

Our mutual OS

I am an adviser to GSPx, a conference that focuses on Signal Processing applications. In that capacity I recently attended two panels at GSPx that focused on Linux and FOSS as choices for telecommunications and aerospace/defence. In both venues, panelists represented a mix of proprietary and open interests, some were heavily-invested Linux vendors; others just coming to terms with the need for an open source strategy.

Tools vendor GreenHills Software, whose president Dan O'Dowd was ensconced in both panels, was clearly in denial. The executive in question, instead of participating in the dialog, used the events as a soapbox for his on-going rant against Linux. Without detailing his critique here, suffice it to say that he packaged together every well-worn claim of fault, failing and FUD attributed to our friend Tux and directed them, like laser-guided munitions, to his Aerospace/Defense developer audience.

O'Dowd prefaced his presentation by stating that unlike the other panelists, he had no intention of being "politically correct" and was "not afraid" to criticize Linux for embedded (or other) applications. His "PC" remark, however, sent a familiar ethnic shudder through me - to work in open source is to be a member of a maligned minority. To begin with, the established class treats you as inferior. When you achieve parity in performance or price, you are derided for trying too hard or "cooking the books". Responding to calumny gets you branded as strident or aggressive. Outstanding achievements are labeled as exceptions, and even the slightest blemish or failing is called out as representative of your entire group. And finally, business success brings accusations from within of "selling out".

There, among the interests of proprietary software, I felt like Judah Riah, in Dickens Our Mutual Friend: "For it is not, in Western countries, with Open Source as with other software. Men say, 'This is a bad Application, but there are good Applications. This is a bad Program, but there are good Programs.' Not so with Open Source. Men find the bad among OSS easily enough - among what technologies are the bad not easily found? - but they take the worst of

The open source community employs and in some cases invented best practices around security and response to exploits

OSS as samples of the best; they take the lowest of OSS as presentations of the highest; and they say "All Open Source Software is alike."

A rush of examples poured into my head:

Litigation around SCO's claims pales before the thousands of suits filed annually around proprietary software IP, yet those few cases still taint Linux and FOSS

The GPL is over a decade old and its accompanying obligations are

well-understood. GPL is shorter and simpler than proprietary software licenses and is scrutinized by legal minds worldwide. Still, GPL licensing is constantly raised as an objection to Linux deployment.

The open source community employs and in some cases invented best practices around security and response to exploits, but claims of superior security by even small, second-tier proprietary s/w vendors gain credence in the press.

Linux is not a real-time OS (RTOS); it nonetheless satisfies 90% of embedded requirements for real-time, yet those few applications not addressed by Linux are cited as reasons against its use anywhere.

The Linux kernel and file system can together run to many megabytes, or be small enough to fit on a floppy. The fact that WindowsCE needs over 24 megabytes or that comparably-configured RTOSes are at least as large as Linux does not shield Tux from shouts of "fatware".

Linux is not only standards-compliant, it is an emerging standard in its own right. However, because Linus and others have chosen to avoid or re-implement certain ill-conceived standard constructs (like POSIX queues and threads semantics), detractors freely question Linux openness.

The open source development process is so well disciplined that it can integrate and quality-assure contributions from thousands of developers in dozens of countries speaking many different languages. Nonetheless, its methods are regularly derided as ad hoc, disorganised, or at risk from malicious submission.



Bill Weinberg

This proprietary gentleman's agreement to judge FOSS by transcendental standards pervades the

IT industry, analysts who report on it, and some sectors of government as well. A telling example is the California Performance Review. The hard-won inroads made by Linux in Germany, Latin America and other public sectors led the CPR to make the following recommendations to state government: "For potential immediate savings, departments should take an inventory of software purchases and software renewals in the Fiscal Year 2004-2005 and implement open source alternatives where feasible. Incorporate open source software as a viable alternative to any software procurement."

Predictably, this opening of IT procurement to include FOSS where feasible has met an onslaught of testimony, editorialising and spin-doctoring that recasts the recommendation as a mandate, a set-aside, an entitlement for FOSS.

History teaches that deeply-held prejudices do not succumb to reason, rational argument or palpable counter-proof. The best and only course is to continue striving for excellence and accelerating the incremental gains that Linux and FOSS have made to date. No pen stroke from above will emancipate all source code and grant social/business/technical equality to Linux and FOSS. Only hard work and quality software will.

Bill Weinberg is Open Source Architecture specialist and Evangelist for the Open Source Development Lab (OSDL)