

Crossing the Digital Divide Volume 7

“Your Network”

by Joseph Feigon
for the Observer

I recently met Trish Steel, fellow resident, neighbor, and Chairman of the Broadband Alliance of Mendocino County. We live in an amazing place, our community is a magical combination of young and less so, our avocations diverse yet complementary. Trish and I were discussing the lack of Internet options here in paradise. While we may never see fiber optic cables running up and down Woodman or Bell Springs, there's no limit to what you can do on your own network.

Your network is called a LAN, also known as Local Area Network. A LAN is essentially house “plumbing” for devices that talk “IP”. This is big. Computers, Printers, Video cameras, Home Automation Systems, Security Systems, Environment Monitoring Systems, Door/Access Control Systems, Media/Entertainment Systems, Phone Systems and more.

The relationship between your WAN (Wide Area Network connection, like Exede or Willitsonline) is not unlike those of us with Water District connections. There is no restriction on how you plumb water throughout your house and property; the District measures how much water you use, and charges for consumption. The District doesn't inventory your swamp coolers, sinks, tubs, showers, or faucets. In a LAN, ‘your network’ can include any number of devices that communicate with one another, or the outside world. While we're limited by the SIZE and SPEED of our WAN connections, there are few constraints (except money) to your building an extensive, integrated, local network.

Why would we want to put any/all of these devices on a LAN at our house/parcel/ranch? IP based products reduce the need for multiple sets of wires for one device (PC, Camera, Phone, etc.), we have the ability to use the same cables for supplying power to our cameras, gate locks and wireless access points. Utilizing the proper grade Ethernet cable and wireless equipment, one could have voice and video access to their front gate, along with the ability to lock/unlock the entrance, all while remaining warm/dry inside your home or the cab of your tractor while working the lower forty. Your ‘local network’ might monitor and control vents in the greenhouse, or tank heaters to your aquaponics setup, or multi-location playback of your extensive music library. You might have a camera/microphone near the crib, with fixed monitors in your kitchen and by your raised beds. Not all devices will need to be accessed from the outside world via your Internet connection, but many of them can be.

In short, there are two “sides” of the Digital Divide: LAN and WAN. Today's WAN options for most of the County remain limited, but not so on the LAN side. Within your own environment, the tools and toys of the 21st Century are not limited by a Satellite, DSL or Cellular modem, rather, your own needs and financial resources.

Next week: Real time communications