



Differentiate your services, simplify your business

HP Integrity NonStop platform helps reduce complexity, cost, and risk

Overview

- Uninterrupted service with 24x7 availability for today's real-time needs
- Twice the performance, half the footprint with new Integrity NonStop BladeSystem
- Lower costs and meet demand for new services in a trusted NonStop fault-tolerant environment

In the quest for total convergence, the boundaries that once distinguished organizations in the communications, media, and entertainment industry are blurring. The demand for ubiquitous communication, enhanced services, and real-time information, at a time when mobile communications is rapidly expanding, has changed the industry's landscape in ways that present new opportunities—and serious challenges. The ability to quickly and cost-effectively deploy new services, provide quality customer care, and deliver uninterrupted service will help differentiate your business from the competition and—ultimately—enable you to achieve desired business outcomes.

Mobile data services—especially text and multimedia messaging—have grown exponentially in recent years; and the ability to cost-effectively deliver ever-higher volumes of messages per second has become a huge priority for many. Meeting this demand requires an infrastructure that can truly perform and scale along with your subscriber base. And while accommodating

long-term growth is essential, you must also be able to accommodate intermittent and extremely large, surges in demand—especially with the rise in popularity of competitive and viewer-determined reality shows.

Rapidly developing and deploying innovative and reliable services require that most telecommunications companies consolidate and focus on core and IP multimedia subsystem (IMS) networks. Consolidation of networks and platforms helps you reduce the complexity and cost of network management, streamline service introduction, and simplify migration to next-generation infrastructures. This also provides enhanced flexibility, which enables you to implement more core networked-based solutions—including HP OpenCall network solutions. HP OpenCall solutions such as the Home Location Register and the Home Subscriber Server (HSS) deliver the capacity, flexibility, and power to drive consolidation and also support powerful new services, especially when combined with the Profile Manager.

One of the largest wireless carriers in Latin America has long relied on HP NonStop technology to run its most critical applications. When they needed to implement their new missed-call application, they naturally turned to the HP Integrity NonStop platform, which enabled them to confidently deliver new services with high quality, continuous availability, and faster time to market.

Convergence is just as important as consolidation. Now, more than ever, it is critical that you can collate voice, video, and data, as well as pre- and post-paid transactions through next-generation convergent and real-time solutions—and, of course, put that into one customer bill. You need accurate, simplified charging, and multiple payment methods. And with prepaid payment options, it is imperative that your system can respond in real time.

Needless to say, the pressure to meet customer service demands, improve average revenue per user (ARPU), and still maintain the high levels of availability, security, and data integrity required of this industry is extreme. Many organizations have experienced firsthand the reliability and high availability of HP NonStop servers. Many of you are also beginning to recognize the distinct advantages of HP Integrity NonStop servers—and perhaps you have even heard about the new Integrity NonStop blade form factor. By moving to the Integrity NonStop platform, you can significantly boost performance and drive down per-transaction cost without sacrificing the reliability, availability, and scalability your organization depends on.

Provide uninterrupted service and satisfy subscriber demands

Availability, scalability, and data integrity have always been critical to the success of telecommunications organizations. These fundamentals are important in today's real-time environment.

Always available: In this industry, downtime is not an option. Your customers demand uninterrupted communication—and their loyalty depends on your ability to provide flawless, reliable services that enhance their overall experience. That's why organizations today rely on the Integrity NonStop platform to run their mission-critical applications. Integrity NonStop systems provide the highest levels of availability in the industry—up to 99.99999 percent uptime with the HP Integrity NonStop Triple Modular Redundancy (TMR) option.

Not only does the NonStop platform offer the best continuous availability on the market, it does so at the lowest total cost of ownership (TCO).

Always scalable: Managing risk is essential, but so is having a system that has the power and scalability necessary to accommodate unexpected changes and increase in volumes. The demand for cutting-edge multimedia messaging services, for example, is burgeoning. These services also consist of applications that require sophisticated e-mail delivery, such as movies, photos, music, chat, financial transactions, Internet gaming, and global positioning services.

Powerful, adaptable HP Integrity NonStop servers provide the performance and scalability needed to handle the most extreme—and complex—transactional volumes.

NonStop systems can be expanded to more than 4,000 processors. And you can add additional processors whenever you need to—without taking the system down—so work continues while you grow, no matter how fast that may be. That's important especially with the growth in mobile communications.

Family of HP Integrity NonStop servers

Many telecommunications organizations are looking to HP Integrity NonStop servers for the continuous availability, unrivaled data integrity, and virtually unlimited scalability—ideal for demanding, transaction-intensive applications. The Integrity NonStop server family—including the new commercial HP Integrity NonStop BladeSystem and carrier grade HP Integrity NonStop CG BladeSystem, commercial-grade Integrity NonStop servers (NS16200, NS14200, and NS1200), and carrier-grade Integrity NonStop servers (NS16000CG, NS5000CG, NS5000T, and NS3000AC)—provide organizations with the performance gains and cost benefits they're seeking as well.

HP Integrity NonStop BladeSystem servers—commercial and carrier-grade choices

HP has expanded its Integrity NonStop family to include the new Integrity NonStop BladeSystem, for commercial applications, which delivers the highest performance and considerably lower total cost of ownership compared with our existing Integrity NonStop systems.

The HP Integrity NonStop NB50000c BladeSystem will deliver double the performance to drive next-generation applications for less. You'll see improved throughput at a 50 percent lower cost per transaction, improved response time, and the capability to scale up as well as scale out for flexible growth. The NB50000c BladeSystem delivers marked efficiency improvements that lower overall IT costs. Utilizing standard, modular components and a new NonStop multi-core architecture (NSMA), the NonStop NB50000c BladeSystem provides twice the processing power per unit of floor space within the same power envelope. Its footprint is cut in half, which saves on facilities costs. In addition, it provides increased manageability, which saves system administration resources.

“I’ve worked on the NonStop platform for almost my entire IT career. The capabilities keep increasing in terms of processing power and storage, and the reliability has always been there.”

—Jonathan Schaff, Sprint network design engineer

A large mobile network in Japan looks to the continuous availability, linear scalability, and price/performance benefits of HP Integrity NonStop to effectively address three primary business challenges impacting the mobile messaging segment of its business: cost, reliability, and speed of development.

For the telco market, which calls for even more robust computing platforms that meet stringent requirements while delivering the power and flexibility needed to support a broad mix of real-time solutions, HP introduces the HP Integrity NonStop NB5000c-cg (with DC power) server that meet stringent NEBS requirements, such as spatial and environmental criteria, including enclosure and seismic bracing.

The new I/O infrastructure for the NB5000c BladeSystem is the ideal choice for this industry. Significant performance improvements and the ability to leverage storage faster is critical to many telco applications, such as charging systems.

Additionally, new storage infrastructures deploy advanced technologies to increase the disk write speed and reduce the response time. New Internet protocol (IP) infrastructures offer an additional level of transaction security by making the IPSecurity protocol available for NonStop applications on the Integrity NonStop BladeSystem.

Integrity NonStop systems—commercial and carrier-grade options

The HP Integrity NonStop NS16200 Server is a top-of-the-line enterprise computing solution that is designed to deliver unprecedented levels of application availability with fail-safe data integrity. Powered by next-generation Intel® Itanium® processor 9100 series processors, the Integrity NonStop NS16200 Server delivers significant performance improvements over earlier NonStop server models. As business needs evolve and demand grows, the Integrity NonStop NS16200 Server is designed to support the most

complex application requirements. And systems can start out with as few as two Intel Itanium processors and grow to as many as 4,080 as business landscapes change.

HP entry-class solution—the HP Integrity NonStop NS1200 Server—is ideal for cost-sensitive applications and emerging markets. This server, which can start with as few as two processors and grow to eight, also exploits the traditional advantage of NonStop servers with fully integrated hardware and software—enabling application availability and fault tolerance right out-of-the-box.

For applications that require even more robust requirements, HP offers the flexibility you need with carrier-grade Integrity NonStop servers. The HP Integrity NonStop 16000CG and NS5000CG meet NEBS criteria, and use DC power.

Using the commercial enclosure and offering different options for power, the HP Integrity NonStop NS5000T server takes in DC power, and the HP Integrity NonStop NS3000AC Server takes in AC power.

HP StorageWorks

Networked storage helps you keep large amounts of information continuously protected and yet readily accessible to the people who power your business. Given the importance of your data, HP StorageWorks is committed to meet the full range of storage needs—whether it is enterprise-class disk arrays, data protection products, or intelligent management software that enhances the potential of your hardware.

The HP StorageWorks XP disk array family meets the stringent Integrity NonStop server requirements for mission-critical capabilities. With a completely redundant server and SAN components—redundant fabrics, redundant adapters, and redundant paths—your mission-critical data is always accessible.

The HP StorageWorks XP storage arrays support the commercial-grade family of Integrity NonStop servers, including the new Integrity NonStop BladeSystem. These arrays, connected to Integrity NonStop servers, provide improved data integrity with NonStop system end-to-end disk checksum. In addition, the XP family provides very large, flexible, and dynamic storage capacity, allowing the pooling of unused capacity for better storage utilization. And when you combine reliability—through redundant caches and redundant arrays of independent disks (RAID)—with easier storage administration and centralized management, you essentially get a lower total cost of storage.

Why HP?

Communications service providers require a system that allows them to meet current and future goals—one that enables reliable, uninterrupted services, and revenue; one that lowers the cost per transaction and provides serious investment protection, and one that can accommodate subscriber growth as well as the demand for new services. With the power, scalability, continuous availability, and flexibility you get with HP Integrity NonStop platform—from entry-level, mid-range, and high-end commercial- and carrier-grade NS series systems to the new and innovative NonStop BladeSystem—organizations can lay the foundation upon which to upgrade and expand operations for future success.

For more information

To learn more about the HP Integrity NonStop server platform and HP Integrity solutions for the communications, media, and entertainment market, visit www.hp.com/go/nonstop

HP Services

HP Service Solutions built on the Solution Lifecycle (SLC) process, offers consistent quality and service levels for the Integrity NonStop and NonStop BladeSystem. The SLC process helps achieve rapid productivity and maximum availability by examining specific needs at each of five distinct phases (Plan, Design, Integrate, Install, and Manage) and then designing solutions around those needs. We offer three different Service Solutions designed to meet customer needs. They are:

HP Critical Service Solution

- **Startup and Deployment Services:** Build the solution to your exact specifications, complete the installation, and make the solution application-ready
 - **Assessment and Design services:** Define requirements and translate your business and technical needs into a solution that meets the necessary hardware and software
 - **Deployment Management:** Upfront project coordination from HP
 - **HP Education Services:** Curricula is designed to help you quickly ramp up on your new NonStop technology
- **HP Critical Service:** Comprehensive on-going support designed to help minimize the business impact of downtime for mission-critical applications

HP Proactive Service Solution

- **Startup and Deployment Services**
- **HP Proactive 24 Service:** Integrated hardware and software support including proactive and reactive services to improve stability and availability across your IT environment

HP Foundation Service Solution

- **Startup and Deployment Services**
- **HP Support Plus 24 Service:** Integrated hardware and software support services designed specifically for your technology

For more information, visit www.hp.com/services/nonstop

Technology for better business outcomes

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