

HP OpenVMS Rolling Roadmaps

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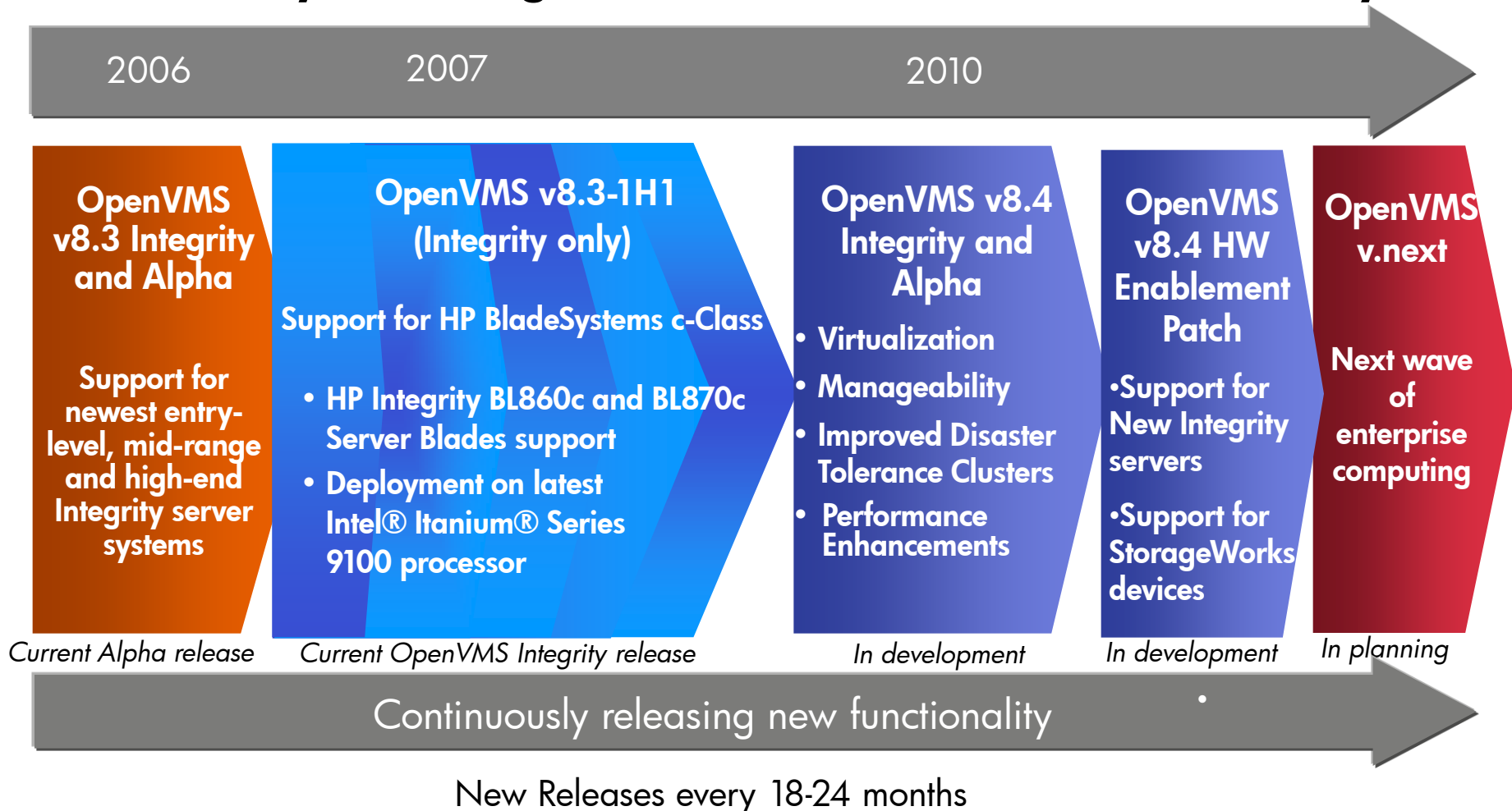
December 2009



HP OpenVMS software roadmap



Continuously delivering mission-critical solutions for over 30 years!



Continuously releasing new functionality

Future releases

- New Integrity systems
- Continued virtualization, performance, security, scalability and management enhancements
- OpenVMS 8.4 HW Enablement Patch (2-3 Qtr after NGIS launch)
 - New Integrity Systems running Itanium processors
 - New HP StorageWorks device Support
- **OpenVMS v8.4 (Integrity and Alpha)**
- **Field Test: 2009 , Release: 2010**
 - OpenVMS as a guest operating system on HP Virtual Machine
 - Clusters over TCP/IP Protocol
 - Host-Based Volume Shadowing with up to 6 member shadow sets
 - 2 Terabyte Volumes
 - Performance Enhancements

Current Releases:

- **OpenVMS v8.3-1H1 (Integrity only)**
 - Intel® Itanium® processor 9100 series
 - BL860c & BL870c Blade Systems, c7000 & c3000 enclosures
 - SB40c (Storage Blade), External SAS MSA60/70 (now with shared SAS cluster support) console, PCI-express, 10 Gigabit Ethernet NIC
- **OpenVMS v8.3 (Integrity and Alpha)**

Time →

Virtualization and Manageability

New OpenVMS Integrity functionality in 2009 and 2010

- OpenVMS v8.4 supported as a guest Operating System in **HP-Virtual Machine v4.2**
- Support for **Insight Dynamics VSE Suite v4.2**
- Availability of agents on OpenVMS for Insight Dynamics VSE Suite management products - **Capacity Advisor, Virtualization Manager** and **gWLM**
- **iCAP v9.x** for Integrity cell-based systems
- Enhanced **Blade Management**
- Full Operating System **Provisioning**
- **WBEM Services v2.9** and **WBEM Providers v2.0**
- System Management Homepage (**SMH v2.1**)

Time



OpenVMS today and tomorrow

Unix Portability and Security

2010 OpenVMS v8.4 (Integrity and Alpha)

Unix Portability:

- Full CRTL semaphores
- Symlinks
- GNV update

Security:

- Improved LDAP External authentication with Active Directory
- SSL refresh to port OpenSSL 0.9.8H plus security fixes.
- Secure Delivery: OpenVMS O/S now signed on install

Open Source Security Tools continuously updated on the web:

- Stunnel 4.2 available now!
- GnuPG Updated
- SNORT for Network Intrusion Detection (port in progress)

OpenVMS v8.3 (Integrity and Alpha)

- Security: External authentication to LDAP, AES encryption

Time



OpenVMS Cluster Support Matrix



AlphaServer

Integrity Server

		v7.3-2	v8.2	v8.3	v8.4
Integrity Server	v8.2	Warranted	Warranted	Migration	Migration
	v8.2-1	Warranted	Warranted	Migration	Migration
	v8.3 & v8.3-1H1	Migration	Migration	Warranted	Migration
	v8.4	Migration	Migration	Migration	Warranted

Notes:

- Same platform/version pairings always warranted
- Alpha v7.3-2 and v8.2 are Warranted Together

AlphaServer

		v7.3-2	v8.2	v8.3	v8.4
VAX	v7.3	Warranted	Warranted	Warranted	Warranted

Note: VAX and Integrity Servers can exist in the same cluster ONLY for temporary migration purposes

OpenVMS today and tomorrow

OpenVMS Storage Hardware



Future Releases

- D2D (Integrity & Alpha)
- VLS De-duplication (Integrity & Alpha)
- SVSP (Integrity & Alpha)

Current Releases

- **MSA Storage Family**
 - MSA2000fc G2 (Integrity)
- **EVA Storage Family**
 - EVA 4400/6400/8400 (Integrity & Alpha)
 - EVA Continuous Access support
- **XP Storage Family**
 - XP20000/XP24000 (Integrity & Alpha)
 - XP Continuous Access support, XP Thin Provisioning support
- **Fiber Channel (Integrity only)**
 - 4 Gb host-based adapters qualified with 8 Gb switches
- **Serial Attached SCSI (SAS) (Integrity only)**
 - MDS600+P700m+3Gb Blade SAS switch (c-class Blades)
 - SAS Smart Array P800 to MSA60/70
 - External SAS clusters, SC44Ge connected to MSA60/70
- **Tape Library/Drives (Integrity and Alpha)**

Ongoing support for VLS, EML, ESL (Incl. partitioning support), MSL

 - 1/8 Autoloader Support (direct attach only)
 - Support of LTO2, LTO3, LTO4 and SDLT_x drives in these libraries
 - Support of MSL LTO-4 Encryption Kit (MSL G3), SKM with LTO4 (ESL and EML)

OpenVMS today and tomorrow

Backup and Storage Software Products



Future Release

- ABS – VLS and D2D Tape Deduplication Support, Compression

2010 BACKUP Utility on OpenVMS v8.4

- Compression

Current Releases:

- **Archive/Backup System v4.5 (Integrity and Alpha)**
 - Software Encryption
 - Hardware Encryption equipment support - SKM, MSL LTO4 Encryption Kit
 - Oracle 10gR2 support (Integrity support - requires ITRC patch kit)
- **Archive/Backup System v4.4A (Last VAX release)**
- **RAID Software v3.0B (Integrity and Alpha)**
 - OpenVMS v8.3-1H1 support and bug fixes
- **DCSC v3.3B (Integrity and Alpha)**
- **Storage Library System v2.9J ECO1 (Alpha and VAX)**
 - No Integrity port, maintenance only and new O/S support

Update Releases as needed for Disk File Optimizer, Media Robot Utility, DCSC, RAID & Save Set Manager; Ongoing HP OpenView Data Protector Support

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OpenVMS today and tomorrow



Networking Products and Printer Support

Future Release : IPSEC

2010 TCP/IP v5.7 for OpenVMS v8.4 (Integrity and Alpha)

- IP Cluster Interconnect
- Packet Processing Engine
- NFS enhancements
- FTP enhancements: Browser compatibility, Anonymous Light, SSL
- LPD port configurability
- Cluster-friendly SMTP

2010 Common Internet File System (CIFS) V1.2 (Integrity and Alpha)

- Support for Kerberos, Integration of the latest SAMBA stabilization changes

H1 2009 DCPS v2.7 (Integrity, Alpha and VAX)

- USB printer support (Integrity and Alpha)

Current Releases:

- **CIFS v1.1 ECO1** – Support for WINDOWS 2008, VMS file format, ASV PDC migration
- **IPSec EAK and TCP/IP v5.6 ECO2 with OpenVMS v8.3-1H1**
- **TCP/IP v5.6 Alpha & Integrity for OpenVMS v8.3**
 - DNS /BIND 9 Resolver & v9.3 Server, NFS enhancements, **FTP performance** improvements and security modifications

Continued support for: DECnet Plus, DECnet Phase IV, X.25, Advanced Server and the IBM SNA products

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OpenVMS today and tomorrow

System Management Products



2010

- **System Management with OpenVMS v8.4**

- Insight Dynamics VSE Suite of Products- Integrated solution to manage, analyze and optimize physical, virtual resources on Integrity & Blades
- Availability Manager v3.1-1 on OpenVMS (Alpha and Integrity)

- **Combined OpenView Operations HTTPS agents v8.6 for Windows and UNIX management servers**

Ongoing releases and support for:

- WBEM infrastructure, OpenView infrastructure

Current Releases:

- **Fixes and enhancements for OVPA v4.0**
- **Availability Manager v3.0-2 on OpenVMS (Integrity and Alpha)**
- **ECO release for OpenView HTTPS Operations Agent for UNIX**
- **System Management Homepage (SMH) v2.0 for OpenVMS**
 - The single system management solution for managing HP OpenVMS systems
 - Also available for HP-UX, Linux and Microsoft® Windows® systems
- **TDC v2.3-20 for Integrity and Alpha**
- **Blades System Management with OpenVMS v8.3**
 - Provisioning (Auto OS install) for Integrity and Blade Systems
 - WBEM server Integrity and WBEM Providers.
- **OpenView Rdb Smart Plug In (SPI) V8**

Time

OpenVMS today and tomorrow

Transaction Processing and Middleware



Future Releases:

- **ACMS V5.2** including performance improvement on Itanium
- **TPWare 5.1C** includes qualification on 64-bit Windows and Visual Studio 2008 support

H2 2009 RTR v5.2

- Enhanced error logging
- Monitor file for FE-TR connection
- RTR 64-bit migration on OpenVMS Alpha and Integrity platforms
- RTR (both back end and front end) to be ported to Red Hat Linux (HP Proliant x86-64 bit Linux) platform

Current Releases:

- **ACMS V5.1B Integrity and Alpha**
 - EXIT Handler Implementation and other bug fixes
- **TPWare V5.1B**
- **RTR v5.1 ECO #1**
 - HP-UX 11iV3 support
- **RTR v5.1:** Group Channel Failover, multiple value ranges in one partition, new Platform Support: HP-UX Integrity, Linux Integrity, Continued Platform support: OpenVMS Integrity, OpenVMS Alpha, Windows 32 bit, Linux I32 front end

Time →

Application Development – Compilers and Deployment Tools

Future Releases:

- Fortran V8.3 (Integrity and Alpha)
- Basic V1.8 (Integrity and Alpha)
- C and C++ V7.4 (Integrity and Alpha)
- Pascal V6.2 (Integrity and Alpha)
- DECset V12.9 (Integrity and Alpha)
- COBOL V3.0 (Integrity and Alpha)
- Distributed Net Beans V6.0 (Integrity and Alpha)

Current Releases:

- Distributed NetBeans V5.5 (Integrity and Alpha)
- C and C++ V7.3 (Integrity and Alpha)
- Basic V1.7 (Integrity and Alpha)
- Pascal V6.1 (Integrity and Alpha)
- Fortran V8.2 (Integrity and Alpha)
- Cobol V2.9 (Integrity and Alpha)
- GNAT Pro 6.0.2 (Ada) (Integrity only)
- DECset V12.8 (Integrity and Alpha)

Time



Application Modernization and Integration Infrastructure

Secure Web Server (Apache v2.1.x based) CSWS v2.1-1

CSWS_PHP v2.1 based on PHP v5.2.6

mod_perl v2.0 and Perl v5.8.6

Tomcat (JSP) v5.5.26

Secure Web Browser (based on SeaMonkey) v1.1-12

Secure Web Browser (Mozilla v1.7-13)

- To be retired in Feb 2010

HP Firefox Web Browser v2.0-18 for OpenVMS (only Integrity)

Simple Object Access Protocol (SOAP) Toolkit (Apache Axis)

Web Services Integration Toolkit (WSIT) v3.0, Axis2

XML Technology (parsers and stylesheet processors) (Apache)

UDDI Client Toolkit (UDDI4J)

Java 1.4.2, Java 5, Java 6 (Integrity only)

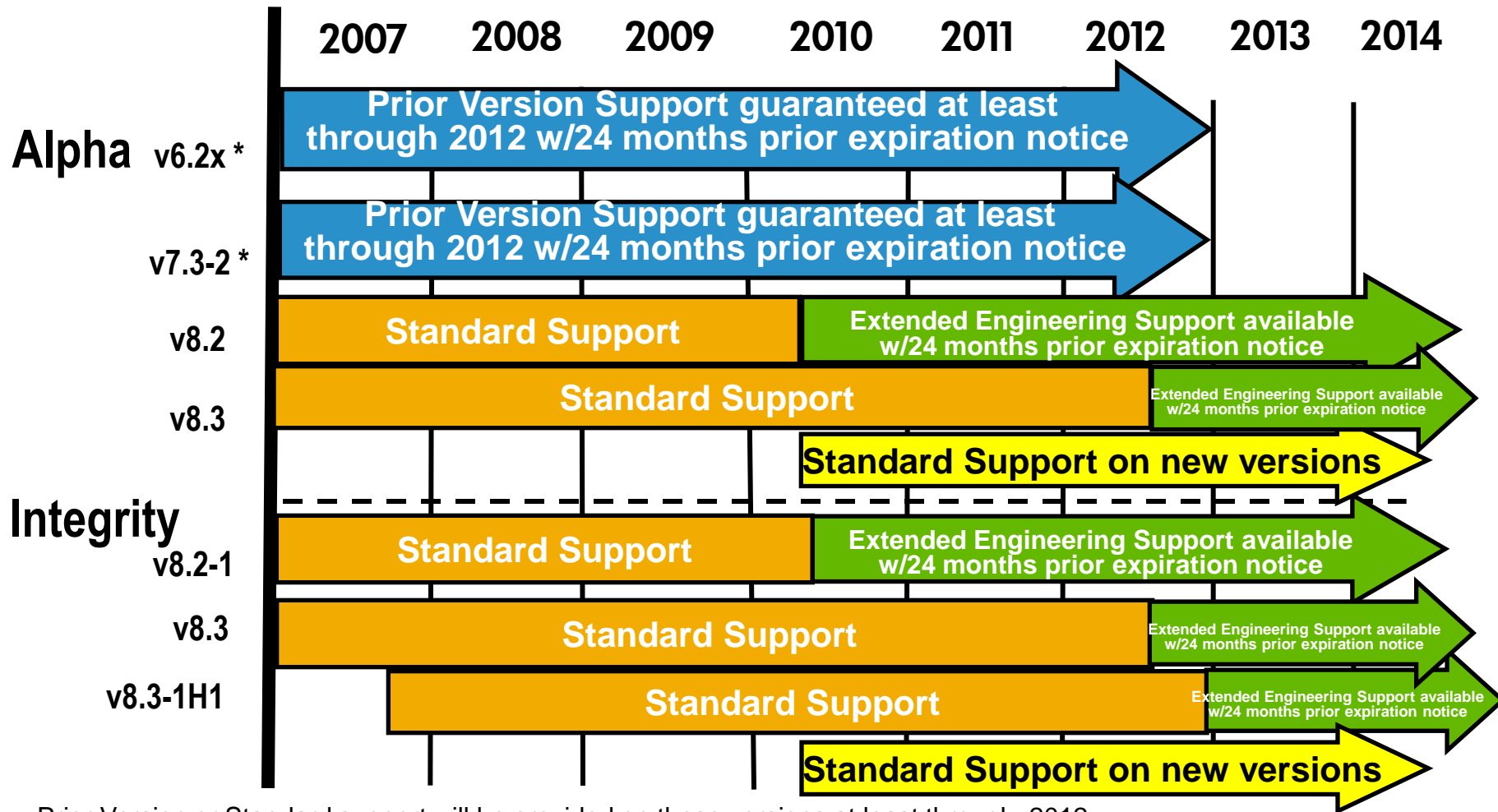
BridgeWorks v3.0A (Alpha only)

Native JDBC and ODBC via Attunity Connect

COM v1.4 (Alpha only) and OPC Transport v1.0 (Integrity only)

DCE v3.2

OpenVMS Service Support Roadmap



• Prior Version or Standard support will be provided on these versions at least through 2012.

** w/24 mo notice: A 24-month notification will be provided before support is ended.

Standard support ends when the 2nd subsequent release ships. HP supports the current version and one back.

Extended Engineering Support will be available for additional cost. Future version shipment dates are estimates.

