Subject: Re: taking the widget plunge. help Posted by Martin Schultz on Tue, 12 Sep 2000 16:24:30 GMT

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"J.D. Smith" wrote:
>
  Martin Schultz wrote:
>
>> This seems somewhat "convoluted" to me (but after recent experience, I
>> am sure you will have your reasons for proposing exactly this). I
>> always tend to think that setup is best done with ASCII files that are
>> easily editable and human readable. Yes, you should have a method
>> named something like FSC_PsConfig::Setup, and this method should
>> define a minimal set of defaults. But then it would read a file and
>> overload the default definitions. If it doesn't find the file, well,
>> then you live with the defaults (or the company creates a child object
>> with specific defaults). Proposed strategy:
> <snip>
>> As for the file format you could do something like
>> size=11.9,6.2 # not sure about the values
>> color=1
>> END
>> A4_Landscape:
>> size=6.2,11.9
>> color=0
>> END
>>
  The problem with using a text file for the input, is that it's deceptively
  appealing. Easy to edit, no object knowledge required, etc. But, once you've
> set the format, you're basically locked into it. Want to add some new items or
> reorganize (for instance, making groups of setups)? You'll need special code to
> handle older-format input files (though you could obviously plan ahead for such
> contingencies). Want to reorganize the internal representation of the data
> entirely? You'll still have to accommodate the old input mechanism. For this
> problem, a flat-file input is probably tractable, but I thought it would be a
 good example case for maximizing forward compatibility. Backward compatibility
> is easy, if tedious. Forward compatibility (being able to replace aging
> modules/objects with new ones without changing the including code), is more
 troublesome.
>
 The idea of abstracting the interface to be limited to a defined set of methods
> with given arguments contrains the fixed interface specification to elements
> enforced by the language itself... certainly RSI won't change the meaning of
> arguments or remove keyword functionality. This abstraction is certainly
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sometimes overkill, as it is not without its costs. But for something which is intended to be upgradeable and extensible, I think it can be worth it.
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I see. Yet, I would like to argue for text based setup files, because they are relatively easy maintainable and human readable. If I compare the Windows registry with the Unix ASCII based setup files, I certainly prefer the latter (for example one can use grep to find something, and one can add comments). With a format like the one I indicated, you still guarantee a lot of up- and downward compatibility: Variables that are undefined in one version will simply produce a warning message but otherwise be ignored. BTW: I don't agree that backward compatibility is always easy - at least not, if you are dealing with binary files of any kind (including IDL sav files).

I do concede, however, that ASCII files bear the danger of getting messy and "incompatible". To some extent, this can be solved by setting some standards such as:

- comments begin with '#'
- definition sections begin with a name followed by ':' and end with 'END'
- a setup file contains either no definition sections (i.e. variables are defined directly or "globally") or only definition sections
- each variable definition must contain a '=' even if the definition is empty

and to facilitate the search for the file:

One advantage compared to the sort of "internal" setup you are proposing is that even people who don't know much about IDL can customize the program (errr, the object;-) whereas you need to know how to inherit if you want to overwrite a setup method. Well, on the other hand, this would give even more power to skilled programmers who can get rich ...

Cheers, Martin

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