# Show Me the Money: Exercises

## Exercise One: Create a ledger and view it at the database level

- 1) Open up Acquisitions, go to Ledgers and Funds, and create a new ledger
  - a. Give the ledger a unique, easily searchable name
  - b. Select any available Fiscal Period
  - c. Select Main Acquisitions Group
  - d. On the Locations tab, move all Available locations over
  - e. Check off Over Commit or Over Expend and supply some percentage values
  - f. Don't worry about funds yet! We'll get to that soon.
- Close the ledger and then execute a search to find it (need to refresh so the Properties tab is populated).
- 3) Go to your sqlplus session
- 4) First, let's just get a quick view of the ledgers everyone has created and what they're called: select ledger\_id, ledger\_name from ledger;
- 5) To look at all of the data for your ledger more specifically: select \* from ledger where ledger\_id = [id #];
- 6) Other helpful queries for information associated with a ledger
  - a. For fiscal period information: select \* from fiscal\_period where fiscal\_period\_id in (select fiscal\_year\_id from ledger where ledger\_id = [id #]);
  - b. To view locations associated with a ledger that \*don't\* belong to an Acq Security

Profile (which impacts an operator's ability to view a ledger): select location\_id from ledger\_locations where ledger\_id = [id #] and location\_id not in (select location\_id from acq\_security\_locs where acq\_profile\_id in (select acq\_profile\_id from acq\_profile where acq\_profile\_name = '[Acq Security Profile Name]'));

## Exercise Two: Create a fund hierarchy and view it at the database level

- 1) Bring up the ledger you created in Exercise One
- 2) Create at least one Summary fund
- Create at least one Allocated fund underneath a Summary fund, and add money in its Original Allocation field
- On one of your Allocated funds, go to the Transactions tab, click New Transactions, and make an Allocation Change of a positive amount

- 5) Create at least one Reporting fund underneath an Allocated fund
- 6) Go to your sqlplus session
- 7) To get a brief list of all the funds you just created in the Acq client: select fund\_id, fund\_name from fund where ledger\_id = [id #];
- 8) Let's look at the data for the Allocated fund on your ledger (since these funds are where

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the money lives!): select parent_fund, original_allocation,
allocation_increase, allocation_decrease from fund where
ledger_id = [id #] and fund_id = [id #];
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- 9) Other helpful queries for information associated with a fund
  - a. Which funds are a particular type: select fund\_type\_id, fund\_type\_name from fund\_type; select fund\_name from fund where ledger\_id = [id #] and fund\_type = [type id #];
  - b. Do any ledgers have a fund that has the Expend Only checkbox set?: select a.ledger\_id, a.ledger\_name, b.fund\_id, b.fund\_name from ledger a, fund b where b.expend\_only = 'Y' and a.ledger\_id = b.ledger\_id;
  - $_{\rm C}$  . List of all the initial allocations of any fund falling below a particular summary

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fund: select fund_name, original_allocation from fund where
parent_fund = [id #] and ledger_id = [id #];
```

#### Exercise Three: Conducting and viewing transactions at the database level

- 1) In Acquisitions, create a purchase order with a line item using one of your allocated funds, and give the line item a specific price, and approve the line item
- 2) Go to your sqlplus session
- 3) Let's grab all the fund\_transaction data for this fund: select \* from fund\_transaction where ledger\_id = [id #] and fund\_id = [id #];
- 4) Go back to Acquisitions, create an invoice for this line item, and approve the invoice
- 5) Re-run your above query to see the commitment decommitted and the expenditure added
- 6) Other helpful queries for information associated with the fund\_transaction table
  - a. Total the commitments for a given fund: select sum(amount) from fund\_transaction where ledger\_id = [id #] and fund\_id = [id #] and trans\_type = 4;
  - b. Is there any fund that has had a transfer in of more than, say, \$15,000: select fund\_id, ledger\_id from fund\_transaction where trans\_type = 6 and amount > 1000000;

## Exercise Four: Orders and invoices at the database level

- Let's start with a fresh new PO create one in the Acquisitions client, with a line item linked to one of your Allocated funds, and a line item linked to one of your Reporting funds
- 2) Go to your sqlplus session
- 3) Using the po\_id, let's look at the data in the purchase\_order and po\_funds tables: select \* from purchase\_order where po\_id = [id #]; select \* from po\_funds where po\_id = [id#];
- 4) In the Acq client, approve the PO and invoice the line item then you'll see the invoice and invoice\_funds tables populate: select \* from invoice where invoice\_id = [id#]; select \* from invoice\_funds where invoice\_id = [id#];
- 5) Other helpful queries for information associated with the purchase\_order/po\_funds and invoice/invoice\_funds tables:
  - a. Amount across POs/invoices associated with a particular vendor during a

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particular date range (could coincide with, say, fiscal period): select
sum(total) from invoice where vendor_id = 1 and
invoice_create_date > '2008-01-01' and invoice_create_date
< '2009-01-01';</pre>
```

b. Total commitments for a particular ledger based on a particular order location: select sum(commitments) from po\_funds where ledger\_id = 68 and po\_id in (select po\_id from purchase\_order where order\_location = 13);

## Exercise Five: Line item/copy level data in the tables

- In Acquisitions, create a new PO with a line item linked to one of the funds from your ledger.
- Open up the Detailed Line Item view for this line item, and go to the Properties tab to get the line\_item\_id.
- 3) Go to your sqlplus session
- 4) Using the line\_item\_id (or the po\_id for this example, as there's only one line item in this case), let's look at some specific data: select unit\_price, line\_price, quantity, prepay\_amount, bib\_id from line\_item where line\_item\_id = [id #];
- 5) To get the copy\_id, check line\_item\_copy\_status: select \* from line\_item\_copy\_status where line\_item\_id = [id #];
- 6) Use the copy\_id to access the line\_item\_funds data: select \* from line\_item\_funds where copy\_id = [id #];
- 7) In Acquisitions, approve the PO and create an invoice for the line item
- 8) Use the line\_item\_id from above to query invoice\_line\_item: select \* from invoice\_line\_item where line\_item\_id = [id #];

- 9) Take the inv\_line\_item\_id from invoice\_line\_item to query invoice\_line\_item\_funds: select \* from invoice\_line\_item\_funds where inv\_line\_item\_id = [id #];
- 10) Other helpful queries for information associated with these tables:
  - a. Any POs containing a line item associated with a particular fund/ledger:

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select po_number from purchase_order where po_id in
(select po_id from line_item where line_item_id in
(select line_item_id from line_item_copy_status where copy_id
in
(select copy_id from line_item_funds where ledger_id = [id #]
and fund_id = [id #])));
```

#### b. Which invoices have a line item that splits copy level allocations across more

#### than one fund:

```
select invoice_number from invoice where invoice_id in
(select invoice_id from invoice_line_item where
inv_line_item_id in
(select inv_line_item_id from invoice_line_item_funds where
copy_id in
(select copy_id from invoice_line_item_funds where percentage
< 100)));</pre>
```