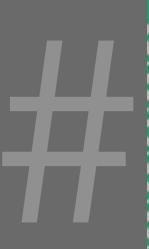


inside:

MOTD





## **USENIX & SAGE**

The Advanced Computing Systems Association & The System Administrators Guild

# motd

### by Rob Kolstad

Dr. Rob Kolstad has long served as editor of ;login:. He is also head coach of the USENIX-sponsored USA Computing Olympiad.



<kolstad@usenix.org>

### **Professionalism**

I enjoyed the special privilege of seeing a concert by the 70s and 80s band Earth, Wind, and Fire recently. They were preceded by a very competent blues combo, The Hazel Miller Blues Band, a perfectly reasonable group performing blues vocals with keyboards and guitars.

But when EW&F took the stage, the difference was not only immediately apparent but incredibly dramatic. It was clear that these guys knew what they were doing (probably proving that practicing your instruments for 20 years really does lead to a certain level of proficiency). Their music and performance had impact and verve – quite astounding (no different from any other super-competent band that one might like, in general, of course).

I mused to myself about the notion of professionalism closer to the technical world. I just reviewed/edited a very good perl book about debugging that's soon to be published. It included all sorts of advice on how to be a programmer whose attributes I might term "professional."

One of the book's most amusing suggestions, to me, was a simple methodology for taking trouble reports. It required just three questions:

"What did you observe?"

"What did you do to cause that?"

"What did you expect to happen?"

These questions can be answered by people at any technical level from total novice/layman all the way to the top of the guru heap. Furthermore, as a technical person, you're liable to get 90% or more of the information you really need in order to solve a technical-style problem.

I tried to think on how many times people have asked those questions of me when I called a help desk or vendor support telephone line. I'm not sure that I have been treated professionally in those contexts in the last half decade or so.

Programmers can also exhibit a degree of professionalism. Coding that doesn't contain buffer over-runs is one way to be more professional. Following advice found in Kernighan's and Pike's books is also a good way to move up the ladder (e.g., "verify all input before acting on it").

Writing such things must be hard as not enough programs exhibit such properties (e.g., feeding binary garbage to UNIX utilities used to cause problems). Completing webbased forms is often a nightmare, as is trying to get the formatting (e.g., credit cards) in just the format the programmer had in mind.

The SAGE folks have a new set of ethics. Dan Geer's column on open systems is provocative. I am going to continue to reflect on the challenge of putting on a professional face both for peers and for the outside world to see. It seems like quite a challenge.