Subject: Re: What does an optimal scientific programming language/environment need?
Posted by Duane Bozarth on Mon, 22 Sep 2003 15:07:42 GMT
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phil chastney wrote:
>
> "grunes" <grunes@yahoo.com> wrote in message
> news:2c0d6c85.0309191029.3efe3a99@posting.google.com...
>>
>> 5. 100% upwards compatibility with earlier versions of the same
>> language/environment, and between platforms.
>
> I don't see this as either necessary or desirable -- Fortran has survived so
> well precisely because of its ability to move the language definition sideways,
> without being shackled to earlier imperfections

Well, since F77 there is little that has actually been removed and a major consideration (as is evidenced in converstions in c.l.f) is maintaining compatability w/existing code. In practice, virtually nothing is ever removed from a commercial compiler although most have switches to allow specific standard level violations to be flagged...

Subject: Re: What does an optimal scientific programming language/environment need?
Posted by Richard Maine on Mon, 22 Sep 2003 18:44:36 GMT
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Duane Bozarth <dp_bozarth@swko.dot.net> writes:

> Well, since F77 there is little that has actually been removed and a
> major consideration (as is evidenced in converstions in c.l.f) is
> maintaining compatability w/existing code. In practice, virtually
> nothing is ever removed from a commercial compiler although most have
> switches to allow specific standard level violations to be flagged...

Note that the "since f77" applies to the whole paragraph. Whether you intended it to or not, I'm unsure; but it needs to. Several f66 features were dropped from compilers. For example, I'm not sure whether you can still find any compilers that support the extended range of a DO loop; certainly most compilers don't. There is actually quite a list of obscure f66 behaviors that f77 was incompatible with.

Though the most widely cited example of f66 features, which some commercial compilers still do support, was never actually an f66 standard feature at all. It was a nonstandard and nonportable

practice used by some codes and supported by some compilers. I'm referring, of course, to the behavior of zero-trip DO loops.

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Richard Maine | Good judgment comes from experience;
email: my first.last at org.domain | experience comes from bad judgment.
org: nasa, domain: gov | -- Mark Twain
