Subject: Oracle8: UTF8 charset Patch
Posted by tojocky on Fri, 28 May 2010 11:59:45 GMT
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Hello all,

I propose to apply this Oracle patch for use UTF-8 (AL32UTF8) or UTF8 charset encoding,
acording by this documentation. I read legal documentation but without success.

Ok, the patch is (with long raw patch):
Index: uppsrc/Oracle/Oci8.cpp
===
--- uppsrc/Oracle/Oci8.cpp (revision 2421)
+++ uppsrc/Oracle/Oci8.cpp (working copy)
@@ -69,7 +69,7 @@
  struct Item {
   T_OCI8&   oci8;
   int   type;
- int16   len;
+ int   len;
   sb2   ind;
   ub2   rl;
   ub2   rc;
@@ -142,6 +142,7 @@
  void   SetParam(int i, Date d);
  void   SetParam(int i, Time d);
  void   SetParam(int i, Sql& refcursor);
+ void   SetRawParam(int i, const String& s);

  void   AddColumn(int type, int len);
  void   GetColumn(int i, String& s) const;
@@ -296,6 +297,13 @@
 PrepareParam(i, r.GetOraType(), r.GetMaxLen(), 0, r.GetType());
 }

+void OCI8Connection::SetRawParam(int i, const String& s) {
+ int l = s.GetLength();
+ Item& p = PrepareParam(i, SQLT_LBI, l, 0, VOID_V);
+ memcpy(p.Data(), s, l);
+ p.ind = l ? 0 : -1;
+}
+
 class Oracle8RefCursorStub : public SqlSource {
 public:
  Oracle8RefCursorStub(SqlConnection *cn) : cn(cn) {}
@@ -320,6 +328,9 @@
   SetParam(i, String());
  else

```
   switch(q.GetType()) {
+  case SQLRAW_V:
+   SetRawParam(i, SqlRaw(q));
+   break;
   case STRING_V:
   case WSTRING_V:
    SetParam(i, String(q));
@@ -842,21 +853,36 @@
   | OCI_THREADED
 #endif
   ;
- if(oci8.OCIEnvCreate) {
-  if(oci8.OCIEnvCreate(&envhp, accessmode, 0, 0, 0, 0, 0, 0)) {
-   OCIInitError(*this, "OCIEnvCreate");
-   return false;
-  }
+
+ // ILUPASCU(tojocky): try to put utf8 charset
+ bool v_without_NLS = true;
+
+ if(oci8.OCIEnvNlsCreate) {
+  if((v_without_NLS)&&(oci8.OCIEnvNlsCreate(&envhp, accessmode, 0, 0, 0, 0, 0, 0,
OCI_NLS_NCHARSET_ID_UT8, OCI_NLS_NCHARSET_ID_UT8))){
+   LLOG("OCI8: error on initialization utf8 NLS");
+   v_without_NLS = true;
+  }else v_without_NLS = false;
+  if((v_without_NLS)&&(oci8.OCIEnvNlsCreate(&envhp, accessmode, 0, 0, 0, 0, 0, 0,
OCI_NLS_NCHARSET_ID_AL32UT8, OCI_NLS_NCHARSET_ID_AL32UT8))){
+   LLOG("OCI8: error on initialization utf8 NLS");
+   v_without_NLS = true;
+  }else v_without_NLS = false;
  }
- else {
-  if(oci8.OCIInitialize(accessmode, 0, 0, 0, 0)) {
-   OCIInitError(*this, "OCIInitialize");
-   return false;
+ if(v_without_NLS){
+  if(oci8.OCIEnvCreate){
+   if(oci8.OCIEnvCreate(&envhp, accessmode, 0, 0, 0, 0, 0, 0)) {
+    OCIInitError(*this, "OCIEnvCreate");
+    return false;
+   }
+  } else {
+   if(oci8.OCIInitialize(accessmode, 0, 0, 0, 0)) {
+    OCIInitError(*this, "OCIInitialize");
+    return false;
+   }
+   if(oci8.OCIEnvInit(&envhp, OCI_DEFAULT, 0, 0)) {
```

```
+    OCIInitError(*this, "OCIEnvInit");
+    return false;
+  }
  }
- if(oci8.OCIEnvInit(&envhp, OCI_DEFAULT, 0, 0)) {
-   OCIInitError(*this, "OCIEnvInit");
-   return false;
- }
  }
  if(!AllocOciHandle(&errhp, OCI_HTYPE_ERROR)) {
   OCIInitError(*this, "OCI_HTYPE_ERROR");
Index: uppsrc/Oracle/Oci8.dli
===================================================================
--- uppsrc/Oracle/Oci8.dli (revision 2421)
+++ uppsrc/Oracle/Oci8.dli (working copy)
@@ -18,6 +18,19 @@

 FN(sword,   OCIEnvInit, (UPP::OCIEnv **envp, ub4 mode, size_t xtramem_sz, dvoid
**usrmempp))

+FN0(sword, OCIEnvNlsCreate, (OCIEnv **envp, ub4 mode, const dvoid *ctxp, \
+ const dvoid *(*malocfp)(dvoid *ctxp, size_t size), \
+ const dvoid *(*ralocfp)(dvoid *ctxp, dvoid *memptr, size_t newsize), \
+ const void (*mfreexp)(dvoid *ctxp, dvoid *memptr), \
+ size_t xtramem_sz, dvoid **usrmempp, ub2 charset, ub2 ncharset))
+
+FN0(sword, OCINlsEnvironmentVariableGet, (dvoid *val, size_t size, ub2 item,\
+ ub2 charset, size_t *rsize))
+
+FN0(ub2, OCINlsCharSetNameToId, (dvoid *hndl, const OraText *name))
+
+FN0(sword, OCINlsCharSetIdToName, (dvoid *hndl, OraText *buf, size_t buflen, ub2 id))
+
 FN0(sword,   OCIEnvCreate, (OCIEnv **envp, ub4 mode, const dvoid *ctxp, \
  const dvoid *(*malocfp)(dvoid *ctxp, size_t size), \
  const dvoid *(*ralocfp)(dvoid *ctxp, dvoid *memptr, size_t newsize), \
Index: uppsrc/Oracle/OciCommon.h
===================================================================
--- uppsrc/Oracle/OciCommon.h (revision 2421)
+++ uppsrc/Oracle/OciCommon.h (working copy)
@@ -36,6 +36,9 @@
  // The following *TWO* are only valid for OCICreateEnvironment call
  OCI_NO_UCB    = 0x40,  // No user callback called during init
  OCI_NO_MUTEX  = 0x80,  // the environment handle will not be
+ // NLS
+ OCI_NLS_NCHARSET_ID_UT8 = 871,          /* AL32UTF8 charset id */
+ OCI_NLS_NCHARSET_ID_AL32UT8 = 873,      /* AL32UTF8 charset id */
  // protected by a mutex internally
```

```
OCI_SHARED_EXT = 0x100, // Used for shared forms
OCI_CACHE      = 0x200, // used by iCache
```

I hope to be helpful!

File Attachments
1) oracle_utf8_charset_patch.patch, downloaded 396 times