Subject: String to std::string conversion
Posted by GaroRobe on Wed, 15 Jun 2011 01:12:20 GMT
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Hello.

I have a code:
std::string tempPath;
FileSel file;

{...}

tempPath = file[i]; <<== error C2593: 'operator =' is ambiguous

What would that possibly mean?

Subject: Re: String to std::string conversion
Posted by Lance on Wed, 15 Jun 2011 03:25:53 GMT
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Please test if

tempPath = const_cast<String&>(file[i]);

compile.

If yes, I believe the ambiguity arises because of

operator std::string() const;

And

operator const char *() const { return Begin(); }

Subject: Re: String to std::string conversion
Posted by GaroRobe on Wed, 15 Jun 2011 03:35:19 GMT
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Quote:

Quote:C:\MyApps\proto1\main.cpp(42) : error C2872: 'String' : ambiguous symbol
could be 'c:\myapps\opencv22\opencv2/core/core.hpp(84) : std::string cv::String'
or 'c:\upp\uppsrc\core\String.h(294) : Upp::String'
C:\MyApps\proto1\main.cpp(42) : error C2440: 'const_cast' : cannot convert from 'Upp::String' to 'cv::String &'
Reason: cannot convert from 'Upp::String *' to 'cv::String *'
Types pointed to are unrelated; conversion requires reinterpret_cast, C-style cast or function-style cast

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Subject: Re: String to std::string conversion
Posted by Sender Ghost on Wed, 15 Jun 2011 05:16:45 GMT
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Hello, Artem.

Try this:

```
std::string tempPath;
FileSel file;

String path;
if (file.ExecuteSelectDir())
 path = ~file;

// Conversion from UPP::String to const tchar * to std::string
if (!path.IsVoid())
 tempPath = ~path;
```

Subject: Re: String to std::string conversion
Posted by dolik.rce on Wed, 15 Jun 2011 05:30:34 GMT
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Hi GaroRobe

Lances explanation about the const char* and std::string is correct. However, his solution is not, the const_cast can only change the constness of variable, not its type. Also, casting Upp::String to std::string is not a good idea anyway, as their internal representation probably differs.

Anyway, there is quite a number of possible solutions:

```
std::string tempPath;
FileSel file;
{...}
tempPath = ~file[i]; // converts the Upp::String to const char*
//OR
```

tempPath = file[i].Begin(); // basically the same as above
//OR
tempPath = std::string(~file[i],file[i].GetLength()); // create a new std::string with the same content and length
//OR
tempPath = std::string(~file[i],file[i].GetLength()); // again, more verbose variation on the previous line
Not that the first two solutions contain potential bug. If there are zero bytes ('\0') in the string, only part up until the first null would get copied. The last two solutions always copy the entire string properly, so I would recommend you to use one of those

Best regards,
Honza

Subject: Re: String to std::string conversion
Posted by GaroRobe on Wed, 15 Jun 2011 05:37:07 GMT
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Well, It compiles. But another problem arises.
My following lines are

```
tempFrame = imread( tempPath );
  if( findChessboardCorners( tempFrame, checkboardSize, foundCorners ))   <<=== Crashes here
  {
   frames.push_back( tempFrame );
   imagePoints.push_back( foundCorners );
  }
```

According to debugger, tempFrame is empty after imread() which is not what I expect.
BTW, that's why I am forced using STL types - most of parameters in OpenCV are std::something.

P.S.: Sorry, I know it's not about stl anymore - feels like I stumble at such topic shifts every time, but...

Subject: Re: String to std::string conversion
Posted by dolik.rce on Wed, 15 Jun 2011 05:51:53 GMT
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GaroRobe wrote on Wed, 15 June 2011 07:37BTW, that's why I am forced using STL types - most of parameters in OpenCV are std::something. Well, maybe we should better come up with some solution to use OpenCV with U++ types, instead of fixing every single use separately I'll have a look into it...

Honza

Subject: Re: String to std::string conversion
Posted by GaroRobe on Wed, 15 Jun 2011 05:56:24 GMT
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A wishful thought... can't see how to implement it other than add conversion operators for each and every respective type and datastructure.

Subject: Re: String to std::string conversion
Posted by Sender Ghost on Wed, 15 Jun 2011 06:07:08 GMT
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Seems, you wanted the path to selected file instead of path to selected directory.

Please, look on the following example:

```
#include <CtrlLib/CtrlLib.h>

using namespace Upp;

GUI_APP_MAIN
{
 FileSel fs;

 std::string stdPath;

 if (fs.ExecuteOpen())
 {
  String path = ~fs;

  PromptOK("From UPP\1::\1String:&\1" + path);

  stdPath = ~path;

  PromptOK("From std\1::\1string:&\1" + String(stdPath));
 }
}
```

Subject: Re: String to std::string conversion
Posted by GaroRobe on Wed, 15 Jun 2011 06:09:53 GMT
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Correct me if I'm wrong, but file[i] returns exactly path to the i-th selected file. Is it not? (debugger complies)