

Daily Business Intelligence: Solutions to Most Common Issues

Sarma Yeddanapudy

Rev 1.0 – 11-Apr-2007

Table of Contents

<i>Abstract</i>	3
<i>Objectives</i>	3
<i>Introduction</i>	3
1. Daily Business Intelligence Installation / Setup Issues	4
1.1. PMV Errors	4
1.2. Dashboard is Blank	5
1.3. Graph Section in Dashboard is Blank	6
2. Data Display issues in Dashboards	7
2.1. Global Start Date	8
2.2. Organization Setup	9
2.3. Time Dimension	10
2.4. Product Category/ Item Setup	11
3. Common errors when a request set is executed	12
3.1. ORA-04031: unable to allocate 83232 bytes of shared memory error	13
3.2. ORA-01555: snapshot too old: rollback segment number 9 with name "_SYSSMU9\$" too small error.	13
3.3. Materialized views erroring out with 'UNUSABLE' index	13
3.4. ORA-06502 And LPX-00210 errors	13
3.5. Dangling keys error	14
4. Debugging Tips	15
4.1. To view the query run by DBI	15
4.2. Bind values for the query	16
4.2.1. View Source	16
4.2.2. Query table	16
4.2. Objects Dashboard Depends on	17
5. General Information on DBI	18
6. Appendix	19

Abstract

This article discusses the most frequent issues users face while implementing Daily Business Intelligence Modules like Supply Chain, Inventory, Manufacturing, Maintenance, Sales and Product Intelligence areas.

This article provides solutions for the installation, parameter/graph display issues, frequent errors encountered while running request sets for dashboards, debugging tips to see actual sql and bind values used for result set run and set-up issues.

Objectives

The following topics will be covered in this paper.

1. Daily Business Intelligence Installation / Setup Issues
2. Data Display issues in Dashboards
3. Common errors when the Request set is executed
4. Debugging Tips
5. General Information on DBI

Introduction

During the implementation of Daily Business Intelligence modules users who run request sets and DBAs face some of the following issues. The purpose of this article is to discuss issues and corresponding solutions.

1. Daily Business Intelligence Installation / Setup Issues

1.1. *PMV Errors*

PMV, Performance Monitor Viewer, is a framework used for displaying data in Daily Business Intelligence. After applying BIS/DBI patches sometimes users start seeing PMV errors while clicking on a report.

Some of the possible reasons are given below:

- ❑ There may be invalid objects related to the concerned module.
- ❑ Installation was not successful (Check the log files).
- ❑ Mismatch between sql query and ak- region attributes (This can happen if .jlt files are not installed).
- ❑ Perhaps apache was not bounced after latest patch was installed.

1.2. Dashboard is Blank

This issue can occur if dashboard is not enabled. To enable, do the following:

Daily Business Intelligence Administrator -> Adminster Content -> Functional Area -> Supply Chain Intelligence -> Implement

ORACLE Daily Business Intelligence Administration

Home Logout Preferences Diagnostics

Parameters Content Key Performance Indicators Reports Geography Request Sets

Administer Content Cancel Apply

Search

Search Go

Functional Area Go

Name	Description	Implement	Configure	Email
Customer Fulfillment Management	Order lines booked, fulfilled, returned, past due, and in backlog, including cycle times and lead times by Organization	<input checked="" type="checkbox"/>		
Inventory Management	Inventory value, annualized Inventory turns and Cycle count by inventory organization	<input checked="" type="checkbox"/>		
Manufacturing Management	Production, Cost Variances, and Manufacturing Efficiency by Plant	<input checked="" type="checkbox"/>		
Manufacturing Management (David)	Production, Cost Variances, and Manufacturing Efficiency by Plant	<input type="checkbox"/>		
Plan Management	Planned revenue, margin, performance, and variance to a compare plan	<input checked="" type="checkbox"/>		
Plant Management	Production, Cost Variances, and Manufacturing Efficiency by Plant	<input type="checkbox"/>		
Product Cost Management	Page that displays performance indicators related to factors affecting product gross margin, such as the fulfilled value of orders and product cost and manufacturing cost variances	<input checked="" type="checkbox"/>		
Product Revenue Bookings and Backlog	Net bookings, revenue, revenue booked this period, and revenue backlog for the sale of products but not for services by sales group and by product category	<input checked="" type="checkbox"/>		
Shipping Management	Shipping performance volume, cycle time, and past due.	<input checked="" type="checkbox"/>		
Sri Shipping Management	Shipping performance volume, cycle time, and past due.	<input type="checkbox"/>		
Transportation Management	Transportation cost, on-time arrival, and carrier billings, carrier payments and the variances by transportation mode.	<input checked="" type="checkbox"/>		
Warehouse Management	Page that displays key performance indicators that relate to tasks and processes in a warehouse like Receipt To Putaway and Pick To Ship cycle times and Capacity Utilization	<input checked="" type="checkbox"/>		

Cancel Apply

[Parameters](#) | [Content](#) | [Key Performance Indicators](#) | [Reports](#) | [Geography](#) | [Request Sets](#) | [Home](#) | [Logout](#) | [Preferences](#) | [Diagnostics](#)

Copyright 2000-2005 Oracle Corporation. All rights reserved. [About this Page](#) [Privacy Statement](#)

1.3. Graph Section in Dashboard is Blank

Most likely X server setting Display is not correct.

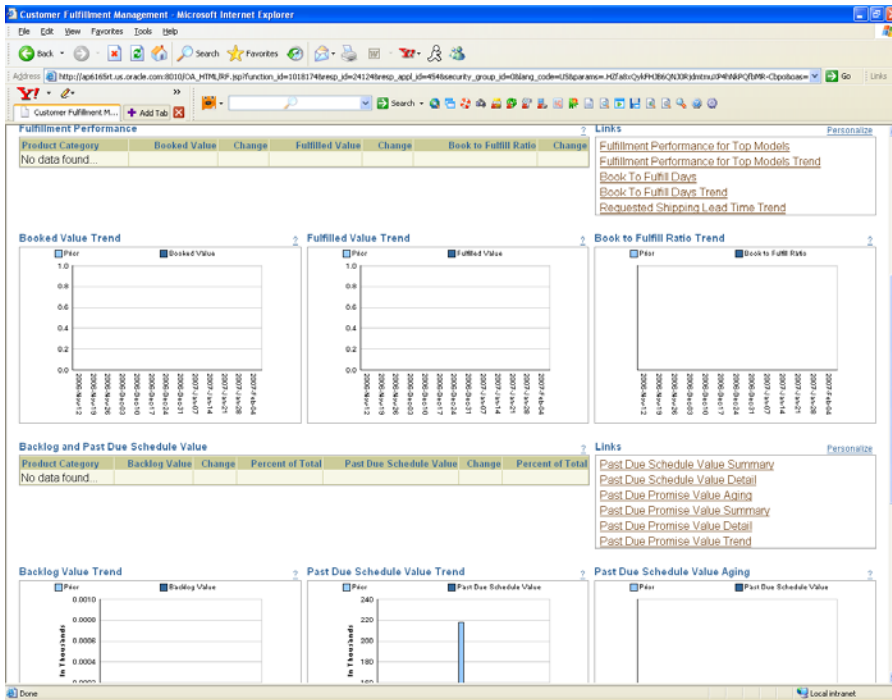
For csh:

```
%setenv DISPLAY <hostname or ip address>:0.0
```

E.g: setenv DISPLAY 192.168.1.128:0.0

For detailed information,

- ❖ [Note 153960.1](#) FAQ: X Server testing and troubleshooting HAS more information.



2. Data Display issues in Dashboards

Request set for Supply Chain Intelligence Dashboards with “clear and load all summaries” option ran successfully but no data could be seen when, say, Customer Fulfillment Dashboard is selected. This section discusses the set-up issues that result in non-collection of data in the DBI objects.

To illustrate some of the dimensions are mentioned below for Customer Fulfillment dashboard.

For detailed information see,

- ❖ [Note.367712.1](#) No Data Found in Customer Fulfillment Dashboard

The screenshot displays the Oracle Customer Fulfillment Management dashboard. At the top, there are navigation links for Home and Logout, and a status bar showing 'GI FY07 Day 59 2007-Jan-31'. Below this, there are filters for Period (Week), Compare To (Prior Year), Organization (All), and Currency (USD). The dashboard is divided into several sections:

- Fulfillment KPIs:** A table with columns for Name, WTD, Change, and Compare Organizations. The data is as follows:

Name	WTD	Change	Compare Organizations
Booked Value	-	-	N/A
Fulfilled Value	-	-	N/A
Book to Fulfill Ratio	-	-	N/A
Backlog Value	-	-	N/A
Past Due Schedule Value	-	-	N/A
Fulfilled Return Value	-	-	N/A
- Fulfillment Performance:** A table with columns for Product Category, Booked Value, Change, Fulfilled Value, Change, Book to Fulfill Ratio, and Change. It displays 'No data found...'. To the right of this table is a 'Links' section with various management links like Inventory Management, Manufacturing Management, etc.
- Trend Charts:** Three line charts are shown at the bottom: 'Booked Value Trend', 'Fulfilled Value Trend', and 'Book to Fulfill Ratio Trend'. Each chart has a 'Peer' and 'Prior' data series, but they are currently empty.

2.1. Global Start Date

If Global start date is not covering the date range of data then underlying materialized views will not collect data to be displayed.

Daily Business Intelligence Administrator -> Global Parameters

The screenshot displays the 'Set Global Parameters' page in a Microsoft Internet Explorer browser. The page title is 'ORACLE Daily Business Intelligence Administration'. The navigation menu includes 'Parameters', 'Content', 'Key Performance Indicators', 'Reports', 'Geography', and 'Request Sets'. The 'Global Parameters' section is active, showing a list of parameters with their current values and edit icons. The 'Global Start Date' is highlighted with a red asterisk, indicating it is a required field. The current value is '12/01/2006'. Other parameters include 'Primary Currency' (US dollar), 'Primary Rate Type' (Corporate), 'Secondary Currency' (Euro), 'Enterprise Calendar' (Accounting), and 'Start Day of Week' (Monday). The page also includes a 'Tip: Only Gif files are supported' and a footer with copyright information and a 'Privacy Statement' link.

Parameter	Value
* Primary Currency	US dollar
* Primary Rate Type	Corporate
Primary Currency Display Name	USD
Secondary Currency	Euro
Secondary Rate Type	Corporate
Secondary Currency Display Name	Euro
Annualized Currency	Primary
Annualized Currency Display Name	Annualised US\$
Treasury Rate Type	Corporate
* Global Start Date (mm/dd/yyyy)	12/01/2006
Custom Logo	
* Start Day of Week	Monday
* Enterprise Calendar	Accounting
* Period	Month
Customer Hierarchy Type	Corporate Hierarchy
Party Market Classification Type	DBI Classification
* Auto Factoring	Yes
High % Range	+999
Low % Range	-999
* Collect Commit Size	1000
* Debug Mode	No

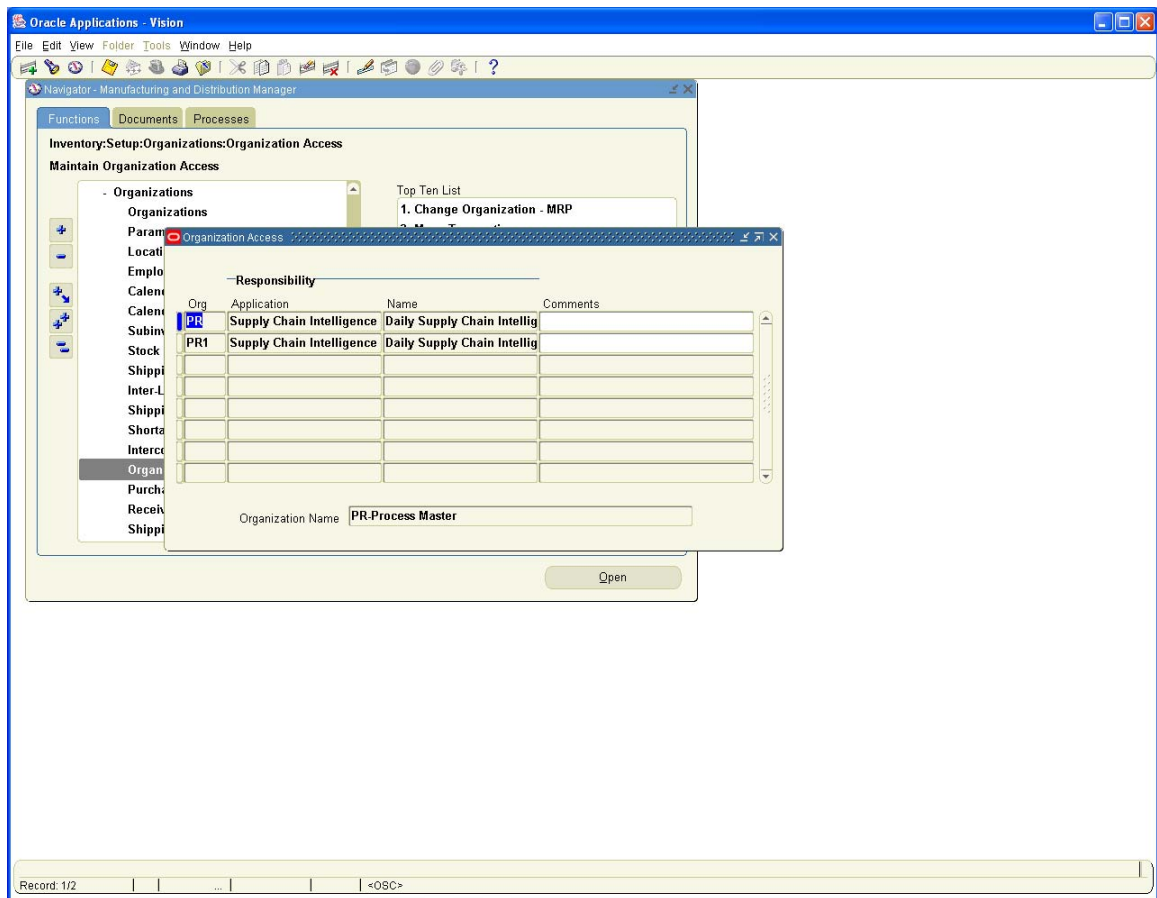
2.2. Organization Setup

Some dashboards are secured by organization access. Unless Organizations are provided access to the responsibility with which user is accessing dashboard, data will not be displayed.

Inventory -> Set Up -> Organizations -> Organization Access ->

In the Name field, Query with say 'Daily Supply Chain Intelligence'

It shows what all the organizations have been added to the responsibility.



Note: The way org access works is that if you do not provide access to any org for a given responsibility, all orgs will be available in the LOV. If you give access to even one org then you have to explicitly provide access to all others you want to see in the Org LOV.

2.3. Time Dimension

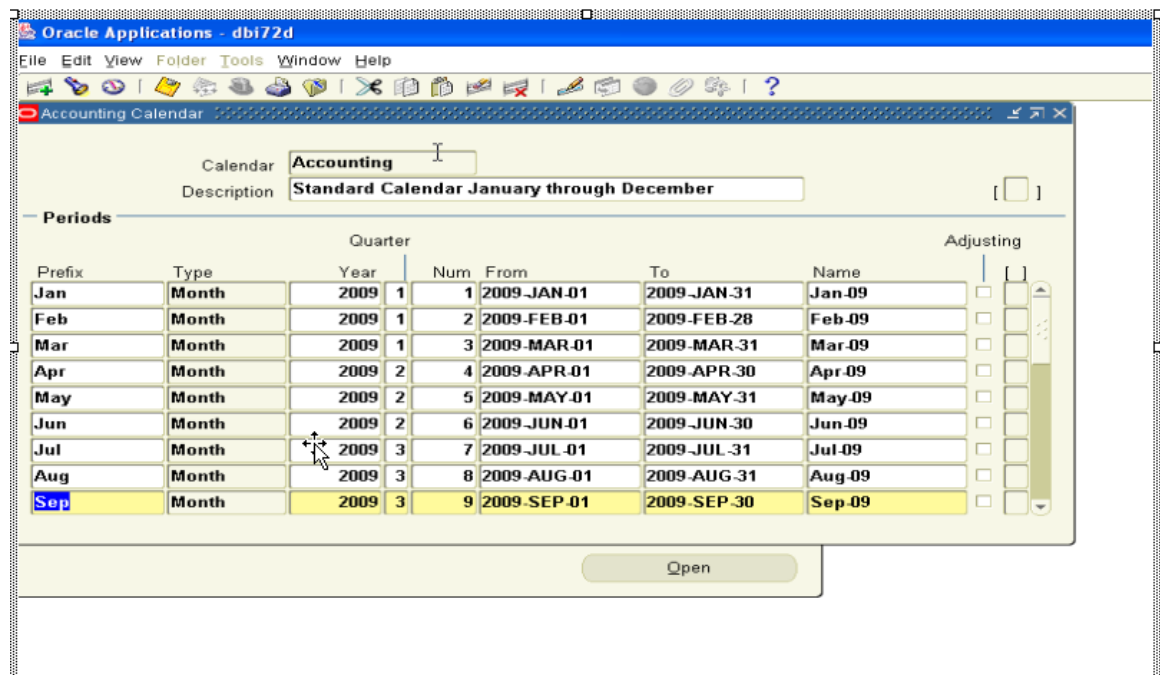
To use dashboards effectively, you must ensure that the Enterprise Calendar has periods defined from the Global Start Date to any future dated transactions that you will report on.

For example, if you are reporting on future dated transactions such as budgets and forecasts, periods must be defined for all possible future and back dated transactions.

GL - Setup- Financials - Calendars- Search for Accounting

Query for the calendar value you found in the DBI Global Parameters for enterprise calendar

Check for missing periods or lacks between periods



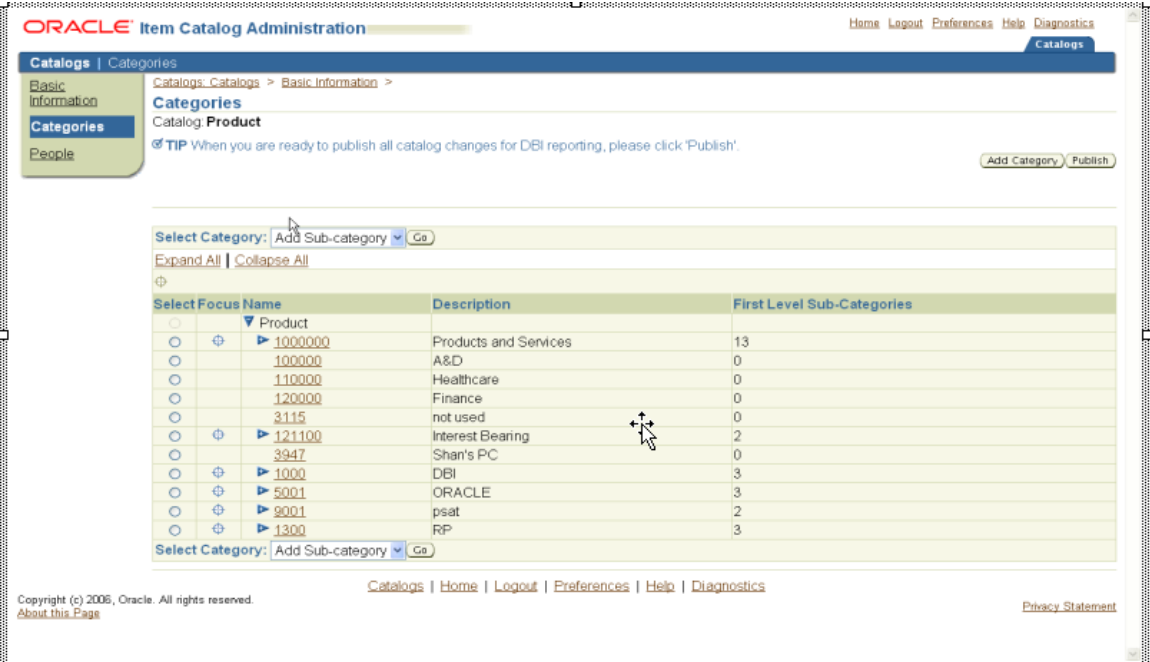
2.4. Product Category/ Item Setup

Item Dimension - Product catalogs need to be setup before running item dimension request set.

- ❑ Log into Oracle Applications using the Item Manager responsibility.
- ❑ Navigate to Advanced Product Catalog Setup > Setup Workbench > Catalogs.
- ❑ Select the Product catalog from the list of available catalogs. The Catalogs window appears.

For detailed information, please see

- ❖ [NOTE.370172.1](#) How To Setup Product Categories IN Supply Chain Intelligence



The screenshot displays the Oracle Item Catalog Administration interface. The page title is "ORACLE Item Catalog Administration". The breadcrumb trail is "Catalogs > Catalogs > Basic Information > Categories". The page shows the "Categories" section for the "Product" catalog. A tip states: "TIP When you are ready to publish all catalog changes for DBI reporting, please click 'Publish'". There are buttons for "Add Category" and "Publish". Below this is a search bar with "Select Category: Add Sub-category" and a "Go" button. There are also "Expand All" and "Collapse All" links. The main content is a table with columns: "Select Focus Name", "Description", and "First Level Sub-Categories". The table lists various categories under "Product", including "1000000 Products and Services", "100000 A&D", "110000 Healthcare", "120000 Finance", "3115 not used", "121100 Interest Bearing", "3947 Shan's PC", "1000 DBI", "5001 ORACLE", "9001 psat", and "1300 RP". At the bottom, there is a footer with "Copyright (c) 2006, Oracle. All rights reserved.", "About this Page", "Catalogs | Home | Logout | Preferences | Help | Diagnostics", and "Privacy Statement".

Select Focus Name	Description	First Level Sub-Categories
Product		
1000000	Products and Services	13
100000	A&D	0
110000	Healthcare	0
120000	Finance	0
3115	not used	0
121100	Interest Bearing	2
3947	Shan's PC	0
1000	DBI	3
5001	ORACLE	3
9001	psat	2
1300	RP	3

3. Common errors when a request set is executed

This section discusses various errors reported when Incremental request set is executed and their solutions.

The screenshot shows the Oracle Daily Business Intelligence Administration interface. The main heading is "Generate Request Set". Under "Indicates required field", there are two sub-sections: "Request Set Name" with a text input field containing "Request set for Supply Chain Intellig" and "Internal Name" with a text input field containing "ISC_INCR_REQ_SET". Below these are radio button options for "Load Summaries" (checked), "Initial Load", "Incremental Load", "Clear and Load All Summaries", and "Gather Table Statistics".

The "Content" section contains a table with the following data:

Name	Internal Name	Type	Remove
Warehouse Management	OPI_DBI_WMS_MGMT_PAGE	Dashboard	
Transportation Management	ISC_DBI_TRANS_MGMT_PAGE	Dashboard	
Shipping Management	ISC_DBI_SHIP_MGMT_PAGE	Dashboard	
Product Revenue Bookings and Backlog	ISC_DBI_REV_BACKLOG_PAGE	Dashboard	
Product Cost Management	OPI_DBI_PRD_CST_MGMT	Dashboard	
Plan Management	ISC_DBI_PLAN_MGMT_PAGE	Dashboard	
Manufacturing Management	OPI_DBI_MFG_MGMT_PAGE	Dashboard	
Inventory Management	OPI_DBI_INV_MGMT_PAGE	Dashboard	
Customer Fulfillment Management	ISC_DBI_CUST_FULF_MGMT_PAGE	Dashboard	

At the bottom of the form, there are "Cancel" and "Apply" buttons. The footer contains navigation links: "Parameters | Content | Key Performance Indicators | Reports | Geography | Request Sets | Home | Logout | Preferences | Diagnostics", copyright information "Copyright (c) 2006, Oracle. All rights reserved.", and a "Privacy Statement" link.

3.1. ORA-04031: unable to allocate 83232 bytes of shared memory error

To fix this error, one of the following should be done.

- ❑ Flush the shared pool
- ❑ Increase the shared Memory

For detailed information, see

- ❖ [Note.374329.1](#) ORA-04031 Unable to Allocate 83232 Bytes of Shared Memory:

3.2. ORA-01555: snapshot too old: rollback segment number 9 with name "_SYSSMU9\$" too small error.

This error could be due to following reasons:

- ❑ Insufficient Rollback Segment Space
- ❑ Corruption in RBS
- ❑ System load is Heavy

For detailed information see

- ❖ [Note.403511.1](#) ORA-01555 Update Material usage and Manufacturing Cost Variance Base Summary Ora

3.3. Materialized views erroring out with 'UNUSABLE' index

To fix this error, one of the following should be done.

- Recreate the Index
- SKIP_UNUSABLE_INDEXES

For detailed information see

- ❖ [Note.398879.1](#) Initial Load for Planning Management Dashboard Results in Error LOAD_SNAPSHOTS ORA-01502:
- ❖ [Note.391970.1](#) Fii_time_cal_day_mv_n1 Initially In Unusable State Running Initial Load Ora-26028:

3.4. ORA-06502 And LPX-00210 errors

Run \$ORACLE_HOME/rdbms/admin/initmeta.sql

For detailed information see

- ❖ [Note.336165.1](#) ORA-06502 And LPX-00210 Errors When Trying To Refresh BIS Materialized View:

3.5. *Dangling keys error*

This error could come from any of the dimensions: Time, Item or Currency.

Open the output file of the failing concurrent request. This output file provides missing data. Fix the data and resubmit the job.

4. Debugging Tips

Some users might be interested to know the actual SQL query run behind a report along with its bind values.

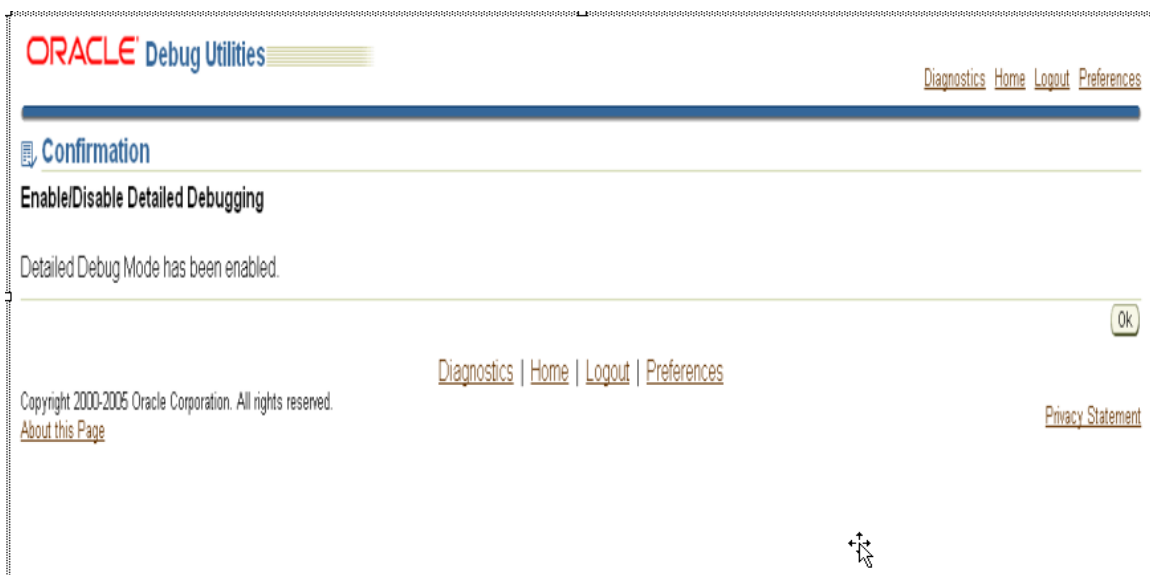
There might also be a need to see all the objects on which report is built in order to customize or query for debugging the issues.

This section covers answers to the above points.

4.1. To view the query run by DBI

Follow the steps below:

- ❑ Daily Business Intelligence Administrator -> Enable/Disable Debugging Press OK. (Note: This is valid only for a session.)
- ❑ Run the report for which you would like to see the query and bind values.
- ❑ Click View source.



4.2. Bind values for the query

In order to see the bind values for a given query, do the following:

4.2.1. View Source

For Example,

```
1/24/2007, 1/24/2006, 1/24/2007, 1/24/2006, 1/24/2007, 1/24/2007, 119, 1/24/2007,  
1/24/2006, 0, 26, 26
```

4.2.2. Query table

```
select function_name,  
       session_value,  
       session_description,  
       attribute_name  
from bis_user_attributes  
where session_id='1935489297'
```

4.2. Objects Dashboard Depends on

Daily Business Intelligence Administrator -> View DBI Object Dependencies
Query for report name or dashboard name.

The screenshot shows the Oracle Daily Business Intelligence Administration interface. The page title is "ORACLE Daily Business Intelligence Administration". In the top right corner, there are links for "Diagnostics" and "Home". The main heading is "View Dependencies", with a sub-note: "Indicates required field". Below this, there is a search filter: "Type" set to "Dashboard" and "Name" set to "Inventory Management", with a "Go" button. Below the search bar are links for "Expand All" and "Collapse All". The main content is a table with the following columns: "Focus Name", "Type", "Programs", and "Columns". The table lists dependencies for the "Inventory Management" dashboard, including "Links", "Cycle Count Adjustment Detail", "OPI_INV_CCA_SUM_MV", "ENI_OLTP_ITEM_STAR", "FIL_TIME_DAY", "OPI_DBI_INV_CCA_F", "OPI_DBI_INV_VALUE_F", "ENI_OLTP_ITEM_STAR", "FIL_TIME_DAY", "Cycle Count Adjustment Summary", and "OPI_INV_CCA_SUM_MV".

Focus Name	Type	Programs	Columns
Inventory Management	Dashboard		
Links	Region		
Cycle Count Adjustment Detail	Report		
OPI_INV_CCA_SUM_MV	Materialized View		
ENI_OLTP_ITEM_STAR	Table		
FIL_TIME_DAY	Table		
OPI_DBI_INV_CCA_F	Table		
OPI_DBI_INV_VALUE_F	Table		
ENI_OLTP_ITEM_STAR	Table		
FIL_TIME_DAY	Table		
Cycle Count Adjustment Summary	Report		
OPI_INV_CCA_SUM_MV	Materialized View		
ENI_OLTP_ITEM_STAR	Table		

5. General Information on DBI

Oracle Daily Business Intelligence Manuals

- Oracle Daily Business Intelligence Implementation Guide
- Oracle Daily Business Intelligence User Guide

Metalink

- <http://metalink.oracle.com/>

6. Appendix

Some Important Notes from metalink

- ❖ [Note.153960.1](#) FAQ: X Server testing and troubleshooting HAS more information.
- ❖ [Note.403637.1](#) Graphs Are Missing From Shipping Management Overview
- ❖ [Note.362706.1](#) Two Different Errors DBI Report "Lines Shipped Late To Promise"
- ❖ [NOTE.370172.1](#) How To Setup Product Categories IN Supply Chain Intelligence
- ❖ [Note.393830.1](#) Load Order Management Base Summary Fails with ORA-0054
- ❖ [Note.374329.1](#) ORA-04031 Unable to Allocate 83232 Bytes of Shared Memory:
- ❖ [Note.403511.1](#) ORA-01555 Update Material Usage and Manufacturing Cost Variance Base Summary Ora
- ❖ [Note.398879.1](#) Initial Load for Planning Management Dashboard Results in Error LOAD_SNAPSHOTS ORA-01502:
- ❖ [Note.391970.1](#) Fii_time_cal_day_mv_n1 Initially In Unusable State Running Initial Load Ora-26028:
- ❖ [Note.336165.1](#) ORA-06502 And LPX-00210 Errors When Trying To Refresh BIS Materialized View:
- ❖ [Note.399517.1](#) Cannot Map Unicode to Oracle Character Error in Customer Fulfillment Management Dashboard
- ❖ [Note.401405.1](#) Pmv-Error-Customquerybuilder- Cumulative Net Booked And Revenue Errors
- ❖ [Note.374327.1](#) Baseline Setup
- ❖ [Note.367712.1](#) No Data Found in Customer Fulfillment Dashboard
- ❖ [Note.403875.1](#) How Can We Configure A User Defined Dimension?
- ❖ [NOTE.334034.1](#) Oracle Daily Business Intelligence Information Center
- ❖ [Note.375573.1](#) How To Determine Which Business Intelligence System (BIS) Patch Has Been Applied
- ❖ [NOTE.312236.1](#) Troubleshooting and Tablespace Requirements for Daily Business Intelligence (DBI)