MOVING PCCS QUALIFIERS

This document is a specific example on how to move the PCCS qualifier_id's from an existing range of 3200000-4499999 to a new range starting at 11000000.

This document is a supplement to the Roles document found at:

https://rolesweb.mit.edu/sys admin tasks.html#move qualifiers

a) The initial range reserved for COST qualifier was from 3200000 to 4499999. Run the sql statement below to verify that the COST qualifier ID's are still within this range.

SELECT qualifier_type, min(qualifier_id), max(qualifier_id)
FROM qualifier
WHERE qualifier type='PCCS';

Make a note of the Minimum and Maximum values. In this example the Minimum and Maximum values are 3200000 and 4088485. Since the PCCS qualifier ID's are still within the initial range, the range 3200000-4499999 will be used for the remainder of this document. If the either the Minimum and/or Maximum values exceed the initial range, adjust the range to include the Minimum and Maximum values.

b) To get an idea of the distribution if the qualifier ID's, execute the sql statement below:

select 5000*truncate(qualifier_id/5000,0), count(qualifier_id)
from qualifier where qualifier_id between 3200000 and 4499999
group by 5000*truncate(qualifier id/5000,0);

c) The base ID of the initial range is 3200000 and the base ID of the new range is 11000000. The delta between the original base ID and the new base ID is 7800000.

You can view all the qualifier types by executing the following sql statement.

select min(qualifier_id), max(qualifier_id), qualifier_type
from qualifier
GROUP BY qualifier type;

d) Run the following 2 sql statements and record the counts. These counts will be used to verify that the qualifier ID's and the associated authorizations were processed correctly.

```
select count(*)
  from authorization a
  where a.qualifier_id BETWEEN 3200000 and 4499999;
select count(*)
  from qualifier
  where qualifier id BETWEEN 3200000 and 4499999;
```

e) Run the 2 sql statements below to create 2 new qualifier types, TST1 and TST2. The TST1 qualifier type will be used to move the COST qualifier type from the 3200000 range to the new 11000000 range. The TST2 qualifier type will be used to rename the existing COST qualifier type so that the TST1 qualifier type can be renamed to COST. When everything is done, the TST1 and TST2 qualifier types will be deleted.

```
insert into qualifier_type values ('TST1', 'Temp qualtype 1', 'N');
insert into qualifier_type values ('TST2', 'Temp qualtype 2', 'N');
```

f) Run the sql statement below to do the actual move from 3200000 to 11000000. The delta between the existing and new base qualifier ID's (difference between 3200000 and 11000000) is 7800000 (see c) above).

As a recap, we have the following 4 values:

```
delta = 7800000
old_min_id = 3200000
old_max_id = 4499999
new min id = 11000000
```

Execute the following sql statement to move the PCCS qualifier type to the new range, starting at 11000000, with the new qualifier type of TST1.

```
insert into qualifier
  (QUALIFIER_ID, qualifier_code, qualifier_name, qualifier_type,
    HAS_CHILD, QUALIFIER_LEVEL, CUSTOM_HIERARCHY, STATUS,
    LAST_MODIFIED_DATE)
  select QUALIFIER_ID+7800000, qualifier_code, qualifier_name,
    'TST1',
     has_child, qualifier_level, custom_hierarchy, status,
     last_modified_date
  from qualifier where qualifier type = 'PCCS';
```

g) Run the sql statement below to move parent/child relationships.

```
insert into qualifier_child
  (parent_id, child_id)
  select PARENT_ID+7800000, CHILD_ID+7800000
  from qualifier child where parent id between 3200000 and 4499999;
```

The number of rows affected in the above statement should be 1 less that the count of qualifier ID's you got in e) above.

```
insert into qualifier_descendent
  (parent_id, child_id)
select PARENT_ID+7800000, CHILD_ID+7800000
from qualifier_descendent where parent_id between 3200000 and 4499999;
```

```
insert into primary_auth_descendent
  (parent_id, child_id, is_dlc)
  select parent_id, child_id+7800000, is_dlc
  from primary_auth_descendent
  where child id between 3200000 and 4499999;
```

update authorization set qualifier_id = qualifier_id+7800000
 where qualifier id between 3200000 and 4499999;

The number of rows affected in the above statement should be equal the count of authorizations you got in e) above.

h) Run the sql statement below to move the COST qualifier type to TST2.

```
update qualifier set qualifier_type = 'TST2'
where qualifier_type = 'PCCS';
```

The number of rows affected in the above statement should be equal the count of qualifier ID's you got in e) above.

i) Run the sql statement below to change the TST1 qualifier type to the COST qualifier type.

```
update qualifier set qualifier_type = 'PCCS'
where qualifier type = 'TST1';
```

The number of rows affected in the above statement should be equal the count of qualifier ID's you got in e) above.

j) Verify that everything was processed correctly by comparing the counts from the first group 4 sql statements below with the counts from the second group of 4 sql statements.

```
The results from the first group of statement below...
     select count(*) from qualifier where qualifier type = 'TST2';
     select count(*) from qualifier child
        where child id between 3200\overline{000} and 44999999;
     select count(*) from qualifier descendent
        where child_id between 3200000 and 4499999;
     select count(*) from primary auth descendent
        where child id between 3200000 and 4499999;
   ... Should match the results of statements from this next group.
     select count(*) from qualifier where qualifier type = 'PCCS';
     select count(*) from qualifier child
        where child id between 1100\overline{0000} and 12299999;
     select count(*) from qualifier descendent
        where child id between 11000000 and 12299999;
     select count(*) from primary auth descendent
        where child id between 11000000 and 12299999;
k) Run the sql statements below to clean up the original qualifiers.
   This will permanently delete the original qualifiers.
     delete from primary_auth_descendent
        where child id between 3200000 and 4499999;
     delete from qualifier child
        where child id between 3200000 and 4499999;
     delete from qualifier descendent
        where child id between 3200000 and 4499999;
     delete from qualifier
        where qualifier id between 3200000 and 4499999;
     delete from qualifier type where qualifier type in ('TST1', 'TST2');
```

YOU ARE DONE!!!!!