

Mirapoint in Service Provider Environments: Customer Success Stories



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Introduction

Over the past decade, the global service provider “xSP” market, consisting of ISPs, ASPs, wireline and wireless operators, web portals, and unified messaging providers, has matured, becoming intensely competitive. Churn has become a significant issue for many service providers. The ability of xSPs to differentiate themselves through an ever-expanding range of features and capabilities delivered at a competitive price, while sustaining a profit, is a principal determining factor between success and failure.

Email has become one of the key, mission-critical, applications that service providers employ to support their customers. Indeed, email has become an integral part of the basic service provider package, but basic email is no longer adequate to meet the increasing expectations of subscribers. Service providers capable of delivering new, feature-rich email services can successfully differentiate themselves, plus realize additional revenue streams from these billable, value-added services.

According to The Radicati Group, Inc., there are currently about 902 million active email accounts worldwide. Approximately 64 percent of those (581 million) are hosted accounts. Of these, 82 percent are consumer accounts provided by a Webmail portal or ISP. Hosted and managed business email providers generated revenues of about \$2.3 billion in 2003. These markets are expected to grow steadily over the next four years, reaching \$3.1 billion by the end of 2007. In addition, mailboxes issued by mobile operators are expected to grow at an average rate of 42 percent annually over the next four years, from 15 million in 2003 to 60 million in 2007.

Mirapoint’s appliance approach is the best option for service providers looking for revenue-generating email services that are easily deployable, manageable, and scalable.

Once an email system is fully deployed, the emphasis switches to growth, expanding the user base and the types of revenue-generating value-added features. This requires an infrastructure that can scale. With the old-world approach to email systems, scalability is a significant challenge. The entire message network often must be completely re-architected to support higher volumes of users and messages or new functionality. An infrastructure built on Sendmail, for example, can easily support POP email, but the addition of Webmail, calendaring, or other messaging-related applications requires the purchase of new components and additional integration. Integration and flexibility can also be a challenge for service providers who want portions of their existing infrastructure, such as provisioning, reporting, and billing systems to work efficiently with their traditional email infrastructure.

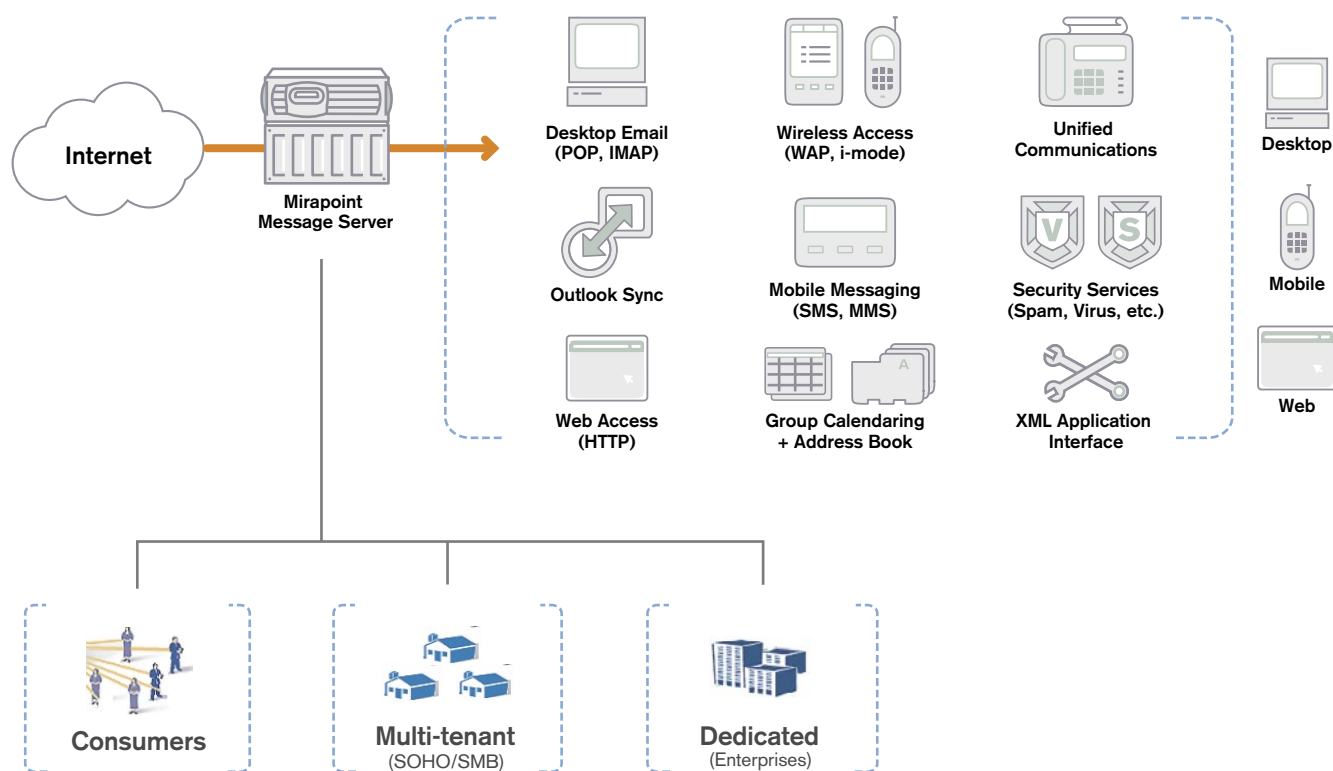
Another challenge service providers face in connection with email is security. Hackers frequently target the large well-known domains such as Yahoo, Hotmail, and AOL, which are easy to identify and result in a larger disruption. Potentially service-affecting viruses, directory harvest attacks from spammers,

Introduction continued...

and password attacks from hackers attempting to compromise customers' accounts are a constant threat to providers of email. Threats can even come from within, like subscribers abusing the message network for distributing spam or viruses, demanding that service providers be able to monitor outbound traffic. In addition, service providers are increasingly being asked by government agencies to setup email wiretaps or archive specific subscribers' messages. Given the need to address security issues, service providers may be able to capitalize on customer demand by offering revenue-generating security-related features, such as anti-spam or anti-virus filtering.

Mirapoint has taken a different approach, creating an email appliance. Hardware and software systems (e.g., runtime, hardware, processing, message store, and directory functionality) are tightly integrated and optimized to work together. Mirapoint appliances are designed for compatibility with provisioning, reporting, and billing infrastructures. This not only enables xSPs to easily and cost-effectively offer basic messaging services, but empowers them to sell profitable, value-added services such as spam filtering and anti-virus protection, mobile access, and Webmail options. It also allows service providers to offer rich email features to small and midsize businesses with multiple domains and tens of thousands of end-users hosted on a single Mirapoint server.

Figure 1. Revenue from multiple users and multiple services on a single email appliance.



The Perfect Solution for Service Providers

Service providers are well aware that users expect email to be just as reliable as utility services like telephone or electric power. Users demand a similar level of dependability—and Mirapoint appliances deliver. The fully integrated approach makes the appliances highly reliable with a proven 99.999 per cent availability based on the actual monitoring of hundreds of deployed Mirapoint appliances.

To maximize profitability and enable growth, messaging systems must provide scalability and performance. Mirapoint solutions have proven world-class scalability and performance based on the industry-standard SPECmail (Standard Performance Evaluation Corporation) benchmark. Mirapoint appliances can scale to hundreds of thousands of users, while handling thousands of simultaneous connections and processing millions of messages per day. Scaling is as easy as adding another Mirapoint appliance as email volume or users grow—resulting in lower total cost of ownership (TCO) over the life of the system.

Billable Messaging Services

Service providers choose Mirapoint because of the wide range of features available and the ease with which Mirapoint appliances can integrate with existing provisioning, reporting, and billing systems to allow service providers to deliver and bill for these value-added services.

Email has evolved into a feature-rich medium to meet the demanding needs of users. Today's users seek robust features such as calendaring, address book, and to-do lists built into their messaging service. They also want to access email via the Web, their cell phones, or PDAs. But they don't want the inconvenience of spam that wastes their time, or the hazards of viruses that can infect their computers. These and other services can be significant revenue generators for service providers.

Mirapoint can deliver billable messaging services such as wireless access, mobile messaging (i.e., SMS and MMS), calendaring and address book, and security services, including spam and virus protection. And, all these services can be offered from a single platform with Mirapoint—without the need to deploy and integrate multiple products or from multiple vendors.

Mirapoint helps xSPs get to market quickly with simplified management and flexibility of services. Customizable service offerings can be delivered through delegated domains and class-of-service controls, which can be used, for example, to segregate customers by consumer versus business users. At the user level, class-of-service capabilities enable service providers to easily and efficiently offer different features on a per-user basis, like webmail for consumers or desktop email and group calendar for businesses.

Figure 2. Examples of billable service packages

	Basic Internet Email (Webmail & POP with 10MB storage)	Additional Storage	Anti-Spam & Anti-Virus	Getmail (External POP email retrieval)	Wireless Notifications (SMS)	Wireless Access (WAP & i-mode)	Fax Integration	Voicemail Integration	Value Added Applications: • Personal & Global • Address Book • Personal Calendar • To-Do List
Consumer Packages	Priced per user per year: • 1-5 users • 5-10 users • 10+ users	Tiered storage offerings: • 25MB • 50MB • 100MB	Protection Priced per user per year	Free or bundled as part of consumer service package	Priced per message or per user per year	Priced per user per year	Priced per user per year	Priced per user per year	Free or bundled as part of consumer service package
Business Packages	Priced per user per year: • 1-5 users • 5-10 users • 10+ users	Tiered storage offerings: • 25MB • 50MB • 100MB • Unlimited	Priced per user per year	Free or bundled as part of business service package	Priced per message or per user per year	Priced per user per year	Priced per user per year	Priced per user per year	Free or bundled as part of consumer service package

Billable Messaging Services continued...

Service providers can add extra value to their email services by customizing the capabilities of Mirapoint products to improve and differentiate the end-user experience. The “look and feel” of customers’ web-based client and management interfaces can be customized through branding, graphics, color schemes and hyperlinks. The Mirapoint solution can also be customized to work with third-party applications, like portals.

Messaging systems must be easy to manage and maintain. Ongoing management and maintenance costs associated with traditional messaging systems can easily grow to exceed the initial capital investment. Mirapoint offers centralized configuration, management, and monitoring of messaging components that simplify management. Control over a service provider’s complete message network is available through unified management tools from a variety of interfaces including web-based graphical user interface (GUI), command line tools, or Mirapoint’s Administration Protocol scripting language. Upgrades are simple with Mirapoint’s single software image that includes all operating system and email application components, which can be dynamically updated over the network. Moving to a new software release requires just one software download. Finally, Mirapoint offers multi-system management with administrative tools that deliver a unified view into all systems on the message network.

Traditional Internet Service Providers

Traditional ISPs, such as THUS and Internet Gold profiled below, are looking for a complete messaging solution that allows them to meet their customers needs, update their infrastructure, and serve different classes of customers (i.e., consumers and businesses) economically from the same platform. They also want the ability to add new services such as Internet Message Access Protocol (IMAP), Webmail, group calendaring, and anti-spam and anti-virus capabilities to generate more revenue.

Thus, Plc



Background

THUS, Plc, headquartered in Glasgow, Scotland, and listed on the London Stock Exchange, provides communications solutions to business and residential customers throughout the UK under the THUS and Demon brands. THUS was formed from the merger of Scottish Telecom and Demon Internet in 1999. Founded in 1993, Demon was one of the first Internet service providers in the UK.

Challenge

As a pioneer in providing email services to its Internet customers, THUS had developed its own mail system, which it continues to use today for most of its residential customers. However, there were corporate customers whose email needs were unique. “A standalone platform was preferable to us either trying to run them on our ISP email platforms or build another one from scratch ourselves,” says Richard McCallum, development director for THUS. The challenge was to find a solution that met THUS’ performance, reliability, flexibility, and conformance to standards requirements.

Solution

THUS had been in discussions with Mirapoint for some time before taking the big step—deploying its initial Mirapoint system in 1999. “It was one of the first outsourced appliances that Demon started using,” says McCallum. “The development team had a lot of confidence in the appliance. They felt that it met all of their needs in terms of conformance, performance, and flexibility. We trusted Mirapoint to take over this part of our infrastructure.”

Over the past four years, THUS has steadily increased the number of end users on its Mirapoint appliances. Today, more than 265,000 users from two major corporate customers are supported on two platform suites that include ten Mirapoint Message Servers™, Message Directors™, and Directory Servers™. The solution supports simple mail transfer protocol (SMTP), post office protocol (POP3), and Webmail access. “Webmail has been a big plus,” says McCallum. “One of the customers that used to be on a legacy system was very happy with the move to Mirapoint because of the significant improvement in their users’ experience with Webmail.”

To combat the growing problem of spam in the UK, THUS uses Mirapoint's Full Spectrum™ Email Security Technology, which combines powerful spam analysis, identification, filtering, and management features to achieve a 96% spam catch-rate with near-zero false positives. The multi-layered approach addresses spam at the email gateway, while giving end-users control to individually define what spam is to avoid lost messages and optimize the effectiveness of spam filtering.

Email user requests, such as adds, deletes, and changes, are handled online through a third-party provisioning system that also manages the other services provided by THUS. "One of the advantages of the Mirapoint appliance is the application programming interface (API), which we have found to be very exhaustive, and we've been able to take advantage of that," says McCallum.

Overall, THUS has found Mirapoint to be the right solution. "It's extremely easy and quick to set up, easy to manage, and extremely reliable," says McCallum. "The upgrade paths have always been trouble free and non-disruptive. And although we don't use a great deal of training, it has been good when we needed it. We find the technical support team extremely knowledgeable and reliable as well. It's a very good solution for us."

Internet Gold



Background

Internet Gold is one of Israel's leading ISPs with more than 300,000 subscribers, including over 3000 businesses that it provides outsourced web and email services to. Internet Gold also provides Israel's leading Hebrew language search engine and portal. With the country's most advanced content, online partnerships, and e-commerce services, the ISP delivers the best in next-generation Internet services. when we needed it. We find the technical support team extremely knowledgeable and reliable as well. It's a very good solution for us."

Challenge

Internet Gold's messaging infrastructure was becoming more complicated and less reliable. The ISP had relied on Sendmail freeware to deliver email functionality to its customers. Internet Gold's team realized they needed a robust, reliable, yet easy-to-use infrastructure to enable a rapidly expanding customer base. The ideal solution would meet the company's current needs as well as evolve to meet future requirements, such as wireless. "In addition to configuration and management challenges, we had a growing concern about susceptibility to viruses and hacking," says Arik Alster, chief technology officer at Internet Gold. "We felt that if we were having problems with our infrastructure at that point, the situation would only worsen as our customer base increased."

Solution

After carefully evaluating various messaging technologies, Internet Gold selected Mirapoint. Mirapoint's Message Server was chosen based on its ability to deliver the reliability and raw power needed to meet the demands of the ISP's business customers. To ensure uninterrupted service, the company included a second server to provide redundancy in the event the active server went down.

By selecting Mirapoint, Internet Gold was able to effectively offer carrier-grade performance with increased reliability to its business customers. The cluster facility enables the ISP to guarantee the appropriate level of service mandated by customers' service-level agreements (SLAs). Coupled with the unprecedented reliability of the Mirapoint solution, Internet Gold can pursue larger corporate accounts. And the ISP can now ensure that customers of all sizes are up and running within days versus weeks or months of signing a contract without an army of UNIX professionals to make it happen.

Mirapoint has also given Internet Gold peace of mind by delivering the highest levels of security. Mirapoint's purpose-built email appliance protects end-user mail access, message transport, and system administration. Through integrated virus and spam protection, Mirapoint enables Internet Gold to give its customers customizable control over their own security options. These services can also be revenue generators for service providers. Approximately 40 percent of Internet Gold's broadband subscribers are now using the Mirapoint virus protection service. According to Eli Holtzman, CEO of Internet Gold, "Our first obligation is to ensure an enjoyable and secure Internet experience for our subscribers. So we are pleased to offer this comprehensive anti-virus solution, and we are particularly pleased that such a large portion of our broadband subscribers have quickly recognized the program's value. We expect sales of the anti-virus service to continue to increase. As a complementary service, we are now planning to market an anti-spam system, and we expect to offer the service to our subscribers by the end of the first half of 2004. We foresee that development and sale of products like these will be a significant contributor to our growth."

Another feature is the ability for customers to administer and manage their own hosted email domains and accounts from a single customized web interface or command-line management console.

Scalability and flexibility were key criteria in selecting Mirapoint, ensuring that Internet Gold could deliver solutions that would grow and evolve to meet changing customer needs, such as Internet messaging on cell phones and personal digital assistants (PDAs). Internet Gold has deployed Mirapoint's Webmail Direct and WAPmail Direct to address this market. "We were committed to finding a company at the forefront of delivering solutions that embraced leading-edge technologies such as wireless," says Alster. "Mirapoint's focus on these types of leading-edge technologies was exactly what we had in mind."

Looking to the future, Alster comments, "We're committed to a relationship with Mirapoint for the long term. They've helped us deliver reliable, first-rate services that cement our position as Israel's largest portal and leading service provider. We're happy, but more importantly, our customers are happy and receiving the services that give them an edge. It's a winning situation all around."

Broadband Operators

Broadband operators, such as IQuest Internet profiled below, are increasingly offering their services through a portal, which requires portal integration with their messaging system. And because they serve both businesses and consumers, they also need to segregate groups within the same platform. Finally, to remain competitive, they want to have the ability to add advanced services and multimedia such as unified communications in the future.

IQuest Internet, LLC



Background

IQuest Internet, LLC, headquartered in Indianapolis, Indiana, provides a comprehensive range of Internet solutions for eBusiness, online service providers, and residential customers. Their broad portfolio of services include analog dialup, ISDN, DSL, T1, and DS3 access, web hosting, server collocation, virtual private networks (VPNs), managed services, wireless Internet, and commercial email server packages.

Challenge

IQuest had developed its own “in-house” email system based on Qmail and UNIX servers. That solution worked reasonably well for residential customers, but IQuest saw an opportunity to serve mid-sized businesses that didn’t want to maintain their own email server, but still wanted the ability to add or delete users and manage their own account. “To provide businesses with administrative access to the system would require delegated domains,” says Mike Booher, business manager at IQuest. “We couldn’t do that on a Qmail system unless we built a totally separate box for each customer.”

Solution

IQuest heard about Mirapoint and decided to put it to the test in the summer of 2001. The ISP installed a Mirapoint M200 Message Server to support a realty group with a network of offices. The application was ideally suited to Mirapoint’s capabilities. Each of the 150 offices has its own domain on the Mirapoint appliance that enables each office administrator to manage his or her own users. “By the time we filled up that appliance, it had paid for itself, and we bought another Mirapoint appliance,” recalls Booher. The second Mirapoint appliance, an M400 Message Server, uniquely supports yet another market. “We provide Internet access and email services to some smaller community-based ISPs,” says Booher. These ISPs sell services under their name, and look

to IQuest to provide the services. The M400 Message Server currently has approximately 70 domains, allowing each end-customer to manage their own set of users. “We’re still adding domains all the time. It’s working great,” adds Booher. “Both Mirapoint appliances have proven very reliable and easy to manage.”

Together the two Mirapoint appliances support nearly 17,000 end users, who can access their emails through POP or Webmail. Some are beginning to set up their personal digital assistants (PDAs) with wireless service. Users are also benefiting from virus protection. Using technology from Sophos, the Mirapoint Message Servers deliver virus filtering for all incoming and outgoing messages. The anti-virus software protects IQuest’s customers from 100% of infections, saving thousands of hours spent dealing with virus incidents and eliminating disruptions, lost data, and lost productivity.

A number of customers have additionally benefited from Mirapoint’s highly customizable web interface. “We have branded their portal based on their unique needs,” says Booher. “It’s fairly easy and, by charging them a small fee to maintain that brand, it’s become another revenue stream for us.”

Internet Operations Center, Inc.



Background

Since its inception in 1996, Internet Operations Center, Inc. (IOC), located in Southfield, Michigan, has been designing, developing, deploying, and operating Internet-based applications for clients such as Ford Motor Company, Visteon Corporation, Collins & Aikman, and many others. Its technical and engineering professionals are experts in business operations, data-center management, electronic commerce, web application development, network engineering, security, and messaging.

In 1999, a major automotive company contacted IOC to host an email service for its dealerships in the U.S., Canada, and Mexico to streamline communications between its network of automobile dealerships and its corporate staff.

Challenge

IOC initially hosted the solution using a standard Webmail application running on a single, large UNIX server. “Although it was running on a high-end server, performance wasn’t optimal,” says John Taisto, a systems engineer with IOC. “We noticed application-related errors once the user-base exceeded 10,000. Additionally, the clients wanted more robust messaging features that weren’t supported in the original application.”

Solution

The client had recently switched to Mirapoint for its own internal mail and, because they saw such a cost benefit and dramatic increase in performance, they wanted the same results for the dealership-messaging project.

Taisto was skeptical at first. "I bombarded Mirapoint's technical staff with questions because I needed to be certain that it would outperform the other solution," says Taisto. "We launched a trial system for extensive hands-on testing. In the end, Mirapoint surpassed our expectations."

In April 2003, Taisto, with assistance from Mirapoint Professional Services, installed a Mirapoint Message Server active-passive cluster as the mail store and two Mirapoint Message Directors to secure and isolate inbound and outbound traffic. The appliance solution offers access via Webmail, Post Office Protocol (POP), and Internet Message Access Protocol (IMAP). Webmail is the most popular mode of access because users can send and receive email from any Internet-connected PC. The solution's address book feature can similarly be accessed from anywhere. "It's also resistant to exploitation by viruses," says Taisto, "because Mirapoint is not a primary target of virus attacks."

User volume has grown to more than 31,000 with SMTP traffic averaging between 100,000 and 250,000 messages per day, 500,000 to 600,000 POP connections per day, 1,000 to 2,000 IMAP connections per day, and 2,000 to 5,000 simultaneous Webmail connections per hour during business hours. In spite of the growing volume, spam and viruses have not become a problem. Using integrated best-of-breed anti-virus technology on the Mirapoint Message Server delivers virus filtering for all incoming and outgoing messages. Dealer email also utilizes Full-Spectrum™ email security technology for spam protection, which provides powerful multi-level spam analysis, identification, filtering, and management features to deliver better than 96 percent effectiveness with zero false positives. A Web-based graphical user interface was created allowing users to set their own preferences.

According to Renee Bingham, IOC's project manager, migrating the solution to Mirapoint and upgrading the infrastructure eliminated the previous application-related challenges. "The solution has been reliable. There have been few instances where IOC needed to contact Mirapoint support, but, when we did, they were responsive and quickly solved the issues," says Taisto.

Mobile Operators

Mobile operators are very interested in increasing their Average Revenue Per User (ARPU) by charging on a per-use basis for services like MMS and SMS notification, and wireless access protocol (WAP) mail or i-mode. Because of their size, mobile operators require messaging solutions that can scale to millions of users. And, like broadband operators, they are increasingly offering their services through a portal, which requires portal integration with their messaging system.

Mobile Operator Integrator

Mobile Operator Integrator

Background

A large, multi-national integrator provides management and IT consultancy, systems integration, and outsourcing services to mobile operators worldwide, with many years of experience in the IT service arena.

The organization's wireless networks division provides mobile messaging and payment solutions to hundreds of the world's top wireless operators in over 70 countries. These solutions serve more than 500 million active mobile phone subscribers. Multimedia Messaging Service (MMS), or video, is the most recent killer application in the mobile telecommunications telco arena, and this organization has a market share in excess of 20 per cent with nearly 50 major mobile operator customers using its solution.

In addition to MMS, the organization's most powerful application is unified communications (UC). The company is providing this solution to the first third-generation provider worldwide. The organization also delivers the first mature, commercially implemented Internet Protocol (IP)-based voice mail solution, which has been deployed in multiple mobile telecom systems.

Challenge

The company's large mobile operator customers have extremely demanding specifications for differentiated offerings beyond traditional communications services, with advanced applications such as MMS, UC, and video mail. At the same time, the economic state of the telecom market requires cost-effective solutions. The company must continually create new applications and work with technology partners that can deliver the most innovative, high-performance solutions with the lowest total cost of ownership.

In addition, mobile operators seek solutions that reduce complexity, are easily managed, and can be rapidly deployed. Most importantly, because many mobile operators have a regulatory requirement to deliver 99.999 % availability on their systems, reliability is essential.

Furthermore, the solution needs a message store where all messages, including MMS, email, voicemail, and video mail, would be stored and accessed by the end user. And the message store requires the proper interfaces to connect with existing billing, logging and reporting, and management systems.

Solution

When searching for the components for their next-generation MMS, UC, video mail, and voicemail solutions, the company looked to Mirapoint. Mirapoint provided an ideal message store platform because of its reliability, superior performance, open interfaces, and low total cost of ownership. The fully integrated approach makes features easy to use and highly reliable with a proven 99.999% availability, combined with world-class SPECmail performance and ease-of-deployment.

Alongside the company's solutions, Mirapoint's Message Server offers convenient integration points for storage, access, and retrieval of any message type and related content, including multimedia, voicemail, video mail, and standard email. Mirapoint's open, standards-based architecture provides a high level of flexibility for the company and its customers to integrate Mirapoint solutions with a host of third-party or custom applications. This is done through a wide range of protocol support offered by Mirapoint including SMTP, IMAP, XML, and LDAP support.

Mirapoint's products also provide the required integration points for message notifications, as well as logging and reporting, billing, and OAMP (Operations Administration Maintenance & Provisioning) that were highly adaptable to the company's architecture. For example, Mirapoint offers Web-based personal and group calendaring functionality to wireless subscribers. Mirapoint's ability to easily integrate these and other applications minimizes development costs.

The Mirapoint solution enabled rapid deployment and the ability to add new users and handle higher message volumes. The combined solution is currently implemented in the networks of over 60 large mobile operator installations around the world.

Conclusion

Mirapoint's feature-rich email and security appliances are the ideal solution for today's highly competitive service provider market. Service providers worldwide have selected Mirapoint appliances for their messaging offerings. Mirapoint's success in service providers around the globe demonstrates the reliability and effectiveness of its solutions. Mirapoint has over 600 customers worldwide including well-known service providers such as Research In Motion (RIM), Network Solutions, RCN, and PSInet, in addition to the five profiled in this document.

Mirapoint's robust messaging services provide xSPs with a comprehensive solution capable of delivering new, feature-rich email services such as flexible Webmail and wireless messaging, calendaring, address book, to-do list, virus scanning, and anti-spam protection. Through these services, Mirapoint helps service providers differentiate themselves and realize additional revenue streams from billable, value-added services.

Mirapoint simplifies message delivery and management with a fully integrated platform that eliminates the complications associated with traditional messaging services deployment and management and makes it easy for service providers to add or integrate functionality. The fully integrated approach makes features easy to use and highly reliable with a proven 99.999% uptime.

If you are a traditional Internet service provider, broadband operator, or mobile operator—Mirapoint is the right solution!

For more information on how Mirapoint can help you provide revenue-generating email services that are easily deployable, manageable, and scalable, visit our Web site at www.mirapoint.com, or call us at 408-720-3700.

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