
Subject: Passing an ArrayCtrl / SqlArray to a function template

Posted by [Giorgio](#) on Mon, 15 Jan 2018 10:51:45 GMT

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Hi folks,

I am creating a small util library for my applications (actually, is a namespace).

I use frequently a method to export the content of a SqlArray /ArrayCtrl to a csv file, so it makes sense to include it in this library.

```
template <class T>
void ExportCSV(T o)
{
    String filename = "";
    FileSel fs;

    ColInitialize(NULL);
    PWSTR path = 0;
    SHGetKnownFolderPath(FOLDERID_Desktop, KF_FLAG_SIMPLE_IDLIST, NULL, &path);
    std::wstring s = path;
    std::string homedir( s.begin(), s.end() );
    homedir.append("\\");
    CoTaskMemFree(path);

    fs.Type("CSV", "*.csv");
    fs.PreSelect(homedir);
    if(!fs.ExecuteSaveAs()) return;
    filename = fs;
    SaveFile(filename, "Prova");
    FileOut out(filename);
    if(!out) {
        Exclamation(t_("Failed opening ") + filename);
        return;
    }

    out.Put(o.AsCsv());
}
```

When I compile I get the following error:

error C2280: 'Upp::ArrayCtrl::ArrayCtrl(Upp::ArrayCtrl &)': attempting to reference a deleted function

I know this is a really generic question, but I am bit lost.

Regards,

Gio

Subject: Re: Passing an ArrayCtrl / SqlArray to a function template

Posted by [omari](#) on Mon, 15 Jan 2018 13:13:16 GMT

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Hi,

a Ctrl can't be passed by value, use reference instead:

```
void ExportCSV(T& o)
```

PS: think about using GetDesktopFolder ()

```
template <class T>
void ExportCSV(T& o)
{
    String filename = "";
    FileSel fs;

    fs.Type("CSV", "*.csv");
    fs.PreSelect(GetDesktopFolder ());
    if(!fs.ExecuteSaveAs()) return;
    filename = fs;
    SaveFile(filename, "Prova");
    FileOut out(filename);
    if(!out) {
        Exclamation(t_("Failed opening ") + filename);
        return;
    }

    out.Put(o.AsCsv());
}
```

Subject: Re: Passing an ArrayCtrl / SqlArray to a function template

Posted by [Giorgio](#) on Mon, 15 Jan 2018 15:48:36 GMT

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Hi Omari,

thank you for your prompt answer.

Do you know if it is possible to use a function of a namespace with THISBACK?

My utilities library is defined as a namespace named util.
When I use the following syntax:

```
buttonExport.WhenPush = THISBACK1(util::ExportCSV, Jobs);
```

I got from the compiler Error C3083, Error C2039, Error C2065.

So I had to define a method:

```
void JobList::Do_export()  
{  
    util::ExportCSV(Jobs);  
}
```

And then assign that method to the button:

```
buttonExport.WhenPush = THISBACK(Do_export);
```

Regards,
Giorgio

Subject: Re: Passing an ArrayCtrl / SqlArray to a function template
Posted by [omari](#) on Mon, 15 Jan 2018 16:39:09 GMT
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for your case, I think the best is to use lambda expression :

```
buttonExport << [&] {util::ExportCSV(Jobs);};
```

to answer your question, THISBACK only accepts member functions.
for a global function, uses callback:

```
buttonExport.WhenPush = callback1(util::ExportCSV, Jobs);
```

Subject: Re: Passing an ArrayCtrl / SqlArray to a function template

Posted by [Giorgio](#) on Tue, 16 Jan 2018 08:46:53 GMT

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Many thanks!
