# Oracle Product Plans for HP Platforms: OpenVMS

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The following is intended to outline our general product direction. It is intended for information purposes only and may not be incorporated into a contract or agreement. It is not a commitment to deliver any material, code, or functionality, and it should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.



# March 2<sup>nd</sup> HP, Oracle, Intel Integrity Web Event

PALO ALTO, Calif. 02-MAR-2006 As part of HP and Oracle's alliance to help enterprises optimize business operations, the companies have increased their commitment to HP Integrity servers running Oracle(r) software. The companies will unveil the news in a live web event featuring chief executive officers Mark Hurd of HP, Paul Otellini of Intel and Larry Ellison of Oracle. The web event, which begins today at 11:30 a.m. ET / 8:30 a.m. PT, is available at <a href="https://www.hp.com/go/hplive">www.hp.com/go/hplive</a>.

For full press release click <u>here</u>.



### Oracle | Hewlett Packard Resources

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APAC - AP

NAS

LAD

**FMFA** 

**Ong Chee Ming** 

**Chee Cheong Lai** 

APAC - JP

Hideharu Kanenobu



#### Oracle Roadmap - OpenVMS

Now

•8iR3(8.1.7.4) Database •9iR2(9.2.0.7) Releases

•20% perf boost

•10gR1(10.1.0.3)

•10gR2 for OpenVMS Itanium

OpenVMS 8.2-1 Required

**Q4CY06** 

•Oracle10*g*R2 Production

for Alpha

•8.2 O/S minimum

•8.3 O/S Cert planned for

**10gR2 – 8.3 Supports** 

**Montecito Chip** 

**Future** 

Next Major

**Database** 

Release

**Itanium only** 

•Alpha 9*i/*10*g* 

patchsets

•10g (10.1.x) Split

Configuration

•11.5.10 w/10g

**Configuration**)

**Application** 

•10g (9.0.4) Split

Configuration

•11.0.3 w/8.1.7

E-Business •11.5.8 w/8.1.7

Suite

Server

•11.5.10 w/9.2

(Split Configurations)

OS

•VMS 7.3-2, 8.2 w/8*i*R3, 9*i*R2, 10gR2

Cert

 Split Configurations allow backend database to reside on OpenVMS. Apps must be on supported middle-tier: HP-UX PA-

RISC, Tru64 UNIX, Linux x86, Windows x86

•8.3 Certification Planning Underway





(Split

### **OpenVMS Roadmap & Directions**

- OpenVMS on Alpha
  - Oracle Database
    - 10g porting thru terminal release
    - Support until at least 2011
  - Application Server & E-Business Suite
    - Split Configuration using VMS as backend database server
    - Support until at least 2011
- OpenVMS on Itanium
  - Oracle Database
    - 10gR2
    - New major database releases to be ported to OpenVMS Itanium only (Aka 11g and on....)



### **OpenVMS Teams at Oracle**

- Oracle Corporate/Oracle Nashua
  - Base porting, quality assurance, stress testing, error diagnosis and error correction
  - Product management, documentation
  - OpenVMS Engineering team working extremely closely with Oracle
- Oracle OpenVMS support dedicated resources in EMEA and US



### **164 Multi-Core Licensing**

"For the purposes of counting the number of processors which require licensing for AMD and Intel multicore chips, "n" cores shall be determined by multiplying the total number of cores by a core processor licensing factor of .50."

http://www.oracle.com/corporate/pricing/sig.pdf



# **Oracle Rdb Status Update**

#### **Norman Lastovica**

Norman.Lastovica@oracle.com

**September 30, 2006** 

Sign up for the Rdb mailing list!

http://www.oracle.com/pls/events/rdb.html





"For decades, our customers have relied on Oracle Rdb to support large-scale production applications and highperformance transaction processing on HP OpenVMS systems. The latest release extends the quality and stability for which Oracle Rdb is known, while providing customers with more choice and the flexibility to easily move to lower cost systems."

> - Steve Hagan, vice president, Oracle Server Technologies



### Rdb Product Development Strategy

- High-end OLTP systems focus
  - High performance
    - Unique scalability on OpenVMS
    - Extensive tuning capabilities
  - High availability
    - Robust on-line management
- Integration with Oracle software environment
  - Oracle Developer Suite
  - Oracle Application Server
  - Oracle Enterprise Manager
  - Oracle Database

**OpenVMS** is the supported Operating System



- Trading commodities, equities & futures: US, UK, Australia, Austria, Sweden, Spain,
   France, Greece, Italy, Switzerland, Hong Kong, Singapore, Korea & Germany
- Mobile phone systems: US, Japan, Hong Kong, UK, South Africa, Peru, Germany, Austria, Czech Republic, Denmark, France, Greece, Portugal and Switzerland
- Semiconductor manufacturing: Worldwide
- Lottery Systems: Europe, Canada, Australia, South America & US
- Automobile manufacturing: Volvo, Nissan, Toyota, Fiat ...
- Short Messaging Service: Worldwide
- Mining: Europe, Australia, US
- Passport control: New Zealand
- Government: Ireland, Department of Social, Community and Family Affairs
- Education: Europe, US, Australia -largest secondary system in Southern Hemisphere
- Smashing Atoms: SLAC
- Satellite Control/Communication: Worldwide
- Reservation systems: Thrifty and Dollar car rental
- Satellite Television: US
- Automatic Toll Systems: US

# Overview – Where Rdb Is Used



### New Sales driven by applications

- **Deutsche Borse & Accenture** 
  - Shanghai Exchange
- **OMX Technology** 
  - Thailand Exchange
  - Singapore Exchange & Hong Kong Exchange
- **EssNet (Lottery Systems)** 
  - Tattersall's, many others
- **LogicaCMG (Short Messaging Services)** 
  - Mobile Phone customer in Ireland
- VCS Aktiengesellschaft
  - BBC Radio
- Cogema
  - 2 new nuclear energy processing plants

New projects with existing customers including SIAER, Sharp, Fidelity Investments, etc







### Press Release, March 7, 2006

# Oracle Unveils Oracle® Rdb 7.2 for HP OpenVMS on HP Integrity Servers and AlphaServer Systems

**Delivers Enhanced Performance and Eases Transition to Low-cost HP Integrity Servers** 

Tuesday March 7, 8:00 ET

#### REDWOOD SHORES, Calif., Feb. March 7/PR Newswire-

**FirstCall/,** Oracle today announced the general availability of Oracle® Rdb 7.2, adding support for HP OpenVMS on HP Integrity servers to provide organizations with more choice and to make it easier for customers running mission-critical applications on HP AlphaServer systems to transition to HP Integrity servers based on the Intel® Itanium® 2 processor.



### Rdb 7.2 Product Family on IA64

Rdb

**DBMS** 

**CDD** 

**Oracle Trace** 

**Replication Option** 

SQS/OCIS

**JDBC** 



# Rdb 7.2 Features Overview

- Increased Maximums
  - ...Number of database global buffers to 1,048,576
  - Database page to 63 blocks, buffer size to 128 blocks
- Index column group enabled by default
- Refined index estimation enabled by default
- Index node pre-fetch performance optimizations
- Transaction rollback performance optimizations
- Caching of AIP entry information
- Improved backup IO performance
- Encrypted database & after-image journal backups for protection of confidential data



### Porting Rdb Applications to 164

- Expect your application to be "Compile & Go"
- Likely visit build procedures
  - Command line switches
  - Alpha/VAX choices

 In the rare case they're required, most changes end up being "one liners"



### **Database Convert Paths**



RMU/CONVERT or RMU/RESTORE

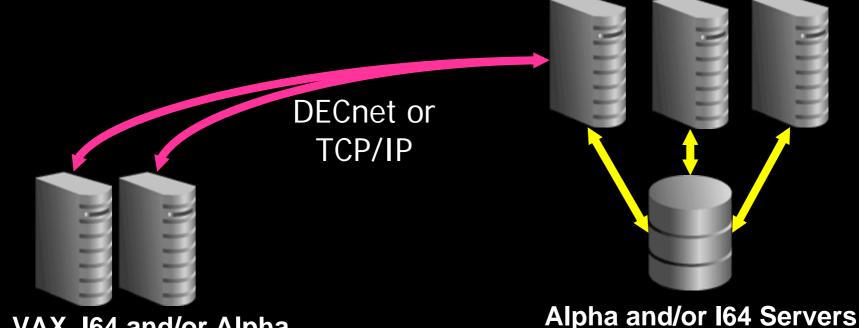




- **▶** Database convert or restore
  - •V7.1 or V7.0 directly to V7.2
  - Prior to V7.0 first to V7.0 or V7.1 and then to V7.2
  - RMU/CONVERT takes seconds to run
- ➤No application recompile/relink when upgrading on same platform



# Remote Network Access to Rdb 7.2 Database



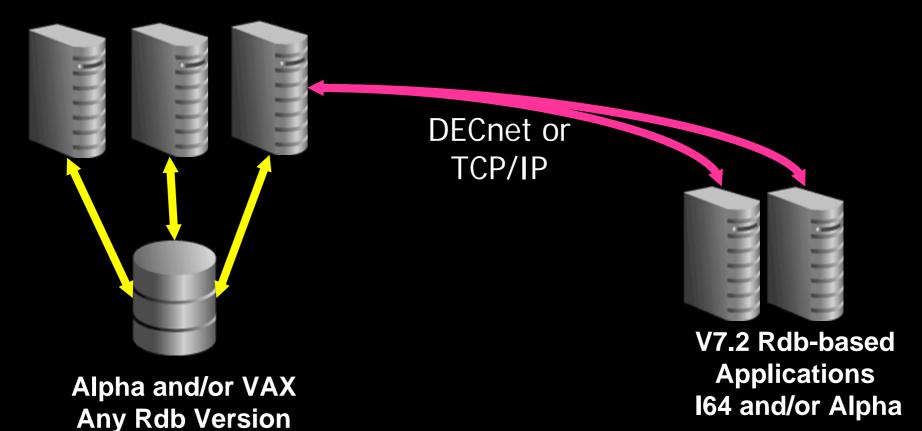
VAX, I64 and/or Alpha Rdb-based applications

Alpha and/or I64 Servers V7.2 Database

- ➤ Clustering allows direct access from 164 or Alpha
- >Built-in network server between versions/platforms
- ➤ Multiple versions of Rdb installed & running on a system



# Remote Network Access to Older Rdb Database



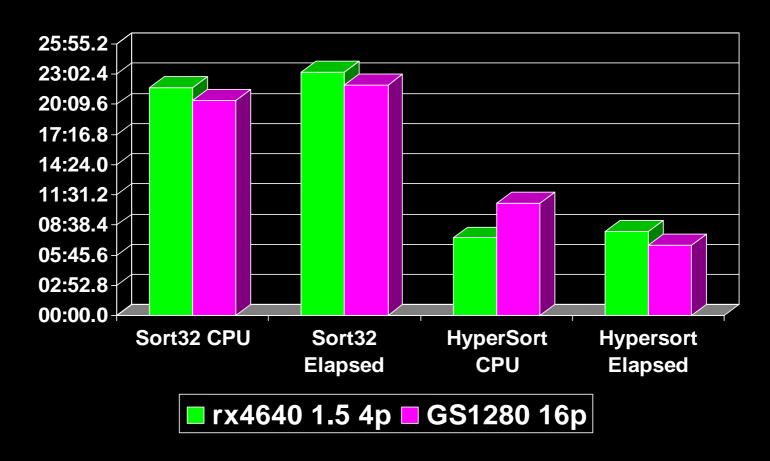


# Performance Overview Rdb on 164



### Sort 100,000,000 records

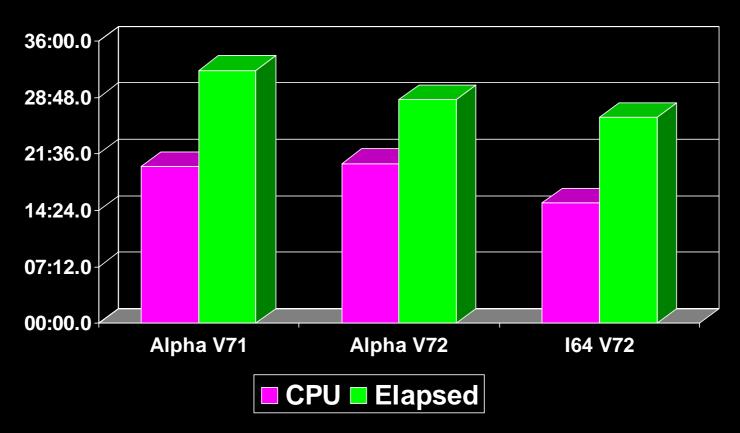
rx4640 vs. GS1280





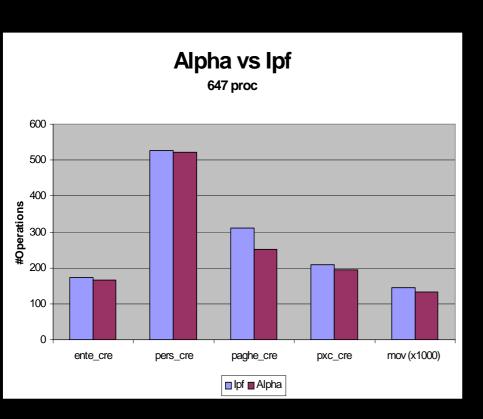
## Create Large Database **8,151 Storage Areas**

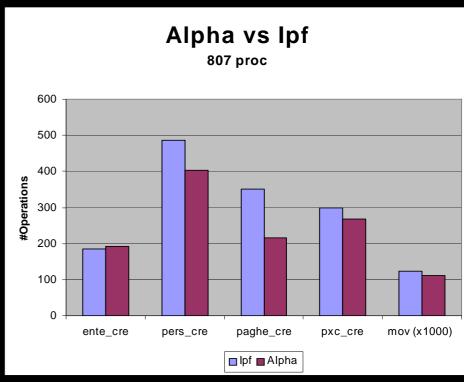
8,151 storage areas, 8,151 partitioned tables, 8,151 indexes = 32,663 logical areas ~28,900,000 10





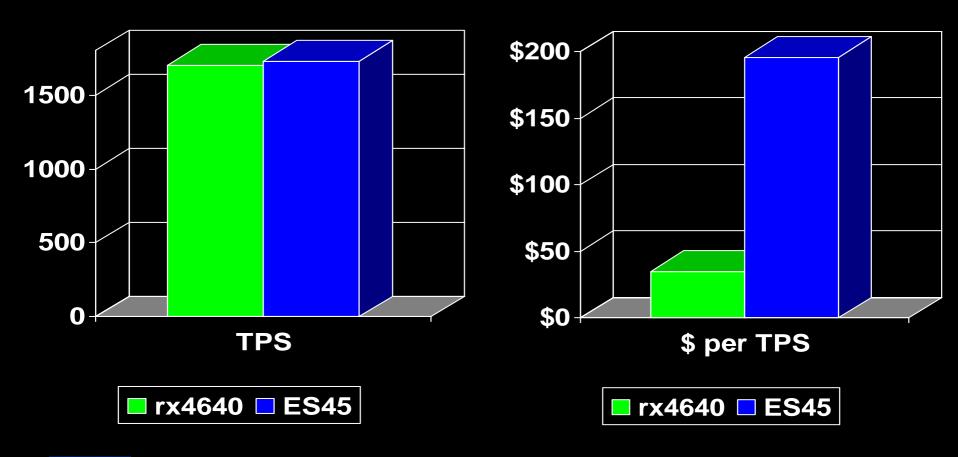
## **Customer's Application Testing**







### ES45 vs. rx4640 30 Process OLTP Workload





### **Rdb on 164 Summary**

- Rdb on Alpha & I64 well tested & stable
- Migrating to Integrity is easy
- Alpha & I64 Clustering
- Rdb 7.2 performance improvements
- Performance & Cost/Performance on Integrity is excellent



### **Oracle Rdb Roadmap**

### Today

Q1CY07

### Future

- •V7.0.8.3 (VAX & Alpha)
- •V7.1.4.5 (Alpha)
- •V7.2.0.2 (Alpha & I64)
- •VMS V8.3 Certified
  - •V7.0.9
  - •V7.1.5
  - •V7.2.1
- •V7.2.1 Features

- •V7.0 & V7.1 maintenance
- •V7.2 maintenance & minor features
- V7.3 feature release



# 7.2.1 Feature Overview

(Scheduled Q1CY07)

- Compression for RMU/UNLOAD & LOAD
- Vastly improved compression for RMU/BACKUP
- Further improved IO behaviour for RMU/BACKUP, RMU/COPY & RMU/MOVE
- SQL Language enhancements
- Run-time durations captured more precisely
  - IO, lock & transaction durations



### Future Project Areas Overview

#### **Development driven by customer needs!**

- Encryption in database
- ODBC
- JDBC
- .NET
- SQL Service/OCI Services HP/UX client
- SQL Enhancements including addition PL/SQL support
- Savepoints
- Lobs
- Performance



### **Rdb Lifetime Support Dates**

	General Availability	Premier Support End Date	Extended Support End Date	Sustaining Support
Rdb <b>V7.0</b>	Oct 1996	Aug 2007	Aug 2009	Indefinite
Rdb V7.1	Jul 2001	Dec 2007	Dec 2010	Indefinite
Rdb V7.2	Jan 2006	Jan 2011	Jan 2014	Indefinite



### **Training Partner List**

Europe, Asia, Middle East & Africa:
 VX Company
 Laren, The Netherlands



http://www.vxcompany.com/rdbtrainingcourses

• Americas:

JCC Consulting, Inc.
Granville, Ohio, United States
<a href="http://www.jcc.com/">http://www.jcc.com/</a> (choose Training)



 Oracle CODASYL DBMS Training Worldwide: Software Concepts International Nashua, New Hampshire, United States <a href="http://www.sciinc.com/training/index.htm">http://www.sciinc.com/training/index.htm</a>





### Summary

After more than 12 years with Oracle, Rdb development continues because Rdb business is healthy & valuable

Cooperation between Oracle & HP means better performance & manageability for our customers

Development strategy maximizes value of Rdb investment



"We are delighted that Oracle has strengthened its commitment to OpenVMS on HP Integrity servers. We are extremely pleased about our continued long-term relationship, delivering some of the industry's most robust, available and secure solutions to support the dynamic and critical needs of customers."

> - Ann McQuaid, general manager, HP OpenVMS





Sign up for the Rdb mailing list! http://www.oracle.com/pls/events/rdb.html

