when connection is lost:

```
bool PostgreSQLSession::ReOpen()
{
 PQreset(conn);
 if(PQstatus(conn) != CONNECTION_OK)
 {
  SetError(ErrorMessage(), "Opening database");
  return false;
 }
 level = 0;

 return true;
}
```