```c
/*
    libxbee - a C library to aid the use of Digi's Series 1 XBee modules
              running in API mode (AP=2).

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*/

/* ######################################################################## */
/* ### Win32 DLL Code ##################################################### */
/* ######################################################################## */

/*  this file contains code that is used by Win32 ONLY */
#ifndef _WIN32
#error "This file should only be used on a Win32 system"
#endif

int ver(HWND hwnd, HINSTANCE hinst, LPWSTR lpszCmdLine, int nCmdShow) {
  char t[256];
  sprintf(t,"libxbee.dll\n%s\n%s",xbee_svn_version(),xbee_build_info());
  MessageBox(NULL, t, "libxbee Win32 DLL", MB_OK);
  return 0;
}

void xbee_UNLOADALL(xbee_hnd xbee) {
  if (xbee->next) xbee_UNLOADALL(xbee->next);
  _xbee_end(xbee);
}

/* this gets called when the dll is loaded and unloaded... */
BOOL APIENTRY DllMain(HANDLE hModule, DWORD dwReason, LPVOID lpReserved) {
  xbee_hnd xbee, xbee2;
  if (dwReason == DLL_PROCESS_DETACH) {
    /* ensure that libxbee has been shut down nicely */
    xbee_UNLOADALL(default_xbee);
  } else if (dwReason == DLL_PROCESS_ATTACH || dwReason == DLL_THREAD_ATTACH) {
    if (!glob_hModule) {
      /* keep a handle on the module */
      glob_hModule = (HMODULE)hModule;
    }
    if (!callbackmutexInitialized) {
      xbee_mutex_init(callbackmutex);
      callbackmutexInitialized = 1;
    }
  }
  return TRUE;
}

HRESULT DllCanUnloadNow(void) {
  xbee_UNLOADALL(default_xbee);
  return 1;
}

/* ######################################################################## */
/* ### Win32 DLL COM Code ################################################# */
/* ######################################################################## */

/* this function is from this tutorial:
     http://www.codeguru.com/Cpp/COM-Tech/activex/tutorials/article.php/c5567 */
BOOL RegWriteKey(HKEY roothk, const char *lpSubKey, LPCTSTR val_name,
                 DWORD dwType, void *lpvData,  DWORD dwDataSize) {
  /*  roothk:     HKEY_CLASSES_ROOT, HKEY_LOCAL_MACHINE, etc
      lpSubKey:   the key relative to 'roothk'
      val_name:   the key value name where the data will be written
      dwType:     REG_SZ,REG_BINARY, etc.
      lpvData:    a pointer to the data buffer
      dwDataSize: the size of the data pointed to by lpvData */
  HKEY hk;
  if (ERROR_SUCCESS != RegCreateKey(roothk,lpSubKey,&hk) ) return FALSE;
  if (ERROR_SUCCESS != RegSetValueEx(hk,val_name,0,dwType,(CONST BYTE *)lpvData,dwDataSize)) return FALSE;
  if (ERROR_SUCCESS != RegCloseKey(hk))   return FALSE;
  return TRUE;
}
```

```
  86:
  87: /* this is used by the regsrv32 application */
  88: STDAPI DllRegisterServer(void) {
  89:   char key[MAX_PATH];
  90:   char value[MAX_PATH];
  91:
  92:   wsprintf(key,"CLSID\\%s",dllGUID);
  93:   wsprintf(value,"%s",dlldesc);
  94:   RegWriteKey(HKEY_CLASSES_ROOT, key, NULL, REG_SZ, (void *)value, lstrlen(value));
  95:
  96:   wsprintf(key,"CLSID\\%s\\InprocServer32",dllGUID);
  97:   GetModuleFileName(glob_hModule,value,MAX_PATH);
  98:   RegWriteKey(HKEY_CLASSES_ROOT, key, NULL, REG_SZ, (void *)value, lstrlen(value));
  99:
 100:   wsprintf(key,"CLSID\\%s\\ProgId",dllGUID);
 101:   lstrcpy(value,dllid);
 102:   RegWriteKey(HKEY_CLASSES_ROOT, key, NULL, REG_SZ, (void *)value, lstrlen(value));
 103:
 104:   lstrcpy(key,dllid);
 105:   lstrcpy(value,dlldesc);
 106:   RegWriteKey(HKEY_CLASSES_ROOT, key, NULL, REG_SZ, (void *)value, lstrlen(value));
 107:
 108:   wsprintf(key,"%s\\CLSID",dllid);
 109:   RegWriteKey(HKEY_CLASSES_ROOT, key, NULL, REG_SZ, (void *)dllGUID, lstrlen(dllGUID));
 110:
 111:   return S_OK;
 112: }
 113:
 114: /* this is used by the regsrv32 application */
 115: STDAPI DllUnregisterServer(void) {
 116:   char key[MAX_PATH];
 117:   char value[MAX_PATH];
 118:
 119:   wsprintf(key,"%s\\CLSID",dllid);
 120:   RegDeleteKey(HKEY_CLASSES_ROOT,key);
 121:
 122:   wsprintf(key,"%s",dllid);
 123:   RegDeleteKey(HKEY_CLASSES_ROOT,key);
 124:
 125:   wsprintf(key,"CLSID\\%s\\InprocServer32",dllGUID);
 126:   RegDeleteKey(HKEY_CLASSES_ROOT,key);
 127:
 128:   wsprintf(key,"CLSID\\%s\\ProgId",dllGUID);
 129:   RegDeleteKey(HKEY_CLASSES_ROOT,key);
 130:
 131:   wsprintf(key,"CLSID\\%s",dllGUID);
 132:   RegDeleteKey(HKEY_CLASSES_ROOT,key);
 133:
 134:   return S_OK;
 135: }
```