vms Software

Transitioning to VSI

Why and How to work with VSI to move your OpenVMS systems forward.

Eddie Orcutt, VP Software Engineering

Terry R. Holmes, VP Sales & Marketing

Moving Forward with VSI OpenVMS

Why remain on OpenVMS?

High availability!

OpenVMS is renown for its
99.999% uptime reputation.

OpenVMS availability is measured in years,
not weeks or months, as you would expect
on other general purpose operating systems.

Demonstrated over time!

European railway company

18 years

highest recorded uptime
without reboot

Security
levels

Why remain on OpenVMS?

Security!

Security has been architected into the OS from the very beginning

Includes numerous features to restrict and control access to resources.

Proven over time!

73x

Fewer daily security vulnerabilities

10x

Lower security patch rate

Security
levels

73x

Fewer daily security vulnerabilities

Why remain on OpenVMS?

Trust!

You have years experience with Open VMS.

OpenVMS causes fewer sleepless nights.

This cannot always be measured monetarily.

10x

Lower security patch rate

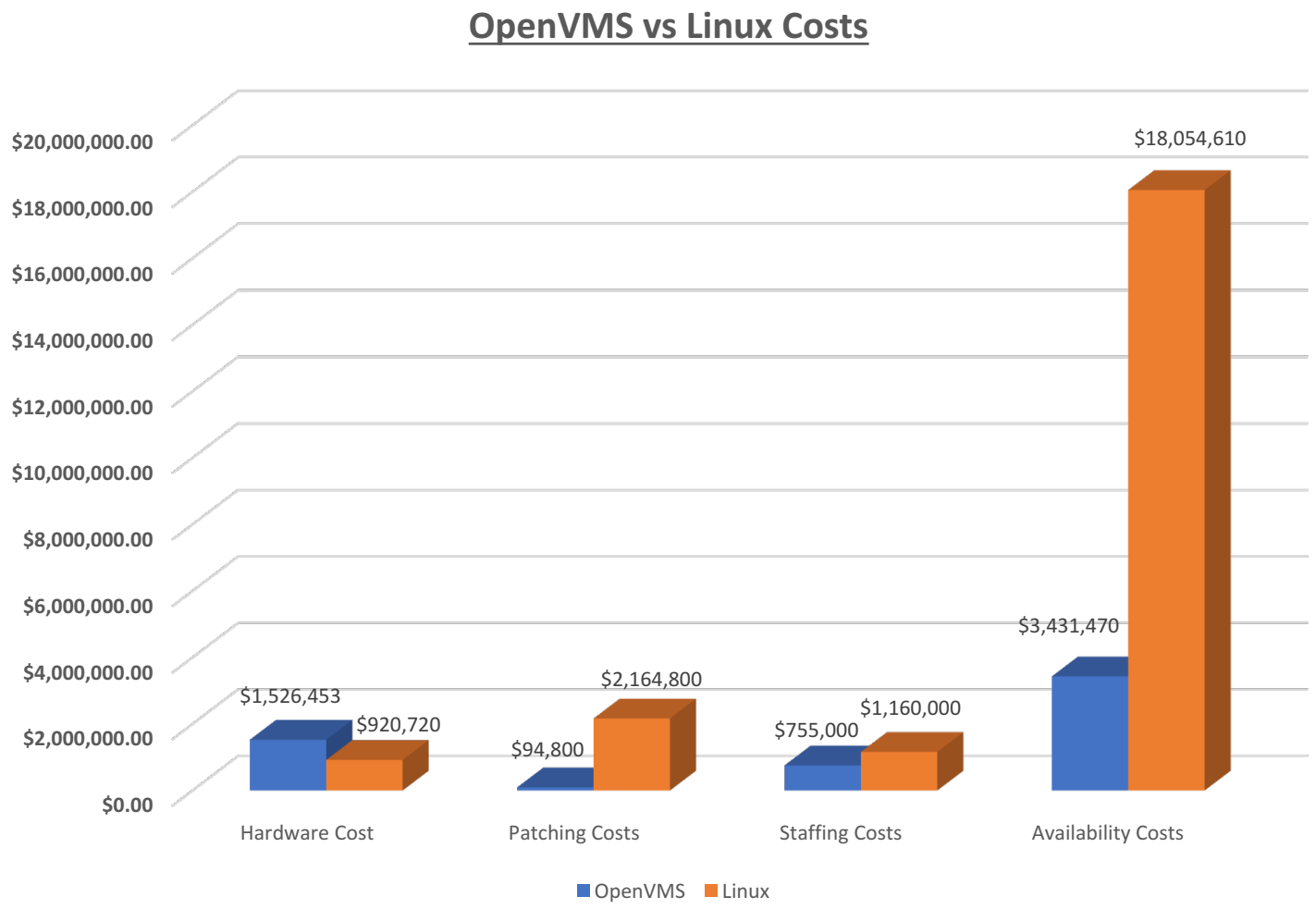
Financial Analysis - TCO

Financial Analysis: Why VSI OpenVMS is proven to be the right answer!

- TCO Comparison: OpenVMS vs. Linux
  - High Availability (Less Downtime)
  - Extreme Security (Fewer Patches Required)
  - Staffing costs
  - Hardware costs

5-Year TCO

For 40 application servers, 10 DB servers

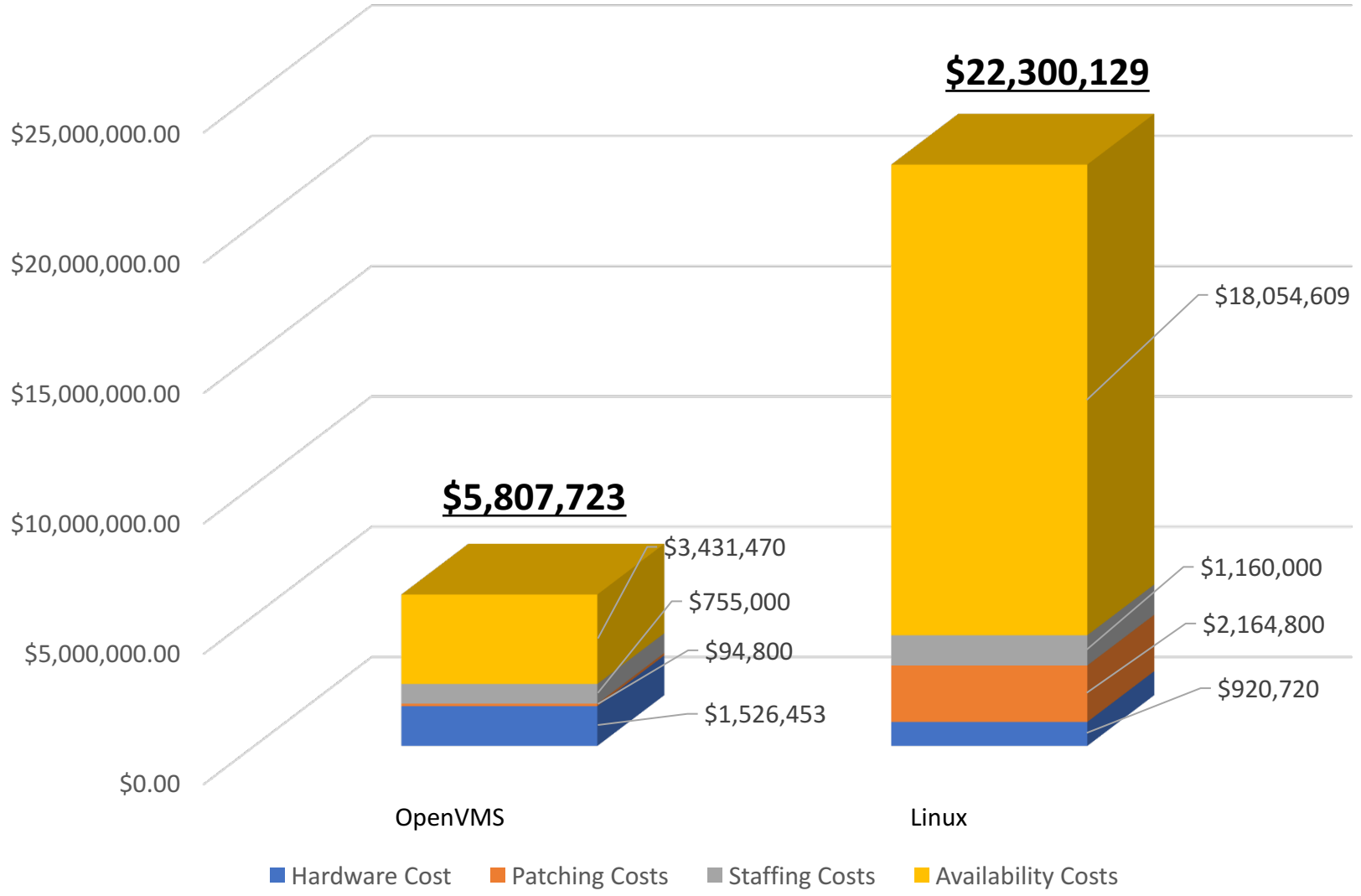


Source: http://www.emersonnetworkpower.com/en-US/Resources/Market/Data-Center/Latest-Thinking/Ponemon/Documents/2016-Cost-of-Data-Center-Outages-FINAL-2.pdf

Source: http://h20565.www2.hpe.com/hpsc/doc/public/display?docId=emr_na-c04618656
Source: http://www.lenovo.com/images/products/system-x/pdfs/white-papers/itic_2015_reliability_wp.pdf

5-Year TCO Costs

For 40 application servers, 10 DB servers



vms Software

Financial Analysis: VSI OpenVMS is proven to be the right answer!

- TCO with OpenVMS is easily less than 1/3 the cost when compared to Linux
- COSTS of migration off of OpenVMS is really unknown, but likely VERY, VERY COSTLY
- COSTS of data breaches may be even MORE COSTLY

vms

vms Software

You are not alone!

(Major Organizations use OpenVMS Today)

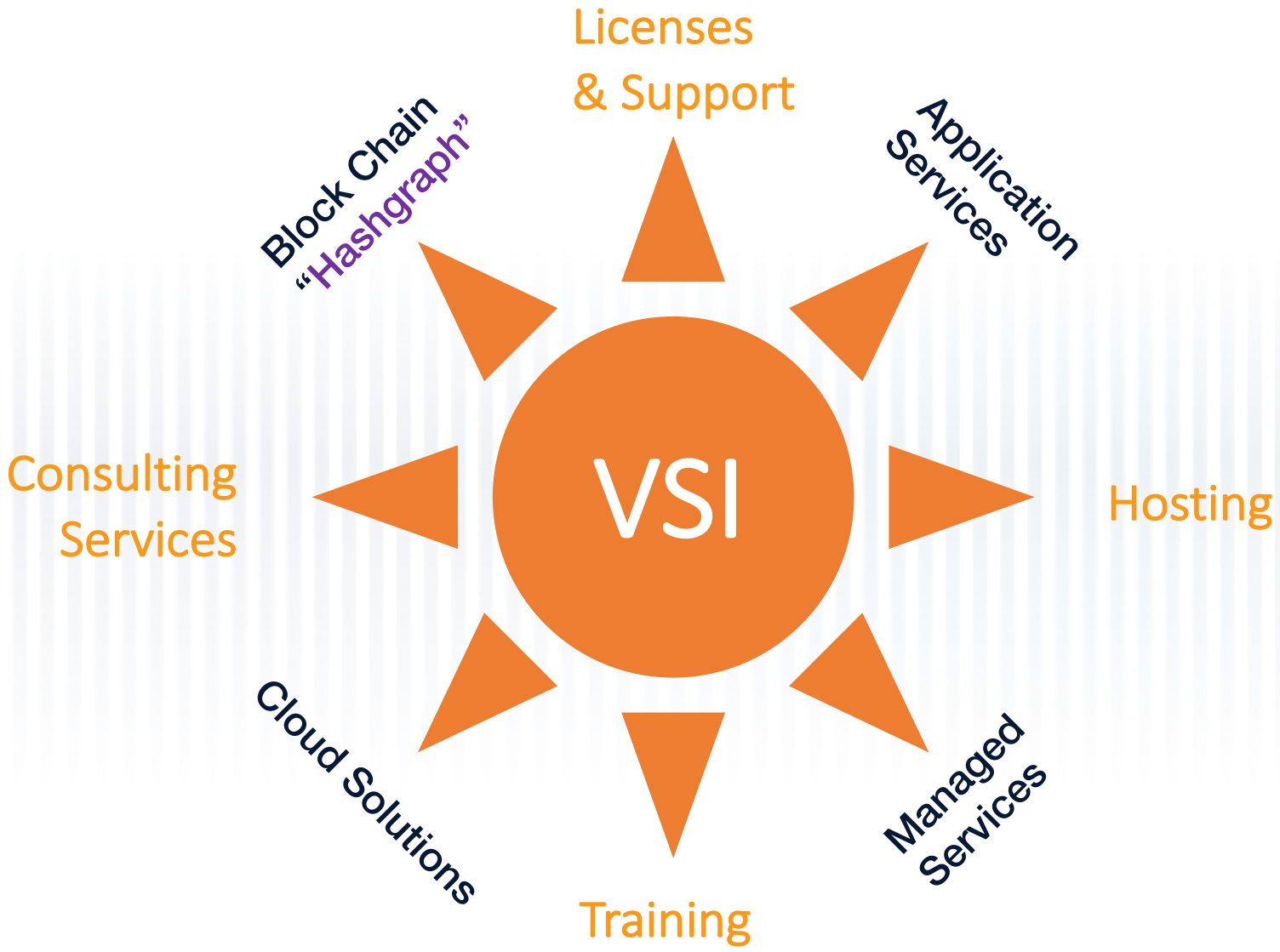
- Financial Services
- Manufacturing
- Healthcare
- Military
- Retail
- Distribution
- Energy
- Public Transit
- Automotive
- Aerospace
- Education
- Gov't Classified
- ….. & More

vms

Historical Transition for OpenVMS O/S

- After HP announces end of support for OpenVMS in 2013, VSI purchases the Rights to OpenVMS in 2014.
- VSI has the Exclusive rights to develop new versions of OpenVMS
- VSI has the Perpetual Worldwide License
- VSI has the Right to use the OpenVMS trademark
- VSI has the Right to release OpenVMS on any hardware (including the mainstream Intel x86 platform)
- VSI / HPE have fundamental agreement to transition customers to VSI (HPE gains new HW business / VSI gains new OpenVMS SW business)

OpenVMS Clearinghouse



How is VSI doing?

- Business nearly doubled from previous year.
  - FY2018 looks very strong.
  - Customer transition well underway.
- 2018 - Stronger VSI Marketing and Partner Outreach.
- VSI makes a strong Commercial Case to Customers
  - **VSI is the only company who can offer <u>The Rights To New Versions</u> including OpenVMS V9.0 and higher.**
  - **RTNV** includes VSI's x86 port scheduled for 2020.
  - **RTNV** includes all OpenVMS users including Alpha and Integrity V9.2.
  - VSI is the OpenVMS Clearinghouse for all OpenVMS.

X86 Port Update

Executive Summary – x86-64 Release Plan

- The Release Plan has multiple stages.
- V9.0: x86-64 Early Adopter Kit (EAK) – kick the tires
  - The EAK is for a selected set of partners, ISVs, and customers
  - The system will be less than complete
  - Content will depend, to a large degree, on the needs of the participants
  - Cross tools (run on Itanium, target x86) – compilers, linker, …..
  - Q4 2018
- V9.1: x86-64 General EAK Release – reasonably complete system
  - Available for all partners, ISVs and customers
  - Not for production
  - Native tools
  - Q3 / Q4 2019
- V9.2: x86-64 Production Release - complete system
  - Same features will be on Alpha and Itanium, where possible
  - Alpha and Itanium V9.2 releases will follow in a few months
  - 2020

VSI Support

Best in Class Support

- Only VSI support staff has first hand access to VSI OpenVMS development engineers and provides 90-Day Conformance Warranty.
- Only VSI provides 4 levels of “Best in Class” support.
- Only VSI supports some layered products previously unsupported.
- Only VSI provides Rights to New Versions (RTNV)
  - Receive free, automatic version updates during the term of your VSI support.
  - Receive free license upgrades for VSI during the term of your VSI support.

VSI Service Offerings

Bronze 9X5 Support

- Standard support phone number provided
- [1] Right to New Versions (RTNV) of a VSI product
- Access to all software updates/patches provided between numbered releases
- Technical Support 9 hours a day, during 5 business days a week
- Provided periodic VSI updates
- 4 hour response from initial customer contact. This assumes that the customer uses the standard support phone line provided to the customer by VSI.

Silver 24X7 Support

- Standard support phone number provided
- [1] Right to New Versions (RTNV) of a VSI product
- Access to all software updates/patches provided between numbered releases
- Technical Support 24 hours a day, 7 days a week
- Provided periodic VSI updates
- 2 hour response from initial customer contact. This assumes that the customer uses the standard support phone line provided to the customer by VSI.

Gold 24X7 Support

- Standard support phone number provided
- [1] Right to New Versions (RTNV) of a VSI product
- Access to all software updates/patches provided between numbered releases
- Technical Support 24 hours a day, 7 days a week
- Assigned a remote Technical Account Manager (TAM)
- VSI software patch analysis
- VSI software system health checks
- Provided periodic VSI updates
- 1 hour response from initial customer contact. This assumes that the customer uses the standard support phone line provided to the customer by VSI.

Platinum 24x7 Support

- Dedicated phone number provided on sign-up
- [1] Right to New Versions (RTNV) of a VSI product
- Access to all software updates/patches provided between numbered releases
- Technical Support 24 hours a day, 7 days a week
- Assigned a remote Technical Account Manager (TAM)
- Quarterly VSI software patch analysis
- Quarterly VSI software system health checks
- Provided periodic VSI updates
- Immediate response from initial customer contact. This assumes that the customer uses the dedicated phone line provided to the customer by VSI.

Planning to Upgrade - Technical

VSI OpenVMS Releases – To date

- 3 OpenVMS Integrity Releases
- V8.4-1H1 – Bolton
  - June 2015
- V8.4-2 - Maynard
  - March 2016
- V8.4-2L1 – Hudson
  - August 2016

Plus …

Japanese Version

- DECforms V4.2
- DCPS V2.8
- FMS V2.6
- DECwindows Motif V1.7E

- 2 OpenVMS Alpha Releases
- V8.4-2L1 – February 2017
  - Standard OpenVMS Release (Hudson)
- V8.4-2L2 - April 2017
  - Performance Build - EV6/EV7 (Felton)

Planning to Upgrade to VSI OpenVMS

- What hardware platforms are supported?
- What server models are supported?

- Upgrade paths
  - What VSI OpenVMS versions are available?
  - How do I get to VSI versions?

- Can I have mixed OpenVMS versions in the same cluster?
  - VSI – VSI versions?
  - HPE – VSI versions?

AlphaServers Supported

OpenVMS V8.4-2L1

Workgroup Class	Departmental Class	Enterprise Class
AlphaServer 200	AlphaServer 2000A	ES80
AlphaServer 300	AlphaServer 2100	ES1280
AlphaServer 400	AlphaServer 4000	AlphaServer 8000
AlphaServer 500	AlphaServer 4100	GS Series
AlphaServer 600	ES40	
AlphaServer 800	ES45	
AlphaServer 1000	ES47	
AlphaServer 1000A		
AlphaServer 1200		
DS10		
DS15		
DS20		
DS20E		
DS25		
DPW Workstation		
XP Workstation		

AlphaServers Supported

OpenVMS V8.4-2L2

Workgroup Class

Model		Code name	CPU
DS10	6/466	WebBrick	EV6 EV67
	67/600		
DS10L	6/466	Slate	EV6 EV67
	6/600		
DS15	68/1000	HyperBrick	EV68CB
DS25	68/1000	Granite	EV68CB
DS20	6/500	Goldrush	21264 (EV6)
DS20E	6/500	Goldrack	EV6 EV67 EV68AL
	6/667		
	68/833		
DS20L	68/833	Shark	EV68AL

Departmental Class

Model		Code name	CPU
ES40	6/500	Clipper	EV6 EV67 EV68AL
	6/667		
	68/833		
ES45	68/1000	Privateer	21364 (EV7)
	68/1250		
ES47	7/1000	Marvel	21364 (EV7)
	7/1150		

Enterprise Class

Model		Code name	CPU
GS80	731	Wildfire	21264A (EV67) 21264C (EV68CB)
	1001		
	1224		
GS160	731	Wildfire	21264A (EV67) 21264C (EV68CB)
	1001		
	1224		
GS320	731	Wildfire	21264A (EV67) 21264C (EV68CB)
	1001		
	1224		
ES80	1000	Marvel 4x2P	21364 (EV7)
	1150		
GS1280	1150	Marvel 8P	21364 (EV7)
	1300		

Integrity Servers Supported

HPE Server Model	VSI OpenVMS V8.4-1H1/V8.4-2/V8.4-2L1
rx2800 i4	Supported
BL860c i4	Supported
BL870c i4	Supported
BL890c i4	Supported
rx2800 i2	Supported
BL860c i2	Supported
BL870c i2	Supported
BL890c i2	Supported

HPE Server Model	VSI OpenVMS V8.4-2L1
rx2800 i6 *	Supported
BL860c i6	Supported
BL870c i6	Supported
BL890c i6	Supported

HPE Server Model	VSI OpenVMS V8.4-2/V8.4-2L1
BL860c	Supported
BL870c	Supported
rx1600	Supported
rx2600	Supported
rx2620	Supported
rx2660	Supported
rx3600	Supported
rx6600	Supported
rx7640	Supported
rx8640	Supported

* Plus 16Gb FC Patch Kit

Supported Integrity Upgrade Paths

From	To - Direct Upgrade Path To These Versions							
	V8.2	V8.2-1	V8.3	V8.3-1H1	V8.4	V8.4-1H1	V8.4-2	V8.4-2L1
V8.2		Yes	Yes	Yes	No	No	No	No
V8.2-1			Yes	Yes	Yes	No	No	No
V8.3				Yes	Yes	Yes	Yes	Yes
V8.3-1H1					Yes	Yes	Yes	Yes
V8.4						Yes	Yes	Yes
V8.4-1H1							Yes	Yes
V8.4-2								Yes
V8.4-2L1								

Per HPE Systems Documentation

Note: For OpenVMS on Integrity, you can upgrade directly to version 8.4x from versions 8.3, and 8.3-1H1. If you are running an OpenVMS Integrity version earlier than 8.3, you must first upgrade to either version 8.3 or version 8.3-1H1, and then upgrade to version 8.4x.

Supported Integrity Upgrade Paths

VSI OpenVMS V8.4-2L1 Upgrade Path Support	
Upgrade Target Version	**VSI Technical Support**
VSI Version V8.4-1H1	Supported
HPE Version v8.4 U900, U1000, U1100	Supported
HPE Version v8.3-1H1	Supported
HPE Version v8.3	Supported
HPE Version v8.2-1	Not Supported

VSI supports upgrades to VSI OpenVMS V8.4-2L1 from VSI OpenVMS V8.4-1H1, HPE OpenVMS v8.4 (with U900, U1000, or U1100 applied), HPE OpenVMS v8.3-1H1 and HPE OpenVMS v8.3.

Supported Alpha Upgrade Paths

From	To - Direct Upgrade Path To These Versions										
	V7.3	V7.3-2	V8.0	V8.1	V8.2	V8.2-1	V8.3	V8.3-1H1	V8.4	V8.4-2L1	V8.4-2L2
V7.3	N/A	Yes	No	No	No	No	No	No	No	No	No
V7.3-2		N/A	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
V8.0			N/A	Yes	No	No	No	No	No	No	No
V8.1				N/A	Yes	No	No	No	No	No	No
V8.2					N/A	Yes	Yes	Yes	Yes	No	No
V8.2-1						N/A	Yes	Yes	Yes	No	No
V8.3							N/A	Yes	Yes	Yes	Yes
V8.3-1H1								N/A	Yes	Yes	Yes
V8.4									N/A	Yes	Yes
V8.4-2L1										N/A	Yes
V8.4-2L2											N/A

Per HPE Systems Documentation

Note: For OpenVMS on Alpha, you can upgrade directly to version 8.4x from versions 7.3-2, 8.3, and 8.3-1H1. If you are running any other OpenVMS Alpha version, you must first upgrade to version 7.3-2, 8.3 or version 8.3-1H1, before upgrading to version 8.4x.

Supported HPE Upgrade Paths

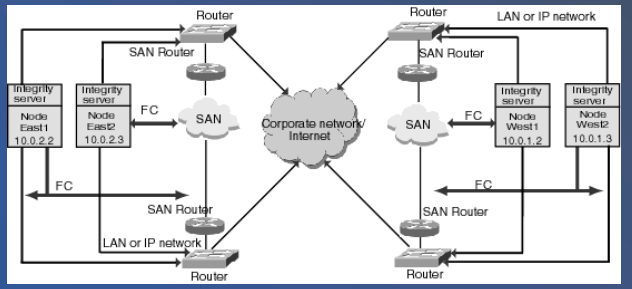
From	To - Direct Upgrade Path To These Versions										
	V6.2	V6.2-1Hx	V7.0	V7.1	V7.1-1Hx	V7.1-2	V7.2	V7.2-1	V7.2-1Hx	V7.2-2	V7.3
V6.1	Yes	No	Yes	Yes	No	Yes	No	No	No	No	No
V6.2		Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
V6.2-1Hx			No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
V7.0				Yes	No	No	Yes	No	Yes	Yes	Yes
V7.1					Yes	Yes	Yes	Yes	Yes	Yes	Yes
V7.1-1Hx						Yes	No	Yes	Yes	Yes	Yes
V7.1-2							No	No	Yes	Yes	Yes
V7.2								Yes	Yes	Yes	Yes
V7.2-1									No	No	Yes
V7.2-1Hx										No	Yes
V7.2-2											Yes

Note: For OpenVMS on Alpha, you can upgrade directly to version 8.4x from versions 7.3-2, 8.3, or 8.3-1H1. If you are running any other OpenVMS Alpha version, you must first upgrade to either version 7.3-2, 8.3 or version 8.3-1H1, and then upgrade to version 8.4x.

Mixed Architecture Cluster Support Matrix

Integrity Server	AlphaServer V7.3-2	AlphaServer V8.2	AlphaServer V8.3	AlphaServer V8.4	AlphaServer V8.4-2L1 V8.4-2L2
V8.2	Warranted	Warranted	Migration	Migration	Migration
V8.2-1	Warranted	Warranted	Migration	Migration	Migration
V8.3 & v8.3-1H1	Migration	Migration	Warranted	Migration	Migration
V8.4	Migration	Migration	Migration	Warranted	Warranted
V8.4-1H1	Migration	Migration	Migration	Warranted	Warranted
V8.4-2	Migration	Migration	Migration	Warranted	Warranted
V8.4-2L1	Migration	Migration	Migration	Warranted	Warranted

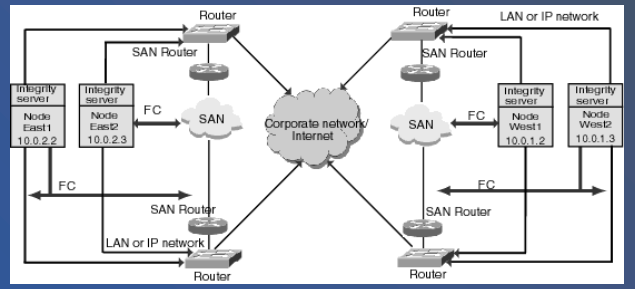
Per HPE Systems Documentation



Alpha Cluster Support Matrix

Alpha Server	AlphaServer V7.3-2	AlphaServer V8.2	AlphaServer V8.3	AlphaServer V8.4	AlphaServer V8.4-2L1 V8.4-2L2
V7.3-2	Warranted	Migration	Migration	Migration	Migration
V8.2	Migration	Warranted	Migration	Migration	Migration
V8.3	Migration	Migration	Warranted	Migration	Migration
V8.4	Migration	Migration	Migration	Warranted	Warranted
V8.4-2L1 & V8.4-2L2	Migration	Migration	Migration	Warranted	Warranted

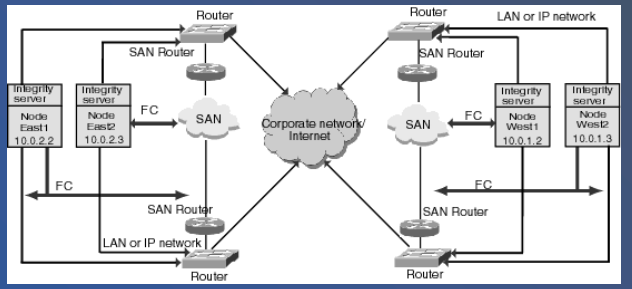
Per HPE Systems Documentation



Integrity Cluster Support Matrix

Integrity Server	Integrity Server						
	V8.2	**V8.2-1**	**V8.3 & V8.3-1H1**	**V8.4**	**V8.4-1H1**	**V8.4-2**	**V8.4-2L1**
V8.2	Warranted	Warranted	Migration	Migration	Migration	Migration	Migration
V8.2-1	Warranted	Warranted	Migration	Migration	Migration	Migration	Migration
V8.3 & v8.3-1H1	Migration	Migration	Warranted	Migration	Migration	Migration	Migration
V8.4	Migration	Migration	Migration	Warranted	Warranted	Warranted	Warranted
V8.4-1H1	Migration	Migration	Migration	Warranted	Warranted	Warranted	Warranted
V8.4-2	Migration	Migration	Migration	Warranted	Warranted	Warranted	Warranted
V8.4-2L1	Migration	Migration	Migration	Warranted	Warranted	Warranted	Warranted

Per HPE Systems Documentation



VSI Products

OpenVMS Integrity Operating Environment

Released			Planned
BOE Components:		**HAOE Components**	**BOE Components**
• V8.4-2L1 operating system • ANT V1.7-1B • AXIS2 VB1.0-1 • CDSA V2.4-322A • CIFS V1.2ECO1A • CSWS V2.4-3G • CSWS_JAVA V8.5-4 • CSWS_PHP V5.2-17A • DCPS V2.8 • DECnet Phase IV V8.4-2L1 • DECnet Phase V V8.4I • DECram V8.4-2L1 • DECwindows Motif V1.7E • DCE (runtime) V3.2A • ENCRYPT V8.4-2L1 • Enterprise Directory V5.8 • Kerberos V3.2-260 • GNV V3.0-2	• NOTARY V1.0 • OpenSSL V1.02k • PERL V5.20-2A • TCP/IP V5.7-13ECO5F • The Data Collector V2.3-1220A • UDDI V1.0B • VSI Binary Checker V1.2 • WBEM/CIM V3.0-B151019 • WBEM providers V2.2-5D • WSIT 3.4-1 • XML C++ 3.0-1-1 • XML_JAVA V4.0-1	• Availability Manager Base V8.4-2L1 • RMS Journaling V8.4-2L1 • Volume Shadowing V8.4-2L1 • OpenVMS Cluster Client V8.4-2L1 • OpenVMS Cluster Software V8.4-2L1 • RTR V5.3	• CSWS additional modules • GNV Updates • CIFS Update

OpenVMS Integrity Layered Products

Released		Planned
• ABS / MDMS V4.6 • ACMS dev, remote, runtime V5.2 • BASIC V1.8-4 • C V7.4-1 • C++ V7.4-6 • COBOL V3.1-7 • Datatrieve V7.4-1 • DECforms dev, runtime V4.2 • DECset V12.9-1 (CMS, DTM, MMS, SCA, LSE, PCA) • DFO V3.3 • DEC DFS V2.5 • FMS dev, runtime V2.6 • FORTRAN V8.3-3	• Japanese VMS - DECforms V4.2 - DCPS V2.8 - FMS V2.6 - DECwindows Motif V1.7E • MRU V1.9 • PASCAL V6.2 • SSM V1.9-1 • TDMS dev, runtime V2.1-1 • T4 V4.4D • DQS V1.4 • GKS V7.3	• OMNI V4.1 • OSAP V4.1

OpenVMS Integrity Open Source Products

Available	Investigating
• ActiveMQ V5.15.0A • cURL & libcURL V7.49.0A (OpenSSL 1.0.2h support) • Lua V5.2.3 • Mosquitto V1.3.5 (MQTT broker) • Paho-C V1.0.3 (MQTT client) • PHP V5.6.10B • Ruby V2.2.2l • SCALA V2.11.8 • Subversion V1.8-13 • SWIG V3.0.5 • Vgit2 V0.8 • ZeroMQ V4.1.2 • gSOAP V2.8.32 • GNUplot V5.0-2 • Maven V3.3-9 • syslog	• Erlang • Precision Time Protocol (PTP) • Python • R • Redis

OpenVMS Alpha – OS & Layered Products

Released			Planned
• V8.4-2L1/V8.4-2L2 OS • CDSA V2.4-320A • DCPS V2.8-1 • DECnet Phase IV V8.4-2L1 • DECnet Phase V V8.4D • DECram V8.4-2L1 • DECwindows Motif V1.7F • DCE (runtime) V3.2B • ENCRYPT V8.4-2L1 • Enterprise Directory V5.8-2 • Kerberos V3.2-152B • DQS V1.4 • NOTARY V1.0 • OpenSSL V1.02n • TCP/IP V5.7-13ECO5F • The Data Collector V2.3-1220 • VSI Binary Checker V1.1A • AM Base V8.4-2L1	• RMS Journaling V8.4-2L2 • Volume Shadowing V8.4-2L2 • OpenVMS Cluster Client V8.4-2L2 • OpenVMS Cluster Software V8.4-2L2 • RTR V5.4-1 • T4 V4.4D • ABS / MDMS V4.6-1 • ACMS dev, remote, runtime V5.3 • BASIC V1.8-5 • C V7.4-1 • C++ V7.4-8 • COBOL V3.1-7 • Datatrieve V7.4-1 • DECforms dev, runtime V4.2-1 • DECset V12.9-3 (CMS, DTM, MMS, SCA, LSE, PCA) • DFO V3.3-1 • DEC DFS V2.5-1	• FMS dev, runtime V2.6-1 • FORTRAN V8.3-3 • MRU V1.9-1 • PASCAL V6.2-125 • SSM V1.9-1-2 • TDMS dev, runtime V2.1-2 • AM Base V8.4-2L1 • AM Data Analyzer V3.2 • GKS V7.3	• OMNI V4.1 • OSAP V4.1

OpenVMS Alpha Open Source Products

Available	Investigating
• CIFS V1.2ECO1C • CSWS V2.4-3C • CSWS_JAVA V6.0-47A	• Mosquitto 1.3.5 (MQTT broker) • Paho-C 1.0.3 (MQTT client) • ZeroMQ 4.1-2

Upgrading

Upgrading

Step 1

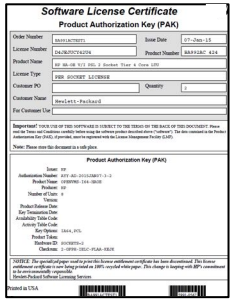
Load VSI Licenses

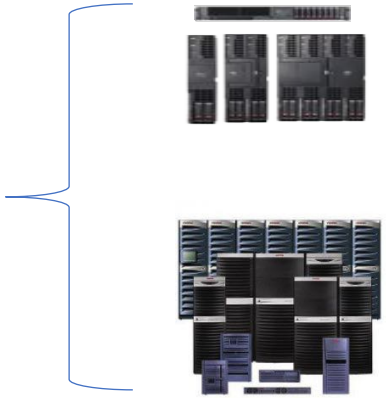
Step 2

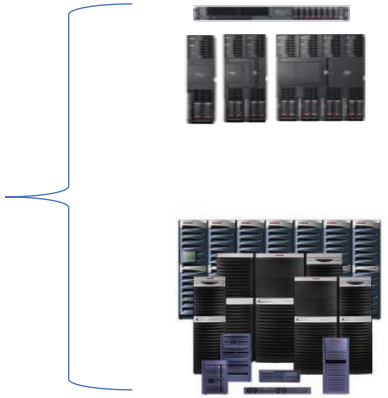
Upgrade to VSI OpenVMS

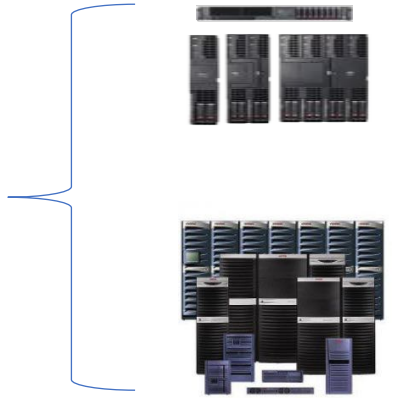
Step 3

Upgrade to VSI LPs [1]





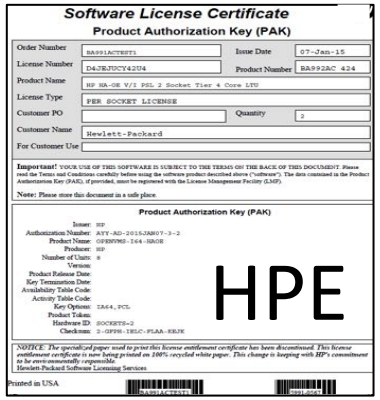


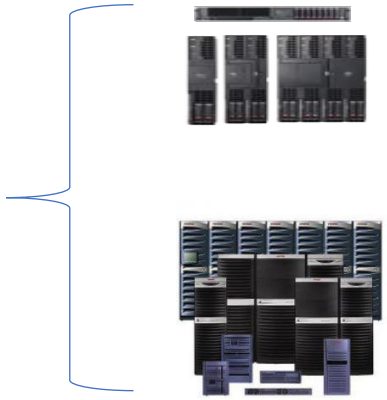


[1] Install compilers first before other Layered Products

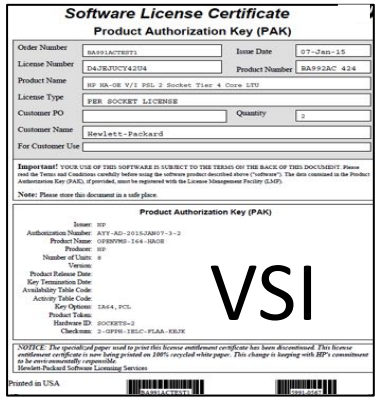
Don’ts

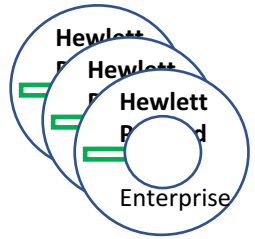
Use HPE Licenses for enabling VSI software

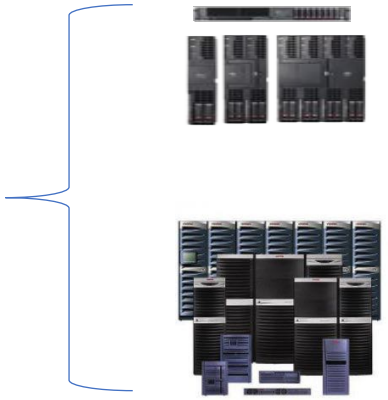




Use VSI Licenses for enabling HPE software







Don’ts

Mix VSI & HPE software on the Same Server

HP TO VSI UPGRADE SERVICES

Let us do the work for you!

Software INTERNATIONAL Concepts

vms

HPE to VSI Upgrade Services

- Offered through VSI Professional Services Alliance

- Software Concepts International
  - Located in Nashua, NH (USA)
  - 30+ years in business supporting OpenVMS
  - International reputation as leading provider
    - Managed services for OpenVMS & databases
    - OpenVMS performance and consulting services

- Completed over 30 HP to VSI VMS upgrades across 8 distinct projects in last 12 months alone

Software INTERNATIONAL Concepts

vms

SCI HP to VSI Upgrade Projects Summary

Hardware:

- Integrity HP v8.4-x → VSI v8.4-2L1
- Alpha HP v7.3 to v8.4-2L2 (Physical & CHARON)
- Alpha HP v7.3-2 → Integrity VSI v8.4-2L1

Layered and 3rd Party Products:

- Oracle Rdb, ACMS, COBOL, BASIC, Pascal, C, Python, FMS, BEA MQ, Websphere MQ, Datatrieve, Synergy/DE, JAMS, JSS, CODASYL DBMS, JDBC, Rally, SQLSERVICES, TCPIP, Attunity, Multinet…

Business Applications:

- Custom and commercial applications

Clustering:

- Single nodes, clusters, multi-site clusters

Industries:

- Healthcare, Financial, Manufacturing, Insurance, Leasing, Distribution and Gaming

Software INTERNATIONAL Concepts

vms

Examples: Integrity Upgrades

- **Insurance sector**: 5 RX3600/6600 standalone→ V8.4 to VSI VMS V8.4-2L1
  - Oracle Rdb, ACMS, COBOL, BEA MQ, Websphere MQ
  - Mission Critical: 1672 days uptime prior to upgrade

- **Financial sector**: 5 Integrity systems→ V8.4 to VSI V8.4-L1
  - Oracle Rdb, COBOL, ACMS, Datatrieve, clustered and standalone

- **Transportation/distribution sector**: 7 BL860C →V8.4 to VSI V8.4-2L1
  - Custom applications, Synergy/DE, JAMS
  - Single site cluster to multi-site split cluster

Software INTERNATIONAL Concepts

vms

Examples: Alpha Upgrades

- **Manufacturing sector**: V7.3-2 to VSI V8.4-2L2
  - GS1280/ES40 4 node cluster
  - WorkStream, CODASYL DBMS
  - Performance Improvements → Daily archive job, averages before / after

Archive Job	V7.3-2	V8.4-2L2
Charged CPU	0:21:12	0:10:34
Elapsed Time	1:59:50	1:27:18

Alpha Upgrades, continued

- **Financial sector**: V7.3-1 direct to VSI V8.4-2L2
  - Oracle Rdb, COBOL
  - CHARON emulator
  - Time constraints mandated this unsupported upgrade path
- **Healthcare sector**: 2 ES80 clustered, 4 ES40 standalone V8.4 to VSI V8.4-2L1
  - Oracle Rdb
  - CHARON emulation
- **Healthcare sector**: 2 ES80s + 1 DS25 V8.4 to VSI-VMS 8.4-2L1
  - COBOL custom application

Examples: Alpha to Integrity Migrations

- **Financial Services Sector**: Migrate from Alpha to VSI VMS on I64
  - ES40s and DS20 to RX2800s
  - Standalone to cluster in production
  - Pure Storage SAN, controller replication
  - BASIC application, Attunity Connect

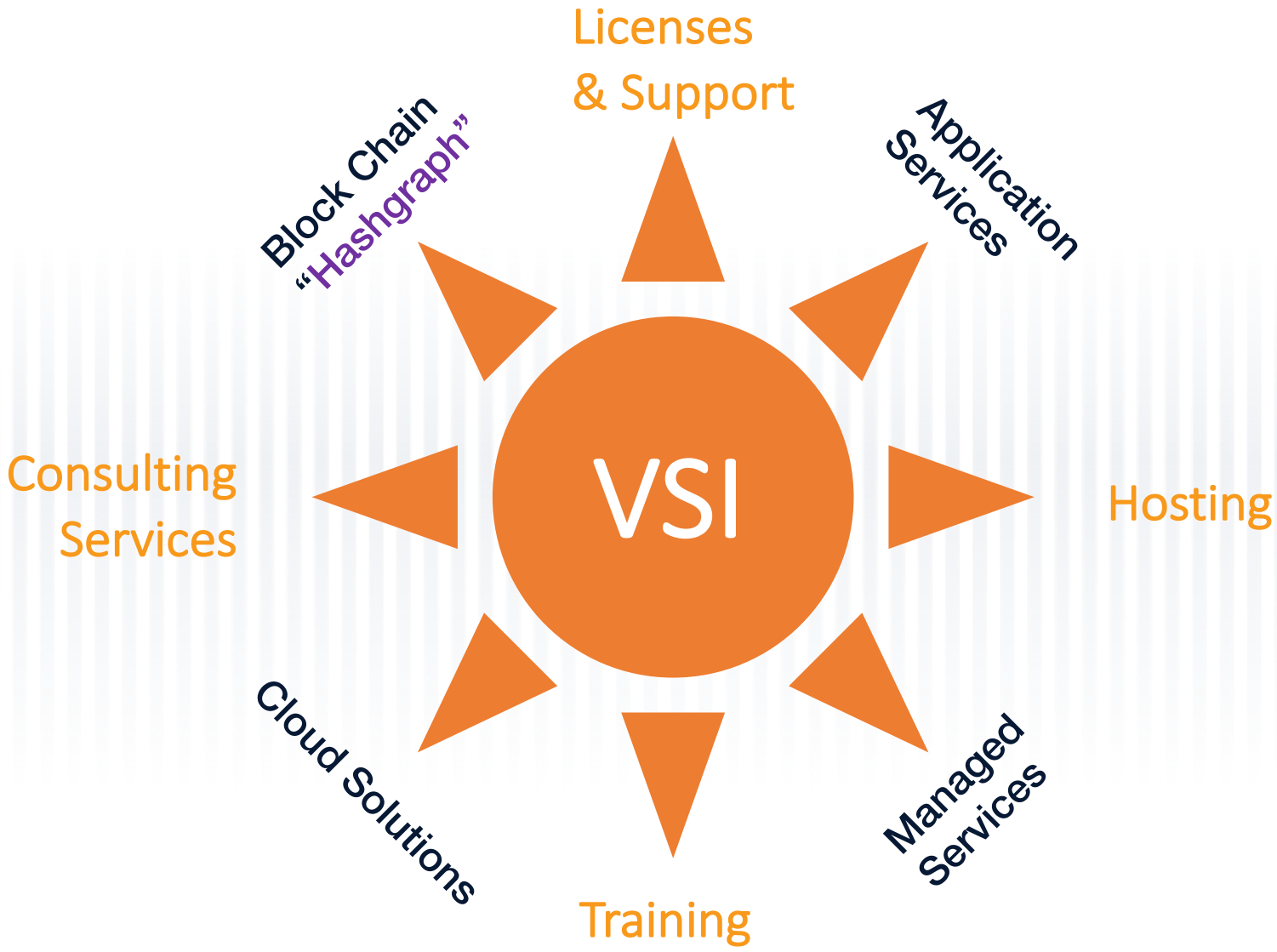
Observations

- Generally straight forward
  (if you know what you are doing)

- Significant performance benefits for Alpha customers

- VSI refreshingly responsive to correcting defects and implementing enhancements

OpenVMS Clearinghouse



How to “Operationally” Move Forward with VSI

Step 1: Contact VSI

- sales@vmssoftware.com
- info@vmssoftware.com (General or Technical Inquiries)
- www.vmssoftware.com
- E-mail VSI person
- Call our HQ in Bolton, MA USA +1 978 451-0110
- VSI Key Account Manager assigned

Step 1: Contact Reseller Partner

- If you have an appointed vendor that you work with, we are happy to work with them.
- VSI Partners Page on website will be listed by end of May, 2018.

Step 2: VSI Pre-Sales Qualification

- Whether Licenses, Support, or Services
- If Upgrading VSI Licenses and Support
- VSI needs basic server information (model number, # of Skts / # of Cores, # of Active Skts, Layered Products, Open Source, etc.)
- $Show License & $Show CPU command reports / Plus level of support
- If you are a potential VSI Reseller, you will receive a VSI Credit application to completes and returned to VSI

How to “Operationally” Move Forward with VSI

Step 3: VSI Proposal

- Once we have customer information details – Proposals out in 72 business hours
- We (VSI Partner) try to follow up with you to ensure the proposal meets your requirements and and to address any questions

Step 4: VSI Ordering

- Purchase Orders are sent to the VSI Key Account Manager that you have worked with or to your chosen VSI Partner.

Step 5: VSI Fulfillment

- Encrypted VPAKS sent via e-mail within 72 hours. (E-Mail / Hard Copy)
- Customer sent separate e-mail with PW
- VSI “Welcome to Support” Letter
    * Terms and Coverage of your support
    * Phone / e-mail Support contact information

VSI Announcements

New VSI VAX Support Programs

- Provides 24x7 OpenVMS technical support (L1/L2)
- Available on VAX models
- Priced by hardware tier
  - Workgroup
  - Departmental
  - Enterprise

Swirlds Hashgraph Partnership

"Next Generation of Blockchain Technology"

- Swirlds
  - Company that owns Hashgraph IP and implement Hashgraph platform.
  - Hashgraph is next generation distributed ledger.
- Swirlds is partnering with VSI to run Hashgraph on VSI OpenVMS.
- Support partners and customers to implement and operate next generation distributed applications.
- Partnership improves speed, security, costs and availability.

New VSI Cloud Solutions

- Partnership with Advanced Virtualization Technologies (AVT / Vere Technologies)
- Move aging VAX and Alpha OpenVMS systems into the cloud.
- Effective for many deployment models
  - Private
  - Public
  - Community
  - Hybrid

Coming Attractions

- VSI Participation in Regional Events
  - IT Symposium – May 14-16. (Leipzig, Germany)
  - UK Users Group Event – May 23 (London, UK)
  - OpenVMS Boot Camp – April 7-10, 2019 (Boston, MA area)

- Upcoming webinar event.
  - Next scheduled webinar is June 6.
  - Modernizing your Alpha systems.

Thank You

To learn more please contact us:

vmssoftware.com
info@vmssoftware.com
+1.978.451.0110