
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, according 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_OC18&    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 xtrmem_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 newsz), \
+ const void (*mfreexp)(dvoid *ctxp, dvoid *memptr), \
+ size_t xtrmem_sz, dvoid **usrmempp, ub2 charset, ub2 ncharset))
+
+FN0(sword, OCINlsEnvironmentVariableGet, (dvoid *val, size_t size, ub2 item,\
+ ub2 charset, size_t *rsz))
+
+FN0(ub2, OCINlsCharSetNameToId, (dvoid *hdl, const OraText *name))
+
+FN0(sword, OCINlsCharSetIdToName, (dvoid *hdl, 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 newsz), \
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 451 times
