



**Hewlett Packard  
Enterprise**


# **HPE OpenVMS Information and Hardware update**

November 2016




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# What questions may be on your mind?



“What are other EMEA customers doing?”



“What is Hewlett Packard Enterprise doing in EMEA to help me?”



“How can I keep up-to-date with what is going on?”



“Am I investing wisely?”



“Who can I talk to about evolving my OpenVMS infrastructure?”

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# Agenda

- HPE Update
- Mission Critical Servers (including OpenVMS) in EMEA
- Update on HPE OpenVMS
- What resources are available
- HPE Hardware update

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# Forward Looking Statement

Information set forth in this presentation, including statements as to Hewlett Packard Enterprise Company's ("Hewlett Packard Enterprise") outlook and financial estimates and statements as to the expected timing, completion and effects of the proposed merger between a wholly-owned subsidiary of Computer Sciences Corporation ("CSC") and Enterprise Services which will immediately follow the proposed spin-off of Enterprise Services from Hewlett Packard Enterprise, constitute forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These estimates and statements are subject to risks and uncertainties, and actual results might differ materially.

These statements are based on various assumptions and the current expectations of the management of Hewlett Packard Enterprise and CSC, and may not be accurate because of risks and uncertainties surrounding these assumptions and expectations. Factors listed below, as well as other factors, may cause actual results to differ significantly from these forward-looking statements. There is no guarantee that any of the events anticipated by these forward-looking statements will occur. If any of the events occur, there is no guarantee what effect they will have on the operations or financial condition of Hewlett Packard Enterprise or CSC. Forward-looking statements included herein are made as of the date hereof, and Hewlett Packard Enterprise and CSC undertake no obligation to publicly update or revise any forward-looking statement unless required to do so by the federal securities laws.

Some forward-looking statements discuss Hewlett Packard Enterprise's and CSC's plans, strategies and intentions. They use words such as "expects," "may," "will," "believes," "should," "would," "could," "approximately," "anticipates," "estimates," "targets," "intends," "likely," "projects," "positioned," "strategy," "future," and "plans." In addition, these words may use the positive or negative or other variations of those terms. Forward-looking statements in this filing include, but are not limited to, statements regarding the expected effects on Hewlett Packard Enterprise, Enterprise Services and CSC of the proposed distribution of Enterprise Services to Hewlett Packard Enterprise's stockholders and merger of Enterprise Services with a subsidiary of CSC (the "Transaction"), the anticipated timing and benefits of the Transaction, including future financial and operating results, and whether the Transaction will be tax-free for Hewlett Packard Enterprise and its stockholders for U.S. federal income tax purposes, the combined company's plans, objectives, expectations and intentions. Forward-looking statements also include all other statements in this presentation that are not historical facts.

These statements are based on the current expectations of the management of Hewlett Packard Enterprise and CSC (as the case may be) and are subject to uncertainty and to changes in circumstances. Major risks, uncertainties and assumptions include, but are not limited to: the satisfaction of the conditions to the Transaction and other risks related to the completion of the Transaction and actions related thereto; Hewlett Packard Enterprise's and CSC's ability to complete the Transaction on the anticipated terms and schedule, including the ability to obtain shareholder and regulatory approvals and the anticipated tax treatment of the Transaction and related transactions; risks relating to any unforeseen changes to or effects on liabilities, future capital expenditures, revenues, expenses, earnings, synergies, indebtedness, financial condition, losses and future prospects; CSC's ability to integrate Enterprise Services successfully after the closing of the Transaction and to achieve anticipated synergies; the risk that disruptions from the Transaction will harm Hewlett Packard Enterprise's or CSC's businesses; the effect of economic, competitive, legal, governmental and technological factors and other factors described under "Risk Factors" in each of Hewlett Packard Enterprise's and CSC's Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q. However, it is not possible to predict or identify all such factors. Consequently, while the list of factors presented here is considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties.

This presentation shall not constitute an offer to sell or the solicitation of an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offer of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended. In connection with the proposed Transaction, CSC will file with the Securities and Exchange Commission ("SEC") a registration statement on Form S-4, which will include a prospectus. CSC will also file a proxy statement which will be sent to the CSC shareholders in connection with their vote required in connection with the Transaction. In addition, Enterprise Services expects to file a registration statement in connection with its separation from Hewlett Packard Enterprise. **INVESTORS AND SECURITY HOLDERS ARE URGED TO READ THE REGISTRATION STATEMENTS/PROSPECTUSES AND PROXY STATEMENT AND ANY OTHER RELEVANT DOCUMENTS, WHEN THEY BECOME AVAILABLE, BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT CSC, ENTERPRISE SERVICES AND THE TRANSACTION.** Investors and security holders will be able to obtain these materials (when they are available) and other documents filed with the SEC free of charge from the SEC's website, [www.sec.gov](http://www.sec.gov). These documents (when they are available) can also be obtained free of charge from the respective companies by directing a written request to Hewlett Packard Enterprise at Hewlett Packard Enterprise Company, 3000 Hanover Street, Palo Alto, California 94304, Attention: Investor Relations, or by calling (650) 857-2246.

For those countries that require consultation with works councils or other employee representatives, this is not intended to provide country-specific complete information and in no way reflects that final decisions have been made at a country level. With respect to such countries, final decisions are subject to prior consultation with works councils and other employee representatives, as required, and in compliance with local laws.

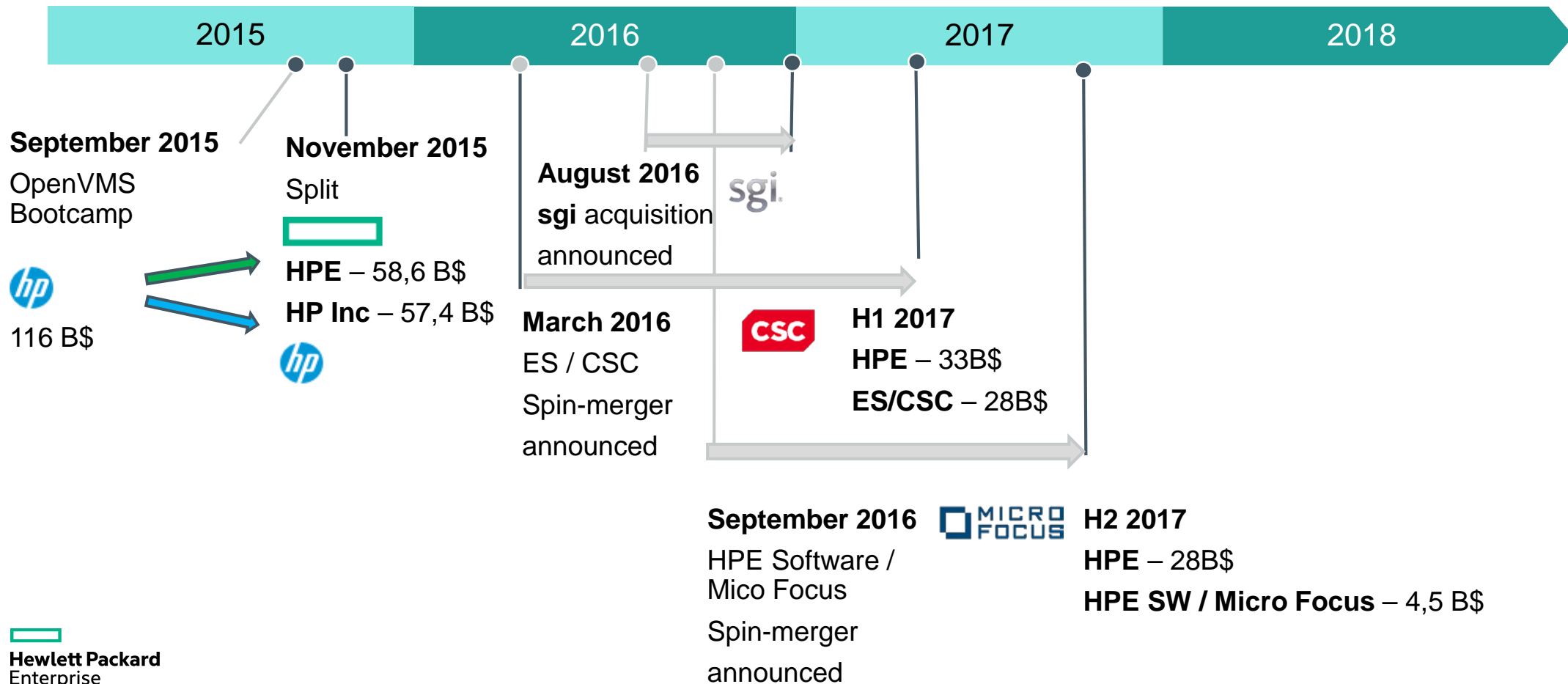
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# Forward-looking statements

This is a rolling (up to three year) Roadmap and is subject to change without notice.

This document contains forward looking statements regarding future operations, product development, product capabilities and availability dates. This information is subject to substantial uncertainties and is subject to change at any time without prior notification. Statements contained in this document concerning these matters only reflect Hewlett Packard's predictions and / or expectations as of the date of this document and actual results and future plans of Hewlett-Packard may differ significantly as a result of, among other things, changes in product strategy resulting from technological, internal corporate, market and other changes. This is not a commitment to deliver any material, code or functionality and should not be relied upon in making purchasing decisions.

# what has changed and will change... ...since you were here last year!



Then.....



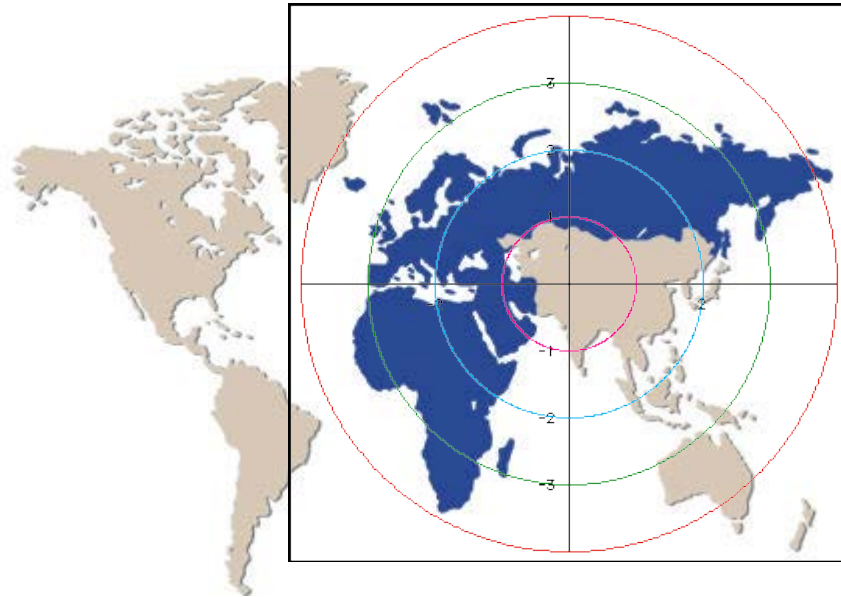
# And now.....





# OpenVMS in EMEA

The inside story for EMEA customers



The state of OpenVMS  
Your HPE team  
The business  
The importance  
The future

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# Business importance



**“Mission Critical is my fastest growing segment”**

– Iain Stephen, February 2016

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# Management relevance



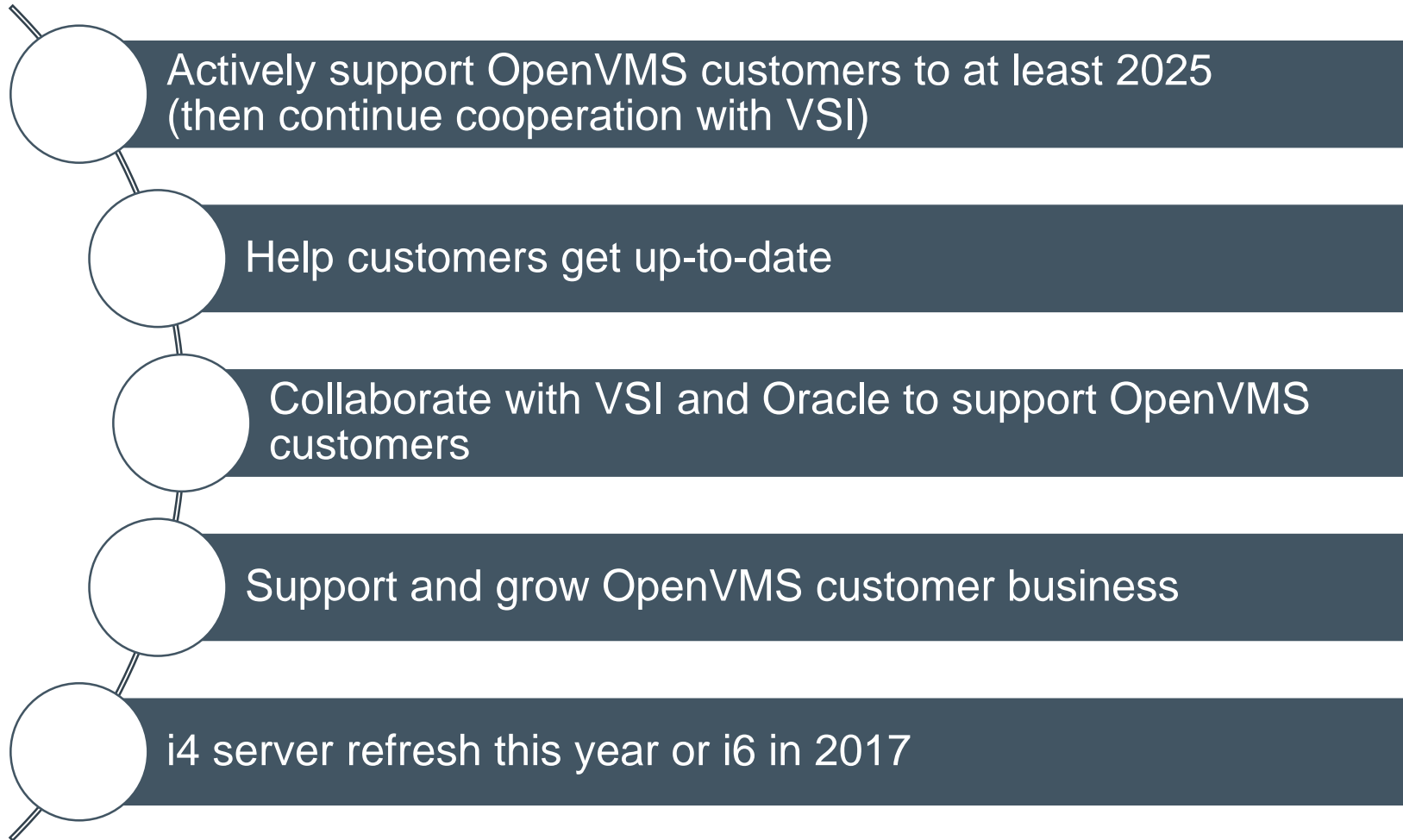
Would you like my  
VMS fiche?



Yes please!

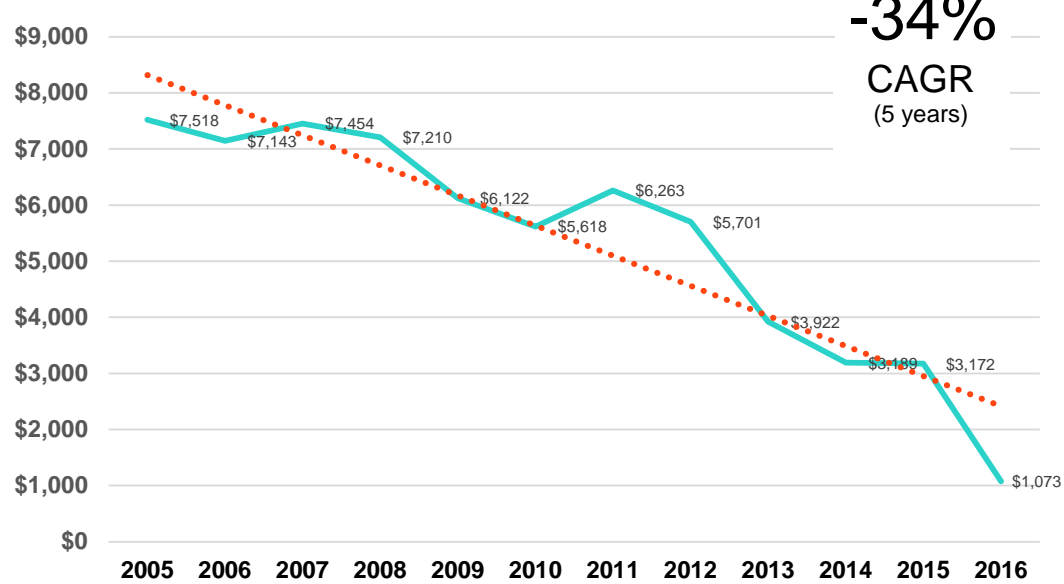
– Iain Stephen, February 2016

# EMEA OpenVMS business

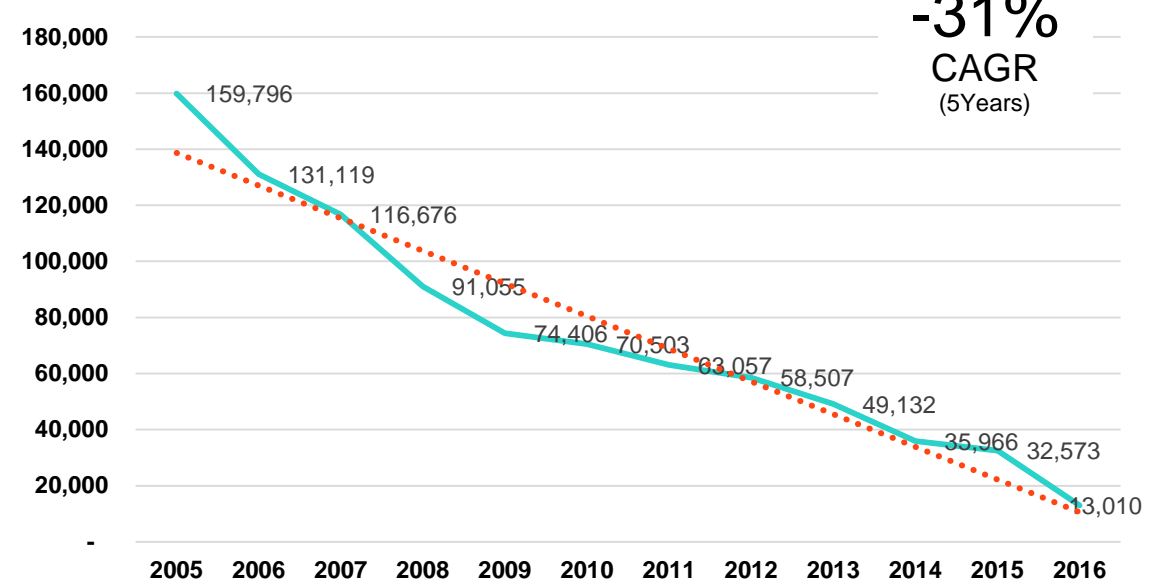


# Overall IBM Power RISC decline\*

By \$M Revenue



By Units



This includes all OS(AIX, Linux, IOS)

Source: IDC Quarterly Server Tracker. 2016Q2, from 10/25/2016.

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# Mission Critical Business

Is in transition

Has returned to growth

OpenVMS is in safe hands with VSI

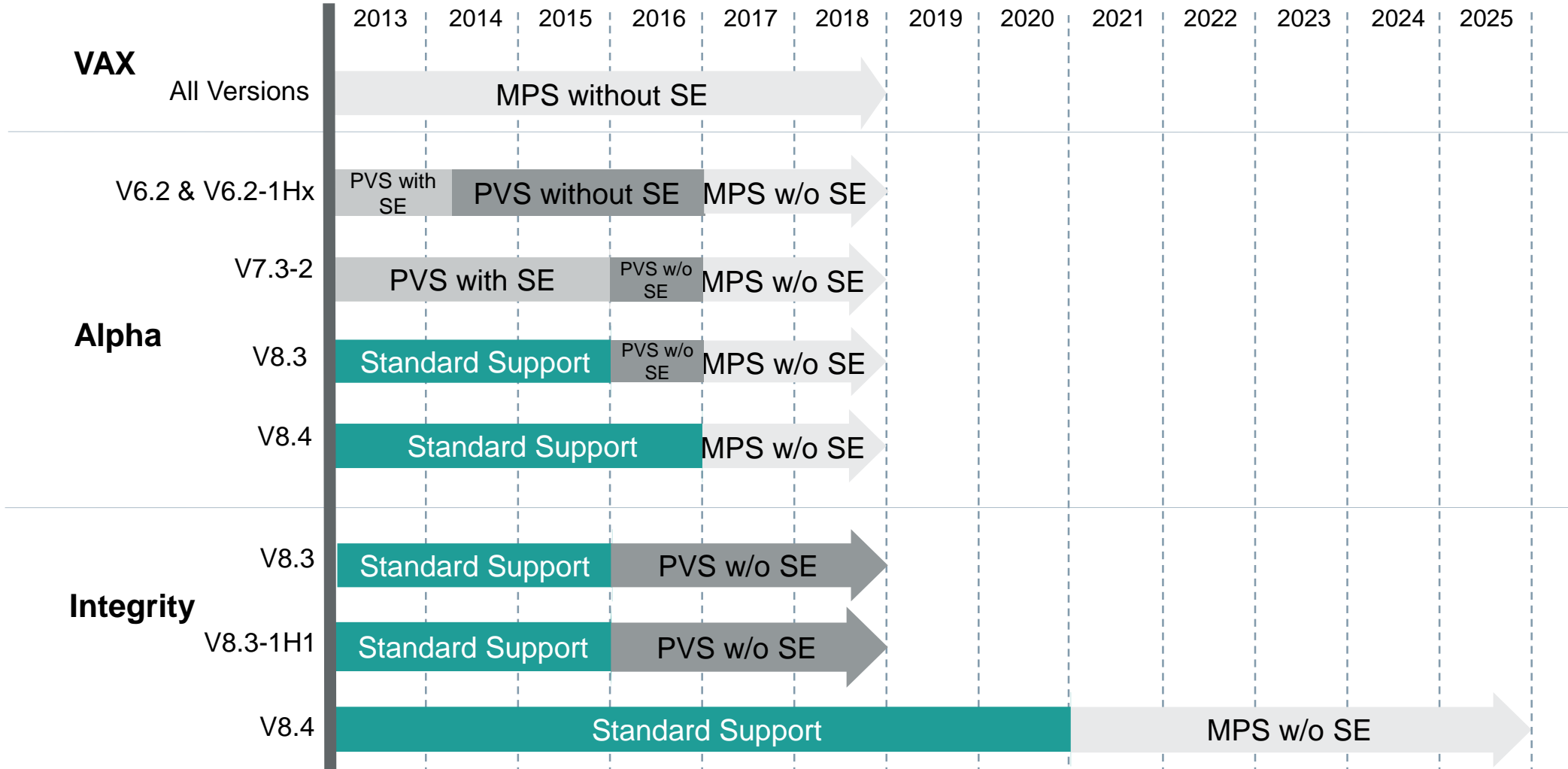
OpenVMS servers are in safe hands with HPE






**Hewlett Packard**  
Enterprise

**HPE OpenVMS Support**

# HPE OpenVMS Service Support roadmap

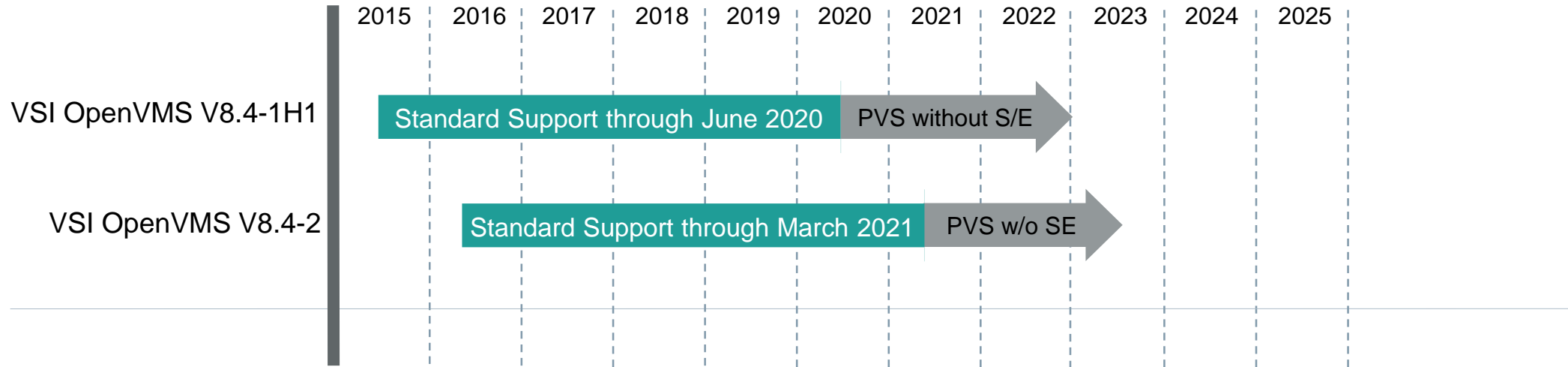


- A 24-month notification will be provided before support is ended
- For details on the PVS and MPS offers, click [here](#)

	MPS w/o SE	Mature Product Support Without Sustaining Engineering
	PVS w/o SE	Prior Version Support Without Sustaining Engineering
	PVS With SE	Prior Version Support With Sustaining Engineering



# VSI OpenVMS Service Support roadmap



Notes:

- Planning is underway now for release and support dates of future VSI OpenVMS versions.
- VSI OpenVMS is developed by VSI. As a result, VSI is responsible for the content and schedules associated with VSI OpenVMS versions. You can find more information at: [www.vmssoftware.com](http://www.vmssoftware.com)

- A 24-month notification will be provided before support is ended
- For details on the PVS offers, click [here](#)

■ PVS w/o SE	Prior Version Support Without Sustaining Engineering
■ PVS With SE	Prior Version Support With Sustaining Engineering

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# HPE OpenVMS Support moving forward with VSI OpenVMS

- Everything up to V8.4 is supported by HPE with Engineering Support (for 8.4 Integrity) provided by HPE Engineering.
- Extended Engineering Support ( EES ) is offered by HPE Engineering.
- With VSI versions, currently V8.4-1H1, V8.4-2 and V8.4-2L1, HPE provide L1 and L2 support. L3 support ( ie Engineering ) is carried out by VSI. This integration is seamless as the L2/L3 interface is handled by HPE from the customers perspective.

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# HPE OpenVMS – Storage interoperability update: 2015-2016

## Hardware:

- Support for 3PAR new firmware releases (3.2.2)
- Qualification and Support of OpenVMS V8.4 with:
  - HPE 3PAR StoreServ 8000 Storage arrays,
  - HPE 3PAR StoreServ 20000 Storage arrays,
  - HPE 3PAR StoreServ All Flash Array variants.
- Qualification and Support for XP7 new microcodes and XP7 Fastsnap feature
- Qualification and support of P9500 with the new microcodes
- Support for the new MSA2040 array.
- Support for HPE LTO-6 Ultrium 6650 and HPE LTO-7 15750 tape drives.
- Support for MSL 6840

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# HPE OpenVMS – Storage interoperability update: 2015-2016

## Operating System Enablement:

- ABS V4.5(1203) for OpenVMS compatible with OpenSSL 1 (SSL1).
- ABS V4.5(1203) support for Oracle RDB V7.3

## Upcoming:

- Reclaim support with thin provisioned Arrays with OpenVMS V8.4
- Support for MSA 2042

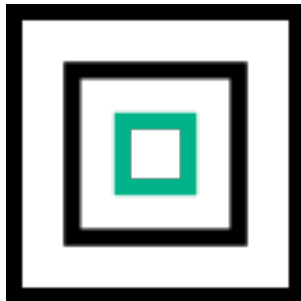
# HPE OpenVMS – Now and later



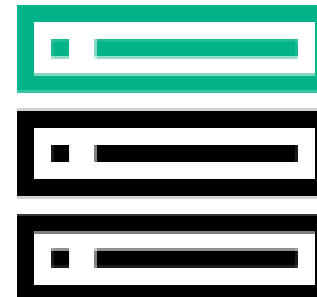
HPE upgraded its products to the latest version of OpenSSL (v1.0.2)



Java 8 will be introduced on HPE OpenVMS for Integrity early 2017



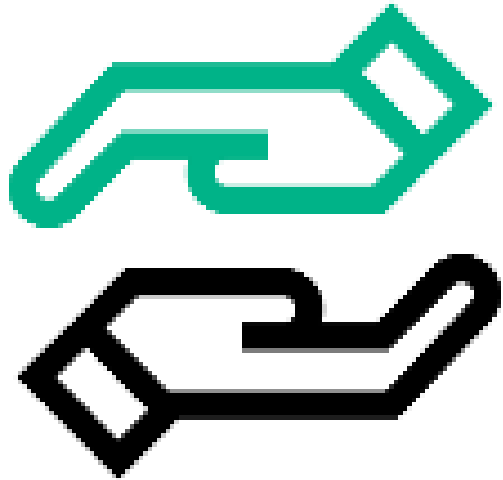
Support for SPC-4



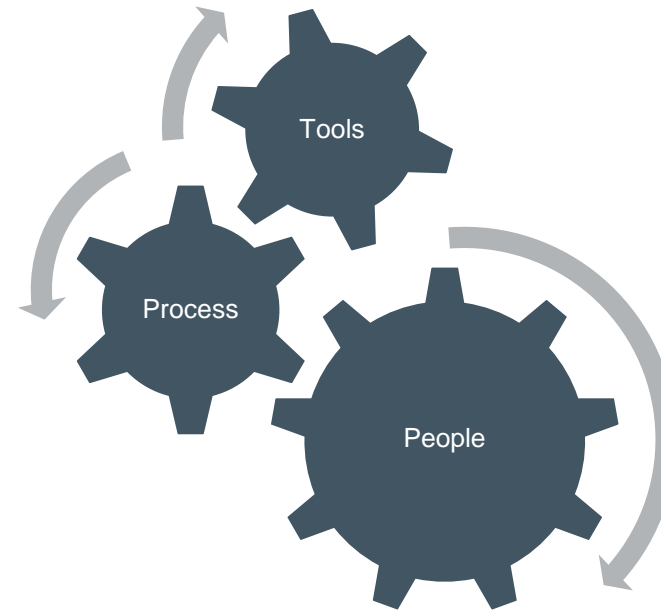
Update kit releases on HPE OpenVMS V8.4 on Integrity/Alpha

# HPE-VSI Partnership

To keep your business running and adapting—today and into the future



- Strong business relationship
- Joint working model
- Collaboration of people, processes and tools
- Leveraging expertise





# Partner & HPE Resources Services

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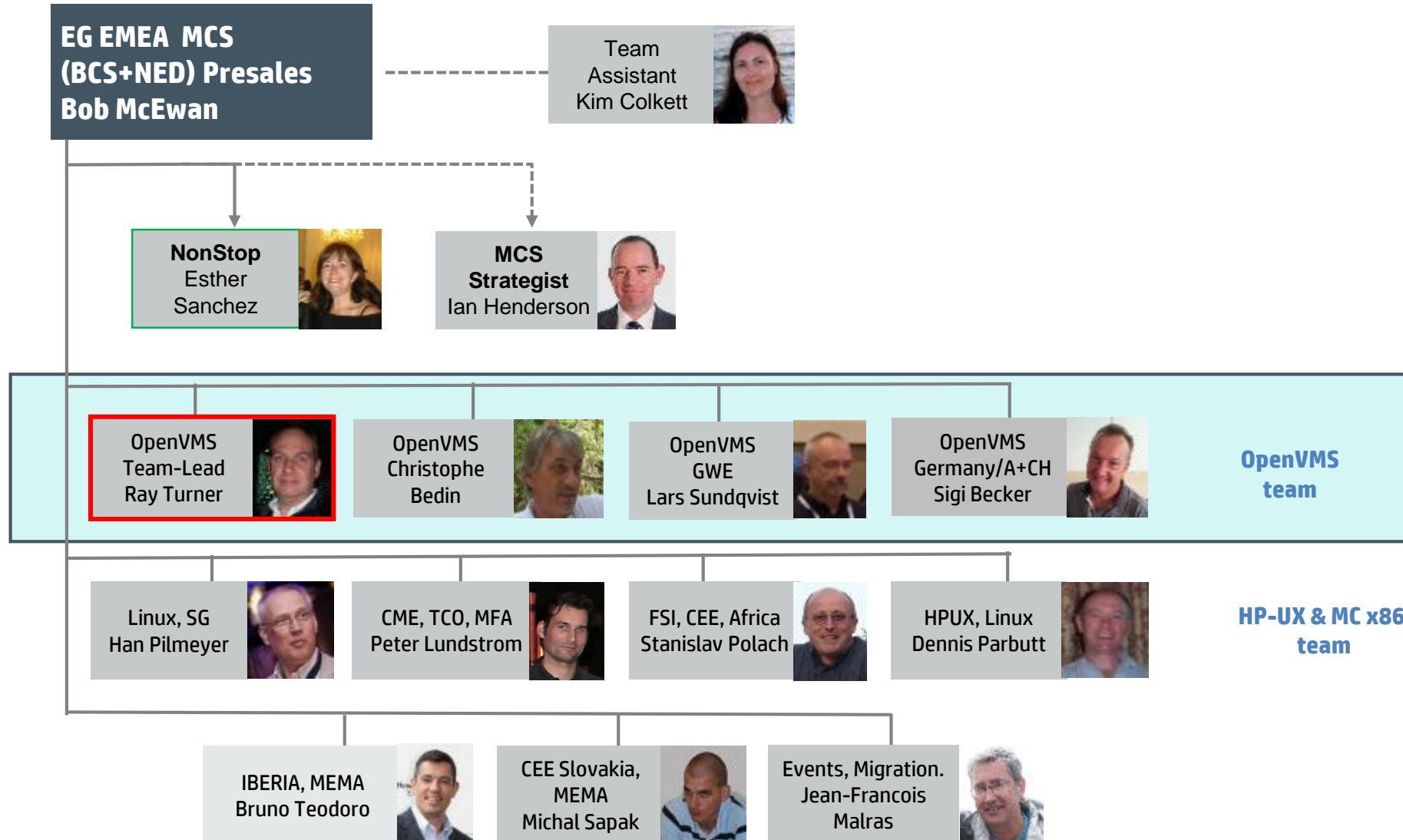
# Concerns voiced by customers

- Who in HPE is there to help me?
- OpenVMS is going away
- I don't know what I have, or how it works?
- My system manager retired and I have no one left who knows the system
  - Or the person who has been given the system to manage fears being 'exposed'
- It's all too old for me to bother with
- It's not my companies strategic direction
  - So I don't want to spend any money on it
- The performance doesn't match what we can achieve with newer systems
- My ISV doesn't want to support OpenVMS anymore



# EG EMEA MCS Win Team – FY16

July 2016



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# Who in HPE can help me

- EMEA Central OpenVMS Presales team
- Partners have access to Office Based Presales and Quote and Configuration teams
- Also many partners are available to assist you

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# I don't know what I have or how it works.....

– Range of partner solutions.....



- Application Maintenance & Control
- Source Analysis & Documentation
- Project Control & Quality Assurance
- Static & Dynamic Testing
- Audit & Second Opinion
- Outsourcing & Out-tasking Support
- Strategic Component Reuse & Recycling
- Migration & Conversion

# My system manager has left.....

- Normally accompanied by .....and I can't recruit a new one
- Full range of training courses offered by VSI

## OpenVMS System Management Courses

VSI Part Number	Description	Days	HP PN	Price
OpenVMS System Management Courses				
TR-1SL201-VMS	System Management I - Essentials	5	U3724S	\$3,500
TR-1SL202-VMS	System Management II - Install/Config/Customization	5	U3725S	\$3,500
TR-1SL203-VMS	System Performance Management	5	U3726S	\$4,000
TR-1SL204-VMS	TCP/IP Services for OVMS	5	U3728S	\$4,000
TR-1SL301-VMS	Managing Complex Systems	5	U3726S	\$4,000
TR-1SL302-VMS	Internals for System Managers	5	U3729S	\$4,000

- Delivered in EMEA by bgsoftware.nl

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## .....and I don't want to have to look after it

- Several EMEA based partners are able to offer OpenVMS hosting services

The logo for CDL, consisting of the letters 'CDL' in a bold, blue, sans-serif font.The logo for CSC, featuring the letters 'CSC' in white on a red, rounded rectangular background.The logo for BGS Business Generating Software, featuring a stylized grey 'X' shape with the letters 'B G S' and the text 'Business Generating Software' below it.The logo for Helo, featuring the word 'Helo' in a blue, stylized font with a blue arrow pointing upwards from the 'o'.The logo for HCL, consisting of the letters 'HCL' in a bold, blue, italicized sans-serif font.The logo for JKP CONSULTANCY GROEP, featuring the letters 'J', 'K', and 'P' in white on a dark red background with vertical lines, and the text 'CONSULTANCY GROEP' below it.

- Experienced teams of OpenVMS support personnel
- Range of services offered can be tailored to your needs
- Enterprise class datacentres for hosting

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# It's too 'old' or not strategic

- But often critical for the business !
- VSI's reasons for using OpenVMS positioning material
- OpenVMS Workshops
- eCube and VSI integration solutions



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# I'm stuck on version x.x or architecture y

- Often not the case
  - Simply haven't tried to upgrade due to skills or cost concerns
  - A well known UK based telecoms company
    - Application ran on VAX 5.5-2
    - Delivered a test RX2660 system running OpenVMS 8.3
    - Before I had left – the customer had completed a test port of 50% of modules
    - Completed full port and started UAT testing inside 2 weeks
    - Moved to production within 3 months
- If really stuck then Stromasys and AVTware can help

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# My ISV doesn't want to support OpenVMS anymore

- Contact your HPE account team (via your partner if appropriate)
- We will work with you, HPE management and VSI to try and engage
- VSI's Software vendor program
- Are seeing ISV's who are changing their planning based on the new roadmap



# OpenVMS – Now and Beyond

## Key Takeaways

HP plans unchanged

A great new future

HP support

Improving TCO

Innovation



### Support

To 2020 with Engineering support.  
To 2025 with TS support.



### VMS Software Inc.

HPE Integrity i4 support; next gen Integrity; x86 support



### V8.4-2

HPE will provide license to use (LTUs) and TS support



### Costs down

per socket license; Server consolidation, better performance



### Refresh

Layered products, OpenSource, Java, SSL...



**Hewlett Packard  
Enterprise**

# **HPE mission critical Hardware**

September, 2016

HPE Confidential; shareable under CDA. Subject to change without notice.

# What's new in 2016?

Scale-up Server refresh with Broadwell, value-add software, options and solutions

## Entry scale-up (x86)

Up to 4-socket offerings for data-demanding workloads



HPE ProLiant DL580  
Refresh Broadwell EX  
DL560 and BL660c  
Refresh Broadwell EP

## Mid-level scale-up (x86)

8-socket offering for large Linux workloads



Integrity MC990 X  
Refresh Broadwell EX

## High-end scale-up (x86)

16-socket offerings for largest, most critical enterprise workloads



Integrity Superdome X  
Refresh Broadwell EX

## High-end scale-up (itanium)

Highest RAS, Long term deployments most critical enterprise workloads



HPE Integrity rx2800 HPE Integrity server blades HPE Integrity Superdome 2

Refresh Klittson

For your most demanding x86 workloads

# Industry's most comprehensive x86 portfolio of **scale-up** servers

Built on HPE server innovation

## Mainstream x86

Up to 2-socket offerings for variety of general purpose workloads



HPE ProLiant DL300 and BL400c

## Entry scale-up

Up to 4-socket offerings for data-demanding workloads



HPE ProLiant DL500 and BL600c

## Mid-level scale-up

8-socket offering for large Linux workloads



HPE Integrity MC990 X

## High-end scale-up

Up to 16-socket offerings for largest, most critical enterprise workloads

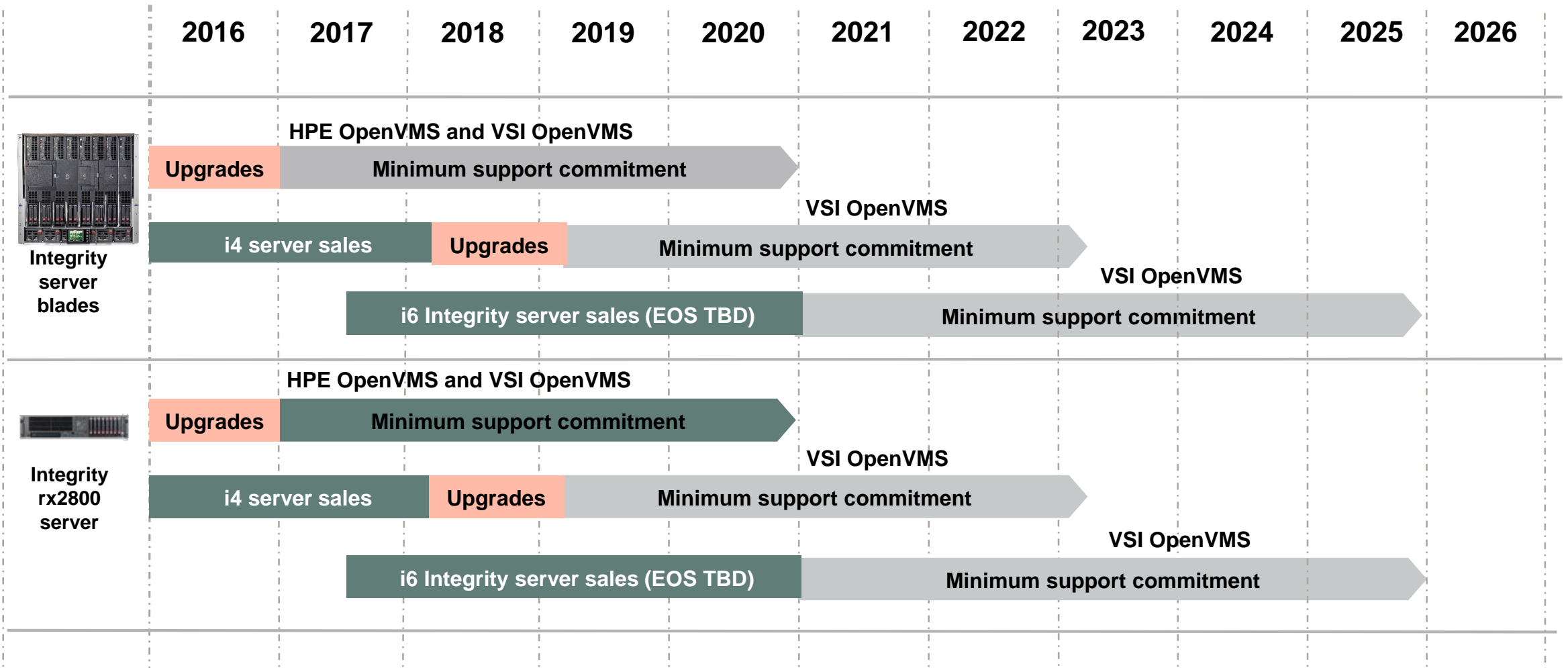


HPE Integrity Superdome X

Intel Xeon E5-2400 and E5-4600 processors for performance and scale

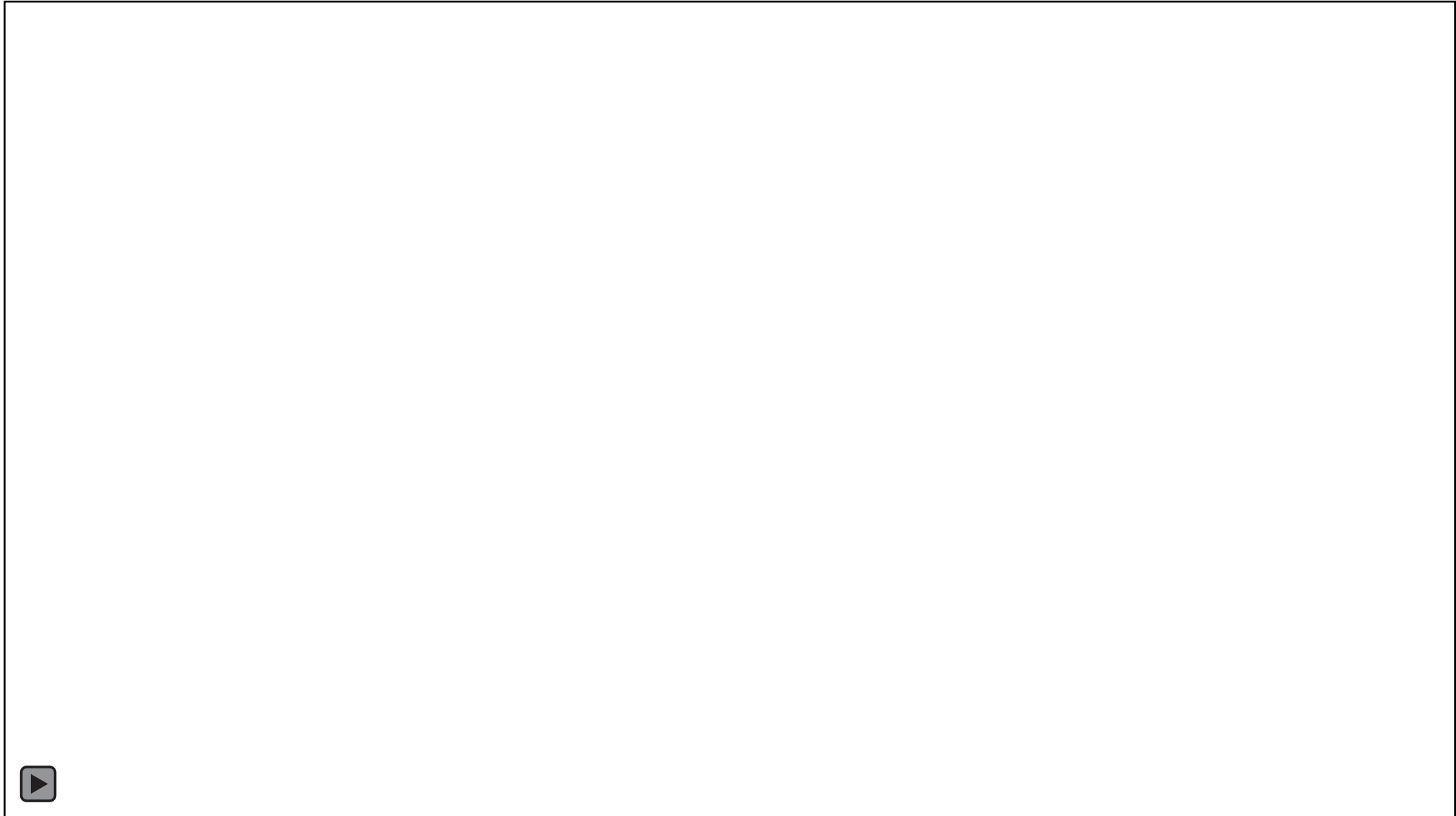
Intel Xeon E7-4800/8000 processors for high availability and reliability

# Integrity Servers roadmap



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# The future of mission critical computing



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# Thank you