
MIMO - Worth an Upgrade?

You've probably seen the new wireless gear hitting the market with names like "pre-N" (Belkin), SRX (Linksys) and Super-G with MIMO (D-Link). These new products are loosely based on emerging MIMO (multiple input/multiple output) wireless technologies that use multiple antennas to send simultaneous signals (two or more radio waveforms) on a single frequency channel. This method of sending the data increases the efficiency of the transmission, range that the transmission can cover and the reliability of the network as a whole. Field tests of MIMO technology have resulted in networks that can cover twice the range of existing 802.11a/b/g networks - at better data rates.

Problems?

It all sounds great doesn't it? But here's the problem. There are no "solid" MIMO standards currently in place - and none are really expected to be ready until sometime in 2006 and 2007. So any of the equipment you purchase today will work only with that vendors equipment - meaning your access points/routers, adapters, print servers and other wireless gear must all come from the same manufacturer to get the benefits of MIMO technologies. With that said, most manufacturers will probably provide a firmware upgrade in the future to ensure that the equipment you purchase today will be upgradeable to the new standards when they do hit the street.

Now or Later?

So here's our take. If your network is performing well - enjoy it and wait. If however, you own a large house, have lots of walls and other impediments or want to work out by the pool - and still get a high speed network connection - perhaps a MIMO investment is worth the time it'll take to upgrade the firmware in the future. Access points are currently averaging around \$160.00 and network adapters from \$110.00 to \$130.00 each. If you need the speed, reliability and coverage - MIMO may be just what the doctor ordered to upgrade your home wireless LAN.

April, 2005