

COMMAND

your infrastructure like a
visionary, not a functionary.

OpenVMS Strategy and Roadmap

Rakesh Sharma

Senior Manager, OpenVMS

October' 2010



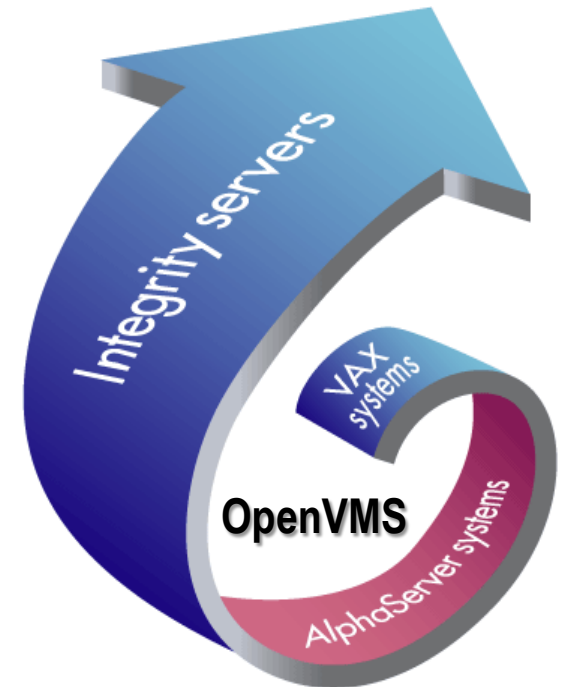
OpenVMS: MOVING STRONGLY INTO IT'S 4TH DECADE

OpenVMS profile

What's New with OpenVMS?

Roadmap and Future Directions

OpenVMS Customer Program



OpenVMS PROFILE



HP OpenVMS

MISSION-CRITICAL & SECURE COMPUTING

Hundreds of thousands of systems installed, millions of users

**OpenVMS provides
core IT infrastructure for:**

World's largest CPU chip manufacturer

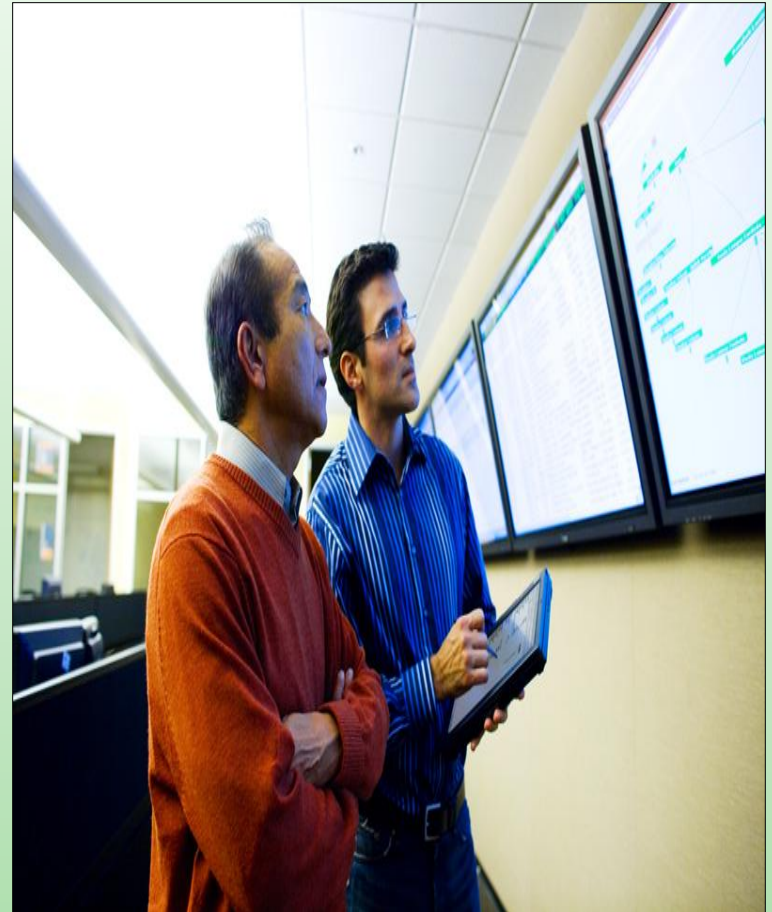
Mobile telecom billing systems
scaling to millions of users

Prominent futures and derivative
exchanges worldwide

Majority of automated lottery systems

Major hospitals

Government offices worldwide
demanding security & high availability



Fraport AG

“We can’t allow much more than five minutes of downtime, which is why we have always relied on HP OpenVMS due to its reliability, fault tolerance, and proven robust clustering capabilities.”



Kay Belke
Software Engineer
Fraport AG (Frankfurt Airport)

ABF-Industrielle Automation GmbH

“OpenVMS on Integrity servers provides a stable and reliable platform for our customers’ mission-critical environments. OpenVMS also maximizes security and minimizes system administration, so our customers can focus on optimizing their manufacturing, assembly, material flow, and other processes—instead of maintaining their process control systems.”



Günther Adelwoehrer
General Manager
ABF-Industrielle Automation GmbH

Savant

“We started using OpenVMS back in the 1980s because of its high availability. Today, OpenVMS offers advanced features like volume shadowing between nodes to synchronously replicate data between sites and storage arrays – capabilities like this still don’t exist in other operating systems available today.”



Ian Gray
Technical Director
Savant

ICAP Electronic Brokering

“We connect the largest professional foreign exchange trading community in the world, so we need to ensure our technology remains leading edge and resilient. HP OpenVMS on HP Integrity systems has given us the trading infrastructure necessary to continue delivering the high level of service our customers expect.”



Rob Perez
Head of FX Development
ICAP Electronic Broking
NY, USA

UK National Health Services Blood & Transplant

“Our experience with the OpenVMS operating system is that it is **incredibly stable and reliable, and it supports the uptimes we need for a critical system.** Then we saw that **moving to HP Integrity servers** would save operating costs, data center space, and give us better performance, reliability, and headroom for the future – there really was no downside.”



Andrew O'Connor
Systems Engineering and Operations Manager
UK National Health Services Blood & Transplant



WHAT'S NEW ON OpenVMS?



WHAT'S NEW IN OpenVMS?

Key Releases

- OpenVMS V8.4 – June 2010
- V8.4 on Integrity i2 server blades – August 2010
- V8.4 on Integrity rx2800 i2 – Q1 2011

20+ Product Updates

- RTR v5.2
- ABS v4.5
- CIFS v1.1, CIFS v1.2
- OpenView Operations Agent V8.6
- ...And many more

ISV & Partner Ecosystem

- 1500+ OpenVMS applications available on HP Integrity
- Over 90% of ISVs with OpenVMS applications have migrated to HP Integrity

Integrity Adoption Up

- HP Integrity adoption continues to be strong
- Migrations to HP Integrity span all industries

Marketing

- Total Cost of Upgrade white paper from Techwise
- Brochures, data sheets
- Blogs and tweets

<http://h30507.www3.hp.com/t5/Mission-Critical-Computing-Blog/bg-p/199>
<http://twitter.com/HPIntegrity>



OpenVMS CUSTOMER PROGRAM – RECENT EVENTS

Events

- US Technical Update Days
 - Conducted in Chicago, Dallas, Washington and New York
 - Close to 200 customers and partners attended the TUD
 - In-depth Technical sessions for two days
- Webinars – Engineering, Partner Delivered
- User Group events in various cities
- Connect – Feb'10 was OpenVMS Month
- HP European premium event Tech@Work at Frankfurt
- HPTF, Las Vegas
- HP Connect Boot camp at Nashua
- Now OpenVMS TUDs in Europe!



OpenVMS FUNDAMENTALS TRAINING

HP Education - interactive, distance learning

HP OpenVMS customers can access OpenVMS Fundamentals training via new, interactive distance learning program

Online courses are:

- Instructor led
- Pre-recorded
- Self paced

Content is the same as that taught in instructor-led version, u3716s

Includes OpenVMS simulated environment for students to practice

Offers a follow-on opportunity to access HP Virtual Lab for hands-on practice in fully configured OpenVMS environment, with live mentoring from an OpenVMS expert

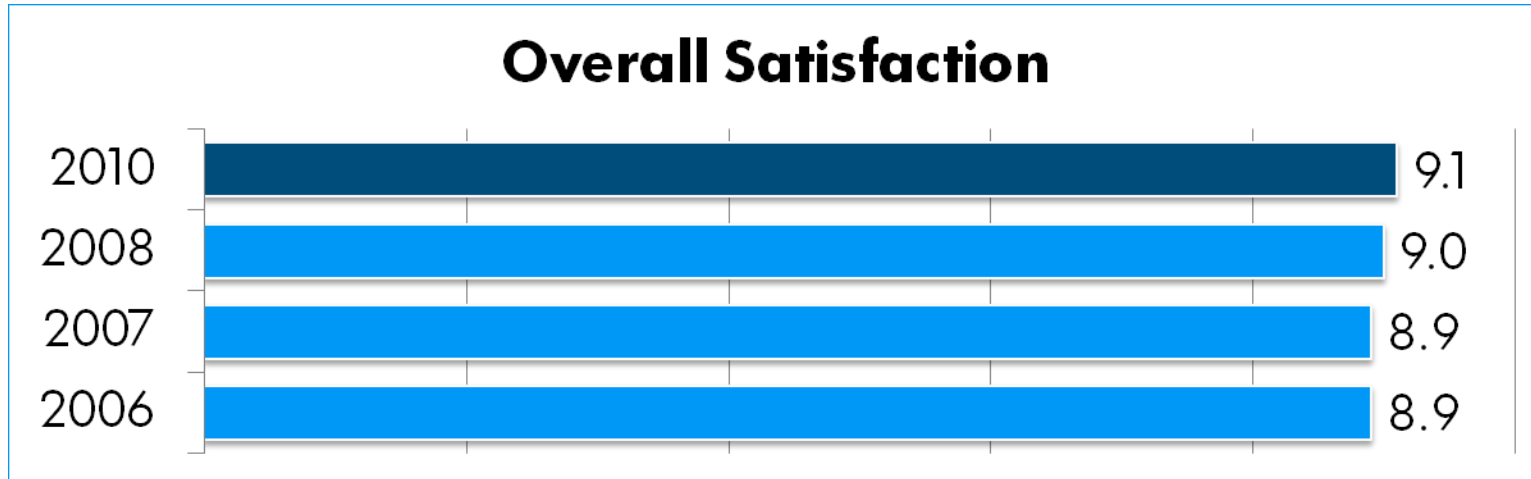
Full curriculum details on course offerings, schedule, and registration at: www.hp.com/learn/openvms

Updated for OpenVMS V8.4



Highlights From Worldwide Customer Advocacy Survey*

We're all about our customers!



OpenVMS continues to receive a high overall satisfaction rating

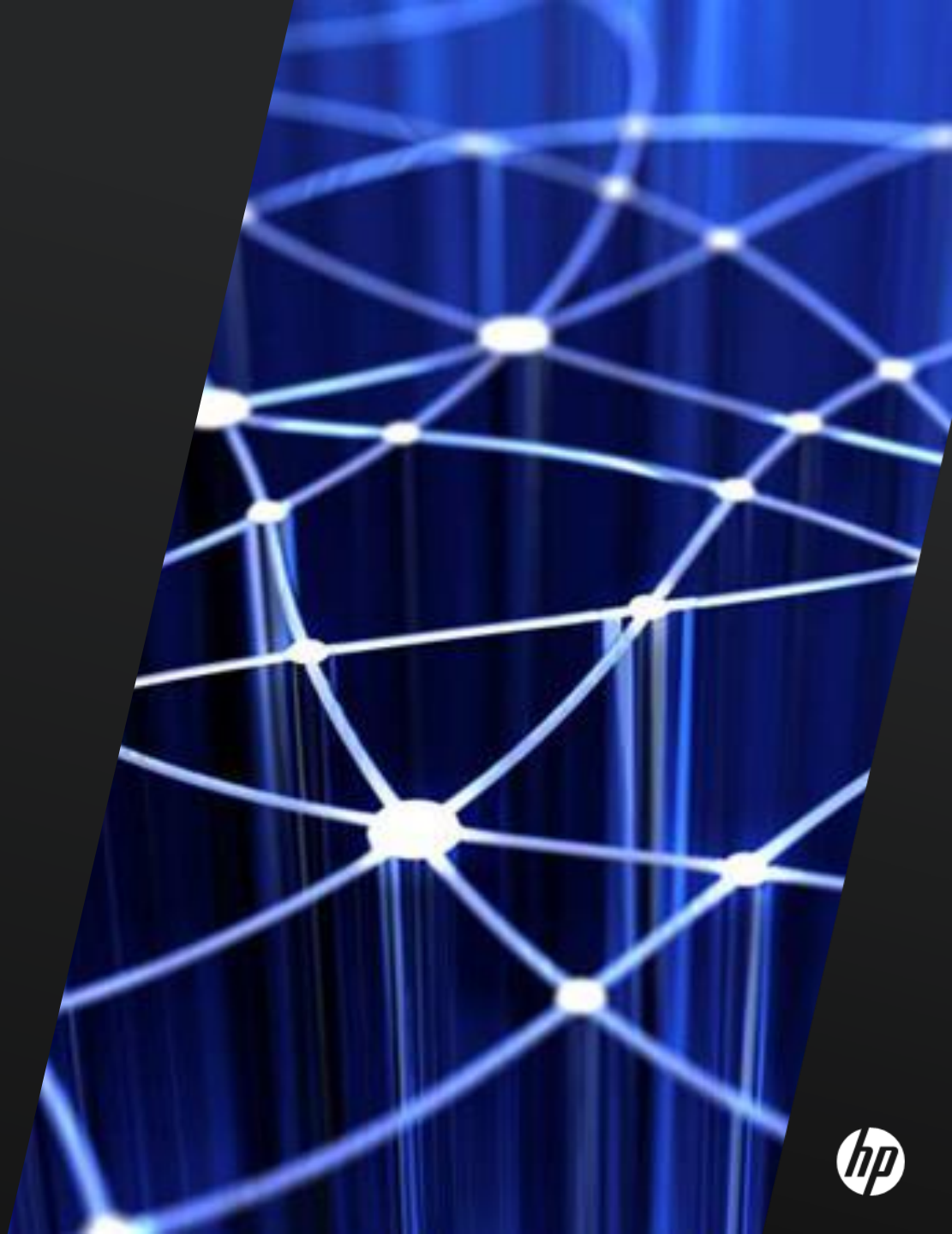
Top areas customers want OpenVMS to focus on going forward:
Open Source, System Management Tools, Development Tools and
Performance Enhancements

*

2006-2008: HP user group world wide survey
2010: HP Connect OpenVMS Customer Survey



ROADMAP & FUTURE DIRECTIONS



CONVERGED INFRASTRUCTURE



Mission-Critical Customer Challenges

Financial Services

Every minute of downtime = a minute of lost revenue!



Manufacturing and Distribution

Production comes to grinding halt



Healthcare

Patient outcomes depend on 24x7 access to data



Public Sector and CME

Customer retention and fraud detection at risk



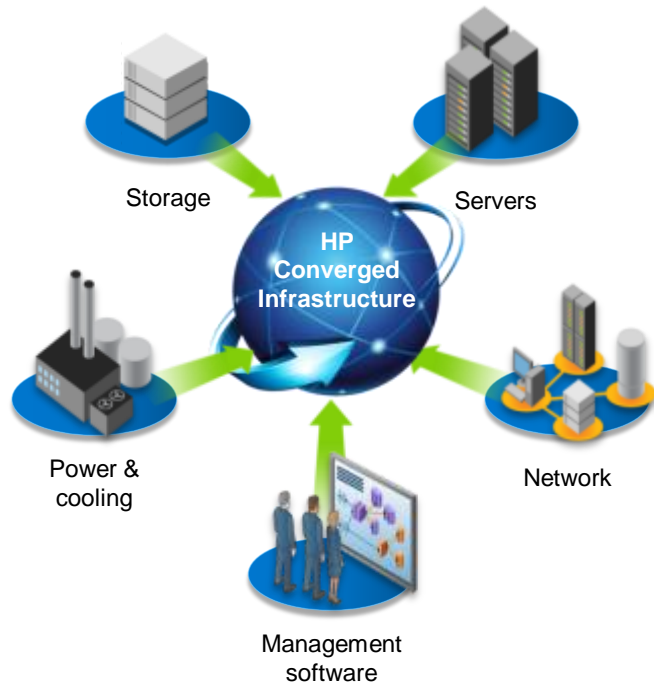
No tolerance for downtime

Increasing SLAs with decreasing budgets

Islands of legacy apps and monolithic systems

The First Mission-Critical Converged Infrastructure

New Integrity systems optimized for the converged infrastructure



A common, modular architecture that simplifies, consolidates, and automates everything

A mission-critical infrastructure delivering the highest levels of reliability and flexibility



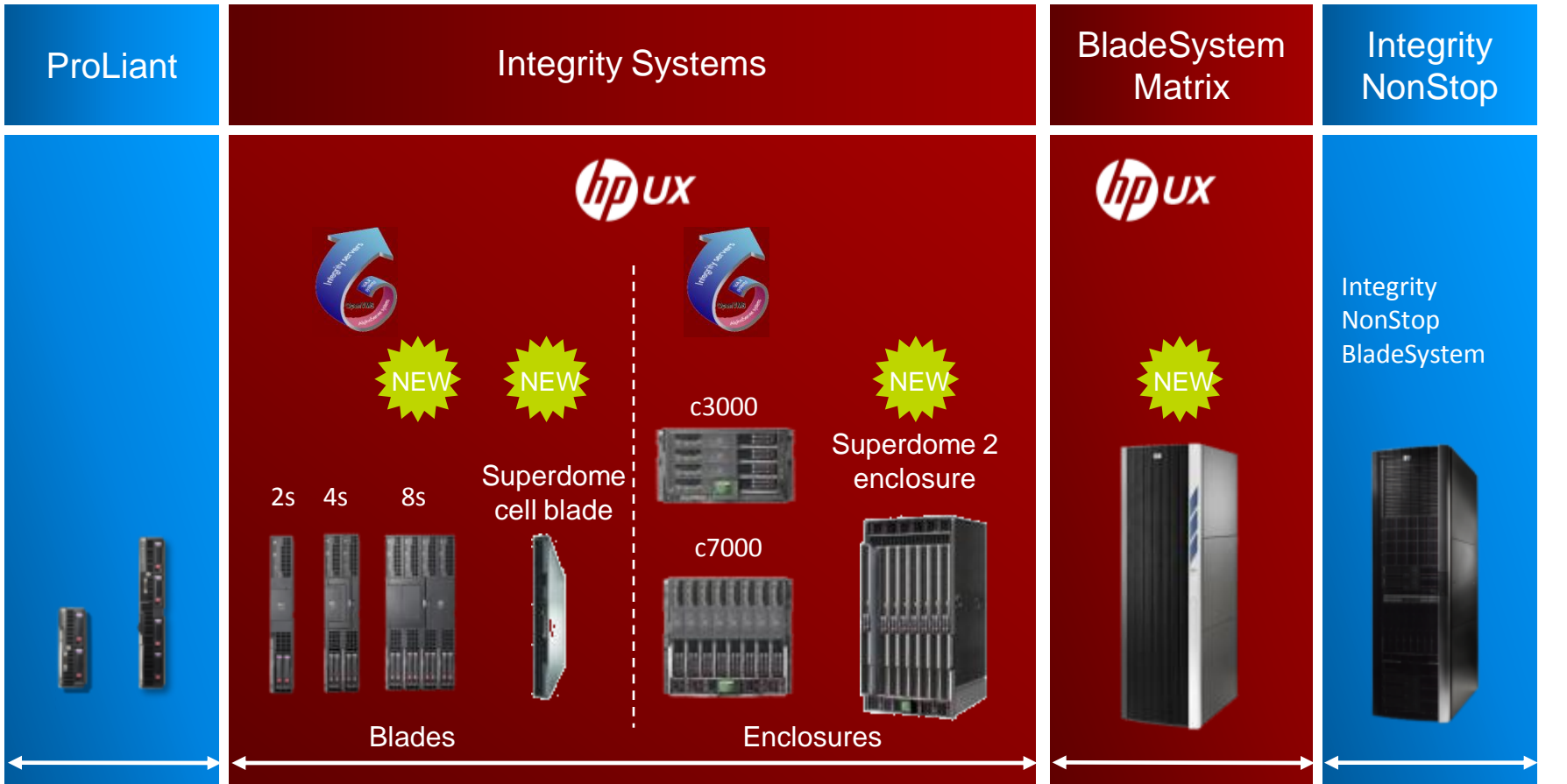
Introducing the Revolutionary Blade Scale Architecture

The first mission-critical Converged Infrastructure on the industry's #1 blade platform



Unified Blade Architecture from x86 to Superdome

Simplify by consolidating applications on a common platform



Intel and AMD x86

2-64s

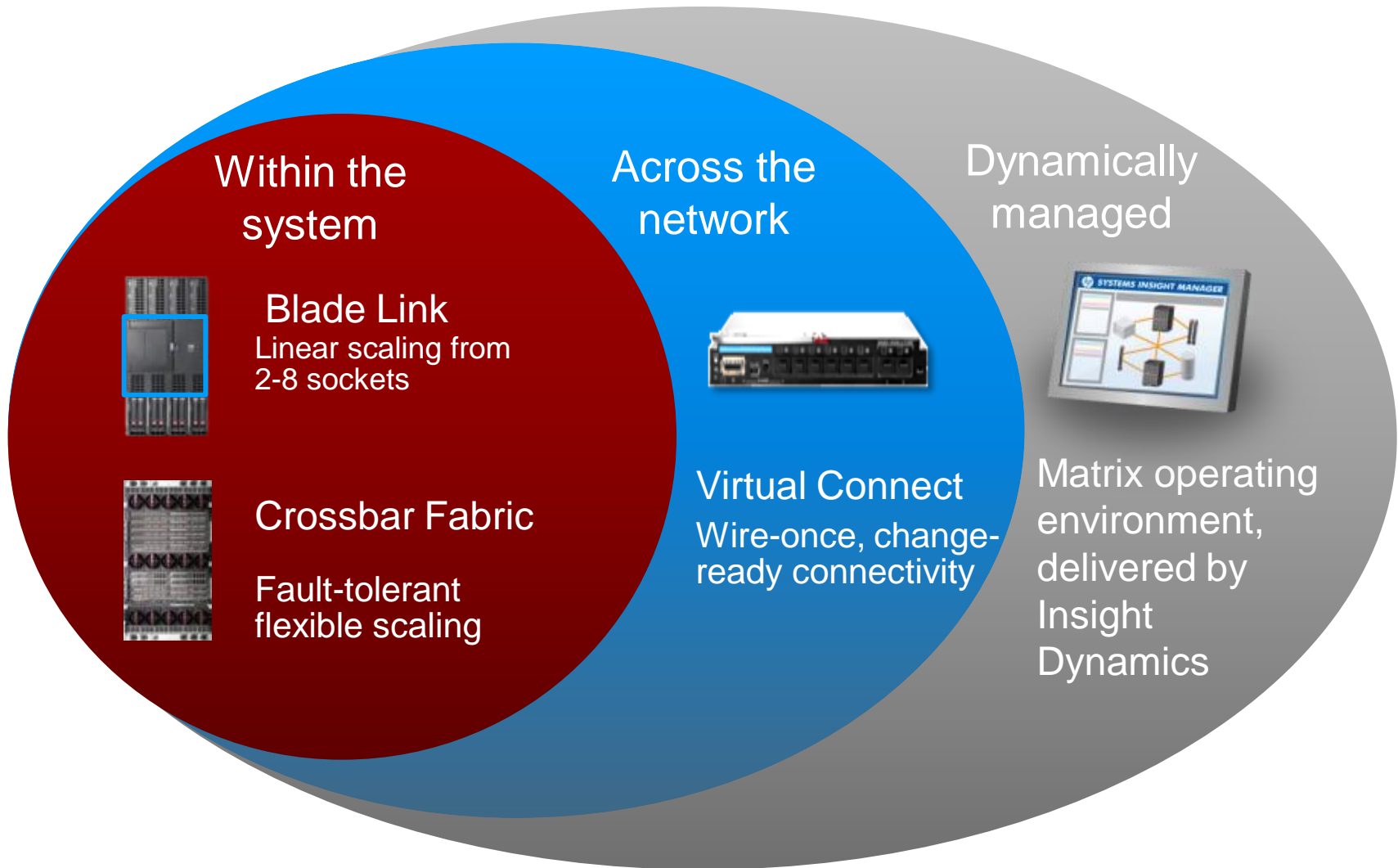
Up to 4,096 nodes

Train once, certify once, deploy once



FlexFabric

Scale resources to meet any workload demand



OpenVMS IN A CONVERGED INFRASTRUCTURE

Components of Converged Infrastructure in an OpenVMS environment

Unified blade architecture
supported August 2010 with
OpenVMS V8.4 on BL8x0c i2

FlexFabric supported with
scalable blade links & support for
Virtual Connect & Flex-10 coming
soon

Always-on resiliency with
Integrity platform and OpenVMS
high availability

Common management with
support for Insight Control via HP
SIM IPM, HP Insight Dynamics -
VSE

Integrity Server Blades with HP OpenVMS

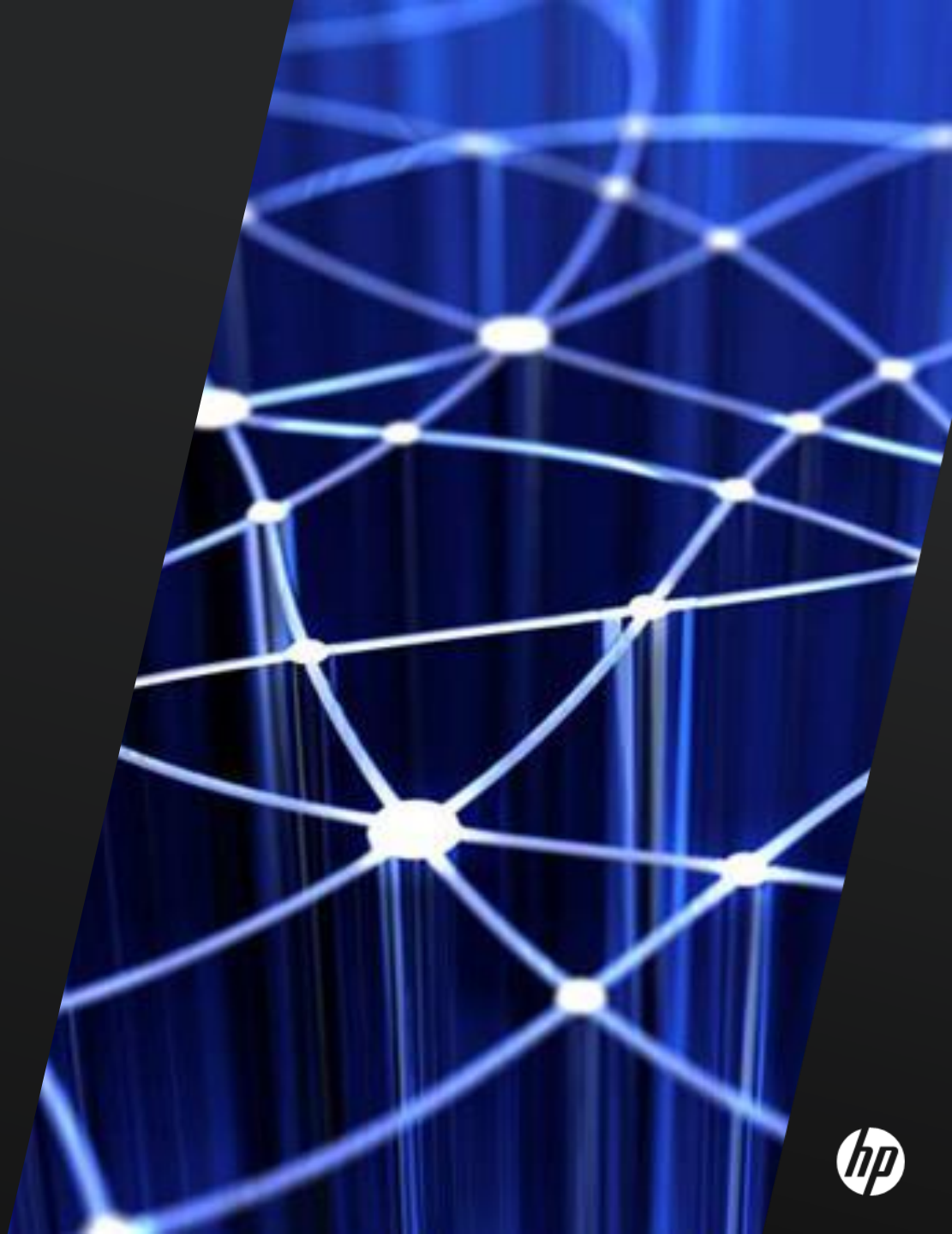


Eliminate downtime

Exceed SLAs with reduced resources

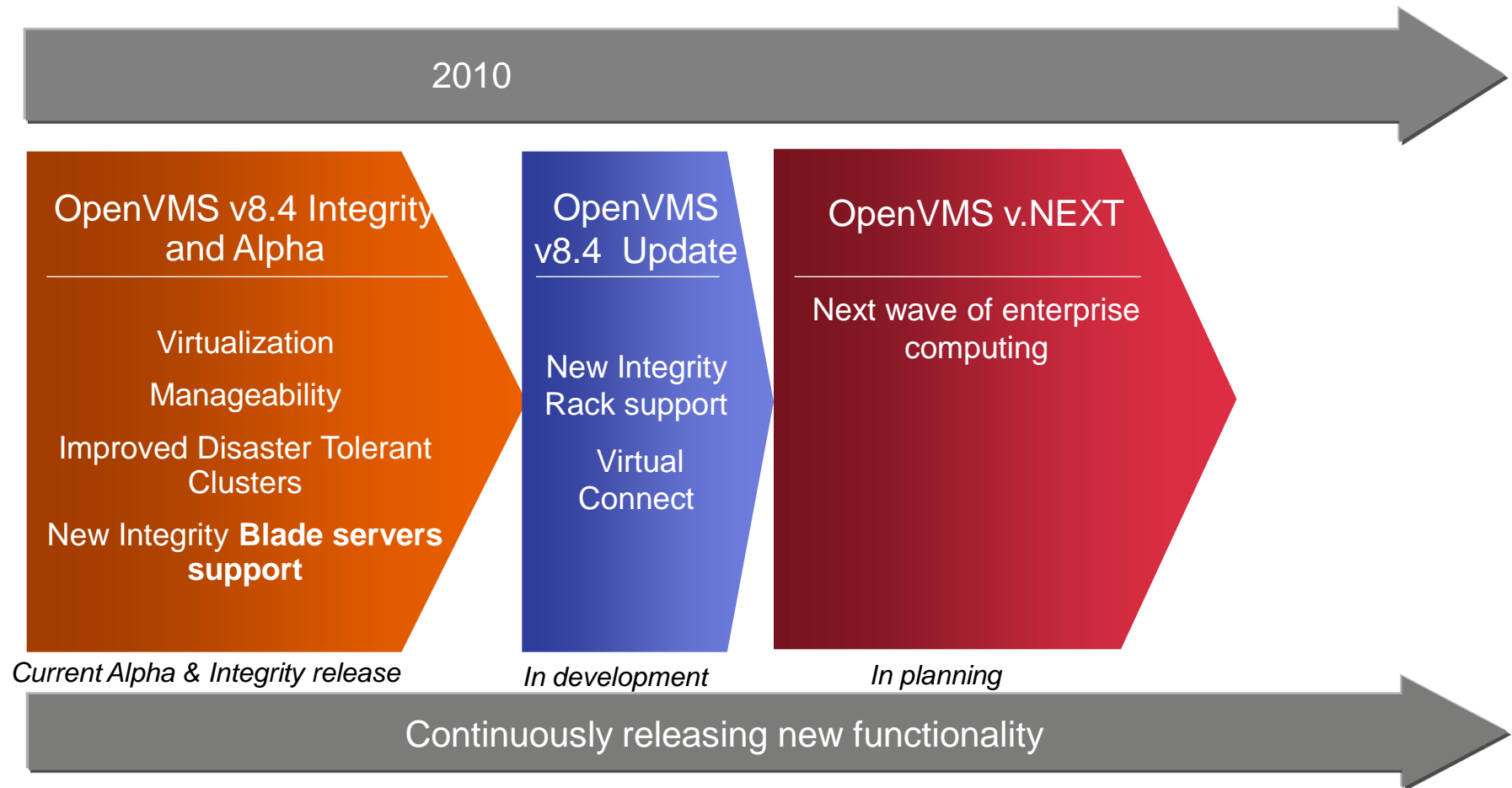
Eliminate islands of legacy applications
& monolithic

ROADMAP



HP OpenVMS SOFTWARE ROADMAP

Continuously delivering mission-critical solutions for over 30 years!



OpenVMS TODAY AND TOMORROW

Continuously releasing new functionality

Future releases:

- New Integrity systems
- Continued virtualization, performance, security, scalability and management enhancements
- OpenVMS V8.4 Update – Future Releases:
 - New Integrity rack systems running Itanium processors
 - Virtual Connect / Flex 10 Support

Current Release:

- OpenVMS V8.4 (Integrity and Alpha)
 - New Integrity blade systems running Itanium processors
 - OpenVMS as a guest operating system on HP Integrity Virtual Machine
 - Clusters over TCP/IP protocol
 - Host-based volume shadowing with up to 6-member shadow sets
 - 2 TB volumes
 - Performance enhancements

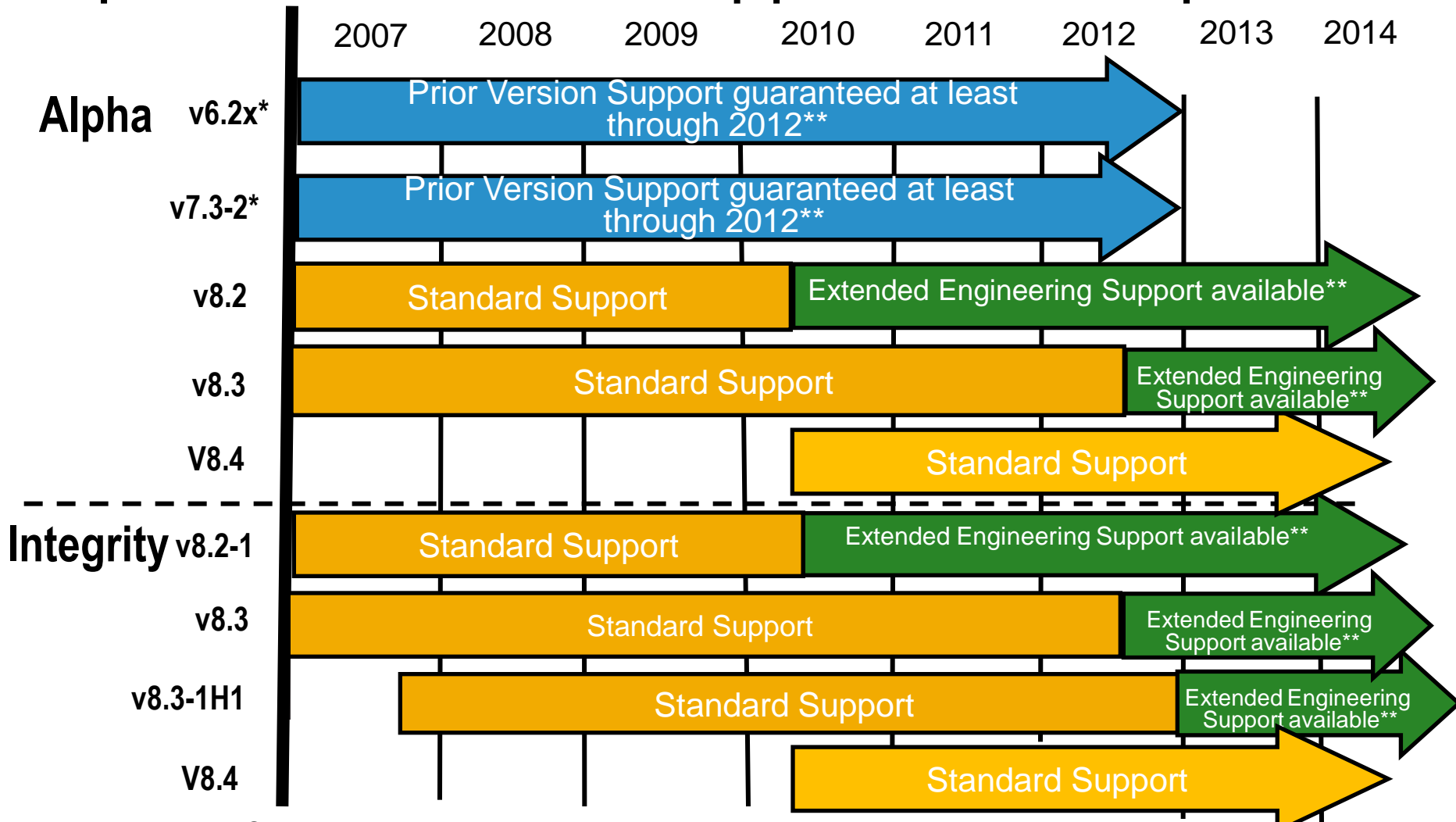
Previous Releases:

- OpenVMS V8.3-1H1 (Integrity only)
 - Intel® Itanium® processor 9100 series
 - BL860c & BL870c Blade Systems, c7000 & c3000 enclosures
- OpenVMS V8.3 (Integrity and Alpha)

Time



OpenVMS Service Support Roadmap



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

** w/24 months prior expiration 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.



OPEN SOURCE ENABLEMENT

We heard you

- Availability of Open Source application on OpenVMS , Version lag
- Effort to Port Open Source applications to OpenVMS and support them
- Community Engagement

Provide Hardware / Software resources to the Community to Port/Test/host Open Source applications on OpenVMS

Work with Open Source foundations/teams to support OpenVMS as a platform

UNIX portability framework

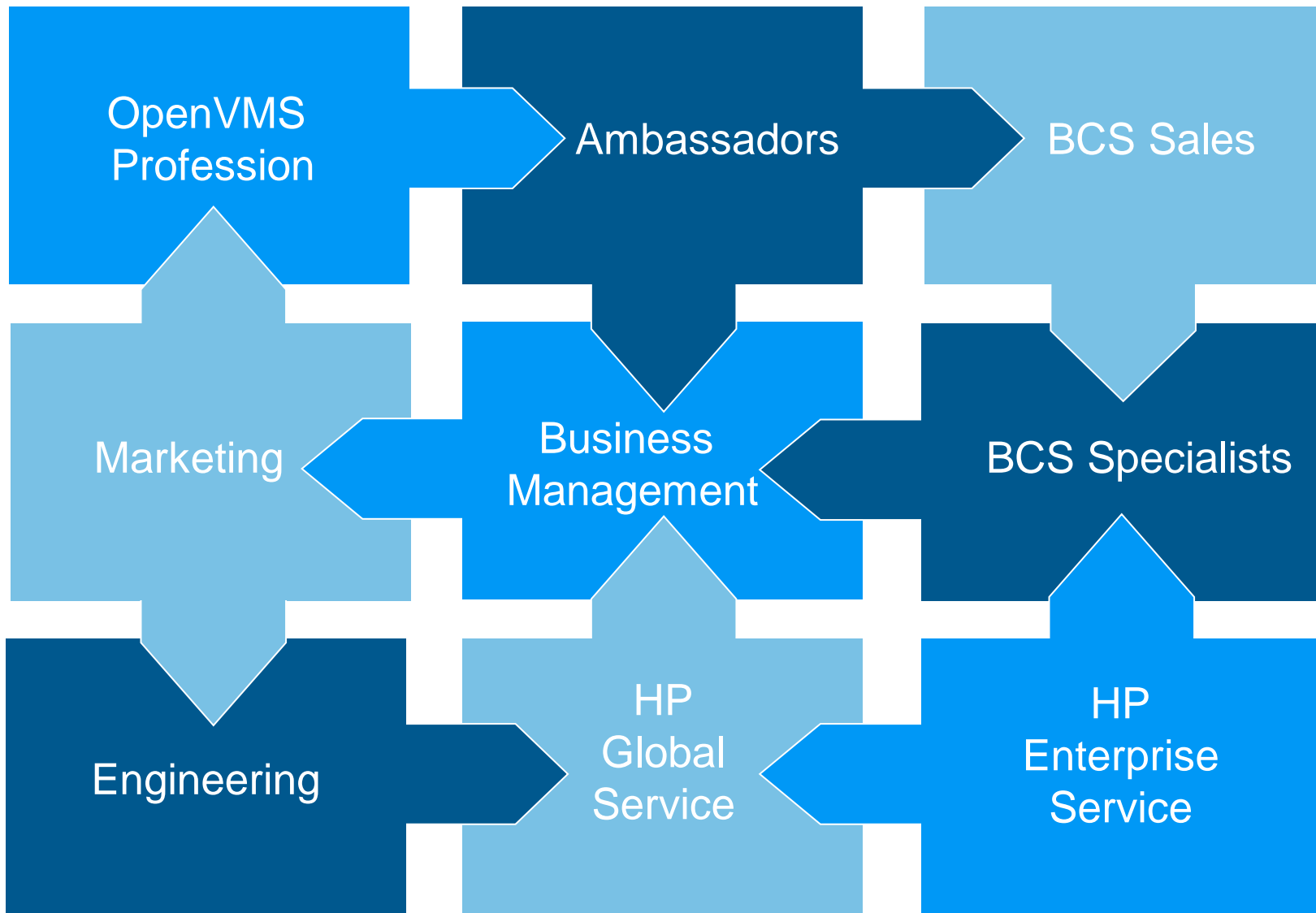


- Hardware made available
 - 26 request community in the first month
- Porting Guidelines
- Webinars
- GNV – 38 upgrade for existing components, 7 new components. Would be updated on SourceForge
- Freeware CD restructuring and Web enablement

OpenVMS CUSTOMER PROGRAM



OpenVMS COMMUNITY ACROSS HP



OpenVMS CUSTOMER PROGRAMS

Nourishing our strong relationships with Customers, Partners and ISV's

- Enable Customers, Partners & ISVs
 - Connect HP OpenVMS Experts to customers/partners on long term basis
 - Assist field deliver quality OpenVMS technical solutions
- Enable Developer & Solution Partner Program (DSPP www.hp.com/go/dspp)
- Close working with universities through EDU & Hobbyist program
- Access to HP Technologies through Customer Lab (similar to PTAC labs)
 - Porting and Migration assistance
 - Technical Consulting
 - Privileged Technology Previews
- Connect with OpenVMS eco system
 - Technical Update Days (TUD), Technology podcasts, Webinars – Engineering & Partner Delivered, HP Connect, VMS Tech Journal, OpenVMS.org
 - Designed for both business and technical audience
- OpenVMS Ambassadors program
 - Direct customer information shaping long term product development
- E-mail: OpenVMS.Programs@hp.com



OpenVMS CUSTOMER LAB

- Do you need to know exactly how fast your OpenVMS application will run on Integrity servers?
 - The OpenVMS Customer lab is the answer
- The perfect place to establish the proof points you need to size your OpenVMS solutions on Integrity
- The Customer Lab personnel have already assisted hundreds of Customers and Partners in migrating to Integrity
- For more info, please see <http://h71000.www7.hp.com/custlab/index.html>



“We managed to reach a max throughput of 3300 private car insurance quotations per minute, each generating up to 50 Insurer results totaling 165,000 complex calculations which is approximately 4 times the maximum load any of our live system currently reach.

The use of different hardware configurations (in the OpenVMS Customer Lab) allowed us to test various deployment options and see the effects of each, comparing single larger systems to multiple smaller system configurations.

The HP OpenVMS customer lab sessions and the results thereof have assisted CDL in gaining new clients and specifying system upgrades for existing clients more accurately.

Robert Trueman
Senior IT Engineer
CDL Internet Services Ltd



HP INTEGRITY SERVERS WITH OpenVMS PROVIDE A SMOOTH TRANSITION



Compiled approximately 500K lines of code, and had the core applications running in around 6 hours



Porting our 1.5 million lines of code to OpenVMS on Integrity required no code changes at all



500,000 lines of Pascal code, only changing 5 lines of code



OpenVMS on Integrity servers provides a stable and reliable platform for our customers' mission-critical environments



Only modified 3% to 5% of code in migration to Integrity



Thank You.

