



# Designed for Homes and Ideal for Teleworkers

By Wayne Caswell

Although originally designed for a home network, HomeRF is the best choice for teleworkers because working from home or while on the road introduces networking requirements that enterprise wireless LANs still can't address. IEEE 802.11 variants such as Wireless Fidelity (Wi-Fi) fail to provide toll-quality voice services and compare poorly in such critical aspects as cost, power consumption, reliability, and support for high-network-density environments such as apartment buildings.

HomeRF is fast, with a 10M bit/sec peak data rate in 2001 products and sufficient range for most residential applications, even in the presence of severe interference from microwave ovens, cordless phones, Bluetooth devices and nearby neighbors. The data rates back off to 5M bit/sec or slower if necessary to extend the range or to operate with older HomeRF products. By 2002, HomeRF proponents expect to achieve a data rate of 20M bit/sec or faster with full backward compatibility.

Because HomeRF was originally designed for home consumers, "certified HomeRF" products are generally simpler, more secure, more reliable and more affordable than Wi-Fi products. For example, Proxim's Symphony-HRF products make it easy to move between offices and homes – or between wired Ethernet in the home office and wireless HomeRF on the sofa, kitchen table or patio without changing network or Internet settings.

HomeRF also enables low-cost roaming for access to wireless networks in public places such as coffee shops, libraries and shopping malls. Due to its frequency-hopping technology, HomeRF offers superior scalability in larger installations, with support for up to 15 overlapping networks compared with three for Wi-Fi. Frequency hopping also makes HomeRF less susceptible to interference and more secure than Wi-Fi. And with Proxim's CompactFlash HomeRF adapter, teleworkers can even use a personal digital assistant as an Internet terminal rather than carrying a PC.

Although Wi-Fi has gained some momentum in retail channels, most deployments have been in industry vertical applications, corporate offices and schools. HomeRF continues to dominate the home wireless networking market and remains the choice of broadband carriers for their integrated services. That's because HomeRF integrates voice, data and entertainment – including cordless phones, prioritized media streaming, wireless speakers and Dolby Surround. HomeRF is included in the leading cable modems, the top TV set-top boxes and a growing number of home gateways, music and TV devices, and information appliances.

Unlike Wi-Fi, HomeRF already has quality-of-service support for streaming media and is the only wireless LAN to integrate voice. In fact, HomeRF has a chance to become the worldwide standard for cordless phones. It is a 2.4-GHz extension of the European digitally enhanced cordless telephony standard, with added data and entertainment support and features such as call waiting, caller ID, forwarding to individual handsets, distinctive ringing, and 911 breakthrough.

Broadband, not enterprise IT, will define home-networking standards important to teleworkers and drive the market from early adopter to mainstream. For more information about HomeRF or a white paper on "Wireless Networking Choices for the Broadband Internet Home," visit [www.homerf.org](http://www.homerf.org).

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