

Usage of Diagnostic Scripts and Tools in Oracle Applications

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AIM: The Diagnostic Scripts available with Oracle provides an easy to use and efficient way of running the scripts without having access to database and does not require the help of DBA or Technical Consultant. The Diagnostic Scripts are prepared by Oracle and vetted by Oracle Development and therefore it is much more safe and supported by Oracle rather we create our own script and sending it to Oracle. Oracle made it mandatory to run these scripts if the service request logged by customers is data related issues.

Scope: The scope of this Document is to provide an insight into how Oracle Diagnostic Scripts can be effectively and efficiently used to understand the set up and flow of data across different tables and identify the data corruption issues thereby reducing the time lag in raising a service request with Oracle for simple issues

Objective: This Document will provide brief introduction and the details of how to run and use the Diagnostic Script and take corrective steps and what information a Consultant will get out of these Scripts and the list of available scripts and how to run those scripts without the intervention of the Technical people.

Introduction

One of the Common questions arises in the minds of many of the Oracle application functional, technical and techno-functional consultants is how do I get more information or learn the new Module.

The following is the simplest way to understand and learn new modules of interest of your choice

- 1) First go through the User Guide and Implementation Guide which contains the Set up check list which provides the Mandatory / Optional set up required for each module.
- 2) Run the Diagnostic Script which is provided by Oracle as a Set up script for each of this module. This is very important and it helps to identify any missing steps in your set up and any inter-dependencies between the modules are also mentioned in those scripts
- 3) Alternatively you can use the (BR100) which is AIM Methodology Document contains step by step instruction on How to do the set up for each module.
- 4) Before starting of creating Transactions try to understand the function of the module with the use of the following
 - a. The Data Sheet of the Module
 - b. Brief Introduction about the Functionalities of the Module provided by Oracle in the User Guide / Implementation Guide
 - c. Student Guide / Instructor Guides (This is Internal of Oracle and provided only for people attend the session in Oracle University by paying the fees)
 - d. Earlier Releases like 11.5.8 had a Document called Fundamentals Guide was available for every Module. After 11.5.8 it was stopped. This is a very good Document to start with to work on any Module, but it is Oracle Internal Document and not available for public.

- 5) Now you are ready with the set up then how do we learn the flow of Transactions? This is the next question arises with many Consultants. You have the following options to learn easily about any module
- a. Try to get the Student Guide from the Known sources which shows step by step instruction of the flow of transactions.
 - b. System Test Script (TE040) as per AIM Methodology contains detailed Description, Step by Step instruction including Navigation Path
 - c. There are few good articles in Metalink for Example Drop Shipment cycle Note#**168083.1**
 - d. There are few other articles available which are Oracle Internal and available only for people working in Oracle and not meant for Public. So leaving this point also, still you get to know the basic functionalities and only for specific cycle you need to log a Service Request with Oracle to know the steps involved to meet your requirement or need to consult Oracle Consulting.

In this Article, I would like to brief upon how effectively you can make use of Oracle Diagnostic scripts to understand the following

- A. Set up for a Module.
- B. Data Flow of Transaction and Tables involved in every Transaction.
- C. Easiest way to identify Data Corruption and make corrective action.
- D. The Patchset details of the module, Procedures and Packages involved etc.,
- E. The Fields and Columns populated at what stage of a Transaction. For Example, The Accounting in AP populates a record in AP_AE_HEADERS, AP_AE_LINES etc.,
- F. The Diagnostic Scripts are available for all versions of application like 10.7, 11.0.3, 11.5 and R12 also

You have to apply the Diagnostic Patch to get enabled these Scripts as part of Oracle application till version 11.5.10 or Oracle Used to provide Standalone scripts to be run if you log a Service request with Oracle and later on towards end of Dec 2005 they discontinued providing standalone scripts and made compulsory to apply the Diagnostic Patch. After 11.5.10 this has become part of Oracle Application.

There is a fear in the mind of many Customers and DBA application of this patch will impact the functioning of Oracle application or will affect any of the existing functionalities and I have seen this and applied this Patch with several customers Instances and it does not affect any of their existing Functionalities and it provides much more help and reduces the dependency of DBA by functional / technical consultants to get to know the information about the tables, Columns and the patchset information involved in the module.

How do I get to know more information about this Diagnostic Script?

Log on to Metalink / Knowledge / Knowledge Browser / Tools and Training Section / Diagnostic Tools

Diagnostic Tools

Diagnostic Tools - Database And Fusion Middleware

- [Getting Started With RDA 4](#)
- [Getting Started with RDA for Rdb](#)
- [Health Check/Validation Engine User Guide](#)
- [ORA-600/ORA-7445 Error Lookup by Argument](#)
- [Scripts - Database Scripts All Releases](#)
- [Training - RDA 4](#)

Diagnostic Tools - Database Performance and Tuning Scripts

- [Core / Stack Trace Extraction Tool \(Stackx\) User Guide](#)
- [HANGFG User Guide](#)
- [LTOM User Guide](#)
- [OSWatcher User Guide](#)
- [RACDDT 2.5 User Guide](#)

Diagnostic Tools - E-Business Suite

- [Diagnostic Catalog for Release 11.0 & 10.7](#)
- [Diagnostic Catalog for Release 11.5](#)
- [Diagnostic Catalog for Release 12](#)
- [Diagnostics Overview](#)

Key Benefits As per Metalink: Oracle Support Diagnostics are designed to improve:

Problem Avoidance - resolving configuration and data issues that would cause processes to fail

Self Service Resolution - resolving problems without the need to contact Oracle Support

Reduction in Resolution Time - minimizing the time spent to resolve an issue

To know how to install the Diagnostic Patch ask your DBA to follow the Installation Instruction provided in the above navigation path. But as a Safety measure apply the Patch in TEST / DEV Instance and test it out before installing the Patch in Production Instance

After Installation of the Diagnostic Patch in your Instance, you can run these Scripts without the need of DBA running the scripts for you.

There are two ways in which you can run these Scripts

a) In the Main Screen generally you get the following two options

Logon Information for Instance vd03

Logon to E-Business Suite Home

[E-Business Home Page](#)

Logon to Oracle Applications Manager

[Oracle Applications Manager](#)

Click on Oracle Applications Manager and log on with your Login/Password

You get the following screen

[Performance](#) [Critical Activities](#) [Diagnostics](#) [Business Flows](#) [Security](#)

Click on the Diagnostics Hyperlink

Click on Launch Diagnostics Test Button

Here you have to choose the application Module for which you want to run the Diagnostic Script

b) The other alternative is

Log on to Oracle E-Business Suite

Attach the System Administration Responsibility to the User and from there you can launch Diagnostics from the Oracle Application Manager

Navigation Path

Log on to Application

System Administrator / Security / User / Define / Query the User and attach System Administration Responsibility.

This is the Diagnostic Script Screen where in you will find the Application LOV from which you can choose the Application Module for which you want to run the script and choose from the available scripts.

Oracle Diagnostics: Homepage - Microsoft Internet Explorer

http://w11510e05.solutions.oracle.com/JOA_HTML/FP_app?function_id=1016251&rep_id=233720&rep_app_id=170&security_group_id=0&lang_code=US&source=CDWg/foq/cid/3&repv=...

ORACLE Diagnostics

Home Basic Advanced Configuration

Summary LogViewer Search Batch Process

Application: HTML Platform

Diagnostics Summary

Description: This is a summary of all the registered tests for each application. Tests in the basic mode run with default input values, and in advanced mode prompt the user for input values.

Test Summary		Failures in Past Week	
Application	Registered Tests	Application Group	Test
HTML Platform	2	Payables	Activity:oracle.apps.fzu.sp.diag/APClosing 08/14/07 19:57:38.0
Advanced Pricing	3		
Alert	1		
Application Object Library	73		
Applications OBA	12		
Assets	5		
CRM Foundation	40		
Cash Management	2		
Collections	1		
Contracts Core	1		
Cost Management	6		
Email Center	10		
Field Service/Laptop	6		
Field Service/Palm	7		
General Ledger	3		
Global Accounting Engine	3		
Grants Accounting	2		
Human Resources	13		
Incentive Compensation	1		
Inventory	10		
Lease Management	1		
Marketing	6		
Mobile Application Foundation	1		
Number Portability	1		
Order Capture	1		

Oracle Diagnostics: Homepage - Microsoft Internet Explorer

http://w11510e05.solutions.oracle.com/JOA_HTML/FP_app?function_id=1016251&rep_id=233720&rep_app_id=170&security_group_id=0&lang_code=US&source=CDWg/foq/cid/3&repv=...

ORACLE Diagnostics

Home Basic Advanced Configuration

Summary LogViewer Search Batch Process

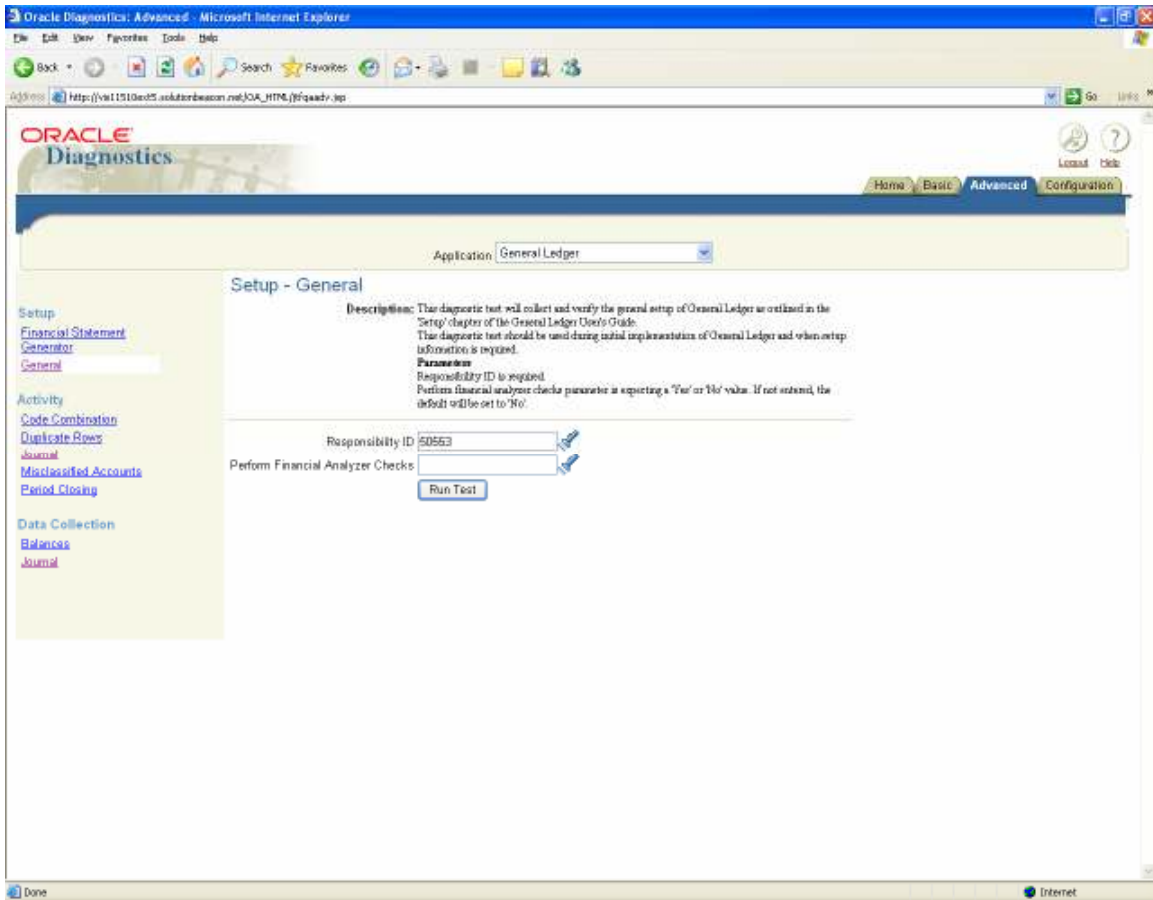
Application: HTML Platform

Diagnostics Summary

Description: This is a summary of all the registered tests for each application. Tests in the basic mode run with default input values, and in advanced mode prompt the user for input values.

Test Summary		Failures in Past Week	
Application	Registered Tests	Application Group	Test
HTML Platform	2	Payables	Activity:oracle.apps.fzu.sp.diag/APClosing 2007-08-22 19:57:38.0
Advanced Pricing	3		
Alert	1		
Application Object Library	73		
Applications OBA	12		
Assets	5		
CRM Foundation	40		
Cash Management	2		
Collections	1		
Contracts Core	1		
Cost Management	6		
Email Center	10		
Field Service/Laptop	6		
Field Service/Palm	7		
General Ledger	3		
Global Accounting Engine	3		
Grants Accounting	2		
Human Resources	13		
Incentive Compensation	1		
Inventory	10		
Lease Management	1		
Marketing	6		
Mobile Application Foundation	1		
Number Portability	1		
Order Capture	1		
Order Management	3		
Payables	14		
Process Manufacturing Logistics	1		
Projects	13		
Provisioning	4		
Public Sector Financials International	4		
Purchasing	19		
Quoting	1		
Receivables	10		
Sales Online	21		
Self-Service Web Applications	3		
Service	3		
Service Contracts	2		
Student Systems	1		
TeleClerk	18		
Universal Work Queue	17		
Warehouse Management	1		

For Example if you want to run the GL set up click on the Hyperlink (and it will open all the available Diagnostic Script for GL Module Enter the Responsibility ID for which you would like to run the script.



Setup - General

Description: This diagnostic test will collect and verify the general setup of General Ledger as outlined in the 'Setup' chapter of the General Ledger User's Guide.

This diagnostic test should be used during initial implementation of General Ledger and when setup information is required.

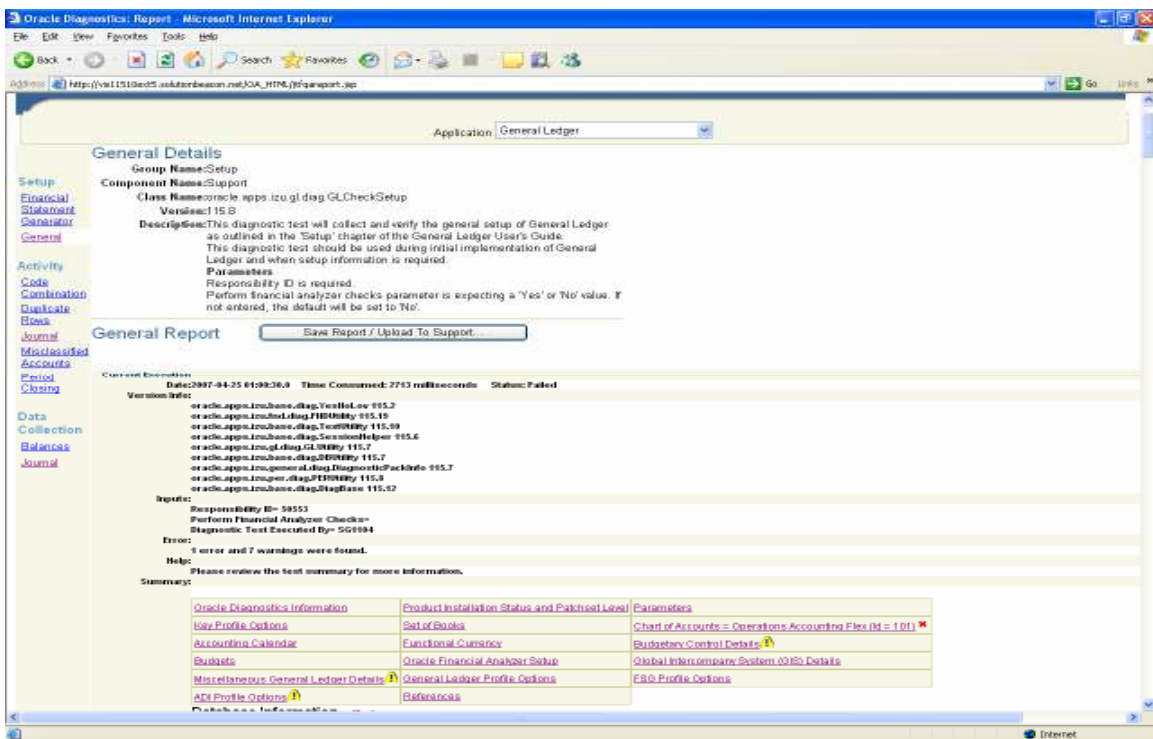
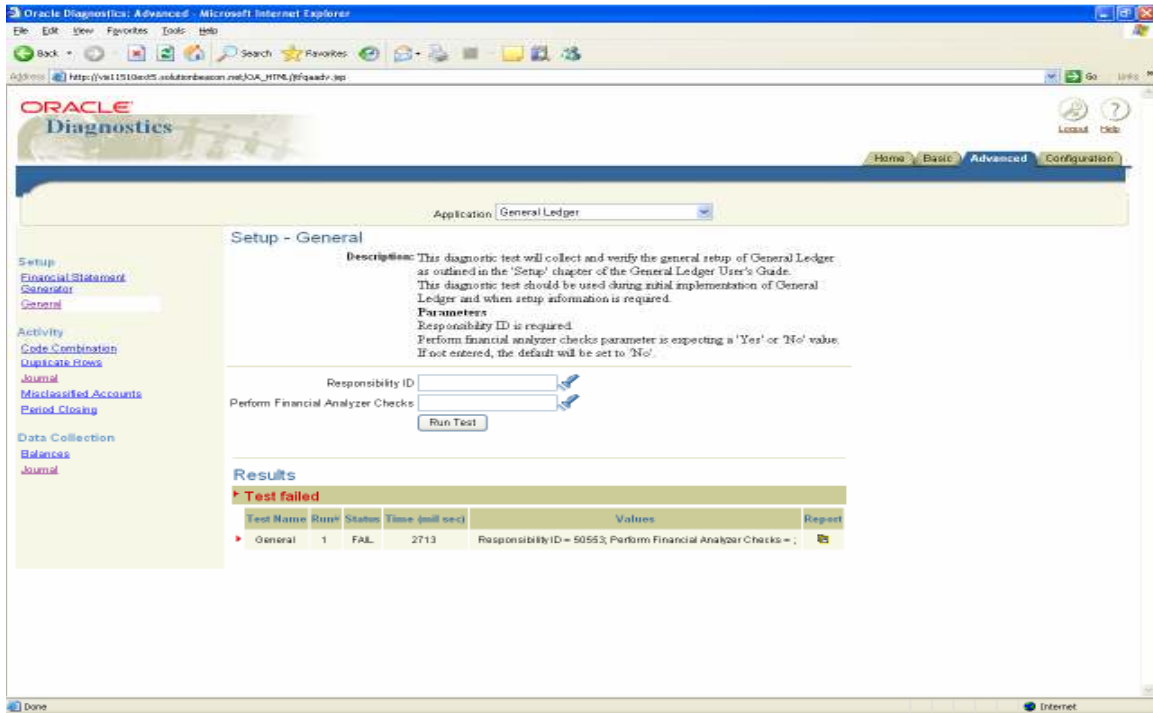
Parameters

Responsibility ID is required.

Perform financial analyzer checks parameter is expecting a 'Yes' or 'No' value. If not entered, the default will be set to 'No'.

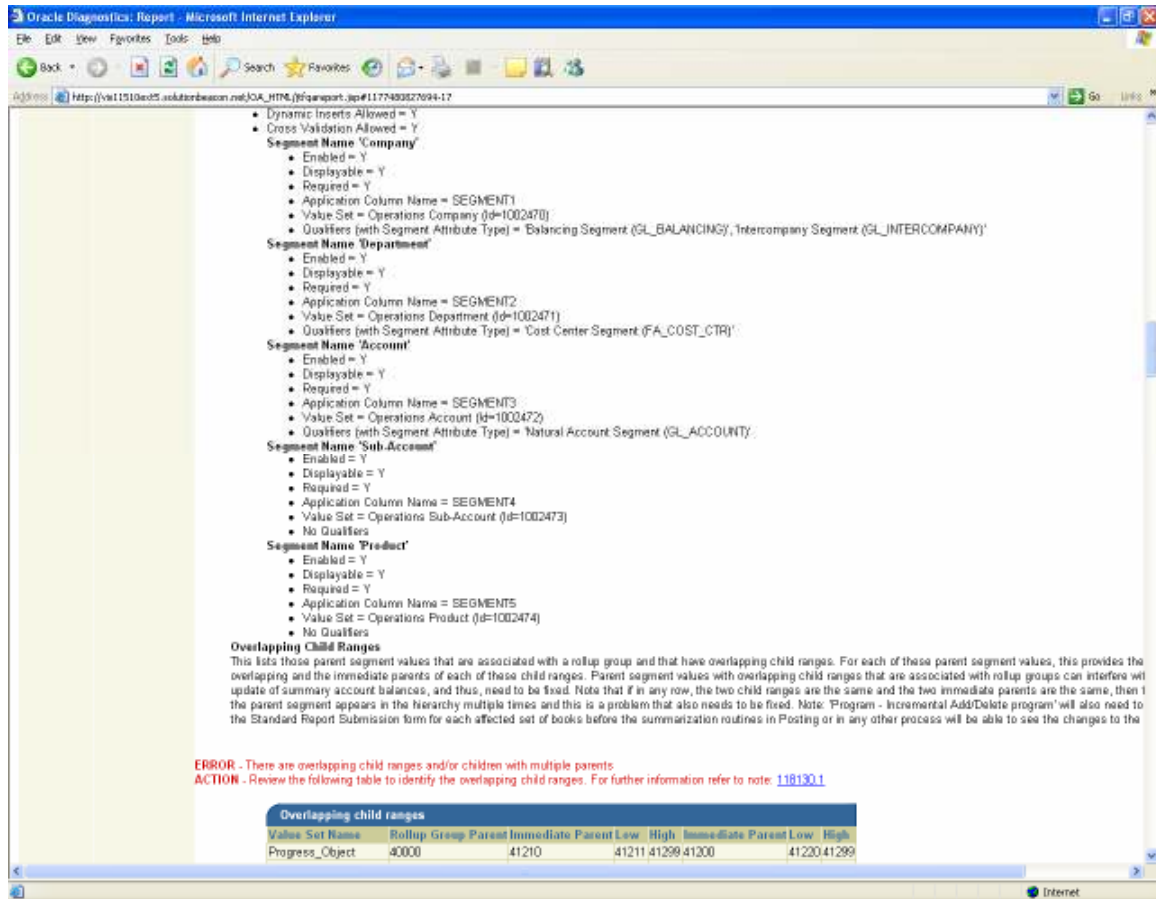
And the output is as follows

The Red Arrow Mark indicates there are certain set up steps were not properly made and you click on the icon below the report it will open the output of the report.



You will find a Red Cross Mark next to Chart of Accounts – Operations Accounting Flex. This indicates something is wrong in this area. Click on that Hyperlink

You will find the error listed below



This way you can easily identify the error and it gives a reference to Note to Metalink on How to correct these errors.

Also there will be yellow icon which will show any warnings in that set up.

I found this is the best available tool for all Oracle Applications Consultants (Functional, Technical or Techno-functional) to learn the set up Data flow Model and become an expert in terms of understanding the flow of data across different tables including the set ups

Let us take another example of the output of a Purchase Order

Steps to run the script

Choose the application as Purchasing

Choose Purchase Order / Release Number

The output is as follows in the following hyperlink
http://vis11510ext5.solutionbeacon.net/OA_HTML/jtfqaprintreport.jsp

ORACLE Diagnostics

Application: Purchasing

Purchase Order/Release Number Details

Group Name: Data Collection
 Component Name: Support
 Class Name: oracle.apps.izp.po.diag.POTransactions
 Version: 115.3
 Description: This diagnostic test will validate data related to a Purchase Order (Standard, Blanket, Planned, Contract) or a Release (Blanket, Scheduled) number, depending on the input value entered

Purchase Order/Release Number Report [Save Report / Upload To Support...]

Current Execution
 Date: 2007-04-25 01:35:31.9 Time Consumed: 2848 milliseconds Status: Succeeded with Warnings
 Version Info:
 oracle.apps.izp.po.diag.POTrans 115.3
 oracle.apps.izp.po.diag.POTrans 115.3
 oracle.apps.izp.po.diag.POTrans 115.3
 oracle.apps.izp.po.diag.POTrans 115.3
 oracle.apps.izp.po.diag.POTrans 115.3
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 oracle.apps.izp.po.diag.POTrans 115.3
 oracle.apps.izp.po.diag.POTrans 115.3
 oracle.apps.izp.po.diag.POTrans 115.3

Inputs
 Responsibility ID= 59578
 Purchase Order/Release Number (Required)= 439
 Document Type (Required)= STANDARD
 Release Number (Required for a Release)=
 Diagnostic Test Executed By= S01994

Error
 0 errors and 1 warning were found.

Help
 Please review the test summary for more information.

Summary

Oracle Diagnostics Information	Product Installation Status and Patchset Level	Parameters
Operating Unit Information	Set of Books Information	Business Group Information
Inventory Organization Information	Purchase Order Header Details	Purchase Order Action History
Purchase Order Line Details	Purchase Order/Release Shipment Details	Purchase Order/Release Distribution Details

Requestion Input

Database Information [Test]

- Server = sbllcs.solutionbeacon.net
- Version = Oracle® Enterprise Edition Release 9.2.0.7.0 - Production
- NameSID = AS10X125
- Language = AMERICAN
- Character Set = UTF8

Application Information [Test]

- Release = 11.5.10.2
- Application = Purchasing (201) with status of INSTALLED
- Responsibility = Purchasing, Vision Operations (USA) (50578)
- MultiOrg Flag = Y
- Operating Unit = Vision Operations (204)
- Security Group = Standard

Oracle Diagnostics Information [Test]

- Patch Oracle Diagnostics 2.3 RUP A (5874725) is installed
- Patch Oracle Diagnostics Support Tools, April 2006 - 0-4 (5092220) is installed
- Metlink Document ID = 205446_1

Product Installation Status and Patchset Level [Test]

Application	Short Name	ID	Installation Status	Patch Level
Advanced Supply Chain Planning	MSC	724	Installed	11i.MSC.I
Bills of Material	BCM	702	Installed	11i.BCM.J
Capacity	CRP	705	Installed	11i.CRP.F
Federal Financials	FV	8901	Installed	11i.FV.K
Flow Manufacturing	FLM	714	Installed	11i.FLM.I
General Ledger	SQLGL	101	Installed	11i.GL.K
Inventory	INV	401	Installed	11i.INV.J
Manufacturing	MFG	700	Shared	Not Available
Master Scheduling/MRP	MRP	704	Installed	11i.MRP.I
Order Management	ONT	660	Installed	11i.ONT.J
Payables	SOLAP	200	Installed	11i.AP.H
Project Manufacturing	PJM	712	Installed	11i.PJM.H
Purchasing	PO	201	Installed	11i.POI
Quality	QA	250	Installed	11i.QA.I
Self-Service Web Applications	KCX	178	Installed	11i.KCX.I
Warehouse Management	WMS	385	Installed	11i.WMS.G
Work in Process	WIP	706	Installed	11i.WPI.I

Oracle Diagnostics Report - Microsoft Internet Explorer

Back Search Favorites

http://val11510aed5.us.kentorbeacon.net/OA_HTML/f?p=apart:ap

Purchase Order/Release Distribution Details [Top](#)

Line Item Num	Shipment Num	Distribution Num	Destination Type	Quantity Ordered	Quantity Delivered	Quantity Billed	Quantity Cancelled	Amount Billed	Destination Org Id	Destination Subinv	Deliver to Location Id	Deliver to Person Id	Set of Books Id	Charge Acct Id	Charge Acct
1	1	1	INVENTORY	500	500	500	0	75196.5	207	RP			1	13401	01.000.1410.0000.000
2	1	1	INVENTORY	7500	7500	7500	0	112500	207	RP			1	13401	01.000.1410.0000.000
3	1	1	INVENTORY	10000	10000	10000	0	1680	207	RP			1	13401	01.000.1410.0000.000
4	1	1	INVENTORY	7500	7500	7500	0	96250	207	RP			1	13401	01.000.1410.0000.000

4 rows retrieved

[See SQL](#)

Purchase Order/Release Receiving Details [Top](#)

Receipt Num	Line Num	Line Id	Shipment Num	Line Location Id	Shipment Header Id	Shipment Line Id	Quantity	PO Unit Price	Usm	Transaction Type	Trx Id Parent
9247	4	36169	1	66625	52225	58110	7500	7.5	Each	RECEIVE	98336 -1
9247	4	36169	1	66625	52225	58110	7500	7.5	Each	DELIVER	98336 98335
9247	3	36169	1	66624	52225	58111	10000	16	Each	RECEIVE	98337 -1
9247	3	36169	1	66624	52225	58111	10000	16	Each	DELIVER	98336 98337
9247	1	36166	1	66622	52225	58112	500	190.393	Each	RECEIVE	98339 -1
9247	1	36166	1	66622	52225	58112	500	190.393	Each	DELIVER	98340 98339
9247	2	36167	1	66623	52225	58116	7500	15	Each	RECEIVE	98347 -1
9247	2	36167	1	66623	52225	58116	7500	15	Each	DELIVER	98348 98347

8 rows retrieved

[See SQL](#)

AP Invoices matched to this Purchase Order/Release [Top](#)

Invoice Num	PO Line Num	PO Shipment Num	Shipment Qty Billed
ERS-9247-348741	1	500	
ERS-9247-348741	1	500	

Oracle Diagnostics Report - Microsoft Internet Explorer

Back Search Favorites

http://val11510aed5.us.kentorbeacon.net/OA_HTML/f?p=apart:ap

Purchase Order/Release Accounting [Top](#)

Receipt Number : 9247 line number : 4 Shipment Number : 1 Transaction ID : 98335
 RECEIVE Accounting is as follows

- 01.000.1410.0000.000.....Dr..96250
- 01.000.2220.0000.000.....Cr..96250

Receipt Number : 9247 line number : 4 Shipment Number : 1 Transaction ID : 98336
 DELIVER Accounting is as follows

- 01.000.1410.0000.000.....Dr..33950
- 01.000.1430.0000.000.....Dr..7515
- 01.000.1410.0000.000.....Cr..96250
- 01.520.7405.0000.000.....Cr..9625
- 01.520.7405.0000.000.....Cr..1680
- 01.520.5210.0000.000.....Dr..22500

Receipt Number : 9247 line number : 3 Shipment Number : 1 Transaction ID : 98337
 RECEIVE Accounting is as follows

- 01.000.1410.0000.000.....Dr..1680
- 01.000.2220.0000.000.....Cr..1680

Receipt Number : 9247 line number : 3 Shipment Number : 1 Transaction ID : 98338
 DELIVER Accounting is as follows

- 01.000.1410.0000.000.....Dr..1080
- 01.000.1430.0000.000.....Dr..760
- 01.000.1410.0000.000.....Cr..1680
- 01.520.7405.0000.000.....Cr..300
- 01.520.7405.0000.000.....Cr..480
- 01.520.5210.0000.000.....Dr..720

Receipt Number : 9247 line number : 1 Shipment Number : 1 Transaction ID : 98339
 RECEIVE Accounting is as follows

- 01.000.1410.0000.000.....Dr..75196.5
- 01.000.2220.0000.000.....Cr..75196.5

Receipt Number : 9247 line number : 1 Shipment Number : 1 Transaction ID : 98340
 DELIVER Accounting is as follows

- 01.000.1410.0000.000.....Dr..75000
- 01.000.1430.0000.000.....Dr..196.5
- 01.000.1410.0000.000.....Cr..75196.5
- 01.520.7405.0000.000.....Cr..150
- 01.520.7405.0000.000.....Cr..46.5
- 01.520.5210.0000.000.....Dr..196.5

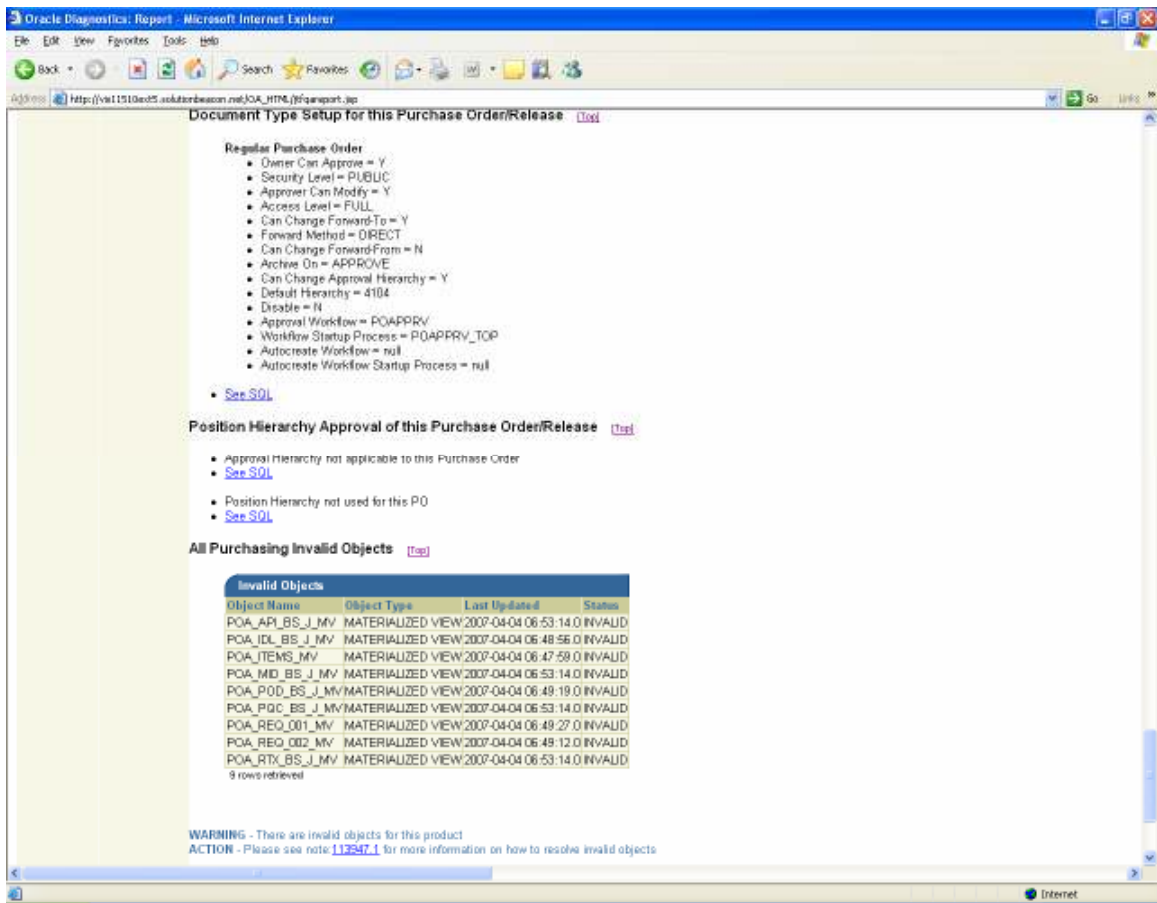
Receipt Number : 9247 line number : 2 Shipment Number : 1 Transaction ID : 98347
 RECEIVE Accounting is as follows

- 01.000.1410.0000.000.....Dr..112500
- 01.000.2220.0000.000.....Cr..112500

Receipt Number : 9247 line number : 2 Shipment Number : 1 Transaction ID : 98348
 DELIVER Accounting is as follows

- 01.000.1410.0000.000.....Dr..67500
- 01.000.1430.0000.000.....Dr..1665
- 01.000.1410.0000.000.....Cr..112500
- 01.520.7405.0000.000.....Cr..1125
- 01.520.7405.0000.000.....Cr..540
- 01.520.5210.0000.000.....Dr..45000

[See SQL](#)



Advantages

- ✓ Easy to use tool to understand the Set up and Data Flow
- ✓ Efficiently can be used to correct Data Corruption issues
- ✓ It helps to identify the Patch set level, Packages, Procedures etc.,
- ✓ Helps to identify the Invalid objects
- ✓ Helps to identify which column of the table updated at what point of time
- ✓ Helps Functional and Technical person to understand the flow of Transactions.
- ✓ Look and Feel has been drastically modified from the text scripts
- ✓ Easy to Load to Oracle Service Request
- ✓ No need of DBA / Technical Consultant to run the script
- ✓ Users can post it to Oracle for creation of New Scripts.
- ✓ Easy way to identify Tables and Columns for creating Reports in Discoverer

To know the list of available Diagnostic Script Click on the Diagnostic Catalogue

Log on to Metalink / Knowledge / Knowledge Browser / Tools and Training Section / Diagnostic Tools

There are Sample outputs of these Scripts available for all the scripts in the above link.