

TO :- VMS Champions

SUBJECT: -VMS update #2 : Jan 2011

This is our second 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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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. Wish you all a very happy and fun filled holiday season and may the new year bring in the best tidings for all of us!

To unsubscribe write into :- [OpenVMS.programs@hp.com](mailto: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 and Japan

We are happy to announce the Technical update days in Australia and Singapore. These are planned in the last week of April. The tentative dates are as under.

25<sup>th</sup> 26<sup>th</sup> April Singapore  
28<sup>th</sup> 29<sup>th</sup> April Sydney  
2<sup>nd</sup> – 3<sup>rd</sup> May Melbourne

Please block your calendar and join us in these cities for our Technical update days. You will hear more in detail from us shortly on this. Our partners for this event are Software Concepts International and Nemonix. Visit them at [www.sciinc.com](http://www.sciinc.com)  
[www.nemonixengineering.com](http://www.nemonixengineering.com)

b. Performance improvement :-

- New MACRO builtin IA64\_STF\_SPILL\_F0 in OpenVMS V84 Update-V0400
  - i. We have introduced a new MACRO builtin IA64\_STF\_SPILL\_F0 for faster memory zeroing in OpenVMS V84 Update-V0400.
  - ii. IA64\_STF\_SPILL\_F0 is a new built-in that allows faster memory zeroing by writing 16 bytes of memory at a time. In the earlier versions, only 8 bytes could be zeroed using the EVAX\_STQ built-in. IA64\_STF\_SPILL\_F0 built-in provides significant performance benefits, especially when zeroing large areas of memory.
  - iii. Format:
  - iv. IA64\_STF\_SPILL\_F0 addr, incr
  - v. where 'addr' is the address of the 16-byte memory region and 'incr' is the value by which 'addr' is incremented; specifying 0 means no auto-increment.
  - vi. Images affected:
    - 1. [SYSEXE]MACRO.EXE
- Performance improvement of OTS\$STRCMP routines in OpenVMS V84 Update-V0500
  - i. We have enhanced the performance of OTS\$STRCMP routines in OpenVMS V84 Update-V0500.
  - ii. The LIBOTS Run-Time Library (RTL) has nine variants of the OTS\$STRCMP routines. These routines are written in BLISS programming language. They perform a byte to byte comparison thereby resulting in poor performance.
  - iii. In this release of the update kit, the OTS\$STRCMP routines are rewritten in Itanium assembly improving the performance significantly. For a toy program, we have observed a performance improvement of ~80%.
  - iv. Images affected:
    - 1. [SYSLIB]LIBOTS.EXE
    - 2. [SYSLIB]LIBOTS.OLB
- Improved performance in handling "%RMS-E-EOF, end of file detected" errors:
  - 1. The GET and FIND statements in HP BASIC use a signaled exception to indicate any condition other than a successful record retrieval. Because the current
  - ii. exception-delivery code on OpenVMS/Itanium is not fully optimized, this can slow down programs that generate a lot of those events.
  - iii. In the new version of DEC\$BASRTL.EXE, the DBASIC\$IO\_NO\_SIGNAL, has been enhanced further to support the commonly experienced RMS\$\_EOF
  - iv. condition as well. This should help most customers improve the performance of their BASIC programs as they port to the new platform.

- v. The DBASIC\$IO\_NO\_SIGNAL routine takes two parameters, the (integer) channel number and an (integer) vector containing the condition for which to avoid
- vi. signaling and exception. This routine call should be placed immediately before the GET or FIND statement, since the effect lasts only until the next I/O
- vii. operation on the indicated channel. The GET or FIND statement should be immediately followed by a call to RMSSTATUS for that channel to test whether an
- viii. exception occurred, and then conditionally deal with the RMS\$\_EOF condition there instead of in the exception handler routine.

ix. Images Affected:

1. [SYSLIB]DEC\$BASRTL.EXE

- Improved performance in handling RECNOTFOU exceptions

- i. Because a lot of effort is required to modify the application for calling the DBASIC\$IO\_NO\_SIGNAL routine before the GET or FIND statement, the logical definition method has been implemented. This allows a user program to
- ii. avoid the cost of an expected I/O exception that is, RMS\$\_RNF by defining the DBASIC\$IO\_NOSIGNAL logical to 1.
- iii. Defining the DBASIC\$IO\_NOSIGNAL logical in the process table to 1 will amount to not signal any errors for any RECNOTFOU error in a user program.
- iv. Explicit call to the DBASIC\$IO\_NO\_SIGNAL routine is not required with this implementation.
- v. However, if you want to conditionally handle the RMS\$\_RNF condition for certain channels (as exception handling will be disabled for RMS\$\_RNF), you need to modify the application to make a call to RMSSTATUS for the required channel.

vi. Images Affected:

1. [SYSLIB]DEC\$BASRTL.EXE

- c. Debugger A new option has been added!

An example of the problem and how it works with the new option is given below:

```

typedef struct _A{
int i;
struct {
int j;
int k;
struct _A *p;
} ST;
}A;
A a1,a2;
DBG> ex *a2.ST.p
*TEST\main\a2.ST.p
i: 10
ST: 51539607563 [cycle found in type definitions]

```

The debugger does not expand ST when examining bydereferencing a pointer  
This has been overcome by providing an additional option to examine: examine/expand. The  
examine/expand behaves  
as below:

```
DBG> examine/expand *a2.ST.p
%DEBUG-I-EXAMEXPAND, Use examine/expand with caution
*TEST\main\a2.ST.p
i: 10
ST
j: 11
k: 12
p: 0
DBG>
```

d. Replacement announcements :- From 31st March 2011, the following will be obsolete and no engineering support will be available:

- HP CSWS V1.3-1 and all previous versions (on Alpha and Integrity )
- HP CSWS\_PHP V1.3-1 and all previous versions (on Alpha and Integrity )

The replacement versions would be :

- HP CSWS V2.x (CSWS v2.1-1) on Alpha and Integrity
- HP CSWS\_PHP V2.x(PHP v2.2) on Alpha and Integrity

## 2. Customers page :-

a. Opensource updates

- ZeroMQ 2.1.0 released on OpenVMS (<http://zeromqonopenvms.blogspot.com/>)
  - Minor modifications to the ZeroMQ API and improved error checking
  - 64-bit pointers on Integrity Server
  - Pascal examples
  - See <http://zeromqonopenvms.blogspot.com/2010/12/zeromq-v210-released-on-openvms-alpha.html> for download details etc.
- Erlang R13A released on OpenVMS Integrity. This is the second release of Erlang on OpenVMS
  - Release Notes
  - See <http://erlangonopenvms.blogspot.com/2010/01/erlang-on-openvms.html> for download details etc.
- RabbitMQ 2.1.1 released on OpenVMS Integrity
  - Release Notes
  - See <http://rabbitmqonopenvms.blogspot.com/2010/12/rabbitmq-v211-released-on-openvms.html> for download details etc.
- Google Protocol Buffers V04 released on OpenVMS Integrity
  - Release Notes
  - 64-bit pointers
  - See <http://gpbonopenvms.blogspot.com/2010/12/google-protocol-buffers-on-openvms-v04.html> for download details etc.
- gSOAP V09 released on OpenVMS
  - This release is based on the V2.7.10 release of gSOAP
  - It includes support for mod\_isapi when deploying with Apache

- Release Notes
- See <http://gsoaponopenvms.blogspot.com/2010/11/gsoap-on-openvms-v09-released.html> for download details etc.
- MOD\_ISAPI V01 (Internet Server API) released on OpenVMS
  - Release Notes
  - See <http://modisapionopenvms.blogspot.com/2010/11/modisapi-on-openvms-v01-released.html> for download details etc.

Please refer to the BC&JA homepage for further details and additional open source software available for OpenVMS, e.g., Lua, Twitter API, FastCGI

### 3. Partner Page :-

- a. Attached and below is a major announcement from Stomasys, Stomasys announces the availability of its leading DEC Alpha virtualization product line on Linux, expanding its cross-platform virtualization offering

Geneva, Switzerland – January 11, 2011 – Stomasys S.A., the pioneering leader in legacy system virtualization, today announced the availability of the DEC Alpha virtualization product line (CHARON-AXP/4100/DS10/DS20/ES40/GS80/GS160/GS320) on a Linux Fedora 64bit host server. CHARON-AXP provides comparable functionality and performance levels to that of CHARON-AXP for Windows. Product details are readily available on the Stomasys website.

“Over the last five years, Stomasys has provided over 4000 licenses of virtual legacy systems for Windows hosts to our customers”, said Robert Boers, CEO and Chairman of Stomasys. “This means that many VMS and Tru64 users have been able to move their applications to modern servers without any conversion or porting effort. More and more data centers move to a VMware environment. Linux-based CHARON-AXP platforms, standalone or VMware clients provide an efficient solution for VAX and Alpha legacy system owners.”

Non-commercial, Educational (NCE) freeware versions of CHARON-AXP on Linux have been made available online for demonstrational purposes. Stomasys NCE products are continuously updated and are made available for Windows, Linux and VMware platforms with the intention of allowing Stomasys users the ability to evaluate products prior to purchase. To obtain access to NCE freeware, users are simply asked to register. All NCE product versions have been built from current source code.

#### About Stomasys

Stomasys S.A. is a privately held, global company headquartered in Geneva, Switzerland which provides commercial cross-virtualization technologies to thousands of users in more than 50 countries. Established in 1998, Stomasys was formed from a management buyout of Digital Equipment Corporation’s European Migration and Porting centre following the HP/Compaq merger. The vast experience gained from years of large-scale migration and porting projects, system-level VMS engineering projects, and development of binary translators eventually led to the creation of the CHARON-VAX and CHARON-AXP software products. With full service sales and support locations in the United States, Eindhoven, and Hong Kong, engineering facilities in Russia and China, and representation around the globe, Stomasys continues to expand, bringing additional cross-platform virtualization technologies for legacy platforms to the market. For more information visit: [www.stomasys.com](http://www.stomasys.com).

- b. CA Technologies is pleased to announce the availability of **CA System Watchdog for OpenVMS Service Pack 2.4.04**. This Service Pack includes all maintenance published prior to this update. By installing this Service Pack, you ensure that your systems are current on maintenance for Release 2.4. Please visit the CA System Watchdog for OpenVMS product information page on the CA Support Online website at <https://support.ca.com> for detailed information concerning this Service Pack, up-to-date support information, and the latest technical bulletins. To obtain your copy of **CA System Watchdog for OpenVMS Service Pack 2.4.04** please contact CA Customer Care at +1-800-225-5224 in North America or see <http://www.ca.com/phone> for the local number in your country. You may also download this product online through <https://support.ca.com>.

CA Technologies is pleased to announce **CA Universal Job Management Agent** is now certified on **HP OpenVMS V8.4 for Alpha systems, HP TCP/IP services V5.7** and **Process Software TCPware 5.9**. Please see Product Information Bulletin [RI25153](#) for more information. The following patch is required: [RO22860](#). Please visit the CA Universal Job Management Agent product information page on the CA Support Online website at <https://support.ca.com> for detailed information concerning this Service Pack, up-to-date support information, and the latest technical bulletins.

- c. Attached an announcement from Vere Technologies LLC about a new VAX emulator in both PDF format.

d. Golden eggs

The Visual Configuration basket has been updated with five new FAMILY-MAPS. Maps are for: Dell, IBM, HP, Fujitsu and Oracle SUN rack and tower servers.

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.

GoldenEggs is the only x86 information vehicle to "melt" these five brands together.  
This work is done for you. To help your choice for best servers.

GoldenEggs:

This is new today: 31-Jan-2011

Server family maps for: Dell, IBM, HP, Fujitsu and SUN

- <http://www.goldeneggs.fi/documents/GE-DELL-FAMILY-A.pdf> ==Brand New==
- <http://www.goldeneggs.fi/documents/GE-IBM-FAMILY-A.pdf> ==Brand New==
- <http://www.goldeneggs.fi/documents/GE-HP-FAMILY-A.pdf> ==Brand New==
- <http://www.goldeneggs.fi/documents/GE-FUJI-FAMILY-A.pdf> ==Brand New==
- <http://www.goldeneggs.fi/documents/GE-SUN-FAMILY-A.pdf> ==Brand New==

Direct-link-listing to the complete GoldenEggs basket are here:

Server comparison maps, all five brands

- <http://www.goldeneggs.fi/documents/GE-COMPARE-2P-1U-A.pdf>
- <http://www.goldeneggs.fi/documents/GE-COMPARE-2P-2U-A.pdf>
- <http://www.goldeneggs.fi/documents/GE-COMPARE-4P-4U-A.pdf>
- <http://www.goldeneggs.fi/documents/GE-COMPARE-8P-8U-A.pdf>

<http://www.goldeneggs.fi/documents/GE-COMPARE-TOWER-A.pdf>

Solutions:

<http://www.goldeneggs.fi/documents/GE-CHARON-AXP-A.pdf>

<http://www.goldeneggs.fi/documents/GE-CHARON-VAX-A.pdf>

DELL PowerEdge x86-64 Rack servers, AMD / Intel

<http://www.goldeneggs.fi/documents/GE-DELL-FAMILY-A.pdf> ==Brand New==

<http://www.goldeneggs.fi/documents/GE-DELL-R415-A.pdf>

<http://www.goldeneggs.fi/documents/GE-DELL-R515-A.pdf>

<http://www.goldeneggs.fi/documents/GE-DELL-R610-A.pdf>

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<http://www.goldeneggs.fi/documents/GE-DELL-R715-A.pdf>

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<http://www.goldeneggs.fi/documents/GE-DELL-R910-A.pdf>

<http://www.goldeneggs.fi/documents/GE-DELL-T310-A.pdf>

<http://www.goldeneggs.fi/documents/GE-DELL-T410-A.pdf>

<http://www.goldeneggs.fi/documents/GE-DELL-T710-A.pdf>

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

IBM xServer x86-64 Rack servers, AMD / Intel

<http://www.goldeneggs.fi/documents/GE-IBM-FAMILY-A.pdf> ==Brand New==

<http://www.goldeneggs.fi/documents/GE-IBM-MAX5-A.pdf>

<http://www.goldeneggs.fi/documents/GE-IBM-X3550M3-A.pdf>

<http://www.goldeneggs.fi/documents/GE-IBM-X3650M3-A.pdf>

<http://www.goldeneggs.fi/documents/GE-IBM-X3690X5-A.pdf>

<http://www.goldeneggs.fi/documents/GE-IBM-X3850X5-A.pdf>

<http://www.goldeneggs.fi/documents/GE-IBM-X3200M3-A.pdf>

<http://www.goldeneggs.fi/documents/GE-IBM-X3400M3-A.pdf>

<http://www.goldeneggs.fi/documents/GE-IBM-X3500M3-A.pdf>

<http://www.goldeneggs.fi/documents/GE-IBM-X86-10-Mar-2010.pdf>

HP ProLiant x86-64 Rack servers, AMD / Intel

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

<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>

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<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-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>

Fujitsu Primergy x86-64 Rack servers, AMD / Intel  
<http://www.goldeneggs.fi/documents/GE-FUJI-FAMILY-A.pdf> ==Brand New==  
<http://www.goldeneggs.fi/documents/GE-FUJI-RX200S5-A.pdf>  
<http://www.goldeneggs.fi/documents/GE-FUJI-RX300S5-A.pdf>  
<http://www.goldeneggs.fi/documents/GE-FUJI-RX600S5-A.pdf>  
<http://www.goldeneggs.fi/documents/GE-FUJI-RX900S1-A.pdf>  
<http://www.goldeneggs.fi/documents/GE-FUJI-TX200S6-A.pdf>  
<http://www.goldeneggs.fi/documents/GE-FUJI-TX300S6-A.pdf>  
<http://www.goldeneggs.fi/documents/GE-FUJI-X86-11-Mar-2010.pdf>

Oracle SUN FIRE x86-64 Rack servers, AMD / Intel  
<http://www.goldeneggs.fi/documents/GE-SUN-FAMILY-A.pdf> ==Brand New==  
<http://www.goldeneggs.fi/documents/GE-SUN-X2270M2-A.pdf> \*\* Old, not listed in the basket \*\*  
<http://www.goldeneggs.fi/documents/GE-SUN-X4170M2-A.pdf>  
<http://www.goldeneggs.fi/documents/GE-SUN-X4270M2-A.pdf>  
<http://www.goldeneggs.fi/documents/GE-SUN-X4470-A.pdf>  
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<http://www.goldeneggs.fi/documents/GE-SUN-X4800-A.pdf>  
<http://www.goldeneggs.fi/documents/GE-SUN-X4640-A.pdf>  
<http://www.goldeneggs.fi/documents/GE-SUN-X86-10-Mar-2010.pdf>

#### How to read Golden Eggs Visual Diagrams.

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

History: 1988 - 2010 Visuals

<http://h18000.www1.hp.com/info/GECPQA/>

<http://www.openvms.org/pages.php?page=GoldenEggs>

DEC - Compaq GoldenEggs  
OpenVMS.org GoldenEggs

Please, take your Windows and Linux people to this Independent Cross-Industry Information basket.  
<http://www.goldeneggs.fi/>

#### 4. Community news!

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