

IT Wireless Winter 2003 Essential Product Guide

■ Enterprise resources for wireless deployment

Welcome to where the rubber meets the road in enterprise wireless. Forget about useful services or creative content until you've figured out where your services will live and how you'll deliver them to your customers and employees.

It became clear in 2002 that wireless LANs — more specifically, it was the year of Wi-Fi, aka 802.11b and its faster 802.11a and 802.11g variants — are the conduit that will bring wireless into the enterprise, rather than cellular-based services.

802.11 is essentially an extension of the Ethernet specification for wireless networks. It struggled in early 2002 with holes in its security protocol; academics and random hackers made poking holes in 802.11b into something of a cottage industry. The bottom line is that companies should treat their 802.11b networks as if the information were being broadcast in the clear to anyone within a few hundred feet (which, thanks to the cracking tools now widely available, it is). The situation will start to firm up later this year when the IEEE greenlights an improved security layer for 802.11b; in the meantime, the Wi-Fi Alliance, an industry consortium, is about to release its Wi-Fi Protected Access protocol, an early version of the eventual IEEE 802.11i security standard. Companies also have the option of treating clients on 802.11b networks like remote clients — hot spots of coverage continue to bloom along popular business travel corridors — and securing the transmissions with virtual private network (VPN) clients and encryption technologies, both private and public, like Kerberos and FIPS.

As security fears lessened, wireless's biggest challenge has become the slow economy. Still, analyst firms concur that 2003 will see a huge growth in enterprise wireless deployments, with 90% of companies adding wireless to their IT strategic thinking, according to International Network Services. Allied Business Intelligence says wireless growth will continue to accelerate as multibillion dollar technology and telecommunications companies such as Microsoft, Intel, Dell, AT&T, and IBM enter the wireless LAN industry.

No matter what the network underpinnings, enterprises will see many providers angling to make the connections from mobile devices to email, server, and other information systems, either by providing the systems for IT to deploy or by hosting the connectivity technology. This guide can help you identify the right tools and providers to do so.

SOFTWARE

Client Applications	2
Platforms	2
Security Software	3
Network Management	3
Virtual Private Networks	4
Network Testing and	4
Monitoring	
Hot Spot and Wireless	4
Provisioning and Management	
Roaming	5
Mobility Applications	5

HARDWARE

Client Devices	5
Wireless-Enabled Notebooks	6
Access Points, Routers, and	6
Gateways	
Relays, Antennas, In-Building,	7
and Distance Systems	
Embedded Hardware	8

SERVICES

Consulting	9
Systems Integration	10
Educational Products and	10
Services	

The IT Wireless Essential Products Guide is published quarterly by EmergMedia. It is available only to IT Wireless subscribers and may not be reproduced or retransmitted without express written permission of EmergMedia. Copyright © 2003 EmergMedia. All rights reserved.

SOFTWARE**CLIENT APPLICATIONS****Network Associates**www.mcafee2b.com

VirusScan Wireless is comprehensive virus security application for the mobile and handheld devices, such as Palms and Pocket PCs. Upon synchronization, VirusScan Wireless checks for and deletes any malicious code.

SalesTool.comwww.salestool.com

SalesTool.com lets salespeople, trainers, and customer support staff deliver online presentations and Webinars from a wireless PDA or by voice commands from a cell phone.

SavaJe Technologieswww.savaje.com

SavaJe OS is a Java client for so-called smart phones and other wireless devices enabling the delivery of sophisticated applications and services. The SavaJe OS supports the full spectrum of Java APIs from J2ME to J2SE.

StarRemote Wirelesswww.starremote.com

The StarAdmin software lets IT administrators manage their enterprise systems, including servers, printers, databases, and users from any Web-enabled wireless PDA, mobile phone, or other wireless handheld.

WolfeTech Developmentwww.wolfetech.com

WolfeTech develops software applications for wireless devices to provide mobile business professionals with wireless solutions to their everyday needs. WolfeTech provides consumer applications and custom wireless enterprise solutions.

Xeroxwww.xerox.com

Xerox's remote access software, mDoc, communicates with handhelds to allow users to wirelessly access, e-mail view, fax, and print documents stored on a corporate server.

WIRELESS PLATFORMS**Adomo**www.adomo.com

Adomo enables IT-managed, hands-free wireless email using the AdomoMCS Voice Gateway, a server appliance designed to run VoxML applications.

Air2Webwww.air2web.com

Air2Web's Mobile Internet Platform delivers wireless applications. Using an XML-based platform, developers can write a single application that simultaneously supports all carriers and devices.

Alattowww.alatto.com

The Memphis Platform provides underlying MMS cellular messaging functionality including interfacing with the MMSC, marshalling and dispatching the messages, generating CDRs, integrating with prepaid systems, and providing links to customer information systems.

Asynchrony Solutionswww.asolutions.com

Asynchrony Solutions offers wireless security, collaboration, systems integration, and custom application development.

AvantGowww.avantgo.com

The AvantGo M-Business Server is a mobile software platform for creating and deploying enterprise applications. The company also provides professional services, and mobile business applications for customer relationship management, sales force automation, supply chain management, and field force automation.

Captariswww.captaris.com

Infinite Mobile Delivery from Captaris securely extends the reach of company email, groupware, and other enterprise information to Web-enabled devices, including text-to-speech and voice-reply options.

Extended Systemswww.extendedsystems.com

Extended Systems' software and services portfolio includes data synchronization and device management solutions, mobile applications, and mobile application development tools and services for the enterprise. Extended Systems mobile data solutions "mobilize" existing groupware and custom databases in wired and wireless environments to extend enterprise data to mobile workers.

Interactive Intelligencewww.inin.com

Mobilité is a wireless application gateway that enables companies to rapidly create, deploy, and maintain productivity applications for wireless PDA devices.

iOrawww.iora.com

iOra provides the Mobile Intranet product to let mobile workers access the company portal or intranet through wireless services.

iSecureTracwww.isecuretrac.com

iSecureTrac is an information services and technology company providing solutions for the mobile tracking of individuals and assets, including real-time data collection, secure remote reporting, and data warehousing.

LRW Digitalwww.lrwdigital.com

RemoteAutoReply for BlackBerry creates a customized autoreply message for chosen recipients. RemoteDistributionList sends emails to multiple preferred addresses. RemoteMulti-Calendar lets users to view Microsoft Outlook calendars and address books.

L3 Technologywww.l3technology.com

L3 Technology offers a Java-based wireless platform designed to be used throughout the enterprise to enable wireless access to corporate data and application environments.

NotePagewww.notepager.net/software.htm

NotePage's alphanumeric paging software and wireless messaging software including network paging and Internet paging applications. It lets text messages be sent to single and multiple alphanumeric pagers and paging devices, including Nextel phones.

Onset Technologywww.onsettechnology.com

Onset Technology's Metamessage for Wireless is a suite of software that gives business users access to virtually any data on their enterprise network using a wireless email device such as RIM's BlackBerry.

Pager Softwarewww.pager-software.com

The company provides software to send text or SMS messages to pagers or mobile phones.

PrinterOnwww.printeron.net

The company provides campuswide and hot-spot printing from laptops and Pocket PCs.

Send Text Messagewww.send-text-message.com

The company provides software to send text messages to cellular phones, mobile phones, pagers, or other wireless devices.

Vytek Messaging Serviceswww.vytek.com

Vytek's TelAlert offering is a NSM urgent notification tool for distributed organizations with remote staff requiring 24/7 access to and resolution of critical information using any handheld device.

01 Communiquéwww.01com.com

I'm InTouch is a remote access service that allows access to PCs when users are away and need access and full control of email, calendar, contacts, files, and desktop applications.

SECURITY SOFTWARE**GuardedNet**www.guarded.net

NeuSecure centrally monitors and performs threat analysis in multivendor enterprise security environments by correlating log data files in real time so users detect and respond to security breaches as they occur.

Internet Security Systemswww.iss.net

Internet Security Systems' Wireless Scanner application provides automated detection and security analyses of 802.11b access points and clients.

NetMotion Wirelesswww.netmotionwireless.com

NetMotion Mobility software securely maintains applications when roaming across networks.

Red-Mwww.red-m.com

Red-M's Genos enterprise software solutions provide management and security for both 802.11 wireless LAN and Bluetooth networks and can scale up to networks consisting of 10,000s of users and thousands of access points.

ReefEdgewww.reefedge.com

ReefEdge Dolphin provides advanced security, mobility with session persistence and management for wireless LANs in small to midsize businesses. It is a server-based solution that offers scalable enterprise-class security.

Sigabawww.sigaba.com

Sigaba provides security tools for enterprises deploying wireless mobile devices.

WIRELESS NETWORK MANAGEMENT**Birdstep Technology**www.birdstep.com

Birdstep's IP Zone wireless access software suite offers improved security and intrusion detection, rapid hot spot deployment through automatic installation, and integrated support for seamless mobility between wireless LAN zones and cellular networks.

Broadbeamwww.broadbeam.com

For enterprises that need their employees, customers, and partners to be integrated into business processes, Broadbeam's products and services enable companies around the world to design, develop, and deploy mobile applications.

Fiberlink Communicationswww.fiberlink.com

Fiberlink extends policy management, security, and simplified usability to wireless devices. Fiberlink provides mobile employees with the same secure access to enterprise data over wireless networks as from their desktops.

Intermec Technologieswww.intermec.com

MobileLAN manager is an intuitive, scalable software solution that increases network efficiency and tracks new and existing devices on the network with great accuracy. The Java-based application works on Windows, HP-UX, Linux, and Solaris platforms.

Microsage Wirelesswww.microsagewl.com

SageAdmin Bluetooth Software SageAdmin software assists network administrators to implement Bluetooth in the enterprise while minimizing support time and costs.

Monitoring Softwarewww.monitoring-software.net

The company provides many types of network monitoring software.

NetNearUwww.netnearu.com

NetNearU is a turnkey provider of software management solutions for wireless LAN networks. The TrackOS management solution performs all system management, customer management, and billing functions.

Network Associateswww.networkassociates.com

Sniffer Wireless is a comprehensive solution for IEEE 802.11b wireless LAN applications and deployments. Sniffer Wireless spots security risks in real time, identifies network problems quickly, and reduces network operating costs.

Red-Mwww.red-m.com

Red-M's Genos enterprise software solutions provide management and security for both 802.11 wireless LAN and Bluetooth networks and can scale up to networks consisting of tens of thousands of users and thousands of access points.

ReefEdgewww.reefedge.com

ReefEdge provides advanced security, mobility with session persistence and easy management for wireless LANs. ReefEdge unifies enterprise wireless networks by supporting multiple vendor, multiple radio technologies, and all connected mobile devices.

Softhill Technologieswww.brilan.com

Softhill Technologies offers BriLAN NMS, a network management system that lets users manage, set up, and monitor performance of BriLAN-based wireless devices remotely from all around globe.

Sygate Technologieswww.sygate.com

Sygate Secure Enterprise uses agents on endpoints and network access points to enforce centrally managed policies that prevent loss, theft, and damage. Policies follow the user or computer, adapting to prevent exposure and block threats dynamically.

WhereNetwww.wherenet.com

The WhereNet system offers a single, integrated wireless infrastructure for 802.11b connectivity, real-time asset location, telemetry, and messaging applications.

Wireless Valley Communicationswww.wirelessvalley.com

Wireless Valley's products are used to predict, measure, optimize and manage cellular and PCS in-building systems, as well as public and private wireless networks.

XcelleNetwww.xcellenet.com

XcelleNet provides mobile infrastructure solutions that control devices, maintain corporate applications, ensure currency of data, enable communications over networks, and enforce security policies to protect data.

VIRTUAL PRIVATE NETWORKS**iPass**www.ipass.com

By harnessing the flexibility of IP data communications, iPass enables secure access over multiple computer platforms and access devices via wireless and wireline broadband, ISDN, dial-up, and other access technologies.

Sygate Technologieswww.sygate.com

Sygate VPN Enforcer is a network gateway device that enforces host integrity at network access points to the enterprise network. SVPNE communicates with Sygate Management Server to obtain enforcement policy and agent authentication information.

NETWORK TESTING AND MONITORING**AbsoluteValue Systems**www.linux-wlan.com

AVS provides a remote wireless LAN monitoring and test tool called AirScope.

Berkeley Varitronics Systemswww.bvsystems.com

BVS designs and manufactures wireless test instruments for Wi-Fi applications. Wireless LAN testers include 802.11b, 802.11a, and frequency-hopping receivers with spectrum, PER, multipath and RSSI analysis, along with indoor/outdoor mapping software.

NetIQwww.netiq.com/chariot

Chariot enables pre-deployment network testing and performance measurement. The result is the ability to predict wireless network performance before applications or devices are implemented.

Network Instrumentswww.networkinstruments.com

The company develops network management troubleshooting and analysis tools, protocol analyzers, and wireless analysis tools.

NetSupportwww.netsupport-inc.com

NetSupport Manager remote control software lets users manage or monitor multiple systems simultaneously over a LAN, WAN, and the Internet.

HOT SPOT AND WIRELESS ISP PROVISIONING AND MANAGEMENT**Airpath Wireless**www.airpathwireless.com

Airpath's Roaming Network combines hot spots into a global footprint on common platform. Users have one-click access to Internet. The system offers payment settlement and automated end-user sign up with branding for wireless Internet service providers.

Charter Communicationswww.chartercominc.com

Charter Communications is a full-service telecommunications construction company for wired and wireless systems, including cellular/PCS/paging, LMDS/MMDS point-to-multipoint and point-to-point, and hot spots.

FatPortwww.fatport.com

The FatPoint is an all-in-one access point and authentication gateway for wireless Internet service providers.

Nomadixwww.nomadix.com

Nomadix develops Internet access gateways to handle connectivity, authentication, billing, and service placement so mobile users can travel among locations while maintaining one relationship with their chosen service provider.

WIRELESS ROAMING**Birdstep Technology**www.birdstep.com

Birdstep's Intelligent Mobile IP software allows users and applications to connect and reconnect across different types of infrastructures without application downtime or user intervention.

Boingo Wirelesswww.boingo.com

Boingo provides secure remote Wi-Fi access in hot spot locations, including major airports, hotels, and cafés.

iPasswww.ipass.com

iPass provides software-enabled enterprise connectivity services that give employees secure access to information and applications on the corporate network from any location in the world.

NetMotion Wirelesswww.netmotionwireless.com

NetMotion Mobility software enables reliable, secure mobile computing. NetMotion securely maintains applications when roaming across networks. It lets users go from Wi-Fi to CDPD, GPRS, or GSM without having to change device configurations.

Padcomwww.padcomusa.com

The Padcom Connectivity Suite is a modular

software platform that provides a seamless handoff between dissimilar wireless data networks, allowing continuous connectivity and consistency in wireless applications.

PCTelwww.pctel.com

The PCTel Segue platform is a turnkey software solution that delivers 802.11 wireless data roaming.

SkyNetGlobalwww.skynetglobal.com

SkyNetGlobal delivers secured remote access to corporate networks across multiple technologies through one single service virtually from anywhere.

MOBILITY APPLICATIONS**Avesair**www.avesair.com

Avesair provides mobile marketing technology and services for mobile carriers, publishers, and media companies. Avesair's technology lets partners drive media revenue and increase adoption of wireless data services.

MDSI Mobile Data Solutionswww.mdsi-advantex.com

Advantex is MDSI's mobile workforce management solution that allows companies to meet customer commitments and provide optimal service delivery, while reducing costs and streamlining operations.

PointServewww.pointserve.com

PointServe provides service supply chain management solutions that optimize the economic performance of the field service organization, from demand forecasting to customer appointment setting to service technician scheduling and dispatching.

HARDWARE**CLIENT DEVICES****Compsee**www.compsee.com

Compsee manufactures the Apex series of portable batch and wireless terminals, along with a series of keyboard wedges.

Handspringwww.handspring.com

With Treo communicators, making calls, accessing email, sending short messages and web browsing is possible from one device. The Treo 90 is a handheld computer with Secure Digital expansion.

Intermec Technologieswww.intermec.com

The Intermec 700 Color Pocket PC integrates up to three communications options — wireless LAN, wired LAN, and Bluetooth — in a single device. It is available with 1D and 2D imaging or PDF417 laser scanning.

LXEwww.lxe.com

LXE manufactures rugged wireless data-collection solutions, including handheld and vehicle mounted computers, for supply-chain execution applications and real-time communications.

Palm Solutions Groupwww.palm.com

Palm products, such as the new Tungsten line of wireless PDAs, give enterprise employees access to information they need to make informed business decisions on the go.

Research in Motionwww.blackberry.net

The RIM BlackBerry provides quick, easy wireless access to corporate e-mail, calendar, and address books wherever you go. The BlackBerry includes desktop tools, server software, and a choice of wireless networks to connect via.

SpectraLinkwww.spectralink.com

SpectraLink's NetLink wireless telephones operate over 802.11b wireless LANs, allowing converged mobile voice and data applications on a single wireless infrastructure. The voice-over-IP phones run on 802.11b wireless LANs from multiple vendors.

Sygate Technologieswww.sygate.com

Sygate Wireless Enforcer is a network gateway device that enforces host integrity at network access points to the enterprise network.

Symbol Technologieswww.symbol.com

Symbol provides application-specific mobile wireless devices that run on 802.11a and 802.11b wireless LANs.

Vocera Communicationswww.vocera.com

The Vocera Communications System provides hands-free, voice-activated communications throughout any 802.11b networked campus, using a communications badge and central server. The system enables instant voice conversations among team members.

WIRELESS-ENABLED NOTEBOOKS**Acer America**www.acer.com/aac

Acer's TM632XCi-D notebook integrates 802.11b wireless LAN to deliver a notebook that provides value, performance, and portability.

Apple Computerwww.apple.com

Apple's PowerBooks and iBooks offer 802.11b and 802.11g AirPort networking, depending on the model.

Dell Computerwww.dell.com

Dell offers 802.11 networking in some models of its notebooks and tablets.

Gatewaywww.gateway.com

Gateway offers 802.11 networking in some models of its notebooks.

Hewlett-Packardwww.hp.com

Hewlett-Packard offers 802.11 networking in some models of its notebooks and tablets.

IBMwww.ibm.com

IBM offers 802.11 networking in some models of its notebooks.

Panasonic Computer Solutionswww.panasonic.com/toughbook

Panasonic provides mobile professionals with the ruggedized, wireless-ready Toughbook line of notebook and handhelds.

Sony Electronicswww.sony.com

Sony offers wireless networking in some models of its notebooks.

Toshiba Americawww.toshiba.com

Toshiba offers 802.11 networking in some of its notebooks and tablets.

ACCESS POINTS, ROUTERS, AND GATEWAYS**AmbiCom**www.ambicom.com

AmbiCom provides 802.11b access points and client adapters.

Asanté Technologieswww.asante.com

Asanté provides PC Card, PCI, USB 802.11 client adapters, as well as USB Bluetooth adapters, for Windows and Macintosh users.

Belkinwww.belkin.com

The Belkin Wireless Network Access Point, Notebook Card, and Desktop PCI Card are interoperable with any 802.11b device. It also offers a wireless router.

Buffalo Technology USAwww.http://www.buffalotech.com/wireless

Buffalo Technology manufactures a line of 802.11 access points, client adapters, and antennas for enterprise and consumer users.

Cirronetwww.cirronet.com

Its wireless data products include Ethernet bridges, network access points, and stand-alone serial modems for flexible and customized wireless network deployment.

Cisco Systemswww.cisco.com

The Aironet 1100 Series IEEE 802.11b Wireless LAN Access Point delivers enterprise features including virtual LANs, Mobile IP, QoS, and upgradability in a single, scalable device.

Digital Networkswww.digitalnetworks.net

The DNwireless AP11 802.11b access point and PC Card client adapter provide cost-effective wireless LAN connectivity, with a SNMP management utility. The DNwireless NetCatcher 802.11b Broadband Router provides Internet access for multiple users sharing a single-user account, as well as firewall and access filtering.

Enterasys Networkswww.enterasys.com/wireless

Enterasys offers the RoamAbout R2, a dual-slot, 802.11b/a, modular wireless access point (for indoor and outdoor use) with user-personalized networking.

Gentek Marketingwww.gnet.ca

Gentek offers the Gnet brand of 22Mbps wireless access points and PC Cards and PCI adapters. Gnet's 22 Mbps wireless equipment interoperates with 802.11b 11Mbps devices.

Hewlett-Packardwww.hp.com

HP offers a wide variety of secure wireless connectivity products for home and commercial applications, including wireless access points, wireless cards, and related adapters.

Intermec Technologieswww.intermec.com

The MobileLANaccess series include 802.11b and 802.11a models, as well as the WA21 model that incorporates dual radios to support both 802.11a and 802.11b.

IOGearwww.iogear.com

IOGear's Bluetooth Network Starter Kit includes two adapters to connect computers to wireless-enabled devices for data synchronization.

Linksyswww.linksys.com

Linksys's line of 802.11b products include PC Card, USB, PCI, and CompactFlash client adapters, as well as wireless access points, print servers, and routers. The company's line of 802.11a wireless products include a PC Card and access point.

National Datacommwww.ndclan.com

NDC's InstantWave 802.11b 11Mbps product line consists of an access point, a bridge, both a PC Card and a PCI client adapter, and various indoor and outdoor antennas.

Netgearwww.netgear.com

Netgear offers the HA501 802.11a 32-bit CardBus adapter for notebooks, as well as the Netgear MA301 802.11b PCI adapter. It also offers wireless routers and print servers.

Proximwww.proxim.com

Proxim provides high-performance wireless LAN and WAN access point, router, and client adapter products.

SMC Networkswww.smc.com

SMC's wireless broadband routers help users securely share a broadband connection, files, printers, and other network resources.

Socket Communicationswww.socketcom.com

The Bluetooth Connection Kit, a CompactFlash card for Pocket PC handhelds, enables access to email and Internet via Bluetooth-enabled phones. The Low Power Wireless LAN Card, a CompactFlash card, connects Pocket PC handhelds to 802.11b wireless LANs.

Sony Electronicswww.sony.com/vaio

Sony offers a complete line of 802.11 products, including the first 802.11a access point and PC Card, as well as 802.11b PC Cards.

Symbol Technologieswww.symbol.com

Symbol develops and deploys 802.11a and 802.11b wireless LAN infrastructure, including access points, client adapters, and routers.

TDK Systemswww.tdksystems.com

TDK provides Bluetooth client adapters for Hewlett-Packard iPaqs, various Palm and Palm-based IBM PDAs, desktop PCS, and notebooks. The devices enables cable-free data exchange between PCs and Bluetooth-enabled mobile phones, PDAs, and headsets.

Teletronics Internationalwww.teletronics.com

Teletronics offers a broad range of wireless LAN cards and access points.

3Comwww.3com.com

3Com offers customers a wide range of 802.11a, 802.11b, and 802.11g PC cards and access points for both enterprise and consumer environments.

Uniden Americawww.uniden.com

Uniden offers 802.11b access points, as well as PCI and USB client adapters.

Wireless Technologywww.gotowti.com

WTI offers the Mach II Series point-to-point and point-to-multipoint access points.

ZyXelwww.zyxel.com

ZyXel's Prestige 650HW is an all-in-one ADSL router/modem and 4-port switch with 802.11b wireless LAN functionality.

WIRELESS RELAYS, ANTENNAS, IN-BUILDING, AND DISTANCE SYSTEMS**Aperto Networks**www.apertonet.com

Aperto Networks provides scalable broadband wireless access systems. The PacketWave is a point-to-multipoint family of base stations, subscriber units, associated radios, and antennas (2.5GHz, 3.5GHz, and 5GHz).

Axxcelera Broadbandwww.axxcelera.com

Axxcelera Broadband manufactures of point-to-multipoint fixed wireless UNII band hardware.

Bluesocketwww.bluesocket.com

Bluesocket manufactures a family of wireless gateways that secure and manage wireless LANs in enterprises and public hot spots. Its WG-2000 offers IPsec and delivers encrypted-data performance up to 150Mbps.

Centurion Wireless Technologieswww.centurion.com

Centurion offers a wide range of standard and custom in-building antenna products for wireless LANs, including dipole, dual-band 802.11a/b, and ceiling antenna panels.

Ceragon Networkswww.ceragon.com

Ceragon's high-capacity broadband wireless networking systems operate across multiple frequencies from 7GHz to 38GHz and support integrated high-capacity services over IP, SONET/SDH, and ATM networks.

DragonWavewww.dragonwaveinc.com

DragonWave offers high-performance broadband wireless networking products for enterprises with real-time IP wireless network needs.

EnGenius Technologieswww.engeniustech.com

EnGenius provides wireless high-power outdoor bridges, hot spots, client bridges, and antennas for building-to-building users and wireless Internet service providers.

Gentek Marketingwww.gnet.ca

The Gnet 11Mbps wireless integrated access point/bridge/15dBi antenna helps create a building-to-building wireless network. Gnet also offers a wide range of antennas, surge suppressors, cables, and other mounting hardware.

Harris Microwave Communications Divisionwww.ourstuffworks.com

Harris MCD is the largest supplier of microwave systems in North America and a leading supplier worldwide. Harris's product line includes both microwave and millimeter wave systems for both point-to-point and point-to-multipoint architectures.

IP3 Networkswww.ip3networks.com

IP3's NetAccess for Wireless Hot Spots is an Internet gateway that allows coffee shops, airports, and hotels to provide high-speed, wireless connectivity to mobile users. Features include service policy management and bandwidth control. IP3's NetAccess for Hospitality gives hotel guests hassle-free broadband connectivity, enables service providers to deploy high-speed Internet access.

IPWirelesswww.ipwireless.com

IPWireless offers Advanced 3G Broadband, the first total network solution based on UMTS TD-CDMA (TDD) standards. It includes complete network infrastructure equipment and pocket-sized wireless modems, and operates on 1.9GHz, 2.5GHz, 3.4GHz, and other frequencies.

MaxRadwww.maxrad.com

MaxRad designs and manufactures wireless communications antennas for broadband wireless access and in-building wireless voice and data networks operating in 800/900MHz, PCS, 802.11b 2.4GHz, and 802.11a 5.8GHz frequencies.

Plaintree Systemswww.plaintree.com

Plaintree offers free-space optical (FSO) wireless LANs from E1/T1 to 100Mbps. Plaintree's WaveBridge links are transportable and act as a replacement for cable or fiber, while providing Class 1 eye-safe LED technology.

Tecom Industrieswww.trak.com

Tecom Industries supplies antennas, positioners, and control systems for the wireless, defense, and satellite communications markets.

Teletronics Internationalwww.teletronics.com

Teletronics provides bidirectional amplifiers and frequency converters for broadband wireless, as well as customer-presence equipment (CPE units) for wireless Internet service providers.

Trango Broadband Wirelesswww.trangobroadband.com

Trango Broadband Wireless offers multipoint, fixed wireless products operating in the 5.8GHz spectrum, delivering 10Mbps throughput at distances of 10 miles.

Wave Wireless Networkingwww.wavewireless.com

Wave Wireless Networking produces fixed-

wireless broadband solutions. The company's products feature mesh and star topology, DHCP, NAT, speeds of up to OC-3, and distances of up to 25 miles.

EMBEDDED HARDWARE**Amphion Semiconductor**www.amphion.com

Amphion designs semiconductor IP cores for wireless system-on-a-chip applications, from 802.11a and 802.16 to UWB and 4G.

Atheros Communicationswww.atheros.com

Atheros develops networking technologies for secure, high-performance wireless LANs. Using OFDM technology, Atheros delivers transparent connections among electronic devices in the office, home, and on the road.

Cracom Engineering Technologieswww.cracom.com

Cracom designs products using 802.11a/b and Bluetooth for wireless Internet service provider applications. It provides research and development of RF/microwave hybrid components, active antennas, wireless facility IT protection systems, wireless LAN test equipment and instruments for RFIC/SOC ATE platforms.

fSona Communicationswww.fsona.com

fSona Communications designs and manufactures the Sonabeam series of free space optical (FSO) wireless systems for delivering high-speed communications to carriers, service providers, and enterprises.

NTRU Cryptosystemswww.ntru.com

NTRU delivers strong, fast security that operates with minimal power consumption and fits into a tiny footprint, making it easy for customers to build devices that people trust for RFID, mobile communications, multimedia and embedded markets.

Vivatowww.vivato.net

Vivato is a manufacturer of next generation

Wi-Fi infrastructure products designed to enable high bandwidth Wi-Fi wireless networks everywhere: in the enterprise, across campuses and throughout metropolitan areas. Products due in early 2003.

Vytek Wireless Products

www.vytekproducts.com

Vytek designs and produces infrastructure, including long-range broadband solutions and wireless messaging equipment for public safety, transportation, and other industries.

SERVICES

WIRELESS CONSULTING

Communications Consulting Services

www.ccsi-solutions.com

CCS consults, designs, and deploys wireless systems for small to large enterprises.

Core Competence

www.corecom.com

The network security consulting firm focuses on wireless LANs and virtual private networking. Its services include competitive analysis, solution design, white paper development, product evaluation, and training for companies and industry conferences.

Gartner Consulting

www.gartner.com

Gartner provides IT management consulting to help determine appropriate use of wireless technologies, design appropriate architectures to support them, and guide clients through the process of technology and vendor selection.

GTCI

www.gtcpro.com

GTCI provides engineering, training, and consulting services for all things wireless, including wired LAN-wireless LAN bridging.

Industrial Data & Information

www.idii.com

IDII provides software selection tools and services aimed at the supply chain. Services in-

clude requests for proposals, research reports, and software directories (WMS, TMS, and SCE), as well as warehouse management system software.

The Kerton Group

www.kerton.com

The Kerton Group consults on wireless business development and product strategy. It covers 3G, wireless Internet and devices, and broadband wireless for carriers, content/application/service providers, and manufacturers worldwide.

Nuclear Digital

www.nucleardigital.com

The consulting firm's services include computer networking, Web development, security, and integration of wireless technology.

Spectra Technology Solutions

www.thinksts.com

STS provide wireless LAN network solutions to small businesses.

Sunbay Software USA

www.sunbay.com

Sunbay provides consulting services and preparation of requests for proposals for wireless technologies. It also provides compression and encryption technology for wireless transmissions via various protocols (GSM, GPRS, and UMTS) plus application development for wireless and handheld devices.

Sygate Technologies

www.sygate.com

Sygate Global Professional Services offers educational services that are designed for end users who are responsible for supporting the deployment, day to day operations, and maintenance of the Sygate Secure Enterprise (SSE) suite.

Velo-Blue Consulting

www.velo-blue.com

Velo-Blue provides end-to-end corporate marketing and consulting services to the wireless telecom and datacom markets. Core competencies include: PR/AR relations, competitive intelligence, market positioning

and demand/technology assessments

Technia

www.techniallc.com

Technia guides customers through the process of planning wireless LANs, from site survey through installation and staff training.

Technocrats Consulting

www.technocrats.bravepages.com

Technocrats provides wireless consulting, training, and system integration.

Tuanis Technology

www.tuanistechnology.com

Tuanis Technology is a business advisory and integration services organization specializing in unlicensed wireless networks such as those based on 802.11. Tuanis offers a suite of business, market analysis, technical, engineering, installation, and support services.

Vigilar

www.vigilar.com

Vigilar is an information security and risk management solution provider. It offers services in wireless security, perimeter security, content security, identity management, certification training, and education.

Wireless InfoNet

www.ask-wi.com

Wireless InfoNet provides wireless Internet service providers with design, consulting, training, and troubleshooting. It also provides vendor-neutral wireless ISP training and the book Deploying License-Free Wireless WANs.

Wireless Resource

www.alphapagingsoftware.com

Wireless Resource provides cellular, mobile, and paging industry resources and information. Wireless resources include information on cell phones, pagers, mobile devices, and cellular events.

Wi-Tek Engineering

www.wi-tek.com

Wi-Tek provides Wi-Fi and network consulting services, including site surveys, network engineering design, and project management.

The Yankee Groupwww.yankeegroup.com

The Yankee Group offers technology research and consulting, focusing on the areas of wireless strategic planning assistance, technology forecasting, and industry analysis.

WIRELESS SYSTEMS INTEGRATION**AccessPlus Communications**www.accesspluscom.com

AccessPlus provides wireless system engineering and installation throughout New England and has experience with 2.4GHz through 60GHz and free-space optical (FSO) links. It also operates as a local exchange carrier.

AccuCodewww.accucode.com

AccuCode is a systems integrator and value-added reseller of data collection, management, and networking technologies.

Anyware Network Solutionswww.anywarewireless.com

The broadband wireless network systems integrator offers wireless LAN and WAN services: consulting, RF and network design, project management, custom installation, technical training, and network maintenance.

Calhoun Communicationswww.calhouncommunications.com

Calhoun provides path/spectrum analysis and installs and designs the most appropriate data communication solutions.

The Cherry Hill Companywww.chillco.com

Cherry Hill creates public and private wireless infrastructures for public libraries and other municipal buildings and facilities.

Compuquip Technologieswww.compuquip.com

Compuquip Technologies is an IT consultancy and systems integrator serving the needs of businesses, state and local government

agencies, school systems, and nonprofits.

CreativeMedia Software Solutionswww.creativemediasoftware.com

CreativeMedia provides software development services including architecture, design, development, and testing. It specializes in device driver and software development for 802.11 hardware.

Donovan Consulting Groupwww.dcgj.com

DCG provides wireless LAN integration services such as site surveys, installation, project management, and training. DCG also provides ancillary wireless LAN components such as secure enclosures, antennas, cables, and mounting solutions.

DTNetwww.dtnet.com

The firm provides wireless networking and security services, from survey to installation.

Extreme Logicwww.extremelogic.com

Extreme Logic builds and delivers business solutions focusing on advanced technical strategies, business process design, application development, and technical architecture.

MicroServe Consultingwww.msconsulting.com

MicroServe offers systems integration, consulting services, support, and IT outsourcing for small, medium, and large businesses, including for wireless networks.

Netcom Internationalwww.netcomintl.com

Netcom provides wireless LAN site survey, design, installation, data cabling, electrical work, staging, configuration, and nationwide rollout.

Optimus Solutionswww.optimussolutions.com

Optimus Solutions has an emphasis on enterprise systems integration and infrastructure design for mobile/wireless, e-business, and enterprise integration.

Signa Serviceswww.signaservices.com

Signa Services is a hardware-neutral professional services organization that provides total wireless LAN project management, from analysis and design to user support.

Symbol Technologieswww.symbol.com

Symbol develops and deploys mobile voice and data services, including application-specific mobile wireless systems for the inventory/logistics, transportation, and retail industries.

Total1 Internet Solutionswww.total1.net

Total1 provides site design, evaluation, and installation of fixed and mobile wireless solutions, including T1, T3, and OC-3 bandwidth with security solutions and custom network design.

WiFinderwww.wifinder.com

WiFinder offers packaged solutions, advisory services, and marketing tools for adding, using, and securing wireless networks.

EDUCATIONAL PRODUCTS AND SERVICES**Addison-Wesley**www.awprofessional.com

Addison-Wesley has published Wireless Security and Privacy: Best Practices and Design Techniques, which shows readers how to build security into a wireless system at a foundation level.

Learning Edgewww.learnedge.biz

Wireless LAN training is Learning Edge's main business, and its classes cover wireless LANs, radio, and security.

O'Reilly & Associateswww.oreilly.com

O'Reilly provides books and articles on a wide range of wireless topics, including its online WirelessDevcenter.