BITUG AUTUMN 2014 NEWSLETTER

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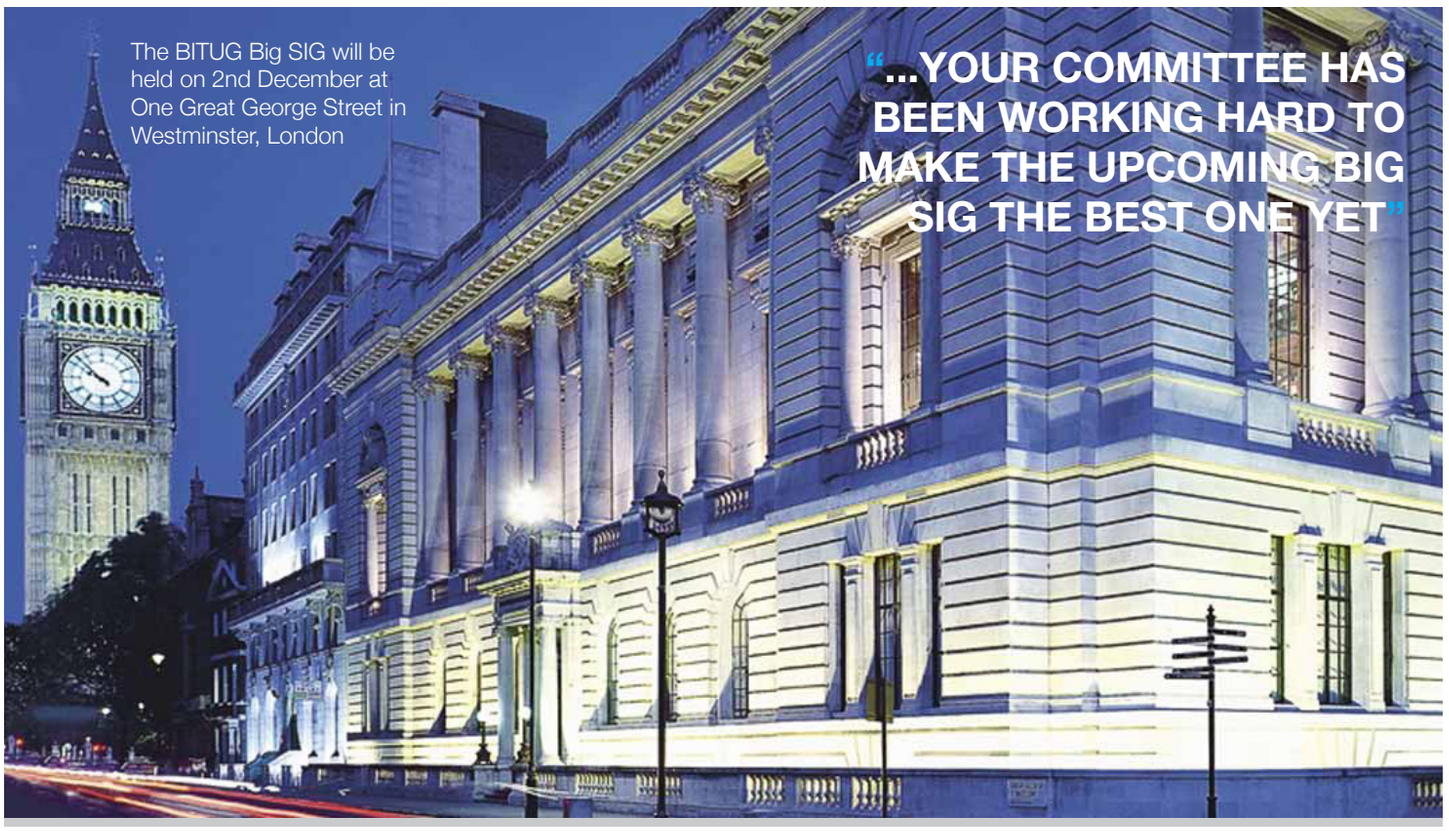

CHAIRMAN'S CHAT

Welcome to the Autumn 2014 BITUG Newsletter

I am writing this 'Chairman's chat' for the Autumn newsletter in the middle of one of the best summers I can remember for a long time. Summer is obviously a relative term here in the UK, but all in all, I don't think we can complain too much about the weather we have had. I do get slightly wound up by people who must think that the UK is located just off the coast of Casablanca and therefore we should have 360 days of glorious sunshine, that they would then of course moan about, as it would be too hot. So I guess my message here is, make the most of what you have, while you have it, as tomorrow you will be rooting around for a wooly hat to put on!

So how does the weather tie in with the general goodness that is BITUG and the HP NonStop scene in general? Well, apart from your user group being the warm reliable fountain of knowledge, for the shining light that is the HP NonStop (can you tell I'm struggling), I guess it doesn't really. However, your committee has been working hard to make the upcoming Big SIG the best one yet. We have decided to change the venue this year. Don't worry; we have picked a location with just as much class as Trinity house. The ceilings are still high, the paintings are regal and the coving is frankly ghastly, so we should have the Yanks flocking over in their droves for a bit of 'real' history. The venue for this year's event is The Institute of Civil Engineers at One Great George Street in Westminster, we are literally 100 yards from the Houses of Parliament and Big Ben. The new venue is larger and we feel accommodates the kind of event we want to run this year, better than Trinity House.

We have four end user presentations already confirmed, covering areas like performance and capacity planning, system migrations and upgrades, IBM's MQ series and support and patch maintenance. HP is supporting us as well as ever with the latest hardware and software roadmap updates as well as a very nice presentation on the future of NonStop as our keynote. By popular demand, our education day is being given by ETI-NET on their BackBox product. The day will cover an overview of the product and will give hints and tips about configuring and managing your BackBox environment. We are expecting a high attendance and as ever the numbers are limited, so please book early.

Anyway, I can feel my tender skin starting to sizzle, so I had better go back inside, to cool down and do some real work.

I look forward to seeing you all at the Big SIG in December!

Regards,

Sean Bicknell
BITUG Chairman and
European Sales Manager
at XYPRO

Little SIG SUMMARY

We hope you all enjoyed the BITUG Little Sig back in May. There was an exceptional turnout with 50+ attendees putting a strain on health and safety regulations at HP!

For those of you who couldn't make it here is a quick summary of what you missed and we hope you can make the Big SIG in December we have planned to accommodate at least 100+ for this event:

HP Keynote – David McLeod, EMEA NonStop Director, HP
David talked with great enthusiasm on many subjects (including Meg Ryan movies) based on his strong feelings that the market is moving toward a NonStop world. He also dispelled many of the myths that have surrounded NonStop particularly those on cost and availability of resources. In addition he gave an update on the good progress being made with x86 software architecture and how NonStop in the future would play an important role in Converged Infrastructure, Cloud Computing, Mobilisation and Big Data.

Pathway Migration – Matt Whiteman, Standard Chartered Bank. Unfortunately Matt couldn't make the event, so Moore Ewing from HP kindly stepped in to give a brief presentation on Pathway TS/MP 2.x. This included an insight into performance, recommendations for utilising PATHTCP4 and suggestions for reviewing Pathway timeout configurations (Pathsend and Serverclass timeouts).

J-Boss/Oracle to NonStop Migration - Franz Koenig, HP. Master technologist, Franz König, explained how user applications can use modern technologies to exploit the full capabilities of NonStop servers by using a combination of the Java stack, services, open source frameworks and NonStop middleware. Topics included NSASJ, NSMQ, NSJ7, Quick porting of UNIX/LINUX/ORACLE and how JToolkit would help developers on NonStop to get up and running quickly.

MQ Futures – Rob Waldron, Barclays, Rick Ploen, comForte & Gerry Reilly – IBM.
Rob explained how Barclays had started testing the IBM WebSphere MQ V7.1 Client on NonStop, but with no confirmed end of support date for MQ V5.3 server on the NonStop he was struggling to move forward with his testing without a formal project to proceed.
Rick gave an overview of the MQ architecture and explained how CS-QMAN from comForte working in conjunction with MQ V7.1 client (both on the NonStop) could be an alternative to the MQ 5.3 server on the NonStop.
Gerry reiterated IBM's commitment to MQ5.3 support until at least 2016 and extended support until at least 2020 and stressed that these dates could be moved further out and that typically 18 months and always at least 12 months notice is given should these dates be extended. He provided updates on the V5.3.1.10 release and a forecast of the enhancements anticipated in the V5.3.1.11 release. Gerry also asked for feedback from all those in attendance for if IBM were to consider releasing a MQ V8 server what key features would NonStop customers want.

NonStop Update – Iain Liston-Brown, HP
Iain Liston-Brown covered off the hardware and software roadmaps, products which are no longer being sold and their replacements, recent key developments for hardware and software and finally the strategy to bring choice of underpinning Intel chip architectures to the HP NonStop server family.

BIG SIG EDUCATION DAY

1st December 2014
88 Wood Street, London

MODERNISING BACKUP AND ARCHIVING APPROACHES ON NONSTOP

The session will be given by Phil Menzies of ETINet. Phil has over 25 years of experience in design of products and solutions for HP NonStop. After serving as an architect for Citicorp's Consumer Banking division, including design of a Tandem-based global network, Phil joined Tandem Computers in 1980. Roles in software development, product management, marketing and business development were followed by jobs away from NonStop including development and manufacturing of point-of-sale and lottery terminals. In 2003 Phil re-entered the NonStop space with ETI-NET where he is responsible for product management of its virtual-tape-based solutions.

"Activate the backup, we got a server going down!"

Session abstract
Backup and archiving on NonStop still use tools over 20 years old but are expected to deal with larger amounts of data, shrinking backup windows, aggressive restore timeframes, and stringent regulatory retention requirements on business data. And prior archiving has often accumulated archives on tape media that may no longer be supported on NonStop. The session will cover how to deal with these challenges using modern tools and approaches that have evolved on other platforms.
Topics will include: use of virtual tape, data deduplication, cross-site replication, catalog management, use of parallelism for performance, legacy tape retrieval & migration, and long term media management using enterprise backup products such as Data Protector, NetBackup & TSM.

Three learning objectives
- Re-examination of backup, restore and archiving objectives and criteria.
- Understanding backup/archiving storage media and retention requirements and avoiding the legacy media trap.
- Understanding and optimizing backup and restore performance while minimizing operational personnel activity levels.

Agenda

Backup & restore in a D/R environment
- Restoring primary-site data at D/R site

Tools for NonStop Backups
- Guardian, OSS, TMF
- The Guardian Tape I/O subsystem

Tape media concepts
- Physical and virtual differences
- Labels and naming
- Physical tape handling – automated vs. manual
- Integrity of data on physical tape media

Cataloging – media and content
- Mediacom
- VOLCATs & FILECATs
- POOLs
- TAPEFILES & generations
- Tape DEFINEs
- Retention & expiration processing

Disk-based backup solutions
- Characteristics of disk storage
- Data Deduplication vs. compression
- Availability & integrity
- Parallelism & throughput
- Managing storage
- Storage access security

BackBox concepts
- Integration with the Guardian Tape I/O subsystem
- Domain concepts – single or multiple, data segregation
- Storage configurations & Data Stores
- Volume Groups – media template & catalog relationship
- Replication, including catalog contents

Using BackBox
- Getting started – configuring a Domain
- Meeting backup windows
- Strategies – media sizing, parallelism
- Operations monitoring
- Periodic maintenance jobs
- Upgrading software
- Growing storage capacities

Strategies for archiving via BackBox
- Large data deduplication appliances
- Enterprise backup applications
- Physical tape
- Ensuring retention

Migrating content & backups from old to new NonStop systems

Migrating old technology physical tape archives

Migrating from VTS

Wrap-up

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BIG SIG 2014 PREVIEW

2nd December 2014 One Great George Street, London

Maintaining our tradition of hosting the BIG SIG in historic London venues, this year we'll be at One Great George Street in Westminster - a stone's throw from the House of Commons, House of Lords, Big Ben and the Chruchill War Rooms, to name a few of the more important neighbours.

Presentation Preview

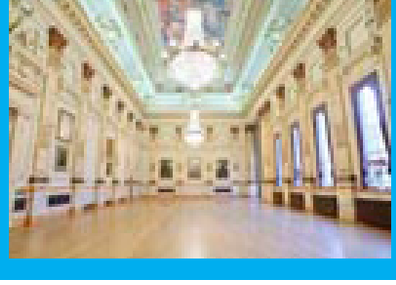
MIGRATION OF LLOYDS BANKING GROUP ATMS FROM NS16200 TO NB56000S AS WELL AS A DATA CENTRE MOVE.
Presenters' names: Peter Booth, Neil Barnes
Presenter's job titles: Senior Infrastructure Delivery Manager / Technical Specialist
Presenters' company: Lloyds banking Group
Biography: Neil Barnes. Over 30 years working on Tandem and NonStop. Technical Lead on HP NonStop for Lloyds Banking Group. Vice Chair for BITUG.
Session abstract: The session will cover the migration from the NS16200 systems to NB56000 systems, as well as the move to a new data centre. The building of a set of route to live boxes for development and test. An implementation date set the board and how we managed to keep to the original date.
Three learning objectives:
1. Migration to NB56000s what they are like, anything you need to be aware of.
2. Being the first Bank critical system in a new data centre.
3. Deadlines and testing.

THE PEAKS AND TROUGHS OF BUILDING AN EFFECTIVE CAPACITY MANAGEMENT PROCESS
Speaker: Darren Coffey
Job Title: Capacity Manager
Company: Worldpay
Summary: Capacity Management isn't just about presenting pretty CPU and DISK graphs. It's a correlation of networks, multiple platforms, tools (and their limitations), data sources, people expectations, reports, recommendations, pro-active engagement and translation of IT terminology into the Service language that Business stakeholders understand. This presentation will take you though a brief journey of my current experience.
Brief History of previous job titles: HP Nonstop (Tandem) Systems Manager with Capacity and Performance specialisation /Technical Services and Infrastructure Manager.
BITUG Association: BITUG committee member 1995 – 2006. Past Chairman on 3 occasions. Presented at domestic and International Tandem User Group conferences.

HP NONSTOP VS MISSION CRITICAL LINUX TCO
Speaker: Iain Liston-Brown
Job title: Presales Consultant
Biography: 22 Years working on Tandem and NonStop. Experienced in planning and strategy and well as business intelligence. Iain is also the HP Liaison officer for BITUG.
Session abstract
The session will consider the architectures and cost of ownership for purchase and support of running the same OLTP payments applications on Mission Critical Linux vs HP NonStop infrastructures.
Three learning objectives
1. The architecture and components needed for running truly mission critical applications on Linux.
2. A comparison with HP NonStop.
3. Costs for the two infrastructures using real ISV OLTP payment applications at different transaction rates.

HP NONSTOP HARDWARE AND SOFTWARE ROADMAP
Speaker: Mark Pollans
Job Title: Product Manager, HP NonStop Enterprise Division - Cupertino, California, USA
Biography: Mark is responsible for the NonStop server platforms and storage solutions. He was the product manger that orchestrated the release of the newest HP Integrity NonStop BladeSystems and the HP Integrity NonStop NS2200 family of entry class servers. In 2007 he introduced the NS16200 and other NonStop platforms and storage solutions since. Previously, Mark managed the HP e3000 Transition Program Office which enabled customers to migrate onto current HP platforms. He has more than 30 years of experience at HP, largely in enterprise computing and networking. During his HP tenure he has held various management and engineering positions in R&D and marketing for hardware and software projects.
Session abstract: An overview of the latest hardware and software for the HP NonStop Server product line including the future roadmap.
Three learning objectives
1. The product strategy and roadmap.
2. Modernization for the HP NonStop platform.
3. HP NonStop as part of HP's Converged Infrastructure Initiative.

Further information will be available on the BITUG website nearer the event.



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CAN YOU TRUST YOUR PUBLIC CLOUD?

BY BILL HIGHLEYMAN

There is a great deal of discussion these days about combining critical NonStop services with public cloud services, either by running non-critical parts of an application in the cloud or by bursting critical services from an overloaded NonStop server into the cloud. After all, cloud compute and storage resources are much more economical than are the same resources in NonStop servers. Furthermore, large, well-managed clouds provide the same degree of high availability as NonStop servers, correct? Wrong! There is a long history of major cloud outages that have taken down cloud services for hours and even for days:

• Microsoft's Windows Azure Cloud went down for 32 hours when a software bug caused security certificates to contain erroneous Leap Year dates.

• What should have been a ten-minute outage for Google Apps due to a power failure turned into a two-and-a-half hour ordeal when its backup data center could not be brought online because of improper documentation.

• An entire Amazon Availability Center was taken out of service for four days after a technician erroneously rerouted traffic during an upgrade from a high-speed internal network to a slow secondary network.

• GoDaddy took down fifteen-million web sites for six hours when a corrupted router table blocked access to its DNS servers.

• Customers of WestHost lost service for up to six days when an accidental triggering of the fire protection system in its data center destroyed hundreds of disks due to the blast from fire sirens.

• Salesforce.com had multiple multihour failures over several months as it attempted to upgrade its Oracle RAC cluster, which continually crashed or refused to fail over.

• A truck driver's heart attack resulted in a crash into a power transformer, causing for Rackspace a dual primary power failure that took down its chillers. Rackspace had to shut down all of its servers due to excessive heat. It took a day to get all of the servers back online.

• The Planet suffered a battery-room explosion that blew out three walls of its UPS room, taking down 9,000 servers. It took four days to get all of its customers back online.

• An attempt by Microsoft to upgrade the storage area network for its Sidekick smart phones failed and corrupted both the primary and secondary databases. Microsoft had neglected to take a backup of customer data, and most of its customers' data was lost.

The details of these and other cloud disasters can be found in the Never Again article archives of the Availability Digest (http://www.availabilitydigest.com/articles.htm).

A several-day outage is extremely painful to an organization even for non-critical applications. It is intolerable for critical applications, many of which cannot withstand outages lasting more than several minutes. Clouds are not yet suitable for critical applications unless they can be run in a redundant mode such as Amazon's Availability Zones. Furthermore, data stored in the cloud must be backed up outside of the cloud in case the cloud loses part or all of a company's data.

The bottom line is that no matter how you use a cloud to host your NonStop applications, you must have a tested Business Continuity Plan detailing how you will continue application services when they are no longer available via your IT assets. This often will entail manual operations of some sort.

About Bill

Bill is Managing Editor of the Availability Digest and Chairman of Sombers Associates. He has been responsible for implementing dozens of real-time mission-critical systems for companies such as Amtrak, Dow Jones, Time, Tandem, FedEx, SIAC, Smith Kline, G. E. Credit, Southeast Bank, Harris Satellite and more.

THE GAMES WE PLAY...

BY RICHARD BUCKLE

If in my last post I admonished you all not to mention the cricket, then perhaps I should start out with something similar about the Commonwealth Games. For me, the only good news for Australians (even expats) is that the games in four years' time will be held on Australia's Gold Coast and I wonder, after two weeks alongside its famous beaches, how many applications for political asylum will be processed – this time, coming from the English team. You will love the place …

Games are an essential element of the Australian psyche – something I am reminded of constantly whenever I take the trip back to London. A competitive spirit develops early on and even here, living in North America, I'm being constantly reminded by my family to "dial it back" occasionally as my competitive spirit kicks in. Perhaps it wasn't all that wise to take up the hobby of driving cars around race tracks, as the fun element is now equated to what time I ran and where did I end up in the pack of drivers.

When it comes to NonStop and the NonStop community, apart from the vendors competing for your business, the thought of games and competitions seems far removed from our daily activities and yet, it's becoming more important than ever before to know just how competitive we are – there's no escaping the attention paid not just to price / performance but to raw performance as well. NonStop systems today just have to keep up with the competition or else – fall too far beneath the bar, and there's renewed emphasis placed on alternate offerings.

And yet, NonStop continues to support mission-critical, real-time, transaction processing in a manner that's near linearly scalable to sizes unimaginable just a decade ago. Many years ago, when I saw a 1,024 processor configuration that Aussie John Donelan assembled in Cupertino for the NeoView team (for deployment within HP), I was more impressed with how small the system was overall. Really big systems are possible however, no matter what games we might play, even the biggest NonStop system doesn't give us entry into Big Data.

The problem? According to sources within NonStop it comes down to what NonStop does so well – lots of guaranteed transaction processing – and that's not what Big Data is about. When you have the volumes (and indeed the velocity) we associate with Big Data, the choice is to go for a columnar database and when compared to relational databases we are all familiar with, the problem becomes apparent. There's no support for ACID transactions, and perhaps far worse for NonStop supporters, there's terms like "basically available", "soft state", and even "eventual consistency"; this is not so much a game than it is a gamble!

"I don't see any good reason to move a columnar database to NonStop because it dilutes the overall value proposition NonStop provides," one NonStop insider told me. Furthermore, "Columnar at this point would only put NonStop in Vertica's crosshairs and they are a shining star at the moment," another NonStop insider added. So here's the deal. No matter what may be said in the heat of battle, NonStop will not be a part of Big Data frameworks when it comes to housing the data, and just as importantly, nor should it be.

However, that's not the end of the story – just as sporting teams include skill positions played by those who excel in that position, so too are their skill positions within any enterprise when it comes to Big Data. After the analytics are performed on data accumulated within Big Data then something has to process the results and while early on, this was a task for data scientists, increasingly it's becoming clear that the ultimate consumer of analytics are the real time transactional systems interacting directly with an enterprise's customers.

The opportunity? Already there are vendors looking at the optimal manner by which analytics are parceled up and fed back to transactional systems. For the moment, the only company focused on delivering such insight back to NonStop is WebAction, a Palo Alto start up with a number of former GoldenGate developers and marketers. Having developed the best Change Data Capture (CDC) processor on the planet with GoldenGate, it's not a stretch to imagine similar logic being applied to addressing how best to get qualified analytics results back to an online solution running on NonStop.

In my first post to the WebAction blog, highlighting the value that comes from integrating the output from Big Data with transactions in flight, I highlight that I will focus on the operational impact of Big Data – how it can contribute to better oversight of data centers, greater awareness of security threats, and just as importantly, enlightening data center managers about whether they are getting the best IT processing bang for the buck! This is where we cross over and it's no longer a game. Enterprises need to be extremely competitive to survive but gamesmanship has no place. The enterprise must win and similarly NonStop has to be an integral part of the enterprise's winning strategy.

In less than two months' time, BITUG will host their Big SIG Conference and Vendor Fair in Westminster, London. It will take place December 1st and 2nd and if previous years are any indication, it will be well attended by both vendors and users alike. There will likely be a big presence from HP as there will be big news about NonStop, particularly as it pertains to support for Intel's x86 architecture. However there will be more than passing references made to Big Data and the role NonStop will play in future enterprise deployments of Big Data initiatives. And the vendors will not be backwards in promoting their Big Data potential either – expect to hear some interesting interpretations on the theme of Big Data

The Commonwealth Games are behind us, even as other contests continue – the inescapable fact of competition is that there's always another competition ahead. No one stays champion for long and no game continues unaffected by rule or governance changes. Big Data is not an end point where upon completion we all relax, congratulating each other. For the NonStop community there's a very serious side and one where good execution will bring rewards to the enterprise. So yes, take a trip to London, enjoy the interaction that will take place and just take the time to consider NonStop participation in Big Data as a winning opportunity too good to miss!

WHITE PAPERS

Secure The Fort – Your Data has become the new Gold - by comForte

Take a quick look at recent data breach stories in the press and it appears that the bad guys are winning. The best protection still = prevention + detection.
The full comForte Opinion Paper on security can be DOWNLOADED HERE.

Stock Exchange Accelerate Operations and Improve Availability with Data Replication - by Gravic

A South American stock exchange using a trading system built with HP NonStop servers faced high data entry error rates. The resulting manual reconciliation process required to correct these errors prevented it from complying with its trade settlement commitments. Working with its clearinghouse, the exchange chose the Shadowbase data replication engine to re-architect its system to eliminate manual data re-entry, thereby eliminating the errors and enabling the stock exchange to meet its settlement commitments. The full article can be DOWNLOADED HERE.

NonStop in the Enterprise - by CAIL

To increase relevance, it's important NonStop be a strategic platform, be integral in the enterprise by supporting Standards, and meaningfully contribute to business success. This is needed by all platforms, including NonStop, to reduce the time, effort, cost and risk to expand business capabilities and improve organizational agility. As a result, decision makers need to appreciate the NonStop value proposition and that the platform can be included in an Enterprise Standardization Strategy. This article provides various insights to increase NonStop profile and opportunities with examples of various products that demonstrate the platform can be integral in Enterprise IT infrastructure and supports Standards to deliver results that matter to the business. The full article can be DOWNLOADED HERE.

NONSTOP TECHNICAL BOOT CAMP 2014

The NonStop Technical Boot Camp is THE global community event that brings HP NonStop engineers, executives, partners and practitioners together to learn from experts and one another.
More info available here
List of sessions available here

AGM

The BITUG AGM will take place via web conference on 17th December 2014 at 3pm. Further details of how to attend will be published on www.BITUG.com

NEWS

Telco

Momentum in the Mobile Virtual Network Operator (MVNO) and Mobile Virtual Network Enabler (MVNE) sector of the telecommunications market continues to grow as LTE (often called 4G) starts to be implemented. HP CMS software in conjunction with HP NonStop servers have clear daylight with the i-HSS solution over traditional switches as the complexities of managing multiple network generations, wifi and subscriber management (HLR and HSS) becomes a reality. EMEA in terms of the Middle East, Spain, Scandinavia and the UK have all committed to i-HSS and NonStop as the scalable, available and simple to manage solution to deploy MVNO, MVNE and LTE capabilities.
Link to further reading here.

Finance

Momentum for retail payments vendors supporting HP NonStop is also gathering pace as these ISVs benchmark their software and show some massive scalability. Choice of solutions based upon trusted scalable, available and data integrity features delivered out of the box by HP NonStop means that you can start small and grow to massive volumes with the confidence that the platform will support your needs. ACI Base24, BPC SmartVista, FIS Connex, LUSIS Tango, Opsol OMNI-ATM and Opus Electracard have all brought their card solutions to HP NonStop. Customers in EMEA have deployed the first four of the ISV solutions and other geographies use the other two ISVs. Customers who love and trust HP NonStop now have a proven choice of applications for retail payments.
Link to further reading here.

SSDs

HP NonStop G6 and Gen8 Storage CLIMs and JBODs have been supporting 200GB enterprise class NAND SSDs since J06.13 and H06.24 versions of the NonStop Mission Critical OS. HP has announced a newer enterprise class 200GB NAND SSD in late May 2014. This new SSD, though the same size, is 12G ready, has improved the wear rate characteristics by 75% to 25 writes per day for 5 years and is less than 2/3 price that the first generation SSD. The new SSDs are less than double the cost of a 300GB conventional disk and around three times the cost of a 146GB conventional disk but will sustain much higher IO rates. The new SSDs are useable on G6 and Gen8 Storage CLIMs and back to J06.13 with SPRs. Generation 1 and generation 2 SSDs can be used in the same enclosure and can even be used as a mirrored pair. Up to 20 SSDs per pair of G6 or Gen8 Storage CLIMs are supported.

Development Tools

The latest version of the NSDEE IDE for Eclipse supports Eclipse 4.2; importantly this version has an SSH connection to the NonStop host and includes an integrated debugger. Local or Remote development is available for C/C++ and Cobol. Local development requires Native cross compilers. Java is supported natively by Eclipse. Eclipse supports many plugins for solutions like revision management, code quality, security etc.
At the end of May 2015 Visual Inspect will move to Mature support status. Visual Inspect does not have an SSH connection from client to the NonStop host. HP recommends customers consider licensing NSDEE to use Eclipse and take advantage of improved security and an integrated debugger.
At the end of May 2015 the Enterprise Toolkit for Microsoft Visual Studio.NET will move to Limited support status. HP recommends HP recommends customers consider licensing NSDEE and moving their NonStop development projects Eclipse and take advantage of improved security and an integrated debugger. The same Native cross compilers are used to NSDEE as are used with the MS Visual Studio.NET ETK.

NonStop on X86

The project for bringing HP NonStop onto the X86 architecture is progressing to schedule. Currently ISV partner BETA testing is being undertaken.

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On behalf of the BITUG Committee we hope you find this edition of the Newsletter both interesting and informative. Your feedback is appreciated, if you would like to contribute an article for the Newsletter or have any suggestions on how it could be improved please do not hesitate to contact your Newsletter Coordinator Kevin Poultney: kpoultney@bitug.com