



What I Wish I Knew about the AP and AR Aging Snapshot Tables

**Oracle Business Intelligence Applications 7.9.6.3
Financial Analytics**

Angela Kmiec, Forsythe Technology
NCOAUG Training Day August 17, 2012

This document and the material contained herein is confidential and proprietary and intended solely for the use and information of the client or customer to whom it is addressed. It should not be copied, disseminated, or used in any other manner without the prior written consent of Forsythe

Abstract

Throughout our implementation of Oracle Business Intelligence Applications 7.9.6.3 for Financial Analytics, the topic of the AP and AR aging snapshot table came up often. This presentation will give a high level overview of the customizations we made related to these tables as well as gotchas we experienced during the project.

Introduction

Resume

- Angela Kmiec
- Forsythe Technology
- Senior Application Developer Analyst

Implementation Background

- Oracle Business Intelligence Enterprise Edition (OBIEE) 11g
- Oracle Business Intelligence Apps (BI Apps) 7.9.6 Financial Analytics
- Accounts Payable (AP) and Accounts Receivables (AR) Dashboards

Problem

Today, our Total AR Outstanding Balance is \$50,000.

I wonder what is was last week?



- How OBIEE does this out-of-the-box?
- What customizations did we make?
- What were our “gotchas”?

How OBIEE does this out-of-the-box?

Warehouse Tables

Source Fact Tables

- W_AP_XACT_F
- W_AR_XACT_F

Aging Snapshot Tables

- W_AP_AGING_INVOICE_A
- W_AP_AGING_SUPPLIER_A
- W_AR_AGING_INVOICE_A
- W_AR_AGING_CUSTOMER_A

- The outstanding AP/AR balance information is broken out into rows.
- Each row represents the outstanding balance information for a particular aging bucket
- Four aging buckets are provided out-of-the-box, with the following durations:
 - Bucket 1: 0 – 30 days
 - Bucket 2: 31 – 60 days
 - Bucket 3: 61 – 90 days
 - Bucket 4: 90+ days

How OBIEE does this out-of-the-box?

Post Load Process (PLP) Mappings

Mappings

- PLP_APSnapshotInvoiceAging and PLP_APSnapshotSupplierAgingAggregate
- PLP_ARSnapshotInvoiceAging and PLP_ARSnapshotCustomerAgingAggregate

Example

W_AR_XACT_F			
12/1/2011	1000	\$5,000.00	\$0.00
4/1/2012	2000	\$5,000.00	\$5,000.00
5/1/2012	3000	\$2,000.00	\$2,000.00
7/6/2012	2000	\$5,000.00	\$0.00
7/8/2012	3000	\$2,000.00	\$0.00
7/20/2012	4000	\$6,000.00	\$6,000.00
8/16/2012	5000	\$7,000.00	\$7,000.00



W_AR_AGING_INVOICE_A			
4/30/12	2000	\$5,000.00	\$5,000.00
5/31/12	2000	\$5,000.00	\$5,000.00
5/31/12	3000	\$2,000.00	\$2,000.00
6/30/12	2000	\$5,000.00	\$5,000.00
6/30/12	3000	\$2,000.00	\$2,000.00
7/31/12	4000	\$6,000.00	\$6,000.00
8/16/2012	4000	\$6,000.00	\$6,000.00
8/16/2012	5000	\$7,000.00	\$7,000.00

How OBIEE does this out-of-the-box?

Dashboards and Analyses

ORACLE Business Intelligence Search All [v] [Advanced] [Administration] [Help] [Sign Out]

Receivables Home Catalog Dashboards [v] [New] [Open] Signed In As **akmiec**

Overview Trend AR Balance Trend AR Balance Daily Payments Due Trend Effectiveness Trend Payment Performance Trend **AR Details**

Receivables Org Name: Forsythe Canada O Client Name: [v] AR Service Representative: [v] Account Manager: [v] Past Due Flag: [v] Invoice Days Until Due: Between [v] [v]

Fiscal Year: 2012 Fiscal Quarter: 2012 Q 3 Fiscal Month: AUG-12 * Fiscal Week: AUG-W2-12 Invoice Days Past Due: Between [v] [v]

Invoice Dollar Range: Between [v] [v] **Apply** **Reset**

AR Details
Scroll down to view all invoice transactions

Sales Invoice Number	Client Name	Region	Account Manager	AR Service Representative	Payment Terms	Invoiced Fiscal Day	Payment Due Fiscal Day	Total AR Invoice Amount	Total AR Outstanding Amount	AR Avg Invoice Days Until Due	AR Avg Invoice Days Overdue	AR Avg Invoice Days Outstanding
7108779	U.S. BANK NATIONAL ASSOCIATION	Enterprise	[v]	[v]	30 NET	05/30/2012	06/29/2012	\$11,242,755	\$11,242,755	0	41	71
7110967	FORSYTHE SERVICE COMPANY	Ohio Valley	[v]	[v]	45 NET	07/18/2012	09/01/2012	\$5,434,933	\$5,127,295	23	0	22
7110267	ALBERT HEINZ	Heartland	[v]	[v]	30 NET	06/28/2012	07/28/2012	\$2,970,594	\$2,970,594	0	12	42
7111977	COMMISSIONER OF THE REVENUE BOARD OF THE COUNTY OF BRADY, COUNTY OF LUTHERAN DISTRICT	Mountain	[v]	[v]	30 NET	08/09/2012	09/08/2012	\$2,671,707	\$2,671,707	30	0	0
7111418	BRIDGEMAN LLC	Mountain	[v]	[v]	30 NET	07/31/2012	08/30/2012	\$2,570,712	\$2,570,712	21	0	9
7110861	LENDING INSTITUTE	Northeast	[v]	[v]	30 NET	07/16/2012	08/15/2012	\$2,444,609	\$2,444,609	6	0	24
7108777	TRAC SYSTEMS LIMITED CORPORATION	Southwest	[v]	[v]	30 NET	05/30/2012	06/29/2012	\$2,325,767	\$2,325,767	0	41	71
7110322	BEVCO CONSTRUCTION COMPANY	Heartland	[v]	[v]	30 NET	06/29/2012	07/29/2012	\$2,311,609	\$2,311,609	0	11	41
7110484	U.S. BANK NATIONAL ASSOCIATION	Enterprise	[v]	[v]	30 NET	07/03/2012	08/02/2012	\$1,978,730	\$1,978,730	0	7	37
7111228	FIRST STATE CORPORATION	Mountain	[v]	[v]	60 NET	07/26/2012	09/24/2012	\$1,945,637	\$1,945,637	46	0	14

Rows 1 - 10

Receivables Org Name is equal to **Forsythe Canada Operating, Forsythe Europe Operating, Forsythe Technology Inventory, Forsythe Technology Operating**
and Total AR Invoice Amount is not equal to / is not in **0**
and Fiscal Week is equal to **AUG-W2-12**

[Analyze](#) - [Refresh](#) - [Print](#)

powered by **ORACLE** **THE**

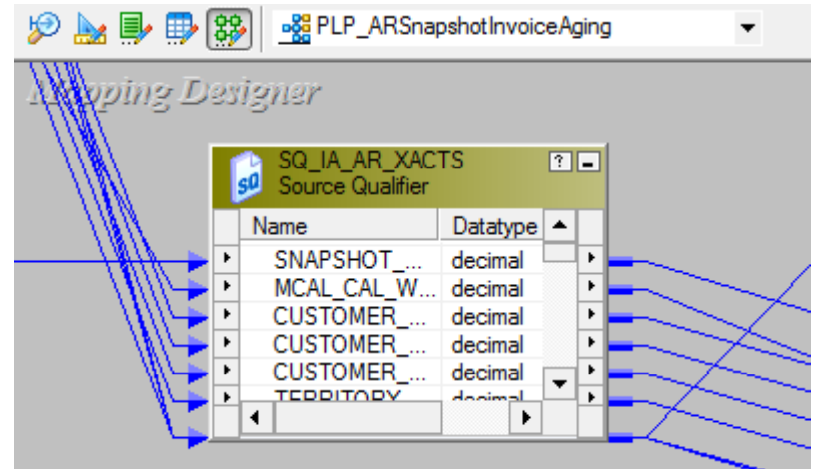
Customizations

Snapshot Date

Example

Mapping: PLP_ARSnapshotInvoiceAging

Source Qualifier: SQ_IA_AR_XACTS



...

WHERE

W_AR_XACT_F.PAYMENT_DUE_DT_WID = DUEDT.ROW_WID AND
W_AR_XACT_F.INVOICED_ON_DT_WID = INVOICEDT.ROW_WID AND
W_AR_XACT_F.DOC_TYPE_WID = W_XACT_TYPE_D.ROW_WID AND
W_AR_XACT_F.DOC_STATUS_WID = W_STATUS_D.ROW_WID AND
W_AR_XACT_F.CUSTOMER_WID = CUST_LIST.CUSTOMER_WID AND

-- W_DAY_D.W_CURRENT_CAL_DAY_CODE = 'Current' AND

-- Added to get the snapshot date as ETL start date

TRUNC(W_DAY_D.DAY_DT) = TRUNC(TO_DATE('\$\$SNAPSHOT_DATE', 'MM/DD/YYYY HH24:MI:SS')) AND
W_XACT_TYPE_D.W_XACT_TYPE_CODE IN ('ORIGINAL', 'PAYMENT') AND
W_XACT_TYPE_D.W_XACT_SUBTYPE_CODE IN ('INVOICE', 'CR MEMO', 'DR MEMO', 'PAYMENT') AND
W_STATUS_D.STATUS_CODE = 'OPEN'
AND W_AR_XACT_F.DELETE_FLG='N'

...

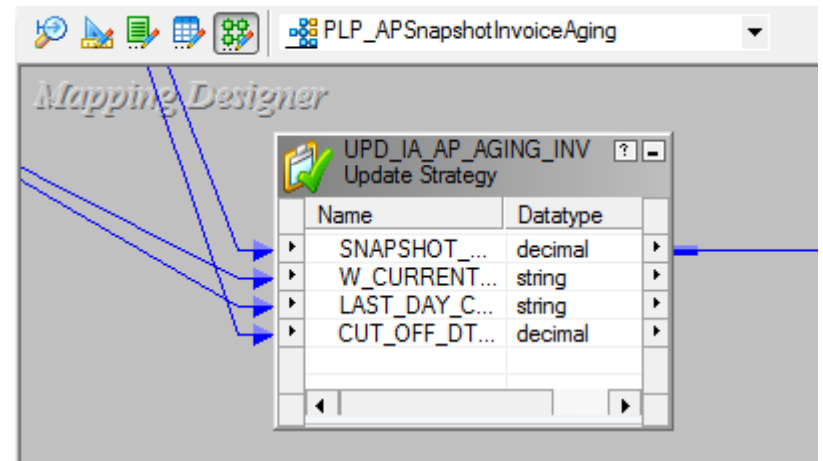
Customizations

Weekly Snapshots

Example

Mapping: PLP_ARSnapshotInvoiceAging

Update Strategy: UPD_IA_AR_AGING_INV



```
iif((SNAPSHOT_DT_WID < CUT_OFF_DT_WID OR W_CURRENT_CAL_DAY_CODE = 'Current' OR  
LAST_DAY_CAL_MNTH_FLG = 'N') AND  
-- add condition to retain the row for the last day of the week  
(SNAPSHOT_DT_WID < CUT_OFF_DT_WID OR W_CURRENT_CAL_DAY_CODE = 'Current' OR  
LAST_DAY_CAL_WK_FLG = 'N') ,  
DD_DELETE, DD_REJECT)
```

What were the “GOTCHAS”?

- Many out-of-the-box reports rely on the aging snapshot tables

The screenshot shows the Oracle Business Intelligence Administration console. The 'Manage Sessions' section displays a table with session details for user 'akmiec'. The 'Cursor Cache' section shows a table with a single entry for cursor ID 53169, including the SQL statement and its execution details.

User ID	Host Address	Session ID	Browser Info	Logged On	Last Access
akmiec	kecholst400w7.forsythe.com	192.168.50.198.32ad2ba5.84	Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 6.1; WOW64; Trident/4.0; SLCC2; .NET CLR 2.0.50727; .NET CLR 3.5.30729; .NET CLR 3.0.30729; Media Center PC 6.0; InfoPath.2; .NET4.0C)	8/16/2012 10:43:10 PM GMT-05:00	8/16/2012 10:59:37 PM GMT-05:00

ID	User	Refs	Status	Time	Action	Last Accessed	Statement	Information
53169	akmiec	1	Finished	Is	Close View Log	8/16/2012 10:43:30 PM GMT-05:00	<pre> SET VARIABLE QUERY_SRC_CD='Report', SAW_DASHBOARD='/shared/Financials/_portal/Receivables', SAW_DASHBOARD_PG='Overview Trend', SAW_SRC_PATH='/shared/Financials/Custom/Receivables/Overview Trend/Days Sales Outstanding';SELECT 0 s_0, "Financials - AR Overview"."Time"."Fiscal Month" s_1, SORTKEY("Financials - AR Overview"."Time"."Fiscal Month") s_2, "Financials - AR Overview"."Facts - AR Turnover"."Days Sales Outstanding" s_3 FROM "Financials - AR Overview" WHERE ((("Ledger"."Ledger Name" = 'Forsythe Management') AND ("Time"."Fiscal Year" = '2012') AND ("Time"."Fiscal Quarter" = '2012 Q 3') AND ("Time"."Month Nbr" IN (SELECT saw_0 FROM (SELECT "Time"."Month Nbr" -1 saw_0 FROM "Financials - AR Overview" WHERE "Time"."Fiscal Month" = 'AUG-12') nqw_1))) ORDER BY 1, 3 ASC NULLS LAST </pre>	Type=Report Dashboard= /shared/Financials/_portal/Receivables/Overview Trend Dashboard Page=Overview Trend Report= /shared/Financials/Custom/Receivables/Overview Trend/Days Sales Outstanding

- Thoroughly test the incremental loads and snapshots
- Explicitly use date filters for aging reports



Total AR Invoice Amount is not equal to / is not in 0
and Fiscal Week is equal to **AUG-W2-12** ←

Conclusion

Today, our Total AR Outstanding Balance is \$50,000.

I wonder what is was last week?



The Solution:

- With BI Apps we can look at end-of-month snapshots
- With customization we can create end-of-week snapshots
- And drill into details to the specific invoices that were open at that time



FORSYTHE

Realize the business value of IT.SM

Realize the business value of IT.