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Subject: [FEATURE] Accessing to Alternate Win Registry View (patch included)  
Posted by [omari](#) on Thu, 02 Jun 2016 14:46:33 GMT

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Hi,

in a Win64 OS, the registry is divided in tow part.

by default, a binary compiled 64 bit, acceses only to the 64 part of the rgistry  
and a binary compiled 32 bit, acceses only to the 32 part of the rgistry.

in order to acceses to the 64 part, a 32 binary shall specify the key KEY\_WOW64\_64KEY.  
in order to acceses to the 32 part, a 64 binary shall specify the key KEY\_WOW64\_32KEY.

U++ now has this functions:

```
String GetWinRegString(const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE);
int  GetWinRegInt(const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE);
bool SetWinRegString(const String& string, const char *value, const char *path, HKEY base_key
= HKEY_LOCAL_MACHINE);
bool SetWinRegExpandString(const String& string, const char *value, const char *path, HKEY
base_key);
bool SetWinRegInt(int data, const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE);
void DeleteWinReg(const String& key, HKEY base = HKEY_LOCAL_MACHINE);
```

my proposal is to:

1 - Add a new dword argument to this funcions, with default value set to zero (0).

```
String GetWinRegString(const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE, dword wow = 0);
int  GetWinRegInt(const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE, dword wow = 0);
bool SetWinRegString(const String& string, const char *value, const char *path, HKEY base_key
= HKEY_LOCAL_MACHINE, dword wow = 0);
bool SetWinRegExpandString(const String& string, const char *value, const char *path, HKEY
base_key, dword wow = 0);
bool SetWinRegInt(int data, const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE, dword wow = 0);
void DeleteWinReg(const String& key, HKEY base = HKEY_LOCAL_MACHINE, dword wow =
0);
```

this is backware compatible.

2 - in the functions bodys:

- GetWinRegString/GetWinRegInt : replace KEY\_READ by KEY\_READ | wow
  
- SetWinRegString/SetWinRegExpandString/SetWinRegInt: replace KEY\_ALL\_ACCESS by KEY\_ALL\_ACCESS | wow
  
- DeleteWinReg :  
replace KEY\_READ by KEY\_READ | wow  
AND replace  
RegDeleteKey(base, key);  
by  
  
if(wow)  
    RegDeleteKeyEx(base, key, wow, 0);  
else  
    RegDeleteKey(base, key);

3 - Next, add a set of function to aceses to specific part of the registry

- 3.1 : acceses to the others part (the 32 part for 64 bin, or the 64 part for the 32 bin):
- define this macro WOW :

```
#ifdef CPU_64
#define WOW KEY_WOW64_32KEY
#else
#define WOW KEY_WOW64_64KEY
#endif
```

- Add the new functions,

```
String GetWinRegStringWOW ( const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE ){
return GetWinRegString ( value, path, base_key, WOW );
}
```

```
int GetWinRegIntWOW ( const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE ){
return GetWinRegInt ( value, path, base_key, WOW );
}
```

```
bool SetWinRegStringWOW ( const String& string, const char *value, const char *path, HKEY
base_key = HKEY_LOCAL_MACHINE ){
```

```

return SetWinRegString ( string, value, path, base_key, WOW );
}

bool SetWinRegExpandStringWOW ( const String& string, const char *value, const char *path,
HKEY base_key ){
return SetWinRegExpandString ( string, value, path, base_key, WOW );
}

bool SetWinRegIntWOW ( int data, const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE ){
return SetWinRegInt ( string, value, path, base_key, WOW );
}

void DeleteWinRegWOW ( const String& key, HKEY base = HKEY_LOCAL_MACHINE ){
DeleteWinReg ( key, base, WOW );
}

```

3.2 : functions to access to specific part:

64 bits:

```

String GetWinRegStringWOW64 ( const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE ){
return GetWinRegString ( value, path, base_key, KEY_WOW64_64KEY );
}

int GetWinRegIntWOW64 ( const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE ){
return GetWinRegInt ( value, path, base_key, KEY_WOW64_64KEY );
}

bool SetWinRegStringWOW64 ( const String& string, const char *value, const char *path, HKEY
base_key = HKEY_LOCAL_MACHINE ){
return SetWinRegString ( string, value, path, base_key, KEY_WOW64_64KEY );
}

bool SetWinRegExpandStringWOW64 ( const String& string, const char *value, const char *path,
HKEY base_key ){
return SetWinRegExpandString ( string, value, path, base_key, KEY_WOW64_64KEY );
}

bool SetWinRegIntWOW64 ( int data, const char *value, const char *path, HKEY base_key =
HKEY_LOCAL_MACHINE ){
return SetWinRegInt ( string, value, path, base_key, KEY_WOW64_64KEY );
}

```

```
void DeleteWinRegWOW64 ( const String& key, HKEY base = HKEY_LOCAL_MACHINE ){  
    DeleteWinReg ( key, base, KEY_WOW64_64KEY );  
}
```

and 32 bits:

```
String GetWinRegStringWOW32 ( const char *value, const char *path, HKEY base_key =  
HKEY_LOCAL_MACHINE ){  
    return GetWinRegString ( value, path, base_key, KEY_WOW64_32KEY );  
}
```

```
int GetWinRegIntWOW32 ( const char *value, const char *path, HKEY base_key =  
HKEY_LOCAL_MACHINE ){  
    return GetWinRegInt ( value, path, base_key, KEY_WOW64_32KEY );  
}
```

```
bool SetWinRegStringWOW32 ( const String& string, const char *value, const char *path, HKEY  
base_key = HKEY_LOCAL_MACHINE ){  
    return SetWinRegString ( string, value, path, base_key, KEY_WOW64_32KEY );  
}
```

```
bool SetWinRegExpandStringWOW32 ( const String& string, const char *value, const char *path,  
HKEY base_key ){  
    return SetWinRegExpandString ( string, value, path, base_key, KEY_WOW64_32KEY );  
}
```

```
bool SetWinRegIntWOW32 ( int data, const char *value, const char *path, HKEY base_key =  
HKEY_LOCAL_MACHINE ){  
    return SetWinRegInt ( string, value, path, base_key, KEY_WOW64_32KEY );  
}
```

```
void DeleteWinRegWOW32 ( const String& key, HKEY base = HKEY_LOCAL_MACHINE ){  
    DeleteWinReg ( key, base, KEY_WOW64_32KEY );  
}
```

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Subject: Re: [FEATURE] Accessing to Alternate Win Registry View (patch included)  
Posted by [mirek](#) on Thu, 16 Jun 2016 06:26:24 GMT  
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I think part 3.1 is not really necessary.

What about adding just single parameter to all function, which will be 0 by default and gets | with access?

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Subject: Re: [FEATURE] Accessing to Alternate Win Registry View (patch included)  
Posted by [omari](#) on Thu, 16 Jun 2016 08:38:57 GMT  
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I am agree with you, the part 3. is not necessary.

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Subject: Re: [FEATURE] Accessing to Alternate Win Registry View (patch included)  
Posted by [mirek](#) on Mon, 20 Jun 2016 09:04:41 GMT  
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Applied (simple variant - adding wow parameter).

Thanks,

Mirek

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