**Performing a Dump/Restore from one Hyperscale (Citus) cluster to another**

(Updated 06.10.20)

**Note**: The info below contains engagement specific detail. Update for your scenario, as necessary.

**Hardware**

Deploy 2 beefy VMs (32vcores, 2TB SSD storage) in the San Antonio and Dublin regions

**a)** Create new cluster and create all the roles that were present on old cluster.

**Schema-only Dump/Restore**

**b) Get the list of schemas: run below command via psql or any other client. [San Antonio]**

select schema\_name

from information\_schema.schemata where schema\_name not in ('cron','partman','information\_schema','pg\_catalog');

**b) Schema-only dump of the above schemas: Replace schemanames from above command in the below pg\_dump statement. Run via bash. [San Antonio]**

pg\_dump --schema-only -n public -n <schema\_1> -n  <schema\_2> ... "host=<hostname> port=5432 dbname=citus user=citus password=<password> sslmode=require" > schema.sql

**c) Get create\_distributed\_table statements: Run via psql or any client [San Antonio]**

SET search\_path to public;

 \COPY (SELECT 'SELECT create\_distributed\_table(''' || logicalrelid::text || ''',' ||'''' || column\_to\_column\_name(logicalrelid,partkey)||''');' from pg\_dist\_partition where partmethod='h') to distributed.sql

**d) Get create\_reference\_table statements: Run via psql or any client [San Antonio]**

SET search\_path to public;

 \COPY (SELECT 'SELECT create\_reference\_table(''' || logicalrelid::text || ''');' from pg\_dist\_partition where partmethod='n') to reference.sql

**e) Apply schema on new cluster. Via psql or any client. [Dublin]**

 SET search\_path to public;

 <Run commands in schema.sql>

**f) Distribute and make tables reference in the new cluster: Via psql or any client. [Dublin]**

SET search\_path to public;

SET citus.shard\_count to <desired\_shard\_count\_value>;

<Run commands in reference.sql>

<Run commands in shard.sql>

ALTER DATABASE citus citus.task\_executor\_type to 'real-time'; -- for now needed for data-only dump as you are older version of citus.

**Data-only Dump/Restore**

**g) From a large azure VM (32vcores, 2TB SSD storage) in the same region as the source database run the below dump command for a data-only dump: [San Antonio]**

pg\_dump --data-only -n public -n <schema\_1> -n  <schema\_2> .. "host=<hostname> port=5432 dbname=citus user=citus password=<password> sslmode=require" -F c > dump

**h) scp the dump folder from a VM in source region (San Antonio) to a VM in the destination region (Dublin).**

**i) Restore the data to the destination cluster from the VM in Dublin. Run the below command from bash: [Dublin]**

pg\_restore \

   --host=<hostname> \

   --dbname=citus \

   --username=citus \

   dump