
Subject: Re: Randomu seed initialization
Posted by [Conor](#) on Fri, 13 Nov 2009 16:31:49 GMT
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Thanks for the input guys:

Jeremy:

I've checked in my primary function, and the variable I pass is uninitialized at first (obviously it becomes initialized after the first call to `randomu()` and stays that way). I haven't specifically checked that it is uninitialized in the subroutine, but the subroutine is only about 5 lines long, and I'm certainly not initializing it. So if it is initialized, then that's certainly an IDL bug (and it seems unlikely to me).

Matt:

I checked this possibility, by making a couple simple routines:

```
pro test
print,randomu(seed,1)
test2
end
```

```
pro test2
print,randomu(seed,1)
end
```

Run this and you will get two different answers out - i.e. the random seed is not initialized to the same value more than once. Which is why I don't understand what's going on with my routine: conceptually, this is the simple case of what I'm doing in my routine. This is why I really wish I knew what `randomu()` was doing. I'm wondering (and there are kinda hints to this in the documentation) if there is a hidden "global" seed, which is initialized by the first call to `randomu()`, and used by all subsequent calls to `randomu()` that have an uninitialized seed. Either that or the initialization of the seed is quasi-random each time (which would be much better, IMO).

Chris:

Thanks for the suggestion, that's what I've done for now, and it fixes it. I just wish I understood what is going on.

Paolo: I could definitely go for some better documentation!
Presumably if it was better documented I would be able to avoid

problems like this, and I would (perhaps) be better able to determine what I was doing wrong, or if this is a bug. As near as I can determine I'm using randomu properly (it's not exactly a complicated function). To uninitialized variables go into two separate calls to randomu(), and the same random numbers come out both times. Is that supposed to happen ever?
