

EPM Asset Management Lab 2013

Union Query

Scenario: Modify Core-CT public EPM query to meet agency reporting requirements.

Skills: Delete fields from union query.

* Union queries are used when the tables cannot be successfully joined and data is required from both tables. *

References: EPM Data Dictionary, Financials Reporting Table Summary http://www.core-ct.state.ct.us/epm/docs/fin_reporting_table_summary.doc

EPM Job Aid: Reporting Table Indexes and Join Criteria <u>http://www.core-</u> <u>ct.state.ct.us/epm/jobaids/</u>

Union Queries

- a. A union query is two select statements brought together in the same query, basically two queries running simultaneously.
- b. Use a union query to combine records that have no fields in common to retrieve similar values.
- c. Unions are especially valuable to avoid situations where a record join will produce inaccurate results. For example, when joining the employee and position tables, only those positions which are filled will be returned.
- d. If one simple rule is followed, union queries will always execute properly. The two portions of the query must have the same number of fields, in the same order like to like (field type and length). The field type must be exact and length similar. To achieve this, use literal expressions as placeholders.
- e. The "balancing" literals can be generic, character is ''(two single apostrophe marks), number is 0 (zero); or you can designate a word, between the two apostrophe marks ('vacant') or integer (2) to clarify the report content.
- f. The table with the largest field sizes must be chosen as the top level of the query.
- g. Unions retrieve unique rows only. If both select statements retrieve the same row, the row will only appear once in the final output.
- h. You cannot use the long or short translate values in union queries.



Navigation: EPM Reporting Tools > Query > Query Manager>Advanced Search>Folder begins with: CLASS

Favorites Main Menu > Core-CT E	PM > Reporting T	ools > Query > Query Manager
My HR Finance	Core-CT	Help
Query Manager		
Enter any information you have and cli Find an Existing Query 1 Q	ick Search. Leave fie Create New Query	lds blank for a list of all values.
Query Name	begins with 💌	
Description	begins with 💌	
Uses Record Name	begins with 🛛 👻	
Uses Field Name	begins with 🛛 👻	
Access Group Name	begins with 🛛 👻	
Folder Name	begins with 🛛 👻	CLASS
*Query Type	=	User 🗸
Owner	Ξ	Public 🗸
When using the IN or BETWEEN ope	rators, enter comma	separated values without quotes. i.e. JOB,I
Search Clear	Basic Search	



Locate the query: CLASS_FIN_AM_LIST_W_COST

1. Click the Edit Link for this query.

***The exercise is to delete fields from the query display

2. Go to the Fields Tab

Query Name CLASS_FIN_AM_LIST_W_	COST		D	escrip	otion In service asset	ts w/cost		Feed	Ŧ
Vorking on selection Top Level of Query						<u>s</u>	ubquery/Un	ion Navigati	on
View field properties, or use field as criteria in que	ery statement.					F	eorder / So	t	
Fields				P	ersonalize Find View	All 🗖 🛗 F	irst 🚺 1-9 a	f 9 🕨 Last	
Col Record.Fieldname	Format	<u>Ord</u>	<u>XLAT</u>	Aqq	Heading Text	Add Criteria	a Edit	Delete	
1 A.BUSINESS_UNIT - Business Unit	Char5				Unit	9	Edit	-	
2 A.ASSET_ID - Asset Identification	Char12				Asset ID	9.	Edit	-	
3 A.TAG_NUMBER - Tag Number	Char12				Tag Number	9.	Edit	-	
4 A.CT_ASSET_DESCR - Asset Description	Char30				Asset Descr	9	Edit	-	
5 A.COST - Total Cost	SNm25.3			Sum	Sum TotalCost	94	Edit	-	
6 C.LOCATION - Location Code	Char10				Location	%	Edit	-	
7 D.DESCR - Description	Char30				Location Descr	94	Edit	-	
8 A.PROFILE_ID - Asset Profile ID	Char10				Profile ID	94	Edit		
9 A.CATEGORY - Asset Category	Char5				Category	9	Elit	-	

- 3. Click the delete button for field #9, CATEGORY
- 4. Click the Run Tab
- 5. Enter your Business Unit



Error Message:

Records Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run	
Business Unit= =	OSCM1							

Rerun Query

A UNION requires the same number of fields for each SELECT. Correct and retry. (30,7)
Error in running query because of error in retrieving select header (50,379)

To correct the query design:

1. Click the fields tab.

ecords Query Expressions Prompts	Fields Crit	eria	Hav	ing	View SQL Rur	1			
Query Name CLASS_FIN_AM_LIST_W	COST		D	escrip	tion In service ass	ets w/cost		Eeed 💌	
Vorking on selection Top Level of Query					(Su	bquery/Ur	nion Navigation	
View field properties, or use field as criteria in qui	erv statement					Re	order / So	nt	
Fields	city statement.			P	ersonalize Find Viev	v All 🗖 📔 Fir	st 🚺 1-8 o	of 8 🖸 Last	
Col Record.Fieldname	Format	Ord	XLAT	Aqq	Heading Text	Add Criteria	Edit	Delete	
1 A.BUSINESS_UNIT - Business Unit	Char5				Unit	9 <mark>4</mark>	Edit		
2 A.ASSET_ID - Asset Identification	Char12				Asset ID	9.	Edit		
3 A.TAG_NUMBER - Tag Number	Char12				Tag Number	9.	Edit		
4 A.CT_ASSET_DESCR - Asset Description	Char30				Asset Descr	%	Edit		
5 A.COST - Total Cost				Sum	Sum TotalCost	9.	Edit		
6 C.LOCATION - Location Code					Location	9.	Edit	-	
7 D.DESCR - Description	Char30				Location Descr	9.	Edit		
8 A PROFILE ID - Asset Profile ID	Char10				Profile ID	9.	Edit		



2. Click the Subquery/Union Navigation link

Select subquery or union to navigate to
Left Right
Top Level of Query Subquery for exists Union 1

3. Click the Union 1 link

- 4. Go to the Fields Tab
- 5. Delete field #9, CATEGORY
- 6. Save the query and successfully execute

Field layout for each level of the query

Top level

Union 1

Col	Fieldname	Format	Col	Fieldname	Format
1	A.BUSINESS_UNIT	Char5	1	E.BUSINESS_UNIT	Char5t
2	A.ASSET_ID	Char12	2	E.ASSET_ID	Char12
3	A.TAG_NUMBER	Char12	3	E.TAG_NUMBER	Char12
4	A.CT_ASSET_DESCR	Char30	4	E.CT_ASSET_DESCR	Char30
5	A.COST	SNm25.3	5	E.COST	SNm25.3
6	C.LOCATION	Char10	9	F.LOCATION	Char10
7	D.DESCR	Char30	7	G.DESCR	Char30
8	A.PROFILE_ID	Char10	8	E.PROFILE_ID	Char10



This page intentionally left blank.



EPM Asset Management Lab 2013 Exercise 2

Union Query

Scenario: Modify Core-CT public EPM query to meet agency reporting requirements.

Skills: Add/delete fields from union query. Reorder fields.

* Union queries are used when the tables cannot be successfully joined and data is required from both tables. *

References: EPM Data Dictionary, Financials Reporting Table Summary http://www.core-ct.state.ct.us/epm/docs/fin_reporting_table_summary.doc

EPM Job Aid: Reporting Table Indexes and Join Criteria <u>http://www.core-</u> ct.state.ct.us/epm/jobaids/

Navigation: EPM Reporting Tools > Query > Query Manager>Advanced Search|>Folder begins with: CLASS

Locate the query: CLASS_FIN_AM_ASSET_DESCR_LOC

1. Click the Edit Link for this query.

***The exercise is to add fields to the query display

- 2. Go to the Query Tab
- 3. Using the table alias to determine which table the fields are located, add the fields;

C. SERIAL_ID E. BUILDING E. FLOOR

4. Click the Run Tab



5. Enter your Business Unit and the wildcard % for Location.

Results:

Error Message:

Records Query Expres	sions Prompts Fi	ields Criteria Ha	aving View SQL Ru	n
Business Unit= = OSC	M1,Location like (%)=	=%		
<u>Rerun Query</u> A UNION requires the same n Error in running query becaus	umber of fields for each S e of error in retrieving sele	ELECT. Correct and retry oct header (50,379)	y. (30,7)	

To correct the query design:

1. Click on the Query Tab.

Query Name CLASS FIN AM ASSET DESCR LOC	Description Assets w/ descr by a cation	Eeed -
prking on selection Top Level of Query	Suba	uerv/Union Navigation
nick tolder next to record to snow neids. Check neids to add to query. (dditional records by clicking the records tab. When finished click the f	ields tab	
Chosen Records		
Alias Record		
A CTW_ASSET_COST - Asset Cost Rpt	Hierarchy Join	
C CTW ASSET RPR - Asset Repair Rpt	Hierarchy Join 🖃	
D CTW_AM_PHYSICAL - Asset Mgnt Physical Rpt	Hierarchy Join 🖃	
E CTW LOCATION FN - Financial Location	Hierarchy Join 🖃	
■ F CTW ASSET LOCTN - Asset Location	Hierarchy Join	
Expand All Records Collapse All Records		
Save Save As New Query Preferences Properties	Publish as Feed New Union	Return To Search



2. Click the Subquery/Union Navigation link

Select subquery or union to navigate to	
Top Level of Query Subquery for exists Union 1	

- 3. Click the Union 1 link
- 4. Go to the Query Tab
- 5. Add the fields:

J. SERIAL_ID M. BUILDING M. FLOOR

- 7. Go to the Fields Tab
- 8. Click the Reorder/Sort Button



Rec	ords Query Expressions Prompts Field	ds Cr	riteria	На	iving	View SQL Run				
Wor	Query Name CLASS_FIN_AM_ASSET_DESCR_I king on selection Union 1	LOC		I	Descr	iption Assets w/ desc	r by location	Subqu	ery/Union*	Feed 👻 lavigation
Fiel	ds	nent.			Per	sonalize Find View All	Eirst	4-20 of	20 🖸 🕞	
Col	Record.Fieldname	<u>Format</u>	<u>Ord</u>	<u>XLAT</u>	Aqq	Heading Text	Add Criteria	Edit	Delete	
1	I.ASSET_ID - Asset Identification	Char12				Asset ID	%	Edit	-	
2	I.TAG_NUMBER - Tag Number	Char12				Tag Number	%	Edit	-	
3	I.CT_ASSET_DESCR - Asset Description	Char30				Asset Descr	%	Edit	-	
4	I.DEPTID - Department	Char10				DeptID	%	Edit	-	
5	L.LOCATION - Location Code	Char10				Location	9 <mark>.</mark>	Edit	-	
6	M.DESCR - Description	Char30				Descr	%	Edit	-	
7	J.ASSET_CLASS - Asset Class	Char10				Class	9.	Edit	-	
8	I.IN_SERVICE_DT - In Service Date	Date			Max	Max In Service	9 <mark>.</mark>	Edit	-	
9	J.CT_MANUFACTURER - Manufacturer Name	Char60				Manufacturer	9.	Edit	-	
10	J.CT_MANUFCT_YEAR - Year of Manufacture	Char4				Year	9 <mark>.</mark>	Edit	-	
11	J.MANUFACTUR_CONTACT - Manufacturing Contact	Char30				Contact	%	Edit	-	
12	J.MODEL - Model	Char30				Model	%	Edit	-	
13	K.REGISTRATION_NO - Registration #	Char25				Reg #	%	Edit	-	
14	J.CT_VIN - VIN	Char18				VIN	%	Edit	-	
15	J.CT_FED_FUND_SW - Federally Funded Asset?	Char1				Federal Funded?	9	Edit	-	
16	M.SECTOR - Sector	Char10				Sector	9	Edit	-	

9. Renumber fields to match the fields in the top level of the query. To match the field order in the top level of the query. Use the handout as a guide.



Edit Field Ordering

Reorder columns by entering column numbers on the left. Columns left blank or assigned a 0 will be automatically assigned a number. Change the order by number by entering numbers on the right. To remove an order by number, leave the remove hank or enter a 0.

dit Field Onten	ng	Personalize Find View		💴 First 🔼 1-	20 of 20 ⊵ L
ew Column C	olumn	Record.Fieldname	Order By	Descending	New Order I
	1	I.ASSET_ID - Asset Identification			
	2	I.TAG_NUMBER - Tag Number			
	3	I.CT_ASSET_DESCR - Asset Description			
	4	I.DEPTID - Department			
	5	L.LOCATION - Location Code			
	6	M.DESCR - Description			
	7	J.ASSET_CLASS - Asset Class			
	8	I.IN_SERVICE_DT - In Service Date			
	9	J.CT_MANUFACTURER - Manufacturer Name			
	10	J.CT_MANUFCT_YEAR - Year of Manufacture			
	11	J.MANUFACTUR_CONTACT - Manufacturing Contact			
	12	J.MODEL - Model			
	13	K.REGISTRATION_NO - Registration #			
	14	J.CT_VIN - VIN			
	15	J.CT_FED_FUND_SW - Federally Funded Asset?			
	16	M.SECTOR - Sector			
	17	M.JURISDICTION - Jurisdiction			
	18	M.BUILDING - Building #			
	19	M.FLOOR - Floor #			
	20	J.SERIAL ID - Serial ID			

10. Save and execute the query.