Scheduling Jobs Using TD Console

Treasure Data's scheduler feature supports periodic query execution to achieve high availability.

When two specifications provide conflicting schedule specifications, the specification requesting to execute more often is followed while the other schedule specification is ignored.

For example, if the cron schedule is '0 0 1 * 1', then the 'day of month' specification and 'day of week' are discordant because the former specification requires it to run every first day of each month at midnight (00:00), while the latter specification requires it to run every Monday at midnight (00:00). The latter specification is followed.
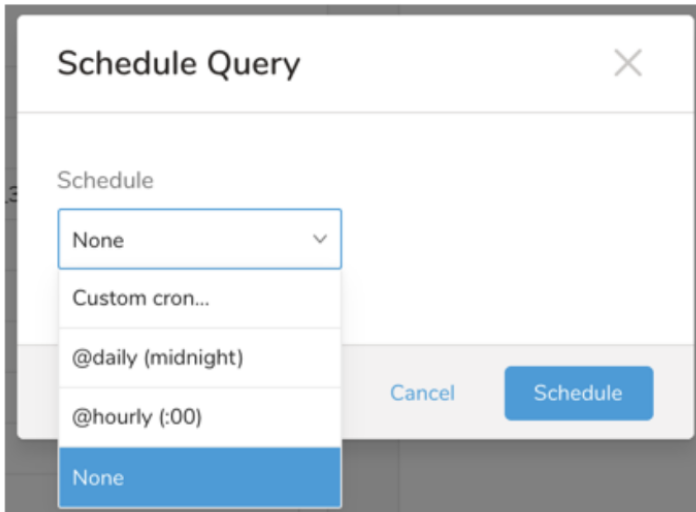
Prerequisites

- Basic knowledge of Treasure Data
- A table with some data

Scheduling your Job Using TD Console

1. Navigate to **Data Workbench > Queries**.

2. Create a new query or select an existing query.

3. Next to **Schedule**, select None.

Schedule: None

4. In the drop-down, select one of the following schedule options.

Drop-down Value	Description
Custom cron...	Review Custom cron... details.
@daily (midnight)	Run once a day at midnight (00:00 am) in the specified time zone.
@hourly (:00)	Run every hour at 00 minutes.
None	No schedule.

Custom cron... Details

Schedule Query

Schedule

Custom cron...

Cron ❓

0 * * * *

The TD_SCHEDULED_TIME UDF returns the time of the job's scheduled run formatted as a Unix timestamp integer.

Timezone

America/Los_Angeles

☐ Delay execution

A delay ensures all buffered events are imported before running the query. Doesn't affect TD_SCHEDULED_TIME().

Cancel   Schedule

Cron Value	Description
0 * * * *	Run once an hour
0 0 * * *	Run once a day at midnight
0 0 1 * *	Run once a month at midnight on the morning of the first day of the month
""	Create a job that has no scheduled run time.

```
*     *     *     *     *
-     -     -     -     -
|     |     |     |     |
|     |     |     |     +----- day of week (0 - 6) (Sunday=0)
|     |     |     +---------- month (1 - 12)
|     |     +-------------- day of month (1 - 31)
|     +------------------ hour (0 - 23)
+---------------------- min (0 - 59)
```

The following named entries can be used:

- Day of Week: sun, mon, tue, wed, thu, fri, sat
- Month: jan, feb, mar, apr, may, jun, jul, aug, sep, oct, nov, dec

A single space is required between each field. The values for each field can be composed of:

Field Value	Example	Example Description
a single value, within the limits displayed above for each field.		
a wildcard '*' to indicate no restriction based on the field.	'0 0 1 * *'	configures the schedule to run at midnight (00:00) on the first day of each month.
a range '2-5', indicating the range of accepted values for the field.	'0 0 1-10 * *'	configures the schedule to run at midnight (00:00) on the first 10 days of each month.
a list of comma-separated values '2,3,4,5', indicating the list of accepted values for the field.	0 0 1,11,21 * *'	configures the schedule to run at midnight (00:00) every 1st, 11th, and 21st day of each month.

a periodicity indicator `*/5` to express how often based on the field's valid range of values a schedule is allowed to run.	`30 */2 1 * *`	configures the schedule to run on the 1st of every month, every 2 hours starting at 00:30. `0 0 */5 * *` configures the schedule to run at midnight (00:00) every 5 days starting on the 5th of each month.
a comma-separated list of any of the above except the `*` wildcard is also supported `2,*/5,8-10`.	`0 0 5,* /10,25 * *`	configures the schedule to run at midnight (00:00) every 5th, 10th, 20th, and 25th day of each month.

5. (Optional) If you enabled the Delay execution, you can delay the start time of a query.

Execute the Query

Save the query with a name and run, or just run the query. Upon successful completion of the query, the query result is automatically imported to the specified container destination.

ⓘ Scheduled jobs that continuously fail due to configuration errors may be disabled on the system side after several notifications.