

Aspect Software Bets on Open Source; Wins Big in Choice, Control and Costs

Leading Contact Center Vendor "Practices what it Preaches," Successfully Using Digium's Asterisk Business Edition™ with Aspect® Unified IP™

Open source implementations have been steadily growing in interest in the wider technology community and have now entered the communications arena. Companies have started to notice open source as a viable telephony option for an IP PBX, or Internet Protocol - Private Branch Exchange. There are several benefits: lower costs, extreme flexibility, highly customizable applications and even heightened security protection. Adoption of this newer telephony platform is definitely on the rise in smaller organizations, yet large-scale implementations of open source IP PBXs are a more recent phenomenon.

One contact center vendor is offering its customers an open source IP PBX package, betting that this technology will see higher adoption in the near future. This industry-leading provider opted to take advantage of an open source IP PBX and deploy the solution in its own headquarters, and has been enjoying the benefits since implementation.



Do Contact Center Agents Need a PBX?

The PBX and the ACD are very different systems, designed for different purposes.

Automatic Call Distribution (ACD) is a software feature that routes a call to groups of agents based on a set of business criteria called routing rules. The guiding principle is that the caller will be routed to the next appropriate agent based upon those rules, in addition to agent skills.

A Private Branch Exchange (PBX) is a switching system providing telephone communications between internal stations and external telephone networks. The term generally refers to manually operated switching equipment as opposed to computer operated switching.

A contact center might implement both an ACD and a PBX in one location if they have business users, outside the realm of the contact center that need general call capabilities. A PBX is used for non-contact center related activities (calling home for example) where the application of business rules isn't required. In addition, PBX capabilities are often utilized by contact center agents to perform research tasks.

Moving On Up

In 2006, Aspect Software was in the process of moving the location of its corporate headquarters from Westford, to Chelmsford, Mass., and considered implementation of a new private branch exchange (PBX) solution to manage both its business and technical support calls. As a leading contact center vendor, Aspect Software has extensive experience integrating its contact center applications with a wide variety of PBXs. And, because of its intimate knowledge of the different communications options available, Aspect had a unique perspective when it became necessary for the company to begin evaluating PBX offerings for its own use.

In its new corporate headquarters, the company needed to install a new phone system that could support 270 general business users and 34 remote employees. The company also determined that it wanted the PBX to support more than 100 contact center agents from its Aspect® Technical Services group through an integration with the company's own contact center solution. The company required a platform that would:

- Minimize wiring and implementation costs
- Provide sustainable reliability and stability to support mission-critical contact center operations,
- Offer easy customization and the flexibility to support future growth, and
- Incorporate open standards - like session initiation protocol (SIP) - to enable seamless interoperability with its contact center applications.

Although Aspect had several options available, the company recognized it had a unique opportunity to implement a customizable and flexible open source IP PBX solution.

"As a reseller of Asterisk Business Edition™ from Digium, Inc., we have seen first hand the value our customers experience by implementing an open source IP PBX," said Ralph Breslauer, executive vice president of sales and marketing at Aspect Software. "The move to our new corporate headquarters provided us with a unique opportunity—to practice what we've been preaching—to show that a SIP-based open source IP PBX can deliver all of the capabilities that a closed source solution offers, and much more, at a mere fraction of the cost."

Added Breslauer, "For many, open source telephony is an unknown quantity and that's something that can cause trepidation for most enterprise contact centers, including Aspect Software. But we felt so confident that that solution offers great value to contact centers, we put it into our own mission-critical contact center."

The company wanted to interoperate the telephony platform with its existing technical support service platform, Aspect® Unified IP™ to have the flexibility to grow the business and customize the set-up to address the specific needs of both its business users and the contact center. By interoperating the telephony system with Aspect Unified IP, the company can address the needs of the business users at the company headquarters and also have all of the capabilities necessary for the contact center, while experiencing the lower costs of an open source solution through the flexibility that open standards provide.

Regardless of the encouragement from the sales and support teams to implement Asterisk Business Edition, the IT department went through the usual due diligence process it follows to evaluate every application implemented at Aspect Software. It included an extensive IT review of the company's infrastructure and how the Digium solution would integrate with the company's

other applications, like Aspect® Unified IP™. Following that evaluation, the IT team developed a deployment plan to ensure that there would be no downtime in the company's contact center. Aspect Software also created a process to easily move the infrastructure from the old location to the new location, to get the contact center up and running seamlessly.

At the end of the evaluation process, the move to open source was blessed by all levels of the organization from the corner office on down.

"We had the choice: we could have stayed with a traditional legacy PBX or we could take a step in the direction the industry is headed, and adopt an open source IP PBX model. Implementing Asterisk Business Edition™ from Digium made the most sense based on both our business needs and the requirements of our contact center. The deployment cost less than other vendor bids, and it was also highly and easily customizable," said Jamie Ryan, senior vice president and chief information officer at Aspect Software.

The Asterisk Business Edition Package

Asterisk Business Edition from Digium provides Aspect with all of the benefits of a traditional closed-source PBX, such as voicemail retrieval, placing and receiving calls between the PSTN and subscribers, call transferring, call routing and conference calling capabilities. The open source solution also supports additional sophisticated features, such as SIP connectivity for remote employees through the company's VPN, the option to incorporate presence for enhanced availability, phone device authentication to prevent unauthorized use and unified messaging.

"Our PBX doesn't just manage calls to our corporate employees, we also wanted it to interoperate with our unified solution to handle all of the calls coming into our technical support contact center," said Ryan. "Since we pride ourselves on providing responsive and timely customer service, it was critical that our telephony platform was completely reliable and secure. If our support center is down, our customers won't be able to contact us and have their mission critical contact center issues addressed immediately. We had to make sure we could depend on our IP PBX, and after extensive testing and customizing, it was clear that the Digium solution wouldn't let us down."

The Aspect Software telephony infrastructure is deployed in a highly available configuration that eliminates failure points and supports full recovery within minutes. The resulting telephony infrastructure is redundant, secure and flexible in the event of a disaster.

Because of its SIP-based VoIP capabilities, Asterisk Business Edition can readily interoperate with the entire Aspect Software product portfolio, including Aspect Unified IP, which provides automatic call distributor (ACD), voice portal, dialer, recording and quality management capabilities. The unified solution offers a wide range of functionality is necessary to help the Aspect Technical Services team manage the company's important customer service inquiries. As a result, Aspect Software customers can depend on Aspect Technical Services and call into the technical support center to resolve any technical issues and receive timely service and support.

A Smooth Move

Aspect Software completed the headquarters move in April 2007. Aspect® Technical Services worked closely with the IT department to ensure the new IP PBX had all the required infrastructure in place for a smooth implementation. After the telephony environment was built out and fully tested, the transition to Digium's Asterisk was straightforward and seamless, as the IP PBX deployment easily progressed from the development level to fully production-enabled in less than one day.

Implementing Asterisk and Ensuring Stability

The Asterisk IP PBX is configured to stabilize work loads by balancing each server with capacity for all Aspect Software users, with synchronized configuration and voicemail files. A key component that is used to balance the network load and also provide failover support are pairs of Mediant 2000 IP Gateways from AudioCodes, a Digium partner. The AudioCodes technology provides time division multiplexing (TDM) connectivity in a SIP-based VoIP environment, lowering costly integration, installation and toll fees by connecting standard hardware and inexpensive TDM devices to the telephony system.

Asterisk Business Edition is also bundled with multi-line desktop and administrative phones for employee use, and AudioCodes Media Gateways to analog devices to the system, including existing conference room phones and fax machines. The SIP phones utilize power over Ethernet through network switches with backup power and provide excellent voice quality regardless of employee location.

Basic calling features such as subscriber to subscriber calling, call forwarding, call transfer, and call waiting are part of the basic Asterisk Business Edition package. Password-protected voicemail supporting default and custom greetings are provided for every employee at no additional cost and are easily user configurable. The solution also enables administrative staff to answer calls for key executives along with ensuring "911" calls are reliably routed in the event of an emergency.

Asterisk Business Edition required less wiring throughout the new headquarters, resulting in immediate cost savings for Aspect Software. The reduced costs for wiring, hardware and licenses for the new IP PBX saved the company more than \$100,000 just on implementation alone.

"The results experienced by Aspect Software is a perfect example of open source telephony's potential impact on the enterprise," said Mark Spencer, creator of Asterisk and CTO of Digium. "Companies like Aspect are leading the industry by implementing Asterisk-based Digium open source solutions that are proven to provide higher cost savings, greater flexibility and easier integration than closed source solutions."

Since Asterisk Business Edition is interoperating with Aspect® Unified IP™, the company will also see significant savings in remote agent costs, since Aspect is planning to migrate all remote agents from a TDM to an IP-enabled environment in the near future. The IP-enabled environment will allow the company to eliminate the toll charges and operational costs of remote agents and sites, saving tens of thousands of dollars a year, according to Ryan's ROI estimation.

The Digium solution provides the infrastructure for Aspect Unified IP to efficiently manage and route customer calls to the most appropriate agent, based on product-specific inquiries and agent skill sets. The Asterisk Business Edition also offers dial-by-name directories and an automated attendant for business users as part of the standard implementation. These features help Aspect Software deliver a positive customer experience through the technical support center.

"Choosing Asterisk Business Edition has proven to be the right decision for our new headquarters," said Ryan. "We've found that external callers don't realize that they are calling us on an open source VoIP-based telephony system - no one is the wiser, because it just works. The implementation was incredibly easy, the quality of the calls has been great and most importantly, Asterisk coupled with our unified contact center solution is the first step in our goal of creating a full-fledged unified communications offering."

Next Steps

For all types of organizations, Aspect Unified IP empowers IT to select their transport of choice using either open source VoIP, such as Digium's Asterisk IP PBX, closed source VoIP or traditional voice.

"By implementing an open source platform, Asterisk has allowed us to have full autonomy from other vendors in operating our IP PBX," added Ryan. "Working with Asterisk is an evolutionary process— our internal team will learn more and more about what the IP PBX can do and as our needs change, we can turn on new functionality and capabilities in the future."

After a successful implementation, Aspect Software continues to seek new ways to further enhance its telephony infrastructure and deliver a positive customer experience. The company has subsequently incorporated the Asterisk Business Edition open source IP PBX as it moved to a new office in San Jose, Calif., and will do the same for all future office moves or openings.

"We have always advised our customers on the benefits of SIP-enabled solutions because of the greater choice and control that those solutions offer contact centers," said Breslauer. "By implementing Asterisk Business Edition and Aspect Unified IP, we have been able 'to put our money where our mouth is' and really demonstrate that an open source IP PBX and a unified solution can offer unlimited possibilities and benefits for the business needs of an industry-leading, global organization."

Snapshot

The Asterisk Business Edition Implementation at Aspect Software

The Company

Aspect Software is the world's largest pure-play contact center vendor, providing SIP-based VoIP and traditional voice-based products and services for customer service, collections, and sales and telemarketing business processes. The company has nine technical support centers around the globe, including a contact center at its new headquarters in Chelmsford, Mass.

The Challenges

- Provide PBX functionality for new headquarters on an IP-based infrastructure
- Limit costs of moving an existing PBX or purchasing a new PBX
- Ensure stability of the system to enable mission-critical contact center to operate with zero downtime
- Seamlessly interoperate with the company's unified contact center product

The Solution

Aspect Software selected Digium's Asterisk Business Edition for its new corporate headquarters. Asterisk Business Edition is designed to provide companies with a rich, flexible set of SIP-based IP PBX features. The open source platform offers all of the call handling capabilities expected of more expensive, closed PBX systems at a substantially reduced cost, providing the technology required to address the needs of the dynamic contact center. In its technical services contact center, Aspect Software is interoperating its leading unified contact center solution, Aspect® Unified IP™, with Asterisk Business Edition.

The Results

- Saved more than \$100,000 in cabling costs
- Reduced remote agent telephony costs
- Easily adaptable to the growing needs of the business
- Progressed from development environment to fully production-enabled in less than one day



About Digium

Digium®, Inc., the Asterisk® Company, created, owns and is the innovative force behind Asterisk, the most widely used open source telephony software. Since its founding in 1999, Digium has grown to become the open source alternative to the traditional communication providers, with offerings that cost as much as 80 percent less than proprietary voice communication platforms. Digium makes Asterisk available to the open source community under the GNU General Public License (GPL) and uses business-class Asterisk to power a broad family of products for small, medium and large businesses. The company's product line also includes a wide range of hardware to enable resellers and customers to design their own voice over IP (VoIP) systems. This year alone, more than 12 billion minutes of calls will be made using Asterisk. More information is available at www.digium.com.

About Aspect Software

Aspect Software, Inc. founded the contact center industry and is now the world's largest company solely focused on Internet Protocol (IP) and traditional voice-based products and services for customer service, collections, and sales and telemarketing business processes. Each day, Aspect Software powers more than 125 million customer-company interactions at thousands of in-house and outsourced contact centers around the globe. Its pioneering Unified IP™ Contact Center product line reduces complexity by uniting automated call distribution (ACD), predictive dialing, voice portal, email management, web chat and collaboration, and recording and quality management to provide consolidated administration, routing, reporting and workflow. PerformanceEdge™, the industry's first fully synchronized contact center optimization suite combines workforce management, recording and quality management, performance management, campaign management, and coaching and eLearning applications. And, the company's trusted Signature product line delivers reliable best of breed ACD, predictive dialing, CTI and Voice Portal capabilities. Headquartered in Chelmsford, Mass., Aspect Software has operations across the Americas, Europe, Africa, the Middle East and Asia Pacific. For more information, visit www.aspect.com.

Aspect Software
Corporate Headquarters
300 Apollo Drive
Chelmsford, MA 01824

978 250 7900
978 244 7420 fax
www.aspect.com

