Installation and Configuration considerations for LSH from an Oracle EBS perspective



DBMS Consulting, Inc. October, 2010

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- Specialize in Oracle Life Sciences and E-Business implementations and long-term support.
- Thanks to the OHSUG for this presentation opportunity.



Installation and Configuration considerations for LSH version 2.1.3

Agenda

- Oracle Life Sciences Data Hub Release 2.1.3
 - Middle-Tier Server
 - Supported middle-tier platforms
 - Database Server
 - Supported database server platforms
 - Technology Stack Components
 - Client
- Technical Stack for Oracle EBS 11.5.10.2



Installation and Configuration considerations for LSH version 2.1.3

Cont..

- Oracle LSH Architecture
 - Client Tier Architecture
 - Application Tier Architecture
 - Database Tier Architecture
- Oracle LSH Installation
- Critical decision points required in the installation and configuration of EBS and LSH
- Oracle LSH Integration with Other system
- Benefits to organization.



Oracle Life Sciences Data Hub Release 2.1.3

Middle-Tier Server and Supported platforms

Product	Release	Patches
Oracle Apps	11.5.10.2	ATG RUG 5 or RUP 7 ¹
LSH	2.1.3	2.1.3.1 ²

¹ ATG RUP 7 is a requirement for 11gR2 database and is only supported in that configuration

² 11gR2 is only supported on LSH 2.1.3.1 and requires the one-off patch 9507908

Platform	Release
Sun SPARC	Solaris 10 (64-Bit) ¹ Solaris 9 (64-Bit) ¹
Linux x86	OEL 5, OEL 4, Red Hat Enterprise AS/ES 5 and Red Hat Enterprise AS/ES 4

¹ A 64-bit OS running 32-bit E-Business Suite 11i

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Oracle Life Sciences Data Hub Release 2.1.3

Database Server and Supported platforms

Product	Release	Patches
Oracle RDBMS	10g2	10.2.0.3.0, 10.2.0.4.0
OWB	10gR2, 11gR2	10.2.0.1, 11.2.0.1

Platform	Release
Sun SPARC	Solaris 10 (64-Bit) ¹ Solaris 9 (64-Bit) ¹
Linux x86, Linux x86-64 1	OEL 5, OEL 4, Red Hat Enterprise AS/ES 5 and Red Hat Enterprise AS/ES 4

¹ Oracle LSH must be installed in a database tier only configuration on HP-UX Itanium and Linux x86-64. The middle-tier must be one of the other supported platforms for the middle-tier.



Oracle Life Sciences Data Hub Release 2.1.3

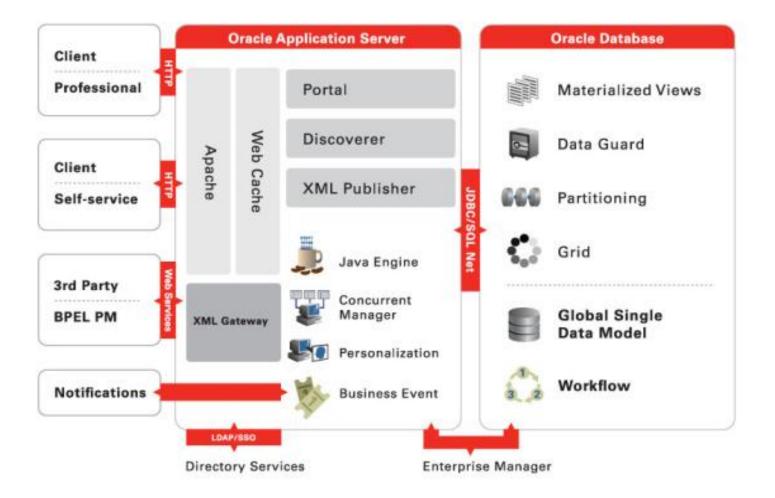
This is the proposed technology stack for the browser tier operating systems:

Platform	Brower	Comments
Window	IE 6.0	
Window Vista	IE 7	with Native JVM – Sun Java Plug-in 1.5 1

¹ Refer to Metalink Note 290807.1: Upgrading Sun JRE (Native Plug-in) with Oracle E-Business Suite 11i for Windows Clients



Technical Stack for Oracle EBS 11.5.10.2



LSH Client Tier	LSH Application Tier	LSH Database T
Consumer Client	LSH Application Logic	LSH Database Server a
Web Browser	Oracle Applications	Oracle Workflow
	Application Tier Tech Stack	
Definer Client	Oracle Applications	Thesaurus Management S Database Server and Sch
LSH Plug-In	Framework	
Web Browser	Oracle XML Publisher	Oracle Warehouse Builde Server and Schema
WinZip	Oracle Reports	Oracle Applications Sch
With Zip	Oracle Discoverer Plus	
Integrated Development Environment(s)		Oracle Database
	LSH Distributed Processing Server	
	Java Runtime Environment	
	SAS Server	

Oracle LSH Architecture



Client Tier Architecture

- Oracle LSH plug-in for launching Integrated Development Environments (IDEs)
- Jinitiator
- Winzip
- Web browser

Application Tier Architecture

Oracle LSH's application tier includes three logical parts:

- Oracle LSH Application Server
- Oracle LSH Distributed Processing (DP) Server
- Processing Systems



Database Tier Architecture

The Oracle LSH database tier includes the following:

- Oracle Enterprise Edition RDBMS
- Oracle Applications Schema
- Oracle Workflow
- Oracle Warehouse Builder (OWB)
- Oracle Thesaurus Management System (TMS)



Oracle LSH Installation and configuration

Oracle LSH Installation:-

- Install the oracle apps 11.5.10.2
- Upgrade the Database to 10.2.0.3 for LSH
- Apply the Required Database Patches
- Install the AD Splicer
- Install the Oracle LSH Release 2.1.3 Patch to Oracle Applications(patch# 8904409)



Critical decision points required in the installation and configuration of EBS and LSH

- Oracle LSH Release 2.1.3 has been tested ONLY on Release 11.5.10.2 of Oracle Applications
- Oracle Real Application Clusters (RAC) enables you to install your database across multiple nodes.
- Oracle Applications Rapid Install prompts you for the database character set. You MUST set this value to UTF8. This automatically sets NLS_CHARACTERSET to UTF8 as well(CANNOT change it later).
- You must download Oracle LSH Release 2.1.3 from My Oracle Support.
 Oracle LSH 2.1.3 available in the form of patch (Download LSH 2.1.3 as patch 8904409 and apply the patch in Oracle apps EBS 11.5.10.2)
- CDR as a synonym for Oracle LSH this is the CDR_TOP

Oracle LSH Integration with Other system

- Integrating Oracle Business Intelligence with the Oracle Life Sciences Data Hub
- Integrating Oracle Clinical with the Oracle Life Sciences Data Hub
- Integrate Oracle LSH with the Oracle Warehouse Builder
- Integrating Informatica with the Oracle Life Sciences Data Hub
- Integrating SAS with the Oracle Life Sciences Data Hub
- Integrating Oracle SQL Developer or Oracle SQL*Plus with the Oracle Life Sciences Data Hub



Benefits to Organization

- Streamline Clinical Development Information Management
- Reduce Risk
- Lower Cost of Ownership
- Simplify Clinical Integration
- Flexible and Extensible Architecture
- Open Integration
- Achieve a Single View of Clinical Data
- Improve Productivity with Self-Service Analysis and Reporting
- Work with Regulators to Optimize Approval Process



System Requirement and Hardware configurations for EBS and LSH

Disk space requirement:

Node Space Required

Node	Instance	Size
Mid-Tier		28 GB
DB Tier	Prod	45 GB
DB Tier	Vision	133 GB

- OS user accounts appmgr, oramgr
- OS Utilities like ar, gcc, g++, ld, ksh, make, X Display Server must exist in PATH. To check the preinstall requirements, you can download the script mentioned in the note <u>402310.1</u> and can verify.



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Thank You

Q/A

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