

Data Load into Snowflake from Local System

1. Purpose

To load CSV machine downtime dataset from a local machine directly into a Snowflake table in a controlled and repeatable manner.

2. Prerequisites

- Snowflake access, sign in snowflake account
- Source file in **CSV UTF-8** format
- Data cleaned and validated in Excel

3. Prepare Source File

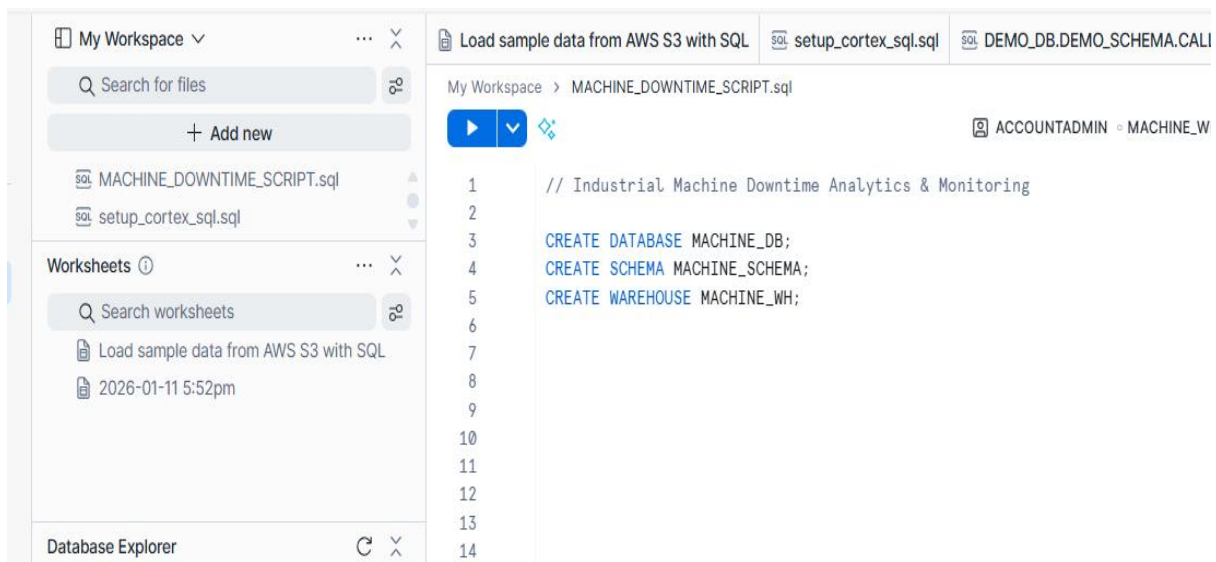
- Clean data in Excel
- Convert text dates to real dates

Fixed Date column Given date column is text “31-12-2021” value convert into date using formula “31-12-2021” **=DATE(RIGHT(A2,4), MID(A2,4,2), LEFT(A2,2))** Then paste as value in next column delete previous two.

- Remove formulas, extra spaces, and invalid values
- Save file as **CSV UTF-8**

4. Procedure

1) Create Database, Schema and warehouse

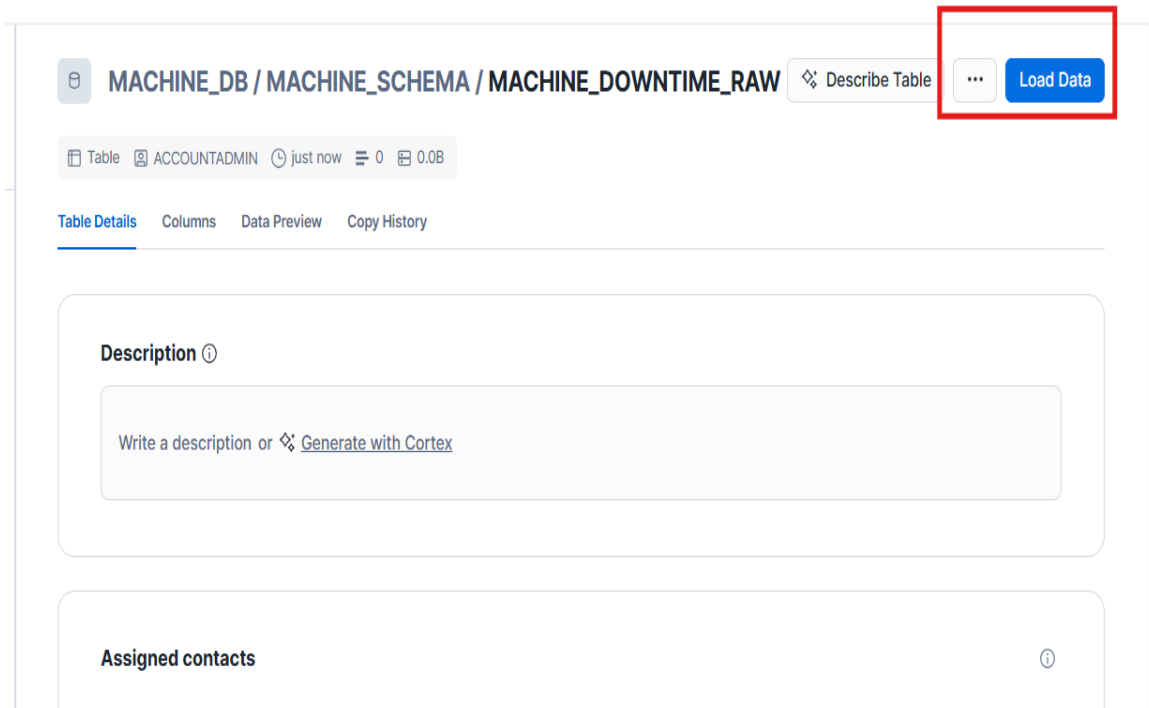


2) Create Target Table

```
CREATE OR REPLACE TABLE MACHINE_DOWNTIME_RAW (
  DATE DATE,
  MACHINE_ID VARCHAR(50),
  ASSEMBLY_LINE_NO VARCHAR(50),
  HYDRAULIC_PRESSURE_BAR FLOAT,
  COOLANT_PRESSURE_BAR FLOAT,
  AIR_SYSTEM_PRESSURE_BAR FLOAT,
  COOLANT_TEMPERATURE_C FLOAT,
  HYDRAULIC_OIL_TEMPERATURE_C FLOAT,
  SPINDLE_BEARING_TEMPERATURE_C FLOAT,
  SPINDLE_VIBRATION_M FLOAT,
  TOOL_VIBRATION_M FLOAT,
  SPINDLE_SPEED_RPM INTEGER,
  VOLTAGE_VOLTS INTEGER,
  TORQUE_NM FLOAT,
  CUTTING_KN FLOAT,
  DOWNTIME VARCHAR(30)
);
```

3) Load Data into Table

Open horizon CatLog of table and load data



Check all dataset, schema and warehouse are correctly selected, then Browse file and click

Load Data into Table

MACHINE_WH

MACHINE_DB.MACHINE_SCHEMA.MACHINE_D...

Drag and drop to upload files

or

Browse

or

Add from Stage

File size limit: 250MB

Supported formats: CSV/TSV, json, orc, avro, parquet, xml

Select or create a database and schema

Schema MACHINE_DB.MACHINE_SCHEMA

+ Database

Select or create a table

MACHINE_DOWNTIME_RAW

Cancel

Back

Next

4) Validate Load

Validate all parameters, eg. header: Skip first line and all as shown image. Then load

File format

Delimited Files (CSV or TSV)

Select existing or create in [Worksheets](#)

Learn more about format-specific configurations in [Snowflake Docs](#)

Header

Skip first line

Field delimiter

Comma (default)

Trim space

True (default)

Field optionally enclosed by

Double quotes (default)

Replace invalid characters

True (default)

Date format

Auto* (default)

Time format

Auto* (default)

Timestamp format

Auto* (default)

Edit Schema

Table Preview

16 Table Columns (16 Matches)

FROM 1 FILE	TO MACHINE_DOWNTIME_RAW	DATA PREVIEW	STATUS
<input checked="" type="checkbox"/> c1	→ <input type="text" value="DATE"/>	2021-12-31, 2021-12-31, ...	
<input checked="" type="checkbox"/> c2	→ <input type="text" value="MACHINE_ID"/>	Makino-L1-Unit1-2013, M...	
<input checked="" type="checkbox"/> c3	→ <input type="text" value="ASSEMBLY_LINE_NO"/>	Shopfloor-L1, Shopfloor-L...	
<input checked="" type="checkbox"/> c4	→ <input type="text" value="# HYDRAULIC_PRESSU..."/>	71.04, 125.33, 71.12, 139...	Warning: Data types dc
<input checked="" type="checkbox"/> c5	→ <input type="text" value="# COOLANT_PRESSU..."/>	6.933724915, 4.9368918...	Warning: Data types dc
<input checked="" type="checkbox"/> c6	→ <input type="text" value="# AIR_SYSTEM_PRES..."/>	6.284964506, 6.1967325...	Warning: Data types dc
<input checked="" type="checkbox"/> c7	→ <input type="text" value="# COOLANT_TEMPER..."/>	25.6, 35.3, 13.1, 24.4, 4.1	Warning: Data types dc
<input checked="" type="checkbox"/> c8	→ <input type="text" value="# HYDRAULIC_OIL_TE..."/>	46, 47.4, 40.7, 44.2, 47.3	Warning: Data types dc
<input checked="" type="checkbox"/> c9	→ <input type="text" value="# SPINDLE_BEARING..."/>	33.4, 34.6, 33, 40.6, 31.4	Warning: Data types dc
<input checked="" type="checkbox"/> c10	→ <input type="text" value="# SPINDLE_VIBRATIO..."/>	1.291, 1.382, 1.319, 0.618, ...	Warning: Data types dc
<input checked="" type="checkbox"/> c11	→ <input type="text" value="# TOOL_VIBRATION_M"/>	26.492, 25.274, 30.608, 3...	Warning: Data types dc

Show SQL

Cancel

Back

Load



Successfully Loaded Data

Machine_Downtime_raw.csv → MACHINE_DB.MACHINE_SCHEMA.MACHINE_D...

2,500 rows were successfully inserted into the table.

Generate SQL from table

View table details

Data is successfully loaded from local CSV into Snowflake table and ready for downstream analytics.

5)Preview data

Database Explorer

HORIZON CATALOG

Databases

Search

DEMO_DB

MACHINE_DB

INFORMATION_SCHEMA

MACHINE_SCHEMA

Tables

MACHINE_DOWNTIME_RAW

PUBLIC

SNOWFLAKE

SNOWFLAKE_LEARNING_DB

SNOWFLAKE_SAMPLE_DATA

STREAMLIT_DB

USERSKSWAT19

MACHINE_DB / MACHINE_SCHEMA / MACHINE_DOWNTIME_RAW

Describe Table

Load Data

Table

ACCOUNTADMIN

11 minutes ago

2.5K

151.0KB

Table Details

Columns

Data Preview

Copy History

MACHINE_WH

100 of 2.5K Rows • Updated just now

	DATE	MACHINE_ID	ASSEMBLY_LINE_NO	HYDRAULIC_PRESSURE_BAR	COOLANT_PRESSURE_BAI
1	2021-12-31	Makino-L1-Unit1-2013	Shopfloor-L1	71.04	6.93372491
2	2021-12-31	Makino-L1-Unit1-2013	Shopfloor-L1	125.33	4.93689186
3	2021-12-31	Makino-L3-Unit1-2015	Shopfloor-L3	71.12	6.83941315
4	2022-05-31	Makino-L2-Unit1-2015	Shopfloor-L2	139.34	4.57438200
5	2022-03-31	Makino-L1-Unit1-2013	Shopfloor-L1	60.51	6.89318192
6	2022-03-31	Makino-L2-Unit1-2015	Shopfloor-L2	137.37	5.91835733
7	2022-03-31	Makino-L1-Unit1-2013	Shopfloor-L1	135.93	6.56033219
8	2022-03-31	Makino-L3-Unit1-2015	Shopfloor-L3	127.7151635	5.06070856
9	2022-03-31	Makino-L3-Unit1-2015	Shopfloor-L3	123.618456	5.07437970