# Common UI Actions:

## HRESULT OpenStartMenu();

## HRESULT OpenAllPrograms();

## HRESULT OpenWelcomeCenter();

The advantage of using these functions is that they cope with some common problems, such as the Start menu already being open, or in Classic mode, timing issues, etc.

## OpenSpecificControlPanel(QUERYID[,QUERYID])

                New function, superseding 'OpenSpecificHomeControlPanel' and 'OpenSpecificClassicControlPanel' Takes one or two QueryIDs, if the first QueryID is for a control panel Icon, such as CPL\_ICON\_PROGRAMSFEATURES, it uses Classic view to open the given control panel. If the first QueryID is a 'link', such as CPL\_LINK\_PROGRAMS it assumes it is a control panel section link, uses Home view, clicks the given link, then clicks the link specified by the second QueryID.  It does everything from hitting the Start button, until the given control panel opens (or fails…).

Example:

            if(FAILED(OpenSpecificControlPanel(CPL\_LINK\_APPEARANCEPERSONALIZATION, CPL\_LINK\_PERSONALIZATION)))

            {

                  LogTestResultW(FALSE, \_\_FUNCTIONW\_\_, L"Failed to open Personalization Control Panel.");

                  return(E\_FAIL);

            }

## HRESULT LeftClickUntilGone(\_\_in PCWSTR pszQueryId [, ...]);

Updated so that you no longer need to pre-globalize your QueryIDs, but a pre-globalized QueryID is still acceptable.

Example:

            LeftClickUntilGone(CPL\_PARENTAL\_CONTROLS\_CLOSE\_BTN);

## HRESULT MultiLeftClickUntilGone(\_\_in unsigned int Count, QUERYID[,QUERYID[,…]]);

                Accepts up to 10 QueryIDs at a time, and cycles through them until they are all gone, or 10 cycles have been attempted.

                The count must be correct, and the QueryIDs correctly formed; any failure to globalize a resource stops the whole cycle.

                Example:

            MultiLeftClickUntilGone(4, CPL\_PARENTAL\_CONTROLS\_CLOSE\_BTN, IE\_TOOLS\_INTERNET\_OPTIONS\_CLOSE, CPL\_CLOSE\_BTN, GAMES\_CLOSE\_BTN);

                The main advantage is that if a modal dialog later in the chain prevents an earlier window from closing, it will loop around and try again. So you can also add QueryIDs to close dialogs that pop open because the main window is closing ("Would you like to save changes?")

# Custom Resource Extraction:

## HRESULT ResourceFromMUM(\_\_in PCWSTR Component, \_\_out\_ecount(cchResource) PWSTR  Resource, \_\_in unsigned int cchResource);

               Extracts a string from a .MUM file, which RPF cannot otherwise retrieve (at least not in Native code), basically created for Optional Components.

                You need the component name, in this case "SUA" and a string buffer; the function does the rest. (getting the packages path, getting the Locale, reading the .MUM file, extracting the name from the XML… about 400 lines of code)

                Example:

                                wchar\_t pwszRes[1024];

            ResourceFromMUM(L"SUA", pwszRes, 1024);

            LogTestInfoW(\_\_FUNCTIONW\_\_, L"Services for UNIX appears to be named: %s", pwszRes);

            hr = LOG\_FAILED\_HR(WOWFromPartialQueryId(L";Name => '{0}' && ClassName => 'NativeHWNDHost';[VisibleOnly]Name = '{0}' && Role = 'outline';Name = '{1}' && Role = 'outline item'", resKeyWindowsFeatures,pwszRes));

## HRESULT GetLocaleString(\_\_out\_ecount(6) PWSTR Language);

New Function, Extracts / Outputs the current locale name. (such as “en-US”) It was needed for ResourceFromMUM, functionalized since it is likely to be otherwise useful.

## STDAPI ResourceForDriveFromPath(\_\_in PCWSTR pwszPath, \_\_out\_ecount(cchResource) PWSTR pwszResource, \_\_in unsigned int cchResource);

Extracts / Outputs a resource for a given drive, for use in the 'Computer' window of Explorer.  Which is complicated by drives having optional labels. You give it "C:\", a buffer, and a length limit; it gives you "Local Disk (C:)" for an unlabeled disk, or "Label (C:)" if a drive label was set. Useful for Backup, Timewarp, etc.

# Informational Logging:

## void LogSKU()

sends the text name of the current Vista SKU to the log.

## void Assessment()

Logs the Windows Experience Index numbers, will not work on N skus.

## #define LOGRESKEY(reskey) (LogResKeyValue(L#reskey,reskey))

Logs the variable name, resKey, and Resource String for a given resource key.

## BOOL LogResKeyValue(\_\_in const wchar\_t\* szResourceKeyName,\_\_out const wchar\_t\* szResourceKey)

Logs the first string directly, along with the resKey and value of the resKey

# General Utilities:

## int \_\_cdecl GetLLU (\_\_in LPCWSTR lpwszLLU, \_\_out LPWSTR Username, \_\_inout unsigned int cchUsername, \_\_out LPWSTR Password, \_\_inout unsigned int cchPassword);

Get the Username(with domain) and Password for a WTT LLU account

## Snooze([int])

Causes execution to pause for the given number of seconds, default is ten.

                Previous version would only snooze for 10 seconds, hard coded.

## #define RESKEYSEQUAL(reskey1,reskey2) (AreResKeyValuesEqual(L#reskey1,reskey1,L#reskey2,reskey2))

## BOOL AreResKeyValuesEqual(\_\_in const wchar\_t\* szResourceKeyName1,\_\_in const wchar\_t\* szResourceKey1,\_\_in const wchar\_t\* szResourceKeyName2,\_\_in const wchar\_t\* szResourceKey2);

Example:

if(!RESKEYSEQUAL(resKeyComputerNameTab,resKeyComputerNameDomainTab))

{

LogTestInfoW(\_\_FUNCTIONW\_\_, L"Localized 'Computer Name' resource inconsistent, if this is not Psuedo-Loc it is very likely a Localization bug.");

pwszResultInfo = L"Localized 'Computer Name' tab name resource inconsistent, if this is not Psuedo-Loc it is very likely a Localization bug.";

}

## 

# Deprecated functions:

## BOOL OpenSpecificClassicControlPanel(\_\_in wchar\_t\* Item)

Example:

wchar\_t Item[1024];

if (FAILED(GlobalizeQueryId(Section, 1024, CPL\_ICON\_PERSONALIZATION)) ||

OpenSpecificHomeControlPanel(Item, Link) != TRUE)

{

LogTestInfoW(\_\_FUNCTIONW\_\_, L"Failed to open Control Panel");

}

## BOOL OpenSpecificHomeControlPanel(\_\_in wchar\_t\* Section,\_\_in wchar\_t\* Link)

Example:

wchar\_t Section[1024];

wchar\_t Link[1024];

if (FAILED(GlobalizeQueryId(Section, 1024, CPL\_LINK\_APPEARANCEPERSONALIZATION)) ||

FAILED(GlobalizeQueryId(Link, 1024, CPL\_LINK\_PERSONALIZATION)) ||

OpenSpecificHomeControlPanel(Section, Link) != TRUE)

{

LogTestInfoW(\_\_FUNCTIONW\_\_, L"Failed to open Control Panel");

}