CLOUD SHINE GLOBAL

L.L.P

YOUR TRUSTED PARTNER

AGENDA

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Oracle Billing & Revenue Management

INVOICE

An invoice lists the balance information for a customer's bill.

BRM invoice features

BRM invoices present a set of data related to **service usage charges**, **discounts**, **promotions**, **taxes**, and **surcharges**.

Important features of BRM invoices are:

- Supports multiple invoices for one customer.
- Supports different ways to send the invoice to customers.
- Charge summary and usage details
- Wireless service usage details (if the customer uses wireless service)
- Past due amount details from the past bill
- Usage details of accounts with multiple phone numbers
- Hierarchical account details
- Promotion names
- A/R actions having currency or non-currency impact, such as adjustment, dispute, settlement, and write-off details

INVOICE TYPES

There are two invoice types:

- **Detailed**
    - A detailed invoice lists the bill items for the bill unit and the events that have currency balance impacts greater than zero. The detailed invoice mode is the default.
- **Summary**
    - A summary invoice lists only the bill items and not the events.

- The PIN_FLD_INV_TYPE field in the **/payinfo** object defines which type of invoice to generate for a given bill unit, **detailed (0 or NULL)** or **summary (1)**.

- By default, BRM generates detailed invoices for bills that use the Invoice payment method.

Note:

The -detail and -summary parameters of the pin_inv_accts utility overrides the PIN_FLD_INV_TYPE field values in the /payinfo object.

Generating invoices

Use the **pin_inv_accts** utility to generate invoices either automatically as part of daily billing or separately.

Syntax

pin_inv_accts   [-**start** *date*] [-**end** *date*] [-**summary | -detail**] [-**pay_type** *id* | -**hierarchy |**
           -**file** *filename*] [-**verbose**] [-**help**]

-start date

-end date

Generates invoices for accounts whose billing cycle ended during the time period defined by the start and end date, including the end date.

- If you do not specify an end date, pin_inv_accts uses the current date.
- If you do not specify a start date, pin_inv_accts searches for all invoices that you have not already sent.

You can specify the date in either of two formats: MM/DD/YY OR -N, where N is the number of days before the current date.

-file filename

Generates an invoice for each bill in the specified file. For example: pin_inv_accts -file bills_020207

Note The file must be in pin_flist format, which is the internal BRM data structure. For example:

```
0 PIN_FLD_RESULTS    ARRAY [0]
1 PIN_FLD_POID       POID [0] 0.0.0.1 /bill 26011 0
```

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OPCODE: PCM_OP_INV_MAKE_INVOICE

- Creates an invoice for a specified bill object.
- This opcode uses the **PIN_FLD_INV_TYPE** value in the **/payinfo** object to determine whether to generate a detailed invoice or a summary invoice.

Input Flist:
0 PIN_FLD_POID POID [0] 0.0.0.1 /bill 12345
0 PIN_FLD_INV_FLAGS ENUM [0] 1

PIN_FLD_INV_FLAGS : This determines what kind of invoice will be created.The default value is set to PIN_INV_TYPE_DETAIL
PIN_INV_TYPE_DETAIL (0x00000001) Detail Invoice
PIN_INV_TYPE_SUMMARY (0x00000002) Summary Invoice
PIN_INV_TYPE_REGULAR (0x00000004) Regular Invoice
PIN_INV_TYPE_SUBORDINATE (0x00000008) Subordinat Invoice
PIN_INV_TYPE_PARENT (0x00000010) Parent Invoice
PIN_INV_TYPE_HIERARCHY (0x00000020) Hierarchy Invoice
PIN_INV_TYPE_TRIAL_INVOICE (0x00000040) Trial Invoice
PIN_INV_TYPE_PARENT_WITH_SUBORDS (0x00000018) Parent and Subordinates Invoice
.

Exporting invoices

You can export the invoices in your database to files in any of these formats—pin_flist, XML, HTML, or DOC1. In addition, you can export detailed invoices for accounts that are set up to receive summary invoices and you can export invoices for a list of bills in an external file.

To export invoices to files:

1. Open the invoicing configuration file (BRM_home/apps/pin_inv/pin.conf) and find the pin_inv_export entries.
2. If you are exporting to a format other than pin_flist, edit the invoice_fmt entry.
Enter one of the following that corresponds to the format you want to use for the invoice files:

text/pin_flist
text/xml
text/html
text/doc1

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For example, to create HTML invoice files, enter:

#- pin_inv_export invoice_fmt text/html

If you do not edit this entry, pin_inv_export creates files in pin_flist format.

3. In the export_dir entry, enter the directory in which you want to store the files. You can enter a complete path or a path relative to the directory where you run pin_inv_export:

- pin_inv_export export_dir ./invoice_dir

4. Change to a directory with a valid invoicing configuration file.

5. Run the pin_inv_export utility and specify any parameters:

pin_inv_export

Running pin_inv_export with no parameters creates a separate file for each invoice in the database.

pin_inv_send

Use the **pin_inv_send** utility to email or print invoices, depending on the delivery method

- If the delivery method is set to **Email**, **pin_inv_send** emails the invoice.
- If the delivery method is set to **Postal**, **pin_inv_send** prints the invoice.

Syntax:
pin_inv_send   [**-start** *date*] [**-end** *date*] [**-pay_type** *id*]

-start *date*

-end *date*

Emails or prints invoices for accounts with invoices whose billing cycle ended during the time period defined by the start and end date, including the end date. If you don't specify an end date, **pin_inv_send** uses the current date. If you don't specify a start date, **pin_inv_send** searches for all invoices that you have not already sent.

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INVOICE SAMPLES

Customer Name:

Address:

P.O.Box:

Bill Reference number	B1-102483
Account number	68260014
Related services	115
Bill Issue Date	24/11/2017
Bill Period: From	24/10/2017
To	23/11/2017
Payment due date	24/12/2017

Current invoice (SAR)	Previous balance (SAR)	Total amount due (SAR)
217.37	55,362.26	55,579.63

Current Invoice summary

Consumption summary	Amount (SAR)
Total subscriptions	-2,932.26
Total usage	1,683.50
Other amounts	0.00
Total Consumption	-1,248.76

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your phone usage: calls, messages and data

subscription fee

	From	To	cost
ÇâÅÔÈÑÇßÇÈ ÇâÒâÑíÈ ÇâÈÇþÈ ÇâÇÓÇÓÇÓÍíÉ	01/03/13	01/04/13	100.00
ÇâÅÔÈÑÇßÇÈ ÇâÒâÑíÈ ÇâÈÇþÈ ÇâÇÓÇÓÇÓÍíÉ	26/02/13	01/03/13	10.72
total (SAR)			110.72

calls you made

	duration	cost
4 call(s) to Landline	03:59:00	28.68
4 call(s) to Atheeb	03:38:00	10.90
4 call(s) to Mobile	04:20:00	91.00
total (SAR)		130.58

07 Apr – 06 May 13

Messrs QATESTBININJAZ

we hope that you enjoyed using our mobily services.

Account Number	Inv-POC-002
Subscription Plan	Corporate Basic
Services Count	6
Bill Issuance Date	06 May 13
Bill Due Date	17 Mar 13

Bill Number :

your queries are important to us

mobily customer service: 901

our web site: mobily.com.sa

Email: 901@mobily.com.sa

the amount you need to pay :   SAR 18508.57

Appreciate your prompt payment within the due date

description of your tariff plan
- Corporate Basic

Bill Summary from 07/04/13 to 06/05/13

Details		
total monthly subscription fees for GSM	[+]	0.00
other services for GSM	[+]	1000.00
total monthly subscription fees for DATA	[+]	0.00
other services for DATA	[+]	1000.00
total local usage	[+]	0.00
total international usage	[+]	0.00
total roaming usage	[+]	0.00
current month's due from 07.04.13 to 06.05.13	[=]	24008.57
previous month dues	[+]	500.00
payment since 07.04.13 to 06.05.13	[-]	6000.00
other credits & charges	[+]	100.00
previous month credit balance and settled this month	[-]	100.00
credit balance not settled and forwarded to next month	[+]	0.00
Total Due	**[=]**	**18508.57**

call details

date	time	number	duration	to where	cost	discount
28 Feb 13	11:21	00218899565404	00:02:00	Libya	4.20	
	11:23	00389899565404	00:02:00	The former Yugoslav Republic of Macedonia	7.00	
	11:25	00261899565404	00:02:00	Madagascar	6.40	
	11:39	00919862112345	00:57:00	India	31.35	
	12:00	008706131898786	01:47:00	International	1070.00	
	12:09	00919885362131	00:37:00	India	20.35	
	13:03	00353250905404	00:02:00	Ireland	6.60	
	13:05	00225250905404	00:02:00	Ivory Coast	7.60	
	13:07	00819250905404	00:02:00	Japan	4.80	
	13:09	00254250905404	00:02:00	Kenya	6.40	

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Corrective Billing and Invoicing

- A **corrective bill** is a bill that is generated after corrections are made to a regular bill or a bill that was previously corrected.
- A **corrective invoice** is the invoice associated with a corrective bill.
- Corrections to a bill become necessary when a bill or invoice sent to a customer requires an update.

Corrections to a bill may or may not affect the charges on a bill.

The corrective bill includes all accounts receivable (A/R) actions for the charges applied to the bill items. BRM does not apply any additional discounts or charges.

Corrective bills can be generated for:

- Original Bills
- Bills created using the Bill Now selection in Customer Center
- On-demand billing
- Parent and subordinate bills in a bill hierarchy.

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- When a corrective bill is generated, it is assigned a new due date based on the current payment setup for the account.
- BRM assigns a new bill number to each corrective bill that it generates. Sequence used - PIN_SEQUENCE_TYPE_CORR_BILL_NO
- A regular bill and all its corrective bills have the same POID. As a result, same bill POID can be used to retrieve the complete set of bills, that is, the corrected bill and its prior bills.
- BRM preserves the historical information for every bill that it corrects by maintaining a **/history_bills** object for each corrected bill.

BRM creates an entry in event_t and event_corrective_bill_t as well

Utility Used - **pin_make_corrective_bills**

Opcode Used - PCM_OP_BILL_MAKE_CORRECTIVE_BILL

Pre-Requisites For Corrective Billing

- Adjustments should be appropriately allocated.
- BRM creates a corrective bill for a finalized bill only. If a bill is currently in progress, BRM does not permit a corrective bill to be generated for that bill.
- BRM created a corrective bill only if invoice exists for the bill, for which corrective billing is attempted.
- If bill is associated with balance forward accounting type, corrective bill can be generated only for the last bill of billing cycle.
- Request to generate corrective bills can only be submitted for Parent bill in hierarchy.
- (BRM creates corrective bills for the parent bill and all the subordinate bills in the hierarchy. The corrective bill includes all A/R actions applied up to that point in time for the parent bill and all subordinate bills.)

Numbering corrective Bills in BRM

Bill Poid	Bill No	Type
12345	B1-100	Regular
12345	CB1-20	Corrective

- By default, corrective bill numbering is enabled in BRM.
- It uses **CB<DB_num>** as prefix and uses PIN_SEQUENCE_TYPE_CORR_BILL_NO to obtain the sequence number currently available for corrective bills in BRM.
- BRM assigns a new bill number to each corrective bill that it generates.
- If the corrective bill belongs to a hierarchy, BRM assigns the new bill number to all the bills in the hierarchy.

Corrective Invoicing

A corrective invoice is the invoice associated with a corrective bill.

Corrective invoices can be the result of simple corrections (non-currency charges, for ex, invoice address change or language preference change) or corrections to charges (due to adjustment/ reversal/ disputes etc).

Types of Corrective Invoices

Replacement invoices

This shows the regular (unchanged) portion of a regular invoice and all the corrections made to the invoice. The replacement invoice includes all bill items and events from the previous invoice and any corrections to those bill items and events.

Invoice correction letters

This lists only the corrections as a letter for the customer whose bill is corrected.

It contains only the corrected bill items and the corrected events.

BRM can generate summary and detailed versions of replacement invoices and invoice correction letters.

BI Publisher

pin_inv_doc_gen

- Use this utility to generate invoice documents and store the instance of the invoice documents in the Oracle Business Intelligence Publisher (BI Publisher) Scheduler database.

- After **/invoice** objects are created by running the **pin_inv_accts** utility, you run the the **pin_inv_doc_gen** utility with necessary input parameters at the command line of the BI Publisher server system to generate the invoice document.

Oracle recommends to use the BipEnv.bat file that has command to run pin_inv_doc_gen.

Important

To connect to the Oracle Communications Billing and Revenue Management (BRM) database, the **pin_inv_doc_gen** utility needs a configuration file, **Infranet.properties**, in the directory from which you run the utility.

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We use the BIP to extract the PDf invoices from the system. The following screenshots will be helpful to achive the goal.
Login to the BIP Server using the provided login credentials.

"Thank You"