

Monitoring Aggregate Usage

The **Aggregates** page displays all aggregate instances that have been defined for your deployed models, as well as your aggregate build history. You can view what aggregates have been created, when they were last built, and how often they have been queried.

To access the **Aggregates** page, open the main menu and select **Aggregates**.

Definitions Tab

The **Definitions** tab displays all aggregate definitions in your system.

Model Name	Catalog Name	Type	Promoted	Instance Status	Utilization	Last Build Started	Last Build Duration	Attributes & Measures
TPC-DS Benchmark Model	AtScale Model Library	User-Defined	No	✓ Active	0	May 21, 2024 4:45 PM GMT-4	5,976 ms	Dependents Count, Sold Mornin... Store Sales Row Counter, Store ...
TPC-DS Benchmark Model	AtScale Model Library	User-Defined	No	✗ Failed	0	May 21, 2024 4:45 PM GMT-4	78,776,258 ms	Product Brand Name, Product C... Store Sales Price, Store Sales P...

The table contains the following information for each definition:

- ▲ The name of the model and catalog the aggregate is defined on.
- ▲ The aggregate type; for example, manual or hinted.
- ▲ The aggregate's status:
 - ▲ **Active:** The definition is complete and available for queries.
 - ▲ **Building:** The definition is currently being created.
 - ▲ **Canceled:** The definition was canceled by user request.
 - ▲ **Deleted:** The definition was deleted.
 - ▲ **Failed:** The definition failed.
 - ▲ **Inactive:** The definition is no longer used.
 - ▲ **Pending:** The definition is pending.
 - ▲ **Queued:** The definition is in the build queue.
 - ▲ **Staged:** The definition is complete, but is waiting for a remaining batch to complete before being activated.
 - ▲ **Unavailable:** The definition cannot be accessed.
- ▲ The aggregate definition's utilization, or how many times overall queries have accessed it since its inception.
- ▲ When the last build started and how long it lasted.

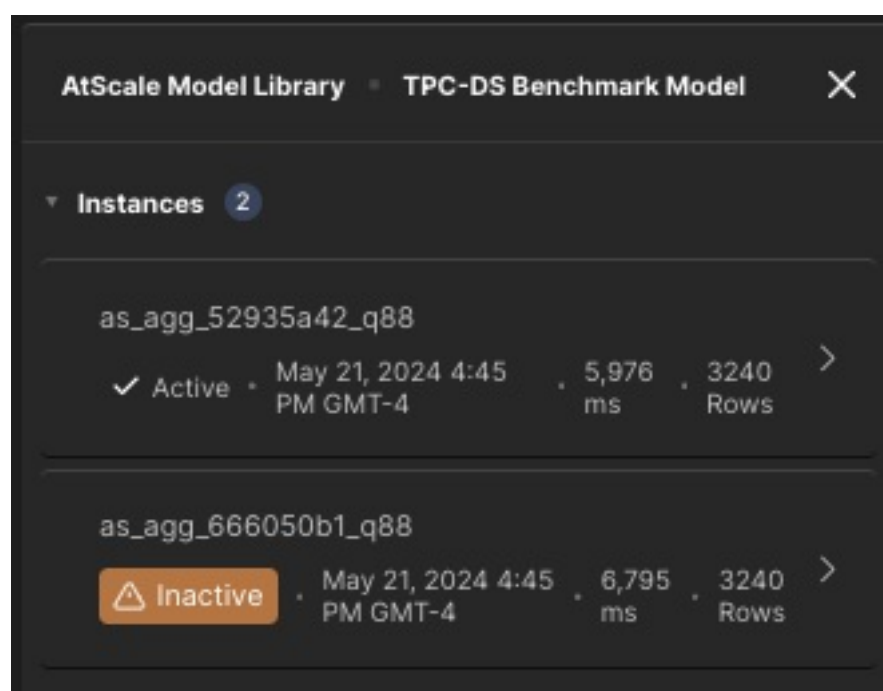
- ▲ The specific attributes and measures included in the aggregate definition.

You can use the fields at the top of the tab to filter the table; for example, you can filter by aggregate type or when an aggregate was last accessed.

Aggregate Details Panel

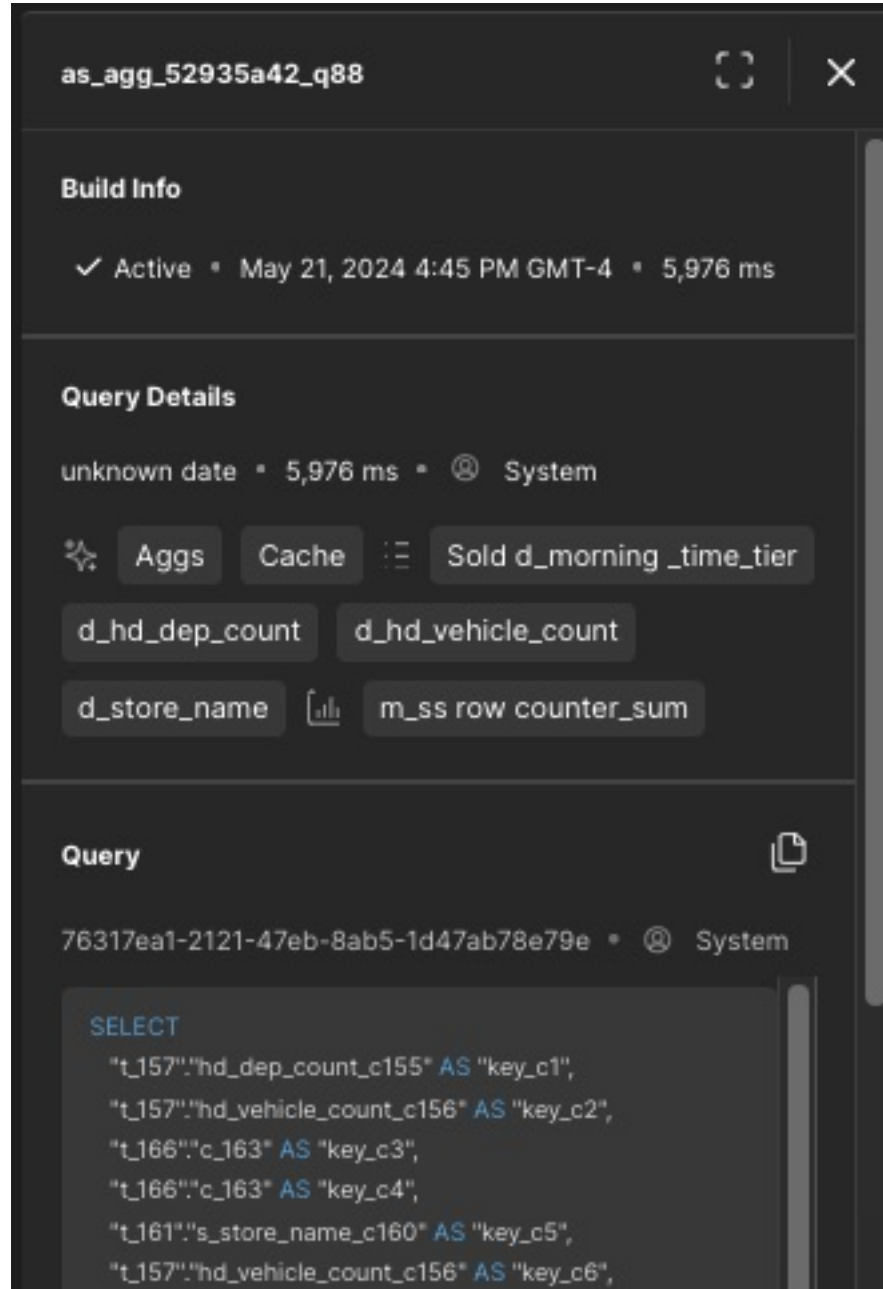
You can click on an aggregate definition in the table to open the aggregate details panel, which displays additional information about it.

The **Instances** section of the panel displays all instances of the aggregate, including its status, when it was last built, how long the build took, and how many rows it contains.



AtScale Model Library		TPC-DS Benchmark Model			
▼ Instances 2					
as_agg_52935a42_q88					
✓ Active	May 21, 2024 4:45 PM GMT-4	5,976 ms	3240 Rows	>	
as_agg_666050b1_q88					
⚠ Inactive	May 21, 2024 4:45 PM GMT-4	6,795 ms	3240 Rows	>	

From here, you can click on an instance to open the instance details panel, which contains more information about that particular instance, including its full SQL query.



The screenshot displays the 'as_agg_52935a42_q88' aggregate details panel. It is divided into three main sections: 'Build Info', 'Query Details', and 'Query'. The 'Build Info' section shows the aggregate is active, created on May 21, 2024, at 4:45 PM GMT-4, and took 5,976 ms to build. The 'Query Details' section shows the query is of type 'unknown date', also took 5,976 ms, and is owned by 'System'. It lists several fields: 'Aggs' (Aggs), 'Cache' (Cache), 'Sold d_morning_time_tier', 'd_hd_dep_count', 'd_hd_vehicle_count', 'd_store_name', and 'm_ss row counter_sum'. The 'Query' section shows the query ID '76317ea1-2121-47eb-8ab5-1d47ab78e79e' and the query text:

```
SELECT
  "t_157"."hd_dep_count_c155" AS "key_c1",
  "t_157"."hd_vehicle_count_c156" AS "key_c2",
  "t_166"."c_163" AS "key_c3",
  "t_166"."c_163" AS "key_c4",
  "t_161"."s_store_name_c160" AS "key_c5",
  "t_157"."hd_vehicle_count_c156" AS "key_c6",
```

The **Metadata** section of the aggregate details panel contains general information about the aggregate definition:

- ▲ **Aggregate Name:** The name of the aggregate. This is only applicable if the aggregate is a UDA.
- ▲ **Aggregate ID:** The unique ID associated with the aggregate.
- ▲ **Created Date:** When the aggregate was created.
- ▲ **Definition Status:** Whether the aggregate is usable or unusable.
- ▲ **Data Warehouse:** The data warehouse in which the aggregate definition was built.
- ▲ **Last Build Started:** When the process that built the most recent definition began. If the aggregate instance is currently building, this field displays the build start time.
- ▲ **Last Build Ended:** When the process that built the most recent definition ended.
- ▲ **Last Accessed:** When any query last accessed the aggregate definition.
- ▲ **Utilizations (Cumulative):** The total number of queries that have used the aggregate since it was created.
- ▲ **Utilizations (Recent):** The total number of queries that have used the aggregate over the past X number of days.

The number of days corresponds to the value of the Window Size parameter; for details, see [Settings for Automatic Removal of Unused Aggregates](#). Consider that the Utilizations value may not be current, since the job that updates the recent usage counts runs periodically (three times per day). The value displayed here is not calculated on demand, and it is not recalculated if you refresh the browser.

- ▲ **Query Saved Time:** Amount of time saved due to aggregation.
- ▲ **Incremental:** Whether the aggregate will be incrementally updated.
- ▲ **Attributes** and **Measures** present in the aggregate definition.

Build History Tab

The **Build History** tab of the Aggregates page displays aggregate builds that have run in your system.

Aggregates				
DEFINITIONS		BUILD HISTORY		
Batch ID	Catalogs	Models		
Batch ID	Select Catalog	Select Catalog to select a model		
Status	BuildStarted			
Select status	Select Build Started Within	Reset	1 Results	ROWS PER PAGE 20
Model Name	Catalog Name	Status	Start Time	Duration
TPC-DS Benchmark Model	sml-models_main	✓ Successful	May 21, 2024 4:45 PM GMT-4	6,228 ms

The table contains the following information for each build:

- ▲ The name of the catalog and model for which aggregates were built.
- ▲ The build status.
- ▲ The build start time and duration.

You can filter the builds using the fields above the table.

As with the **Definitions** tab, you can click on a specific build in the table to open the aggregate details panel. From there, you can click on a specific instance to view additional details about it, including its full SQL query.