My phone just DoS'd my office network

August 25, 2009

Raymond Chen

The other day I was working in my office minding my own business when I suddenly lost network connectivity. I couldn't contact any machines other than the ones in my office. When this happens, I go through some basic troubleshooting steps. Is my neighbor's network okay? How about power-cycling the affected machines? Refreshing the TCP/IP security policies? None of that seemed to work, so I called the network helpdesk, on the assumption that my port was shut down because I somehow missed an e-mail message announcing a mandatory security patch that I had failed to keep up with. My office has an IP phone. It's hard to call the network helpdesk when your network is down and your office phone is network-based. I called them from my cell phone instead. After giving the helpdesk person the MAC addresses of all the computers in the office, the technician said, "Nope, none of these is on the list. If your network isn't working, it's not because of a port shutdown. Try plugging one of your computers directly into the wall rather than going through the hub." Bingo, network connectivity restored. The problem was somewhere inside my office. I thanked the technician and set to figuring out what was wrong with my office. Now, in order to plug the computer directly into the wall, I had to unplug my IP phone, since the office network topology is wall→phone→hub→other computers. The phone goes straight into the wall on the recommendation of the phone people because they argue that not all hubs know how to intermediate the QoS packets that the phone uses to ensure that call quality is acceptable. When I plugged the phone back into the wall and rebooted the phone, I got the message *Please wait while updates are being installed*. Once the phone finished booting, I found that the rest of the computers in the office had network connectivity. Basically, my phone downloaded an update and tried to auto-reboot itself, but got wedged, and it took my office network down with it. My phone just DoS'd my office network.

Historical note: This entry was written over a year ago, and the model of IP phone in question has long since been replaced.

Raymond Chen

Follow