Scenario Facts:

* Report will be run by system office for multiple schools or by each school for themselves
* Hard coded multi\_source filter exists on report (multi-select filter)
* Optional filter exists on e-class
  + If an individual has a selected e-class at ANY of the selected schools, their data should show up for both schools, regardless of the e-class at the schools where they do NOT have the selected e-class.
* The Cognos data is stored in a single query

The following are 2 options for how to store this data

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| --- | --- |
| **Simple Select Method from the normal data-set** | **ListAgg Select Method in a separate table (Cognos Query)** |
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Example: When CCCS runs the report for ACC & LCC with an e-class of ‘38’, the following records should show up:

**Our desired results:**

Chip ACC 38  
Eric ACC 10  
Eric LCC 38  
Bryan does NOT show up because, even though he has a 38, it is at FRCC, which was not selected  
Chip’s shows up as he has a 38 at ACC. His FRCC will not show up since FRCC was not selected.  
Venu does not show up as neither of his schools were selected  
Karen does not show up as neither of her schools were selected  
Eric shows up because he has a 38 at LCC, his ACC record shows up as well since it was selected, even though it has no 38.  
Bobby Tables does not show up, although he is at ACC, he has no 40 record.

**Option 1: AND statement from normal data set**  
“multi\_source IN (‘ACC’,’LCC’) AND e\_class = ‘38’

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We want it to return all of Chip & Eric’s values. It is returning Chip & Eric, but not Eric’s value at ACC with a code of 10.

**Option 2, OR statement:**

“multi\_source IN (‘ACC’,’LCC’) OR e\_class = ‘38’

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These are obviously not returning what we want, too many people.

We must split this into 2 queries:

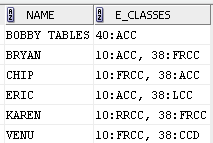
Query 1: (what we have above): Contains all of the data in normalized form; has hard filter on multi-source.

Query 2: Contains only filterable data, no filter on multi-source. We can use listagg for this.

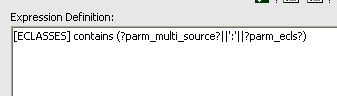
These queries will be joined on person\_uid. Query 1 will weed out non-selected multi-sources, Query 2 will filter out individuals.

**Query 2:**

SELECT e.person\_uid, listagg(e.employee\_class||':'||e.multi\_source,',') WITHIN GROUP (ORDER BY e.person\_uid)||',' eclasses  
 FROM employee e  
 WHERE e.employee\_status = 'A'  
group by e.person\_uidNow I have a separate “table” (Query 2) that looks like this:



Now I can completely ignore my hard-filter on multi-source, which was needed in the original Cognos query. Instead I have created a soft-filter on multi\_source. (“soft filter” meaning it will not necessarily weed out all codes without the prompted multi-source)

Cognos key word “contains:  


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| Query 1 (detail query) will filter on Multi Source:  (LCC OR ACC) | Query 2 (ECLS query) will filter on the ECLASS (38) & multi-source (LCC or ACC), yet return only the id#. It will not limit the multi-source |
|  |  |

Then I will join on person-uid – This will eliminate Bryan & Bobby Tables. Additionally, the hard filter on multi-source in the details query will eliminate Chip’s FRCC record, returning only the values we’d like.

