**SNOWFLAKE TASK MONITORING DASHBOARD PREREQUISITES:**

**List of dashboards:**

1.Performance And Error Tracking Dashboard

2.Cost Monitoring Dashboard

3.Security Dashboard

**Note** :Use the role TASK\_MONITOR\_ADMIN and warehouse TASK\_MONITOR\_WH Before you create all these dashboards in snowsight.

**View Latency** :

* Latency for the TASK\_HISTORY view may be up to 45 minutes.
* Latency for the SERVERLESS\_TASK\_HISTORY view may be up to 180 minutes (3 hours).
* Latency for the GRANTS\_TO\_USERS view may be up to 120 minutes (2 hours).
* Latency for the GRANTS\_TO\_ROLES view may be up to 120 minutes (2 hours).
* Latency for the QUERY\_HISTORY view may be up to 45 minutes.

**1.RBAC Script:**

// SETTING ENVIRONMENT FOR MONITOR

USE ROLE ACCOUNTADMIN;

CREATE OR REPLACE ROLE TASK\_MONITOR\_ADMIN;

GRANT ROLE TASK\_MONITOR\_ADMIN TO ROLE ACCOUNTADMIN;

GRANT EXECUTE TASK ON ACCOUNT TO ROLE "TASK\_MONITOR\_ADMIN";

GRANT EXECUTE MANAGED TASK ON ACCOUNT TO ROLE "TASK\_MONITOR\_ADMIN";

//---DATABASE---------

USE ROLE ACCOUNTADMIN;

CREATE DATABASE TASK\_MONITOR\_DB;

GRANT ALL ON DATABASE TASK\_MONITOR\_DB TO ROLE TASK\_MONITOR\_ADMIN;

GRANT USAGE ON FUTURE SCHEMAS IN DATABASE TASK\_MONITOR\_DB TO ROLE TASK\_MONITOR\_ADMIN;

GRANT SELECT ON FUTURE TABLES IN DATABASE TASK\_MONITOR\_DB TO ROLE TASK\_MONITOR\_ADMIN;

GRANT SELECT ON FUTURE VIEWS IN DATABASE TASK\_MONITOR\_DB TO ROLE TASK\_MONITOR\_ADMIN;

GRANT IMPORTED PRIVILEGES ON DATABASE SNOWFLAKE TO ROLE

TASK\_MONITOR\_ADMIN;

//----SCHEMA----------

USE ROLE TASK\_MONITOR\_ADMIN;

USE DATABASE TASK\_MONITOR\_DB;

CREATE OR REPLACE SCHEMA TASK\_MONITOR\_SCHEMA;

//---WAREHOUSE-----

USE ROLE ACCOUNTADMIN;

CREATE WAREHOUSE IDENTIFIER('"TASK\_MONITOR\_WH"') COMMENT = '' WAREHOUSE\_SIZE = 'X-Small' AUTO\_RESUME = true AUTO\_SUSPEND = 600 ENABLE\_QUERY\_ACCELERATION = false WAREHOUSE\_TYPE = 'STANDARD' MIN\_CLUSTER\_COUNT = 1 MAX\_CLUSTER\_COUNT = 2 SCALING\_POLICY = 'STANDARD';

GRANT MODIFY, OPERATE, USAGE, MONITOR ON WAREHOUSE "TASK\_MONITOR\_WH" TO ROLE "TASK\_MONITOR\_ADMIN";

//---USER--------

USE ROLE ACCOUNTADMIN;

CREATE USER IDENTIFIER('TASK\_MONITOR\_USER') COMMENT = 'FOR TASK MONITORING' PASSWORD = '' MUST\_CHANGE\_PASSWORD = FALSE LOGIN\_NAME = 'TASK\_MONITOR\_USER' FIRST\_NAME = '' LAST\_NAME = '' DISPLAY\_NAME = 'TASK\_MONITOR\_USER' EMAIL = '' DEFAULT\_WAREHOUSE = 'COMPUTE\_WH' DEFAULT\_NAMESPACE = '';

GRANT ROLE TASK\_MONITOR\_ADMIN TO USER TASK\_MONITOR\_USER;

**2.Create View(QUERY\_CREDITS)**:

// --VIEW---

USE ROLE TASK\_MONITOR\_ADMIN;

USE SCHEMA TASK\_MONITOR\_DB.TASK\_MONITOR\_SCHEMA;

CREATE OR REPLACE VIEW QUERY\_CREDITS AS

SELECT S.QUERY\_ID,

S.QUERY\_TEXT,

S.NAME AS TASK\_NAME,

S.STATE AS STATUS,

D.EXECUTION\_TIME,

D.WAREHOUSE\_SIZE,

D.WAREHOUSE\_NAME,

D.CREDITS\_USED\_CLOUD\_SERVICES,

START\_TIME,

END\_TIME

FROM SNOWFLAKE.ACCOUNT\_USAGE.TASK\_HISTORY AS S

INNER JOIN SNOWFLAKE.ACCOUNT\_USAGE.QUERY\_HISTORY AS D

ON S.QUERY\_ID=D.QUERY\_ID

WHERE TASK\_NAME NOT IN (SELECT DISTINCT(TASK\_NAME) FROM SNOWFLAKE.ACCOUNT\_USAGE.SERVERLESS\_TASK\_HISTORY);