

- IP Telephony
- Contact Centers
- Mobility
- Services

CASE STUDY

Avaya IP Telephony Services and Solutions provide total Business Continuity at The Seattle Times

Challenge	Solution
Finding a best-in-class “Converged” solution that delivers high performance via adaptive and scalable architecture; high reliability; cost effectiveness; end-user friendliness and expert support	The right combination of Avaya solutions creates an open architecture that is very stable; Avaya mobility solutions enable employees to be more productive while on the road while enhancing the IP Telephony network to best serve its customers.
Value Created	
<ul style="list-style-type: none"> Initial savings: \$125/phones moved multiplied by 500 moves per year yields a savings greater than \$62,000 annually; in terms of time saved the Moves/Adds/Changes that used to take days - now take minutes - to complete. Eliminated \$56,000 in annual circuit costs by moving internal voice traffic to the WAN. Realized another \$20,000 in annual savings in technical administration time saved by running remote sites off the main voice servers. More Agile, Secure and Reliable Operations for 18 sites, including news bureaus, contact centers, printing facilities and distribution centers. “If we don’t have communications, we don’t have a newspaper.” 	

Benefiting from IP Telephony Without Reinventing Your Network

SEATTLE, Washington USA – Winner of seven Pulitzer Prizes for progressive news coverage and investigative reporting, The Seattle Times has earned an international reputation for community service and dependability. In more than a century of operation, the paper has never missed a daily edition.

With a record like that, it's no surprise that The Seattle Times demands top communications system performance. When it comes to serving its nearly one and a half million weekly readers, only the best will do.

Today, after pioneering converged voice/data communications across its many Puget Sound locations, the paper is taking convergence to the next level in a drive to reinforce business continuity and link its people and operations even more tightly together. A new Avaya Enterprise Survivable Server, adding Avaya IP Softphone capabilities for remote reporters and photographers, and tests of a new series of user-friendly Avaya IP telephones are all part of this next stage.

Choosing a Highly Adaptive Communications Network

Though the printed page is still the centerpiece of its operations, the Seattle Times today is a 24x7 multimedia communications operation with a growing on-line classified and help-wanted business and the 13th-largest news media website in the U.S. For this no-downtime business, the performance of its communications network is all important.

Eighteen Seattle Times locations, including news bureaus, contact centers, printing facilities and distribution ware-

houses, are linked by and depend on infallible voice and data communications. As they say at the Times, ‘if we don’t have communications, we don’t have a newspaper.’

So the stakes were high in early 2001, when the Seattle Times IT organization completed a comprehensive network blueprint designed to support the company’s multi-year business plan.

“We’d been an Avaya customer for quite a few years,” says Leif Haslund, senior telecom system analyst for The Seattle Times. “We made the decision to look at a new system — an IP system — knowing that was the wave of the future.”

Although its existing TDM (Time Division Multiplexing) voice network was highly reliable and feature-rich, the Times team was unsure whether it could fully support the application platform that the business plan demanded. With initial research suggesting that an integrated voice and data infrastructure was the way to go, the team set about their work.

They saw a Voice over IP (VoIP) network as the best way to meet the newspaper’s evolving needs. Given the tight linkage between voice and data, a converged infrastructure is ideal for highly integrated business applications – a key consideration for the paper’s future.

As they evaluated the competitive options and visited vendor labs to see the converged solutions first-hand, the team was clear on what the newspaper needed. They wanted a best-in-class solution that would deliver high-performance on a highly adaptive and scalable architecture — a communications infrastructure ready for whatever the business might need in the future.

The Critical Requirements

As the team considered the different providers and their approaches, there were several 'no-compromise requirements' that received heavy weighting in the evaluations.

High Reliability The most important requirement. The newspaper's management – and the end-user community at large – was accustomed to a 'no downtime' network. It was essential that the new system delivered that same level of reliability and performance.

Cost Effective The Leadership Committee expected a selection that made immediate – and ongoing – financial sense. This meant the solution needed to have a reasonable initial capital outlay as well as reduce day-today operational costs.

End-user Friendly The Seattle Times is a very people-centric business. For the new solution to be a success, it needed to be easy to use, so it would be readily embraced by the staff.

Expert Support Though the Times' internal IT team was highly skilled, convergence was new to them. They wanted an expert partner to learn from. The winning provider would need to marry best-in-class hardware and software with superior service and support.

The Solution

After three months of exhaustive research and a presentation of findings and recommendations to The Seattle Times Leadership Committee, the choice was made. Avaya S8720 Media Servers with Avaya Communication Manager Software, Avaya P333 Data Switches and an Avaya MCC1Gateway would be powering the newspaper's next-generation VoIP network.

The Avaya solution met all of the requirements. Financially, the Avaya solution was very attractive. The cost of the actual system was about the same as a standard PBX upgrade.

The Avaya Communication Manager Software has an intuitive, easy-to-use interface, so the staff required minimal training. In the newspaper environment, with its non-stop deadlines, it enabled the staff to avoid the productivity hit that often comes with deploying a new technology.

Since the new solution delivered the same five 9's reliability as the previous system, everybody at The Seattle Times would continue to receive the high-performance they were accustomed to.

And the competitors? The Times staff found a consistent pattern with the competitive alternatives. While each had its 'bells and whistles', all were missing critical functionality that the newspaper could not do without. One example was the ability for incoming caller ID numbers to follow transferred calls. No business wants to go backwards when they're investing in a new technology. Once the Times team had the facts, choosing Avaya was an easy decision.

Premium Voice Quality

When the deployment of the new system began, things went smoothly. The team began implementing the new system on a Monday, and by Friday it was up and running smoothly.

The plan called for them to bring it up on a parallel network, since they wanted to do some stress testing before they cut it over to full production.

The team knew that peak network performance would not happen by chance, so they were very interested in how the network would handle the new packetized voice traffic.

Understanding how demanding VoIP is on a network, they decided to really stay on top of the issue by doing constant Quality of Service (QoS) testing -- hammering away on the network with all sorts of test traffic. The network testing and end-user feedback have consistently verified that VoIP is running with very high QoS on the existing data network, straight through to the desktop. The voice quality is easily on par with traditional TDM systems.

Seamless Interoperability

The paper's backbone WAN is supported by three large Cisco Catalyst 6509 data switches, with a distribution layer running forty Catalyst 3524s. The addition of the Avaya S8720 Media Servers and P333 Data Switches made interoperability a key requirement.

When the Times decided to go with a converged architecture, the IT team knew that the total communications infrastructure needed to fully interoperate. That included all of the new Avaya elements, the Cisco switches, and the Nortel edge routers. They installed the P333 switches in the wiring closets to provide a switched 10/100 Mb/s link to the desktop, along with in-line power to the IP endpoints through the existing Ethernet cabling. Not only were the P333's completely compatible with the Cisco gear, they were less expensive.

Given the paper's absolute requirement for reliability, the fact that the Avaya Media Servers ran a Linux operating system over Intel processors was a real plus. The IT team viewed this open architecture as a very stable structure and an important element in a high-performance multi-vendor network.

Big Impact on Moves, Adds & Changes

The new system quickly made a positive impact on The Seattle Times' core business.

From an internal IT perspective, the IT team has realized significant savings in the amount of time spent day-to-day on network administration. This has freed up staff to spend time on more strategic issues, like planning and deploying new business applications in the paper's contact centers.

The impact on moves, adds and changes (MACs) has also been impressive. On average, the Times moves about 25 percent of its people per year. With a staff of 2,000, that's a lot of MACs. But with the new converged solution, MACs require minutes, not days. Reporters are able to move themselves — they simply log out of one phone and log into another. They don't even have to move the physical telephone. The productivity gains are significant and immediate.

A Compelling Return on Investment

The newspaper business has never been more financially challenging than today. As competition from TV, alternative

print media and Web-based news and ad sources has grown, cost control has become a core issue. When the Seattle Times looks at the financial benefits of convergence, it likes what it sees.

"We needed to find a way to reduce our operating costs on the telecom side of the house," says Haslund. "By going voice over IP and enabling all of our T1s or frame relay networks going out to our remote locations to handle voice, we were able to reduce costs and the number of T1s. Traditionally you had one voice and one data T1, and had your monthly recurring costs for each one of those. Now with just one T1 we can handle both voice and data. That reduced our costs — basically cut them in half."

In addition, Haslund says that by homing all local traffic into the Avaya S8720 Media Server at one central location, the Times was able to reduce the number of local circuits it uses, cutting local line costs by 30 percent. The Times eliminated about \$56,000 in annual circuit costs by moving internal voice traffic to the WAN.

From the MAC perspective, convergence saved \$125 per phone moved, multiplied by about 500 moves a year. That doesn't take into account the financial implications from improved end-user productivity.

For instance, Avaya Modular Messaging enables users to see, hear and manage both voice mail and e-mail messages using their Microsoft Exchange desktop interface. When out of the office, they can listen to e-mail messages and forward or respond to them by telephone. The paper's many Blackberry users can pick up both voice and e-mail messages on their PDAs. Both e-mail and voice messages are stored on the same server.

Finally, the paper has saved an additional \$20,000 annually in technical administration time by running remote sites off the main voice server, and avoiding the capital expense required to purchase switches for those locations.

In addition to cost savings, another key benefit has been system dependability.

"The ability to have these systems up and running at all times has been critical," says Haslund. "We've had very little — if not zero — downtime in our system in the past four years. The majority of the problems we run into are with our carriers — problems with our T1s, but not our phone system."

What's Next?

Though convergence is now firmly in place at The Seattle Times, Haslund and the IT team have number of IT initiatives on the planning horizon. A top priority is to further buttress the paper's resilience and survivability in case of disaster, an issue dramatized by the Nisqually Earthquake that struck the Seattle area in 2001.

"How do we continue business if we are told we cannot enter one of our buildings?" Haslund asks. "How can we continue to do what we need to do? The Avaya platform gives us that ability. We can take our reporters and they can log in with their phone number at a warehouse, and we can

still produce a newspaper."

"We have upgraded our system to Avaya Communication Manager 3.1 Powering an Avaya S8720 Media Server," he adds. "In doing so, we still have our Avaya S8700 Media Servers. Those can be moved out to our North Creek printing facility and become an Enterprise Survivable Server (ESS)."

The ESS automatically replicates the database of the primary Avaya S8720 Media Server in real time and, in case of trouble with the primary server, takes over instantly to keep calls moving. Avaya S8300 Media Servers in local survivable processor (LSP) mode with Avaya G250 and G350 Media Gateways will be installed at the paper's dozen-plus warehouse facilities and news bureaus.

"The plan is that the ESS in North Creek will be able to handle all of our remote locations in the event of a major disaster in the Seattle area, and that we'll be able to still produce our paper by sending our reporters and support staff to remote locations around the Puget Sound area," Haslund says

The IT team is also attracted by the user friendliness of the new Avaya one-X™ Deskphone Edition for 9600 Series IP Telephones. Ten of the phones have been on beta test in the Seattle Times IT department, where they have proven popular.

"They enjoy the look of the phones and they like the ease of use, the changes that have occurred in transferring and conferencing," Haslund says of his IT teammates. *"The features in these phones are more robust and give us more tools to use as we're going forward. There's a high-fi handset; it's like listening to an iPod or some high quality music equipment. It's got a richness to it that is unique in the industry right now. I don't think we'll be able to get the phones off their desks when we're done."*

Avaya one-X Deskphone Edition for 9600 Series IP Telephones provides confident control of customers' daily communications demands by offering:

- User-centric design
- Intuitive, context-sensitive interfaces
- Enhanced audio
- Flexibility to add modules, adapters, and phone applications

Mobility is another priority. With many Seattle Times employees working as road warriors, Haslund is looking forward to equipping them with Avaya IP Softphone software on their laptops. With IP Softphone, they can connect securely through the Seattle Times virtual private network log and use the company's telecommunications system, including four-digit dialing, conferencing, call forwarding and other conveniences, as if they were in the office. Reporters and photographers will find it easy to file stories and digital images with IP Softphone.

Since contact centers are the primary means the Times uses to communicate with its subscribers, the paper intends to

keep customer relationship management (CRM) applications at the cutting edge. One way is by leveraging the extensive community of Avaya third party developers. Whether through enhancements to ACD and IVR capabilities or tighter CTI database linkage, the Times sees its converged architecture giving the business maximum application flexibility and integration.

Lessons Learned B-to-B Advice for Enterprises Considering Convergence

Fundamentals First

“Look at your business needs first and figure out what your business goals are. Then take a look at how to best service your customers internally. Look for products that are going to be effective for your business needs.

If you’re looking for a robust communications company, then you need to look at the telephony side Avaya has come from, and how that fits into your business needs with call

centers, applications for your desktop phones, and products that help your internal customers do their jobs more efficiently. Avaya has done that for us.”

Set The Bar High

“Hold your vendor to true business partner standards.”

Do Your Homework

“Definitely check out the different solutions and make sure you’re putting in a system that meets your needs – all solutions are not created equal.”

Learn More

For more information on how Avaya can take your enterprise from where it is to where it needs to be, contact your Avaya Client Executive or Authorized Avaya BusinessPartner, or access other collaterals by clicking on **Resource Type** under “Do Your Research” at www.avaya.com

ABOUT THE SEATTLE TIMES

Founded in 1896 by Alden Blethen, The Seattle Times is the largest, locally owned and operated metropolitan newspaper in the U.S. A 4th and 5th generation family-owned business, The Seattle Times is well respected for its comprehensive regional coverage as well as its in-depth national and international reporting and award-winning photography and design. The Seattle Times Company owns seven affiliate newspapers in Washington State and Maine, as well as a network of on-line news sites. For more information on The Seattle Times, visit www.seattletimescompany.com

ABOUT AVAYA

Avaya enables businesses to achieve superior results by designing, building and managing their communications infrastructure and solutions. For over one million businesses worldwide, including more than 90 percent of the FORTUNE 500®, Avaya’s embedded solutions help businesses enhance value, improve productivity and create competitive advantage by allowing people to be more productive and create more intelligent processes that satisfy customers. For businesses large and small, Avaya is a world leader in secure, reliable IP telephony systems, communications applications and full life-cycle services. Driving the convergence of embedded voice and data communications with business applications, Avaya is distinguished by its combination of comprehensive, world-class products and services. Avaya helps customers across the globe leverage existing and new networks to achieve superior business results.

Applications	Systems	Services
<ul style="list-style-type: none"> • Avaya Communication Manager • Automatic Call Distribution (ACD) • Avaya Call Management System • Avaya Call Center Elite • Avaya Modular Messaging (with Unified Messenger) 	<ul style="list-style-type: none"> • Avaya S8720 Media Servers • Avaya S8700 Media Servers (Enterprise Survivable Server) • Avaya S8300 Media Servers • Avaya MCC1 Media Gateway • Avaya G250 Media Gateways • Avaya G350 Media Gateways • Avaya P333 Load Balancing Stackable Switches • Avaya 4600 Series IP Telephones • Avaya one-X™ Deskphone Edition for 9600 Series IP Telephones 	<ul style="list-style-type: none"> • Avaya Global Services: <ul style="list-style-type: none"> – Implementation and Integration – Project Management – Solution Design & Development – Call Center Consulting – Solution Deployment • Avaya Product Support (Maintenance)

All statements in this Case Study were made by Leif Haslund, senior telecom system analyst, The Seattle Times

