

## **TECHNICAL COLUMNS**

Official archives of articles and columns written by Ron Hranac for Communications Technology and some of its sister publications, published by Access Intelligence, LLC. Reprinted with permission of the author.

By Ron Hranac, former Senior Technology Editor, Access Intelligence and Communications Technology Magazine

Originally appeared in the February 2005 issue of Communications Technology.

## CONFESSIONS AND A GREAT CUSTOMER SERVICE STORY

By RON HRANAC

I have a confession to make: I, um, just got cable modem service at home.

"Welcome to the 1990s," you're no doubt thinking.

Oh, I had plenty of excuses for putting it off until now.

The office is less than two miles from the house, and the company's high-speed network works wonderfully.

Dialup is good enough. Heck, I'm getting a whopping 45 to 48 kbps!

Installing an outlet in the second floor home office would require crawling through the attic, possibly a crawl space, and drilling through a brick wall. This is something that I ought to be able to do, since I was an installer a long time ago in a system far, far away.

Quad-shield coax really should be used to help keep my ham radio signals out of the local cable system's reverse path.

And, well, procrastination is my middle name. You see, I've been toying with the thought of getting a cable modem for, oh, the past three years or so.

## Prep

So, a couple years ago I started to gather materials for this project. They don't use quad-shield drop cable here, and one of the engineers at the cable company said he appreciated the fact that I was willing to go to the trouble of using cable with extra shielding to minimize ingress problems.

A buddy at Times Fiber provided some quad-shield 6-series coax, and another at Thomas & Betts sent a bag of Snap-N-Seal F-connectors, crimper and cable preparation tool. While speaking at Society of Cable Telecommunications Engineers seminars, I picked up a few other odds and ends—wallplates, barrels, splitters, terminators, ground block and outside junction box—from local systems. Heck, I even got my own cable modem and eventually a combination cable/digital subscriber line (DSL) router and wireless access point.

OK, parts gathered, now what?

Procrastinate, that's what.

After getting umpteen marketing and promotional pieces addressed to "resident," I figured it's about time. In early December I installed the junction box on the side of the house (complete with ground block and a two-way splitter to provide a convenient test point); drilled through the brick wall; ran the cable to the second

TECHNICAL COLUMNS

Official archives of articles and columns written by Ron Hranac for Communication Technology and some of its sister publications, published by Access Intelligence, LLC Reprinted with permission of the author.

floor, including crawling around in the attic; installed a wallplate in the upstairs office; put connectors on the cable; tightened every connector to 20-30 inch-pounds and weatherproofed all outdoor connectors with thread sealing sleeves; terminated the unused splitter port; and bonded the ground block to the house and radio equipment ground system using a short length of No. 6 solid copper wire.

Taking the plunge

Then I called Comcast.

Kim, the customer service representative (CSR) with whom I spoke, was courteous, professional and had a good sense of humor. Expecting to have the installation scheduled two or three weeks out. I was pleasantly surprised when she said someone could do the job the next day! She said an installer would show up between 1 p.m. and 3 p.m.

Technician #2995 pulled up in front of the house at 1:55 p.m., almost exactly in the middle of the scheduled installation window. Nick, I think his name was, has been in cable for about five years, working for AT&T Broadband before it was acquired by Comcast. I explained that the interior wiring was ready to go and that all he had to do was run a drop from the pedestal to the ground block, then get the modem up and running. He checked levels at the pedestal with his signal level meter (SLM) and came in the house to finish with the cable modem initialization. At that point, I pulled out a Sunrise Telecom CM1000 and offered to check the downstream and upstream signal integrity. Downstream signal level was fine, the constellation looked good, modulation error ratio (MER) was in the mid 30s, and there were no pre- or post-forward error correction (FEC) bit errors. The upstream signal level was spot on, although there was some occasional packet loss.

While he was finishing up, we chatted about the downstream 256-QAM (quadrature amplitude modulation) constellation. About that time someone from Comcast called to check on the installation's progress. Nice touch! I explained that the job was about five minutes from being done and that all was going well. Just before signing the paperwork, Nick did a speed test to a server in the local headend, which showed the downstream data rate at just above 3 Mbps and the upstream at about 240 kbps. He showed me the Comcast Web site, how to set up an email account and a few other housekeeping chores. That night I installed the router/access point, turned on encryption, changed default names and passwords, and tested the setup.

The next day Comcast called again, this time to schedule the drop burial.

A week later the drop contractor called the day before the scheduled burial to confirm the appointment and note that a utility locate would be done first thing in the morning. I thanked him for the call and added that he'd have to replace the newly installed cable, since my youngest dog had decided to use it as a chew toy. Oops! She didn't chew it in half, but her teeth did damage the jacket enough so that the flooding compound would be ineffective if the cable were buried in that condition. "No problem," the drop contractor supervisor

The drop replacement and burial were done on schedule the next afternoon.

All is right with the world

I was very impressed with the level of customer service before, during and after the installation. I don't think the installer or CSRs with whom I spoke on the phone had any idea who I was (remember, the promotional materials that have been showing up in my mailbox the last couple years have been addressed to "resident"), so I don't believe there was any special treatment. A big tip of the hat to the folks at Comcast for a job well done.

Now I need to see about replacing my eight-track with one of those new-fangled AM/FM cassette players ...





Official archives of articles and columns written by Ron Hranac for Communication Technology and some of its sister publications, published by Access Intelligence, LLC Reprinted with permission of the author.

Ron Hranac is technical leader, HFC Network Architectures, for Cisco Systems, and former senior technology editor for *Communications Technology*. Reach him at <a href="mailto:rhranac@aol.com">rhranac@aol.com</a>.