



December's BITUG Little SIG will be held at Barclays, while in May next year we'll be welcoming NonStop users from all over Europe to eBITUG 2017.



CHAIRMAN'S CHAT

Welcome to the Autumn 2016 BITUG Newsletter

Welcome all NonStop users to the BITUG Autumn Newsletter. If you are reading the copy you found on the desk next to you, don't miss out on future copies: to receive the next free Newsletter in the post go to "Membership" and then "Become a Member" from the top of the www.BITUG.com home page.

The next Newsletter will be in the spring of 2017 when all planning for the European event (eBITUG) will be complete. A full agenda will be included, but for a taster of where we are on the planning for this make sure you read the article in this issue.

The BITUG committee hope you enjoyed the BIG SIG at Trinity House earlier in the year, over 100 of you attended, we also had a great turn out for the Education Day.

As you are aware, this year we have a change from our normal SIG schedule so our Little SIG will be in December

and hosted by Barclays in one of their Canary Wharf buildings, read on for full details on the agenda and how to register. Registration is now open via our website, so be quick to reserve your seat because places are limited.

BITUG is run by a committee of BITUG members for British Isles HP NonStop users. All committee members are volunteers from the BITUG community. If you are interested in joining the committee please contact me, Chairman@BITUG.com. You do not need to be a NonStop technical guru to be a member of the committee, just willing to give up a couple of hours of your time per month to help organise events.

Your FREE membership and many benefits could not be achieved without the invaluable help from our Vendor Members, so a big THANKYOU from BITUG for their continued support in 2016 and anticipated support in 2017. A full BITUG Vendor Member list can be

found on the BITUG home page including an overview of what they can provide elsewhere on the website.

Your feedback is important, without it your committee can only assume it's doing a good job! If you do have any ideas for consideration that could help the BITUG Committee to serve you better, please let me know at Chairman@BITUG.com. Tell your colleagues about us and the various events that as a user we hope you will find invaluable.

And finally, my term as Chairman will come to a close at the end of this year, I will be handing over to Neil Barnes. Neil will be your Chairman for 2017 and we both look forward to seeing you at the Little SIG in December, the BITUG AGM will be held at the end of the SIG.

Kevin Poultney
Chairman, BITUG
BrightStrand International Limited



I ARE WE THERE, YET? IS THIS IT?

HAVE THE NONSTOP ROADMAPS PROVIDED THE ASSURANCE WE NEED?

By Richard Buckle

The last time I wrote an article for BITUG, I asked the question “How long have we got?” The context was travel, where the frequent reprise from those in the back seat was not just, “How long have we got (before we get there)?” but also, the more often heard, “Are we there yet?” In other words, have we arrived? Of course this all depends upon us knowing ahead of time what our destination is and when it comes to technology, it continues to be a challenge for all us these days. “Are we there yet?” “How much longer will it take?” And more importantly, or so it would seem, “Is this it?” all resonate with any parent who has taken their family for a ride.

Perhaps no other question is asked more often today than that about our plans for migrating to cloud computing. The adoption of clouds is looking to be outstripping demand for on-premise equipment and this is proving to be both challenging and disruptive. Traditional vendors including IBM, Oracle and even Dell are being disrupted by the likes of Amazon, Microsoft and even Google. To admit that they didn’t see this coming isn’t likely – IBM, Oracle and Dell all have multiyear planning horizons so they should have been better prepared than they appear to be – even as it is just as likely that they will try to change gears and play a fast game of catch-up. But the recent headlines for Oracle succinctly summarized their plight, as reported by the online financial analyst’s publication Seeking Alpha, it’s now all about “Oracle - A Company With The Hardest-Working Spinmeisters On The Planet.” Cloud computing is definitely not only spinning the heads of CIOs but those in leadership roles in many of the major vendors as well.

Yes, “spin” is a much hyped word of late as even HPE hasn’t been shy talking

about spin. However, when it comes to spin at HPE it’s in a completely different context where you will find “spin” being used. HPE has announced, over the course of just a few months, the spin-out of its services organization followed more recently by another spin-out, this time of it’s software organization. Turns out, according to the news release from HPE that came late in the day September 7, 2016, CEO Meg Whitman on HPE’s Plans to Spin-Off & Merge Non-Core Software Assets With Micro Focus -Company doubles down on delivering software-defined hybrid IT solutions, there’s more than one meaning of the word “spin”.

“Today’s announced spin-merge of our non-core software assets with Micro Focus is another important step in our strategy to unlock a faster growing, higher margin, stronger cash flow company. As we said in the Enterprise Services announcement last quarter, both software and services remain key enablers of our go-forward strategy, and we are focused on building the right portfolio to win in our target markets. We believe the portfolio changes we’ve made over the past year are setting up HPE for long-term success while unlocking tremendous value for our shareholders.” HPE CEO Meg Whitman then said, “When we launched the new HPE, we laid out a vision of being the industry’s leading provider of hybrid IT, built on the secure, next-generation, software-defined infrastructure that will run customers’ data centers today, bridge them to multi-cloud environments tomorrow, and enable the emerging intelligent edge that will power campus, branch and IoT applications for decades to come.”

HPE has seen the rise of clouds and the impact it is having on all within IT. Enterprise data centers aren’t immune to the enticements being extended to CIOs to abandon traditional IT and hand over all responsibility to cloud providers. After all, they will not only take responsibility for ensuring reliability of the services but also, will dramatically reduce the need to retain any expensive (yet highly skilled) staff. And this message is attracting adherents almost daily. HPE, having seen this has responded with its support of private clouds whereby traditional IT is augmented with on-premise cloud computing. The goal here is to allow enterprise IT to make baby steps towards greater cloud adoption even as enterprise

IT ensures a level of service consistent with its primary business objectives. It’s a journey and we may all be in the back seats with HPE at the wheel, but the questions remain, “Are we there yet?” and “Is this it?”

When the NonStop community looks at the roadmaps presented this year it’s clear that among the many goals for NonStop is a path to virtualization together with support for a number of cloud based services. We have heard HPE IT is already testing virtual NonStop (vNonStop) and in so doing, looking seriously at the opportunities vNonStop presents to IT when it comes to provisioning NonStop SQL more or less at will. NS SQL availability on the basis of a DataBase-as-a-Service (DBaaS) is closer to being realized than many of us though possible just a year ago. The can-do attitude evident within NonStop development these days is refreshing and unlike anything we have experienced up until now. However, as good as this looks, I don’t believe we are quite there yet – there’s still more to come before we safely say, “We have arrived!”

It’s hard to ignore just how many outages have happened of late. It’s almost as if CIOs are abdicating responsibility for uptime. Availability seems to be now sitting in the back seat as the reduced costs promoted so loudly for cloud computing have piled into the front seats. Google goes down, airline system after airlines system fails, and yes, cloud computing isn’t far from center stage. Last year, InfoWorld reported of 9 Spectacular Cloud Computing Fails among them, Netflix running on Amazon Web Services (AWS), CloudFlare (that brought down 785,000 Websites), and Joyent.

This last reference I have included as I really warmed to the explanation that was provided. According to InfoWorld, “When you think of large-scale service providers, Joyent is one of the biggest. And because of that, one would think that policies, procedures, and access controls in such large data centers would be rock solid. Then again, we’re all human. Word quickly spread as to the cause of a 2014 outage that lasted about an hour. Reportedly, a single Joyent systems administrator was responsible for simultaneously rebooting every server instance in its data center. Oops!” In a



world where the up-and-coming generations have become so used to outages and where even the shrewdest CIO is prepared to offload all responsibility to outside parties, what has become of the importance of availability?

HPE and the investments in private clouds as it focuses on the core message of transformation to a hybrid infrastructure has its own IT organization anchoring the all-important database implementation on NonStop SQL/MX. But there is another very important step yet to be taken and that is not only offering NonStop SQL as the DBaaS, but offering NonStop itself as a service. It's only

a matter of time before we hear a lot more about this even as it was strongly hinted at during a keynote presentation at last year's NonStop Technical Boot Camp in San Jose. Roadmap presentation to come will provide the NonStop community with the assurances they need – NonStop is front and center of major investments that bring NonStop sharply into focus. There's no question that designating specific applications running within the cloud as being "NonStop" will make a big splash shortly and it will be with such an announcement, many CIOs will be able to breath a huge sigh of relief and in so doing, be able to admit, "We have arrived!"

TAND- SOFT NEWS

INTERCEPTION TECHNOLOGY ENHANCES APPLICATION FUNCTIONALITY

Interception technology once existed only in the realm of communications-based tracing. Today, it is a powerful means by which to enhance the behaviors of mission-critical applications without the need to make costly, time-consuming modifications or complete recompiles. Interception technology never alters original application logic, does not require source-code access, and is language-ambivalent because it works at the native API level. Intercept libraries are not hard to manage. They are not difficult to install. They do not create a massive increase in overhead, and they do not slow down your system. NonStop customers take advantage of existing interception utilities in a number of NonStop environments and for a variety of functions. Read this article by Jack Di Giacomo, President of TANDsoft, Inc., a NonStop interception specialist.

View the full article here:
<http://bit.ly/2dA0Mzi>



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www.tcm.uk.com

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For 20 years TCM has been at the forefront of NonStop systems management solutions.

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For any of your NonStop support needs, from back-fill resource, specialist consultancy to upgrades and migrations, talk to TCM.

We are the NonStop Experts.

We Are NonStop

I HPE NONSTOP NEWS

TRANSFORMATION JOURNEY

Since the launch of the Integrity NonStop NS16000 server in 2005, HPE NonStop has been on a modernisation journey to bring standard components and building blocks into the build of every NonStop server whilst continuing to provide the 100% NonStop features of fault tolerance, scalability, data integrity and security for which the platform is renowned.

With the launch on the NonStop X systems in 2015 the Servernet interconnect, the last proprietary component, was replaced with InfiniBand. NonStop servers are now built from standard HPE server, networking and storage components providing entry level to high end systems and all with core licensing which means systems can scale up or scale out. The introduction of the carrier grade offerings and InfiniBand Clustering with the L16.05 RVU of the Mission Critical Operating System in May 2016 means customers have a full complement of NonStop server offerings and can choose between Itanium-based NonStop i servers (containing ServerNet) or x86-base NonStop X servers (containing InfiniBand) all offering the traditional availability, scalability and data integrity.

Those of you who have attended recent RUG meetings such as TBC, GTUG and BITUG will be aware that the introduction of x86 based NonStop servers and InfiniBand interconnect is the enabler for the new transformation journey to bring Hybrid solutions and the Cloud to HPE NonStop as well as the vision for a Virtual NonStop capability. As the world moves to 24x7 and new business models cause disruption to traditional industry companies then the capability of Cloud-based and Virtual NonStop offerings in addition to traditional on premise factory integrated offerings would allow NonStop to help leverage traditional advantages in a new delivery and deployment model.

NONSTOP I PRODUCT TRANSITION

In Q3 2016 HPE has had to comply with the latest set of EU RoHS (removal of hazardous substances) which affects the manufacturing process of all server, storage and networking products. To comply with these new rules all HPE

NonStop servers have transitioned to the Gen9 server components for CPU and IO controller components. All existing components will continue to be supported and maintained on a like-for-like basis but new systems and additional CPUs or IO controllers will need to use the Gen9 components. There is no impact to performance or throughput by this transition. NonStop i systems will require a minimum of J06.20 to support the Gen9 components.

NONSTOP APPLICATION DEVELOPMENT INTERFACE (NSADI)

This is the first release of a Hybrid application model using x86 and InfiniBand for NonStop Servers and was previously known as project "YUMA". Using NSADI you can connect a NonStop X system to one or more Linux servers over an InfiniBand network to establish direct connectivity between applications running on these systems without having to go through the CLIMs. NSADI opens up new possibilities for architecting modern, mission-critical solutions using closely knit applications running on Linux and NonStop systems in a hybrid environment from L16.05 and later OS RVUs.

NSADI provides the following choice of Application Programming Interfaces (APIs) for 64-bit OSS applications on NonStop:

- RDMA Sockets (rsockets): Provides a sockets-based interface for applications to communicate over IB. TCP/IP sockets based applications require minimal changes to switch over to this service.
- RDMA Communication Manager (RDMA_CM): Provides an RDMA transport-neutral interface for establishing connections. The API concepts are based on sockets, but adapted for queue pair (QP) based semantics.
- InfiniBand (IB) verbs: Allows direct use of the underlying IB verbs API and hence offers performance advantages. Programming using IB verbs can be complex and need strong understanding of the underlying protocol services.

NONSTOP APPLICATION SERVER FOR JAVA (NSASJ) 1.4

NSASJ is a value added port of the popular open source Java Enterprise

Edition Application Server JBoss AS 7.1.2. Salient features added to the product in release 1.4 are:

Request Retry

In case of certain failures while handling a client's request to servlet applications, the NSASJ ecosystem will retry the ongoing transaction automatically by itself with no additional effort from the client or the server-side applications.

In-memory cache (IMC) based on Redis

The Infinispan cache cluster that was being used from NSASJ 1.0 to NSASJ 1.3 as the session context store has been replaced with NonStop IMC based on Redis cache server in NSASJ 1.4. This will be the session context storage mechanism for NSASJ going forward.

JMX Management Interface

Now you can monitor individual NSASJ server instances simultaneously using the JMX protocol. Each NSASJ server instance can be accessed via a specific port.

Silent Installation

NSASJ now allows non-interactive installation. The process allows administrator to specify installation particulars apriori in a configuration file. Using this feature multiple NSASJ installations can be done in one go and also, the installation of NSASJ can be automated as part of a workflow.

NONSTOP DEVELOPMENT ENVIRONMENT FOR ECLIPSE (NSDEE) 6.0

NSDEE 6.0 is a plugin for Eclipse 4.5 (Mars) and C/C++ development tooling (CDT) 8.8.

NSDEE 6.0 introduces a number of new features as listed below:

- Support for C11 compiler and Boost
- Addition of more Visual Inspect features to the NSDEE debugger,
 - A new view "NonStop Signals" to display and modify signal handlers
 - Load symbol files for debugging public and private DLLs
 - Display SPI and EMS buffers
- Support for remote project development from a Linux hosted NSDEE
- Support for using Expand path for remote project sources
- Support for launch of TS/MP server classes in debug mode.



4TECH SOFTWARE NEWS

INTRODUCING REAL-TIME FILE INTEGRITY MONITORING ON STEROIDS!

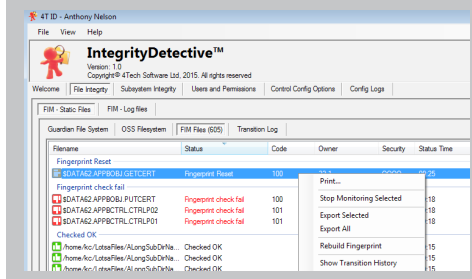
4tech Software is pleased to announce its latest NonStop security solution: Integrity Detective.

It would be a major injustice to just call Integrity Detective (ID) a File Integrity Monitoring tool, because FIM is just one of several important monitoring

features it offers.

As well as raising real-time alerts in the event of a monitored file being altered, ID also monitors critical subsystem configurations. An example of where that is useful: you have a Pathway server running program file A on your system. Your FIM is monitoring Program file A for changes. The Pathway is maliciously modified to point the server config. to program file B (which also happens to duplicate PAN/PII data to folder X). A standard FIM tool would still be monitoring A, blissfully unaware that A is now sitting there doing nothing. Integrity Detective would raise a real-time alarm directly to your SIEM device in the event of that Pathway (or Netbatch job, Safeguard globals etc.) being changed - making a breach far more likely to be detected. For more information or to request a demo please visit www.4tech.software

OBSOLETE: Any piece of software or hardware that you bought last week for mega bucks.



HPE SOFTWARE

HPE SPINS OFF SOFTWARE ASSETS TO MICRO FOCUS IN \$8.8BN DEAL

By Bill Highleyman

HPE has announced that it plans to spin off its non-core software assets and merge them with software company Micro Focus. This move represents an ongoing slimming of HPE by CEO Meg Whitman to strengthen the company's ability to focus on its primary mission – to deliver the promise of hybrid IT in which a company's data centers are efficiently integrated with its private clouds.

The Micro Focus spin-merge deal is valued at \$8.8 billion USD to HPE shareholders. The acquisition of HPE's non-core software by Micro Focus will position Micro Focus to be one of the world's largest software companies.

Earlier in 2016, HPE spun off its Enterprise Services Division and merged it with Computer Sciences Corporation (CSC) in a deal valued at \$8.5 billion USD. HPE's technology services business also was not core to the company's current strategy.

Read the full article at www.availabilitydigest.com/public_articles/1109/hpe_micro_focus.pdf

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BITUG LITTLE SIG

DATE: 8th December 2016

TIMES: 8.45-16.30

VENUE: Barclays, 5 North Colonnade, Canary Wharf

IMPORTANT NOTE: You must register in advance and you must bring photo ID with you on the day.

If you don't bring photo ID, you will not be able to access the building.

This year's BITUG Little SIG will be held at one of Barclays' buildings near Canary Wharf in London on the 8th December. The morning will consist of an education session by hosted by XYPRO, with the afternoon split up into several sessions from end users, HPE and software vendors including comForte and NTI. The final session of the day will be the BITUG AGM, so please make sure you're there if you're interested in getting involved in BITUG and helping steer it in 2017.

Lunch is provided free of charge and there will also be post-event drinks and food at a pub just around the corner.

PROPOSED AGENDA:

At time of printing we're still awaiting full details for some of the sessions. Please see www.BITUG.com for latest news.

MORNING SESSION:

The morning sessions will be presented by XYPRO and will focus on the Merged Audit (XMA) and User Authentication (XUA) tools which are bundled with the NonStop operating system

VENUE:

Barclays (Plaza 15/16)
5 North Colonnade
Canary Wharf
London
E14 4BB

Please note: 5 North Colonnade is *not* the main Barclays tower block, it's a different building near Canary Wharf DLR station. The Little SIG will be held in Plaza 15/16, with food served in Plaza 23.

PRIZES:

BITUG will be presenting an Amazon Echo to one lucky attendee and NTI will also be sponsoring some prizes, so make sure you stay to the end to be in with a shout of going home with some new tech.

Start	Duration	End	Plaza 15/16
08:45	00:15	09:00	Registration & Welcome
09:00	01:45	10:45	XYPRO Rob Leson Getting the Most out of XMA and XUA Part I
10:45	00:15	11:00	Coffee
11:00	01:30	12:30	XYPRO Rob Leson Getting the Most out of XMA and XUA Part II
12:30	01:00	13:30	Lunch
13:30	00:45	14:15	User Presentation See BITUG website DR
14:15	00:15	14:30	Coffee
14:30	00:45	15:15	ComForte See BITUG website See BITUG Website
15:15	01:00	16:15	HPE Iain Liston-Brown NonStop Roadmap
16:15	00:15	16:30	Prize giving (sponsored by NTI) followed by AGM

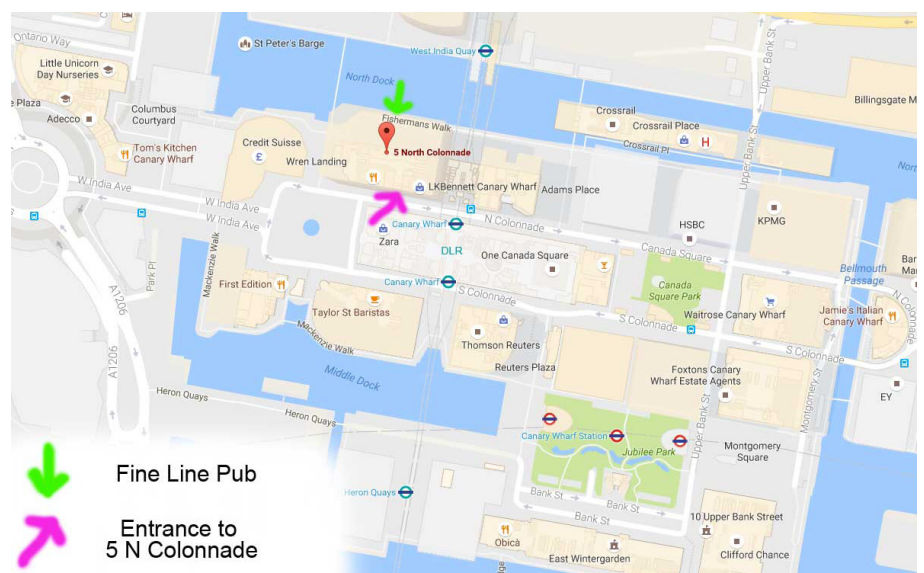
POST EVENT SOCIAL

XYPRO will be hosting informal drinks and food after the event - all attendees, including vendors, are welcome. The drinks will be held at:

The Fine Line
29-30 Fishermans Walk
10 Cabot Square, Canary Wharf
London E14 4DH

To get to the bar you turn right out of 5 North Colonnade, turn right toward the water and head down the steps. Then turn right onto Fishermans Walk and it's about 30 yards up on your right.

www.finelinecanarywharf.co.uk





OMNIPAY- MENTS NEWS

THREE NONSTOP X SERVERS AND COUNTING

Yash Kapadia loves the NonStop X. As the CEO of OmniPayments LLC, Yash and his company became the first NonStop partner to take possession of a NonStop X server. That was late 2014. Two more NonStop X servers later, Yash's projected business growth indicates a near-future investment of additional NonStop X systems to enhance OmniPayments provisions for high-speed, multi-platform solutions of its standalone and cloud-based Financial Transaction Switch. Yash is thinking six more NonStop Xs, positioned worldwide among seven data centers to mitigate communication costs for OmniPayments customers. What will Yash do with all that speed and performance? In "Three NonStop X Servers and Counting," read the OmniPayments migration case study, the fraud blocker case study, the loyalty card case study, and more.

www.bitug.com/s/OmniPayments.docx

NONSTOP DIARY DATES

NONSTOP TECHNICAL BOOT CAMP

13-16 NOVEMBER 2016

Venue: Fairmont Hotel, San Jose, California

BITUG LITTLE SIG

8TH DECEMBER 2016

Venue: Barclays, 5 North Colonnade, Canary Wharf, London.

E-BITUG 2017 EUROPEAN NONSTOP SYMPOSIUM

9-10 MAY 2017

Venue: Hilton Double Tree, Tower Hill, London

CSP NEWS

SECURITY HARDENING FOR NONSTOP SERVERS

Why is Security hardening important?

In simple terms, security hardening describes the implementation of a series of measures to make systems less vulnerable to attacks. A hardened system has a reduced number of attack points making it more difficult to be compromised. It also helps avert the "drift and decay" of security settings.

NonStop-X & OSS

With the introduction of NonStop-X, more applications are being ported to OSS, and the use of open source tools is increasing substantially. The security needs and exposures of these applications must be fully understood and addressed.

While there is an abundance of generic security information available, finding specific information and then implementing changes, is quite challenging.

In order to address this, CSP engaged in significant research and built a FREE database of NonStop security hardening knowledge named CSP-Wiki (wiki.cspsecurity.com)

For more information, visit www.cspsecurity.com

Automated Security Hardening with PROTECT-X[®]



Protect-X[®], the revolutionary browser-based security hardening solution for HP NonStop & Linux/Unix servers.

Learn more at www.cspsecurity.com



EVENT PREVIEW: eBITUG 2017

NEXT YEAR, BITUG IS TO HOST EUROPE'S LARGEST NONSTOP SYMPOSIUM

The last time the UK hosted the European Nonstop event was in 2007, in Brighton. BITUG are in the planning stages of holding a similar event again in the UK in 2017. This will be held at the DoubleTree Hilton just behind Trinity House in Tower Hill. It will be a fully packed two days of presentations from end-users, vendors, HPE and a rather special guest.

This ETUG event over the last couple of years has been successfully run by Germany's GTUG organisation, but over 9-10th May 2017 it will be BITUG's turn.

Planning is well under way, and by the time this newsletter is out we should have the costs for vendors finalised. At the Little SIG in December we should have an idea of the cost for end-users and will be able to give you an update on our plans.

As you can imagine this is a complex and expensive project for BITUG and we want to ensure that the costs are fair and that we can produce as good a show as GTUG has done in the past.

There will be a main track plus several break out streams as well as a vendor fair, where we will be serving food and drink. As we have the space and a variety of areas for vendors we hope to have more of them than we could cater for in Trinity house. As well as being a platform for key announcements by HPE and vendors, another incentive to attend is Jimmy Treybig, the father of the Tandem, will be giving a keynote speech at the start of the event. More details will be announced on www.BITUG.com.



BITUG COMMITTEE

Outgoing Chairman
Kevin Poultney - Brightstrand

Incoming Chairman
Neil Barnes

Treasurer
Matt Whiteman

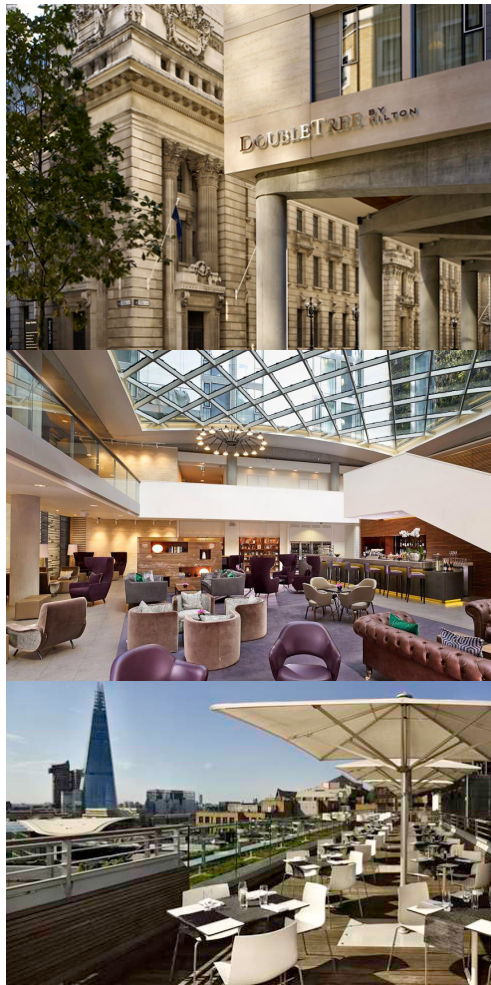
HPE Liaison
Iain Liston-Brown

Vendor Liason
Collin Yates - TCM

SIG Coordinators
Damian Ward
David Ross - NuWave
Robert Waldron

Website
Dan Lewis - 4tech Software

Newsletter
Collin Yates - TCM
Dan Lewis - 4tech Software
Kevin Poultney - Brightstrand



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- **OmniCloudX Hosts OmniPayments Instances on Pay-for-Use Basis**
- **50% Savings Guarantee off Current Transaction Processing Costs**
- **Managed Services Provider - Seven Locations Worldwide**