



OpenVMS  
**Rolling Roadmap**



December 15, 2017

# Notice

**This information contains forward looking statements and is provided solely for your convenience.**

**While the information herein is based on our current best estimates, such information is subject to change without notice.**

# VSI OpenVMS Rolling Roadmap

2018

## Q1

- VSI TCP/IP 10.5 Kit
- LTO-8 Tape

## Q2

**SAMBA**  
**JAVA 8 Update**  
**12Gb SAS**

## Q3

### OpenVMS V8.5 Itanium

- VSI TCP/IP 10.6
- CRTL: C99 features, header updates
- Up to date ACPI
- SSL 1.1.x
- Enhanced Password Management
- Low Cost Cluster (12Gb SAS)

## Q4

### Pre-OpenVMS V8.5 Patch Kit

- Enhanced Password Management : Alpha & Integrity

### OpenVMS V8.5 Alpha

- Includes TCPIP V10.6

### OpenVMS V9.0 x86-64 Early Adopters Kit

- Selected ISVs, Partners & Customers
- New Licensing
- Selected HPE & Dell Servers
- Graphical Boot Manager
- Virtual Machine guest option
- VSI TCP/IP
- Compilers
- Select Layered Products
- Cross-build tools

2019

## OpenVMS V9.1

### x86-64 General Early Adopters Kit

- Available to All ISVs, Partners & Customers
- Additional HPE & Dell Servers
  - Additional I/O Devices
- Additional Layered Products
- Additional Compilers
- Additional Open Source Applications
- VMS Advanced File System
- Additional Virtual Machine guest options
- Alpha to x86-64 Dynamic Binary Translator
- Native build tools

2020

## OpenVMS V9.2

### Production Release – X86-64, Itanium\*

- Full Production Release
- Security
  - Secure Boot
  - Encrypted Crash Dumps
- Additional HPE & Dell Servers & I/O Devices
- Enhanced Application Isolation and Management
- Increased Network Performance
- Stronger Password Encryption
- OpenJDK (X86-64 only)
- Same compilers supported on Itanium plus standards updates for:
  - C
  - C++
  - FORTRAN

*\* OpenVMS V9.2 will be released on Itanium after the x86-64 release followed by Alpha in 2021.*

# x86 Server Roadmap

	2018	2019	2020
	OpenVMS V9.0 x86-64 Early Adopters Kit	OpenVMS V9.1 x86-64 General EAK	OpenVMS V9.2 X86-64 Production Release
<b>HPE</b>			
<i>Rackmount</i>			
• Gen 9, 10	√	√	√
<i>Blade</i>			
• Gen 9, 10			√
<b>DELL</b>			
<i>Rackmount</i>			
• Gen 12, 13, 14	√	√	√
<i>Blade</i>			
• Gen 12, 13, 14			√

## x86 HBA & USB Roadmap

	2018	2019	2020
	<b>OpenVMS V9.0</b> x86-64 Early Adopters Kit	<b>OpenVMS V9.1</b> x86-64 General EAK	<b>OpenVMS V9.2</b> X86-64 Production Release
<b>SCSI</b>	<b>Nemonix</b> Ultra 320 SCSI disk & tape ; boot & data		
<b>SAS</b>	<b>HPE</b> H221 (12Gbs) <b>DELL</b> HBA 330 (12Gbs)		<b>HPE</b> 24Gbs <b>DELL</b> 24Gbs
<b>RAID</b>	<b>HPE</b> SA Series		<b>DELL</b> Perc Series
<b>FIBRE</b>	<b>QLOGIC</b> 26601/2	<b>QLOGIC</b> 27401/2	<b>EMULEX</b> LPe16001/2 <b>EMULEX</b> LPe32001/2
<b>USB*</b>	<b>USB 3.1</b>		<b>USB 4.0</b>
	<ul style="list-style-type: none"> <li>• <i>Will support built-in USB on HPE and DELL servers.</i></li> <li>• <i>Support restricted to server-oriented devices.</i></li> </ul>		

## x86 NIC Roadmap

	2018	2019	2020
	<b>OpenVMS V9.0</b> x86-64 Early Adopters Kit	<b>OpenVMS V9.1</b> x86-64 General EAK	<b>OpenVMS V9.2</b> X86-64 Production Release
<b>1Gb</b>	<b>Intel</b>		
<b>10Gb</b>	<b>BROADCOM</b>		
<b>20/40Gb</b>	<b>EMULEX (BE3)</b>		<b>Intel XL710 (New)</b>
<b>100Gb</b>			<b>Intel Mellanox</b>

## Research Areas

- **Virtual Machine Guest**

- VirtualBox
- kvm
- Hyper-V
- xen
- VMware

- **Containers / Sand Boxes**

- **Hadoop**

- **Cloud**

- OpenStack
- Rackspace
- Apache jclouds

- **RoCEv2**

- **UTF-8**

- **Security**

- Encrypted Communications
- Volume encryption

- **Additional Scripting Language**

- **Open Source Databases**

- Ingres
- MariaDB
- PostgreSQL

- **Infiniband**

- **Blockchain Technology**

- **iSCSI**

# OpenVMS Integrity Operating Environment

Released		Planned	
BOE Components:		HAOE Components	BOE Components
<ul style="list-style-type: none"> <li>• V8.4-2L1 operating system</li> <li>• ANT V1.7-1B</li> <li>• AXIS2 VB1.0-1</li> <li>• CDSA V2.4-322A</li> <li>• CIFS V1.2ECO1A</li> <li>• CSWS V2.4-3G</li> <li>• CSWS_JAVA V8.5-4</li> <li>• CSWS_PHP V5.2-17A</li> <li>• DCPS V2.8</li> <li>• DECnet Phase IV V8.4-2L1</li> <li>• DECnet Phase V V8.4I</li> <li>• DECram V8.4-2L1</li> <li>• DECwindows Motif V1.7E</li> <li>• DCE (runtime) V3.2A</li> <li>• ENCRYPT V8.4-2L1</li> <li>• Enterprise Directory V5.8</li> <li>• Kerberos V3.2-260</li> <li>• GNV V3.0-2</li> </ul>	<ul style="list-style-type: none"> <li>• NOTARY V1.0</li> <li>• OpenSSL V1.02k</li> <li>• PERL V5.20-2A</li> <li>• TCP/IP V5.7-13ECO5F</li> <li>• The Data Collector V2.3-1220A</li> <li>• UDDI V1.0B</li> <li>• VSI Binary Checker V1.2</li> <li>• WBEM/CIM V3.0-B151019</li> <li>• WBEM providers V2.2-5D</li> <li>• WSIT 3.4-1</li> <li>• XML C++ 3.0-1-1</li> <li>• XML_JAVA V4.0-1</li> </ul>	<ul style="list-style-type: none"> <li>• Availability Manager Base V8.4-2L1</li> <li>• RMS Journaling V8.4-2L1</li> <li>• Volume Shadowing V8.4-2L1</li> <li>• OpenVMS Cluster Client V8.4-2L1</li> <li>• OpenVMS Cluster Software V8.4-2L1</li> <li>• RTR V5.3</li> </ul>	<ul style="list-style-type: none"> <li>• CSWS additional modules</li> <li>• GNV Updates</li> </ul>



# OpenVMS Integrity Layered Products

Released		Planned
<ul style="list-style-type: none"> <li>• ABS / MDMS V4.6</li> <li>• ACMS dev, remote, runtime V5.2</li> <li>• BASIC V1.8-4</li> <li>• C V7.4-1</li> <li>• C++ V7.4-6</li> <li>• COBOL V3.1-7</li> <li>• Datatrieve V7.4-1</li> <li>• DECforms dev, runtime V4.2</li> <li>• DECset V12.9-1 (CMS, DTM, MMS, SCA, LSE, PCA)</li> <li>• DFO V3.3</li> <li>• DEC DFS V2.5</li> <li>• FMS dev, runtime V2.6</li> <li>• FORTRAN V8.3-3</li> </ul>	<ul style="list-style-type: none"> <li>• Japanese VMS               <ul style="list-style-type: none"> <li>- DECforms V4.2</li> <li>- DCPS V2.8</li> <li>- FMS V2.6</li> <li>- DECwindows Motif V1.7E</li> </ul> </li> <li>• MRU V1.9</li> <li>• PASCAL V6.2</li> <li>• SSM V1.9-1</li> <li>• TDMS dev, runtime V2.1-1</li> <li>• T4 V4.4D</li> </ul>	<ul style="list-style-type: none"> <li>• OMNI / OSAP</li> <li>• DQS V1.4</li> <li>• GKS V7.3</li> </ul>

# OpenVMS Alpha – OS & Layered Products

Released			Planned
<ul style="list-style-type: none"> <li>• V8.4-2L1/V8.4-2L2 OS</li> <li>• CDSA V2.4-320A</li> <li>• DCPS V2.8-1</li> <li>• DECnet Phase IV V8.4-2L1</li> <li>• DECnet Phase V V8.4D</li> <li>• DECram V8.4-2L1</li> <li>• DECwindows Motif V1.7F</li> <li>• DCE (runtime) V3.2B</li> <li>• ENCRYPT V8.4-2L1</li> <li>• Enterprise Directory V5.8-2</li> <li>• Kerberos V3.2-152B</li> <li>• DQS V1.4</li> <li>• NOTARY V1.0</li> <li>• OpenSSL V1.02KA</li> <li>• TCP/IP V5.7-13ECO5F</li> <li>• The Data Collector V2.3-1220</li> <li>• VSI Binary Checker V1.1A</li> <li>• AM Base V8.4-2L1</li> </ul>	<ul style="list-style-type: none"> <li>• RMS Journaling V8.4-2L2</li> <li>• Volume Shadowing V8.4-2L2</li> <li>• OpenVMS Cluster Client V8.4-2L2</li> <li>• OpenVMS Cluster Software V8.4-2L2</li> <li>• RTR V5.4-1</li> <li>• T4 V4.4D</li> <li>• ABS / MDMS V4.6-1</li> <li>• ACMS dev, remote, runtime V5.3</li> <li>• BASIC V1.8-5</li> <li>• C V7.4-1</li> <li>• C++ V7.4-8</li> <li>• COBOL V3.1-7</li> <li>• Datatrieve V7.4-1</li> <li>• DECforms dev, runtime V4.2-1</li> <li>• DECset V12.9-3 (CMS, DTM, MMS, SCA, LSE, PCA)</li> <li>• DFO V3.3-1</li> <li>• DEC DFS V2.5-1</li> </ul>	<ul style="list-style-type: none"> <li>• FMS dev, runtime V2.6-1</li> <li>• FORTRAN V8.3-3</li> <li>• MRU V1.9-1</li> <li>• PASCAL V6.2-125</li> <li>• SSM V1.9-1-2</li> <li>• TDMS dev, runtime V2.1-2</li> <li>• AM Base V8.4-2L1</li> <li>• AM Data Analyzer V3.2</li> </ul>	<ul style="list-style-type: none"> <li>• GKS V7.3</li> </ul>

# OpenVMS Integrity Open Source Products

Available	Investigating
<ul style="list-style-type: none"><li>• ActiveMQ V5.10.0</li><li>• cURL &amp; libcurl V7.49.0A (OpenSSL 1.0.2h support)</li><li>• Lua V5.2.3</li><li>• Mosquitto V1.3.5 (MQTT broker)</li><li>• Paho-C V1.0.3 (MQTT client)</li><li>• PHP V5.6.10B</li><li>• Ruby V2.2.21</li><li>• SCALA V2.11.8</li><li>• Subversion V1.8-13</li><li>• SWIG V3.0.5</li><li>• Vgit2 V0.8</li><li>• ZeroMQ V4.1.2</li><li>• gSOAP V2.8.32</li><li>• GNUplot V5.0-2</li><li>• Maven V3.3-9</li></ul>	<ul style="list-style-type: none"><li>• Erlang</li><li>• Precision Time Protocol (PTP)</li><li>• Python</li><li>• R</li></ul>

# OpenVMS Alpha Open Source Products

Available	Investigating
<ul style="list-style-type: none"><li>• CIFS V1.2ECO1C</li><li>• CSWS V2.4-3C</li><li>• CSWS_JAVA V6.0-47A</li></ul>	<ul style="list-style-type: none"><li>• Mosquitto 1.3.5 (MQTT broker)</li><li>• Paho-C 1.0.3 (MQTT client)</li><li>• ZeroMQ 4.1-2</li></ul>

# Prior VSI OpenVMS Releases

May 2015

## OpenVMS V8.4-1H1

### Itanium® Processor 9500 series

- New CPU architecture
- Vastly improved performance

### HP Integrity System Support

- rx2800
- HP Integrity Server Blades
  - BL860c
  - BL870c
  - BL890c
- Blades FlexFabric LAN support
- 9300 series blades and rx2800

### Software

- Quality Enhancements
  - Operating System
  - Layered Products
- Product Rebranding

March 2016

## OpenVMS V8.4-2

### HPE Integrity System Support

- Full BL890c Support
  - 64 Cores (hyperthreads off)
  - 1.5 TB Memory
- AUTOGEN (large memory)
- UEFI 2.3
- Network Boot for i4 Blades
- WBEM for i4
- rx7640 / rx8640

### Performance

- More alignment faults eliminated
- Tunable BACKUP Compression

### Software Component Updates

- Enterprise Directory 5.7
- CSWS (based on Apache 2.4.12)
- LDDRIVER 9.7
- Latest Time Zone Definitions
- I18N (for localized language support)
- Digital Signing 2.0
- Rebranding 2.0

August 2016

## OpenVMS V8.4-2L1

### Limited Software Release

- Updated SSL to 1.0.2h
- Updated key exchanges
- 0.9.8/1.0.2 coexistence mechanism
- VSI and HPE libraries and shareable images are compatible
- 0.9.8 no longer supported

### SSL-Related Capabilities

- Updated for compatibility with 1.0.2: TCP/IP, ENCRYPT, NOTARY, LDAP, ACMELDAP, Enterprise Directory, WBEM services, WBEM providers, CSWS

### Patch Kits

- Includes contents of patch kits issued through June 15, 2016

## Prior VSI OpenVMS Releases

2017



### Q1

- Alpha V8.4-2L1 Operating System
- Itanium
  - JAVA 1.8
  - Digital Signing for ISVs
  - OpenSSL 1.0.2j

### Q2

- Alpha Layered Products
- Alpha V8.4-2L2 Operating System
- OpenSSL 1.0.2k

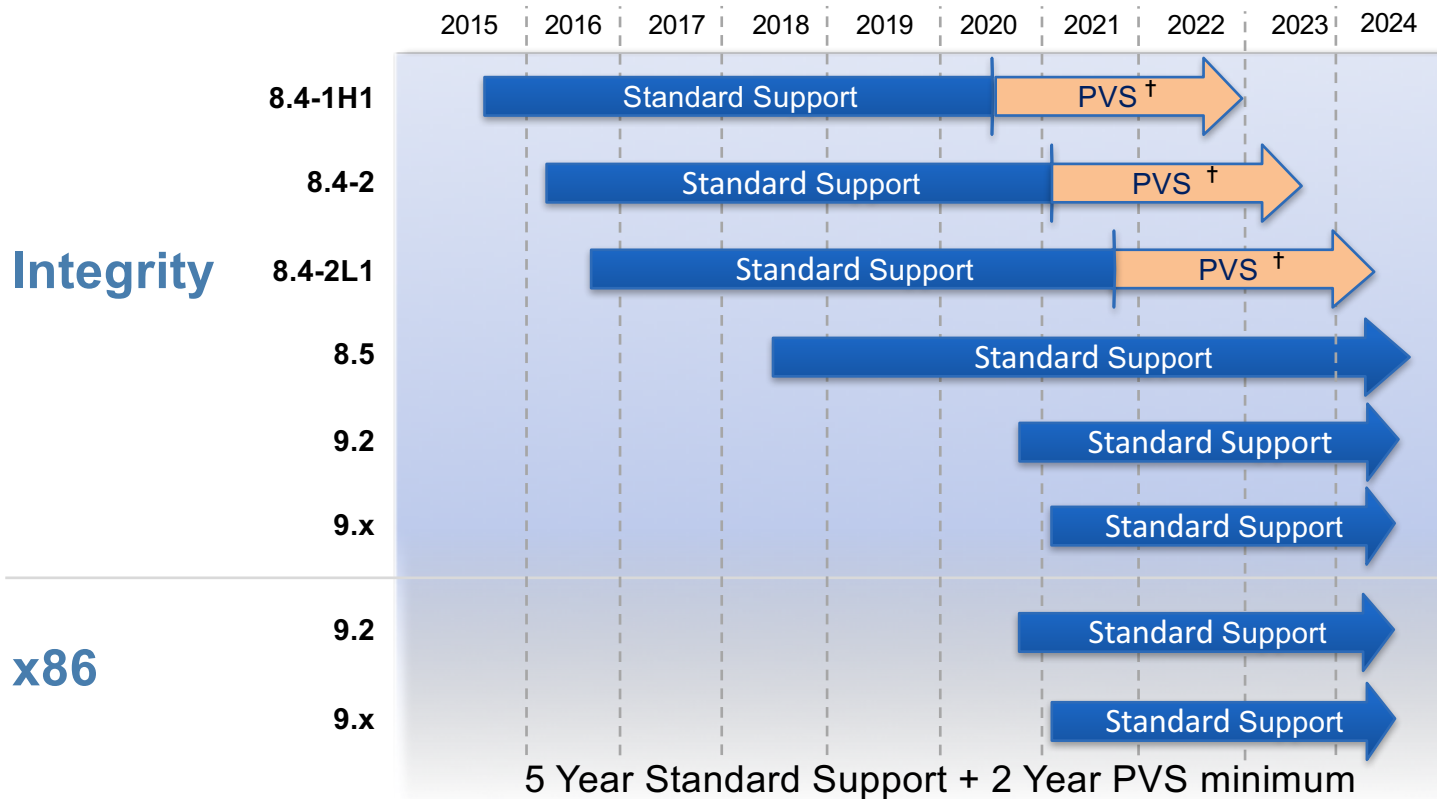
### Q4

- 16Gb Fibre Channel for rx2800
- Itanium i6 Support Announced

# VSI OpenVMS Support

Roadmap

# VSI OpenVMS Integrity & x86 Support Roadmap

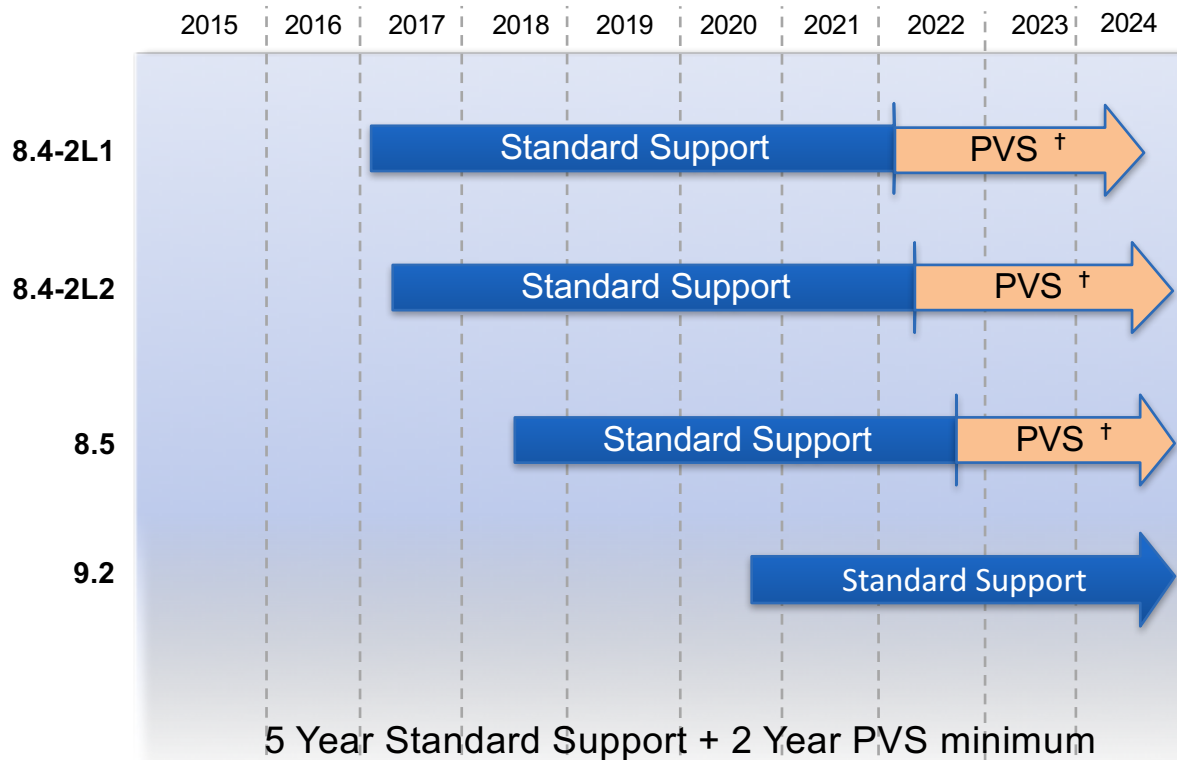


† PVS – Prior Version Support without Sustaining Engineering  
 24 Month notice will be provided before support is ended  
 Extended Engineering Support (EES) contract is available



# VSI OpenVMS Alpha Support Roadmap

Alpha



† PVS – Prior Version Support without Sustaining Engineering  
24 Month notice will be provided before support is ended  
Extended Engineering Support (EES) contract is available

# Thank You

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