SNOWFLAKE

ASSIGNMENT 1

1.CREATE 3 WAREHOUSES

o IMPORT\_WH (MEDIUM, Quick AutoSuspend 5 mins, No MultiClustering. INITIALLY\_SUSPENDED)

o TRANSFORM\_WH (MEDIUM, Quick AutoSuspend 5 mins, No

Multi-Clustering, INITIALLY\_SUSPENDED)

o REPORTING\_WH (SMALL, Multi-Cluster upto 5, AutoSuspend

after 15 mins to keep cache alive,INITIALLY\_SUSPENDED) \*/

USE ROLE SYSADMIN;

--IMPORT\_WH (MEDIUM, Quick AutoSuspend 5 mins, No MultiClustering. INITIALLY\_SUSPENDED)

CREATE OR REPLACE WAREHOUSE IMPORT\_WH

WAREHOUSE\_SIZE='MEDIUM'

AUTO\_SUSPEND=300

MIN\_CLUSTER\_COUNT=1

MAX\_CLUSTER\_COUNT = 1

INITIALLY\_SUSPENDED=true;

--TRANSFORM\_WH (MEDIUM, Quick AutoSuspend 5 mins, NoMulti-Clustering, INITIALLY\_SUSPENDED)

CREATE OR REPLACE WAREHOUSE TRANSFORM\_WH

WAREHOUSE\_SIZE='MEDIUM'

AUTO\_SUSPEND=300

MIN\_CLUSTER\_COUNT=1

MAX\_CLUSTER\_COUNT = 1

INITIALLY\_SUSPENDED=true;

--REPORTING\_WH (SMALL, Multi-Cluster upto 5, AutoSuspendafter 15 mins to keep cache alive,INITIALLY\_SUSPENDED

CREATE OR REPLACE WAREHOUSE REPORTING\_WH

WAREHOUSE\_SIZE='SMALL'

MAX\_CLUSTER\_COUNT=5

AUTO\_SUSPEND=900

INITIALLY\_SUSPENDED=true;

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-- 2 DATABASES

--o STAGING

--o PROD

USE ROLE ACCOUNTADMIN;

CREATE OR REPLACE DATABASE STAGING;

CREATE OR REPLACE DATABASE PROD;

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/\* 3 SCHEMAS

o STAGING.RAW (Default Data Retension 3 days for tables to keep

original raw data as it is ingested)

o STAGING.CLEAN (Default Data Retension 3 days for tables to

keep cleaned data for ETL & modeling & ETL)

o PROD.REPORTING (Data Retension 90 days - Used by Business

Users for analytics & keeps 90 day continous history ) \*/

CREATE OR REPLACE SCHEMA STAGING.RAW DATA\_RETENTION\_TIME\_IN\_DAYS = 3;

CREATE OR REPLACE SCHEMA STAGING.CLEAN DATA\_RETENTION\_TIME\_IN\_DAYS = 3;

CREATE OR REPLACE SCHEMA PROD.REPORTING DATA\_RETENTION\_TIME\_IN\_DAYS = 90;

CREATE OR REPLACE STAGE STAGING.RAW.SOURCE

URL = 's3://snowflake-folder/parquet/';

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/\*o IMPORT\_ROLE (Can read from file stage & write to both

schemas in STAGING. No Access to Prod) -- doubt

USAGE only access for Warehouse "IMPORT\_WH" (Can't

modify/resize)

USAGE access STAGING\_SOURCE for import files -- doubt

USAGE on STAGING\_DB

Full access to RAW schema in STAGING\_DB for all

existing & new tables

Full access to CLEAN schema in STAGING\_DB for all

existing & new tables

No Access to PROD database \*/

USE ROLE ACCOUNTADMIN;

-- Create IMPORT\_ROLE

CREATE OR REPLACE ROLE IMPORT\_ROLE;

--GRANT USAGE AND PREVILIGESNTO THE ROLES

GRANT USAGE ON DATABASE STAGING TO ROLE IMPORT\_ROLE;

GRANT USAGE ON WAREHOUSE IMPORT\_WH TO ROLE IMPORT\_ROLE;

GRANT USAGE ON STAGE STAGING.RAW.SOURCE TO ROLE IMPORT\_ROLE;

GRANT ALL ON SCHEMA STAGING.RAW TO IMPORT\_ROLE;

GRANT SELECT ON FUTURE TABLES IN SCHEMA STAGING.RAW TO ROLE IMPORT\_ROLE;

GRANT ALL ON SCHEMA STAGING.CLEAN TO IMPORT\_ROLE;

GRANT SELECT ON FUTURE TABLES IN SCHEMA STAGING.CLEAN TO ROLE IMPORT\_ROLE;

-- Restrict access to Prod database

--REVOKE USAGE ON DATABASE PROD FROM IMPORT\_ROLE;

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/\*TRANSFORM\_ROLE (Can read & write to STAGING\_DB.Clean +

PROD.REPORTING, No Access to STAGING\_DB.Raw)

USAGE only access for Warehouse "TRASNFORM\_WH"

(Can't modify/resize)

Partial USAGE on STAGING\_DB -- DOUBT

Full access to CLEAN schema in STAGING for all existing &

new tables

No access to RAW schema in STAGING

Full access to REPORTING schema in PROD for all existing

& new table \*/

CREATE OR REPLACE ROLE TRANSFORM\_ROLE;

GRANT USAGE ON WAREHOUSE TRANSFORM\_WH TO ROLE TRANSFORM\_ROLE;

GRANT USAGE ON DATABASE STAGING TO ROLE TRANSFORM\_ROLE;

GRANT ALL ON SCHEMA STAGING.CLEAN TO ROLE TRANSFORM\_ROLE;

GRANT SELECT ON ALL TABLES IN SCHEMA STAGING.CLEAN TO ROLE TRANSFORM\_ROLE;

GRANT SELECT ON FUTURE TABLES IN SCHEMA STAGING.CLEAN TO ROLE TRANSFORM\_ROLE;

GRANT USAGE ON DATABASE PROD TO ROLE TRANSFORM\_ROLE;

GRANT ALL ON SCHEMA PROD.REPORTING TO ROLE TRANSFORM\_ROLE;

GRANT SELECT ON ALL TABLES IN SCHEMA PROD.REPORTING TO ROLE TRANSFORM\_ROLE;

GRANT SELECT ON FUTURE TABLES IN SCHEMA PROD.REPORTING TO ROLE TRANSFORM\_ROLE;

-- Deny access to the RAW schema in STAGING\_DB

--REVOKE USAGE ON SCHEMA STAGING.RAW FROM TRANSFORM\_ROLE;

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GRANT USAGE ON WAREHOUSE TRANSFORM\_WH TO ROLE TRANSFORM\_ROLE;

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/\* REPORTING\_ROLE (Read-only access to PROD.PROD schema &

tables)

USAGE only access for Warehouse "REPORTING\_WH"

(Can't modify/resize)

Read-Only access to PROD schema in PROD for all existing

& new tables

No access to STAGING database

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CREATE OR REPLACE ROLE REPORTING\_ROLE;

GRANT USAGE ON WAREHOUSE REPORTING\_WH TO ROLE REPORTING\_ROLE;

GRANT USAGE ON DATABASE PROD TO ROLE REPORTING\_ROLE;

GRANT SELECT ON ALL TABLES IN SCHEMA PROD.REPORTING TO ROLE REPORTING\_ROLE;

GRANT SELECT ON FUTURE TABLES IN SCHEMA PROD.REPORTING TO ROLE REPORTING\_ROLE;

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/\*3 USERS (Test Users)

o UserReporting (belongs to REPORTING\_ROLE)

o UserTransform (belongs to TRANSFORM\_ROLE)

o UserImport (belongs to IMPORT\_ROLE)

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CREATE OR REPLACE USER UserReporting

PASSWORD = 'UserReporting'

DEFAULT\_ROLE = REPORTING\_ROLE;

GRANT ROLE REPORTING\_ROLE TO USER UserReporting;

CREATE OR REPLACE USER UserTransform

PASSWORD = 'UserTransform'

DEFAULT\_ROLE = TRANSFORM\_ROLE;

GRANT ROLE TRANSFORM\_ROLE TO USER UserTransform;

CREATE OR REPLACE USER UserImport

PASSWORD = 'UserImport'

DEFAULT\_ROLE = IMPORT\_ROLE;

GRANT ROLE IMPORT\_ROLE TO USER UserImport;

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/\*• 3 USAGE MONITORS

o IMPORT\_MONITOR (100 credits a month)

o TRANSFORM\_MONITOR (100 credits a month)

o REPORTING\_MONITOR (100 credits a month)

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CREATE OR REPLACE RESOURCE MONITOR IMPORT\_MONITOR

WITH CREDIT\_QUOTA = 100;

CREATE OR REPLACE RESOURCE MONITOR TRANSFORM\_MONITOR

WITH CREDIT\_QUOTA = 100;

CREATE OR REPLACE RESOURCE MONITOR REPORTING\_MONITOR

WITH CREDIT\_QUOTA = 100;

GRANT MONITOR ON RESOURCE MONITOR IMPORT\_MONITOR TO ROLE IMPORT\_ROLE;

GRANT MONITOR ON RESOURCE MONITOR TRANSFORM\_MONITOR TO ROLE TRANSFORM\_ROLE;

GRANT MONITOR ON RESOURCE MONITOR REPORTING\_MONITOR TO ROLE REPORTING\_ROLE;

/////////////////////////////////////THANK YOU/////////////////////////////////////////////

From

Sandhya Shankar