Subject: LaunchWebBrowser() problem and perhaps not the best solution
Posted by koldo on Wed, 14 Mar 2012 10:40:41 GMT

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Hello all

In my XP LaunchWebBrowser() does not work because of ShellExecute.

A possible solution proposed here (
http://stackoverflow.com/questions/1193873/which-reasons-cou ld-make-shellexecute-fail) is to
create a separate thread for executing ShellExecute.
The reason could be this one(Calling Shell Functions and Interfaces from a Multithreaded
Apartment: http://support.microsoft.com/?scid=kb%3Ben-us%3B287087&x =16&y=15).

The solution works for me. First call to ShellExecuteOpen() fails but second one in a separate
thread, works.
However I am not sure if it is a right implementation. Please check it before approve.


```
#if defined(PLATFORM_WIN32) && !defined(PLATFORM_WINCE)
bool ShellExecuteOpen(const char *str)
{
 return 32 < int(ShellExecuteW(NULL, L"open", ToSystemCharsetW(str), NULL, L".",
SW_SHOWDEFAULT));
}

void LaunchWebBrowser(const String& url)
{
 if (!ShellExecuteOpen(url)) {
  HANDLE handle = CreateThread(NULL, 0,
(LPTHREAD_START_ROUTINE)&ShellExecuteOpen, (LPVOID)~url, 0, NULL);
  if (handle == NULL)
   return;
  WaitForSingleObject(handle, 500);
  CloseHandle(handle);
 }
}
#endif
```

Subject: Re: LaunchWebBrowser() problem and perhaps not the best solution
Posted by mirek on Wed, 14 Mar 2012 21:37:33 GMT
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koldo wrote on Wed, 14 March 2012 06:40Hello all

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  CloseHandle(handle);
 }
}
#endif
```


Looks quite OK with me. Maybe the WaitForSingleObject is not needed...

Mirek

Subject: Re: LaunchWebBrowser() problem and perhaps not the best solution
Posted by koldo on Thu, 15 Mar 2012 07:41:51 GMT
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Hello Mirek

In fact WaitForSingleObject() is useless as it always wait the timeout.

However I realized that sometimes the string passed is released BEFORE the thread is really run
so second call to ShellExecuteW() fails as LaunchWebBrowser() has ended before .

The proposed solution is this one:

```
void ShellExecuteOpen(char *str)
{
 ShellExecuteW(NULL, L"open", ToSystemCharsetW(str), NULL, L".", SW_SHOWDEFAULT);
 free((void *)str);
}

void LaunchWebBrowser(const String& url)
{
 if (int(ShellExecuteW(NULL, L"open", ToSystemCharsetW(url), NULL, L".",
SW_SHOWDEFAULT)) <= 32) {
  char *curl = (char *)malloc(url.GetLength()+1);
  strcpy(curl, url);
  HANDLE handle = CreateThread(NULL, 0,
(LPTHREAD_START_ROUTINE)&ShellExecuteOpen, (LPVOID)curl, 0, NULL);
  if (handle == NULL)
   return;
  CloseHandle(handle);
 }
}
```

The thread receives the string and releases it.

Subject: Re: LaunchWebBrowser() problem and perhaps not the best solution
Posted by koldo on Sun, 08 Apr 2012 14:15:18 GMT
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Hello Mirek

Could you check this?

Subject: Re: LaunchWebBrowser() problem and perhaps not the best solution
Posted by mirek on Sun, 08 Apr 2012 15:02:34 GMT
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I have found a bug, IMO you should not have to use ToSystemCharsetW in thread, if you want
this to work in U++ single-threaded mode...

After fixing this, commited.

Also used new "raw thread support".

Please check.

Mirek

Subject: Re: LaunchWebBrowser() problem and perhaps not the best solution
Posted by koldo on Sun, 08 Apr 2012 16:30:11 GMT
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Curious the "raw thread support".

Subject: Re: LaunchWebBrowser() problem and perhaps not the best solution
Posted by mirek on Sun, 08 Apr 2012 17:10:13 GMT
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koldo wrote on Sun, 08 April 2012 12:30Curious the "raw thread support".

Will add note to development blog...