

Biomedical Firm Improves Reliability with Wireless Backup Link

Deseret Morning News Published: Monday, April 5 2004 12:00 a.m. MDT

Most enterprises think of wireless as a technology to connect mobile workers, but it can also be used to replace fixed-line connections. That's the realization that Ardais came to recently. The Lexington, Mass., clinical genomics company analyzes donated human tissue and then arranges its delivery to drug companies and others for cancer research. The company uses the Internet to make the tissue analysis files available to researchers, and it needs to have its systems always available so clients get the background data whenever they need it. It also carries email traffic.

But Ardais was having trouble keeping its connections available over its T1 line, once due to a cable cut in South Boston that took nine hours to repair and more often due to network outages, recalls Dan Kern, manager of IT infrastructure at Ardais. He also noted the last-mile connections had frequent data "hiccoughs" that interrupted smooth data transfer. So, at the suggestion of a local integrator, Kern decided to use a dedicated wireless link rather than a second T1 to maintain the company's connection to the outside world. The company did add a T1 line for phone traffic, putting all its data traffic (file transfer, email, instant messaging, Web hosting, and virtual private network) on the

original T1 and the new wireless link. When not used as a T1 backup, the wireless link handles Ardais's Citrix-based remote access and its Web-based email access. The wireless link provides 500Kbps of data throughput with 1.5Mbps burst transmission before there's any billing for additional bandwidth; it costs about a third the price of leasing a dedicated T1, Kern says.

Using WARP hardware from FatPipe Networks, Ardais connects the wireless and wireline links to the internal network and handles routing, and was able to provide a dedicated backup between its Lexington office and its Internet service provider's Waltham office at about a third of the cost of a landline Border Gateway Protocol (BGP) connection, which Ardais had also considered. FatPipe is the leading provider of router clustering technology, providing redundancy, reliability and speed for WANs.

Deployed about 18 months ago — the process took about a day — the wireless connection "has never hiccoughed, even in bad weather such as a snowstorm," Kern notes. "Wireless is just as reliable." One fact that worked to Ardais's advantage is that the company's office is high enough to get a clear line-of-sight connection to the Waltham ISP, and the building

management had no objection to the installation of the wireless link's antenna. And there have been no issues of security.

Another advantage was that the wireless link fit into Ardais's existing LAN infrastructure. All the company had to do was experiment with the address translator for proper routing, but not retool its external interfaces or management systems. Plus, the FatPipe network device does not require a dedicated network administrator, as a BGP programming does, saving Ardais additional cost. "Anyone who has any experience with networks can get it configured," Kern says.