Wi-Fi WLAN

Monthly Newsletter

Covering 802.11x, Bluetooth, Telematics, and Enterprise/Campus/MTU/MDU Wireless Deployments

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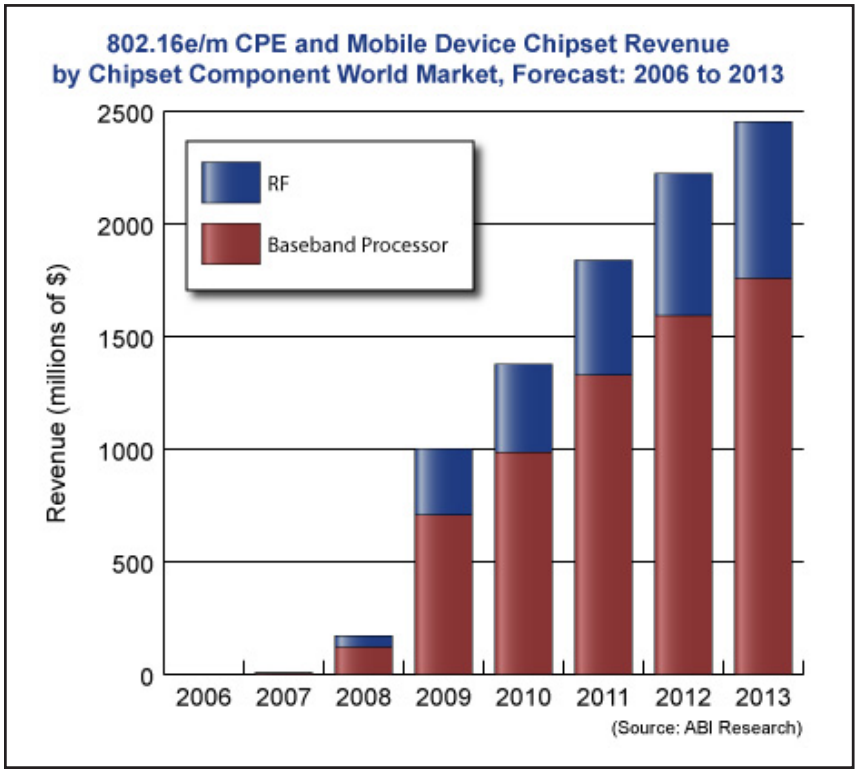

SERVICES

Alltel Wireless Wi-Fi now available to all US residents

America's largest network is growing, and now everyone in the United States can take advantage of premium Wi-Fi access from Alltel Wireless. Now Alltel and non-Alltel customers have access to more than 25,000 hotspots developed through Alltel's relationship with Boingo Wireless, the global market leader in Wi-Fi. So whether you are traveling

In This Issue...

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across the country, waiting to catch a plane, or checking out the latest paperback book release, Alltel Wireless can keep you connected.

Alltel Wi-Fi is available for purchase by anyone in the United States as a standalone offer. Consumers can access unlimited Wi-Fi access for $19.99 per month or $3.99 per day with no contract commitment.

In the past year, more than 15,000 additional hotspots have been added to Alltel's nationwide service, which includes thousands of hotels, bookstores, coffee shops, and fast food restaurants.

Travelers can also take advantage of Alltel's premium Wi-Fi service, which provides Internet access in more than 100 of the nation's airports and thousands of hotspots across Canada, Mexico, and Europe. Exact locations of Wi-Fi hotspots can be found at http://Wi-Fi.alltel.com, and downloadable Wi-Fi software for laptops can be downloaded for free at http://software.alltel.com.

Recently, Alltel Wireless began offering an Internet Anywhere Bundle, allowing Alltel customers to bundle their Wireless Internet plan with unlimited Wi-Fi access for their laptops. The $69.98-per-month bundle gives customers the choice of connecting to either Alltel's EVDO network or a Wi-Fi hotspot. More information about the bundle is available at www.alltel.com/Internet.

"The Internet Anywhere Bundle is a common-sense approach to network connectivity and will enhance the choices available for our customers," said Angela Rittgers, director of product marketing.

"Alltel, together with Boingo Wireless, is pleased to offer the flexibility of Wi-Fi to stay in touch with families and friends or access work email and schedules through a reliable connection."

Alltel Wireless continues to provide choice and control to the customer's wireless experience with its exclusive "My Circle" feature, giving customers unlimited calling to and from any five, 10, or 20 numbers on any network for free. Alltel Wireless was also the first to offer Anytime Plan Changes, giving customers the flexibility to change their calling plans at any time, without extending their current contract. Additionally, Alltel recently received "Highest Call Quality Performance Among Wireless Cell Phone Users in the West and Southeast Regions, and in the Southwest Region in a Tie" according to J.D. Power and Associates' 2008 Wireless Call Quality Performance Study — Vol. 1.

Skyhook Wireless launches in Europe

Skyhook Wireless, provider of the Wi-Fi Positioning System and XPS 2.0, the hybrid positioning system, announced its formal launch in Europe. The launch includes a massive coverage expansion throughout the UK and Europe and the establishment of sales and operational offices in the region.

Skyhook has already mapped over 16 million Wi-Fi access points in Europe and now provides coverage to over 130 million people in Europe. Skyhook's fleet of 200 European data-collection specialists has driven over 750,000 kilometers to date and continues to expand coverage every day.

"Skyhook's European expansion is an important step towards our goal of delivering consumer-ready location across any environment, indoors or outside, in rural areas or downtown, in Berlin or Boston," said Ted Morgan, CEO of Skyhook Wireless.

European application providers are taking advantage of Skyhook's European expansion. UK-based BuddyPing and Rummble and Dublin-based Locle are integrating Skyhook's software into their applications.

By working with Skyhook's positioning system, these mobile social networking and search applications are responding to the consumer demand for fast, accurate, and reliable location determination in all environments.

MacBook users now enjoy one-click Wi-Fi with GoBoingo for Mac

The MacBook community now has a convenient and affordable way to access Boingo Wi-Fi at more than 100,000 hotspots worldwide. A Mac version of the lightweight GoBoingo! client software, which simplifies the process of logging in to public Wi-Fi hotspots, is available for download at http://www.boingo.com/download.html.

GoBoingo! is a great tool for travelers who want high-speed Internet without the hassle of searching for coverage, memorizing multiple usernames and passwords, and paying different Wi-Fi providers at each stop during a trip. Boingo has affordable monthly plans for both North American and international usage, as well as a "pay as you go" option.

"With our GoBoingo! software for MacBooks, you are now just one click away from enjoying Wi-Fi service at hotspots around the world," said Dawn Callahan, vice president, consumer marketing, Boingo Wireless. "We now have an easy-to-use Wi-Fi utility for the legions of MacBook users who want to be connected to Boingo Wi-Fi hotspots at airports, hotels and retail locations."

GoBoingo! for Mac works on MacBooks running Mac OS X 10.4 (Tiger) and 10.5 (Leopard), and PowerBooks running Mac OS X 10.4. GoBoingo! is also available for Windows and runs on Vista, XP, and Windows 2000. The lightweight authentication tool automatically determines whether a hotspot belongs to a Boingo roaming partner and helps users log on to the Internet with their Boingo account in a single click. Less than 1MB, the tool installs quickly and stays in the background until the Boingo member needs to log into a Wi-Fi network.

According to usage reports from airport Wi-Fi networks operated by Boingo, there is a steady increase in Wi-Fi connections from MacBooks and PowerBooks. As of January 2008, nearly 20 percent of airport usage comes from Mac laptops, an increase of 30 percent since January 2007.

Online travelers will find Boingo in the places they need it most; a Boingo account works at more than 475 airports, including 85 of the top 100 airports worldwide. Boingo is also available at more than 17,000 hotels, such as Hilton and Marriot, and retail destinations, such as Barnes & Noble. Other locations include coffee shops, restaurants, and cafés.

Boingo operates Wi-Fi networks at 30 major US and UK airports, including Atlanta-Hartsfield, JFK and LaGuardia in New York, Chicago's O'Hare, and Heathrow in London.

Time Warner Cable deploys Bandspeed AirMaestro WLAN solution in student apartment building

Bandspeed Inc. announced the successful deployment of its AirMaestro wireless LAN (WLAN) solution by Time Warner Cable at Jefferson West, a large student apartment building that houses 350 students at The University of Texas at Austin. The Bandspeed system combines the AirMaestro Virtual Controller Access Points (APs) with AirMaestro WLAN monitoring and management software, providing a complete WLAN solution.

The Bandspeed system replaced an existing WLAN solution from another manufacturer. The previous WLAN was plagued with wireless coverage and capacity problems throughout the six-story complex, resulting in severe performance degradation and user dissatisfaction. The previous WLAN also didn't provide centralized and remote network management, making it difficult to address performance issues without sending a technician on-site. The apartment complex was inundated with calls from students complaining about their lack of wireless connectivity — so it was time to make a change.

Time Warner Cable selected the Bandspeed AirMaestro WLAN to solve the issues. The network was initially upgraded by

replacing the existing access points with Bandspeed AirMaestro APs in the same locations. Both coverage and performance were significantly improved through the superior RF performance of the AirMaestro APs. Next, additional APs were installed to provide the blanket coverage and network capacity demanded by the student tenants. The combination of the scalability of the AirMaestro WLAN architecture and the APs support for standards-based power-over-Ethernet allowed additional APs to be easily added to the network where they were needed. WLAN throughput improved dramatically throughout Jefferson West — by as much as 1,400 percent in some areas.

"Our tenants immediately noticed the difference, and so did we — the complaints about wireless connectivity dropped to zero," said Mark Schliep, director of community operations for Jefferson West.

Bandspeed's AirMaestro APs and WLAN management software proved easy to install at the facility. The APs intelligently and dynamically select the appropriate WLAN channels on which to provide access, improving the user experience and providing consistent Wi-Fi coverage.

In addition, each AP includes an integrated dual-band spectrum analyzer. When used in conjunction with the AirMaestro WLAN Management Console software, this allows Time Warner Cable to remotely view the RF environment around any AP in the Jefferson West network in real time. The system automatically detects RF interference from devices such as cordless phones and microwave ovens — consumer devices that can severely degrade wireless network performance — allowing Time Warner technicians to adjust the AP settings remotely to prevent network problems.

"Bandspeed's deployment at Jefferson West has exceeded Time Warner's expectations," said David Roon, vice president, Time Warner Cable, Austin. "We haven't received a single WLAN support call since the AirMaestro system was installed. AirMaestro has proved to be an intelligent and robust WLAN solution that allows Time Warner Cable to confidently deploy wireless service for our customers."

"Bandspeed is very pleased to be working with Time Warner Cable," said Bill Eversole, president and CEO, Bandspeed. "Our enterprise-class AirMaestro WLAN solution is the ideal platform to extend Time Warner's high-performance, broadband solutions to its customers."

Xirrus enables high-performance Wi-Fi For Middleton Paper facilities

Xirrus Inc., a provider of Wi-Fi "Power-Play" that can replace Ethernet workgroup switches with Wi-Fi as the primary network connection, announced that Middleton Paper has deployed Xirrus Wi-Fi Arrays across four paper manufacturing and warehousing units in the United Kingdom. Middleton Paper selected the Xirrus solution for its ability to pervasively cover its facilities far more effectively with far less equipment than other Wi-Fi manufacturers.

"We have a difficult environment with heavy machinery that processes 50,000 tons annually and warehouses 15,000 tons of paper within four individual units-it is very labor intensive to pull CAT5 cable in these buildings," said Martin Travis, IT/project manager at Middleton Paper. "We chose Xirrus because they have the most powerful Wi-Fi solution we could find-no other Wi-Fi vendor could cover each of our warehouses with a single cable drop. By centrally mounting a Wi-Fi Array in each warehouse, we are able to have complete coverage that provides a persistent network connection for our wireless scanners, printers and PCs."

The Xirrus Wi-Fi Array integrates 4, 8, or 16 radios and high-gain directional antennas into a single device along with an onboard Gigabit

switch, Wi-Fi controller, firewall, dedicated Wi-Fi threat sensor, and embedded spectrum analyzer, providing the performance and security to replace Ethernet workgroup switches with Wi-Fi technology, and obsolescing traditional Wi-Fi offerings.

"Traditional controller-based Wi-Fi architectures would have required multiple wall-mounted access points along with hundreds of meters of CAT5 cabling, Wi-Fi controllers, and additional Ethernet switch ports in each warehouse-too cumbersome and costly," Martin added.

"Middleton Paper is known throughout the United Kingdom as one of the leading independent Paper Merchant/Convertors with a reputation for the highest quality customer service and products-with the Xirrus Wi-Fi Arrays, they now have a wireless network that will save them time processing orders and tracking inventory from receiving to shipping, saving enormous amounts of time filling customer orders," said Chris Allen, regional manager, United Kingdom, at Xirrus.

Array Networks helps Telenor implement first nationwide secure wireless hotspot services

Array Networks, a global provider of enterprise secure application delivery, announced that its SPX SSL VPN technology is being deployed as an integral part of Telenor's new next-generation nationwide Wi-Fi network and wireless hotspot deployment. Covering 24 cities in Sweden, Telenor's new service is the first to offer a nationwide secure broadband wireless service at hotspots.

Previous hotspot solutions left people open to security vulnerabilities such as spoofing, sniffing, man-in-the-middle attacks, etc. This created security risks for users accessing their email accounts and bank accounts from public wireless hotspots. By implementing Array's SPX SSL VPN technology, Telenor's next-generation hotspots provide end-to-end encryption and identity-based access to make it far less vulnerable to these risks without sacrificing ease of use.

Telenor is deploying Array's SPX5000 Universal Access Controllers to provide end-to-end security for all connections and to seamlessly provide segmented access based on the identity of the user. With Array, Telenor gets the benefits of a scalable platform architecture that not only handles the highest number of concurrent users and provides the highest level of security with utmost simplicity, but also provides future extensibility for other service offerings.

"People now expect to able to be securely connected not just at home, but wherever and whenever," said Mathias Tonnesson, director of Telenor Wi-Fi. "With our new secure nationwide wireless network and our new service sakersurf, we are able to secure even first generation unsecure wireless networks, this helps to reduce the risk that someone improperly can access personal information such as passwords. We extensively tested many products from different vendors and found Array SPX5000's SSL VPN based wireless LAN security offering to be the most scalable and intuitive security solution to deploy and manage."

The service went live on July 5, 2008. The nationwide HotSpot services will be initially offered for free for all users until September. Additional services will be offered on top of this platform in the future.

"We are pleased to announce this cooperation with Telenor and strongly believe that it will deliver secure and innovative wireless mobility services," said Michael Zhao, president and CEO of Array Networks. "Security has been a missing element in most hotspot deployments. Telenor is taking a leadership role in addressing this problem squarely. Security and scalability are at the core of the Array products. We are constantly finding new ways to offer the most intuitive, secure access solutions."

CONTRACTS

IPass delivers remote working for Sony Ericsson

IPass Inc., a provider of mobility services to many of the world's largest companies, announced that Sony Ericsson, a global provider of mobile multimedia devices, including feature-rich phones, accessories, and PC cards, is rolling out iPass Mobile Office to its global remote workforce. Sony Ericsson has offices around the world, including Sweden, UK, France, Netherlands, India, Japan, China, and the US.

IPass Mobile Office is a service that unifies mobility management over any Internet connection. It works to optimize mobile access, centrally manage mobile devices and connections, and control the end-user organization's mobility expenses. Users connect via the iPassConnect mobility manager, enabling a simple and consistent user experience over all Internet connections, multiple access technologies, and various laptop and handheld device platforms.

IPass has become an obvious choice for enterprises with large mobile workforces due to its high level of usability and expansive global Wi-Fi network, which now includes over 100,000 Wi-Fi hotspots (including more than 50,000 in Europe) and coverage in over 550 unique airports. Other hotspots locations include hotels, cafes, restaurants, and retail outlets.

"Customers such as Sony Ericsson need a solution that gives their mobile workers the flexibility to access corporate resources on the road, while having the necessary tools to keep a hold on costs — iPass fits the bill perfectly," said Rene Hendrikse, managing director, iPass EMEA. "We have a very strong local team to support the business in Northern Europe plus an extensive network of iPass-ready broadband locations around the world. We look forward to working further with Sony Ericsson in the future as their access requirements develop."

IPass also provides comprehensive training programs as part of service deployment, including customized online training and an on-site global helpdesk support program. Especially with such large-scale and widespread deployments, this approach is focused on ensuring that every user can properly take advantage of the iPass Mobile Office service in order to drastically reduce support requirements and boost productivity.

Wavion wins wide-area Wi-Fi project in San Luis Province, Argentina

Wavion, a company transforming the metro and rural Wi-Fi markets with a new category of Wi-Fi base station; the University of La Punta, responsible for the San Luis province network design; and Xiden Networking announced the deployment of Wavion WBS-2400 base stations in the province of San Luis, Argentina. The WBS-2400 will deliver high-speed wireless Internet (Wi-Fi) to the province, its schools, and its towns.

"We are proud to be the pioneers in providing wide-area, free Internet connectivity in Argentina," said La Punta University rector and San Luis minister of development Alicia Bañuelos. "This is the first deployment in Argentina where Internet connectivity is provided for town-wide coverage. We believe that this project will foster economic development and tourism in the province and will help close the digital divide by enabling the children in the province to access the Internet at school and at their homes."

Wavion's powerful WBS-2400 spatially adaptive beamforming base stations provide extended range and higher throughput connectivity to standards-based Wi-Fi clients, such as those embedded in laptops and other notebook computers. Wavion's Wi-Fi solution requires one-third fewer units than other competing access points (APs) to cover the same area, with superior indoor penetration and fewer dead spots.

"We applaud the San Luis province for their vision and initiative," said Ariel Scaliter, CEO of Xiden Networking, the system integrator of the project. "We hope that this project will serve as a role model for other provinces in Argentina in providing Internet connectivity to their rural communities."

"We are proud to be selected by the San Luis province for their pioneering project in Argentina and honored in taking part in their vision and making it a reality," said Eran Kaplan, Wavion's executive VP sales and marketing. "Our superior performance in terms of range, throughput and indoor penetration create a unique value proposition for wide-area broadband coverage and is critical to the success of this project."

Girona, Spain, deploys wireless broadband network for municipal services using Tropos and Neomedia solution

Tropos Networks, a provider of wireless IP broadband mesh networks, and Neomedia, an engineering company in the design and deployment of advanced telecommunications infrastructures in Spain, announced that the City of Girona, Spain, has deployed a broadband wireless network. The network currently provides coverage for more than 600,000 square meters of the city's Can Gibert del Pla and Santa Eugenia neighborhoods. This milestone completes the first two phases of Girona's plan to cover the entire 13 square kilometers of the city. Plans are to use the network as the foundation for enabling a range of services that provide benefits to the community.

"Three years ago, we started to look at broadband wireless technology to address the digital divide in Girona as well as provide connectivity for the whole city for a variety of public and municipal applications," said Paco Berta Müller, director of IT systems and communications for the City of Girona. "We were impressed with the affordability and the efficiencies that Tropos' networks have provided for communities in other cities around the world. Now, after two years of testing and deployments in Can Gibert del Pla and Santa Eugenia, we are more excited than ever about the power and potential of the network for our city."

The network is already being used by local police for video surveillance of municipal buildings and public areas to increase public safety, for public workers to improve intra-office communications, and to provide Internet access to students in neighborhood schools for the first time. The city is also finalizing plans to offer digital access services to the neighborhoods' disadvantaged communities, as well as plans to evaluate a variety of other municipal applications.

As part of the video surveillance solution, Tropos MetroMesh routers and IP video cameras from Axis Communications, a Troposphere Solution Partner, have been deployed on municipal buildings, city traffic lights, and streetlights owned by the city in the Can Gibert and Santa Eugenia neighborhoods. Phase three, now under way, will cover an additional 600,000 square meters. Planned uses going forward include mobile police communications and information access via PDAs and laptops; centralized traffic management and monitoring of public transit vehicles; parking monitoring and management; centralized water control for public gardens; and real-time information for tourists to access on PDAs around town. The network is being funded by the City and Province of Girona, and the Catalan government.

"With the pervasiveness and growing use of Wi-Fi enabled devices such as PDAs, phones and laptops, it is economically attractive for Girona and other cities in Spain to build a multi-service IP foundation for city-wide communications services using wireless mesh technology," said Enrique Moreno Darbonnens, chief technical officer of Neomedia. "We chose the Tropos' MetroMesh system because the

company is the leader in this market with proven city-wide, multi-use network deployments in Europe and around the world."

"Girona's decision to deploy the Tropos' MetroMesh solution will profit the community in numerous ways, from increasing public safety and public works efficiencies to bridging the digital divide," said Tom Ayers, president and CEO of Tropos Networks. "By owning and controlling their own broadband network, the city and its people are able to leverage this resource to improve and deliver new community services not possible in the past. We are excited to be a key part of Girona's vision."

New Jersey high school deploys wireless network from Meru

Cresskill (New Jersey) Junior and Senior High School has installed a wireless LAN from Meru Networks to provide its more than 800 students and faculty with mobile wireless access to the Internet and online educational materials.

The WLAN deployment was driven by the need to give large numbers of students simultaneous, uninterrupted Internet access via the school's laptop computers, which are moved around as needed on mobile carts. It also supports a recent district initiative allowing students to bring their own laptops to school for educational use, and the district's implementation of the Moodle open source course-management system, which helps teachers create interactive online instructional programs and distribute assignments.

Kevin Whitney, district technology coordinator for Cresskill Public Schools, said the Meru WLAN, which involves hallway-mounted wireless access points managed by a central controller, replaces an earlier scheme that required plugging wireless hardware directly into the school's computers.

"When a cart with 25 laptops rolls into the classroom, everyone expects to log on immediately and begin doing research for their projects," Whitney said. "With our old system, half the class often wasn't able to authenticate and get access, and even then there were lots of timeouts. I kept coming across references in the trade press to Meru's ability to handle high density very well, and it's true. Now everyone can connect at once, no matter what kind of laptop they're using, and our wireless network is incredibly reliable."

Meru's single-channel approach to WLAN architecture has also made it easy for Whitney and his team to set up and manage the wireless network. "Other vendors' products require a formal and extensive site survey to avoid co-channel interference," Whitney said. "But with a single channel there are no interference issues to contend with, so there's no channel planning. If we find any 'dead' spaces [areas without wireless coverage], we just plug in another access point — it's that simple."

Meru products being used in the Cresskill deployment are the AP201 single-radio IEEE 802.11a/b/g access point and the fixed-configuration MC3000 series controller. Meru's Air Traffic Control technology provides the WLAN with centralized intelligent RF management, advanced quality of service, and security.

Xirrus selected as official Wi-Fi provider for LinuxWorld 2008

Xirrus Inc., a provider of Wi-Fi "Power-Play" that can replace Ethernet workgroup switches with Wi-Fi as the primary network connection, announces they have been selected by IDG World Expo to be the official wireless provider for LinuxWorld 2008 taking place August 4 through 7, 2008, at the Moscone Center in San Francisco, California.

"LinuxWorld Conference & Expo is the largest and most comprehensive event of business and technical leaders deploying Linux and open source solutions," said Melinda Kendall, vice president and general manager, LinuxWorld Conference & Expo. "We selected

Xirrus for the Wi-Fi network because, unlike traditional access points, the Xirrus Wi-Fi Array solves the user density issues plaguing traditional access point architectures. The Xirrus Wi-Fi Array is a testimony of the impact Linux is having on products around the world."

The Linux-based Xirrus Wi-Fi Array integrates 4, 8, or 16 802.11a/b/g/n radios with an onboard Gigabit Switch, Wi-Fi controller, Wi-Fi firewall, dedicated Wi-Fi threat sensor, and spectrum analyzer into a single device. Xirrus's solution delivers four times the performance and coverage along with 75 percent less devices, cabling, switch ports, and installation time compared to any competitive solution available today.

"Providing the Wi-Fi network for this prestigious gathering of Linux engineers is an honor and demonstrates the strength of our Wi-Fi architecture in challenging environments with high user density and large coverage areas," said Dirk Gates, CEO at Xirrus. "Distributed Wi-Fi architectures, like the Xirrus Wi-Fi Array, are overtaking centralized architectures the same way Ethernet overtook ATM in the 1990s. The distributed intelligence and simplicity of our Wi-Fi Array allows us to quickly deploy a network with significantly fewer devices and provide exhibitors and attendees with the highest performance possible for voice, video, and data."

LinuxWorld Conference & Expo runs August 4 through 7, 2008 at the Moscone Center in San Francisco, California. Xirrus will showcase its Linux-based 802.11a/b/g/n products at Booth #502.

Xirrus partner SETS S.R.L. deploys Wi-Fi point-to-point solution for TATA S.P.A.

Xirrus Inc., provider of a Wi-Fi "Power-Play" that can replace Ethernet workgroup switches with Wi-Fi as the primary network connection, announced that its partner SETS S.R.L. in Milan, Italy, has once again innovated on behalf of their customers through the deployment of a multipurpose Wi-Fi network at TATA S.P.A. in Treviso, Italy. SETS S.R.L. deployed Xirrus Wi-Fi Arrays to not only service traditional data and voice clients at TATA's corporate offices and warehouse locations but also wirelessly link those facilities together using the Wi-Fi Arrays integrated and dedicated wireless bridging capabilities.

TATA S.P.A. in Treviso is an industrial air conditioning and heating manufacturer located in an industrial campus outside of Milan, Italy. They asked SETS S.R.L. to provide Wi-Fi both inside and between their buildings to avoid the significant cost of installing and maintaining a buried inter-building fiber plant.

"We deployed Xirrus Wi-Fi Arrays at TATA S.P.A. to deliver local client connectivity as well as voice roaming services," said Giacomo Broggi, director at SETS S.R.L. "We linked buildings over 600 meters apart wirelessly without using special equipment, external antennas, or having to do time consuming antenna alignments. This was easily accomplished by using the integrated and automatic Point-to-Point capability of the Wi-Fi Array-we created a switchless enterprise, saving my customer considerable monthly telecommunications expense by allowing them to wirelessly redistribute their wired uplink connection across two facilities."

Unlike traditional omni-directional access points with one or two radios, the Xirrus Wi-Fi Array integrates a high-gain directional antenna system along with four, eight, or 16 radios, each capable of a per-radio TCP throughput link of 18Mbps at distances greater than 800 meters between Wi-Fi Arrays. By bonding up to three dedicated radios per link, organizations can create robust wireless bridges with speeds equivalent to wired 100Mbps Ethernet, while at the same time servicing wireless users with the additional radios in the same devices. The ultimate result is reduction in equipment investment and making applications available in mobile environments.

Globe7 is selected for the Hong Kong government-sponsored wireless project

Digital voice provider Globe7 HK Ltd. has been selected for the Hong Kong government-sponsored wireless project to provide mobile phone service with its Globe7@mobile service throughout the territory from Wi-Fi hotspots.

Anthony Tang, director of the Hong Kong Wireless Development Centre, said, "We are excited to be working with Globe7 for our 'Ubiquitous City — Hong Kong Project.' Globe7@mobile is user-friendly with comprehensive infotainment features for mobile devices." Tang added, "It enables users to communicate with friends at anytime, anywhere, and in a wide variety of ways including voice, text message, and handwriting and in multiple languages."

Based in Cyberport, Globe7 has developed one of the world's leading digital voice applications and has been downloaded over 45 million times by Internet users globally. The new service, Globe7@mobile, enables users to make phone calls over the Internet from wireless hotspots, and also has value-added features including infotainment videos, real-time news, instant messaging with handwriting capability and banner advertising to generate business opportunities.

"We're honoured to have Globe7@Mobile selected as Hong Kong's digital voice provider," said Clayton Haswell, president and CEO of Globe7. "We believe this is a truly innovative application that will help the Ubiquitous City Project be a great success and a step forward in digital communication."

BUSINESS

Spiderhost brings Wi-Fi to the alligator capital of the world

Central Florida's Gatorland — the Alligator Capital of the World — now enjoys a wireless Internet system thanks to Spiderhost and AOK Networking.

After a 2006 fire destroyed the 69-year-old theme park's "gaping gator mouth" main entrance and gift shop, the theme park embraced the opportunity to incorporate Wi-Fi in the rebuild.

The new $4 million dollar gift shop and admissions complex plan called for a wireless solution to improve the park's operations and point-of-sale system.

"We needed a trusted partner to build the wireless network and help integrate it into Gatorland's existing IT infrastructure," said Bob Knoerzer, president of AOK Networking, who manages on-site network administration for the iconic theme park. "Having worked with Spiderhost on a number of innovative IT projects in the past, we knew their wireless expertise made them the obvious choice for this project."

"Given the park's size and layout, the installation process required a rather complex routing configuration," added Dale Frohman, president of Spiderhost. "We relied on AOK's extensive knowledge of the existing network to integrate the two, ultimately equipping Gatorland with a more secure, highly reliable network with a Wi-Fi component."

The Wi-Fi project will also enhance the guest experience, as it includes free wireless Internet access for park guests.

Gatorland's new Wi-Fi network will debut as part of the park's 60th-anniversary celebration.

BelAir Networks provides TESSCO customers with wireless mesh products

BelAir Networks, a provider of broadband wireless mesh networks, has signed a distribution agreement with TESSCO Technologies, a provider of the product and supply chain solutions needed to build, operate, and use wireless networks and systems. The distribution agreement provides easy access to BelAir Networks best-of-breed wireless mesh products for TESSCO's wireless system operators, program managers, contractors,

resellers, and self-maintained utility, transportation, enterprise, and government organizations. It also enables current BelAir Networks resellers to take advantage of TESSCO's complementary products, valued-added services, technical support, and customer service.

"BelAir's unique carrier-grade approach to wireless mesh products, both hardware and software, have made us the market leader and the trusted brand of major service providers and system integrators," said Susan Masek, director of sales channels, BelAir Networks. "This distribution agreement makes our products more accessible to TESSCO customers and BelAir resellers to address the huge demand for BelAir Networks high-performance wireless mesh for video security, VoIP, enterprise data, high-speed Internet access, point-of-sale systems and location-based services."

TESSCO's chairman, president, and CEO, Robert B. Barnhill, commented, "The addition of the BelAir Networks high-performance wireless mesh portfolio reflects TESSCO's commitment to expanding its total-source solutions focus and offering with superior product choices from world-class manufacturers. We are very pleased and excited about our new partnership with BelAir and are confident that the addition of their portfolio represents significant new wireless system opportunities for our customers."

BelAir Networks wireless mesh network solutions deliver industry-leading broadband performance and scalability as well as carrier-class capacity and reliability for a wide range of environments, including public safety networks, municipal networks, port security, mass transit and ITS installations, hotel and venue networks, defense applications, and industrial plant deployments around the world. BelAir Networks was recognized as the worldwide wireless mesh node market leader based on revenue for the third consecutive quarter, according to Dell'Oro Group's Q1 2008 Wireless LAN quarterly report. The company also maintained its leadership position for units shipped in the first quarter of 2008.

Driven by the BelAirOS operating system software and managed by BelViewNMS, BelAir Networks offers the industry's most comprehensive product portfolio with the highest capacity, lowest latency, and fastest roaming speeds. Supporting Wi-Fi, WiMAX, 4.9GHz public safety, 5.9GHz ITS, and 4.4GHz military spectrum bands, the portfolio includes the flagship four-radio BelAir200 wireless multiservice switch router, the BelAir200D for defense applications, the three-radio BelAir100T wireless mesh node, the BelAir100M mobile mesh node, the dual-radio BelAir100 multiservice node and BelAir100D, the single- or dual-radio BelAir100C multiservice node, and the strand-mounted BelAir100S.

PARTNERSHIPS

CSR and Skyhook Wireless partner on Wi-Fi positioning technologies

CSR, a global provider of wireless technologies, and Skyhook Wireless, maker of the Wi-Fi Positioning System and XPS 2.0, the hybrid positioning system, announced a partnership that will bring advanced location capabilities to CSR's Wi-Fi silicon. Skyhook Wireless's core technology, the Wi-Fi Positioning System (WPS), is software that produces accurate location information by detecting Wi-Fi access points and comparing them against a known database of geolocated points. By combining CSR's UniFi, embedded Wi-Fi chips, and GPS location solutions with Skyhook's positioning capabilities, this partnership will enable device makers to more easily support and launch location-based services that satisfy consumer location needs.

The technology provided by CSR and Skyhook will capitalize on the emergence of Wi-Fi-enabled mobile devices and provide greatly enhanced positioning availability and accuracy

for the growing location-based services market. This technology will enable device makers and application developers to provide consumer-ready location technology that works quickly and accurately, indoors or outside. The system will benefit consumers by enabling them to more quickly and reliably perform tasks such as planning a trip, finding friends nearby, or locating the closest restaurant.

"In addition to CSR's eGPS developments, CSR is excited by the potential of Wi-Fi to provide an additional dimension to location information. Skyhook's Wi-Fi location technology is a perfect complement to CSR's leading Wi-Fi and fits well with our GPS developments" said Neil MacMullen, senior vice president for CSR. "By combining Wi-Fi location information provided by Skyhook's technologies to other location sensors, such as GPS, the system has a lot of potential for boosting location technologies."

"CSR is a leader in Wi-Fi and GPS solutions," said Michael Shean, vice president of business development for Skyhook Wireless. "Skyhook Wireless is pleased to partner with CSR in order to further the vision of ubiquitous location availability and reliable accuracy."

Boingo partners with free-hotspot.com to extend its European reach

Boingo Wireless and free-hotspot.com announced that Boingo customers will now be able to roam at all of free-hotspot.com's Wi-Fi locations. With access to uninterrupted sessions and an assured quality of service, Boingo users will not be required to view advertisements to connect to free-hotspot.com's network of more than 3,500 locations in 18 countries throughout Europe.

Free-hotspot.com quadrupled its network size in 2007 and expects to have 5,000 hotspots by the end of 2008, making it one of the fastest-growing networks in the world. Boingo, which provides access to the world's largest network of Wi-Fi hotspots, has aggregated more than 100,000 hotspots across the globe, all accessible via one single account.

"We are pleased to extend our reach by partnering with a dynamic company like free-hotspot.com. Their rapidly growing network is a great complement to our business and personal traveller user base and will provide our customers with more choices and options as they move around Europe," said Luis Serrano, vice president of network strategy for Boingo.

"We are excited about teaming up with a worldwide market leader such as Boingo," said Brandon Meyers, free-hotspot.com's vice president of marketing. "Their large established user base can now use hotspots across our entire European footprint, which includes previously underserved areas in Eastern Europe such as Poland, Romania and the Czech Republic."

Both Boingo Wireless and free-hotspot.com won WBI Awards in 2006, confirming their position as innovative companies within the wireless industry: Boingo Wireless for Best Aggregator/Wholesaler and free-hotspot.com for Best Public Wi-Fi Product.

Freescale and Arada Systems collaborate to streamline development of 802.11n access point devices

Freescale Semiconductor and Arada Systems have collaborated to create a production-ready reference design offered to help speed and simplify the development of concurrent 802.11n access point devices. The solution supports advanced 802.11n features such as security, QoS and multiple SSID for both video and VoIP applications.

The reference design uses Freescale's MPC8377E-RDB platform to deliver more than 330Mbps of TCP/IP throughput in the combined 2.4GHz and 5.0GHz bands, while providing enough processing power to address other enterprise-class applications.

"Partnering with Arada allows us to offer our customers a proven, production-ready

solution that provides industry leading performance for 802.11n enterprise WLAN access points," said Altaf Hussain, marketing manager with Freescale Semiconductor's Networking Systems Division. "This solution gives manufacturers the components they need to rapidly create compelling new products that succeed in the marketplace."

Running on the Freescale silicon is Arada's AWS software, which is a highly scalable architecture ideal for a range of Wi-Fi products including wireless bridges, wireless routers, and triple-play gateway applications. AWS features Atheros Draft 802.11n XSPAN technology. The modular architecture of the AWS software allows customers to focus on high-value tasks while relying on the robust architecture and implementation of the MAC layer functionalities.

AWS includes a unique extensible layer called SoftChip, which maximizes the advanced capabilities of Atheros Wi-Fi chipsets. AWS features a true enterprise-class Wi-Fi software stack that supports dual-concurrent 2.4GHz and 5.0GHz designs while providing the flexibility to support various fat, fit, and thin AP models.

"Arada Systems is excited to venture in this partnership with a world-class company like Freescale," said Praveen Singh, president and chief executive officer of Arada Systems. "There is tremendous growth expected in 802.11n within emerging applications, and Freescale's architecture allows us to exploit many features including PCI- and PCI Express-ready capabilities."

Freescale's MPC8377E-RDB is a highly integrated reference design board created to speed time to market. The platform features 256MB unbuffered DDR2 SDRAM, 8MB NOR flash, and 32MB NAND flash, where the platform can boot from either NOR or NAND flash. It includes both a Gigabit PHY and a five-port Ethernet switch, as well as support for a PCI Express add in connector and a MiniPCI Express slot. The platform supports two Serial-ATA II (SATA II) connectors and has a four-port USB hub or a one-port USB on-the-go (OTG). These components, integrated with the MPC8377E processor, provide an application-specific platform that can help customers get a jumpstart on their next application design.

Along with hardware support, the MPC8377E-RDB comes with a board support package (BSP) that includes both U-boot and Linux 2.6 support.

The MPC8377E processor is based on the e300 core, built on Power Architecture technology, and has a frequency range of 400-667MHz. It supports a 32K instruction and L1 data cache. The device also supports two Gigabit Ethernet controllers, USB 2.0, PCI 2.3, 64/32-bit DDR1/2, and an integrated security engine, as well as two x1 PCI Express and two SATA II controllers.

The dual concurrent 802.11n access point reference solution based on Freescale technology is available now from Arada.

Xirrus partner SETS S.R.L. deploys Wi-Fi arrays throughout major Italian hotels

Xirrus Inc., provider of a Wi-Fi "Power-Play" that can replace Ethernet workgroup switches with Wi-Fi as the primary network connection, announced that it has repeated its recent success at major USA hotel properties (Westin Hotel Times Square, The Swan and Dolphin Hotels, Caribe Royale, Westin Hotel Michigan Avenue, and Westin Hotel Embassy Row, to name a few) at several major Italian properties by partnering with SETS S.R.L., located in Milan, Italy.

"Our customers operate world class properties and want to offer their guests high-performance Wi-Fi that delivers the same quality of experience as the property itself," said Giacomo Broggi, director at SETS S.R.L. "Xirrus provides the product, support, and training that allows me to deliver a cost-effective, purpose-built solution superior to my competitors while satisfying the high demands of the world class

properties that my company supports. We tested all the other Wi-Fi offerings available on the market today and visited several Xirrus customers before deciding to add them to my product portfolio and nothing else even comes close. Xirrus fields a superior product backed up by Wi-Fi Experts that put my success as a Partner and the satisfaction of my customers as primary in every transaction."

Historical Liberty building, the Sheraton Diana Majestic, combines traditional architecture with state-of-the-art technology and a young, hip, and fashionable atmosphere. Dated back to 1908, the hotel's beautiful edifice, with its thick solid walls and complex architecture, made Wi-Fi planning and deployment very difficult for most Wi-Fi manufacturers.

"Using Xirrus Wi-Fi Arrays the hotel could save time and huge sums of money for equipment and cabling as our solution required the installation of just a few devices," said Giacomo Broggi.

The Complex of Luxury Collection on Sardinia Island offers four amazing hotels (Cala di Volpe, Romazzino, Pitrizza and Cervo Hotel Costa Smeralda Resort) catering to the elite international "jet-set."

"Like many other organizations across Italy, the famous property of Cervo Hotel Costa Smeralda Resort chose the Xirrus Wi-Fi Array architecture to ensure high-speed Internet connectivity for their high-level guests," said Giacomo. "Both of the Sheraton Diana Majestic Hotel and the Complex of Luxury Collection have seen a surge in user connectivity from guests since deploying the high-performance Wi-Fi network from Xirrus."

NEW PRODUCTS

Belkin revamps wireless router design with new sleek, vertical form

Belkin International Inc., launched a new vertical design for its line of wireless routers, which includes the G, G+ MIMO, N, and N+. Intended to take up minimal desktop space, the new vertical enclosures offer enhanced usability with simple details like labels on the rear ports. Easy-to-understand icons on the front panel turn to amber to alert you of problems in your network.

Setting the standard with intuitive usability, Belkin's innovative designs began with the N1 Wireless Router, boasting a sleek black finish with blue iconic status LEDs. The N1 Vision Wireless Router features the same black appearance, clean lines, and a network-status LCD. The N+ is a natural progression of the two routers, combining some of the same popular elements such as the blue status LEDs and speedometer.

The new design is visually pleasing and technically advantageous. The shape allows for better airflow to keep the Wireless Router cool, enhancing performance. The antennae are situated atop the Router to supply and maintain a strong wireless signal.

The new routers will be available in October 2008 in the US, with launches in Canada, Europe, Asia, and Australia to follow

Laird Technologies' new heptaband external wireless antenna offers seven frequency ranges

Laird Technologies Inc., a designer and supplier of customized performance-critical components and systems for advanced electronics and wireless products, announced the availability of its new Heptaband External Wireless Antenna. This ultraflexible, unique antenna exhibits excellent radio transmission characteristics while supporting seven bands in one profile. The seven antenna bands operate simultaneously, providing performance across Cellular Quadband GSM, UMTS/3G, GPS, and Wi-Fi/WLAN frequencies.

"The Heptaband Antenna is the ideal choice when multiple bandwidths are required in various regional and global wireless

applications," said Craig Somach, business director for Infrastructure Antenna Systems. "The antenna is ideal for wireless terminal, point-of-sale, automatic meter reading, M2M (machine-to-machine), and home security applications."

This blade-style antenna measures only 6.33 inches and has a knuckle/swivel snap-in or SMA/TNC/RPTNC connector option, allowing for easy integration into a wide variety of customer devices. Operating frequencies include 824-894MHz, 880-960MHz, 1575MHz, 1710-1880MHz, 1850-1990MHz, 1920-2170MHz, and 2400-2500MHz.

SkyPilot lowers broadband wireless CPE prices

SkyPilot Networks, a provider of carrier-class broadband wireless networks, announced new pricing and new products for broadband wireless operators.

"Our products enable service providers to deploy broadband wireless to fixed locations, like homes and businesses, as well as mobile Wi-Fi devices," said Paul Gordon, president and CEO of SkyPilot. "As always, service providers demand cost-effective solutions, and with our new pricing, we're making it easier than ever for operators to deploy profitable broadband wireless access networks."

To lower the cost per broadband subscriber, SkyPilot has implemented bundle pricing for packs of SkyConnector customer premises equipment (CPE), which provides the fixed "last-mile" wireless connection for residential and business subscribers. Bundle packs are available in 40- and 120-unit configurations with per-unit retail pricing as low as $449 for 40-unit bundles and as low as $349 for 120-unit bundles. More information about the SkyConnector can be found at http://www.skypilot.com/products/skyconnector.php.

To lower the cost of providing high-power Wi-Fi HotSpots, SkyPilot is reducing the retail price for the SkyAccess DualBand from $1,799 to $999. The SkyAccess DualBand integrates a long-range directional 5GHz backhaul with a high-power 2.4GHz Wi-Fi access point, providing broadband wireless operates with a cost-effective solution for long-range Wi-Fi coverage.

More information about the SkyAccess DualBand can be found at http://www.skypilot.com/products/skyaccess_db.php.

SkyPilot is also introducing the SkyExtender Plus, a new version of the SkyExtender designed to improve performance in the most demanding outdoor environments. Like the traditional SkyExtender, the SkyExtender Plus integrates three distinct components:

1. A point-to-multipoint base station to connect low-cost SkyConnectors;
2. A multihop relay to interconnect other SkyExtenders;
3. A point-to-point link to backhaul traffic to SkyGateway capacity injection points.

The SkyExtender Plus provides a few additional enhancements that include the following:

- Enhanced GPS receiver improves GPS signal reception sensitivity by 10dB, resulting in a stronger and more reliable GPS signal even in areas like "urban canyons" where GPS signals were often too weak to be reliable;
- Higher transmit power improves maximum output power by 3dB, resulting in a maximum peak transmit power of 30dBm that helps consistently establish high modulation links even over long distances;
- Improved antenna isolation provides up to 40dB of adjacent sector isolation, which limits unwanted signals to mitigate interference from external sources;

- Improved surge suppression provides up to 100 amps of lightning protection to protect in harsh lightning-rich environments.

The retail price for the SkyExtender Plus is $3,499. The Sky Extender Plus/DualBand, which adds a mobile Wi-Fi access point at either 2.4 or 4.9GHz, has a retail price of $4,499. The Sky Extender Plus/TriBand, which adds mobile Wi-Fi access points at both 2.4 and 4.9GHz, has a retail price of $5,499. Each version of the SkyExtender Plus can be configured as a SkyGateway through the purchase of the $1,999 conversion kit. More information about the SkyExtender Plus can be found at http://www.skypilot.com/products/skyextender.php.

SkyPilot is also announcing a new SkyConnector designed for video surveillance networks that use the FCC-licensed 4.9GHz frequency. The SP-4204, which meets the tight high-power "M" mask regulations, is principally designed to provide wireless backhaul of remotely located video surveillance cameras. By connecting the SkyConnector's Ethernet port to a network camera and transmitting the video over the 4.940-4.990GHz spectrum, SkyPilot provides a unique method of building long-range and high-capacity video surveillance networks. The new SP-4204 has a peak EIRP of 34.2dBm/2.6W and a retail price of $999.

All products are available through SkyPilot's distributors and AirPower Partners. A list of SkyPilot distributors can be found at http://www.skypilot.com/partners/distributors.php.

AirDefense adds real-time troubleshooting functionality to its wireless intrusion-prevention system

AirDefense, a provider of anywhere, anytime wireless security, launched Live View, an enhanced feature to AirDefense Enterprise, the company's wireless intrusion-prevention system. Live View gives enterprise IT network administrators a real-time view of all current wireless network activity, enabling timely and cost-efficient troubleshooting to a myriad of connectivity or bandwidth issues that occur on wireless networks. Live View also reduces costly visits by wireless IT experts to remote office locations, offering a tremendous return on investment (ROI) to AirDefense's customers.

In addition, Live View enables IT administrators to visualize why devices such as laptops, VoWiFi phones, or any Wi-Fi enabled device might be bouncing between access points (APs). For example, in a case where a user is having connectivity issues due to a malfunctioning AP, a support technician can use Live View to remotely diagnose the problem and determine the appropriate corrective action. After changes are made to correct the issue, Live View can be used to verify that the problem is in fact resolved. With powerful functions such as a configurable dashboard, device connectivity mapping, and frame capture/analysis, Live View can be used to diagnose a wide variety of performance and connectivity issues.

"It is essential to business productivity that IT administrators immediately fix wireless connectivity and throughput issues. Live View provides a realtime assessment of the problem and limits the steep costs typically associated with sending someone to a remote location," said David Thomas, vice president, product strategy, AirDefense. "AirDefense will continue to regularly add important functionality such as Live View to the AirDefense Enterprise platform to ensure our customers have access to world-class troubleshooting tools even when they cannot be on-location."

ROI is often difficult to quantify for network administrators. However, reducing the travel costs associated with remote site visits can save tens of thousands of dollars per visit. For instance, one major grocer needs to sell nearly $80,000 in groceries to cover the costs associated with a single AirDefense site visit that AirDefense could automate and eliminate the

need for remote dispatch. Companies like this grocer average more than 50 remote site visits each year, costing hundreds of thousands or in some cases more than $1 million annually in remote troubleshooting expenses alone. Live View is available free to all AirDefense Enterprise customers currently participating in AirDefense's maintenance plan.

Earlier this year, AirDefense was named the 2008 Frost & Sullivan "Market Leader" for global wireless intrusion detection and prevention (WIDPS) systems for the second consecutive year.

AirDefense Enterprise 7.2 recently received Common Criteria Certification to Evaluation Assurance Level 2 (EAL2) from the National Information Assurance Partnership (NIAP). In February 2008, AirDefense received the only "Best Buy" rating from SC Magazine amongst wireless intrusion prevention software companies in an independent product review. Also, the Technology Association of Georgia named AirDefense one of the Top 40 Most Innovative Technology companies for 2008. AirDefense also received the only "Readers Choice Award" among wireless intrusion-prevention companies in 2007 from Information Security magazine. In addition, AirDefense owns all dominant patents in the area of wireless intrusion-prevention and wireless troubleshooting.

MARKET INTELLIGENCE

Wi-Fi hotspots stay hot in 2008, according to ABI Research

Wi-Fi hotspots are continuing their torrid growth in 2008. According to ABI Research's "WI-FI Hotspots Forecasts," by the end of this year, global hotspots will grow by 40 percent over 2007. The greatest growth and the largest number of hotspots continue to be found in Europe. While the UK has long led in European Wi-Fi hotspots, there is also marked growth in France, Germany, and Russia.

Most remarkable about the hotspot market, said vice president and research director Stan Schatt, are the dynamics of a fast-changing business model. "Starbucks' decision to go to a virtually free Wi-Fi hotspot model is having a profound impact. Hotspot owners are beginning to see Wi-Fi as a cost of doing business and an operational expense, rather than as a profit center." Schatt expects major retailers to move towards a free service model in phases. "The first phase is likely to be a free or almost free service for good customers, those who have signed up for loyalty cards."

One reason hotspot owners are willing to move towards such a business model, according to Schatt, is the realization that, "charging for service is counter-productive in the long run because the real money will be in value-add content downloads." In the near future, hotspots are likely to encourage users to pay to download the latest music and TV shows. Airport clubs are likely to offer hotspot users the chance to download movies for their upcoming trips. Starbucks has already begun selling music CDs in its stores. The next logical step will be to move to selling music downloads.

The proliferation of devices that support Wi-Fi also makes charging for such services more complex for hotspot owners. If a person is on a 3G connection on a dual-band phone and then moves into a Wi-Fi hotspot, how does the Wi-Fi billing take place? How many separate accounts must a customer who has both a dual-band phone and a Wi-Fi enabled laptop have in order to use a Wi-Fi network? Garnering money for downloads is a much more straightforward matter.

Wi-Fi Hotspot Forecasts (http://www.abiresearch.com/products/market_data/Wi-Fi_Hotspot_Forecasts) provides users with historical market data for Wi-Fi hotspots, and forecasts yearly market data. This includes the number of Wi-Fi hotspots by region and by venue type, the number of hotspot access points shipped for, and subscribers and revenue data.

'IEEE 802.11n Technology and Market' now available

Research and Markets announced the addition of the "IEEE 802.11n Technology and Market" report to their offering.

The emerging IEEE802.11n standard is certain to enhance wireless communications for businesses and consumers of all types. It promises speed comparable with wireline Fast Ethernet speed and higher, and range higher than other 802.11 devices are able to support. For the system builder, that translates into lower hardware expenditures for both internal wiring and access points.

The 802.11n standard is still in the development form. A final standard is not likely to be released by the IEEE until late 2008, or even 2009. At the time of this report writing, the latest Draft of this standard is Draft 4; the Wi-Fi Alliance created a certification program for the Wi-Fi devices, including 802.11n, which are certified as per Draft 2 of this standard.

Currently, the 802.11n vendors have already created an industry, which is analyzed in this report. Both chipset and platform manufacturers are working hard to reach the 802.11n evolving market.

2007 was the first year when 802.11n products contributed sizably in the total Wi-Fi market. Prognoses for 2008 are even more encouraging: nearly 50 percent of Wi-Fi chipsets on a market in 2008 are expected to adhere to the new draft standard, double the number from 2007. The industry progress assured this standard longevity, even with the existing history of a very long and difficult standardization process in the IEEE. The Wi-Fi Alliance has put the Wi-Fi certified seal of approval — indicating validated product interoperability — on 325 products and is seeing strong numbers of 802.11n draft 2 products presented for testing.

This report emphasizes the importance of 802.11n technology for both businesses and consumers in the developing communications infrastructure.

The report details technological and market properties of 802.11n technology. This technology allows a quantum leap from the 802.11a/b/g device features to wireless communications compatible with the existing wired products delivering Fast Ethernet. Several technological advances (MIMO and others) made it possible to support communications in the multipath environment, with speed up to 600Mbps for distances exceeding 802.11a/b/g technologies ranges. Initial data shows that 802.11n devices will be also cost-efficient.

It is the authors' opinion that in the near future, 80211n products will dominate the PC, home, and enterprise markets (though currently 802.11n standard penetration into home networking is not more than 4 percent-6 percent). 2010-2012 will be years of gradual diminishing of the 802.11a/b/g markets in favor of the 802.11n segment.

This report is important to a wide population of research, technical, and sales staff involved in the developing of high-speed wireless services and products. It is recommended for both service providers and vendors that are working with related technologies. The report also helps readers understand issues associated with the relationship between 802.11n and other technologies.

Considerable research was done using the Internet. Information from various Web sites was studied and analyzed. Evaluation of publicly available marketing and technical publications was conducted.

Telephone conversations and interviews were held with industry analysts, technical experts, and executives. In addition to these interviews and primary research, secondary sources were used to develop a more complete mosaic of the market landscape, including industry and trade publications, conferences, and seminars

The overriding objective throughout the work has been to provide valid and relevant

information. This has led to a continual review and update of the information content.

For more informations, please visit http://www.researchandmarkets.com/research/bf3186/ieee_802_11n_techn.

Bluetooth and Wi-Fi markets are evolving in different directions, says ABI Research

Global markets for Bluetooth and Wi-Fi both continue to show strong growth and will remain the leading personal area networking technologies, but prices and market developments are pushing each of them in new directions, according to a new short-range wireless communications forecast from ABI Research.

Senior analyst Doug McEuen said, "Bluetooth and Wi-Fi equipment and chipset numbers continue to increase. But with IC prices continuing to fall due to technology evolution and greater IC production efficiency, revenues aren't rising as dramatically. That's especially the case for Wi-Fi, where the chipsets have been very expensive for a long time. As the attach rate, particularly in laptops, increases to 100 percent, production is growing rapidly and prices are falling. That's a good thing, because as the laptop market reaches saturation, Wi-Fi will need to find new opportunities."

So IC vendors are hoping that lower price points will make the ICs attractive to other market segments, especially the huge but very cost-sensitive wireless handset market. "If you're a radio or IC manufacturer and your unit price is above $2.00, you're going to have trouble getting your product into a cell phone," noted McEuen. "That is definitely one of the reasons why Wi-Fi has seen slower adoption in that market."

Another key trend noted by McEuen is that Bluetooth's prevalence in wireless handset/headset combinations is being supplemented by greater penetration in MP3 players and other portable media devices. It is also making inroads in the automotive industry. Bluetooth already has great penetration in the handset world, and its price point is very low. It is also evolving towards higher speeds and greater capabilities.

ABI Research's "Short Range Wireless Forecasts" (http://www.abiresearch.com/products/market_data/Short_Range_Wireless_Forecasts) examines connectivity uptake in end-equipment markets such as mobile handsets and notebooks, and includes analysis of vertical markets such as industrial and commercial. The user segment analysis plots shipments of connectivity-enabled equipment by user sector and connectivity standard.

It is a component of the firm's Short-Range Wireless Research Service (http://www.abiresearch.com/products/service/Short_Range_Wireless_Research_Service), which also includes Research Reports, Research Briefs, ABI Insights, the ABI Vendor Matrix, and analyst inquiry support.

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