U++ - Bug #1724

LocalProcess portability issue: LocalProcess::Read2 can not return more than 1024B on PLATFORM_WIN but it can on POSIX

05/17/2017 02:22 PM - Abdelghani Omari

Status:	Approved		**Start date:**	05/17/2017
Priority:	Normal		**Due date:**	
Assignee:	Abdelghani Omari		**% Done:**	0%
Category:	Core		**Estimated time:**	0.00 hour
Target version:			**Spent time:**	0.00 hour

Description

test case:

```
CONSOLE_APP_MAIN
{
    String str = String('A', 1024);
    str << "B";

    String f = GetDataFile("data.txt");
    SaveFile(f, str);

    String cmd;

    #ifdef PLATFORM_POSIX
     cmd << "cat \"" << f << "\"";
    #else
     cmd << "cmd /c Type \"" << f << "\"";
    #endif

    LocalProcess proc;
    proc.Start(cmd);
    Sleep(200);

    String r;
    proc.Read(r);
    DUMP(r.GetCount());
    proc.Read(r);
    DUMP(r.GetCount());
}
```

output :
 POSIX:

```
    r.GetCount() = 1025
    r.GetCount() = 0
```

 WIN32:

```
    r.GetCount() = 1024
```

```
      r.GetCount() = 1
```

this is because the WIN32 version use "if" and the POSIX use "while".

the patch :

```
    bool LocalProcess::Read2(String& reso, String& rese)
    {
        LLOG("LocalProcess::Read2");
        reso = wreso;
        rese = wrese;
        wreso.Clear();
        wrese.Clear();

    #ifdef PLATFORM_WIN32
        LLOG("LocalProcess::Read");
        bool was_running = IsRunning();
        char buffer[1024];
        dword n;
        while(hOutputRead && PeekNamedPipe(hOutputRead, NULL, 0, NULL, &n, NULL) && n &&  // LINE modified : replace "if"
    with " "while"
            ReadFile(hOutputRead, buffer, sizeof(buffer), &n, NULL) && n)
            reso.Cat(buffer, n);

        while(hErrorRead && PeekNamedPipe(hErrorRead, NULL, 0, NULL, &n, NULL) && n &&   // LINE modified : replace "if" with "
    "while"
            ReadFile(hErrorRead, buffer, sizeof(buffer), &n, NULL) && n)
            rese.Cat(buffer, n);

        if(convertcharset) {
            reso = FromOEMCharset(reso);
            rese = FromOEMCharset(rese);
        }

        return .......
```

History

- Assignee changed from Miroslav Fidler to Abdelghani Omari

I do not think this is an error. Contract is that Read returns "some" data if available. You are supposed to call it again for the next chunk.

Even in this example, reading the output of "ls" can return less and then some more on the next call, as there might not be data in the pide yet.

In fact, if something needs fixing here, it is perhaps posix version - if some process would be producing a lot of data quickly, it would produce very large Strings, which would be bad in some cases. I guess there should be "if" too...

Mirek

#2 - 05/17/2017 05:41 PM - Abdelghani Omari

Ok, "if" for posix version resolve the portability issue.

#3 - 05/17/2017 05:41 PM - Abdelghani Omari

- Assignee changed from Abdelghani Omari to Miroslav Fidler

#4 - 05/18/2017 09:58 AM - Miroslav Fidler

- Status changed from Patch ready to Ready for QA

- Assignee changed from Miroslav Fidler to Abdelghani Omari

It is now 'if' in POSIX Read...

#5 - 05/22/2017 12:01 AM - Abdelghani Omari

- Status changed from Ready for QA to Approved