OpenVMS Roadmap Update, Fall 2017
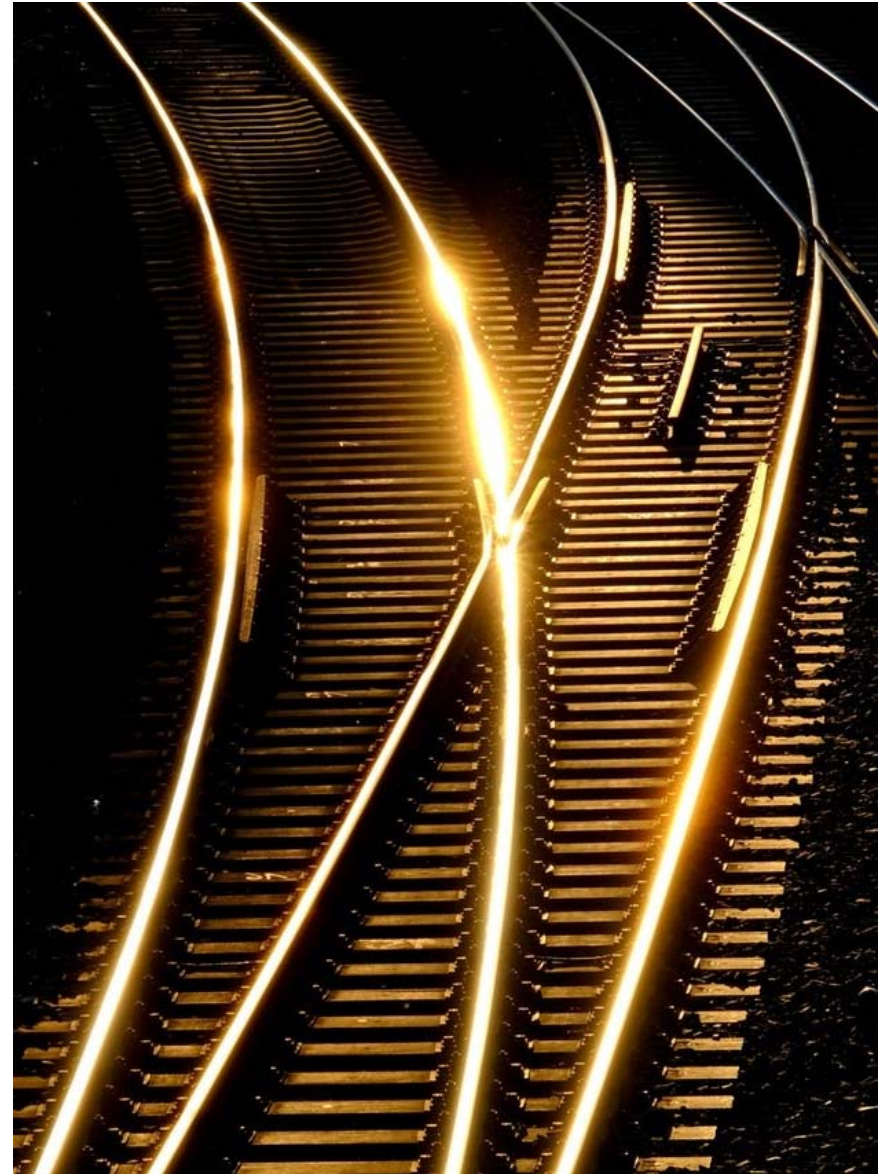
Keith Parris and Rob Eulenstein

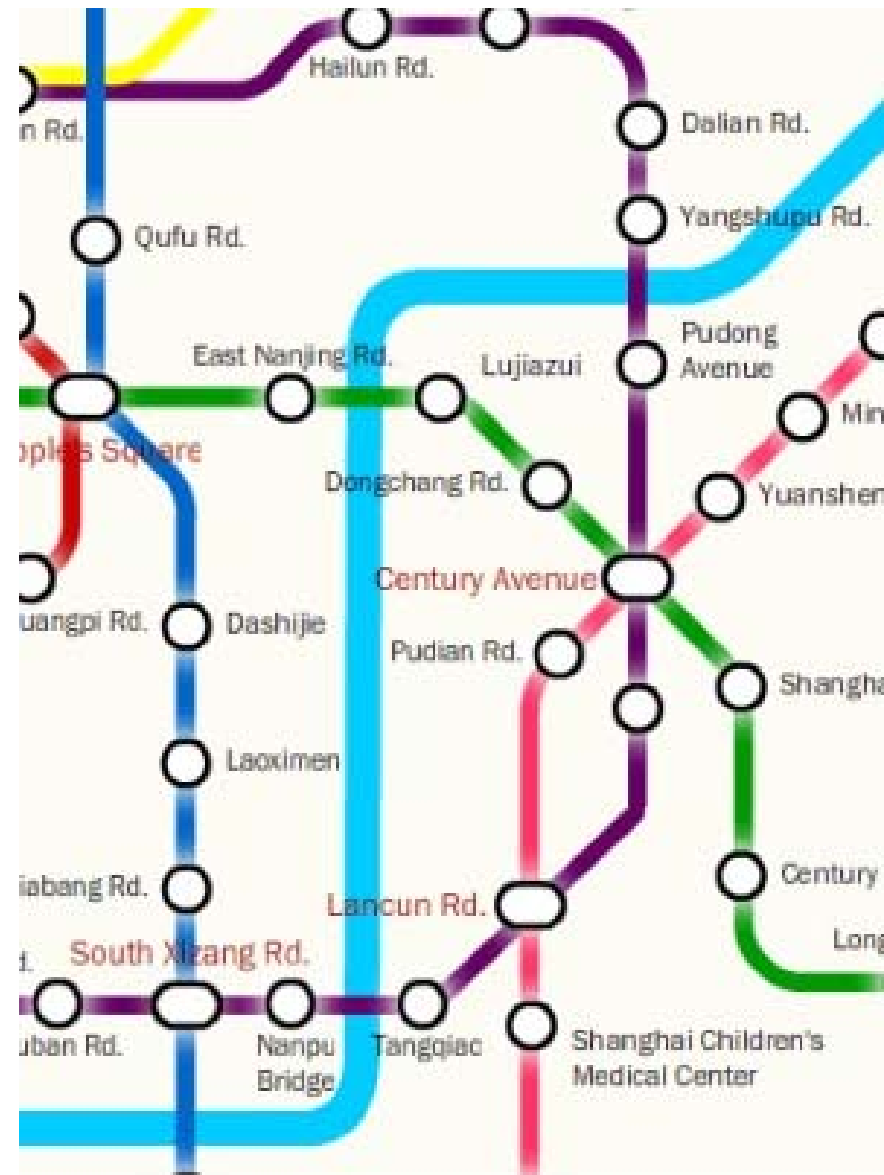Today there are two parallel tracks for OpenVMS:

HPE and VSI

You can move from
one track to another
when you choose.

With a map, you can pick your destination, and know what track you need to take to get there, and where you need to switch tracks.

Possible Destinations

—HPE Integrity i4 Servers:

—HPE Integrity i6 Servers:

—x86 Servers:

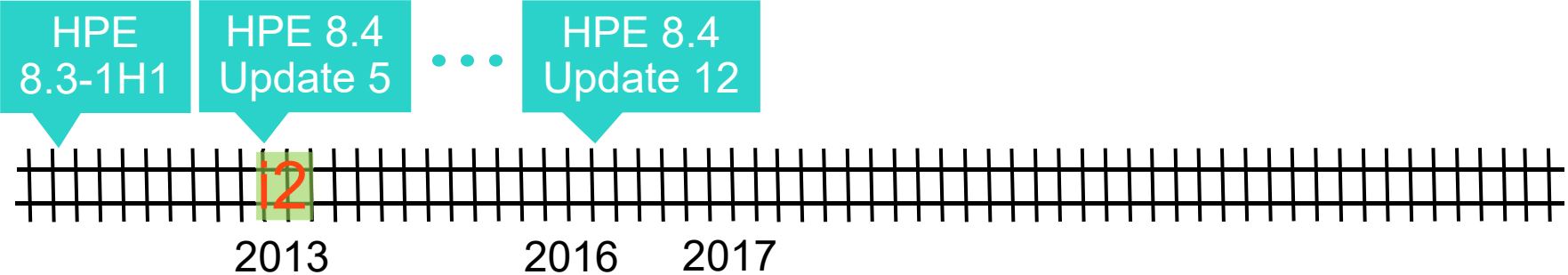Superdome X   Proliant   MC990 X

OpenVMS Tracks:
HPE OpenVMS on Itanium

HPE
8.3-1H1

HPE 8.4
Update 5

HPE 8.4
Update 12

i2

2013   2016   2017

HPE OpenVMS Roadmap

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
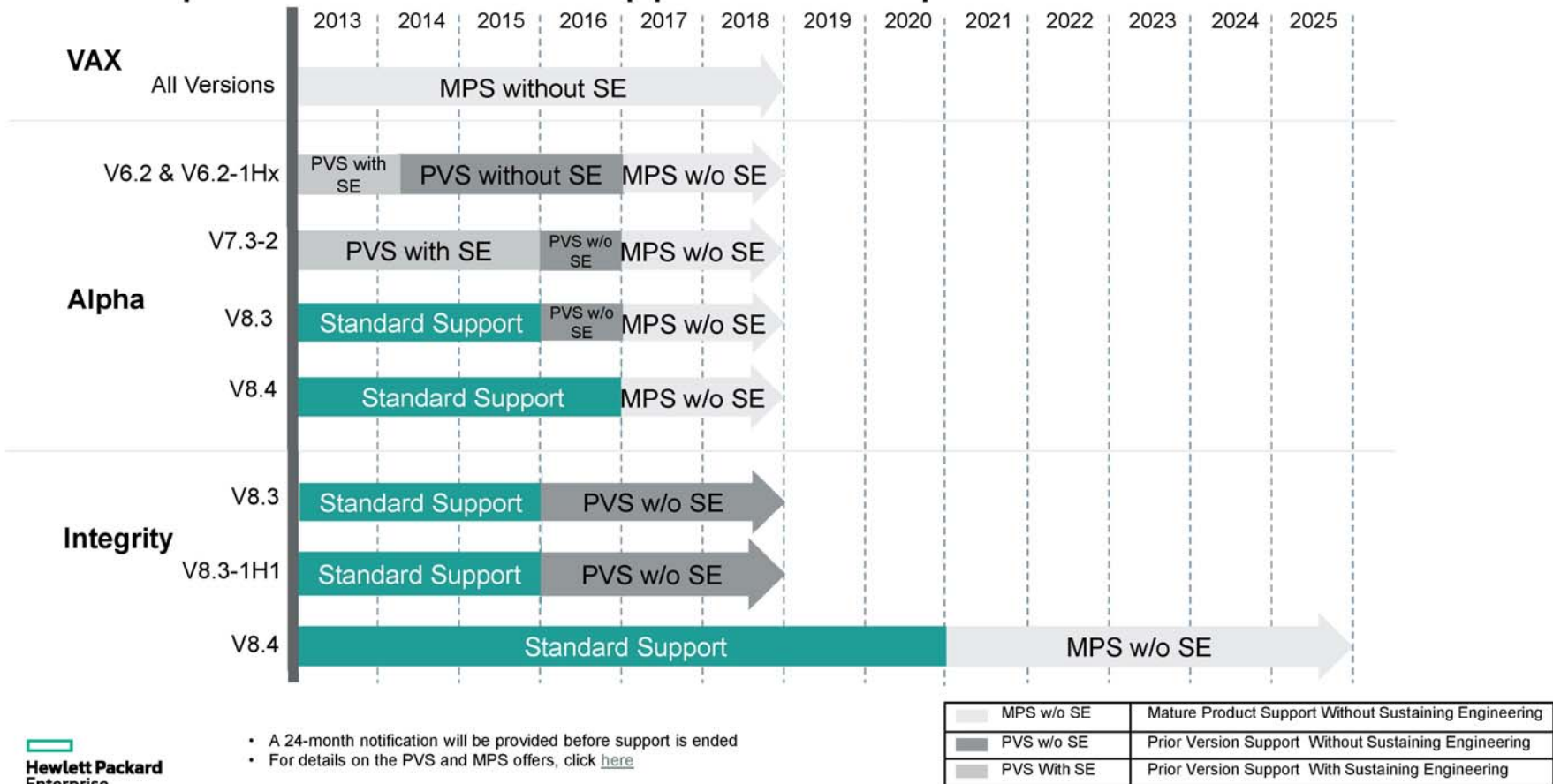
Sustaining Engineering for HPE OpenVMS 8.4

Standard Support for HPE OpenVMS 8.4 Integrity (with Sustaining Engineering) ends December 31, 2020.

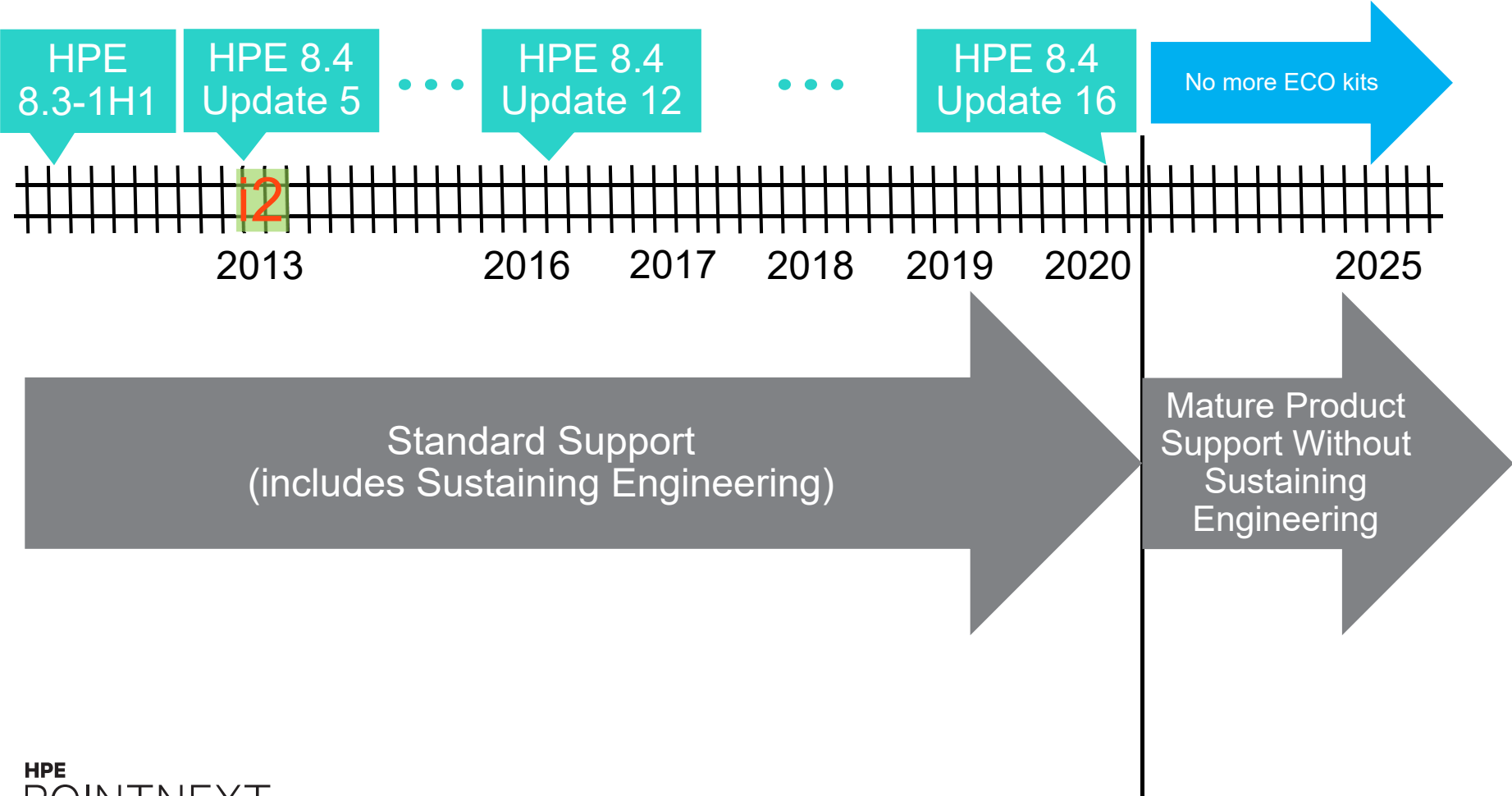Do you need new patches beyond that point?

> If so, you may need to plan to change tracks by that time.

> If not, Mature Product Support without Sustaining Engineering will be available through at least the end of 2025.

OpenVMS Tracks:
HPE OpenVMS on Itanium

| HPE 8.3-1H1 | HPE 8.4 Update 5 | ... | HPE 8.4 Update 12 | ... | HPE 8.4 Update 16 | No more ECO kits |

i2

2013 2016 2017 2018 2019 2020 2025

Standard Support (includes Sustaining Engineering)

Mature Product Support Without Sustaining Engineering

OpenVMS Tracks:
VSI OpenVMS on Itanium
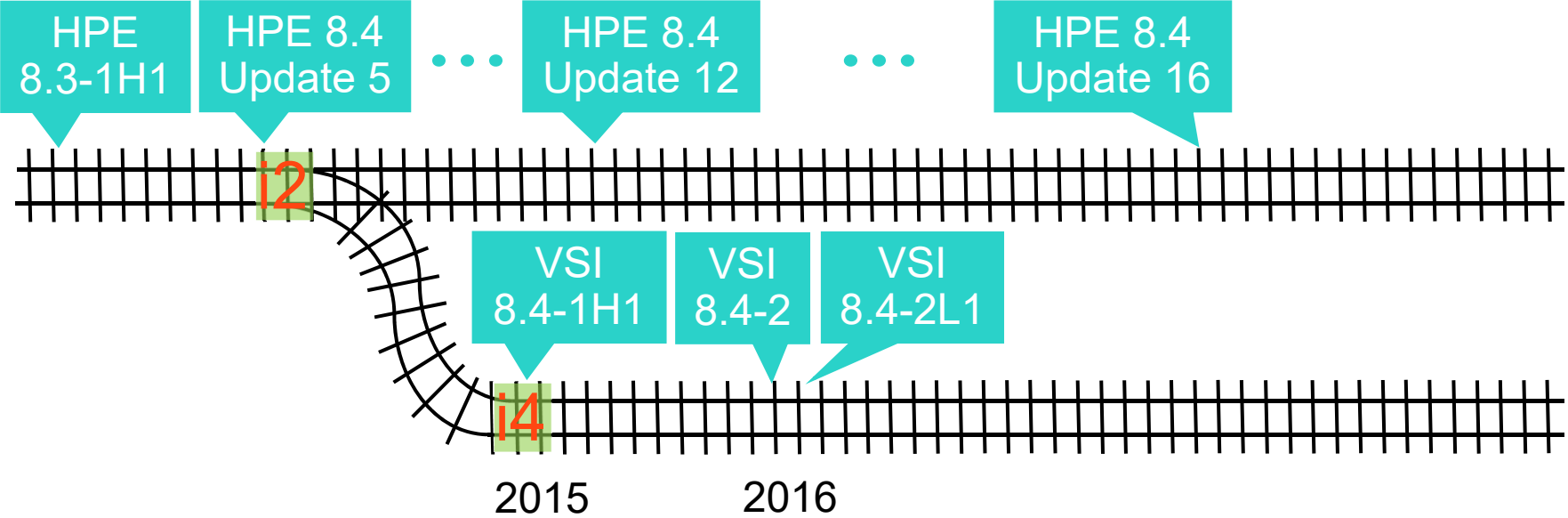
Prior VSI OpenVMS Releases

May 2015	March 2016	August 2016

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

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

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

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Based on current, best estimates. Subject to change without notice.

vms

Advantages of i4 Servers over i2

Much faster clock rate:

    2.53 gigahertz vs. 1.73 gigahertz

Twice the CPU cores per socket

    BL860c i4 (1 blade) = BL870c i2 (2 blades)

i4 system sales through Q1 2018; upgrades through Q1 2019

Hardware support through at least Q1 2023

Integrity server blades
BL860c i4, BL870c i4, BL890c i4

Integrity
rx2800 i4
Server

OpenVMS Tracks:
VSI OpenVMS on Itanium
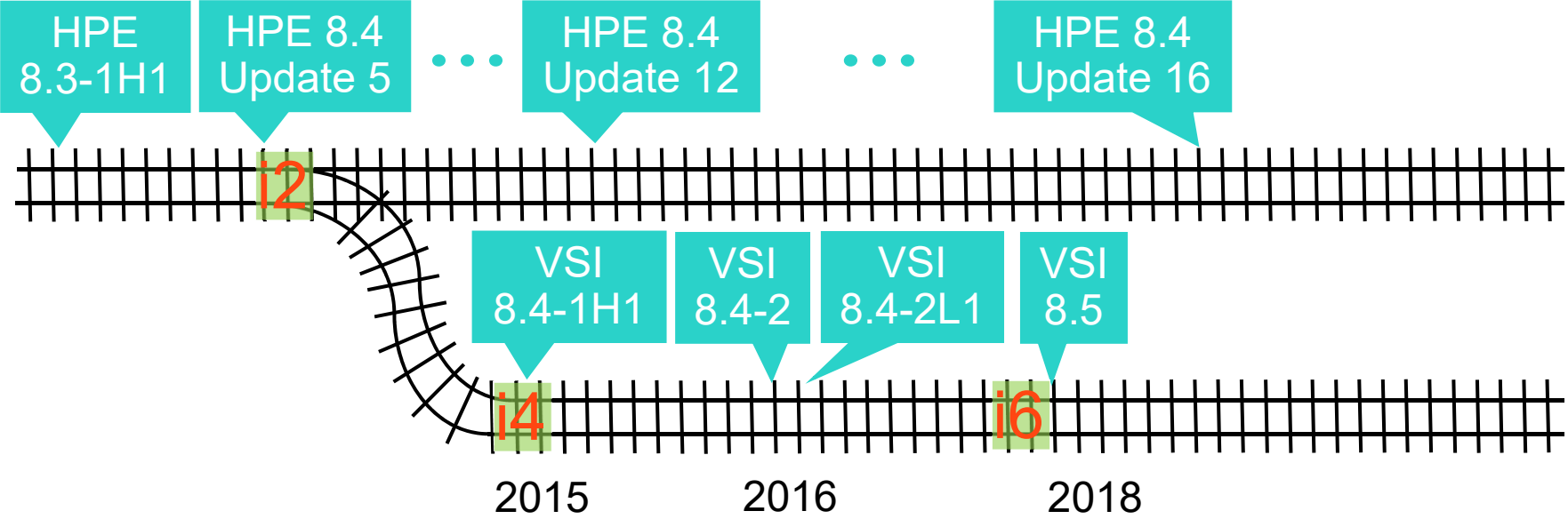
Advantages of i6 Servers over i4

Slightly faster clock rate than i4:

      2.67 gigahertz vs. 2.53 gigahertz

i6 system sales from 2017 onward

      Last Itanium-based platform

Hardware support for a minimum of 5 years after last sale

HPE Integrity BL8x0c i6 Server Blades

HPE Integrity rx2800 i6 Server

HPE Integrity Itanium-based Servers roadmap

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026

Integrity server blades

HPE OpenVMS and VSI OpenVMS
- Upgrades | Minimum support commitment

VSI OpenVMS
- i4 server sales | Upgrades | Minimum support commitment

VSI OpenVMS
- i6 Integrity server sales (EOS TBD) | Minimum support commitment

Integrity rx2800 server

HPE OpenVMS and VSI OpenVMS
- Upgrades | Minimum support commitment

VSI OpenVMS
- i4 server sales | Upgrades | Minimum support commitment

VSI OpenVMS
- i6 Integrity server sales (EOS TBD) | Minimum support commitment

HPE POINTNEXT

OpenVMS Tracks:
VSI OpenVMS on Itanium

OpenVMS Tracks:
VSI OpenVMS on Itanium

HPE
8.3-1H1

HPE 8.4
Update 5

HPE 8.4
Update 12

HPE 8.4
Update 16

i2

VSI
8.4-1H1

VSI
8.4-2

VSI
8.4-2L1

VSI
8.5

VSI
9.2

i4

i6

2015

2016

2018

2020

New File System: > 2
TB; faster directory
performance

OpenVMS Tracks:
VSI OpenVMS on Itanium

HPE 8.3-1H1

HPE 8.4 Update 5

HPE 8.4 Update 12

HPE 8.4 Update 16

i2

VSI 8.4-1H1

VSI 8.4-2

VSI 8.4-2L1

VSI 8.5

VSI 9.2

i4

i6

2015

2016

2018

2020
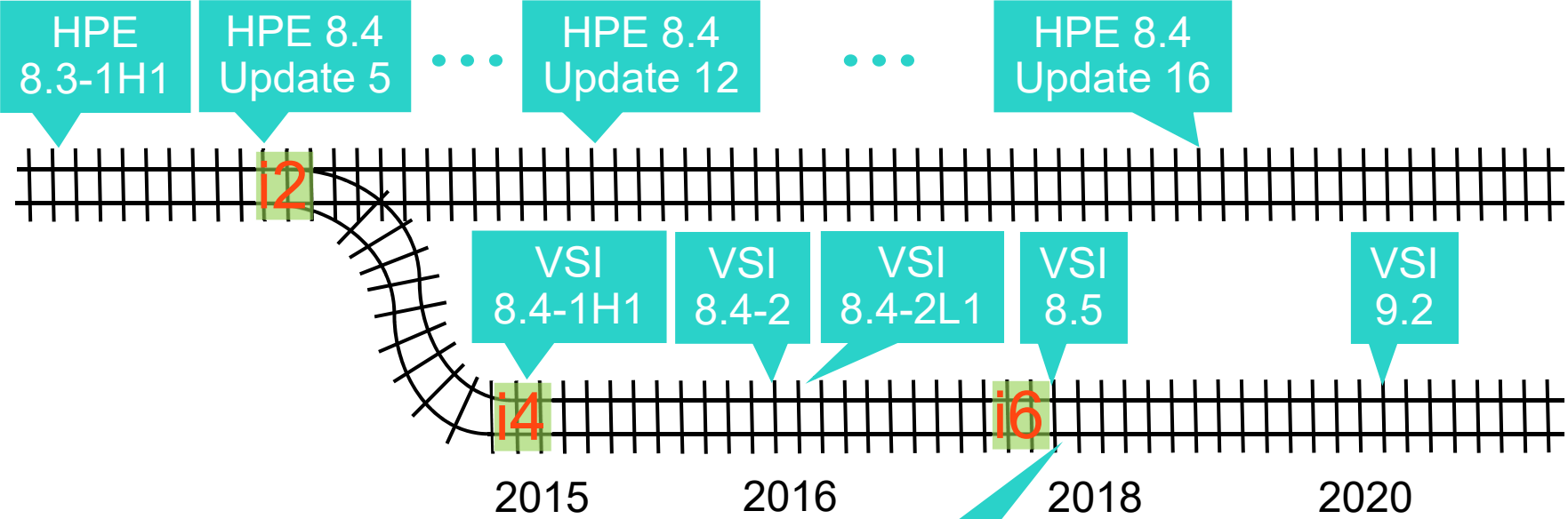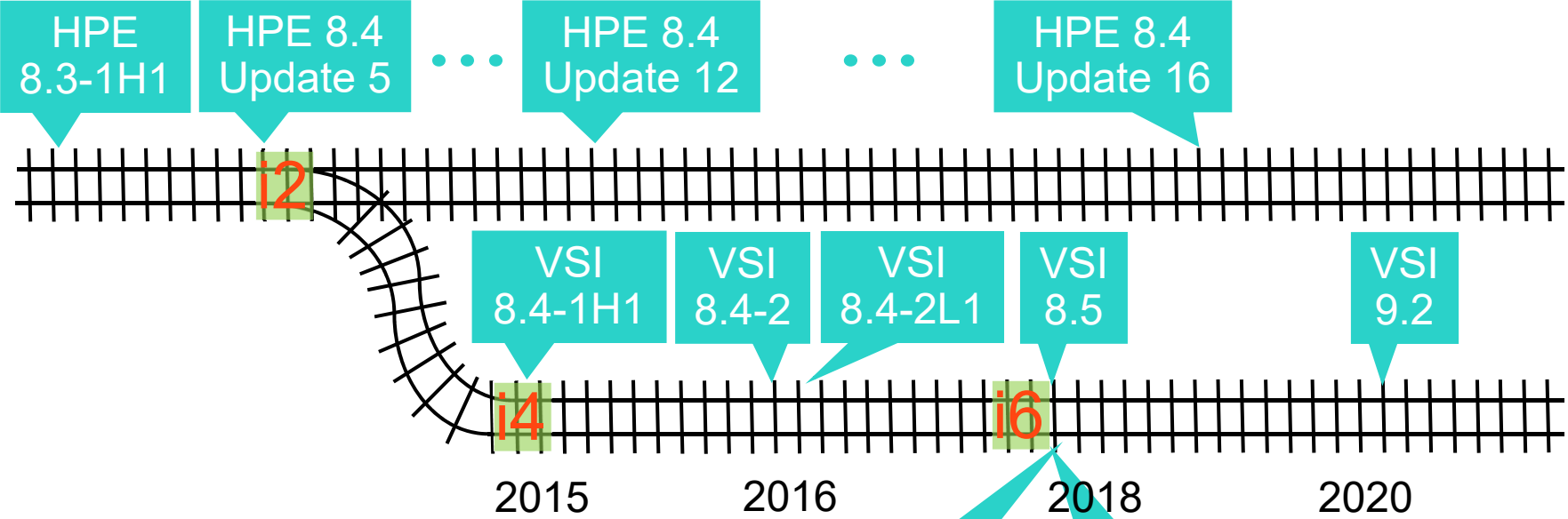
New File System: > 2 TB; faster directory performance

Higher network performance; New TCP/IP stack

OpenVMS Tracks:
VSI OpenVMS on x86

HPE 8.3-1H1

HPE 8.4 Update 5

· · ·

HPE 8.4 Update 12

· · ·

HPE 8.4 Update 16

i2

VSI 8.4-1H1

VSI 8.4-2

VSI 8.4-2L1

VSI 8.5

VSI 9.2

i4

i6

VSI 9.0

VSI 9.1

VSI 9.2

x86

2018   2019   2020
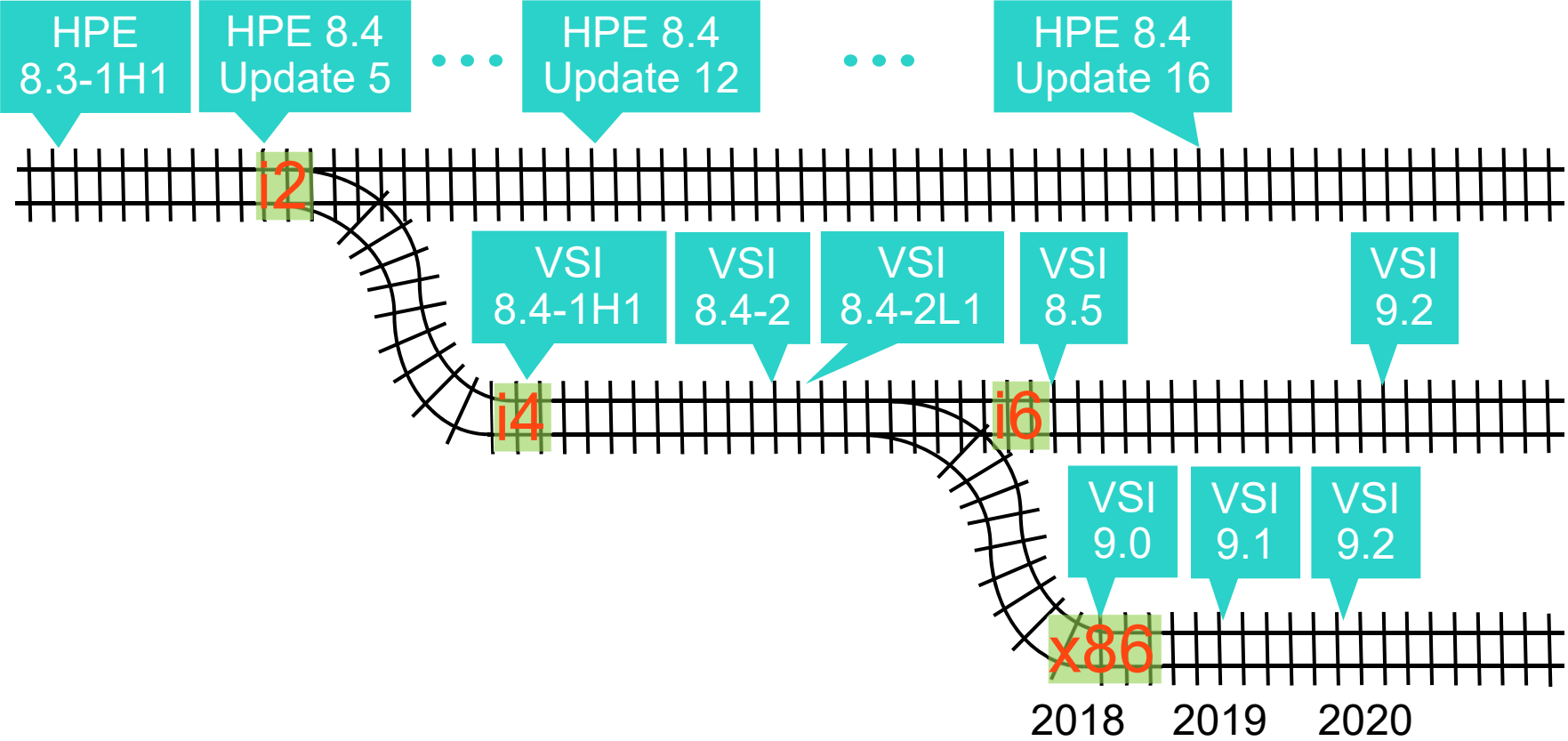
VSI OpenVMS Rolling Roadmap

2018	2019	2020

Q1
- HPE Kittson-based Servers
- LTO-8 Tape

Q2
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
SAMBA
JAVA 8 Update
12Gb SAS (low cost cluster)

H2
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 (native thereafter)
Alpha V8.5 (General/Performance)
- Includes TCPIP V10.6
Enhanced Password Management
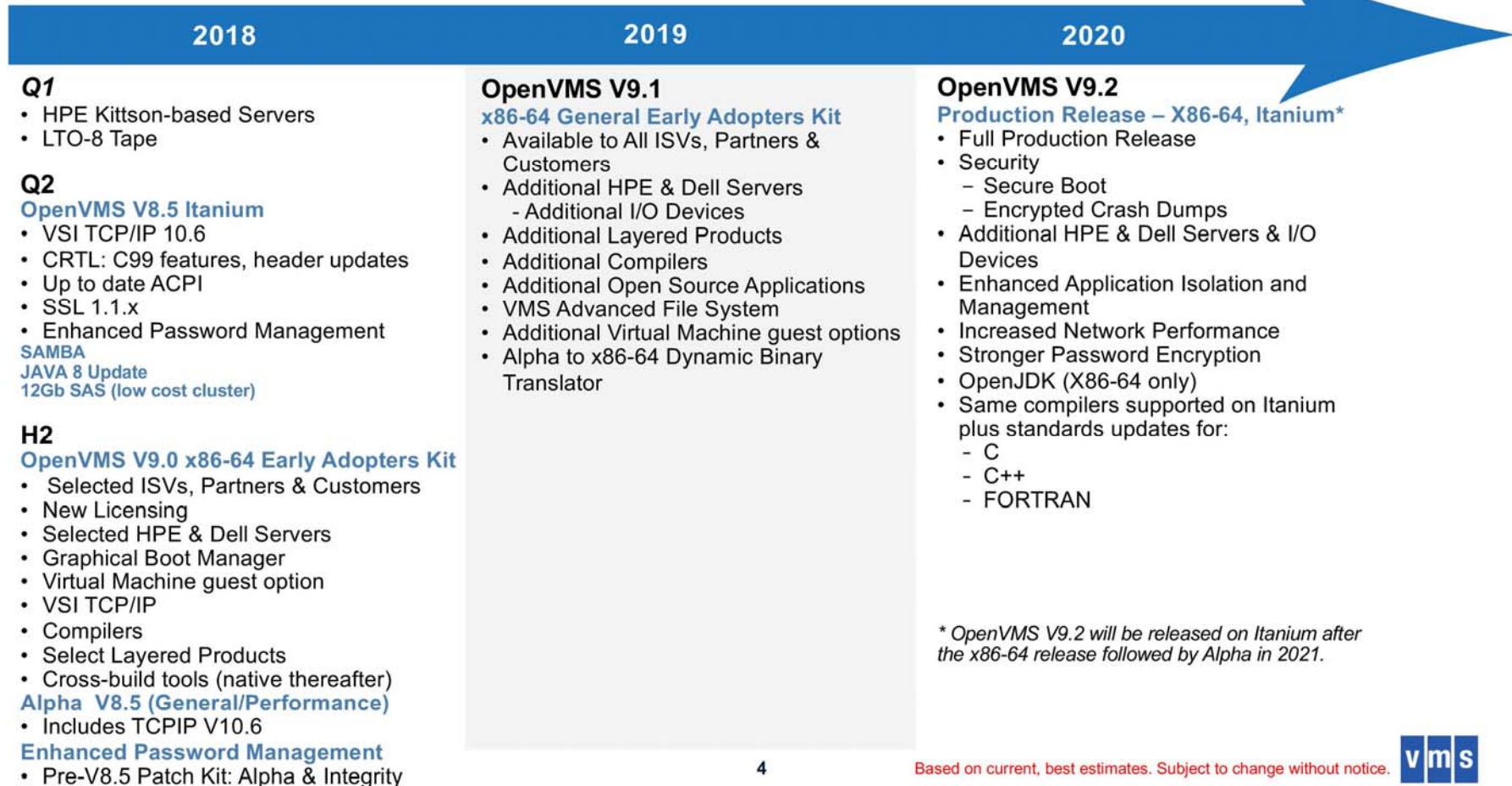- Pre-V8.5 Patch Kit: Alpha & Integrity

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

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.

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Based on current, best estimates. Subject to change without notice.

vms

VSI OpenVMS Integrity & x86 Support Roadmap

5 Year Standard Support + 2 Year PVS minimum

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

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Based on current, best estimates. Subject to change without notice.

Questions?

HPE POINTNEXT

Thank you

keith.parris@hpe.com and
rob.eulenstein@hpe.com

Hewlett Packard Enterprise