Subject: Re: IDL and ActiveX CCD camera
Posted by Rick Towler on Fri, 02 Aug 2002 16:06:16 GMT
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If you have IDL5.5 I encourage you to try the new COM/ActiveX interface. The only help you get from RSI is found in the "What's new in 55" pdf. Not as much as one would like but enough to start doing some damage.

You'll need OLEview (available free from MS), some good documentation on the camera side and some luck but in theory I think it should do the trick. It will also help if you have the activeX control test container which ships with Visual Studio. I have had mixed luck, but most of the bad luck was due to non-existent documentation on the ActiveX control side.

Using OLEview, find your activeX control (maybe under automation objects). Use OLEview to get the CLSID (required by IDL). If you have the activeX control container use "Insert new control..." to create an instance of your camera control. Then you can use the "invoke methods" dialog to explore the methods. If you don't have the AX control container you can use OLEview to get some basic into on the methods by using the TypeInfo viewer. Hopefully the methods will be documented so this exercise will be academic.

At this point my experience with these two tools starts to wane so I go back to IDL and start experimenting. Check out the examples in "what's new"

It would be helpful if you could report back to the group with your results (or just to me if you are shy). Your experiences, bad or good, with the new COM objects will help the 3 other IDL users who are trying to use them. :)

-Rick

"Brandon Jones"
 <bjones8@yahoo.com> wrote in message news:2f8dde96.0208011556.24ecf9aa@posting.google.com...

> Hello-

>

>

>

- > I am just getting started with IDL and was curious about its ActiveX
- > functionality.
- > I have a CCD camera that uses COM (ActiveX) interfaces for control.
- > Would I be able to use these ActiveX controls from just within IDL?
- > From reading the documentation it seems as if I need to use VB or VC++
- > to control the CCD camera and call IDL from VB/VC++/LabView (I do not
- > want to do this).

>

- > I'd like to build an application that uses IDL for GUI (and everything
- > else) but just uses the ActiveX controls to grab some images from the
- > CCD, and preferably control the CCD camera.

>

> I want IDL to be the mothership, and not the slave :-)

>

- > BTW I am using MaxIm DL for the CCD interfacing, which states:
- > "Almost all of MaxIm DL and MaxIm CCD capabilties are available via
- > the scripting interface. This interface is ASCOM comliant, and uses
- > platform-independent COM (ActiveX) interfaces for compatibility with
- > the built-in Windows scripting host and many programming languages."

>

> I'd appreciate any feedback (including, "you're crazy!")

>

- > Brandon Jones
- > Mechanical & Aerospace Engineering Department
- > Henry Samueli School of Engineering & Applied Science

Subject: Re: IDL and ActiveX CCD camera Posted by bjones8 on Fri, 02 Aug 2002 23:03:23 GMT

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Rick-

Thanks for the response, I do have IDL 5.5 and I reviewed the what's new manual. It all looks very interesting. I don't have any experience with COM object or ActiveX (or IDL just yet), however I know it would be a very useful thing to learn.

I did figure out a way to use the camera by just using vbscipt, running the script with the spawn command, and just using IDL to modify the text in the script file to edit parameters. This is cheating though...but works.

I think i'll spend some time investgating the method you outlined since I'm up for learning something...

Thanks!

Brandon Jones
Mechanical & Aerospace Engineering Department
Henry Samueli School of Engineering & Applied Science

"Rick Towler" <rtowler@u.washington.edu> wrote in message news:<aieao7\$1urk\$1@nntp6.u.washington.edu>...

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> -Rick

Subject: Re: IDL and ActiveX CCD camera
Posted by Mark Rivers on Sat, 03 Aug 2002 00:28:00 GMT
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Rick Towler <rtowler@u.washington.edu> wrote in message news:aieao7\$1urk\$1@nntp6.u.washington.edu...

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I have tried using the COM/ActiveX interface in IDL 5.5 to talk to CCD cameras from Roper Scientific (formerly Princeton Instruments) using their COM interface. Basically it does not work from IDL, while it works fine from Visual Basic.

I have discussed the problem with technical folks from RSI and they understand that the problem is on their end. Here is an extract from their

response to my problem report:

- > ..., your example code pointed
- > out some shortcomings in the COM data management of IDL 5.5, with
- > respect to the Roper Scientific automation. Apparently, it's passing
- > some parameters to and from the automation using some techniques
- > that we hadn't anticipated. We'll attempt to address these in a future
- > release of IDL. In particular, the ::GetFrame method won't work properly
- > from IDL 5.5.

Mark Rivers