Open Source, e-Business and Integration Update

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Agenda

- eBusiness and Integration Strategy
- Product Technology Update
- Web Services and Integration
- Application Development Tools
- Secure Web Server, Secure Web Browser
- Java
- Third party middleware
- Open Source

eBusiness and Integration Strategy

- Enhance the OpenVMS operating system with an infrastructure that allows application, middleware, and data integration in a global, multi-platform environment.

- Invest in new software technologies that help customers extend their computing environments to meet business needs.

- Develop new products and offer IT solutions by working with partners and the open source community.

OpenVMS and Web Services Technologies

- XML-C
  - Updated versions of Apache Xerces (2.8) and Apache Xalan (2.7)
  - Alpha version – available now
  - Integrity version - available in FT now. Release in October 2007
- SOAP Toolkit
  - SOAP Toolkit V2.0 (Alpha and Integrity) based on Apache AXIS 1.1
  - Coming soon - FT version available based on Apache AXIS2 (Integrity only)
- UDDI Client Toolkit
  - Based on UDDI4J 2.0.2
  - Alpha and Integrity

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Web Services Integration Toolkit (WSIT)

- WSIT provides tools to support the encapsulation of a 3GL or ACMS application into a Javabean.
- Will generate sample callers of the Javabean, such as a simple JSP page or a plain old Java object.
- Designed to call non-Java (e.g. C, Cobol, BASIC, Fortran) applications from Java applications.
- Java offers platform neutrality and ease of use.
- Rewriting older non-Java applications is difficult, time consuming and expensive. Using WSIT, a developer can encapsulate older application libraries and expose them as Java Classes.
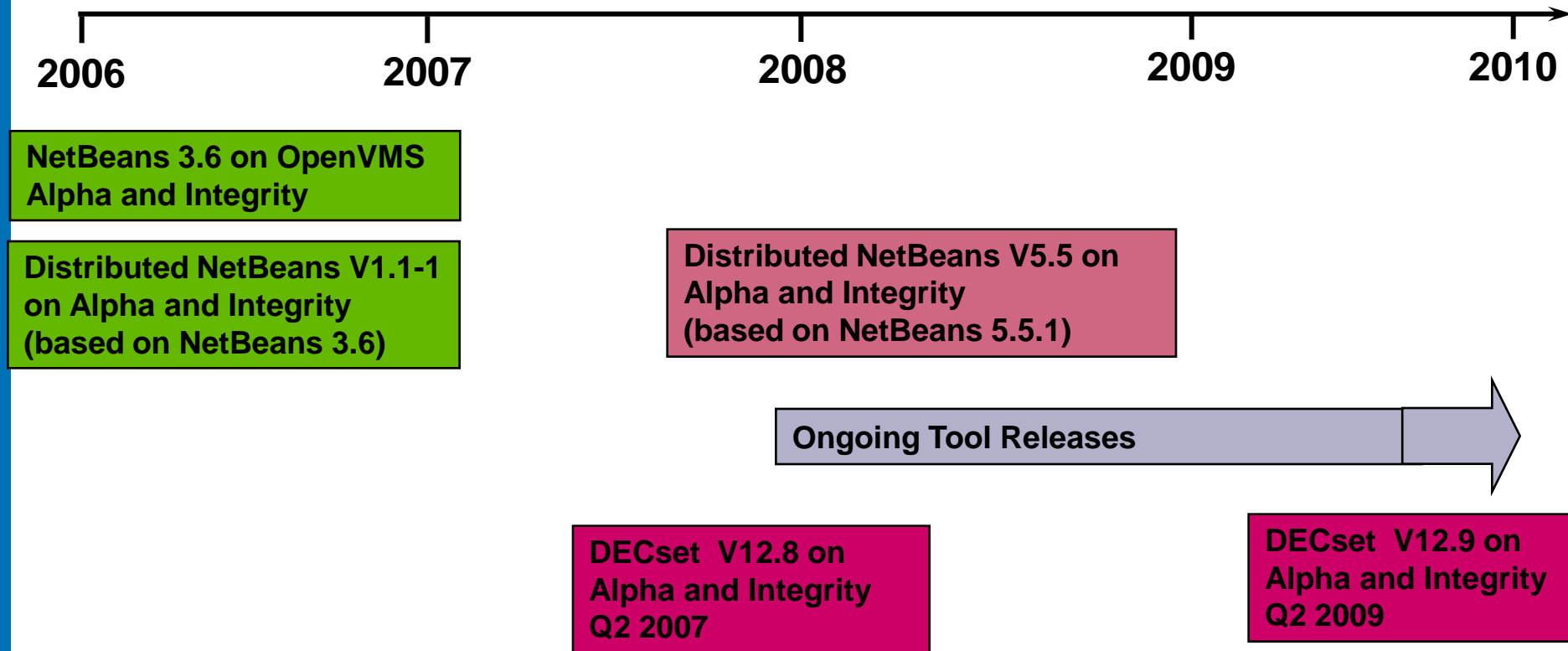
Web Services Integration Toolkit (cont)

- **Supports Alpha and Integrity**
- **OpenVMS Technical Journal article by David Sullivan http://h71000.www7.hp.com/openvms/journal/v7/**
- **Current released version is 1.2, available for download on website**
- **Current FT version is T2.0 (release in October)**
- **Planning underway for V3.0**
  - **Generate a sample AXIS2 web service caller for the encapsulated app**
  - **A monitor tool to manage WSIT application**
  - *More! Plus, we're taking requests!*

Application Development Tools

- Distributed NetBeans for OpenVMS
  - Supports remote development for OpenVMS from a non-VMS desktop
  - Supports 3GL languages as well as Java et al
  - Distributed NetBeans V1.1 – current supported version
  - Distributed NetBeans T5.0
    - FT2 – in field test and available for internet download
    - FT3 – awaiting dependencies, by end of year
  - Media Distribution
    - Internet Download
    - eBusiness CD for OpenVMS Alpha
    - FOE for OpenVMS Integrity
    - OpenVMS Delta Disk for OpenVMS Integrity
- DECSet –
  - V12.8 (3/2007) CMS, DTM, LSE/SCA, MMS, PCA
  - Working on next version
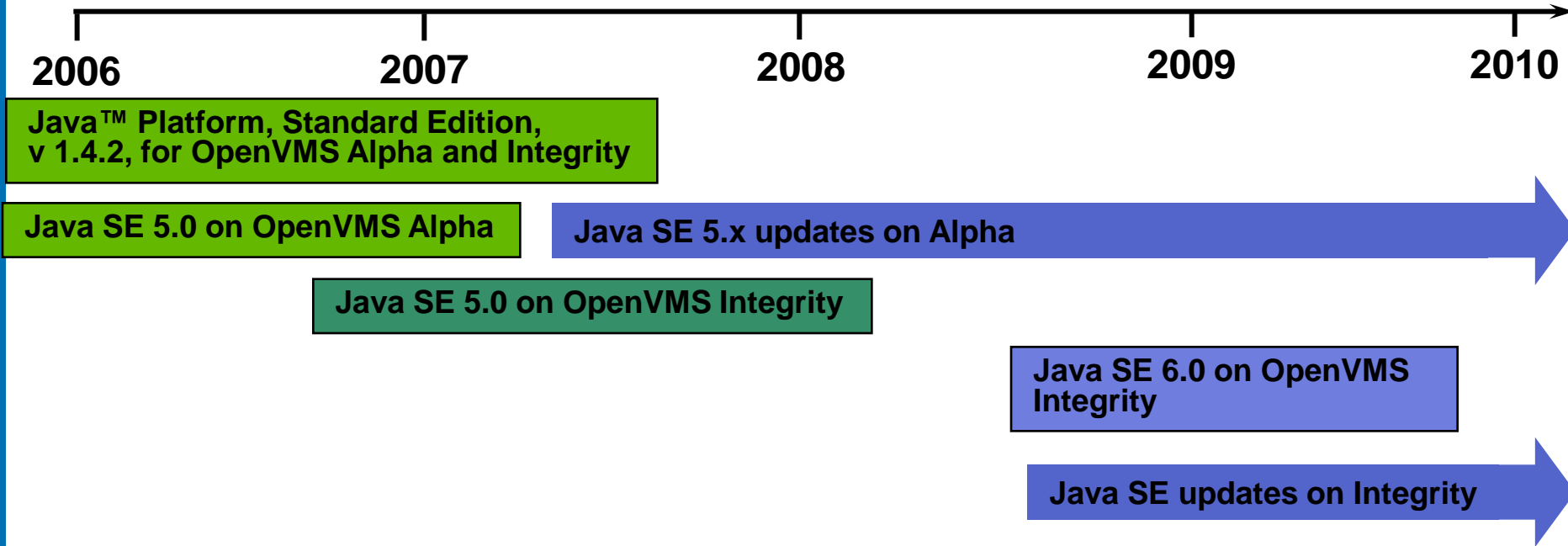
Application Development and Deployment – Tools

2006　　　　　2007　　　　　2008　　　　　2009　　　　　2010

NetBeans 3.6 on OpenVMS Alpha and Integrity

Distributed NetBeans V1.1-1 on Alpha and Integrity (based on NetBeans 3.6)

Distributed NetBeans V5.5 on Alpha and Integrity (based on NetBeans 5.5.1)

Ongoing Tool Releases

DECset V12.8 on Alpha and Integrity Q2 2007

DECset V12.9 on Alpha and Integrity Q2 2009

Java for OpenVMS

- Current releases
  - Alpha (OpenVMS 7.3-2+)
    - 1.4.2-6 (based on Sun's 1.4.2_13)
    - 5.0-3 (based on Sun's 1.5.0_10)
      - Includes JPDA and Java Web Start
  - Integrity (OpenVMS 8.2-1+)
    - 1.4.2-3 (based on Sun's 1.4.2_09)
    - 5.0-2 (based on Sun's 1.5.0_10)

- Future releases
  - Alpha
    - 1.4.2-7 based on 1.4.2-15 (Fall 2007)
    - 5.0-4 - target date Fall 2007 (based on Sun's 5.0_11)
  - Integrity
    - 1.4.2-7 based on 1.4.2-15 (Fall 2007)
    - 5.0-3 - target date Fall 2007 (based on Sun's 5.0_11 + new Hotspot sources)
      - Boosts SPECjbb2005 performance on OpenVMS I64 by around 20%, YMMV
    - 6.0 – target 2H2008, 8.3+

OpenVMS eBusiness and Integration Technologies

2006   **2007**   **2008**   **2009**   **2010**

Java™ Platform, Standard Edition, v 1.4.2, for OpenVMS Alpha and Integrity

Java SE 5.0 on OpenVMS Alpha

Java SE 5.x updates on Alpha

Java SE 5.0 on OpenVMS Integrity

Java SE 6.0 on OpenVMS Integrity

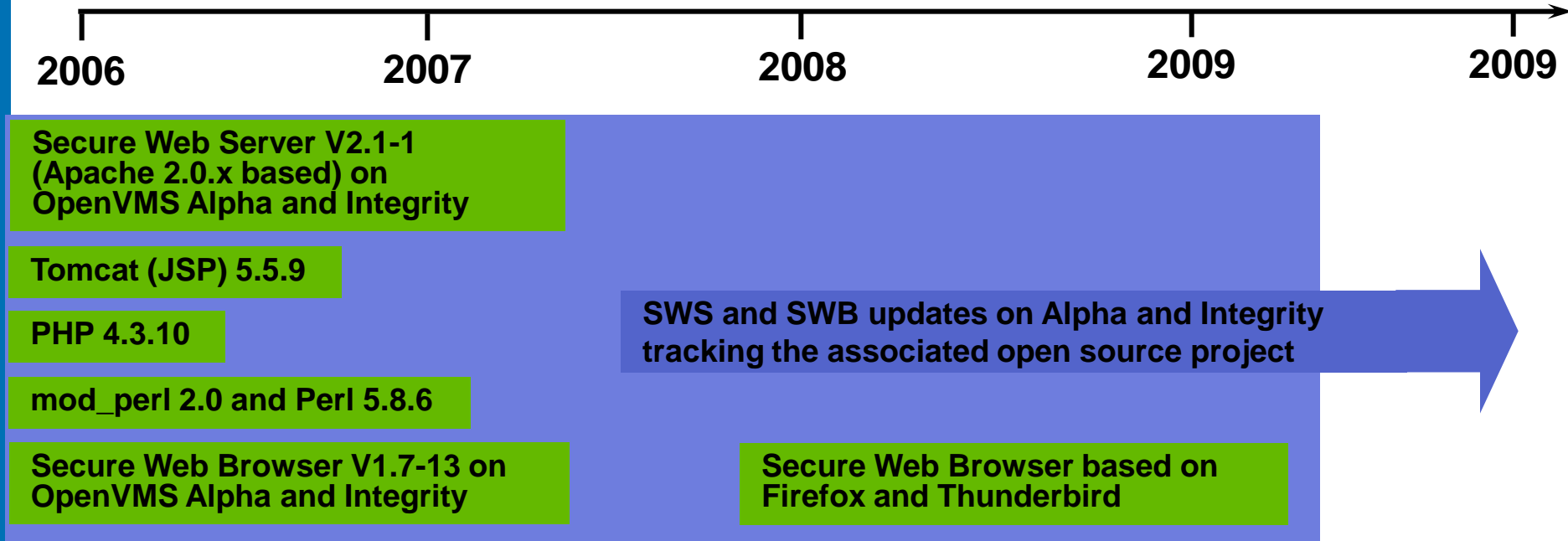**Java SE updates on Integrity**

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Secure Web Server and Scripting

- SWS is based on Apache server
- Patch kits released in December 2006
- All on Alpha and Integrity
  - SWS 2.1-1 (Apache 2.0.52)
  - CSWS_PHP 1.3 ECO1 patch kit (mod_PHP 4.3.10)
  - CSWS_Perl 2.1 ECO1 patch kit (mod_Perl 2.0.1)
  - Perl for OpenVMS 5.8.6 ECO1 patch kit
  - CSWS_Java 3.0 ECO1 patch kit (Tomcat 5.5.9)
- Future directions
  - SWS 2.1-x is the functional replacement for SWS 1.3-x and SWS 2.0
  - Future enhancements and new features will be in SWS 2.1-x and later
  - Looking at PHP5
  - New kits and patch kits created as needed

Secure Web Browser

- Current version:
  - SWB 1.7-13
    - Based on Mozilla 1.7.13 (fixed security vulnerabilities)
    - June 2006
    - Alpha and Integrity
  - ChatZilla 0.9.69 (bundled with SWB)

- Next Mozilla
  - SeaMonkey - includes mostly security fixes
  - Will be update to Mozilla 1.7-13

- Future releases:
  - Firefox – in development now
  - Mail client based on Thunderbird (in the future…any interest?)

OpenVMS eBusiness and Integration Technologies

2006   2007   2008   2009   2009

Secure Web Server V2.1-1 (Apache 2.0.x based) on OpenVMS Alpha and Integrity

Tomcat (JSP) 5.5.9

PHP 4.3.10

mod_perl 2.0 and Perl 5.8.6

Secure Web Browser V1.7-13 on OpenVMS Alpha and Integrity

SWS and SWB updates on Alpha and Integrity tracking the associated open source project

Secure Web Browser based on Firefox and Thunderbird

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OpenVMS eBusiness and Integration Technologies – 3rd Party

- TIBCO RV (Rendezvous) V7.5.2 – on Integrity
- IBM WebSphereMQ (aka MQseries)– V5.3 available now. V6.0 is planned for both Alpha and I64 available in 2007
- BEA Weblogic – 8.1 SP3 on Alpha and Integrity
  - No new versions currently planned, we're plan JBOSS as alternative
- BEA MessageQ - Mature product, no new versions, but keep current on new operating system versions – on Integrity
- 2AB Orb2 (CORBA) – on Integrity
- WRQ Reflections and VeraStream – on Integrity
- Attunity Integration Suite – on Integrity
- Compuware Uniface – on Integrity

JBoss

- JBoss 4.0.5.ga
  - Integrity only
  - Installation docs and command procedures available from John Egolf (john.egolf@hp.com)
  - JBoss 4.0.5.ga cert tests pass with 98% success rate.
  - Currently testing JBoss 4.2.1 using OpenVMS V8.3, JDK 5.0, Ant for OpenVMS
  - Support plans are being developed
    - Redhat interested in adding OpenVMS to supported operating systems.
    - OpenVMS preliminary plans include certifying JBoss Enterprise Edition, to provide JBoss to OpenVMS customers for production use.
    - Likely support plans include having HP provide L1 and L2 support. RedHat provides L3 support.

MySQL

- Open source DBMS…owned by MySQL AB
- Written in C/C++
- 5.1-11 available on OpenVMS web site
  - Contributed by Jean-Franqois Pieronne
- We're working on it…
  - Adding some of the client pieces
  - Integrity-only for new stuff
  - Fixing bugs, making improvements
    - ISAM database engine bug
    - 64-bit pointers (use large memory spaces, better caching)
    - OpenSSL support for secure db connections
    - Contact Jim Lanciani if you'd like to FT the fixes (Jim.Lanciani@hp.com)

PHP

- PHP: Hypertext Preprocessor
- MOD_PHP (in SWS)
  - V1.3 ECO 1 (9/2006)
  - Based on PHP 4.3.10
- We're investigating PHP 5 for OpenVMS … any interest?

Ant

- Another Neat Tool!

- PCSI Kit available 1.7-0 for internal FT

- Passes a large percentage (>90%) of the Ant test suite

- Alpha and Integrity

- Will be required by Distributed NetBeans and WSIT (eventually)

- For external FT, contact Jim Lanciani (Jim.Lanciani@hp.com)

Other Open Source

- Python - 9/2007 V2.5.1 (new!), V2.5.0 too
- Perl
  - CSWS_Perl 9/2006 (V2.1 ECO 1)
  - Perl 9/2006 (V5.8.6 ECO 1)
- GNV – 1/2007 V2.1
- GnuPG – 6/2007 V1.2-4, also available for VAX
- SSL – (source kit) 9/2006 V1.3
- Others…visit
  http://h71000.www7.hp.com/opensource/opensource.html

gSOAP

- Open source XML/Web Services Development Toolkit

- Written in C/C++

- Ported to OpenVMS due to question in comp.os.vms newsgroup

- Can be used in situations where WSIT is not attractive (calling web services *from* VMS application, for example)

- For more info: Brett Cameron (Brett.cameron@hp.com)

Where To Go For More Information

E-Business Technology Web Site

http://h71000.www7.hp.com/ebusiness/technology.html

Contacts

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