

;login:

THE MAGAZINE OF USENIX & SAGE

October 2001 • Volume 26 • Number 6

inside:

APROPOS

By Tina Darmohray

USENIX & SAGE

The Advanced Computing Systems Association &
The System Administrators Guild

apropos

Haphazard Heroics

by Tina Darmohray

Tina Darmohray, co-editor of *;login:*, is a member of Stanford University's Network Security Team. She was a founding member of SAGE.



tmd@usenix.org

System administrators often lament that when they're doing a good job, no one knows it. As such, it's hard to get recognition in the workplace or raises at review time. This non-recognition situation is disturbing, but lately I've witnessed an opposite trend in the workplace, which is equally disturbing. Over and over again, I see system administrators succumb to the pressure to over-commit or under-plan, landing themselves and their co-workers in situations that require heroic efforts to dig themselves out. I think this can and should be avoided.

Over-committing doesn't help anyone. It may feel better in the short run to give a "can do" answer to the management, but if it's unrealistic, it's better to say so up front. Too often IT managers fall into this trap. Recently, a friend witnessed this dilemma. The company was outsourcing a mission critical application, but had become unhappy with the situation. A dead-of-the night scenario was concocted in which the company would request a current tape of the data as an "upper-management disaster preparedness drill" so as not to tip off the outsourcing company. Next, in a mere 48 hours, the IT group would bring up new RAID servers, install database software, and restore the tapes. If you're not gasp-

ing yet, let me add that the RAID servers hadn't been procured yet!

Of course, this became a fire drill for all involved. Just getting the machines onsite and running was a formidable task. Bringing them up taxed the existing machine room cooling capacity, so for days, the doors were propped open, the door alarm was temporarily disarmed, fans were brought in, and the IT group anxiously watched as the new machines teetered on the brink of overheating until the AC guys could get out and rework the system.

Meanwhile, contractors were brought in to do shift work to get the database up and the tapes restored. The round-the-clock shifts were uncomfortable in the over-heated machine room, but the oppressive heat paled in comparison to the pressure-cooker environment the entire IT group was working in, now that the entire company's productivity hinged on getting these machines up.

In the end, they didn't make the deadline. It eventually took about two weeks to get everything working, which would have probably been a reasonable "can do" estimate in the first place. In my book, the inability to size the project was a failure on the part of the IT manager, but she proclaimed victory via heroics instead. Somehow unrealistically sizing the job up-front was overlooked, and instead, pulling the all-nighters, and hiring contractors to do the same, was portrayed as "going above and beyond" to get the job done.

Often, unrealistic demands come down from above, and it's hard to say no to them. But some folks do it to themselves! Email upgrades are always fertile ground for such problems. Email is typically the most visible computing service, which means that email upgrades are prime candidates for maximum planning and minimum upheaval. Yet email upgrades go awry, often due to the folks doing the upgrading! Midway through

the afternoon of one such upgrade involving migration to two new redundant mail gateways, the IT manager suggested the site also migrate the DNS servers in house: IP address change and all. "What about notifying the NIC?" I squealed in terror, but there was no stopping her. She argued that we'd collocate the inconvenience and come out ahead for doing so. Not the case. The mail successfully rolled over to the awaiting servers with no problems. Then, we brought up the DNS servers in-house easily enough too. But, of course, the NIC changes lagged predictably behind, and we had to undo and redo the cutover again. I felt there was no excuse for such a mid-course change of plans, but she hailed herself as a hero, and I wondered how anyone could agree.

There's also the appearance of heroics by the chronic all-nighters. These are the folks who wander into the office mid afternoon on a daily basis, or skip a few days entirely and then come in for several days running. They're frequently the topic of water cooler conversations about their seeming dedication to the job; putting fire fighting above sleeping on a mattress, eating self-cooked meals, or taking a shower at home. But when I do the math, I'm not sure they're any more dedicated, on a straight hour by hour basis, than the guy that gets there fed, clean, and rested at 8 a.m. each day and spends all of his efforts on-site attending to the machines and network. Too often, the quality of work which comes out of the all-night heroes reflect the lack of sleep and lack of planning.

Fire fighting is part of our job. Hardware fails, systems wedge, and occasionally, there's a virus or two let loose on the network. Going into the blazes when it's necessary is a noble and reasonable thing to do. However, over committing, under planning, or creating your own crisis is not a good approach, and fighting those kinds of fires makes for hapless heroes at best.