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

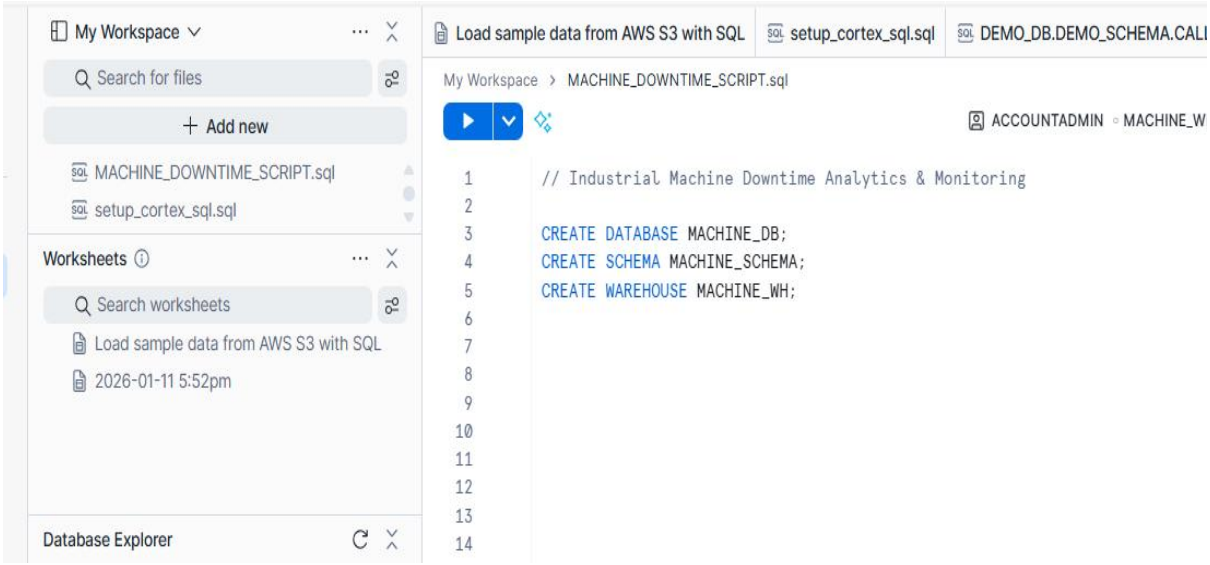
3. Prepare Source File

- 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

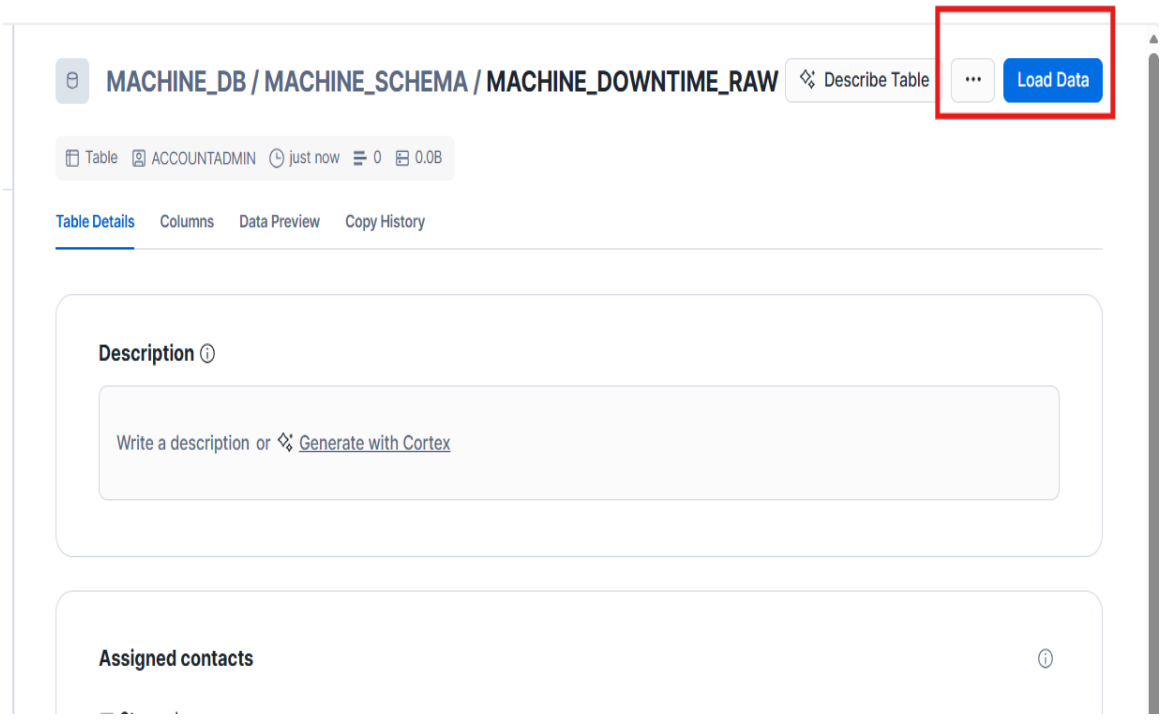


2) Create Target Table

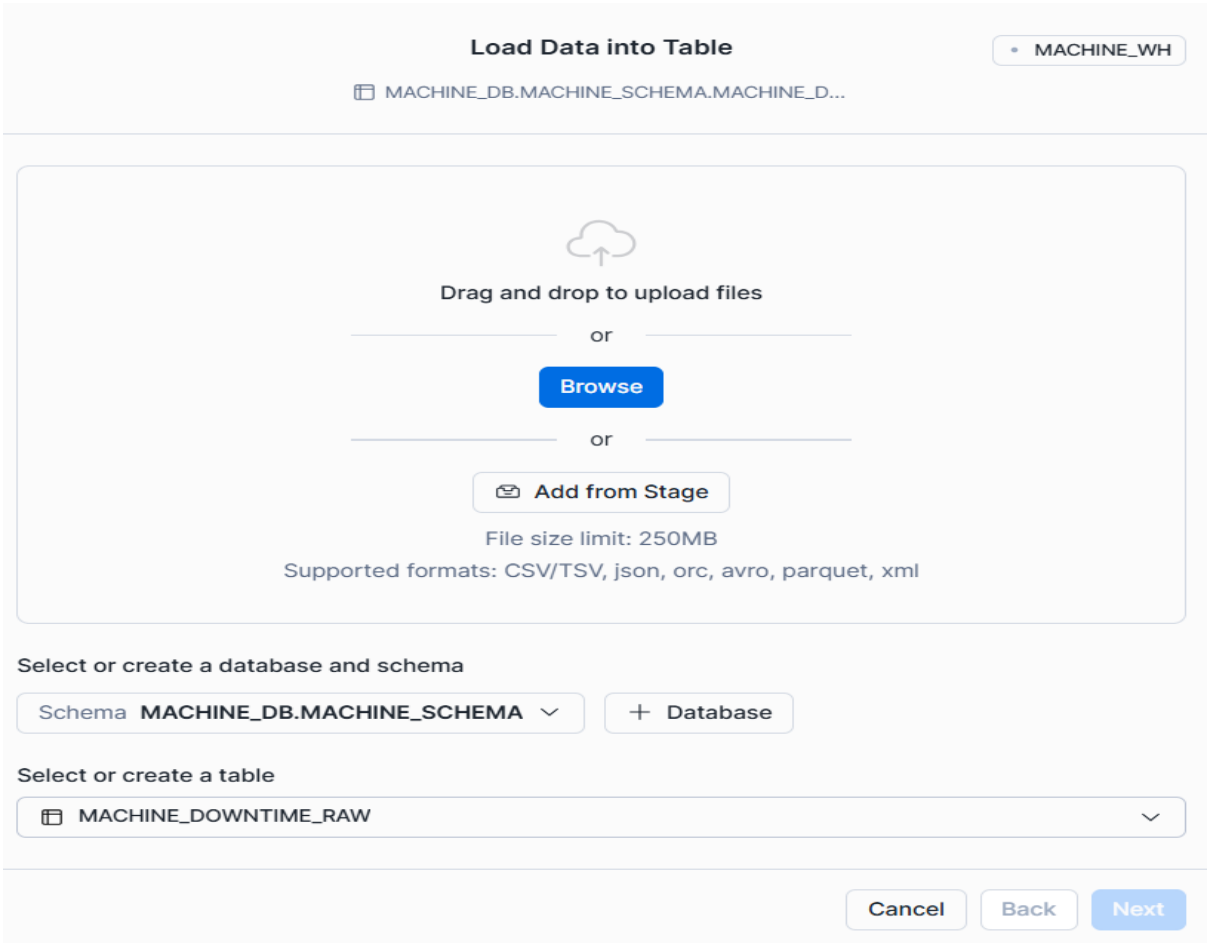
```
CREATE OR REPLACE TABLE MACHINE_DOWNTIME_RAW (
    DATE                          DATE,
    MACHINE_ID                    VARCHAR(50),
    ASSEMBLY_LINE_NO              VARCHAR(50),
    HYDRAULIC_PRESSURE_BAR        FLOAT,
    COOLANT_PRESSURE_BAR          FLOAT,
    AIR_SYSTEM_PRESSURE_BAR       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

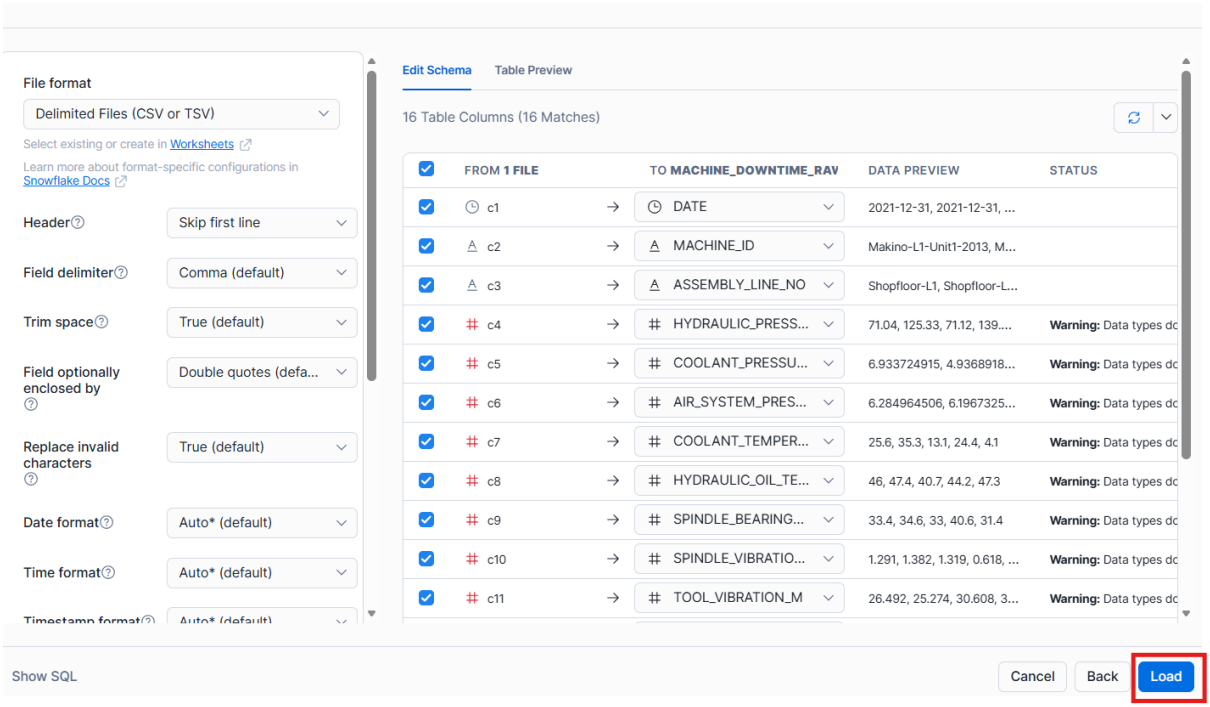


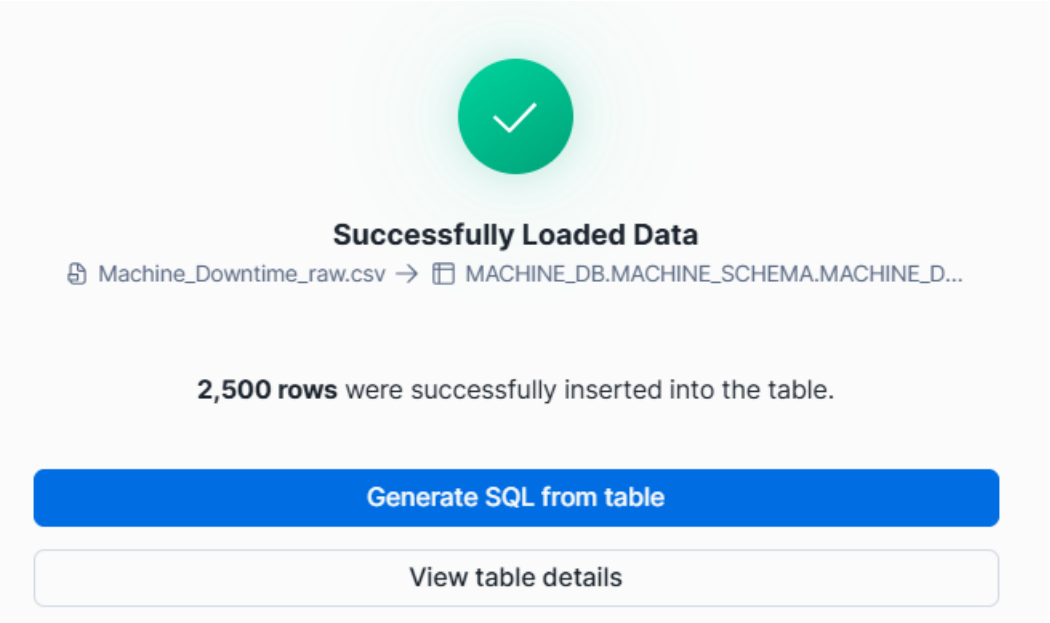
Check all dataset, schema and warehouse are correctly selected, then Browse file and click



4) Validate Load

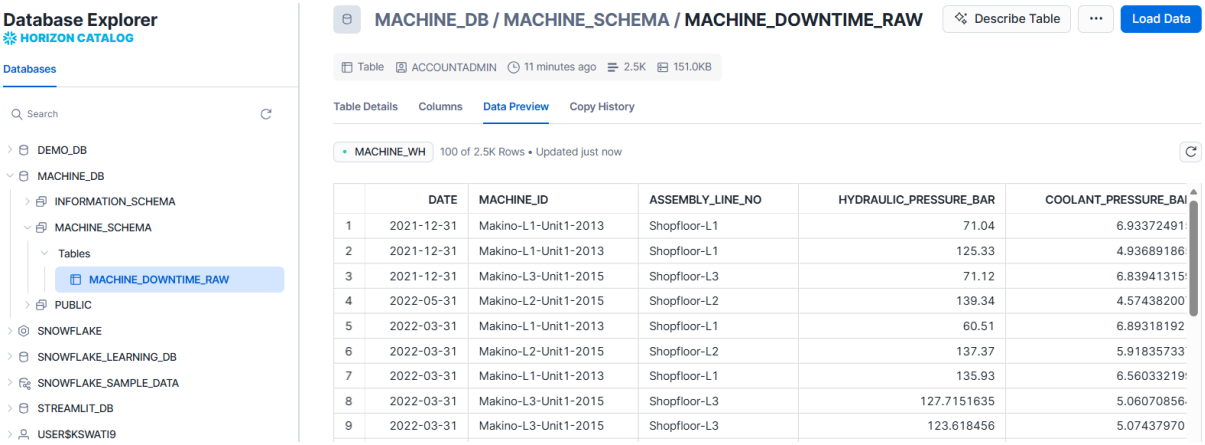
Validate all parameters, eg. header: Skip first line and all as shown image. Then load





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

5)Preview data



	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