ACCOUNT_USAGE - Views					
Name	**Object Type**	**Latency**	**Retention**	**Edition**	**Notes**
ACCESS_HISTORY	Historical	3 Hours	1 year	Enterprise or Higher	Used to query the **access history of Snowflake objects** e.g. table, view, column within the last 365 days(1 year).
ALERT_HISTORY	Historical	3 Hours to 45 mins	1 year		Retrieve the **history of alert usage** within the last 365 days, displays one row for each run of a alert.
AUTOMATIC_CLUSTERING_HISTORY	Historical	3 Hours	1 year		Used to query the **Automatic Clustering history**. The information returned by the view includes the credits consumed, bytes updated, and rows updated each time a table is reclustered.
DATABASE_REPLICATION_USAGE_HISTORY	Historical	3 Hours	1 year		Used to query the **database replication history**. The returned results include the database name, credits consumed, and bytes transferred for replication. Usage data is retained for 365 days. **Note:** Results are only returned for **secondary databases** in the current account (i.e. the target account)
DATABASE_STORAGE_USAGE_HISTORY	Historical	3 Hours	1 year		Used to query the **average daily storage usage, in bytes,** for databases in the account for the last 365 days. The data includes: -> All data stored in tables in the database(s). -> All historical data maintained in Fail-safe for the database(s).
EVENT_USAGE_HISTORY	Historical	3 Hours	1 year		Used to **query the history of data loaded into Snowflake EVENT tables** within the last 365 days.The view displays the history of data loaded and credits billed for your entire Snowflake account. **Note:** An event table is designed to record events, event logs and trace events logged from function and procedure handler code. The table contains a predefined set of columns for capturing log entries and trace events.We associate and event table with our account to capture log entries and trace events to that table. Only one table can be associated with an account at a time. The associated event table is referred as "**active event table**".
MATERIALIZED_VIEW_REFRESH_HISTORY	Historical	3 Hours	1 year	Enterprise or Higher	Used to **query the materialized views refresh history**. The information returned by the view includes the view name and credits consumed each time a materialized view is refreshed.
METERING_DAILY_HISTORY	Historical	3 Hours	1 year		Can be used to return the **daily credit usage and a cloud services rebate for an account** within the last 365 days. **Note:** Usage for cloud services is billed only if the daily consumption of cloud services exceeds 10% of the daily usage of virtual warehouses.

METERING_HISTORY	Historical	3 Hours	1 year		Used to return the hourly credit usage for an account within the last 365 days. **Note #1:** Latency for this view can be up to 6 hours for the CREDITS_USED_CLOUD_SERVICES column. **Note #2:** Latency for showing the credit consumption of SNOWPIPE_STREAMING may be up to 12 hours. **Note #3:** Type of service that is consuming credits, which can be one of the following: AUTO_CLUSTERING, COPY_FILES, MATERIALIZED_VIEW, PIPE, QUERY_ACCELERATION, REPLICATION, SEARCH_OPTIMIZATION, SERVERLESS_TASK, SNOWPARK_CONTAINERS, SNOWPIPE_STREAMING, WAREHOUSE_METERING, WAREHOUSE_METERING_READER.
PIPE_USAGE_HISTORY	Historical	3 Hours	1 year		Used to **query the history of data loaded into Snowflake tables using Snowpipe** within the last 365 days. The view displays the history of data loaded and credits billed for your entire Snowflake account. **Note #1:** Snowflake bills for auto-refresh notifications in *external tables* and *directory tables* on external stages at a rate equivalent to the Snowpipe file charge. You can estimate charges incurred by your external table and directory table auto-refresh notifications by examining this PIPE_USAGE_HISTORY view or function, the auto-refresh pipes will be listed under a NULL pipe name. You can also view your external table auto-refresh notification history at the table-level/stage-level granularity by using the Information Schema table function AUTO_REFRESH_REGISTRATION_HISTORY. **Note #2:** To avoid charges for auto-refresh notifications, perform a manual refresh for external tables and directory tables. For external tables, the ALTER EXTERNAL TABLE <name> REFRESH … statement can be used to manually synchronize your external table to external storage. For directory tables, the ALTER STAGE <name> REFRESH … statement can be used to manually synchronize the directory to external storage.

QUERY_ACCELERATION_ELIGIBLE	Historical	3 Hours	1 year	Enterprise or Higher	Used to identify queries that are eligible for the query acceleration service. It also identifies warehouses that might benefit from the query acceleration service. The SYSTEM$ESTIMATE_QUERY_ACCELERATION function can also be used for this purpose. The query acceleration service when enabled for a warehouse improves overall warehouse performance by reducing the impact of outlier queries that use more resources than typical query. It does this by offloading portions of query processing work to shared compute resources & performing more work in parallel and reducing the time spent in scannig & filtering.
QUERY_ACCELERATION_HISTORY	Historical	3 Hours	1 year		Used to query the history of queries accelerated by the query acceleration service. The information returned by the view includes the warehouse name and the credits consumed by the query acceleration service.
REPLICATION_GROUP_REFRESH_HISTORY	Historical	3 Hours	1 year		Used to query the **refresh history for a specified replication or failover group**.Results are only returned for secondary failover or replication groups in the current account (i.e. the target account). **Note:** **->** Database and share replication are available to all accounts. **->** Replication of other account objects & failover/failback require Business Critical Edition (or higher). **Key Columns:** START & END_TIME, REPLICATION_GROUP_ID, REPLICATION_GROUP_NAME, JOB_UUID, TOTAL_BYTES & OBJECT_COUNT (JSON objects that gives detailed information about Refreshed Databases & Objects respectively).
REPLICATION_GROUP_USAGE_HISTORY	Historical	3 Hours	1 year		Used to query the **replication history for a specified replication or failover group**. The returned results include the replication or failover group name, credits consumed, and bytes transferred for replication. Usage data is retained for 365 day. **Columns:** START_TIME,END_TIME, REPLICATION_GROUP_ID, REPLICATION_GROUP_NAME, CREDITS_USED (total credits used during replication), BYTES_TRANSFERED.
REPLICATION_USAGE_HISTORY	Historical	3 Hours	1 year		The view is deprecated. **->** Use DATABASE_REPLICATION_USAGE_HISTORY View for **database replication**. **->** Use REPLICATION_GROUP_USAGE_HISTORY View for **account replication**.
SEARCH_OPTIMIZATION_HISTORY	Historical	3 Hours	1 year	Enterprise or Higher	Used to query the search history. The information returned by the view includes the search optimization service name and credits consumed by the service.

SERVERLESS_TASK_HISTORY	Historical	3 Hours	1 year		Used to query the serverless task usage history. The information returned by the view includes the serverless task name and credits consumed by serverless task usage.
SESSIONS	Historical	3 Hours	1 year		Provides **information on the session, including information on the authentication method to Snowflake and the Snowflake login event**. Snowflake returns one row for each session created over the last year.
SNOWPARK_CONTAINER_SERVICES_HISTORY	Historical	3 Hours	1 year		Used to return the **hourly compute pool credit usage for an account** within the last 365 days.The credit rate usage is determined based on the machine type (instance family) of the compute pool.
LOCK_WAIT_HISTORY	Historical	3 Hours	1 year		Returns transaction details that can be useful in analyzing blocked transactions. Each row in the output includes the details for a transaction that is waiting on a lock and the details of transactions that are holding that lock or waiting ahead for that lock.
WAREHOUSE_EVENTS_HISTORY	Historical	3 Hours	1 year		Used to **return the events that have been triggered for the single-cluster and multi-cluster warehouses in our account** in the last 365 days. Supported events include: *-> Creating, dropping, or altering a warehouse, including resizing the warehouse.* *-> Resuming or suspending a warehouse.* *-> Resuming, suspending, or resizing a cluster in a warehouse (single-cluster and multi-cluster warehouses).* *-> Stopping or starting additional clusters in a warehouse (multi-cluster warehouses only).* **Note:** Each event can produce multiple rows in the view for the following reasons: => Events often trigger additional, related events. => Events may take time to complete or may be canceled; if this occurs, the EVENT_STATE column indicates whether the event was started, completed, or canceled.
WAREHOUSE_LOAD_HISTORY	Historical	3 Hours	1 year		Used to **analyze the workload on our warehouse within a specified date range**. Load history is shown in 5-minute intervals.
WAREHOUSE_METERING_HISTORY	Historical	3 Hours	1 year		Used to return the hourly credit usage for a single or all warehouses in our account within the last 365 days
EXTERNAL_ACCESS_HISTORY	Historical	3 Hours	1 year		Used to query the history of external access performed by procedure or UDF handler code within the last 365 days. **Note:** Each row in the view represents a single IP address that the procedure or UDF accesses. As a result, there might be multiple rows with different IP addresses, but with the same query ID. There might also be multiple hostnames mapped to the same IP address

AGGREGATE_QUERY_HISTORY	Historical	3 Hours			Enables us to **monitor and track execution of statements over time**. **It contains similar data to the QUERY_HISTORY view but is aggregated in one-minute intervals for repeated SQL statements**. We can use this view to monitor your workload and analyze performance.
OBJECT_DEPENDENCIES	Historical	3 Hours			Displays one row for each object dependency. For example, if a view is dependent on two tables, Snowflake returns one row for first table & another row for second table.
DATA_TRANSFER_HISTORY	Historical	2 Hours	1 year		Used to query the **history of data transferred from Snowflake tables into a different cloud storage provider's network** (i.e. from Snowflake on AWS, Google Cloud Platform, or Microsoft Azure into the other cloud provider's network) **and/or geographical region within the last 365 days**. The view includes the history for your entire Snowflake account.
COPY_HISTORY	Historical	2 Hours	1 year		Used to query **Snowflake data loading history** for the last 365 days. The view displays **load activity for both COPY INTO <table> statements & continuous data loading using Snowpipe**. The view avoids the 10,000 row limitation of the LOAD_HISTORY View.
LOGIN_HISTORY	Historical	2 Hours	1 year		Used to query **login attempts by Snowflake users within the last 365 days**.
SNOWPIPE_STREAMING_CLIENT_HISTORY	Historical	2 Hours	1 year		Used to **query the amount of time spent loading data into Snowflake tables using Snowpipe Streaming** within the last 365 days.
STAGE_STORAGE_USAGE_HISTORY	Historical	2 Hours	1 year		Used to **query the average daily data storage usage, in bytes, within the last 365 days for all the Snowflake internal stages** in the account, including Named internal stage & default staging areas(for tables & users).
STORAGE_USAGE	Historical	2 Hours	1 year		Displays the average daily data storage usage, in bytes, within the last 365 days across the entire account, including data in Database tables & Files in all internal stages.
SNOWPIPE_STREAMING_FILE_MIGRATION_HISTORY	Historical	12 Hours	1 year		Used to **query the history of data migrated into Snowflake tables using Snowpipe Streaming within the last 365 day**s. The view displays the number of rows and bytes migrated and credits used for migration billed for your entire Snowflake account.

LOAD_HISTORY	Historical	90 minutes	1 year		Enables us to retrieve the **history of data loaded into tables using the COPY INTO <table> command** within the last 365 days. The view displays one row for each file loaded. It does not return the history of data loaded using **Snowpipe**. **Note:** The view only includes COPY INTO commands that executed to completion, with or without errors. No record is added if the transaction is rolled back, for example, or if the ON_ERROR = ABORT_STATEMENT copy option is included in the COPY INTO <table> statement and a detected error in a data file aborts the load operation.
COMPLETE_TASK_GRAPHS	Historical	45 minutes	1 year		Used to query the status of completed graph runs (i.e. runs that executed successfully, failed, or were cancelled). **Note:** The view avoids the 10,000 row limitation of the COMPLETE_TASK_GRAPHS.
QUERY_HISTORY	Historical	45 minutes	1 year		Used to query Snowflake query history by various dimensions (time range, session, user, warehouse, etc.) within the last 365 days. It is available in both the ACCOUNT_USAGE and READER_ACCOUNT_USAGE schemas with the following differences: => The following column is AVAILALBE ONLY in the reader account view: READER_ACCOUNT_NAME => The following columns are NOT AVAILABLE in the reader account view: QUERY_ACCELERATION_BYTES_SCANNED QUERY_ACCELERATION_PARTITIONS_SCANNED QUERY_ACCELERATION_UPPER_LIMIT_SCALE_FACTOR
TASK_HISTORY	Historical	45 minutes			Enables us to retrieve the history of task usage within the last 365 days. The view displays one row for each run of a task in the history.
CLASS_INSTANCES	Object	3 Hours	1 year		Displays a row for each instance of a class defined in the account.
CLASSES	Object	3 Hours	1 year		Displays a row for each class in the account.
SERVICES	Object	3 Hours	1 year		It is similar to SERVICES view in information schema except this view includes deleted Snowpark Container Services services.
DATABASES	Object	3 Hours			Displays a row for each database defined in our account.
TASK_VERSIONS	Object	3 Hours			Enables us to retrieve the history of task versions. The returned rows indicate the tasks that comprised a DAG and their properties at a given time.
PIPES	Object	3 Hours			Displays a row for each pipe defined in the account.
ROLES	Object	2 Hours	1 year		Used to query a list of all roles defined in the account. The data is retained for 365 days.

USERS	Object	2 Hours	1 year		Used to query a list of all users in the account. The data is retained for 365 days.
TABLE_STORAGE_METRICS	Object	90 minutes			**Displays table-level storage utilization information, which is used to calculate the storage billing for each table in the account, including tables that have been dropped, but are still incurring storage costs**. In addition to table metadata, the view displays the **number of storage bytes billed for each table**. Snowflake breaks down the bytes into the following categories: => **Active bytes**, representing data in the table that can be queried. => **Deleted bytes** that are still accruing storage charges because they have not been purged yet from the system. These bytes are classified into the following sub-categories: **-> Bytes in Time Travel** (i.e. recently deleted, but still within the Time Travel retention period for the table). -> **Bytes in Fail-safe** (i.e. deleted bytes that are past the Time Travel retention period, but within the Fail-safe period for the table). -> **Bytes retained for clones** (i.e. deleted bytes that are no longer in Time Travel or Fail-safe, but are still retained because clones of the table reference the bytes).
FILE_FORMATS	Object	2 Hours			Displays a row for each file format defined in the account.File formats are named objects that can be used for loading/ unloading data.
FUNCTIONS	Object	2 Hours			Displays a row for each user-defined function (UDF) defined in the account.
PROCEDURES	Object	2 Hours			Displays a row for each stored procedure defined in the account.
GRANTS_TO_ROLES	Object	2 Hours			Used to query access control privileges that have been granted to a role.
GRANTS_TO_USERS	Object	2 Hours			Used to query the roles that have been granted to a user.
MASKING_POLICIES	Object	2 Hours			Provides the masking policies in our account. Each row in this view corresponds to a different masking policy.
NETWORK_RULE_REFERENCES	Object	2 Hours			Returns one row for each network rule that is associated with an external access integration or a network policy.The view only displays objects for which the current role for the session has been granted access privileges. It is complementary to the Information Schema table function NETWORK_RULE_REFERENCES.
PASSWORD_POLICIES	Object	2 Hours			Provides the user-defined password policies in your account. Each row in this view corresponds to a different password policy.

POLICY_REFERENCES	Object	2 Hours			Used to identify policy objects and their references in your account.The view supports masking, network, and row access policies.The view is complementary to the Information Schema table function POLICY_REFERENCES.
REFERENTIAL_CONSTRAINTS	Object	2 Hours			Displays a row for each referential integrity constraint defined in the account.
ROW_ACCESS_POLICIES	Object	2 Hours			Displays a row for each row access policy defined in your account. Each row corresponds to a different row access policy. The view only returns rows if row access policies have been created in your account.
SCHEMATA	Object	2 Hours			Displays a row for each schema in the account except the ACCOUNT_USAGE, READER_ACCOUNT_USAGE, and INFORMATION_SCHEMA schemas.
SEQUENCES	Object	2 Hours			Displays a row for each sequence defined in the account.
SESSION_POLICIES	Object	2 Hours			Provides the session policies in your account. Each row in this view corresponds to a different session policy.
STAGES	Object	2 Hours			Displays a row for each stage defined in the account. Stages are named objects that can be used for loading/ unloading data.
TABLE_CONSTRAINTS	Object	2 Hours			Displays a row for each referential integrity constraint defined for the tables in the account.
TABLES	Object	90 minutes			Displays a row for each table and view in the account.
COLUMNS	Object	90 minutes			Displays a row for each column in the tables defined in the account.
VIEWS	Object	90 minutes			Displays a row for each view in the account, not including the views in the ACCOUNT_USAGE, READER_ACCOUNT_USAGE, and INFORMATION_SCHEMA schemas.

READER_ACCOUNT_USAGE - Views					
Name	**Object Type**	**Latency**	**Retention**	**Edition**	**Notes**
WAREHOUSE_METERING_HISTORY	Historical	3 hours	1 year		Used to return the hourly credit usage for a single warehouse or all the warehouses in our account within the last 365 days.
LOGIN_HISTORY	Historical	2 hours	1 year		Used to query login attempts by Snowflake users within the last 365 days.
STORAGE_USAGE	Historical	2 hours	1 year		Displays the average daily data storage usage, in bytes, within the last 365 days (1 year) across the entire account, including data in Database tables and Files in all internal stages.
QUERY_HISTORY	Historical	45 minutes	1 year		Used to query Snowflake query history by various dimensions (time range, session, user, warehouse, etc.) within the last 365 days.
RESOURCE_MONITORS	Object	2 hours			Displays the resource monitors that have been created in the reader accounts managed by the account. **Note: This view available ONLY in READER_ACCOUNT_USAGE schema.**