**Build Instructions for CURL**

**Source to use /Checkout**

Get cURL source from TPL depot //TPL/src/cURL/7.30.0 - kerberized/ to MY\_TPL\_ROOT (TPL workspace)

TPL\_BASE is the location where you have built the libz, openssl, Mit Kerberos and fbopenssl.

Get fbopenssl source from TPL depot //TPL/src/fbopenssl-0.0.4/ to TPL\_BASE and build it (build instructions given in separate document)

Get MIT Kerberos libraries from maven global repo <http://infamvn:8081/nexus/content/groups/platform/third-party-libs/mitkerberos/1.11.1/>

And take the libraries for the appropriate platform. Map to TPL\_BASE

**Unix platforms:**

1. Go to <MY\_TPL\_ROOT>/cURL source folder.

2. Create <MY\_TPL\_ROOT>/build if it does not exist.

**Windows platforms:**

3. Goto <TPL\_ROOT>\cURL\vs\vc6\vccurl

Open the curllib.sln file

**Note: Curl has already been successfully built linux 32 bit and windows 32 bit environments with Kerberos features enabled**

**Environment variables to be set**

**Unix platforms:**

For AIX64:

setenv CC cc\_r

setenv LIBPATH ${TPL\_BASE}/zlib/v1.2.1/lib:${TPL\_BASE}/openssl/lib:${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/Linux-debug:${TPL\_BASE}/mitkerberos-1.11/lib

setenv LDFLAGS "-L${TPL\_BASE}/zlib/v1.2.1/lib -L${TPL\_BASE}/openssl/lib"

setenv CPPFLAGS "-I${TPL\_BASE}/openssl/include -I${TPL\_BASE}/zlib/v1.2.1/include -I${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/include -I${TPL\_BASE}/mitkerberos-1.11/include -I${TPL\_BASE}/mitkeberos-1.11/include/gssapi include -q64"

For HPIPF:

setenv SHLIB\_PATH /usr/lib/hpux64:${TPL\_BASE}/zlib/v1.2.1/lib:${TPL\_BASE}/openssl/lib:${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/Linux-debug:${TPL\_BASE}/mitkerberos-1.11/lib

setenv LDFLAGS "-L${TPL\_BASE}/zlib/v1.2.1/lib -L${TPL\_BASE}/openssl/lib -L/usr/lib/hpux64"

setenv CPPFLAGS ""-I${TPL\_BASE}/openssl/include -I${TPL\_BASE}/zlib/v1.2.1/include -I${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/include -I${TPL\_BASE}/mitkerberos-1.11/include -I${TPL\_BASE}/mitkeberos-1.11/include/gssapi include +DD64 +DSitanium2"

For LinuxIA-64:

setenv LD\_LIBRARY\_PATH ${TPL\_BASE}/zlib/v1.2.1/lib:${TPL\_BASE}/openssl/lib:${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/Linux-debug:${TPL\_BASE}/mitkerberos-1.11/lib

setenv LDFLAGS " -L${TPL\_BASE}/zlib/v1.2.1/lib -L${TPL\_BASE}/openssl/lib"

setenv CPPFLAGS "-DZ\_PREFIX -I${TPL\_BASE}/openssl/include -I${TPL\_BASE}/zlib/v1.2.1/include -I${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/include -I${TPL\_BASE}/mitkerberos-1.11/include -I${TPL\_BASE}/mitkeberos-1.11/include/gssapi"

For Linux64:

setenv LD\_LIBRARY\_PATH ${TPL\_BASE}/zlib/v1.2.1/lib:${TPL\_BASE}/openssl/lib:${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/Linux-debug:${TPL\_BASE}/mitkerberos-1.11/lib

setenv LDFLAGS "-Wl,--hash-style=both -L${TPL\_BASE}/zlib/v1.2.1/lib -L${TPL\_BASE}/openssl/lib"

setenv CPPFLAGS "-DZ\_PREFIX -I${TPL\_BASE}/openssl/include -I${TPL\_BASE}/zlib/v1.2.1/include -I${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/include -I${TPL\_BASE}/mitkerberos-1.11/include -I${TPL\_BASE}/mitkeberos-1.11/include/gssapi"

For Linux32:

setenv LD\_LIBRARY\_PATH ${TPL\_BASE}/zlib/v1.2.1/lib:${TPL\_BASE}/openssl/lib:${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/Linux-debug:${TPL\_BASE}/mitkerberos-1.11/lib

setenv LDFLAGS "-Wl,--hash-style=both -L${TPL\_BASE}/zlib/v1.2.1/lib -L${TPL\_BASE}/openssl/lib"

setenv CPPFLAGS "-I${TPL\_BASE}/openssl/include -I${TPL\_BASE}/zlib/v1.2.1/include -I${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/include -I${TPL\_BASE}/mitkerberos-1.11/include -I${TPL\_BASE}/mitkeberos-1.11/include/gssapi"

For Sun64 and SunX86:

setenv LD\_LIBRARY\_PATH ${TPL\_BASE}/zlib/v1.2.1/lib:${TPL\_BASE}/openssl/lib:${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/Linux-debug:${TPL\_BASE}/mitkerberos-1.11/lib

setenv LDFLAGS "-L${TPL\_BASE}/zlib/v1.2.1/lib -L${TPL\_BASE}/openssl/lib -m64"

setenv CPPFLAGS "-m64 -I${TPL\_BASE}/openssl/include -I${TPL\_BASE}/zlib/v1.2.1/include -I${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/include -I${TPL\_BASE}/mitkerberos-1.11/include -I${TPL\_BASE}/mitkeberos-1.11/include/gssapi"

**Set permissions /Checkout**

**Unix platforms:**

chmod +x ./configure

**Changes done:**

**Unix platforms:**

In file $CURL/lib/select.h,

Added the ifdef condition for **struct pollfd.** It should be defined for all Unix platforms and undefined for Windows.

**Building:**

**Unix platforms:**

./configure --with-ssl=${TPL\_BASE}/openssl --with-zlib=${TPL\_BASE}/zlib/v1.2.1 --with-spnego=${TPL\_BASE}/:${TPL\_BASE}/fbopenssl-0.0.4-build/fbopenssl/Linux-debug

--with-gssapi-libs=${TPL\_BASE}/mitkerberos-1.11/lib –with-gssapi-include=${TPL\_BASE}/mitkerberos-1.11/include/gssapi –with-gssapi --with-krb5=${TPL\_BASE}/mitkerberos-1.11/lib --prefix=<install path>/curl-7.30.0-kerberized

1. make clean
2. make
3. make install

After successful build, following libraries are created in MY\_TPL\_INSTALL/ curl-7.30.0 (Common TPL build directory):

1.share

2.bin

3.man

4.lib

5.include

**Windows platforms:**

Make sure you build openssl for the respective platform and ssleay32.lib and pmlibeay32.lib are built. Same applies for zlib, MIT Kebreros and fbopenssl lib files.

Create the following environment before building:-

Introduce environment variables:-

$(MITKERBEROSDIR)

$(OPENSSLDIR)

$(FBOPENSSLDIR)

$(ZLIBDIR)

Verify the c++ include settings, lib settings and lib names in the project setting.

Currently the setting is with respect to L: drive mapped to TPL root.

Win IA64:

a) Select Itanium for IA64

b) Rebuild cURL.sln

Win X64:

a) Select x64 configuration for X64

b) Rebuild curl.sln

**Issues (if any) :** None