

Crossing the Digital Divide (v79)

“Why IP?”

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For the Observer

Electronics fail. Computers, cameras, video recorders, automotive computers, home appliances all suffer the same endgame, hopefully not landfill. Electronic components get hot in use. Electronic devices collect dust when powered up. The collected dust covers heat sinks, fans, vents and more. Dust is powdered dirt. Dirt acts as an insulator. Electronics don't require insulation; they need airflow to dissipate heat. We've talked about this before – don't keep your PC on the floor. Don't use compressed air to clean out your PC, it's too cold and will condense moisture on your electronics (heat, dust and moisture, the deadly triad).

I'm seeing more and more instances of failing components in security systems. These systems, in most cases, represent older technology. Older cameras lack the enhanced flexibility of the newer units engineered to take advantage of both increased intelligence (there are computers in everything nowadays) as well as advances in network capabilities. Older security systems use specialized cables and connectors, and require a one-to-one port arrangement on the DVR (digital video recorder). A DVR is nothing more than a computer designed to store video files. DVR's have disk drives. Disk drives fail.

Video surveillance systems include cameras, cabling, software, and a storage server (NVR, DVR, etc.). Older equipment lacks Infrared capability (ability to see things in low light conditions). Older systems use specialized cables, often designed for INTERIOR deployments, and woefully lack UV or rodent protective casings. Older security systems are limited by input ports on their DVR. The newer, NVR (network video recorder) based systems, unlike their older cousins, use IP to communicate with cameras and security software, and do so across the same cable type used for your computers and printers – Ethernet. Ethernet cabling is available in a variety of grades, from inexpensive indoor only to “carrier-class”, tower and/or direct burial. Ethernet cabling along with IP (Internet Protocol) based networking empowers the user/business owner with the flexibility to expand a security system without major component upgrades. IP means one type of cable distribution for the entire home/business. IP means easier maintenance, centralized control, and the ability (in most cases) to upgrade a systems' software for feature enhancements, granular control, and lower operational costs.

Control those things you can, and keep the surprises to a minimum!