On the Road to Network Convergence

The Services Revolution is Coming

Getting the AT&T CallVantage®

Racing Ahead with Team McLaren Mercedes
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Companies that need more mobility, flexibility and cost savings are looking to converged networks as the answer. AT&T understands what it takes to make convergence work and offers cost-effective services to help companies ease network migration. Convergence built on solid foundations: read more on page 2.
A Word from the President

Bill Archer

At long last, network convergence has not only begun to gain momentum, but is a key vision for most of today’s multinational companies.

Businesses have realized that successful network convergence is no longer just a question about the technology’s ability to deliver, but is focused around business strategy, technical know-how and business restructuring. Companies that cover all three are well on their way to reaping all the advantages that a single voice and data network brings.

As President for the EMEA region, I am excited to work alongside our customers as they travel down this road. Part of making that journey successful is to continue communicating with you, our customers. We want to share key insights, discuss new technologies, offer insightful industry analysis and highlight innovative companies from around the world.

In this issue of AT&T Connections, read about how Siemens is cutting communications costs in half by converging networks and hear from Brownlee Thomas of Forrester Research as she shares her thoughts on where the industry is headed. You will also learn about how AT&T has joined Team McLaren Mercedes by becoming the exclusive corporate sponsor for the team’s global voice and data-networking services and get insight into the services revolution.

We are keenly interested in hearing what you think about this new and improved issue of AT&T Connections so please contact us at inforequest@emea.att.com to let us know what you would like to see in future issues. We look forward to your comments, ideas and suggestions. Happy reading!

Sincerely,

Bill Archer
President, AT&T Europe, Middle East & Africa
The concept of converged networks has already been through the “next-big-thing” treatment – first as a good story for those in the media looking for the next significant trend, and then subsequently played down by skeptical observers as being more hype than help.

Amid all this, however, the idea of convergence – of running voice, video and data packets over a single IP-based network – has slowly but surely entered the business mainstream.

The reason for this is clear. Enterprise networking environments have long been disordered places. A typical company employs multiple networks, each supporting different applications and departments, including a network for voice, a video-ISDN network, or one that supports Enterprise Resource Planning (ERP) and other data applications. Meanwhile, the demands that bandwidth-hungry users – scattered across the country or around the world – place on these networks are rising sharply, forcing companies to look at new options.

The ability to run voice, video and data packets over a single IP-based network, experts widely agree, not only helps network managers meet these challenges, but also creates an environment that is easier to maintain. Even by simply laying the groundwork for a converged environment, companies can reduce their overall network maintenance costs.

“The value of convergence is not just putting different applications on the same network. Instead of having five or six different networks, you have one. It is a whole lot easier to manage, less costly to operate and maintain. There is a lot to gain in terms of simplicity,” says Miguel Barca, Marketing Director, AT&T Services over IP.
Companies pursuing a converged strategy have mostly opted for Multiprotocol Label Switching (MPLS), VPN-based networks as their preferred network solution, as it enables Class of Service – the ability to prioritize applications – and supports secure transactions. MPLS networks make more efficient use of bandwidth, enable managers to monitor the network centrally via a Web interface, allow locations, people or devices to instantly “plug-and-play,” and allow organizations to explore new technologies.

It is the potential for new applications that is generating interest in convergence. But it is something many organizations are approaching with caution.

“What we have found is that when our enterprise customers have made the decision that they were going to do this, they did some ROI calculations to determine where they would realize the most value,” Barca says. “A lot of times they found that it would be in moving their remote locations, or new branch locations to an IP network.”

While Barca feels it is still early in the convergence evolution, he believes voice is likely to be the next critical application that customers are looking at. Voice over Internet Protocol (VoIP) alone, however, is not the only motivator.

The desire to offer employees the option to work effectively on the road is also top of mind among network managers. Employees who work from home have come to expect access to productivity applications like email, but they also want access to all the telephony features available to them at the office. Convergence makes this prospect easier to manage and less costly, as a virtual IP-based PBX can support any number of remote sites or users.

According to Richard Blacklock, Director, Business Strategy & Development at AT&T, another driver behind network convergence is the concept of ‘future proofing’. “Regardless of whether a company sees the immediate benefit in a particular application, such as VoIP, they know it is important to lay the groundwork now for future innovation,” he says.

“A lot of attention has been given to the individual applications that converging networks allows, but companies need to first focus on their underlying networks to ensure they are equipped to run realtime mission-critical applications,” adds Barca. “You can build a house on sand or you can build it on rock – how your house holds up under day-to-day stress will be different.”

Once the proper environment is in place, there are several tantalizing technologies looming on the horizon that can help companies gain a competitive edge. Services over IP may help network managers offer a wider range of communication capabilities over an IP network including unified messaging – the ability for employees to decide how they would like to be reached, whether by email, phone or Instant Message, but make that choice invisible to the person contacting them.

IP-enabled call centers can also take advantage of complex call-routing features. “We have the ability and intelligence in our network to distribute those calls using any number of means, such as ‘next available agent,’ and ‘time-of-day routing’ or pushing specific types of calls to the qualified agent and routing them over an IP network directly to that person’s home,” says Blacklock.

While the advantages are clear, making these technologies work will require overcoming some challenges. Operating in a converged environment means organizations must learn to treat voice like any other application and that requires adequate bandwidth. As well, an IP network does not offer the same kind of restricted voice access offered by a PSTN network, and proper security measures must be implemented to ensure data remains protected.

“These concerns are definitely valid,” says Barca. “A lot has to do with what you’re running your application on. If you take a voice application and you run it on a poor network, you’re not going to get the quality of a TDM or PSTN network. The bottom line is, companies need to make sure they have the underlying network that can adequately support that application.”

This means: sufficient bandwidth; class of service designation; and a way to ensure the network is secure.

To guide them through these issues, some organizations are enlisting the help of a service provider. Others have chosen to outsource the network management process entirely. AT&T understands what is needed to make convergence work, and can draw on its expertise to offer organizations a range of managed and outsourced services. In the past three years, the company has made significant investments to develop and deploy its own global IT network to serve customers around the world, and is adding new capabilities such as voice that will enable its customers to leverage the benefits of convergence.

Converged networks can be a powerful tool for a company looking for more mobility, flexibility and cost savings. In fact, Blacklock says the trend may permanently alter the networking landscape, yielding the return on investment network managers have long been looking for.

“This is where we are really going to see the productivity gains we’ve been talking about for years and years,” he says. “It’s an exciting time to be in the telecommunications industry.”

To find out more about thought leadership from AT&T, please visit: www.att.com/convergence.
Andy Knight, Head of Group IT for McLaren has the mission to ensure the team has robust and constantly available communications, no matter where they are in the world.

“In Formula One racing, one-hundredth of a second can be the difference between winning and losing. To get the absolute optimum performance from our cars and drivers, we need to make sure we have access to huge amounts of data in real-time, and we need to be able to ship that data around the world as quickly as possible,” Knight says.

In January, the first public appearance of the Team McLaren Mercedes MP4-20, this year's race car, saw the addition of another new member, with the announcement of AT&T as the latest Corporate Partner. The deal, however, is much more than just adding a logo to the front of a fast car – the company is now the exclusive corporate sponsor for the team's global voice and data networking services.

The multi-year relationship is designed to give Team McLaren Mercedes an extra edge via the AT&T Global Network – as it competes in one of the most demanding and high-tech sports in the world.

To connect the team’s headquarters in Woking, UK with other locations including Mercedes-Benz in Stuttgart, Germany and the engine manufacturing facility in Brixworth, UK, McLaren is using AT&T Enhanced Virtual Private Network – Private IP option (Enhanced VPN). Based on MPLS technology, Enhanced VPN provides the feature-rich capability of a fully-managed IP network, while also providing the security of a private network environment.

“When the car is in the garage, in the pit lane, or even on the track, we will securely connect it and its associated systems directly to the McLaren wide area network via the AT&T Global Network. This provides a seamless, digital chain from the company servers and IT infrastructure in Woking, directly to the driver’s cockpit,” says Martin Silman, Global Offer Management Director, AT&T, who is overseeing the implementation of AT&T technology for the team.

“Our objective in working with AT&T is to have a single consistent network that carries both our data and voice applications, which would help us reduce our communications costs,” says Knight. “With Enhanced VPN, AT&T is laying the right foundation.”
WHEREVER FORMULA ONE GOES, SO DOES AT&T

With races from Brazil to Australia to Canada to Germany, AT&T also supports the team’s connectivity at every Formula One Grand Prix location around the world, managing data communications during race events and at testing sessions.

From the remote track locations, AT&T provides connectivity with ISDN lines to the AT&T Global Network. Once the McLaren data hits AT&T’s network, the traffic is fully integrated into the AT&T Enhanced VPN service.

“When Enhanced VPN, we offer customers the ability to prioritize data traffic. For example, McLaren Racing’s data files on the latest performance of the engine management system can take precedence over general email traffic. This ensures that Team McLaren Mercedes benefits from optimized and efficient network performance,” says Silman.

According to McLaren Racing’s Team Leader of Operational Research, Neil Martin, a key component during testing, practice sessions and races is to monitor large volumes of data from each car’s telemetry system as the cars travel around the circuit.

“Over a race weekend approximately 6.5GB of data is accumulated in this manner. Traditionally this data was transferred back to the McLaren Technology Center in Woking at the end of each event,” he says. “Working with the AT&T team, we are now able to get all of this data back to the team during the race. This ensures that all facility-based engineers who previously had to wait until after the event to view the data, can now proactively interact with people at the trackside and contribute to the team’s performance at that event.”

THE McLAREN GROUP’S COMMUNICATIONS ECOSYSTEM

In addition to communications between trackside and headquarters, AT&T provides an enveloping “communications ecosystem” for the team, helping Team McLaren Mercedes employees work faster, smarter and more economically.

The AT&T Remote Access Service supports each team member’s need for personal communication anywhere in the world. No matter how a McLaren employee connects to their corporate data network – by a 56K standard modem, a hotel broadband connection, Wi-Fi access at an airport, or a GPRS-enabled mobile phone – one intuitive user interface provides access to thousands of local access points around the world.

“We’ve found in the past that the phone bill from a hotel room during a race weekend can be greater than the cost of the accommodation,” says Knight. “Using the AT&T service the team can almost always connect using a local or toll free number to the McLaren network at a reduced cost.”

ON THE ROAD TO SUCCESS

Already this season, AT&T has provided the team with double its previous bandwidth – which means twice the speed in communications, twice the amount of data and twice the flexibility – but at a significantly reduced cost.

As a result more data will get back to McLaren Technology Center at a faster pace during race weekends, adding real value to the team’s ability to adapt to the ever-changing race and track conditions.

Additionally, by outsourcing the management of its global communications infrastructure to AT&T, the McLaren Racing technical teams are relieved of the complex and time-consuming task of managing the data network. McLaren technicians and engineers can now focus on core tasks centered on the car and its performance, instead of having to deal with local telephone companies, suppliers and vendors.

AT&T and McLaren Racing are also working to further develop the solution to enable Team McLaren Mercedes to leverage AT&T’s Managed DSL services, which would bring further enhancements to the speed of connectivity for the team. Later this year the team will deploy AT&T’s Netgate technology, which offers secure and high bandwidth connectivity.

“Our philosophy is that we should use our IP technology to provide anytime, anywhere communications,” says Silman. “In the demanding environment of Formula One, we could not have found a better scenario of how communications is fundamental to just about everything a company does. The connectivity we provide means that the Team McLaren Mercedes MP4–20, the 2005 challenger, is becoming the fastest ‘IP-enabled’ edge device in the world.”

For more information on AT&T’s sponsorship of Team McLaren Mercedes, please visit www.att.com/mclaren.
The Services Revolution is Coming

When network managers talk about deriving value from their IP VPN networks, they are usually talking about adding voice capabilities to their data networks.
Expert’s Corner

Voice over IP is an obvious example of network convergence. Running voice and data packets together is an easy way to realize cost savings and reduce network complexity. However, it is hardly the only IP VPN application. A slew of new network-based communications applications are emerging, known collectively as Services over IP.

“Today customers are thinking of how to move bits and bytes. Services over IP will allow businesses to think about their entire networked application environment,” says Robert Merrick, Product Director, Services over IP, AT&T. “We’re just beginning to scratch the surface of the potential value. There are so many applications that will be enhanced by incorporating realtime communications capabilities into them – it’s hard to imagine them all.”

By taking advantage of innovative communication applications, companies could substantially increase their productivity, says Michael Weinstein, Project Manager, Services over IP, AT&T. Services over IP applications will enable users to control realtime and non-realtime communication services; employees could use “find me” and “follow me” communications and never miss an important call; or they could start a call on their desktop phone and then switch seamlessly over to their mobile phone in the middle of the call without missing a word.

These next generation IP-based communication services provide unprecedented convenience and control to both end-users and network administrators. By using voice, video-conferencing, collaboration and other Web-based services, end-users have the flexibility to communicate in whatever manner best suits their immediate needs. Networking managers appreciate the power of Services over IP because of the integrated control they have over their communications environment. Instead of taking weeks to move a phone from one cubicle to another, it is now just a matter of minutes.

But enabling these solutions will be a journey, not a “flash-cut” event.

Companies will need to ensure that the core of their IT infrastructure – their global IP VPN – is ready to support a wide array of advanced Services over IP.

“Enabling Services over IP requires upfront planning, and now is the time to build a solid foundation,” Weinstein says. “Working with an experienced service partner like AT&T makes the adoption of these services much easier for businesses beginning their convergence journey.”

For more information on Services over IP, please contact your AT&T representative.

THE RISE OF NEW IP NETWORK-BASED APPLICATION SERVICES, SERVICES OVER IP, WILL ENABLE COMPANIES TO DRIVE MORE VALUE FROM THEIR NETWORKS, INCLUDING:

- Consolidation and rationalization of networking equipment through converged voice, data, video and application services on a single infrastructure
- Cost savings resulting from being able to operate multiple services over single network elements
- The possibility of true end-to-end, application-oriented Service Level Agreements
- Integration of voice and data facilitates much faster application development and implementation, and therefore faster realization of benefits and time-to-market for new products and services
- Reduced network support costs due to fewer network components and vendor interfaces

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Situation
Currency devaluation in many Latin American countries had a big impact on the bottom line of Siemens' operations in the region, and Latin American business units were severely affected by rising networking costs. To remain viable in the region, Siemens officials decided to consolidate five data centers into one – located in Sao Paulo, Brazil. However, the existing multi-carrier, private line-based private network transport lacked the bandwidth to support critical applications like SAP from a single center. Additionally, using its existing network to connect all business units to a single data center would have been cost prohibitive.

A Monumental Migration
Siemens officials in North America and Latin America watched with interest as an AT&T Enhanced VPN pilot for Siemens' UK operations produced significant savings and increased network performance levels. As a result, Siemens' North American operations, which represent the company's second largest business market, jumped on board to deploy Enhanced VPN and soon after, the decision was made to simultaneously convert Latin America. AT&T’s Enhanced VPN gives Siemens a robust, fully managed Multiprotocol Label Switching (MPLS) network with the ability to connect each site to the nearest MPLS cloud and avoid expensive international private lines.

The U.S. Enhanced VPN was initially scheduled to be installed before any changes to the Latin American network, but Jan Dressel, Siemens VP/CIO for the Americas, was convinced that Latin America could benefit immediately. Siemens officials agreed to migrate Latin American sites while the U.S. deployment was still in process, as long as the team could accomplish the project with only two staff members from its corporate division.

The original game plan was to piggyback on the work being done in North America and convert as many sites as possible. However, Luis Navas, Siemens Latin America Network Program Manager, soon
found that their North American colleagues were inundated with the process of migrating their own, much larger network.

“We quickly realized that we would have to find a way to do the work in Latin America with the in-country infrastructure staff and AT&T,” Navas said. “The success of this whole program was the combination of our project manager, Siemens in-country staff and the AT&T team.”

He added that the migration itself was seamless.

“With the help of the infrastructure management teams from Siemens in each country and the AT&T team, it was really just a phenomenal implementation. We had absolutely zero down time, thanks to the teams working hand in hand,” Navas said. “It’s very hard to distinguish between AT&T and Siemens people working on these projects.”

Overall, Siemens Latin America moved 82 routers from 75 sites in Brazil, Argentina, Chile, Colombia, Venezuela, Peru, Ecuador, Mexico and Central American countries to the Enhanced VPN with no network interruption.

“We basically were able to switch over the entire network with zero down time to our business units,” said Navas. “To this day, it’s one of the few projects that the business units and in-country CIOs recognize as helping their productivity without hampering them in any way, shape or form. The migration was transparent to them and their users. We attribute that to the team AT&T had in country and the support from the Siemens regional companies.”

The Enhanced VPN will enable Siemens to converge data and voice traffic over a single network. The company plans to add AT&T Voice over IP service in the second phase of its Enhanced VPN migration, which is expected to result in additional savings on long distance and international calls. “It’s a strategic move for us,” said Navas. He also commented that Siemens is “very satisfied” with Enhanced VPN.

On a global scale, AT&T is Siemens’ primary networking services provider in North and South America, Asia Pacific, the Middle East, Africa and parts of Europe, providing a standardized 800-plus node network-based IP VPN solution to the global Siemens organization.

Enhanced VPN Boosts Business Transformation

Latin American point-to-point networking costs had been twice as expensive as the same services in North America. Additionally, the existing network had given Siemens no way to prioritize the most critical network operations. Once all Latin American business units had to access critical applications like SAP from a single data center, latency would have significantly hampered operations. “It would have been cost prohibitive, if not impossible,” Navas said.

Enhanced VPN was attractive to Siemens from both a financial and operational perspective, saving the corporation US$ 4.8 million in the first year.

“We experienced improvements in latency between the countries, compared with our private network that was based on point-to-point circuits between each of our locations,” said Navas. “Strategically, Enhanced VPN allowed us to consolidate data centers, which enabled significant cost savings.”

Consolidation and Cost Savings Comfort CIOs

Before moving to Enhanced VPN, Siemens contracted with AT&T to manage its proprietary private line networks that were supported by multiple carriers. At the time, some of Siemens’ Latin American CIOs were concerned as they were not aware of AT&T’s footprint in that part of the world. Since the implementation, however, the situation has changed dramatically.

“Today, every one of them says the move is one of the highlights of our strategic implementations and they’re extremely satisfied with the performance levels,” Dressel said. “When we moved to Enhanced VPN, the ability to specify the class of service and associated Service Level Agreements made a dramatic improvement. Latin American CIOs and business units have fully bought into the Enhanced VPN because of the significant cost savings and improved service levels.”

Navas agrees. “Our hat is off to AT&T and their team for pulling this project together,” he said. “It has given our group CIO quite a bit of leverage in being able to put in some of these strategic initiatives. This has not only lived up to our expectations, but has exceeded them.”

For more information on Siemens, visit: www.siemens.com.
According to industry experts, VoIP-based solutions have emerged to address both of these needs, and companies worldwide are getting on board.

In fact, remote working has become a key factor in driving corporate success according to a recent global survey conducted by the Economist Intelligence Unit (EIU) on behalf of AT&T. The results show that 81 percent of corporate executives worldwide believe that providing remote access is a ‘critical’ or ‘important’ network goal and 20 percent of companies currently use VoIP for remote working. Additionally, 79 percent of respondents said they expect to be using VoIP by 2006.

In September 2004, AT&T responded to this demand with an international pilot of its global VoIP remote worker solution. Based on the AT&T CallVantage® Service platform, this solution enhances the value of working remotely – operational savings, greater end-user productivity, enhanced mobility – by strengthening the bottom-line impact. The trial involved companies with locations in Australia, Hong Kong, Singapore, and the UK, and represents one of the industry’s most comprehensive initiatives leveraging the capabilities of VoIP for global remote workers of multinational firms.
One of the companies participating in the four-country trial was Bausch & Lomb Hong Kong Ltd. Prior to the AT&T CallVantage Service trial, Bausch & Lomb employees relied on a corporate calling card to make International Direct Dialing (IDD) calls. These cards provided global access to a traditional voice network, allowing users to call a local access number specific to the country they were in, and access an IDD system after providing a username and password.

Additionally, because Bausch & Lomb is a US-based company, many employees in Asia Pacific need to work at home after normal office hours, making calls to the US and attending teleconferences. While they could use the corporate calling cards, employees had to use their own handsets which meant that teleconferences would tie up their home phone line.

“Some of the teleconferences would take place in the evening, which is inconvenient for friends and family who look forward to calling each other. Also when employees used their mobile phones, they would frequently drain their handset battery and drop out of the call which is very frustrating for everyone,” said Eric Wong, Bausch & Lomb Hong Kong’s Manager of Information Management and Technology. “Overall, it was an expensive process, so we were looking for an easier and less costly solution that didn’t compromise on quality.”

In looking at AT&T as an alternative, the company focused on two critical factors – the quality of the line and cost reduction. Since beginning the trial with AT&T CallVantage Service, Wong says it has met the company’s needs and it is already seeing dramatic improvements.

“We have had very good feedback from our employees, many of whom use it for their own private phone calls, which speaks volumes about the quality and ease of use of the system. And from my personal experience, I have to agree with them,” says Wong.

Companies participating in the trial could also enjoy easy access to AT&T’s advanced VoIP calling features. These include features such as Personal Conferencing, which makes it quick and easy for participants to establish impromptu conference calls with up to ten individuals. Voicemail with eFeatures allows participants to hear their messages by phone or PC and forward them to anyone in the world via email. Call Logs allow participants to track and monitor their calling habits or move frequently called numbers into their personal Phone Book for click-to-dial access.

Bausch & Lomb Hong Kong has not taken advantage of the additional features yet, but hopes to explore them in the future.

“It has definitely met our expectations and we’re very excited about the value this service can contribute to our bottom line. The conferencing capabilities and integrated voicemail are significantly improving our ability to collaborate around the world,” says Wong. “If other multinational companies are considering VoIP technology, I would recommend AT&T CallVantage Service – it’s stable, easy to use, feature rich and high quality.”

**AT&T CallVantage® Service:**
A Voice over IP (VoIP) service designed for home-use that replaces the traditional home phone with a wealth of modern communication features. Combining the power of your current corded or cordless home phone with your high-speed broadband Internet, it offers the potential to save at least US$ 250 a year over traditional phone service.

**HOW DOES IT WORK?**
The technology behind AT&T CallVantage Service converts your voice into data so you can place and receive calls over your hi-speed cable or DSL connection. You simply plug your computer, Cable or DSL Modem, and your standard household telephone into the Adapter (provided with service) — it’s that easy. You’ll use your phone the exact same way, but you’ll get more than you ever thought possible.

**WHAT DO I GET?**

Customers can choose from plans that include local, long distance, and nationwide calling, favourite features like Voicemail, Call Forwarding, Call Waiting, and Caller ID with Name, and powerful new features, such as:

- Locate Me
- Do Not Disturb
- Keep Your Number for Life
- Safe Forward Number
- Online Call Management

For more information and local availability, please contact your AT&T representative.

Note – this service is not generally available outside of the United States.
Industry Insight
By Brownlee Thomas

Businesses Eye
Customized Convergence

As the debate around defining network convergence continues, AT&T Connections sat down with Brownlee Thomas, Principal Analyst with Forrester’s Telecom & Networks Research Group, to get some insight into the state of the market, what customers are looking for, and how service providers have responded.

Q: There doesn’t seem to be one clear definition of “network convergence”. How do you define the term?

A: Network convergence is traditionally defined as using one type of data for different types of applications, but typically at least one of those applications has real-time elements and requires prioritization.

When you ask most people they usually think of voice, data and video, but increasingly – as we become more mobile – there is a growing tendency to include “mobility” as a crucial element of network convergence. When you look at global enterprises, they have employees working from remote locations around the clock, so there’s an obvious need for global remote access through virtual private networks. But there is also a perceived growing need to provide more complete solutions for mobile workers. Mobility, especially mobile voice, is a mature application and people would like to be able to turn to their primary service provider to provide mobile data as well.

For example, if I’m using a global wide area network service provider for data services and I want to converge my corporate site-to-site networks to support IP video or on-net voice, it will most likely mean moving to an MPLS-based IP VPN environment. But if my service provider can offer me more – such as converged voice and data, managed global and node access, and even managed mobile services, that’s a very powerful combination. My service provider could potentially become the source of all my networking needs.

Q: Are service providers responding to this need?

A: Until recently, North American mobile carriers have tended to be focused on North American customers. However, if I’m looking internationally, one of the differentiators that we’ve seen emerge in the last year or so, is a handful of global operators who can also offer a mobility solution. I think this eventually could prove key to survival in the network convergence game, as offers from network operators and mobile carriers are currently limited.

Q: Other than mobility, what are companies most interested in?

A: Most of the convergence talk is about voice, but we’re actually seeing a higher level of interest in IP video. And the reason for that is

As Principal Analyst in Forrester’s Telecom & Networks Research Group, Brownlee Thomas focuses on international telecommunications services and global telecom market trends.
because the cost of PSTN-type circuit-switched international calling is almost nominal – for example $0.03 to $0.05 cents for trans-Atlantic calls.

Another key issue for companies is the desire for flexible sourcing arrangements that enable the customer to decide from which vendor to purchase managed or unmanaged services. If they’re moving from an unmanaged Frame Relay environment, they usually want to go to an unmanaged MPLS network. If they’re going from a managed Frame Relay environment, then they want to go to managed MPLS – and they don’t want to pay more for it.

They’re looking for more bandwidth, a more powerful offering, and they want to pay the same price as before. The ability for service providers to deliver that on an international scale will be a differentiator, as not all service providers have taken this route.

A: There’s a difference between converging networks, which is MPLS, and converged networking. It’s the difference between what the uptake is on MPLS and what they’re doing with that. Unfortunately, we can’t tell specifically what they’re doing once they’re on MPLS, because voice blends with other high-priority applications, and is no longer distinguishable.

Anecdotally, the indications I get from multinational enterprise customers are that most network convergence is still in pilot or early-rollout stages, with between five and ten VoIP sites – either on very high-volume routes or within the same geographic region. A lot more enterprises are considering trialing or piloting converged WANs in the next year, and I see this trend actually taking off in 2007 or 2008.

Q: Where are you seeing the most activity for network convergence?

A: Where we see the most uptake is at communications sites that are in regions where voice is more expensive – Asia Pacific, Latin America, Middle East, and Eastern Europe. Those are the places where we anticipate the highest degree of demonstrable savings. It really is going to be about demonstration of cost savings.

For more information on Forrester Research or Principal Analyst Brownlee Thomas, please visit www.forrester.com.

Q: What stage are companies at today in terms of converging their networks? Are they still evaluating or have they already started?

A: Companies are essentially making the move to MPLS to future-proof their networks. They realize that the future will be IP, so they’re IP-enabling everything. And when they revisit their WAN contracts for renewal or issue a request for proposals, vendors are promoting MPLS as a replacement for Frame Relay and International Private Line Circuits.

Q: Besides cost savings, what else is driving companies to MPLS and IP?
EVOLVE AT WILL. Can your network turn a tight race into a commanding lead? Can it move quickly into global markets, help drive down costs and be nimble in the face of changing competition? Can it offer both ultra-flexible IP-VPNs and Voice over IP solutions? Can it deliver network security and IP management expertise? Can it evolve to the next generation of converged communications, built on a solid foundation? With AT&T, you can integrate your entire value chain into a single, globally networked community. So not only will your enterprise be able to reach the entire world – it might even be capable of changing it. CAN YOUR NETWORK DO THIS?

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