MOVING COST QUALIFIER ID's

This document is a specific example on how to move the COST qualifier_id's from an existing range of 6000000-699999 to a new range starting at 8000000.

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 6000000 to 6999999. 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='COST';
```

Make a note of the Minimum and Maximum values. In this example the Minimum and Maximum values are 6000000 and 6491163. Since the COST qualifier ID's are still within the initial range, the range 6000000-6999999 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 6000000 and 69999999
   group by 5000*truncate(qualifier_id/5000,0);
```

c) The base ID of the initial range is 6000000 and the base ID of the new range is 8000000. The delta between the initial base ID and the new base ID is 2000000.

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 6000000 and 6999999;

select count(*)
   from qualifier
   where qualifier_id BETWEEN 6000000 and 6999999;
```

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 6000000 range to the new 8000000 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 6000000 to 8000000. The delta between the existing and new base qualifier ID's (difference between 6000000 and 8000000) is 2000000 (see c) above).
As a recap, we have the following 4 values:

```
delta = 2000000
old_min_id = 6000000
old_max_id = 6999999
new_min_id = 8000000
```

Execute the following sql statement to move the COST qualifier type to the new range, starting at 8000000, 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+2000000, qualifier_code, qualifier_name, 'TST1',
      has_child, qualifier_level, custom_hierarchy, status,
      last_modified_date
   from qualifier where qualifier_type = 'COST';
```

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

```
insert into qualifier_child
   (parent_id, child_id)
   select PARENT_ID+2000000, CHILD_ID+2000000
   from qualifier_child where parent_id between 6000000 and 6999999;
```

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+2000000, CHILD_ID+2000000
   from qualifier_descendent where parent_id between 6000000 and 6999999;

insert into primary_auth_descendent
   (parent_id, child_id, is_dlc)
   select parent_id, child_id+2000000, is_dlc
   from primary_auth_descendent
   where child_id between 6000000 and 6999999;

update authorization set qualifier_id = qualifier_id+2000000
   where qualifier_id between 6000000 and 6999999;
```

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 = 'COST';
```

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 = 'COST'
   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 6000000 and 6999999;
select count(*) from qualifier_descendent
   where child_id between 6000000 and 6999999;
select count(*) from primary_auth_descendent
   where child_id between 6000000 and 6999999;
```

...Should match the results of statements from this next group.

```
select count(*) from qualifier where qualifier_type = 'COST';
select count(*) from qualifier_child
   where child_id between 8000000 and 8999999;
select count(*) from qualifier_descendent
   where child_id between 8000000 and 8999999;
select count(*) from primary_auth_descendent
   where child_id between 8000000 and 8999999;
```

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 6000000 and 6999999;

delete from qualifier_child
   where child_id between 6000000 and 6999999;
delete from qualifier_descendent
   where child_id between 6000000 and 6999999;

delete from qualifier
   where qualifier_id between 6000000 and 6999999;

delete from qualifier_type where qualifier_type in ('TST1', 'TST2');
```

YOU ARE DONE!!!!!