hp OpenVMS Software Partner Programs and Initiatives — for Alpha and Integrity Systems
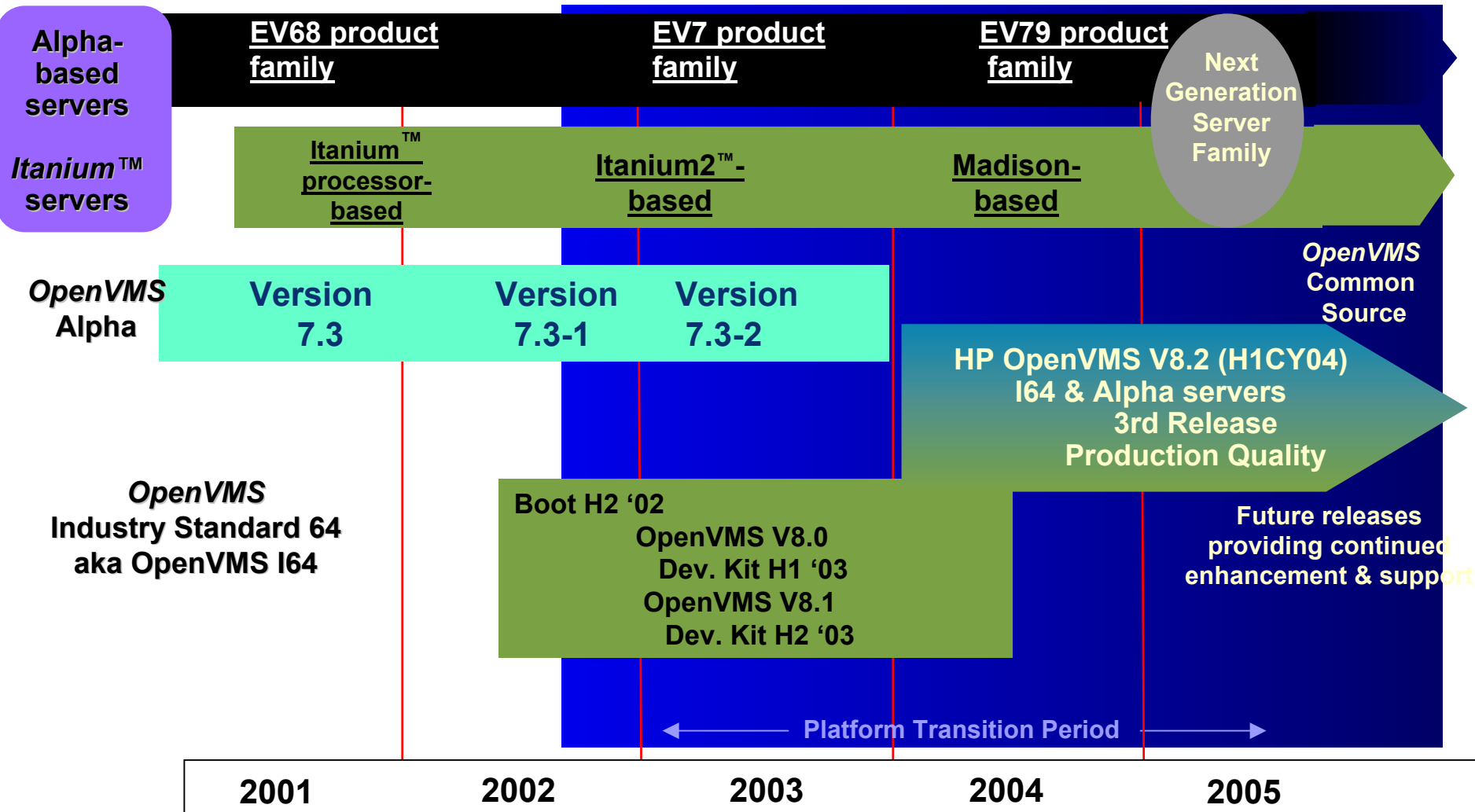
John C. Egolf
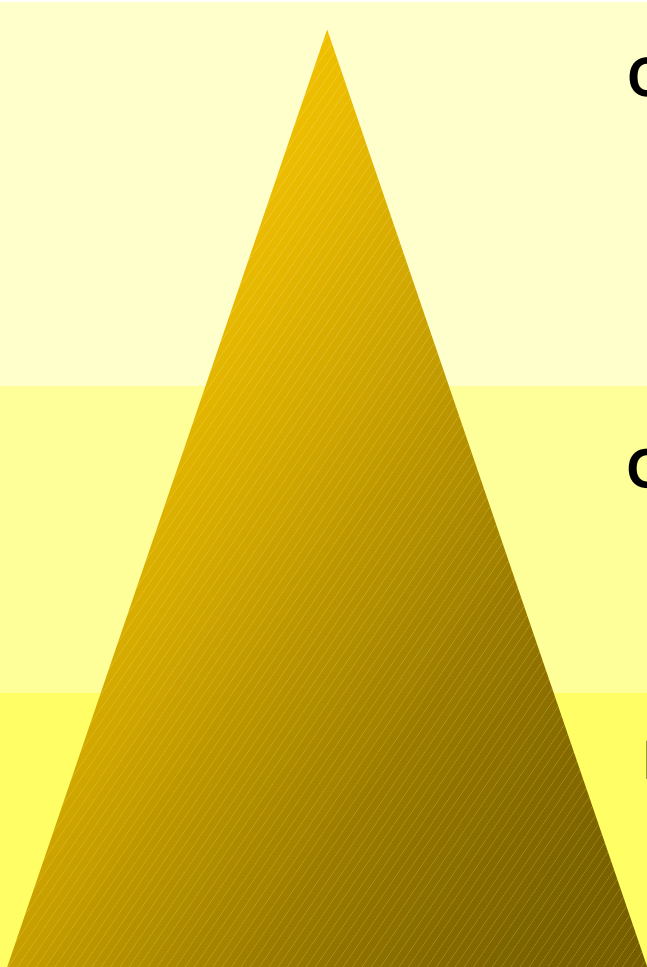
OpenVMS Segment Manager /

Itanium ISV Program Manager
HP

HP WORLD 2003
Solutions and Technology Conference & Expo

Topics

- OpenVMS Roadmap for Alpha and Itanium™ Processor Family

- Overview of OpenVMS partner programs and initiatives

- Porting case studies and examples:
  - Typical OpenVMS software application port from Alpha to Itanium from a software partner's perspective.
  - Known hints, tips, and techniques

OpenVMS Roadmap for Alpha and Itanium™ Processor Family

HP WORLD 2003
Solutions and Technology Conference & Expo

Alpha-based servers

Itanium™ servers

| EV68 product family | EV7 product family | EV79 product family | Next Generation Server Family |

Itanium™ processor-based — Itanium2™-based — Madison-based

OpenVMS Alpha

| Version 7.3 | Version 7.3-1 | Version 7.3-2 |

OpenVMS Common Source

HP OpenVMS V8.2 (H1CY04)
I64 & Alpha servers
3rd Release
Production Quality

OpenVMS Industry Standard 64 aka OpenVMS I64

Boot H2 '02
OpenVMS V8.0
Dev. Kit H1 '03
OpenVMS V8.1
Dev. Kit H2 '03

Future releases providing continued enhancement & support

← **Platform Transition Period** →

| 2001 | 2002 | 2003 | 2004 | 2005 |

Partner definitions

Corporate Managed Accounts
- HP Partner Managers
- Examples: Oracle, Microsoft, Intel, etc.
- Some partners support multiple platforms (eg. OpenVMS, HP-UX, Tru64 UNIX, NSK, Windows)

OpenVMS Vertical Segment Focus
- Engineering-led business & technical support
- Approx. 100 partners supported
- Engagement model: 1 VSP mgr to few partners

Program-managed Partners (DSPP, etc.)
- Approx. 3500 ISVs supported
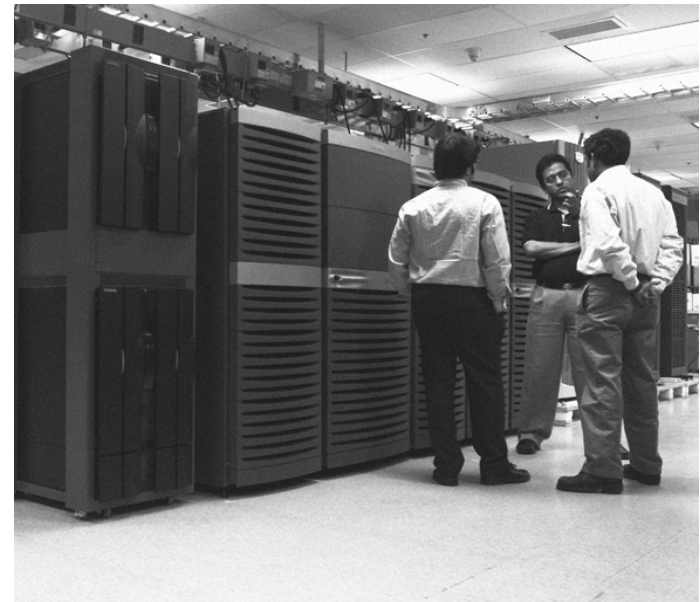- Engagement model: 1 manager to many partners

OpenVMS partner programs

- Focus on key enterprise class partners

- *Move* OpenVMS partner base to OpenVMS on Itanium®
    - *FastTrack* program
    - Supportive quotes from partners (e.g. Oracle, Brooks-PRI, Wall Street Systems, Heroix, …)
    - Expand the program with additional partners
    - Ensure smooth introduction of Itanium® - based HP platforms, with partner engagement.
- *Engage* 'end users' to accelerate adoption of Itanium-based OpenVMS Systems.
- OpenVMS partner labs provide valuable partner support

Strengthen OpenVMS software application portfolio

OpenVMS Solutions Center

- Dedicated lab in Nashua, NH (ZKO1)

- Secure environment for partner/customer application evaluation and testing

- On-site technical assistance

- Hardware & software focuses:
  - New hardware
  - Latest versions of OpenVMS
  - Third-party e-business software
  - Vertical segment solutions

- For more info, contact:
  `craig.showers@hp.com`

What partners/customers like about our labs…

- Working with the newest hardware and software.
  - new hardware
  - latest versions of OpenVMS
  - third-party e-business software
  - vertical segment solutions
- Consulting with on-site OpenVMS engineers when required.
- Secure environment for partner/customer application evaluation and testing.
- Seeing and experiencing first-hand that HP continues to invest in OpenVMS.
- Learning "best practices" on OpenVMS, Alpha systems, storage.

OpenVMS software partner status

- Strong partner commitments to support OpenVMS

- 80+% of "program-managed" partners already have plans to port to OpenVMS on Itanium

- Key partner support for database, middleware, and system management applications.

Overall status of OpenVMS IPF partner support

The OpenVMS ISV Fast St2AB, Inc., ACUCORP, Inc., Acxiom Corporation, ADL Data Systems Inc., ADMINS Inc., Advanced Systems Concepts, Inc., Albany Software Ltd., ALI Database Consultants, Alpaje, Amzi! inc., Applied Information Systems, Inc., Appmind Software AB, APT Management Solutions, Pty Ltd, Arcadd Enterprises, Aster, Attunity Inc., bChat Pty Ltd, BetaData Systems, Inc., BIOS, Software GmbH, BMC Software, Inc., BMS Computer Solutions Limited, BookMine/PageWeavers, Bormuth Associates, Bradly Associates Ltd., BridgeHead Software Ltd., Brooks Automation,, Inc., CAIL, CARE System, Celric Corporation, Cincom Systems, Inc., Circle Software Group, B.V., Cleanscape Software International, Columbia University, Commercial Computer Services, Computer Associates International, Inc., Computer Communications Limited, Computer, Corporation of America, Computershare Limited, Compuware Corporation, COMTEK Services,, Inc., CONNX Solutions, Inc., Consolidated Data, Inc., Corporate Microsystems Limited (CML), Courion Corporation, CRISP Automation Systems, Cristal Software, Cyrano, Inc., Data Center, Software, Inc., Data Life Associates, Data Processing Engineering S.R.L., Deutsche Bourse, Systems AG, Digiflex Information Systems, Inc., Digita GlobalSoft Limited, Digital Information Systems, Digital Networks, Distribution Management Systems, Inc., DSD Barcelona, Dr. Materna International, DST Data Systems, S.A., DTRO Inc., Dymaxion Research Limited, edisolve.com, inc., EDS Information Business GmbH, EDS Software Engineering and Products, (SWEP), Eiger Systems Limited, Envoy Technologies, Inc., Ergonomic Solutions, Ericom, Software, Inc., eSignal, a division of Interactive Data Corporation (formerly Data Broadcasting, Corp.), EssNet AB, Eyelit Incorporated, Faxport Inc., Financial Accounting Systems, Inc., Financial Models Company Inc., FORTEL Inc., GENEOUS SOFTWARE AG, Geimetek Earth, Research Corporation, Geometric Solutions Inc., Global Informatica S.r.l., GrayMatter Software, Corporation, Great Northern Services, Group, Inc., GS & G Heroix Corporation, Hirschmann Consulting AG, IBM United Kingdom Laboratories, ICAM Technology Corporation, iDX Systems Corporation, Imperial Technology, Inc., IMSure Network, Inc., Industrial Process, Support Services Inc., Infomedia Ltd., Business Systems Division, Information Resource, Products, Inc., Intralot S.A., IPESOFT Ltd., ipTEST Limited, ISE Inc., ISIDATA GmbH, ITHEON, Ltd, JFA Systems, Ltd., Johnson Aeronautics, Kaycee Software, Inc., Legacy Technologies 2000, Leica Microsystems Lithography Ltd., LIWACOM Informationstechnik GmbH, LUTECH S.p.A., MadGoat Software, Mainsource Software Corporation, Mannesmann Institut GmbH (formerly Mannesmann Mannrohren Service GmbH), Martin Group (formerly Martin and Associates,, Inc.), Max-Planck Institut fuer Immunbiologie, Megalys Computer Technologies, Migration, Specialties International, MQSoftware, Inc., MVP Systems, Inc., National Distributor Systems, Inc., (NDS), Network Catalyst, Networking Dynamics Corporation, New York University Medical, Center, Noack & Partner, ONE Tec AG, Opus One, Oracle Corporation, Orsyp S.A., PARSEC, Group, Inc., (The), PDV-SYSTEME GmbH, Pinnacle Solutions Incorporated, Point Secure, Inc., PowerLOC Technologies Inc., PredictAbility PLUS, Inc., Premier Software Systems, Inc., Probe, automaisiren, POLUS Software, Proprietary Software Systems, Inc., Qit Solutions, Radley, Corporation, Recital Corporation, Reflection Software International, Savant Technologies, Inc., SBPA Systems, Inc., SchlumbergerSema Finance (Capital Markets), SchlumbergerSema, Telecom (formerly Sema Telecoms), SCJ Consulting, Inc., SHD Datentechnik GmbH, Shell, Global Solutions International B.V., Sigma Systems, Inc., SIMCO, SoftLink Ltd., Softsys OY, Software AG, Software Partners, Inc., Software Resources International, Spokane Computer, Incorporated, SPS Gensys Solutions BV, STABILIT Informatik AG, Storage Solutions Specialists, Inc., Swiftbase International Limited, Syslog Informatique SA, System Insights, Systemetrics, Inc., Tantia Technologies Ltd, TECSystems Development LP (DLP), RRA5 Database Technology, Verisoft, Verifone, Database Technology (formerly Mimer Infomation Technology AB), VAI, Industries Ltd., VCS Aktiengesellschaft, Vista Control Systems, Inc., Viveo Cognitive Systems, (formerly Logos-CSE sa/nv), Whisper Technology Limited, X9000, XLNsystems, Inc., Xora, Inc., XuiS Software Ltd., Yartoo Software Pty Ltd.

More than 480 applications from 220 partners are planned for port to OpenVMS I64; more coming every week

BEA Commitment

"BEA and HP have a worldwide business, services, and technology partnership that provides a universal middleware infrastructure across the entire HP product line, including HP NonStop servers, AlphaServer systems running the OpenVMS or Tru64 UNIX operating systems; PA-RISC servers running the HP-UX operating system; ProLiant servers running the Microsoft Windows or Linux operating systems, as well as HP desktop systems and iPAQ handheld computers.

The HP and BEA partnership offers customers uncompromising value and flexibility by delivering proven integrated application infrastructure solutions that are built for today and into the future. "

http://h71000.www7.hp.com/solutions/bea/index.html

BEA and OpenVMS

- MessageQ
  - Cross tools installed.
  - Systems shipped
  - Beta version planned before end of year
- Web Logic Server (WLS)
  - WLS is "committed" on VMS/IPF. But it isn't on the BEA "engineering roadmap yet". BEA doesn't put products that are more than 6 months out, on the engineering POR.

Oracle Commitment

"Oracle has a long and successful history of delivering enterprise solutions to the OpenVMS marketplace for more than 20 years, first with DIGITAL, Compaq, and now HP. After the merger with Compaq in May 2002, HP announced that they will sustain the existing OpenVMS roadmap. The OpenVMS port remains one of Oracle's top platforms, with a large and loyal customer base. Oracle is committed to providing continued ports of its core database to OpenVMS, working with HP on its latest roadmap. "

"HP has announced plans to consolidate its 64-bit servers on the Itanium Processor Family (IPF). Oracle is committed to work with HP on its enterprise platform offerings, including working with HP to deliver the Oracle DBMS on OpenVMS for IPF based platforms. Oracle will continue to support the Alpha platform to ensure smooth transition to IPF for our customers. "

ORACLE®

http://h71000.www7.hp.com/solutions/oracle/openvms_sod-10-02.html

IPF Early Adopter Strategy

- Work with key strategic 'enabler' partners who do not have requirements for yet-to-be-delivered components vs. end users.

- Select a small number of partners so that quality support can be given in a 1x1 engineer to partner mode

- Learn as much as possible as quickly as possible, feed information back to engineering and prepare others for porting experience

- Be in a position to be more aggressive with V8.1 release and have hardware / software / processes in place to enable a larger supported group of horizontal and vertical partners on board

Alpha ➝ Itanium

OpenVMS Itanium®-based *FastTrack* program

Objectives:

- **Early validation** of base operating systems and HP layered products
- **Early characterization** of ISV / customer porting effort
- **Early references,** experiences and success stories
- Key partner applications available at production release of OpenVMS on Itanium!

Plan:

- 5 vertical ISV applications
- HP supplied engineering resources and equipment
- Ready for porting to begin on day-one of OpenVMS Itanium kit availability

Current Status:

- Several partners actively participating

Early adopter partners running OpenVMS V8.0

- Horizontals
  - ACT (Ada Core Technologies)
  - SRI
  - EDS
  - Oracle Rdb
  - BEA (MessageQ)
  - Attunity
  - Computer Associates (Ingres and Unicenter components)
  - Synergex
  - TECSys TDI
  - MVP Systems

- Verticals
  - Brooks Automation via FastTrack
  - Cerner Corporation via FastTrack

Partners being evaluated for OpenVMS V8.0

- Legato
- TIBCO
- Oracle Server
- Software AG
- Netricks
- Northrop
- Acucorp
- *And others….*

Case Studies
Brooks Automation - PROMIS

- Application
  - Semiconductor FAB Manufacturing Execution System
- Source environment
  - 2.5 Million lines Fortran
  - Small amounts of C
- Third Party dependencies
  - Oracle Database (Optional)
  - Messaging (Optional)
    - TIBCO RV
    - BEA MessageQ

TECsys TDI ConsoleWorks
First 3rd party application ported to
OpenVMS I64

OpenVMS I64 Ready

http://www.tditx.com/

Case Studies
Brooks Automation - PROMIS

- Lessons Learned
  - Fortran 77 and Fortran 90 compiler (on Alpha) have minor differences
  - Checking for "architecture" was not consistent
  - Cross compilers have some headaches that native compilers will allow us to breeze right through
  - Build and regression testing is very manually intensive (eyeball scan / human intervention required)

Case Studies
Cerner Corporation - HNMA

- **Application**
  - Millennium is a revolutionary application platform that fulfills departmental needs while unifying complex, enterprise-wide workflows. It places the individual at the core of a complete, centralized electronic medical record, creating the foundation for streamlining communication and reducing risk.

- **Source environment**
  - 2.5 Million lines of C/ C++ source code
  - 6.5 Million lines of CCL (Cerner Command Language)
  - 1000 lines of Macro32

- **Third Party dependencies**
  - Oracle Database
  - IBM MQseries messaging

Case Studies
Cerner Corporation - HNMA

- **Lessons learned**
  - C++ cross compiler is in process of maturing
    - C++ cross compiler doesn't handle VAX float datatypes (yet)
    - Exception handling planned for end of Aug 2003
    - Template support planned for end of Aug 2003
  - Had to move the UCX$INETDEF.H and TCPIP$INETDEF.H to the IA64$LIBRARY
  - TRACE utility not present (yet)

Case Studies
Open Source - MySQL

- Application
  - Database

- Source environment
  - 800 modules / 400,000 lines of C/ C++ source code

- Dependencies
  - OpenSSL
  - Zlib, a compression/decompression library

Case Studies
Open Source - MySQL

- **Lessons learned**
  - C++ cross compiler is in process of maturing
  - some 'posix compliant' C compiler changes (pthreads.h no longer includes ints.h on OVMS)
  - sigwait now provided by OVMS C RTL
  - Need better documentation for OpenVMS build / usage

Overall Lessons Learned

- OpenVMS V8.0 is looking good on Itanium!

- Working with the cross compiler / cross tools takes a little getting used to, but only a few will experience this

- Sept "Refresh" expect to solve many of the early problems

- Native development environment will be MUCH better!

- OpenVMS V8.1 is expected to deliver on the promise of "re-compile, re-link, and run" with only minor modifications needed to source program

Questions?

Interex, Encompass and HP bring you a powerful new HP World.