HP Integrity NonStop servers

Keep your systems running whenever you need them.

Availability = profit

According to Infonetics Research, IT downtime is costing financial enterprises an average of 16 percent of revenue per year.[1] So when you look at your IT infrastructure, you really need to look at the big picture. How much does downtime cost your business?

At HP, we know that availability has become part of the singsong of virtually all enterprise vendors. Everyone says they have it. But when you consider a vendor's claims about continuous availability, you should also consider their definition of the term.

Is planned downtime for upgrades and other system maintenance excluded from the numbers? Or are these functions performed dynamically while the system remains online? And what does "online" mean, anyway? Are we talking about system prompt availability or providing continuous access to products and services?

The business objective of continuous availability is to increase profits—by keeping services running whenever you want them. It protects against revenue loss caused by unavailable services and the dissatisfaction and loss of reputation that results from it. So these are critical questions—because the answers translate directly into profit.

NonStop systems provide the highest levels of availability in the industry

HP NonStop technology set the standard in the 1970s by defining online transaction processing and high availability. Now, more than 30 years later, NonStop computing is the best-kept secret of hundreds of the world's largest businesses:

- The world's largest ISP depends on NonStop solutions for global messaging.
- Sprint runs the largest database in the world on NonStop servers.[2]
- Five of the top six U.S banks, six of Canada's nine largest banks, and all three of Mexico's top banks rely on NonStop servers.
- More than 60 percent of world's financial exchanges use NonStop computing.
- NonStop servers run 70 percent of all U.S. 911 calls.

[1] Infonetics Research, "The Costs of Enterprise Downtime: North American Vertical Markets 2005."

[2] WinterCorp TopTen Survey, 2005

NonStop servers deliver a higher level of availability at roughly one-half the total cost of ownership (TCO) of IBM zSeries mainframe servers.

Why do these companies, and many others, rely on the NonStop platform to run their mission-critical applications? Because 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.

What high availability can mean for your business

The real story about downtime

The world's largest businesses are loyal and passionate about NonStop systems because when it comes to continuous availability and business continuity, nobody does it better. If fact, nobody even comes close. The difference in average downtime per year between NonStop systems and Microsoft® Windows® based systems is 89.44 hours. Even for mainframe systems, the difference is 3.33 hours.[3] That might not sound like much, but translated into dollars and cents, it could mean the difference between a healthy business and disaster.

Higher availability at half the cost

Not only does the NonStop platform offer the best continuous availability on the market, but it does so at the lowest total cost of ownership (TCO). With the new Integrity NonStop family of servers, we have improved system price/performance by 250 percent, by leveraging storage and servers from across HP to reduce hardware R&D costs, and then passing the savings on to you.[4] Integrity NonStop servers now deliver a higher level of availability at roughly one-half the TCO of IBM zSeries mainframe servers.[5]

Save more when it's time to grow

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 when you consider that the annual number of electronic payment transactions, currently at about 210 billion worldwide, is projected to double by the end of the decade.[6]

[3] Data from Standish Group comparison of live production sites, Standish VirtualADVISOR database, September 2006.

[4] The Clipper Group, "HP Gives Green Light to NonStop—Adapts Integrity for Failsafe Environments," June 2005.

[5] The Standish Group, VirtualBEACON, Issue #387, June 2005.

[6] Study sponsored by ACI Worldwide and conducted by Global Insight, Inc., May 2006.

"With the new Integrity NonStop server, HP is providing a bionic heart for mission-critical enterprise applications."
Nina Lytton, president, Open Systems Advisors

Save more with lights-out operations
Thanks to advanced NonStop automation capabilities and transparent, automatic, and self-healing functionality, you can also anticipate significant administrative staff savings. Even extensive NonStop environments run lights-out operations that require only a few managers.

Recover fast when you have to
In the rare instance of a downed system, NonStop servers provide the fastest database recovery in the industry. We even offer a "zero lost transaction" (ZLT) guarantee with HP NonStop RDF/ZLT Software.

Together with HP Global Services Desk, we know about preparing for disasters:

- Forrester puts HP disaster recovery services squarely in the leadership quadrant—ahead of SunGard and IBM.
- HP has more than 70 disaster recovery facilities worldwide.
- HP handled more than 50 disaster invocations on 9/11.
- HP facilities include fully equipped IT recovery centers, office recovery centers, and satellite recovery centers.

Just your standard programming skills required
The NonStop computing environment offers standards compliance for rapid development of innovative new solutions. What was once proprietary is now open and standard, making it far easier to develop new solutions without specialized programming knowledge or lengthy retraining.

Designed to work in an open systems environment, NonStop servers can also be deployed in parallel with an existing IT infrastructure, providing the advantage of limited or no disruption of business. NonStop servers are also ideal for hybrid architectures, in which critical information and applications are kept in the trusted NonStop environment and less critical elements are run on low-cost industry-standard Linux, Microsoft Windows, or UNIX system–based servers.

NonStop standards-based protocols, clients, and APIs	
Before	**Now**
"Proprietary" APIs	Standard APIs: Web Services Description Language (WSDL)
"Proprietary" protocols	Standard protocols: HTTP and SOAP
"Proprietary" clients	Standard clients: Web servers and browsers

Manage change with a NonStop service-oriented architecture
NonStop open, standards-based software sets the stage for achieving the highest service levels in a service-oriented architecture (SOA). Advancements in SOA support the delivery of IT as a service, allowing business processes to drive the definition, creation, and execution of services and bring an end to monolithic, rigid application architectures and the high maintenance costs associated with them. With the NonStop platform, you can expose your existing applications in an SOA, thereby protecting and enhancing them. You can also develop new NonStop server–based SOA applications that will have the fault-tolerant, scalable characteristics required by the enterprise.

Committed roadmap of innovation

According to Nina Lytton, president, Open Systems Advisors, "With the new Integrity NonStop server, HP is providing a bionic heart for mission-critical enterprise applications. Moving the time-tested NonStop technology forward onto an industry-standard platform delivers significant customer benefits: a major performance kick, more cost-effective solutions, higher availability, reduced risk, and increased longevity of the system."

HP continues to invest heavily in the future of the NonStop environment, with a committed roadmap of innovation through 2013 and revenues growing year after year. HP has invested more than USD 800 million in NonStop research and development since 2002.

Understanding your business

Large businesses everywhere rely on us not only for our technical acumen but also for our long history of working in the finance; communications, media, and entertainment (telecom); and healthcare industries. HP understands your business and has an extensive portfolio of real-time solutions that you can leverage to gain a competitive edge.

Sampling of the many industry solutions that run on NonStop servers

Finance	Telecom	Healthcare
HP Real Time Financial Services (RTFS)	HP OpenCall Home Location Register	edisolve EDI Claims Management and Electronic Funds Transfer
ACI BASE24	Location-based services (LBS)	GE Healthcare Centricity Enterprise
BHMI Concourse-ESP	Verizon Usage Management System	Crossflo Systems Data Exchange 3.0 (CDX3)
AtosEuronext Clearing 21	Mobile E911	
Dynasty SIBAC Core Banking		

Find out more

To find out how HP NonStop solutions can help you increase your profits, contact your HP sales representative or view additional materials online:

- Integrity NonStop computing: **www.hp.com/go/nonstop**
- Why buy HP NonStop?: **www.hp.com/go/whybuynonstop**

HP Services

HP's end-to-end service solutions, built on the Solution Lifecycle (SLC) process, offer consistent quality and service levels for Integrity NonStop servers. 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 melds the necessary hardware and software
  - Deployment Management Services—up-front project coordination from HP
  - Education Services—training curriculums relevant to needs and existing expertise based upon a needs analysis
- HP Critical Service—comprehensive ongoing 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: **www.hp.com/services/nonstop**

To learn more, visit www.hp.com

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