## Subject: Calling IDL Objects from JAVA Posted by David Fanning on Thu, 12 Feb 2009 22:49:55 GMT View Forum Message <> Reply to Message

Folks,

We are working on a new web portal that uses JAVA code for most of its operations. We wish to add some graphical functionality to the web page, so we are using the JAVA bridge to call some already defined IDL objects that open a file, process the data, create a PNG file, and display it on the web page.

All of this works reasonably well. (We have had some weird problems with the IDL JAVA Bridge Assistant Wizard, or whatever it is calling itself these days, but for the moment we have overcome these.)

Our main problem is that our IDL objects use a LOT of keywords in their methods. Specifically, in their SetProperty methods. We do this primarily for ease of communicating with superclass objects, and it seems to be a "best practice" to judge from most of the objects written from within the ITTVIS confines.

As it happens, JAVA doesn't know anything at all about keywords, and indeed the IDL JAVA Bridge programmers who wrote the JAVA wrappers admit that you can't pass keywords to IDL object methods from JAVA. Bummer, to say the least. :-(

So much a bummer that you wonder why anyone would bother to write a JAVA IDL Bridge in the first place.

But that aside, perhaps someone has some ideas on how to proceed. We have kicked around several ideas, none terribly compelling, that would have the advantage of us not having to write duplicate methods for all of our important methods that we wanted to expose to the JAVA programmer.

We have settled, we think, on JAVA passing a "keyword string" of keyword:value pairs, that we would parse to create an anonymous structure of keywords and their values. As long as our keyword values are fairly "generic" (strings, integers, and floats), this is not a huge deal. We take this keyword structure and pass it to the appropriate object method, which is also named in the same string. (We use CALL\_METHOD for the latter.)

Has anyone run into this problem before? (I can't imagine you haven't!) What have you done to solve it?

Cheers,

David

David Fanning, Ph.D. Coyote's Guide to IDL Programming (www.dfanning.com) Sepore ma de ni thui. ("Perhaps thou speakest truth.")