



The Association of Telecommunications Professionals, Inc.

Volume **XXIII**
November/December 2006

NEWSLETTER

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ATP December Meeting Notice

When: Wednesday, December 13, 2006

Registration begins 8:30 a.m.
Meeting begins at 9:00 a.m.

Where: Nationwide Arena

200 W. Nationwide Blvd.
Columbus, OH 43215-2563

See our website (www.atp-ohio.org) for parking options

Topic: *Business Continuity Through Advanced Technology/From Bleeding Edge to Reality-Convergence Continues*

The Association of Telecommunications Professionals, Inc. is pleased to present its December meeting at the Nationwide Arena. Parking will be an additional cost for this meeting. There are several lots and garages near the Arena.

There will be two distinct presentations. **Jim Connolly**, IT Director for the Columbus Blue Jackets, will discuss *Business Continuity through Advanced Technology*, describing recent IT and telecommunications upgrades for the Blue Jackets organization. Following this, **John Loether**, President and Senior Technology Consultant of **LoetherSpeaks, LLC**, will address *From Bleeding Edge to Reality-Convergence Continues*, a look at major trends in computing, and their effect on telecommunications.

The meeting fee is \$20 for members and \$30 for non-members. To pre-register by e-mail, respond to treasurer@atp-ohio.org, and include the company name and names of those who will attend. Or, to register by phone, call the **ATP HOTLINE at (614) 836-4318**. And don't forget, when you pre-register before the deadline (5:00 P.M. on Friday, December 8, 2006), your name is automatically entered in the drawing for a prize, which will be a *Columbus Blue Jackets* Jersey. Please register early so that we may have an accurate count for seating and lunch. Your pre-registration allows us to keep our member costs down. ☺

Membership Dues Status

by **Steve Schlicher**, *Treasurer*

The **ATP By-Laws** state that your yearly membership dues are payable by the first meeting of the year. To insure continued good standing in ATP it is necessary that the dues be brought up-to-date. **ATP Representatives who's Parent Organization has not paid its annual dues will be charged the \$30 non-member meeting fee.**

If you have any questions regarding the Membership Status of your Organization, please contact **Steve Schlicher** at (740) 348-4040 or by email at treasurer@atp-ohio.org. ☺

Treasurer's Report

by **Steve Schlicher**, *Treasurer*

Treasurer **Steve Schlicher** reports that as of Sept. 29, 2006, there was \$13,750.25 in savings and \$7,220.56 in checking. ☺

ATP Board Minutes

September 9, 2006

by **Lora Chappellear-Pearson**,
Secretary

Meeting Attendees

Bryan Barlitt, Doug Ballou, Jed Bistline, Steve Schlicher, Mike Patterson, Wendell Mumaw, and Lora Chappellear-Pearson. The meeting was called to order at the AEP Groveport office.

companies expressed interest in the organization including Worthington Industries and BMW Financial.

Steve will be working on the invoices for next year's membership drive.

A membership fee change was discussed again. The proposed change to \$150 for full membership for all members will be presented at October meeting. By changing the membership, it may increase membership attendance at meetings and in participation in the organization. If the membership objects to the increase, it was mentioned that the fee has not increased for at least 15 years.

October Meeting

The topic for the October meeting will be Disaster Recovery held at OCLC. Chris Caldwell from EMC will give a presentation on disaster recovery. Wendell has received preliminary approval for a tour of the Grange backup site installed at OCLC. He will also contact Children's Hospital for permission to tour their site as well. It is also at OCLC. If need be, Wendell can discuss disaster recovery at OCLC.

Jim Long from General DataComm expressed interest in presenting at the October meeting to discuss security

The October meeting is also the meeting for officers' election. A list of potential candidates was discussed.

December Meeting

Jed will investigate holding the December meeting at the Columbus Blue Jackets office in the Brewery District. Netarx recently implemented an upgrade to the telecom and phone systems for the Blue Jackets organization and will present a case study of their work. We may need to find another speaker to fill in time.

Web Site

The new web site is moving along. It's in the final debugging phase and should be finished in time for the December meeting registration.

Membership

Doug reported the current membership stands at 46 member companies with 28 voting members. A new application was received from South Eastern Ohio Regional Medical Center from Cambridge. Doug attended the Avaya users' group meeting and discussed the ATP. Several

A change to the by laws to allow previous vendor members to hold officer positions will be brought to the membership at the December meeting for consideration.

Treasurer Report

Steve issued the treasurer's report. A checking account has a balance of \$6,974.161 and the savings account has a balance of \$13,750.25.

Other Business

Wendell will become the new statutory agent for the ATP and will do it till the end of his board commitment.

The topic of quarterly meetings rather than bi-monthly was discussed as it is becoming more difficult to come up with topics and attendance is dwindling at some meetings. At this time, the meeting schedule will continue as is.

Steve will order new ATP business cards as we are out.

Another program planning meeting breakfast will be scheduled to start work on next year's agenda. Topic ideas mentioned included wireless, VMware, and storage.

The meeting was adjourned.

2006 ATP Calendar

January 13 (8:30a.m.)
Board Meeting
AEP

February 8 (8:30a.m.)
General Meeting
"Enterprise Security"
OCLC

March 10 (8:30a. m.)
Board Meeting
AEP

April 12 (8:30a.m.)
General Meeting
"Member Forum"
LaScala

May 12 (8:30a.m.)
Board Meeting
AEP

June 14 (8:30a.m.)
General Meeting
"Regulatory"
OCLC

July 14 (8:30a.m.)
Board Meeting
AEP

August 9 (8:30a.m.)
General Meeting
"VoIP"
Grace Worship Center

September 8 (8:30a.m.)
Board Meeting
AEP

October 11 (8:30a.m.)
General Meeting
"Disaster Recovery"
OCLC

November 10 (8:30a.m.)
Board Meeting
AEP

December 13 (8:30a.m.)
General Meeting
"Business Continuity/Convergence."
Nationwide Arena

ATP Meeting Minutes

October 11, 2006
by **Lora Chappellear-Pearson,**
Secretary

ATP HOTLINE

The phone number for the ATP
HOTLINE is (614) 836-4318.

(Provided as a courtesy of
American Electric Power)

The August meeting was called to order by Bryan. The topic for the meeting was Disaster Recover. The first speaker was Chris Caldwell from EMC (<http://www.emc.com>). EMC is a world leader in storage systems and software. EMC helps customers install systems and provides intelligent, flexible software enabled information infrastructures at reduced costs. From 1991-2002, EMC was a storage company. Over time the company has evolved to a storage and management company to an information infrastructure company. Software and services are now 54% of EMC's revenue.

EMC has made several acquisitions to enhance their services including Data General, VMware, Smarts, Authentica, and RSA. EMC is ranked among the world's top IT companies.

Mr. Caldwell then discussed the evolution of systems in an information infrastructure. This consists of content services, information security, archiving, data mobility, protection options, and tiered storage. Three basic types of service interruptions include disasters (natural or man made), unplanned occurrences such as failures, and planned occurrences including maintenance activities. These interruptions create conflicting workloads - the need to keep systems highly available and parallel processing such as backup and archiving.

Tier applications can be defined as mission critical, business critical, and deferrable. Data also needed to be defined to determine workload overlap and set recovery point SLA. This includes zero data loss and the amount of acceptable down time. It is important to remember that work loads cross operating systems, data bases, and control unit boundaries; therefore it is important to remain consistent throughout the entire enterprise.

Another concern is tape recovery systems. It is ideal to keep multiple points in time for integrated systems. It will take a significant amount of time to build your restoration infrastructure at your disaster recovery time. Interleave backup tapes adds to unprotected restore risk. RTO/RPO limitations will often impact your business. Pace of change and infrequent testing will make written plans ineffective.

EMC capabilities for business continuity include tiered protection and recovery, business consistency, centralize and distribute data, backup and restore, content management and archiving, and replications management.

Mr. Caldwell then discussed where to begin. How far back in time do you go for an acceptable copy of information (recovery point) and how fast do you want to recover that copy of data after an even occurs (recovery time). Current best practices are defined as follows:

- People and information are irreplaceable
- Distance is key – carrier capability / flexibility
- Tape as a medium of recovery is not effective
- Inconsistent backup is no backup at all
 - BP/Run/Correct/Seque nce
 - Restart requires a single, good, PIT copy of data
- Most data is critical
 - Especially e-mail
- People-dependent processes do not suffice
 - Automation of the restart process

Mr. Caldwell then discussed Tiered Storage. Factors that help define where applications reside are availability, performance, and recovery point. Each tier is defined based on these parameters. EMC provides products that support all of these parameters. The Symmetrix DMX series provides high-end storage, the Clariion family provides performance, affordability and functionality, and Network-Attached Storage (NAS), the Centera optimized storage for fixed content, host-based replication with

RepliStor, and RecoverPoint network based intelligent data protection.

Mr. Caldwell summarized business continuity steps simply as plan, build, and manage.

John Miller and Michael Hunt from Nationwide Children's Hospital presented their experiences in Disaster Recovery and High Availability Planning of a Redundant Data Center.

Mr. Miller began the presentation by giving an overview of Children's Hospital (CH) (<http://www.columbuschildrens.org>). With an IT staff of 120 and three data centers, CH has a network of 400 servers, 3500 computers, 800 printers, and 130 wireless access points.

Mr. Miller then discussed the disaster recovery and high availability strategy at CH. The tier applications were defined by business and patient care impact to determine Recovery Point Objectives (RPO) and Recovery Time Objectives (RTO). Patient care was the primary service. It took one year to develop the strategy and perform the business impact analysis (BIA). It took six to eight months to implement the remote data center infrastructure. Manual intervention is required for remote data center fail over. The new AIX/Windows clinical systems failover test took 65 minutes to recover at the remote data center with zero data loss.

Mr. Miller then discussed the setup of the primary and remote data centers. The secondary server for the services is located on the main campus. The goal for this recovery is less than 5 minutes. The manual failover is required to the remote data center located at OCLC in Dublin. The goal for this recovery is 30 minutes. Recovery objectives are defined as recovery times and data loss. Many critical systems at CH don't fail over at this time due to older hardware and software. High availability systems include the network, email, Epic, and their Intranet. Tier 1 services include eChart, PICIS, PACS, WORx, MiSys, CoPath, and other patient related services.

Mr. Miller then described their remote data center located at OCLC. The leased space consists of 2000 square feet of caged space with network connections to the primary data center. Access to this space is restricted using a card key system. The remote center went live November 18, 2005. The key steps to fail over to the remote data center include:

- o Network and hardware (in place at OCLC),
- o Operating systems (in place)
- o Application software (running in 30 minutes)
- o Restore data (restored in 15 minutes)
- o Test and turnover (15 minutes)

Mr. Miller described their experiences during their August 2006 test. The test was extremely successful. Application recovery time took approximately 1 hour with no data loss.

The Tier 1 systems install at the remote data center include network services including DNS and Active Directory, the tape backup system and storage archive for digital images, the SAM for all Tiet 1 data, single sign-on authentication, Citrix, Oracle data warehouse, and other departmental clinical applications. For Tier 2 and 3 systems, empty racks, power, and network connections are implemented for these systems. Additional hardware is then installed if a real recovery is required.

Plans for 2007 include adding digital imaging applications (radiology and cardiology), Email, user files and department shares replicated to remote data center, program lifecycle (BIAs, recovery assessments, and documentation)

In addition, CH plans to expand the remote data center infrastructure, redundant Internet and VPN connection, enterprise backup – Tier 1 & 2 on disk, and security cameras.

Mr. Miller then shared a list of lessons learned.

- Fully understand intended use, gain IT/organizational buy-in, and document expectations for RDC prior to design/build-out
 - o Live production vs. standby vs. quick-ship

- o “If you build it, they will come”
- o Applications limitations
- o Test! Test! Test! Children’s uses the Platform Labs for testing.
- o Crawl-walk-run – Start with low expectations at the walking phase.
- o If lease, option for more space
- o Plan for better efficiency in RDC than Primary Data Center (use space wisely)
- o Know power requirements – Can you support all that will be needed.

• Space

• Other Considerations

- o Distance Between Primary and Secondary Data Centers
- o Balance between geographical diversity and operational efficiency
- o Latency for storage and application performance – no issues SRDF over gigabit, but will need to increase capacity. Did not need fiber connection.
- o Synchronous vs. Asynchronous data replication
- o Ethernet vs. Fiber Channel for storage replication – tried using Ethernet first. So far it has been fine.

• Network

- o Difficult to project “real” needs prior to implementation
- o Long lead times for high speed circuits

- o Talk to vendors and references
- o Build in time in schedule to pilot prior to production to give time to order more bandwidth if needed

Mr. Miller gave a list of do’s and don’ts.

Do’s and Don’ts list

- Dedicate resources permanently to Disaster Recover and High Availability program.
- Don’t underestimate technical complexity or staff requirements in addition to DR/HA.
- Do prioritize applications – evolution not revolution
- Don’t exclude tier 1 applications from quick ship agreements until redundant systems are in place.
- Do use an inventory tool or develop your own. An accurate inventory is critical to ongoing effectiveness.
- Don’t short change documentation or recovery procedures
- Do use DR equipment for test environment. You want to use the resources purchased.

Question: Children’s Hospital is located down town. If you lose power at the main campus, what do you do?

Answer: They have UPS and backup generators for critical medical equipment and the data center. The most important thing for all hospital staff is patient care.

Question: How did you plan the migration back to the main site from the backup site?

Answer: Children’s followed the same plan, but in reverse. With their exercise, they did not lose any data. The test was performed prior to going live. In real life, they estimate that the actual data conversion would add an hour to the turn around time.

Question: In planning, what types of disasters did you include?

Answer: Children’s looked at anything that would remove the data center and build in diversity within the campus

Credit Card Payments

ATP accepts payments using most major credit cards. This is yet another frequently requested service to ATP Members being provided by the ATP. Credit Card payment is optional.

already. If the entire campus is gone, the data center is not the main issue. Personnel have already evacuated the campus and the patients are the main concern.

Question: Do you list various disaster scenarios?

Answer: The one defined is if the data center is gone. Children's had consultants look at their data center for power outages and floods.

Question: Isn't the data center in the basement of the hospital? (In reference to flooding)

Answer: Children's in the process of building a new data center.

Question: How do you maintain continuity and communication between different parts of the campus?

Answer: We have a disaster recovery plan in place. In the past, the hospital was evacuated during a bomb threat. This put into motion a plan to outsource the communications systems.

Question: With real events, does the hospital do mock disaster testing?

Answer: IT doesn't do mock disaster testing, but hospital wide testing is do. For IT testing, Children's performs quarterly testing at the Platform Labs (<http://www.platformlab.org>).

Question: How did you test quick shift agreement?

Answer: It's in the plans, but haven't tested it yet. The plan was 24 or 48 hours for the T1 and T2 quick shift, with 5 days for the T3 and T4.

Question: How do you coordinate data center recovery with patient evacuation?

Answer: Patient areas would also be affected. A chain of command would be

followed and used to determine the procedure to follow. If clinical systems go down, a detail plan is followed for notification.

Business

The drawing for a \$25 gift certificate to the Olive Garden was won by Bob Patterson.

Treasurer Report

Steve gave the treasurers report. The checking account has a balance of \$7166 and the savings account has \$13,761.

Membership Report

Doug issued the membership report. We currently have 28 voting members, 18 vendor non-members, and 1 honorary member.

Election of new Officers

The officers elected for 2007 are:

President – Wendell Mumaw

Vice President – John Hoag

Treasurer – Shelia Schmitt

Secretary – Lora Chappelle-Pearson

Directors at Large – Jed Bistline & Gina George

Fee structure change

A change to the fee structure was voted on and approved. The new fee annual membership fee will be \$150 of all members eliminating a separate fee for vendors and voting members.

The meeting was adjourned.

Hot Topics in Telecommunications

(Regulatory, New Offerings, New Technologies and More)

October 2006

by **Doug Ballou**, Director

AT&T announced it is acquiring **USinternetworking** for about \$300 million in cash. USinternetworking is a privately held application service provider (ASP) founded in 1998, when the ASP model was first popularized. The company touted big customer wins, but the ASP

concept never lived up to its initial hype. Application management is USi's core competency. AT&T says it will retain all of USi's employees and has offered retention packages to all key executives in an effort to keep them on board. The carrier says it will operate USi as a wholly-owned subsidiary that will be run by the company's current chairman and **CEO Andrew Stern**. He will be CEO of the subsidiary after the acquisition. The deal is expected to close in the fourth quarter.

Motorola is getting a lot for its \$4 billion buyout of **Symbol Technologies**. The acquisition gives Motorola access to a blue-chip list of customers in key vertical markets, where Symbol's diverse product portfolio has been strong. Those products include rugged handheld computers, bar code readers, wireless point-of-sale systems, wireless LAN (WLAN) infrastructure, and more recently RFID readers and tags. Those products resulted in 910 U.S. patents and 680 international patents for Symbol. Motorola executives cited the patents as a key attraction.

Internet2 and the **Department of Energy's Energy Sciences Network** said they are partnering to build a next-generation network to support the Department of Energy's scientific research efforts. The network, called **ESnet4**, initially will operate on two dedicated 10Gbps wavelengths on Internet2's new next-generation network. ESnet4 will grow "seamless scale by one wavelength per year for the next four to five years," according to the organizations. The Department of Energy needs the higher bandwidth to support projects such as the agency's participation in the **Large Hadron Collider**, the world's largest particle accelerator, and the **Relativistic Heavy Ion Collider**. ESnet4 is accessed by 30 Department of Energy labs, 100,000 scientists, and 18,000 researchers.

The final regulatory hurdle facing **AT&T's** acquisition of **BellSouth Corp.** got a bit higher when the **FCC** delayed a vote -- for the third time -- on whether to approve the proposed deal. Commissioners had been expected to vote on the deal at an open meeting, but they yanked the item from the agenda a day earlier because they were unable to decide what conditions should be

placed on the deal. A vote was not rescheduled.

A set of security standards designed to lock down mobile devices (www.docfinder.com/5051) is set to be unveiled at the **CTIA Wireless I.T. & Entertainment conference**. Called the **Mobile Security Specification**, it is billed as the basis for a new generation of secure phones and mobile devices that will be harder to tamper with. The standards are backed by companies such as **France Telecom, Nokia, and Samsung**.

Internet service provider **AOL's** sales may shrink for the next two years as it gives away services to win more users and attract advertising, its chief executive said in an interview. In recent weeks, AOL has sold its Internet access units in Germany, France, and Britain for a total of almost \$2 billion as it reshapes itself into a free Web portal where popular e-mail and entertainment services are supported by advertising.

Broomfield, Colorado-based **Level 3 Communications** announced a \$1.4 billion cash-and-stock deal to acquire **Broadwing Corp.** The acquisition will enable Level 3 to put Broadwing's customers on its 23,000-mile broadband fiber optic network and eliminate duplication. Level 3 will increase their customer base and gain a nationwide sales force. The deal is supposed to close in the first quarter of 2007 pending approval by regulators and Broadwing shareholders.

StopBadware.org, the group spearheaded by **Harvard Law School** and **Oxford University** to warn consumers about software it deems harmful or deceptive, said it has added **AOL 9.0 software** to its **Badware Watch List**, because the software compels the installation of additional and unnecessary software without informing the user. AOL said it would address several of the issues raised by StopBadware.org.

American Power Conversion Corp. (APC), a provider of power availability platforms, and **Schneider Electric SA**, a provider of electrical distribution, industrial control and automation

platforms, have announced a definitive merger agreement under which Schneider will acquire all outstanding shares of APC for \$31 per share in cash. The aggregate transaction value is approximately \$6.1 billion. The companies say the combined businesses will form a global leader in both single-phase and three-phase uninterruptible power supply (UPS) systems, as well as a preeminent provider of integrated systems for IT and data center applications.

An **Ohio University** grievance committee thinks two computer-systems administrators, fired after hackers stole personal data, deserve new jobs and apologies. Ruling on the appeals of **Todd Acheson** and **Thomas Reid**, the committee found that they were wrongfully fired by **William Sams**, associate provost for information technology. The three-member **Administrative Senate committee** also recommended that Acheson and Reid receive back pay and benefits. Ample evidence shows that both men did their jobs and worked to secure OU's computer systems against data breaches for which they were incorrectly blamed, the committee found.

Sprint Nextel is rolling out a series of wireless software packages for business customers to better support employees in the field and keep track of assets. The **Advanced Wireless Solutions** are the result of the carrier integrating wireless software packages that Sprint and Nextel separately offered before their merger last year. There are six packages initially, but the service provider says it will add vertical offerings by year-end, including software specific to the healthcare and public safety industries. The packages available include field service, route accounting, fleet dispatch and resource management, mobile asset management, IT help desk service and field sales automation. The packages vary in price depending on number of employees using a particular software package and the type of devices with the software.

By the end of the year, **Franklin County** public safety officials should be able to trace the location of 911 calls made from cell phones. The county will spend \$7.1 million from the state to install and run computer software and hardware to enable

emergency calls placed from wireless phones to be routed to the nearest 911-response center

Google announced it was releasing an online word processing and spreadsheet application. **Google Docs & Spreadsheets** is a combination of Google's Writely word processing service and Google Spreadsheet. Like many applications from Google, Docs & Spreadsheets is available as a beta. The service will let users centrally store and access the files, transform them into many different formats, and publish them to Web sites or blogs. "These Web 2.0 offerings are more complementary than competitive with traditional desktop applications."

Crown Castle will buy rival **Global Signal** for about \$4 billion to create the biggest U.S. wireless tower operator.

IT will waste an estimated \$100 billion during the next five years by overspending on network products and services. That was the startling message delivered by **Gartner** analysts **Mark Fabbi** and **Bob Hafner** at a **Gartner Symposium/ITExpo** presentation on network design. Fabbi created quite a buzz at the spring ITExpo when he told IT execs that gigabit Ethernet to the desktop was a \$10 billion waste of money.

Research firm **Dell'Oro Group** says sales of **IP telephony gear** topped \$500 million in the second quarter – a 42 percent year-over-year gain. IDC predicts 34 million homes will have VoIP phones and service instead of traditional Bell service by the end of this decade.

Qwest says it is cutting rates to retain state government business in its 14-state region. In addition to local and long-distance services, Qwest is pursuing bids that involve telecom repair, network equipment integration, and 911 services for state agencies.

IBM will build a next-generation supercomputer for the U.S. Energy Department that has the potential to achieve a sustained speed of 1,000 trillion calculations per second, or one petaflop.

The computer, dubbed **Roadrunner**, will be built at the Los Alamos National Laboratory in New Mexico. Congress provided \$35 million in fiscal 2006, which ends on Sept. 30, to launch the computer project. Roadrunner may eventually be used for an Energy Department program that ensures the U.S. stockpile of nuclear weapons is safe.

The focus of **network security** should shift from safeguarding infrastructure to protecting data, and that requires extraordinary marketing measures by IT security staff, according to speakers at the **Forrester Research Security Conference**.

Foreign Internet service and applications providers would be required to base the servers they use for U.S. customers inside the country, under a proposal from the **U.S. Department of Justice**. The department and its **FBI** division are taking that message to Congress and asking lawmakers for a broad **rewriting of U.S. wiretapping rules**.

Intel and **Siemens** have agreed to collaborate in the development of new enterprise communication systems using **VoIP technology**. The world's largest chip maker and the German industrial conglomerate will fund and conduct research focused on secure wireless networks and real-time communications using VoIP technology. The goal is to develop VoIP-based systems based on Intel's dual-core chips and rack-mounted servers and on Siemens's HiPath 8000 and OpenScape telecom technology. Siemens is transferring its telecom and enterprise communications manufacturing operations to new joint ventures, including one with **Nokia**.

Xerox scientists have developed a font so small that you need a magnifying glass to read the words. The font is 1/100th of an inch high and is designed to help make birth certificates and other valuable documents harder to forge.

IBM debuted a new tape drive that encrypts data in the drive itself. It's designed for markets that are increasingly regulated and concerned with data loss. The TS1120 tape drive lets healthcare and

financial services customers encrypt data at rest on tape from mainframe, Linux, Windows or Unix systems, thus eliminating the need for host-based encryption systems or separate appliances. The TS1120 drive can be installed in IBM and **Sun/StorageTek** tape libraries. It has a capacity of 1.5TB.

Sprint Nextel and **Verizon Wireless**, the leading EV-DO wireless service providers in the United States, both announced plans to bolster support for **EV-DO Revision A**. Sprint Nextel is adding more EV-DO Rev. A devices to its line of compatible gear, and Verizon Wireless announced that it will be using **Motorola** network gear to upgrade to Rev. A. EV-DO Rev. A supports higher-speed wireless data transmissions with peak data rates of up to 3.1Mbps downstream and 1.8Mbps upstream; and it is said to better support VoIP, high-speed file transfers, real-time television and video telephony. Current EV-DO deployments max out at about 2.4 Mbps.

A federal judge has ordered former **WorldCom Inc. Chief Executive Bernard J. Ebbers** to report to prison Sept. 26 to begin serving a 25-year sentence for accounting fraud. A bureau spokesman said Ebbers has not yet been assigned to a specific prison.

Alcatel SA and **Lucent Technologies Inc.** overcame shareholder misgivings to win firm backing for their 81.4 billion euros (\$10.7 billion) tie-up to create a major global telecommunications equipment maker. The votes gave the go-ahead for Alcatel's all-stock acquisition of New Jersey-based Lucent, scheduled for completion by the end of the year.

Intel said it would slash 10,500 jobs, or about 10 percent of its workforce, by the middle of next year as the chip maker attempts to regain its footing in an increasingly competitive x86 processor market. The cuts, which come as part of a broad company overhaul that Intel launched in April, are expected to result in savings of about \$3 billion by 2008. In June, Intel said it would shed its communications units to sharpen its focus on its core microprocessor business.

Apple Computer Inc. has updated its **iMac** line with **Intel's** latest microprocessors. The Intel Core 2 Duo processor, which the world's largest chip maker launched this summer, is faster than the Intel chips previously used.

Hewlett-Packard supplanted **Dell** as the world leader in personal-computer shipments during the third quarter. **Gartner Inc.** and **IDC** pegged the overall third-quarter growth of the global PC market at almost 7 percent, but that trend was overshadowed by the industry's new pecking order. The changing of the guard occurred after HP's shipments climbed by 15 percent from a year ago while Dell's edged up by less than 4 percent.

Dell said it could not file its fiscal second-quarter financial report because of "questions raised" by an informal SEC investigation into accounting issues and a subsequent internal probe.

Freescale Semiconductor Inc., the computer-chip maker spun off by **Motorola**, may be acquired for about \$16 billion as two investor groups compete in what would be the biggest leveraged buyout of a technology company.

AT&T Inc. is launching an **Internet TV service** where subscribers can watch live cable channels such as Fox News on any computer with a broadband connection for \$20 per month. The AT&T Broadband TV service announced features about 20 channels of live and made-for-broadband content. The service requires Microsoft Corp.'s Windows Media Player for playback.

The **Ohio Telecom Association** estimates that the number of **wireless subscribers** increased 75 percent over the last four years, hitting 7 million. The number of traditional phone customers fell 20 percent and stands at 5.5 million. Wireless customers also are spending more time and money on their cell phones; a monthly average of 837 minutes per plan and \$60. That has led to \$3.3 billion in annual revenue for wireless companies, eclipsing the \$3.2 billion for local phone companies.

The report says 64 percent of Ohioans have wireless service.

Cingular will launch its improved mobile broadband network in Greater Cleveland, after staggered debuts in other markets. The country's largest wireless company follows **Alltel**, **Sprint**, and **Verizon**, all of which debuted their own faster networks here in the past year. **Broadband Connect** is replacing Cingular's slower **Edge** network. **CTIA**, a Washington, D.C., trade group, estimates that wireless data, which includes Web-based content accessed on cell phones, accounted for \$6.5 billion industry revenue through the first six months of 2006. That's a 70 percent increase over the same period in 2005.

Consumers are being asked to return 526,000 laptop batteries made by **Sony Corp.** because they could catch fire, the latest in a record-setting recall involving nearly 7 million computers. **IBM** and **Lenovo Group**, the world's third-largest computer maker, were seeking the recall of rechargeable lithium-ion batteries purchased with ThinkPad computers. It is the fourth recall in recent weeks involving Sony laptop batteries.

Sprint Nextel Corp. announced that **Tim Donahue** is leaving as chairman of the struggling cell phone carrier, the second unexpected departure of a top executive in six weeks. The company did not name a replacement for Donahue, 57, who was chief executive officer of Nextel before it was acquired by Sprint last year for \$35 billion. The announcement came on the heels of a recent rough patch, including a weak second-quarter earnings report and the sudden ouster of **Len Lauer**, a veteran Sprint executive.

The **Justice Department** gave its unconditional approval to **AT&T Inc.**'s buyout of BellSouth Corp. The decision cheered company executives, but outraged consumer advocates and two members of the **FCC**. The five members scheduled a vote on whether the \$78.5 billion deal should go forward, but that could be pushed back and one commissioner may sit out because of a conflict of interest. Consumer advocates and some lawmakers claim the government is well on its way to

reconstituting the old **Ma Bell** monopoly, which was broken up in 1984 after a lengthy court battle.

Announcements of **tech-industry job cuts** spiked in the third quarter, indicating a slowdown is under way in the sector. Global outplacement firm **Challenger, Gray and Christmas Inc.** said the number of tech-job cuts announced in the third quarter of this year rose by 75 percent from the previous quarter, reaching the highest number since early 2005. "These numbers are a clear indication that tech companies see a slow-down on the horizon."

In another example of how mobile gadgets can carry malicious programs, **Apple Computer Inc.** said a fraction of its **iPod players** sold recently contained a virus that affects Windows systems. The iPods got the virus from a Windows computer at one of its manufacturing plants. The virus, **RavMonE.exe** is known to spread through external data storage devices when they are connected to computers and affects only machines running the Windows operating system from **Microsoft**. Security experts say the virus opens up further security holes for hackers. Up-to-date anti-virus software included with most Windows computers should detect and remove it.

Verizon said its board has approved the spin-off of the telephone company's print and on-line yellow pages business to stockholders as a new public company named **Idearc Inc.** One share of Idearc will be distributed as a dividend for every 20 shares of Verizon stock held by an investor at the close of business Nov. 1. The distribution is scheduled to occur Nov. 17 and is expected to qualify as a tax-free transaction for shareholders. Idearc, with revenue of \$31.5 billion in 2005, would be based in Dallas and employ about 7,100 people.

Microsoft's fiscal first-quarter earnings rose 11 percent, exceeding Wall Street estimates, as the company said it benefited from stronger sales of server software and some cost savings. For the three months ended Sept. 30, Microsoft said it earned \$3.48 billion, or 35 cents per share.

Novell has confirmed the receipt of a notice from the **NASDAQ** stock market warning that its shares will be delisted after the company delayed filing its quarterly report to the **SEC**. The vendor said that it will appeal and request a hearing before a NASDAQ listing qualifications panel. **Wells Fargo** said Novell is in default under the terms of the indenture, which require the company to file its 10-Q reports to the SEC within five calendar days of the due date. Novell said the indenture requires it to provide the bank with copies of all its SEC filings within 15 days of the filings being made.

Microsoft has embraced **Novell's** open-source software platform, forming a technological truce between two longtime antagonists who want to make it easier for the still-dominant Windows operating system and the increasingly popular Linux system to work together.

Nokia and **Alcatel** are jumping the gun on **Wi-Fi phones** that work like regular office handsets: They are offering the same capability on ordinary cell phones. That can mean one handset for all business calls, anywhere in the enterprise, but that still leaves an employee's cell phone for use outside. Dual-mode cell and Wi-Fi devices are starting to emerge and moving between networks will raise some technical issues.

AT&T will add about 2,000 previously outsourced technical support jobs to its own payroll. The jobs are related to supporting AT&T DSL customers who self-install their service or have other basic questions. The jobs, to be added to AT&T payroll by the end of 2008, have been provided by outsourcing vendors in the United States and overseas.

NAC involves checking devices for compliance with security policies before being granted network access. At issue is how different NAC approaches will be integrated and how long it will take for standards, such as those being developed by the **Trusted Networking Group (TNG)**, to gel.

Organizations still leasing **Centrex** phone lines could be wasting money and holding back advanced telephony and collaboration

features from employees, said a pair of IT professionals speaking at Interop. Two very different government/nonprofit organizations – the **Visiting Nurse Service (VNS) of New York**, and the **Public Schools in Saskatchewan, Canada** – hacked down their telecom and IT costs by bringing telephony in-house using VoIP instead of hosted Centrex services. The IT executives also said that the productivity gains and advanced features delivered by IP telephony and VoIP blew away what Centrex could do for them.

Sprint launched a suite of security services for its wireless users that includes authentication, threat protection, and policy enforcement on smart phones and laptops from any wireless provider. The company announced its **Sprint Mobile Security** service at Interop New York. Sprint is teaming with wireless security company **Mobile Armor** to support this offering.

Research analysts at **Gartner** are predicting a sticky web of **security hazards for IT professionals** over the next two years, ranging from targeted financial attacks to spyware and rootkits. Gartner released the list of threats during its **IT Security Summit** in London. The threats, which Gartner said have a “potential to inflict significant damage” on businesses, are as follows: **Cyber attacks** with a financial motive; Identity theft; Social engineering; Viruses; and Rootkits could offer an attacker the same control as the computer’s administrator.

Intel’s next-generation notebook platform will hit the streets in the first half of 2007, bringing improvements over the current **Centrino architecture** in processing power, battery life, and wireless connectivity. The notebook will feature a more efficient version of the Merom Core 2 Duo chip and Crestline ICH8M chipset, code-named **Santa Rosa**. For wireless, the new notebooks will use the pending **802.11n standard**. Intel also will deliver embedded **3G wireless WAN technology** from **Nokia**. In addition, Intel by 2008 plans to deliver an integrated Wi-Fi and WiMAX chip. The company’s WiMAX plan will be supported by a commitment from service providers **Sprint** and **Clearwire** to start building mobile

WiMAX networks in 2007 and provide commercial service by 2008.

The long arm of the law reached out and grabbed fugitive **Comverse Technology CEO Jacob “Kobi” Alexander** in the African nation of Namibia. Alexander faces extradition for charges in New York that he and others at the voice mail company pocketed millions of dollars by secretly manipulating stock options. The indictment also seeks the forfeiture of \$138 million in Alexander’s assets. If convicted, he faces as many as 25 years in prison.

Cisco introduced a set of **IP video hardware appliances** designed to let organizations shoot, edit and publish their own video content on the Web or over internal networks. The new lineup of gear targets an array of customers: businesses that publish corporate training video over a WAN, schools that distribute Web-based educational videos, local governments that stream public meetings and hearings, and public service announcements in stadiums or airports. The new video products are available as a package priced at \$133,000. The system’s gear is supposed to give an enterprise instant video publishing capabilities, but it lacks tools for configuring network switches and routers to support video. IP Multicast configuration, QoS, and other settings must be fine-tuned separately.

Handheld PC vendors sold four times as many **smart phones** and **PDA**s in the second half of 2006, and **Nokia** continued to distance itself from competitors. Nokia owns 42 percent of the combined PDA and smart-phone market, compared with single-digit market share for **Research in Motion**, **Motorola**, and **Palm**, according to a study released by **Gartner**. Worldwide, that market reached 42.1 million units, a 57 percent rise from the same period last year. Most of the growth was driven by sales of smart phones, which rose 75.5 percent to 34.7 million units. In contrast, sales of PDA’s grew very slowly, climbing only 5.7 percent to 7.4 million units.

Former HP Chairman Patricia Dunn made a brief court appearance in Santa Clara County, Calif., to face four state

felony charges in the HP boardroom scandal. **Superior Court Judge Alfonso Fernandez** scheduled her arraignment for Nov. 17, at which time she will enter a plea to the charges in the case.

ISPs may be under further pressure to provide the government with customer information. **FBI Director Robert Mueller** said he wants ISPs to hold on to customer data – which typically is deleted within a few months – to help law enforcement. The federal government says this customer information could help the government track down possible terrorist threats, as well as find other criminals, such as online predators. Industry watchers believe the FBI’s request will fuel arguments over privacy and infringements on civil liberties.

IBM announced that **Harvard University** is using an **IBM Blue Gene supercomputer**, which holds the title as the fastest supercomputer in the world, to support research into the human heart and circulatory system. The deployment is the largest Blue Gene system in academia. A larger version is running at the **Lawrence Livermore National Laboratory** and is ranked as the fastest supercomputer in the world.

Forrester Research projects U.S. **IT spending** in 2006 to fall short of previous expectations and next year’s results to be even weaker. Forrester, which bases its spending forecasts partly on data distributed by the **U.S. Department of Commerce**, reports that adjusted spending figures from the government for 2004 and 2005 investments have forced Forrester to lower its expectations for spending.

The **Office** worker productivity and collaboration suite is about to become the next piece of software from **Microsoft** subject to mandatory **piracy checks**. The **Office Genuine Advantage** program will require mandatory validation of Office software. Office Online templates downloaded from within the Office 2007 Microsoft Office System applications will require validation of legitimacy. And starting in January, users of **Office Update** will have to validate that their Office software is legitimate before they can use the service.

Cisco announced it is buying **Orative**, a maker of cell phone software that ties mobile phone users to corporate IP PBXs and messaging systems. Cisco will pay \$31 million for Orative. Orative makes a mobile phone client software and a server application that lets cell phone users make calls and handle messages as if plugged into a wired IP phone or working via a PC application interface. The Orative Client lets users with mobile devices on a GSM network log into an enterprise Cisco VoIP network and access features and applications as if in the office. A cell phone GUI lets users scan voice mail messages, check the presence status of others, and access directories. On the back end, the Orative Enterprise Service interfaces with Cisco CallManager IP PBX servers and Cisco Unity Unified Messaging servers.

With **Microsoft** saying that its next major service pack for **Windows XP** will not ship until 2008, some users are wondering whether the software upgrade will ever be released. Administrators have expressed concern since Microsoft announced "preliminary" plans to ship SP 3 in the first half of 2008, later than previously expected.

The **802.11n** proposed **Wi-Fi** standard has key applications applicable to the enterprise and is widely expected to drive the next generation of deployments. Enterprise-class, bandwidth-intensive applications like ERP and CRM systems, workgroup computing applications, and some wireless backhaul applications require throughputs larger than current 802.11 technologies can provide. In addition to throughput, 802.11n will significantly enhance the reliability and range of existing 802.11 networks. The standard defines procedures by which throughputs greater than 100Mbps and significant range improvements also are possible. Work began on the standard in late 2003, and earlier this year Draft 1.0 was published. The next version, Draft 2.0, is expected to be available in January 2007. Wi-Fi Alliance pressure has changed its plan of record to certify prestandard 802.11n devices no later than first half of 2007. The IEEE expects to finalize 802.11n in early 2008. Existing 802.11n devices have severe

interoperability concerns and have no guarantee of eventual interoperability with the ratified 802.11n.

Growth in its wireless and data services helped **Cincinnati Bell** into a profitable third quarter, reversing year-ago losses. The telecom company posted net income of \$22.5 million, or 9 cents per share, compared to a net loss of \$46.7 million, or 19 cents per share in third-quarter 2005. Revenues grew to \$320.1 million, versus \$300.3 million in the year-ago quarter, beating analysts' estimates of \$306.5 million.

Researchers at a London teaching hospital have come up with a "**clean**" keyboard that could help in the fight against hospital bugs, including the one responsible for the deaths of hundreds of patients. **University College London Hospitals NHS Foundation Trust** is ready to begin installing the new keyboard on hospital wards. It is completely flat and easy to clean, and UCLH believes it can cut the infections spread by dirty keyboards. The keyboards are much smoother than conventional ones, and are equipped with timing devices to warn nursing staff when they need cleaning. Medical staff spread infections by moving between keyboards without cleaning their hands.

Mobile phones costing less than \$15 will be available in developing countries by 2008, **Motorola Chairman David Brown** has predicted. If handsets can be delivered that cheaply, it could lead to another 100 million people a year getting their first phones, he said. The thrifty price tag on the handsets is partly because of chip manufacturers' commitments to supply inexpensive silicon components.

Heavy cell phone use may have a significant impact on the **fertility** of men, according to a study released in late October by the prestigious **Cleveland Clinic in Cleveland, Ohio**. The study, conducted by **Dr. Ashok Agarwal** reported on the results of 364 men who used cell phones for varying amounts of time each day. According to Agarwal, men who used their cell phones for four

hours a day or more showed the greatest damage to their sperm. The study used only **GSM** phones operating in frequencies ranging from 800 to 1900MHz. According to Agarwal, the Cleveland Clinic is planning a follow-up study that will look at some of the variables that were not considered in this test. For example, he mentioned that no one knows whether cell phones have the same effect on women.

The government has launched investigations into fraud cases in which computer hackers apparently manipulated client accounts at two of the nation's largest electronic brokerages, stealing millions of dollars. Officials at **TD Ameritrade Holding Corp.** said the fraud cost the company about \$4 million in the July-September quarter. **E-Trade Financial Corp.** said the company lost about \$18 million in a similar scheme during its third quarter. Both companies reimbursed customers for their losses. Ameritrade's chief operating officer said the fraud that his company experienced during the quarter was part of an industry-wide problem and that the company was working with the FBI and other law enforcement agencies. Ameritrade officials said the problem largely occurred overseas when clients were using either wireless networks or public computers infected with spyware, and user IDs and passwords were stolen.

BellSouth said third-quarter earnings rose. The company said earnings, including its 40 percent share in wireless company **Cingular** but excluding special items, totaled \$1.18 billion, or 65 cents a share. That compares with \$938 million, or 51 cents a share, in the same quarter a year earlier.

T-Mobile USA began offering a service that allows people to use their mobile phones to talk over T-Mobile's cellular network as well as Wi-Fi networks. The new service, called **T-Mobile HotSpot @Home**, is currently only available in Seattle.

Time Warner Cable Inc.'s planned initial public offering is likely to be well received by investors eager for another opportunity to tap the fast-growing U.S. cable sector. The

offer from the unit of **Time Warner Inc.** is expected within three months, after it registered the IPO with the **SEC**, in the first step toward spinning off 16 percent of its equity. According to the filing, proceeds from the IPO will go entirely to bankrupt cable operator **Adelphia Communications Corp.** as payment for some of its cable assets that Time Warner bought, under an agreement reached in July.

Thousands of defrauded **WorldCom** investors will soon start receiving money from a \$750 million fund set up to compensate them according to the SEC. In 2002, the SEC brought civil charges against the former telecommunications company after a massive accounting scandal. A court overseeing the SEC litigation has cleared a first wave of payments up to \$150 million or about 20 percent of a fund created by the SEC. There were nearly 450,000 claims against the first installment. The remaining \$600 million in the fund will be distributed as claims get processed.

Cisco Systems Inc. unveiled a high-definition, video conferencing system that it says can grow into a billion dollar business in five to seven years. Named **TelePresence**, the product is the latest move by Cisco to expand from its traditional business of network routers and switches into video, a strategy it launched with the February acquisition of cable set-top box maker **Scientific Atlanta**.

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Microsoft, which dominates with almost 86 percent of the market, released **Internet Explorer 7** for download. It's the first new version of the Web browser since Internet Explorer 6 came out in 2001 with the Windows XP operating system. Since then, **Mozilla's Firefox** browser has emerged and gained a chunk of the market, 11.5 percent at **OneStat's** last count. Mozilla, an open-source software-development organization, puts its share at 12 percent to 15 percent, with 70 million active users. **Firefox 2** has been released.

Cingular Wireless announced it has finished integrating its cellular network with that of **AT&T Wireless**, the carrier it acquired two years ago in a \$41 billion deal. Cingular, a joint venture of **AT&T Inc.** and **BellSouth Corp.**, leads all

wireless carriers in the U.S. with 57.3 million subscribers.

Microsoft plans to launch its updated and renamed Internet search engine **Live Search**, available at www.live.com. It is the successor to **MSN Search**. Live Search will include improved ways to refine a search engine query. Microsoft also plans to officially launch **Live Local Search**, which shows detailed photographic images of some parts of the country based on searches for addresses and places of interest.

And finally, on the Gee Whiz front, in a partnership with **Sony Ericsson, Fossil Inc.** (the watch people) is introducing a line of watches that will show you who is calling. The system uses the **Bluetooth** wireless standard to beam a phone's caller ID information to the watch. The watch vibrates to alert users to an incoming call, and a quick press of a button can send the call to voicemail. You can't answer a call with the watch, but it will be compatible with Bluetooth headsets. The watches are available now. The technology is compatible only with some phones from Sony Ericsson.

More next issue!

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