IBM

Aastra Intecom delivers carrier-grade VoIP solutions to large enterprises using Linux on IBM BladeCenter

Highlights

- **Comprehensive set of voice applications over next-generation networks**

- **Architecture supports large enterprise need for reliability and scalability**

- **IBM systems provide a flexible, standards-based foundation for Clearspan™ platform**

The evolution of telecommunications

The telecommunications industry is facing unprecedented changes, driven by an increasingly competitive business environment. Telephony solutions built on proprietary, closed architectures tend to be expensive to deploy and maintain. This has left many PBX systems essentially unchanged and in steady decline over the past decade.

New and emerging IP-based voice products built on open, industry standards based platforms are quickly gaining market share by overcoming these traditional problems with exciting new applications and capabilities. Telecommunication solution providers are leveraging these capabilities by moving beyond generic offerings to provide solutions tailored for the needs of larger enterprises. Moreover, the widespread adoption of IP voice and data services is enabling a new business paradigm: converged services, which include voice, video and data offerings across a single network. This convergence is opening new opportunities for CIO's to provide increased service and value to their enterprises.

Convergence with a VoIP application platform

Aastra Intecom is a pioneer in VoIP having developed the first commercial VoIP application. Its flagship Clearspan™ platform empowers large enterprises to deploy next-generation voice and multimedia applications with advanced features that help increase revenue, enhance competitive differentiation and elevate customer satisfaction. Aastra's family of "carrier-class" telephony solutions deliver the scale, open architecture and reliability that the world's leading enterprises demand to serve their mission-critical initiatives.

"Aastra's large enterprise customers have specific requirements for scalability, reliability, and total cost of ownership that are best addressed by the IBM BladeCenter. Its innovative technology provides Clearspan with the power to run the most advanced applications to increase an employee's overall efficiency."

— Brandon Weilbacher
Senior Director of
Product Line Management
Aastra USA Inc

Clearspan allows employees to make and receive calls from any device, at any location, with only one phone number, one dial plan, one voice mailbox, and a unified set of features. Clearspan provides a comprehensive range of applications including call management, presence, fixed mobile convergence, call center functionality and conferencing. Functionality is distributed across server components to optimize performance and enhance deployment flexibility. The core Clearspan platform is comprised of three elements:

- *Application Server provides the primary environment for call control and service management.*
- *Media Server performs media-oriented functions such as voice messaging, announcements, and music on hold.*
- *Network Server supports system-wide "geographic redundancy" and manages enterprise-level services such as private dial plans and private on-net routing policies.*

SIP is the core protocol underlying the entire system, providing hundreds of features to hundreds of thousands of users on the widest range of devices. But Clearspan is not limited to SIP-based devices; it extends its capabilities to ANY device; cellular, analog, residential, PBX, PDA, smartphone or PC.

In addition, special function servers extend the capabilities of the Clearspan VoIP applications platform and improve system performance:

- *Conferencing Server supports full feature, enterprise-grade audio and web conferencing.*
- *External Web Server handles all web traffic, enabling call control and service management functions maintain high performance levels.*
- *EMS Server provides a single point of control and management for the various servers within the Clearspan VoIP application platform.*

Clearspan applications provide an "out-of-the-box" Unified Communications environment and minimize the issues and challenges associated with IP telephony deployment. In addition, Aastra's 28 years of experience implementing mission-critical telecommunications solutions in some of the world's largest companies gives them the unique ability to tailor a solution to fit specific technology and enterprise requirements, reducing implementation time and deployment risk.

Furthermore, Clearspan's self-paced migration capability delivers immediate value without immediate replacement of existing infrastructure, helping maximize return on investment.

IBM BladeCenter family — for every customer need

The IBM BladeCenter T chassis provides hardware redundancy (power supply, I/O modules, management modules, L2 switching, mid-plane, etc.) thereby reducing potential points of failure in the solution.

The IBM BladeCenter is an advanced blade system which integrates servers, storage and networking into a single chassis — yielding significant simplification, improved density and potential TCO savings .   A single family of common server blades, storage, I/O, switches and networking modules are fully supported and interchangeable across the family of BladeCenter chassis.   The IBM BladeCenter chassis is designed as the ideal solution for data center deployments. The IBM BladeCenter H is for high performance computing platform, while the IBM BladeCenter T chassis is specifically designed for telecom central office deployments.

The new, IBM BladeCenter HT — a new, telecom optimized version of the BladeCenter H — opens new market opportunities with a new and powerful NGN platform ideally suited for telecom equipment and service providers.

The IBM BladeCenter T and BladeCenter HT deliver rich telecommunications features and functionality, including fault-tolerant capabilities, hot-swappable redundant DC or AC power supplies and cooling, and built-in systems management resources in a 20" deep chassis.   The rigorous Network Equipment Building System (NEBS) Level 3 and European Telecommunications Standard Institute (ETSI) outline requirements typical of telecom central office environments in the areas of electromagnetic compatibility, thermal robustness, fire resistance, earthquake and office vibration resistance, transportation and handling durability, acoustics and illumination, and airborne contaminant resistance.   The IBM BladeCenter T and BladeCenter HT chassis meet the NEB Level 3 / ETSI requirements[1].

Clearspan on IBM can provide a rapid return on investment

By leveraging the next-generation voice and multimedia capabilities of Clearspan, combined with the reliability, scalability, and high-performance of the IBM BladeCenter platform, large enterprises can build and deploy VoIP based services that help increase employee productivity and build competitive advantage.

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For more information

Learn how IBM Systems can help your company achieve more revenue and help reduce your costs, while helping you keep your profitable customers.

Have questions? Contact the IBM Telecommunications team today on how we can help you take advantage of our extensive industry expertise. Please visit us on the web at:

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