INTEROPERABILITY

Are Secrets Standards? Even ANSI Secrets?

Open systems are based on carefully crafted international standards. If you want to implement (or even understand) open systems, you need to read these primary reference documents. Textbooks, tutorials and the like are fine, but at some point you have to go to the real thing.

Standards are more than just how you code a particular project: They are the basis for training a new generation of computer professionals. If I have a staff of eager young programmers or a bunch of students in a class, I certainly hope they will go home at night and read. Not what I assign them, but just plain general reading.

THE MOVERS

General reading is what makes well-read computer professionals. Well-read computer professionals are the ones that will be able to move our industry forward.

The problem is getting the standards. If you have money—lots of it—you can buy paper versions of International Standards Organization and American National Standards Institute standards. ISO and ANSI don’t hesitate to charge $10 per page, don’t have student rates and prohibit copying.

Not all organizations think this way. The International Telecommunication Union has given permission to me and a group of volunteers to post their entire standards set on the Internet network for distribution at no charge. The head of the CCITT calls this “the B-52 philosophy of standards distribution: Load them up in a plane and carpet bomb the world.”

Thousands, and possibly tens of thousands, of talented engineers spend lots of time formulating standards on a volunteer basis. It’s an insult to their dedication to hide the results of their work behind mountains of purchase orders and stacks of paper.

ACCESS TO STANDARDS

Standards about networks should be accessible on networks. This isn’t really such a radical idea—the Transmission Control Protocol/Internet Protocol standards have been available for years on many servers around the world. Access to the standards is one of the primary reasons that TCP/IP is so well accepted. People know about TCP/IP and people use what they know.

I’d like to propose a meta-standard. If you have something that you want to call a standard, it has to be available to everybody cheaply and easily. If I can’t get it for free (or darn close to free), it’s not a standard. I don’t care if ANSI makes it, it’s still not a standard.

Once something is a standard, then we can start comparing “American National standards” or “ad-hoc standards.” Until I can read about it, though, it’s not a standard, it’s a secret. And open systems aren’t based on secrets.

CARL MALAMUD, A WRITER AND CONSULTANT, HAS JUST PUBLISHED STACKS INTEROPABILITY IN TODAY’S COMPUTER NETWORKS (PRENTICE HALL, 1991), FEATURED THIS WEEK AS THE INTEROP BOOK AT THE INTEROP CONFERENCE AND EXHIBITION. THE OPINIONS EXPRESSED ARE HIS OWN.