Subject: Re: Creating procedure with arbitrary number of input parameters
Posted by Michael Galloy on Thu, 12 Jan 2012 19:36:55 GMT

On 1/12/12 12:34 PM, PMan wrote:
> I am trying to created a procedure with an arbitrary number of input
> parameters that will be determined at run time. There does seem to be
> a mechanism to do this in IDL. For example, in the STRING function:
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> Syntax
> Result = STRING(Expression1, ..., Expressionn, ...
>
> can handle N input parameters. However, I cannot find any documents or
> references showing how to implement this.
>
> Does any one here know how this can be achieved?
>
> Thank you for your attention.

It can be done in C as a DLM.

Mike
--
Michael Galloy
www.michaelgalloy.com
Modern IDL, A Guide to Learning IDL: http://modernidl.idldev.com
Research Mathematician
Tech-X Corporation

Subject: Re: Creating procedure with arbitrary number of input parameters
Posted by PMan on Thu, 12 Jan 2012 19:58:12 GMT

On Jan 12, 2:36 pm, Michael Galloy <mgal...@gmail.com> wrote:
> On 1/12/12 12:34 PM, PMan wrote:
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> Mike
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> Michael Galloywww.michaelgalloy.com
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> Research Mathematician
> Tech-X Corporation

Ah, I see. Time for plan B. Thank you for your quick answer.

Subject: Re: Creating procedure with arbitrary number of input parameters
Posted by Michael Galloy on Thu, 12 Jan 2012 20:30:09 GMT

On 1/12/12 12:58 PM, PMan wrote:
> On Jan 12, 2:36 pm, Michael Galloy<mgal...@gmail.com> wrote:
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>> Michael Galloywww.michaelgalloy.com
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> Ah, I see. Time for plan B. Thank you for your quick answer.

Of course, you can fake this by making your routine have 10 arguments
(or whatever number you don't think the user will ever exceed) and a
CASE statement. Ugly, but gets the job done usually.

Mike
--
Michael Galloy
www.michaelgalloy.com
Modern IDL, A Guide to Learning IDL: http://modernidl.idldev.com
Research Mathematician
Tech-X Corporation

Subject: Re: Creating procedure with arbitrary number of input parameters
Posted by cgguido on Fri, 13 Jan 2012 17:48:04 GMT
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How about passing your args as a structure, à la MPFIT ?

G

Subject: Re: Creating procedure with arbitrary number of input parameters
Posted by wlandsman on Fri, 13 Jan 2012 18:30:49 GMT
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Often you don't need to use a CASE statement but can use SCOPE_VARFETCH in a loop to get
values from the input parameters or put them into output parameters.   For example, READCOL
http://idlastro.gsfc.nasa.gov/ftp/pro/misc/readcol.pro accepts anywhere between 2 and 40
parameters without the need for any CASE statements. --Wayne

Subject: Re: Creating procedure with arbitrary number of input parameters
Posted by penteado on Fri, 13 Jan 2012 19:13:27 GMT
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On Jan 12, 5:36 pm, Michael Galloy <mgal...@gmail.com> wrote:
> It can be done in C as a DLM.

Also, using _extra/_ref_extra, possibly with scope_varfetch(),
depending on the case. See the help on extra arguments.

Subject: Re: Creating procedure with arbitrary number of input parameters
Posted by Russell[1] on Sat, 14 Jan 2012 19:26:16 GMT
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It's ugly, but it's doable....

Presumably, you have some code that will call some other code which
has an unknown number of inputs (and possibly outputs), making it
impossible to elegantly write it ahead of time. However, the first
code must know what number of inputs and outputs that code 2 should
have, so why not just write code 2 in real-time. So store your code
as a string (or even read it from an ascii file) and write it out to
be compiled with "resolve_routine" and called by "call_procedure" or
"call_function". You could use "execute", but that'll be a mess if
you decide to use the IDL Virtual Machine.

Russell

On Jan 12, 2:34 pm, PMan <bloodysam.v...@gmail.com> wrote:
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