

Consolidating Oracle Databases to Linux on zSeries

Oracle9*i* and Oracle Database 10g



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Agenda

- Customer Status
- Oracle on IBM Platforms
- Products Available on Linux for zSeries
 - Oracle9*i* Database Server
 - Oracle Database $10\mathrm{g}\,Server$
 - Oracle Collaboration Suite
 - Oracle EBusiness Suite
- Selecting an application database for Linux on zSeries
- Additional Information



Is Anyone Really Doing Oracle on Linux for zSeries?

- Yes!
 - Many customers have asked for support on Metalink
 - Large numbers of downloads from Oracle Technology Network web site
- References
 - State and Local Government
 - Federal Government
 - Utilities
 - Telco
- What is a typical installation?
 - Biggest is 10 z900 IFLs, 50 guests, 20 databases
 - Smallest is 9672 RA6 (1 CPU) running VM/VSE
 - Average is more than 2 IFLs, several databases and plus other infrastructure or middleware





Oracle Products on IBM Platforms

- Porting Process
 - Oracle's dominant development platform is Linux.
 - Products then go to concurrent release and test process
 - Porting Teams port Oracle technology to supported platforms
- Supported IBM Platforms
 - pSeries
 - AIX
 - Linux on Power at next major release of Oracle 10g
 - zSeries with z/OS and Linux
 - Split Tier configurations
 - iSeries for AIX, Windows, and Linux
 - xSeries Linux and Windows
- IBM investment
 - Oracle Competency Centers World Wide
 - Assistance with certifications
 - Testing
 - Redbooks
 - Sizing for Oracle EBusiness Suite

Oracle9*i* Availability

- Oracle9i Database Linux on zSeries
 - Released for general availability in August 2002
 - Products
 - Database Server
 - Oracle Collaboration Suite (OCS) as Split Tier
 - Use any supported middle tier
 - In Linux for zSeries or other platform
 - Oracle9iAS is not supported on Linux for zSeries
- Oracle9i is a 31bit database
 - SGA (memory footprint) limited to 750 MBytes
 - Can be expanded to over 1GByte
- Linux Distributions
 - GA on SuSE SLES7 (SLES7 no longer supported)
 - Currently supported on
 - SuSE SLES8 (64bit and 31bit)
 - Red Hat 7.2
 - No plans to certify on more current distributions









Oracle Database 10g Availability

- Oracle Database 10g for Linux on zSeries released for general availability on Oct 28th, 2004
 - Oracle Database 10g is 64bit only
- Oracle Collaboration Suite (OCS) available at GA
- EBusiness Suite (EBS)
 - EBS in process to be certified on Database $10 \mathrm{g}$ for all supported platforms
 - The EBS for Linux on zSeries will be certified with all other supported platforms
 - Certified with 10.1.0.4 DB and 11.5.10 EBS plus about one month
- Both EBS and OCS are split tier
 - Only database certified to run on Linux for zSeries
- Linux Distributions for Oracle Database 10g
 - GA on SuSE SLES8
 - SuSE SLES9 to be certified in early 2005 (Oracle 10g 10.1.0.4)
 - Red Hat 4.0 will be certified after SuSE SLES9



Oracle EBusiness Suite on Linux for zSeries

- Oracle EBusiness Suite
 - Provides Enterprise functionality
 - Over 50 modules for financials, manufacturing, planning, etc
- IBM can provide
 - Architecture assistance
 - zSeries Planning assistance including sizing
 - Implementation Services
 Browser Based Clients
 Middle Tier Supports
 Concurrent Managers
 Forms Server
 Reports Engine







Oracle EBusiness Suite on Linux for zSeries

- All Linux on IBM eServers Solution
 - Application Server on Linux for xSeries
 - AS 10g
 - Concurrent Managers
 - Forms and Reports Server
 - Database Server Linux for zSeries
 - Oracle Database 10g
- Hipersocket connectivity to legacy data
 - FTPs for legacy data
 - Local
 - Fast
 - Secure





- Oracle OCS is a collaboration framework based on Oracle mail
 - Application logic resides in middle tier
- All IBM/Linux solution available for OCS
 - Application Server on Linux for xSeries
 - AS 10g
 - Database Server on Linux for zSeries







Siebel on Linux for zSeries

- Siebel CRM supports Oracle9i as backend database server
 - Announced November 2004
 - Supported on SuSE SLES8







Oracle Application Server 10g

- Oracle Application Server 10g is *projected* for Linux on zSeries in the Metalink Certification Matrix
 - Specific dates not announced
 - Contact your Oracle Sales Representative for further information





Why Oracle on Linux for zSeries

- Value Statement
 - The best TCO characteristics can be obtained from consolidating many servers with low CPU utilization and taking advantage of the virtualization capabilities of z/VM.
 - However, Linux scales well in an LPAR and may resolve other issues or problems such as availability.
- Linux runs on multiple architectures and provides
 - A common set of tools such as GNU compiler, etc.
 - A common runtime
 - A common skill set for SA and application development
- Select the correct platform for Oracle on Linux
 - zSeries for virtualization
 - Moderate to high I/O
 - Not CPU bound



Selecting an Application

- Proper expectations are a must
 - Performance on zSeries CPUs comparable to CPUs on other platforms of similar speed.
 - CPU speed is not entire story
 - zSeries has definite advantage with applications with mixed CPU and I/O
 - z/VM provides unique abilities
 - To virtualize resources.
 - Simplify management of guests
 - Good planning is a must. IBM can
 - Perform sizing estimates
 - Assist with planning and initial installation needs
- One last thought
 - Benchmarks against other platforms are not a good thing
 - This will only test processor speeds
 - Better to test workloads selected for Linux on zSeries





Information Sources

- Redbook SG24-6552 Experiences with Oracle9i for Linux on zSeries
- Red Piece REDP-3859 Experiences Installing Oracle Database 10g for Linux on zSeries
 - <u>http://www.ibm.com/redbooks</u>
- Oracle information and database downloads
 - <u>http://www.oracle.com/ibm</u>
 - http://otn.oracle.com (Select "download code")
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