

Future Stuff

It's difficult to say with any degree of certainty what home networking will be like 3, 5, or 10 years from now. The technology just moves too fast to really know. Think about what home networking was like just 10 years ago. If you had guessed then with any accuracy about what is available today, you would be a gazillionaire by now. We can, however, take some guesses about general trends and—who knows?—maybe we'll be right and we'll be gazillionaires in 10 years (of course, by then, it will only be worth zillions):

- **Everything will get smaller and more integrated**—OK, this one is a bit of cop-out as far as predictions go. Just look at the last 50 years—with the exception of toasters and SUVs, everything is smaller. Toasters are the same size because bread, being very low tech, refuses to get smaller. We have no good explanation for SUVs, other than maybe all those suburbanites would prefer that earth was few degrees warmer, but we digress. In the coming years, you can bet that home networking devices will get smaller, faster, cheaper; will work farther away from your home; and will do more stuff.
- **Providers will merge**—The era of the mega-provider is around the corner. If you have broadband, you are likely already getting your Internet service bundled with your phone or cable service. We are not far from having all three merge. Not long after that, additional services (such as music, movies, video-phone, and home surveillance/security) could all come down the same “pipe.” In some ways, this will benefit consumers because bundling services tends to be cheaper than purchasing services individually and billing is much easier to keep track of. The downside is that a single provider for all these services leaves the consumer at the mercy of the providers in the event of network outage. Privacy advocates also worry about the potential power of a single company or government to have so much information about the types of services you use.
- **“Smart” homes will go mainstream**—For years, there has been this idea that homes will become “intelligent” and will be able take care of all those nuisances you hate to do, such as flipping on a light switch all by yourself or paying your utility bill. Within the next 10 years, though, there is a good bet that your house lights will turn on when you are a block away, your utility bills will be calculated by the house, routed to the provider, and automatically debited from your account. By using radio frequency identification (RFID), your refrigerator and pantry will automatically determine what food and household items you are low on and will order them from the store for you. Pretty much all the technology needed to do this already exists and is getting smaller, faster, and cheaper. In the coming years, the only barrier will be people's willingness to trust and adopt the system.

- **The Internet will be everywhere**—Schools, malls, buses, hospital waiting rooms, bars, concert halls, planes—you name it. In 5 to 10 years, there will be very few places you will go that do not have wireless Internet access. With PDAs, phones, watches, and eye chips, everything will be recorded and fed live to the Internet. It will be a bad time to be a celebrity.
- **Books will not go away**—We’ve heard predictions for years that books and book stores would be replaced by “e-books” and streaming books online. We don’t buy this one. If it does happen, it’s way out in the distance (20 years or more). Books have already been available online for a few years. Yet most people still prefer the physical aspect of a book and turning pages. Laptops and PDAs are still not very usable for reading a book in bed, for example.
- **Wires will disappear**—The technologies already exist and it’s getting cheaper to get rid of just about every wire in your house and life. The remaining tether not yet figured out is power; you still need to periodically or permanently connect to a power outlet. When we get wireless power figured out, life will be grand.
- **Pervasive wireless networking**—Just around the corner (starting to roll out already) are community-wide wireless networks. This will enable hotspot access on a grand scale. When you leave your house, your laptop, PDA, car, watch, etc., will automatically “roam” from your home wireless network to your neighborhood/community wireless network, “roam” to a cellular provider’s wireless data network, and then “roam” into your employer’s wireless network. Constant and instant communications will be possible, enabling applications that were not possible before.