

TO :- VMS Champions

SUBJECT:- VMS update #3 : Apr 2011

This is our third issue of OpenVMS update brought to you by OpenVMS customer programs office. Our endeavor is to give information that will be useful and gainful for you.

I trust that you all like this new format which helps you get a quick glance of all the contents in this issue. Click on the pointers below and get full details.

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3. [Community news! :- Job openings on OpenVMS](#)

Don't miss the hp OpenVMS blog on [OpenVMS](#) , [OpenVMS blogs](#)

A big thank you to all who contributed to this edition of the OpenVMS update. Keep contributing for the OpenVMS business.

To unsubscribe write into :- OpenVMS.programs@hp.com

Thanks and Warm Regards,
Sujatha Ramani
Global Lead- Customer & Partner Technical programs

1. **OpenVMS Engineering update :-**

- a. **TUDs** in Asia Pacific region Please join us for these events. It is unique opportunity to meet with the engineering folks from OpenVMS lab.

Our first TUD in 2011 is in Singapore on 28th and 29th April. [Click to register for Singapore TUD](#)

We then move on to Australia and conduct 2 more TUDs there. One in Sydney on 2nd and 3rd May and one in Melbourne on 5th and 6th May. [Click here to register for Australia](#). Please see attachment for the full details on Australia TUD.

Our partners for this event are Software Concepts International and Nemonix. Visit them at www.sciinc.com and www.nemonixengineering.com

- b. **TechWise** White paper on i2 Performance is live on the OpenVMS website. This is a great tool for our customers and partners to understand the performance tuning and productivity gains that accrue. This paper focuses on the performance advantages of running OpenVMS 8.4 on the new BL*8xc i2 server blades.

http://h71000.www7.hp.com/techwise_ovms_bl8x0ci2_perf_mar11.pdf

<http://h71000.www7.hp.com/index.html?jumpid=/go/openvms>

- c. **VMS support with rx2800 i2 servers:** We are happy to announce the OpenVMS 8.4 support for the new integrity servers late in February 2011. Please click to read on the details <http://h30507.www3.hp.com/t5/Mission-Critical-Computing-Blog/OpenVMS-V8-4-now-available-on-rx2800-i2-servers/ba-p/88039>
- d. **Availability Manager v 3.1** Data Analyzer/Server Windows kit is qualified on the Windows Server 2008 (32-bit, x86) and Windows 7 (32-bit, x86)
- Support for HP SIM v6.2 on OpenVMS 8.4
 - WBEM Services v2.9-9 and WBEM Providers v2.2-3 for rx2800 i2 server

2. Partner Page :-

- a. **Migration Specialties** :- The folks at Maindec in the UK (www.maindec.com) were kind enough to supply us with independent Avanti 1.3.0.351 performance test results. Using an AlphaServer 4100 as a baseline, they checked raw CPU performance running Avanti on HP ProLiant hardware with JIT enabled and disabled. They checked performance using the Migration Specialties VUPs procedure (<http://www.migrationspecialties.com/VAXAlphaEmulator.html#Benchmarks>) on their own in-house VUPS and MIPs procedures. We have detailed the results below.

Caveat: These tests are for raw CPU performance of the emulated Alpha CPU. They do not reflect overall system performance, which would include disk and network I/O. Modern disk and network hardware provided emulated Alpha systems a significant boost in disk and network throughput. We hope to better quantify this in the future.

Test Hardware

1. An HP ProLiant DL360 G4, 2 x CPU, 3GHz, 4GB Mem, running Windows 2003 Server x64 SP1, Avanti 1.3.0.351 running VMS 7.3.
2. An HP ProLiant DL380 G6, 2 x QuadCore CPU, 2.4 GHz, 6 GB Mem, running Windows 2003 Server x64, SP1, Avanti 1.3.0.351 running VMS 7.3.

3. Alpha 4100 5/600 8MB, model 1619, dual CPU. One CPU disabled. 2GB Memory running VMS 7.3

Each of the Avanti configuration were using 128M of memory. Changing the amount of memory makes little difference in the CPU performance tests.

Results

DL360G4

- Running Avanti 351, JIT enabled: VUPS.COM=28.2, Maindec Internal: (MIPS=51.3, VUPS=109.4)
- Running Avanti 351 JIT disabled: VUPS.COM=16.4, Maindec Internal: (MIPS=33.1, VUPS=64)

DL380G6

- Running Avanti 351, JIT enabled: VUPS.COM=54.9, Maindec Internal: (MIPS=91.1, VUPS=211.5)
- Running Avanti 351, JIT disabled: VUPS.COM=24.2, Maindec Internal: (MIPS=51.1, VUPS=94.5)

Alpha 4100

- VUPS.COM=207.9, Maindec Internal: (MIPS=482.0, VUPS=817.0)

Note: These tests have been repeated, yielding the same results.

Avanti 1.3.0.351 provides 170% the performance of an AlphaServer 400/166 and 26% the performance of an AlphaServer 4100/600 when run on an HP ProLiant DL380G6. The test results emphasize the benefits of faster host hardware. We appreciate Maindec sharing these results and look forward to more.

- b. **Ingres is now available on OpenVMS Integrity** :- Ingres and OpenVMS have a long history dating back to the VAX days.

Ingres Corp has recently released V9.2 of the database.

V9.2 supports OpenVMS Integrity 8.3 & 8.4 and OpenVMS Alpha 8.2, 8.3, & 8.4

Ingres Database is the open source database management system that can reduce IT costs and time to value while providing the strength and features expected from an enterprise class database. Ingres is a leader in supporting business critical applications and helping manage the most demanding enterprise applications of Fortune 500 companies. Focused on reliability, security, scalability, and ease of use, Ingres contains features demanded by the enterprise while providing the flexibility of open source.

Ingres 9.2 is an update focused on providing a flexible, easy to use platform optimized for the Java development of multi-language applications. Clustered Ingres support is provided for HP Integrity with Ingres 9.2.3 (Ingres 9.2 Service Pack 3). The configuration of Ingres 9.2 in clustered mode on clustered VMS nodes provides the advantage of utilizing multiple nodes in a single Ingres environment. A single Ingres installation can be started on all nodes of the cluster, enabling all nodes to access a common set of databases, checkpoints, journals, and applications. The recovery functions in this configuration also provide a failover capability, enabling access to the Ingres 9.2 releases installation to be maintained in the event of the loss of a node from the cluster. Ingres performance in a Clustered Ingres installation continues to improve with the latest release. Some key features introduced in this release are:

Improved Ingres Cluster Upgrade. – The upgrade process is more transparent as it no longer requires an uncluster of Ingres to perform the Ingres upgrade and then remake the Ingres Cluster.

Scrollable Cursors – Scrollable cursors are database query result sets that are maintained in the database server as long as the cursor is open and that allow the user to retrieve rows of a result set in any sequence. Scrollable cursors greatly ease the display of information, for example, in scrolling web applications and enable the application to move backward and forward through the query results faster.

LOB (Large Object) Locators – Ingres 9.2 adds support for LOB locators in compliance with the ANSI SQL 2003 standard. LOB locators, which may be used with BLOBs and CLOBs, are pointers to the LOB data and greatly reduce the network traffic passed between the client and server. They permit the client to access LOB data outside the scope of row data retrieval, so that the client application can control the processing and storage requirement of the LOB data.

Improved Out of the Box Defaults – Ingres 9.2 has new defaults for a series of configuration parameters including the default page size and the default buffer cache size. We've also increased the default size for a transaction log file from 32MB to 256MB. These changes increase the chances of a non-educated new user being successful with Ingres 9.2 out of the box. We've also added the ability to change the default table structure from a heap to a btree (see below) which again is intended to improve the chances of a novice Ingres user being successful out of the box.

Automatic Storage Structure for New Tables – The storage structure of a base table, when created, is automatically determined based on the syntax used for the CREATE TABLE statement. If the CREATE TABLE statement includes at least a primary key, unique constraint, or referential (foreign key) constraint, the base table structure is set to B-tree and the usual secondary index is not built. If the table definition includes more than one constraint, it chooses the primary key constraint over a unique constraint, and the first unique constraint over any referential constraint. Previously, all new tables were created with a heap structure, by default. This feature is enabled or disabled in a given DBMS Server by setting the configuration parameter table_auto_structure to ON or OFF.

New SQL Functions – To simplify the migration of applications built for other database technologies we've added a whole host of new SQL functions including the following: round, ceiling, floor, truncate, atan2, acos, asin, tan, pi, sign, chr, ltrim, rtrim, lpad, rpad and replace.

Cached Dynamic Cursor Query Plans – When doing performance benchmarking with Jaspersoft we identified a need to cache and reuse query plans for cursors defined with dynamic SELECT statements so that when a subsequent PREPARE is executed on the identical syntax, the query plan in cache is used and the query is not re-optimized.

Connection Pooling in ODBC CLI (UNIX and VMS) - The Ingres ODBC Call-level Interface (ODBC CLI) now supports ODBC connection pooling. Connection pooling allows connections to be shared in ODBC applications and improves performance, especially in multi-threaded applications and applications with a large number of connections. Connection pooling is set on a per-process basis and is supported in the SQLSetEnvAttr() function. By default, ODBC connection pooling is disabled. If the ODBC CLI detects that a pooled connection has remained connected past the defined time-out interval, the connection is terminated. A new screen in the Ingres ODBC Administrator utility (iiodbcadmin) allows users to specify the connection timeout value. The minimum timeout value is 1 second; the maximum is 2,147,483,647 seconds. If a user upgrades his or her Ingres installation without running iiodbcinst, iisuodbc, or iiodbcadmin, the default timeout value is -1, which indicates no timeouts.

Additional information regarding features contained in Ingres 9.2 can be located at <http://docs.ingres.com/ingres/9.2/release-summary>.

c. **Maklee** Welcomes Norman Lastovica, Executive Vice President – Performance Solutions

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Maklee Engineering is pleased to announce the appointment of Norman Lastovica as Executive Vice President – Performance Solutions. Norman joins Maklee from a distinguished, long-term career at Oracle, where – among other achievements – he led Rdb development teams.

In his role at Maklee Engineering, Norman will contribute to the company's continued growth, working with performance critical workloads for a high-end customer base. Norman brings to Maklee nearly twenty-five years of expertise working with leading technology innovators. His vast experience with large system design and development, including the world's largest and fastest OLTP systems, highlights his exceptional technical abilities coupled with a unique, broad-based vision for optimal integration of technology within organizations.

Maklee's management team, including CEO and founder Guy Peleg, and Executive Vice President and CTO Christian Moser, is delighted to be working together with Norman to drive the company forward, servicing clients with sophisticated performance tuning, platform migration and custom engineering solutions.

Maklee Engineering specializes in performance tuning of Oracle databases, with a guarantee to double the performance of your database or the service is provided free of charge. The Maklee staff welcomes Norman to the company, and wishes him luck in our mutual journey to develop breakthrough solutions for even the most demanding database workloads.

For further information about Maklee Engineering's services and solutions, please visit <http://www.maklee.com> or contact info@maklee.com.

d. **OPC-UA for OpenVMS** :- We are attaching a press release for a new OpenVMS product that The RoviSys Company is offering. This is an exciting new product for us, as it brings to OpenVMS a connectivity that previously was confined to the Windows world. See the attached press release.

e. **GNAT** Pro Ada Development Environment is now released.

GNAT Pro 6.4.1 Available on OpenVMS Platforms

AdaCore is pleased to announce the release of the GNAT Pro 6.4.1 Ada Development Environment on HP OpenVMS for Alpha servers and for Itanium (Integrity) servers. This is a major release and includes the following features:

- Ada 2012 preview including most of the currently finalized Ada Issues (AIs)
- Improved code generator based on GCC 4.5
- More detailed exception messages (-gnateE switch)
- New gnatcheck rules
- New warnings

- More flexible and more efficient project manager
- Improved handling of static aggregates

GNAT Pro customers can find the complete list of new features and release notes in the features section of the documentation page in GNAT Tracker.

GNAT Pro is highly compatible with HP Ada on Alpha, providing an efficient solution for porting existing Ada code on OpenVMS to 64-bit support on Alpha and to Itanium. The product supports Ada 83, Ada 95, Ada 2005, and also Ada 2012. For more information, please contact info@adacore.com.

f. Golden eggs

The Visual Configuration basket has been updated.

These documents give the best understanding for these five top brand vendors. Each map has also a rich set of sub-links to servers shown in the document.

Links to other four vendor are also included.

HP ProLiant x86-64 Rack servers, AMD / Intel

<http://www.goldeneggs.fi/documents/GE-HP-FAMILY-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-DL165G7-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-DL385G7-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-DL360G6-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-DL380G7-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-DL380G6-A.pdf> ** Old, not listed in the basket
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<http://www.goldeneggs.fi/documents/GE-HP-DL580G7-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-DL585G6-A.pdf> ** Old, not listed in the basket
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<http://www.goldeneggs.fi/documents/GE-HP-DL585G7-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-DL785G6-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-DL980G7-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-ML150G6-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-ML310G5-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-ML350G6-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-ML370G6-A.pdf>

<http://www.goldeneggs.fi/documents/GE-HP-X86-11-Mar-2010.pdf>

3. Community news!

- There are new job postings available for VMS professionals. Please contact miannotti@softworldinc.com if you are interested.
- This job is with the State of Connecticut Judicial branch looking for someone with VMS Admin experience as one of their people retired.
The job description is on CareerBuilder.Com at: <http://tinyurl.com/3nb494c>
- Don't miss the hp OpenVMS blog on [OpenVMS](#) , [OpenVMS blogs](#)