



**Because customers
never wait**

HP NonStop

For industries that never stop,
because customers never wait.

Mark Flanigan, HP Managing Solutions
Architect

November 14, 2012



agility
made possible™



Introducing the platform for continuous business

HP NonStop
Because customers never wait.



Agenda

- How can you achieve continuous service availability for your most critical CA Gen applications?
- What is your best choice for CA Gen applications requiring zero application downtime and/or extreme scalability?
- What do HP NonStop servers provide to help you meet mission critical customer needs?
- Where can you find out more about the HP NonStop platform and our unique offerings?



In today's need-it-now world...

when is it okay for your applications to be unavailable to your customers?

Never.



In today's need-it-now world...

Enterprises absolutely can't afford to stop

- Downtime — planned or unplanned — causes irreparable harm
- Unavailable applications are unacceptable when customers can't wait

Business process continuity is imperative

- Because customer loyalty and account control means money
- Because a “*continuously on business*” means profit

HP NonStop. For industries that never stop.

- Uniquely designed and integrated for business process continuity
- Continuous application availability
- Lowest TCO* for complex, mission-critical environments

Your customers never wait.



“Solutions deployed on NonStop become nonstop”



Business demands change, but the NonStop advantage for Mission Critical is timeless.

Financial Services

Processing 68 million credit card accounts and over 10 billion transactions annually

HP 2012 internal sales data, cross-referenced with Nielsen and D&B data



Manufacturing and Distribution

Powering mission-critical applications at 100% of the top 10 global manufacturers

HP 2012 internal sales data, cross-referenced with Nielsen and D&B data



Communications, Media, and Entertainment

Supporting over 375M subscribers in advanced Telco network applications

Source: Infonetics Service Providers Report, 2011 and TRAI Report, 2012



Public Sector and Healthcare

Supporting several of the world's leading medical institutions

HP 2012 internal sales data, cross-referenced with Nielsen and D&B data



The simple cost of business failure

Average business revenue lost per hour of downtime (US\$)

Retail \$1,999,872

Healthcare \$4,223,520

Manufacturing \$10,432,800

CME/Telco \$15,120,000

Financial \$16,833,600

Average \$9,700,000

Source: © 2009 HP internal testing and development over two-year period and other competitive materials, including IDC "Cost of Downtime Tool" developed for HP



HP NonStop. The platform for continuous business.

Continuous Availability

The BonTon stores have recorded **zero minutes of unplanned downtime** against their HP NonStop systems since 1998.

BON♦TON

Yamazaki Baking produces and delivers 18 million items a day to its customers. With HP NonStop they are **on time and without fail**.



Lowest TCO*

The NonStop platform has become progressively more modern and standard... a key factor in **helping HEMIT drive down costs**.



HEMIT
HELSE MIDT-NORGE IT

TCO is only part of the story. We're capable of processing nearly **5x more volume at about 25% of the former cost**.



*Source: Richard Buckle, Pyalla Technologies, Research Note, May 2012
NonStop offers the lowest TCO in its class for complex mission-critical applications



Situations NonStop handles every day.....

Vertical workloads where 100% continuous availability is the business requirement

1

Retail Banking and Payments

Fraud and risk management, real-time payment fraud prevention
Payments: multi-channel retail, ATM, EFT

2

Telecommunications core mobile networks

4G LTE mobile services: HLR/HSS, LBS, MMS, UMS
Integration of separate 2G, 3G, and 4G mobile networks and subscriber data

3

Manufacturing and Distribution

Continuous production control processes, manufacturing execution systems
Multi-channel distribution , wholesale and retail transactions

4

Healthcare provider infrastructure services

Real-time access to patient information, integration of clinical and administrative data
Health information exchange platforms



Healthcare never stops... we understand

Which of these issues can NonStop help you address?

Patient care and services

- Connectivity of patient records and clinical care
- Real-time access to patient information
- Integration of clinical and administrative data

National health initiatives

- Health Information Exchanges platform

Risk mitigation

- Secure network infrastructure for electronic records
- Improved patient safety

Operational efficiencies

- Automation of analog and manual processes
- Cost controls and staffing work



Shoppers never wait.

“By definition, the NonStop server is fault tolerant; it never goes down. *There’s no system that can come close to it in terms of stability.* As one stack, you have tremendous advantages in operability, total cost of ownership, ease of use, manageability, redundancy, data recovery, and more.”

Jalil Falsafi

Director of IT Computing Services and Operations
Future Electronics



Fraud never stops.

“After reviewing multiple vendors, ReD chose to implement on HP Integrity NonStop systems. These systems provide the fault tolerance, ‘out-of-the-box’ clustering, scalability, and 100% application uptime essential for ReD customers.”

Kevin Sprake

Regional Director, North America

ReD Retail Decisions



Citizens never wait.

“The deputy will be talking on the radio to the dispatcher. The dispatcher will be updating the CAD system with the location, and also dispatching other units to that pursuit. *Our NonStop server is the hub of the whole operation.*”

Javier Ramirez
Systems Analyst
Riverside County Sheriff's Department
California



HP Integrity NonStop

For industries that never stop. Because customers never wait.

- Integrated stack
- Unparalleled continuous availability
- Data integrity
- Massive linear scalability
- Lowest TCO in its class¹
- Standard and Modern

100%

uptime: AL4
fully fault
tolerant²

10B+

Credit card
transactions
annually³

375M+

subscribers in
advanced telco
network apps⁴



**NonStop entry-class
rack mount servers**

NS2100 (1-core
enabled)
NS2200 (2-core
enabled)

**NonStop
BladeSystem**

NB54000c, NB54000c-
cg
2 or 4-core licensing

¹ Richard Buckle, Pyalla Technologies, Research Note, May 2012 NonStop offers the lowest TCO in its class for complex mission-critical applications

² IDC Worldwide and U.S. High-Availability Server, 2011-2015 Forecast and Analysis ; ³ HP 2012 internal sales data, cross-referenced with Nielsen and D&B data

⁴ HP Internal Data, Source 4: Infonetics Service Providers Report, 2011 and TRAI Report, 2012



The unique value of NonStop

Designed from the ground up for 100% application availability

Applications

Fault tolerance and scaling capabilities for applications. Use of SOA and Java frameworks for fast deployment.

Operating system

Scalability of shared-nothing , uniquely parallel processing . Uncompromising data integrity. Built-in security.

Hardware

Tightly-integrated hardware and software delivers the highest levels of fault-tolerance and massive scalability.

The HP NonStop Integrated Stack

APPLICATIONS

Middleware

Modern Application Development
Tools

Database and Transaction
Management

System Management and Control

System-wide Security

NonStop Operating System

HARDWARE

Modern development

Java, CORBA, ODBC, SOAP, XML and Eclipse... More applications, on-premises for cloud readiness.

SQL database

Open, modern, clustered database
Mixed workloads with no performance impact. Virtualized data and query processing.



Combining the economies of standards-based, open computing with the trusted 24x7 fault-tolerant availability and data integrity of the NonStop architecture



Standards-based, open computing

The only thing that's proprietary is how well NonStop works

Standard platforms

- Modular building blocks
- Stable, predictable roadmap

Modern software

- NonStop operating system with quad-core technology
 - Enhanced NonStop OS lock design and scheduler
 - NonStop OS subsystems leverage Itanium's advanced control speculation and compiler technologies
- Middleware (SOA)
- TM and NonStop SQL database

Application development

- Application development tools (JAVA/Open Source, SASH, and Eclipse)
- Modern programming models based on open source Java frameworks (Spring, Apache, Axis2, Apache MyFaces, and Hibernate)
- Standard interfaces based on Service Oriented Architecture (SOA), SOAP, and Web Services technology

Improved security offerings

- Modern data-in-motion capabilities
- Advanced data sanitation
- Fully-integrated Volume Level Encryption (VLE)
- Secure archiving



Reduced complexity and cost

The lowest TCO* in its class

Simplified integration into the data center

- Ultra-robust servers delivering better-than-mainframe class of service out of the box
- CA Gen application portability

Scalability

- Near-linear scalability of up to 16,320 cores
- UP to 192,000 program processes per node
- An incredible 48,960,000 program processes on an Expand network
- A new SAS 2.0 storage subsystem

Lower the cost

- Lower management costs
- Smaller footprint and power consumption

*Source: Richard Buckle, Pyalla Technologies, Research Note, May 2012
NonStop offers the lowest TCO in its class for complex mission-critical applications

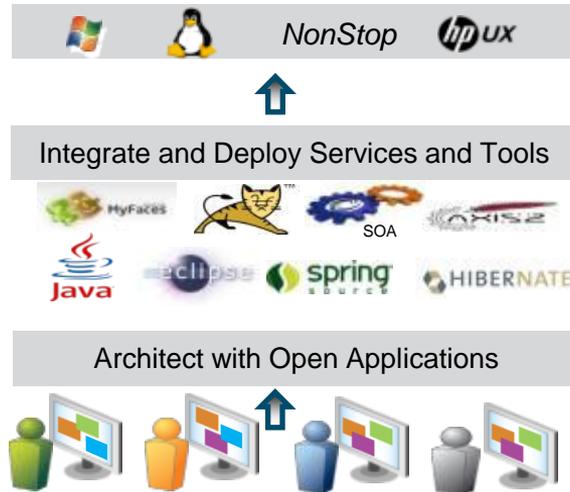


Execution of NonStop strategy

Standard hardware



Modern software



Simplified integration into the data center

Easier to develop & deploy your apps

Integrate your apps with other apps in the enterprise

Lower cost of ownership

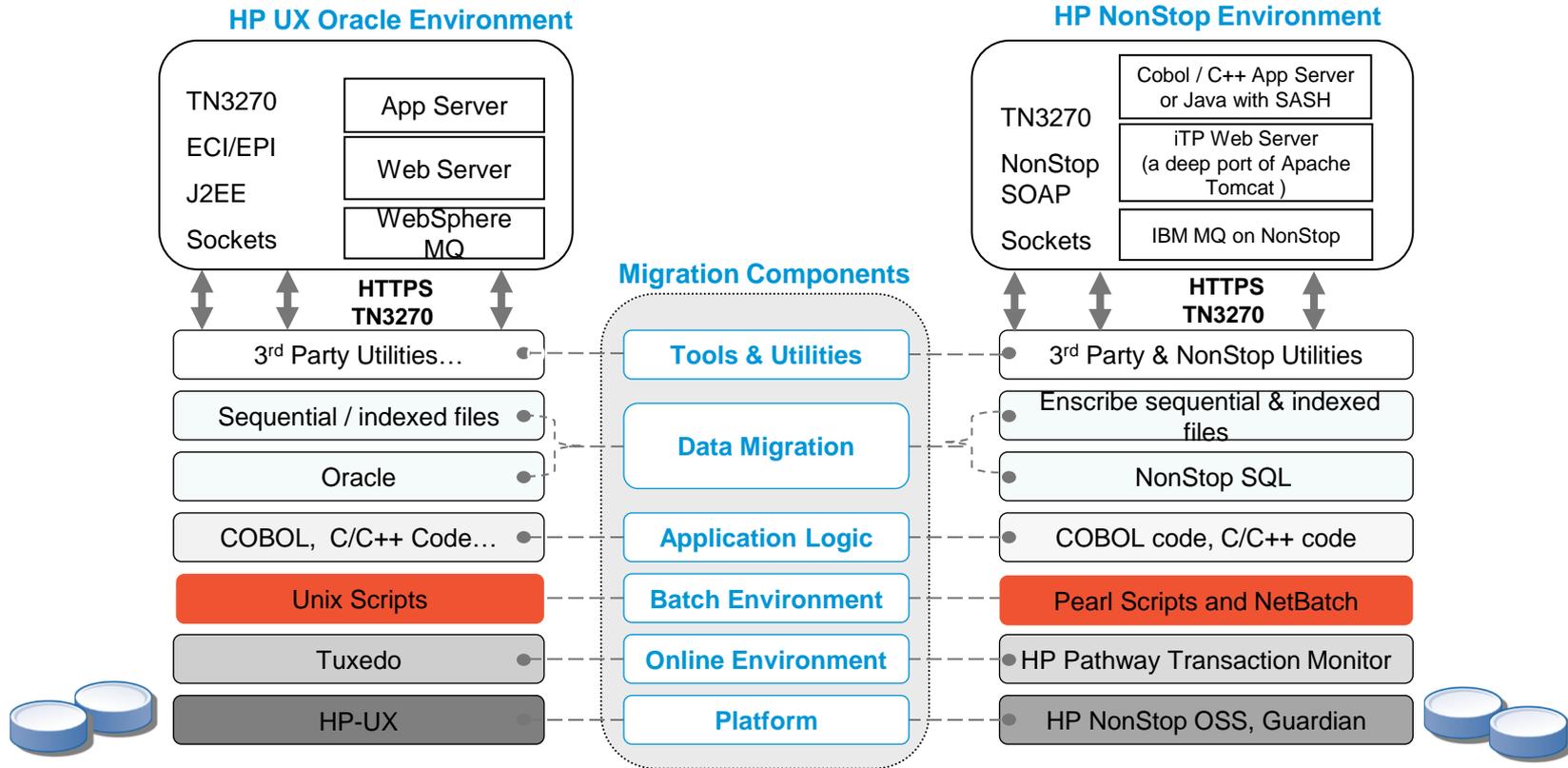
Ease of use

Part of HP's Mission-Critical Converged Infrastructure

Positioned for converged cloud



Moving CA Gen Applications to the HP NonStop Platform



A few ways we engage with customers....

Next steps

HP-led assessment workshop

- Current state
- Future state goals
- Gap analysis
- Roadmap to achieve goals

Comprehensive TCO analysis

Proof of Concept project

Migration Proposal

hp.com/go/nonstop



thank you

questions

Backup Slides



NonStop by the numbers

100%
uptime

Availability Level 4 (AL4)
for fully fault-tolerant
servers

Source: IDC Worldwide and U.S. High-Availability
Server, 2011-2015 Forecast and Analysis

38

Years of service
and success (1974)

Source: HP internal sales data, 2012

10B+

Processing 68 million credit
card accounts and over 10
billion transactions annually

Source: HP internal sales data, 2012

375M+

Supporting over 375M subscribers
in advanced Telco network
applications

Source: Infonetics Service Providers Report, 2011
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