

## Data Flow

Data flow refers to how data work and transit from one endpoint to another.

Stage of data flow from Ms Server to API server:

1. Pulling Data from Daily procedure SQL server and store it into a backup file aligned by date.
2. Login to API and add a token to local storage.
3. Posting daily transactions from local files to API Server can be manually or automatically.

## Project Structure

This is how the project is structured inside the project folder. Each folder contains its purpose file.

```
|—dbcsv //Backup daily transaction by date and store
|—doc // Document
|—logs // Events logs
```

### Detail View

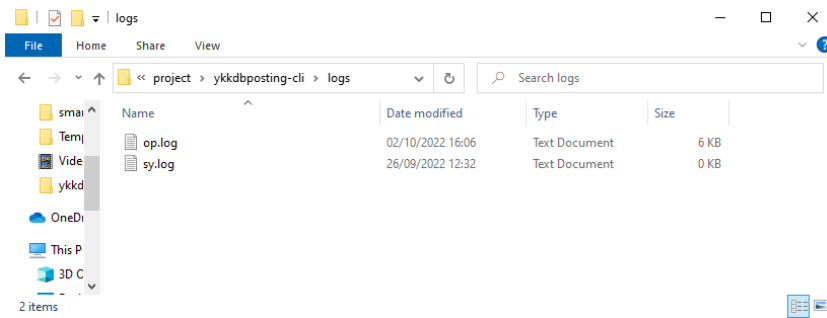
Mode	LastWriteTime		Length	Name
----	-----		-----	----
d-----	01/10/2022	11:30		dbcsv
d-----	01/10/2022	13:08		doc
d-----	26/09/2022	12:32		logs
-a-----	01/10/2022	11:59	444	.env
-a-----	27/09/2022	13:46	36	.gitignore
-a-----	26/09/2022	19:13	42	2022-09-26.csv
-a-----	01/10/2022	11:24	867	commands.js
-a-----	26/09/2022	12:47	428	dbConfig.js
-a-----	26/09/2022	16:59	978	dbOperation.js
-a-----	01/10/2022	11:53	2695	getDailyTransaction.js
-a-----	01/10/2022	11:58	1382	loginToAPI.js
-a-----	30/09/2022	22:23	145860	package-lock.json
-a-----	30/09/2022	16:43	629	package.json
-a-----	01/10/2022	12:06	1817	postDailyTransaction.js
-a-----	01/10/2022	11:36	2923	postData.js
-a-----	27/09/2022	19:05	228	README.md
-a-----	26/09/2022	14:21	871	toDateFM.js
-a-----	01/10/2022	11:35	264	tokens.json

## Event log file

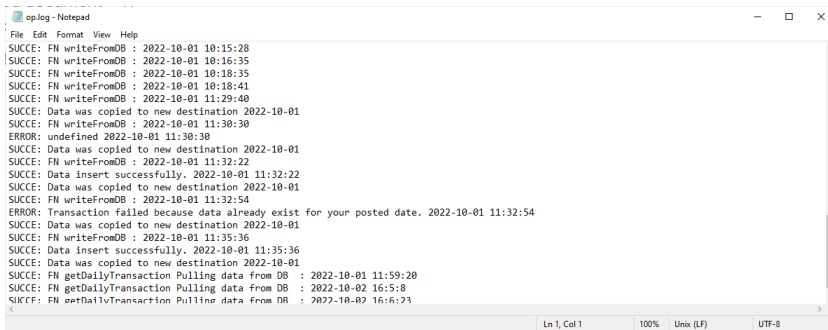
Where is the journal of the event?

Each process is properly written into a log file at the specific date time. Here is the event log file located.

logs/op.log



The log should look as following:



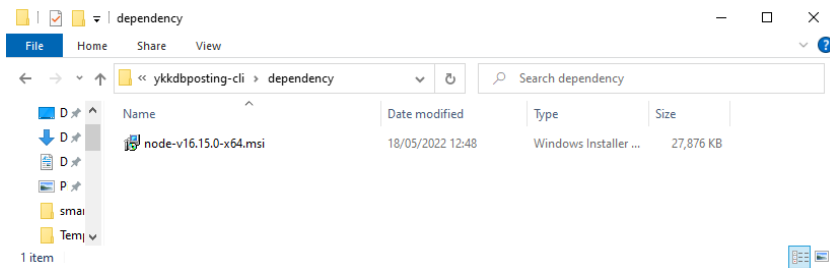
# Install and Deployment

There are few packages that need to be installed before running the script.

## 1 Dependency

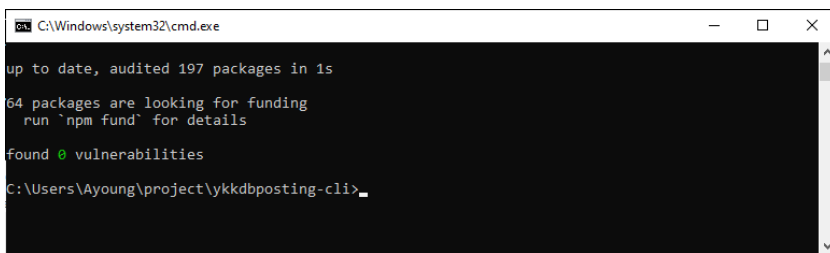
- Nodejs version : v16.15.0
- npm version: 8.5.5

Install Nodejs in the dependency folder.

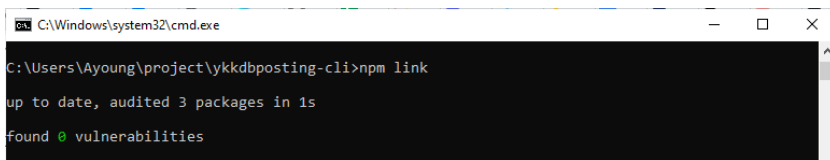


initial project by install dependency go to project directory enter the following command

*npm install*

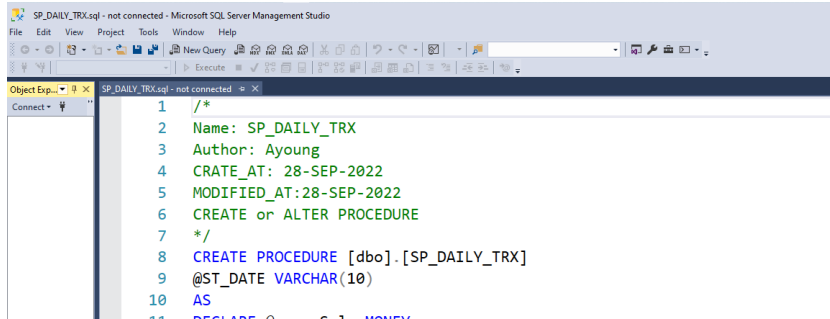


*npm link*



## 2 Deploy SP Script

Get SP\_DAILY\_TRX.sql and run on MSSQL server at each database that needs to post the transaction to API.

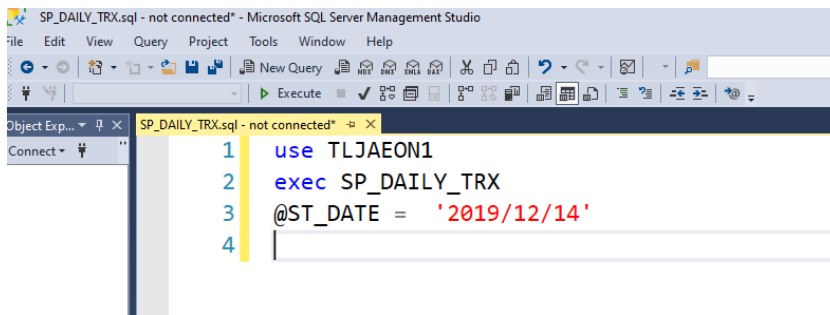


The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The 'Object Explorer' on the left shows a tree view of the database. The 'Query Editor' on the right contains the following T-SQL script:

```
1  /*
2  Name: SP_DAILY_TRX
3  Author: Ayoung
4  CRATE_AT: 28-SEP-2022
5  MODIFIED_AT: 28-SEP-2022
6  CREATE or ALTER PROCEDURE
7  */
8  CREATE PROCEDURE [dbo].[SP_DAILY_TRX]
9  @ST_DATE VARCHAR(10)
10 AS
11 BEGIN
```

Test execute Procedure

```
use TLJAEON1
exec SP_DAILY_TRX
@ST_DATE = '2019/12/14'
```



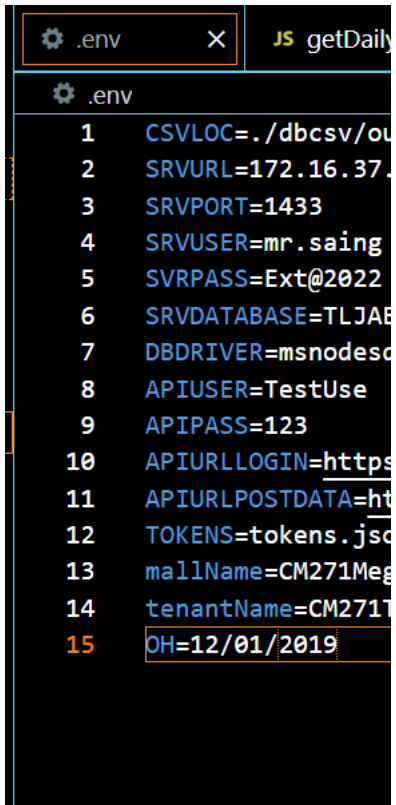
The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The 'Query Editor' on the right contains the following T-SQL script:

```
1  use TLJAEON1
2  exec SP_DAILY_TRX
3  @ST_DATE = '2019/12/14'
4
```

The result should display up on the completion of execution of above script.

### 3 Environment Configuration

go and edit .env file replace with actual environment configuration.



The image shows a VS Code editor window with a file named `.env` open. The editor has a dark theme. The file content is as follows:

```
1 CSVLOC=./dbcsv/output
2 SRVURL=172.16.37.100
3 SRVPORT=1433
4 SRVUSER=mr.saing
5 SVRPASS=Ext@2022
6 SRVDATABASE=TLJAB
7 DBDRIVER=msnodesql
8 APIUSER=TestUse
9 APIPASS=123
10 APIURLLOGIN=https://172.16.37.100:1433
11 APIURLPOSTDATA=https://172.16.37.100:1433
12 TOKENS=tokens.json
13 mailName=CM271Meg
14 tenantName=CM271T
15 OH=12/01/2019
```

The line numbers 1 through 15 are visible on the left side of the editor. The file name `.env` is shown in the top left of the editor window. The text `JS getDaily` is visible in the top right of the editor window.

## 4 Test From Command Line

Posting daily sale by: Store, Date, Mall Name, Tenant Name:

```
ykkdbposting-cli p TLJAEON1 2019-12-13 CM271MegaMall CM271TheAsianKitchen
```

```
C:\Windows\system32\cmd.exe
C:\Users\Ayoung\project\ykkdbposting-cli>ykkdbposting-cli p TLJAEON1 2019-12-13 CM271MegaMall CM271TheAsianKitchen
Backup transaction ...
Data was copied to new destination
Pulling data from TLJAEON1 on Fri Dec 13 2019 07:00:00 GMT+0700 (Indochina Time) transaction ...
{
  grossSale: 4974700,
  taxAmount: 452238.23,
  netSale: 4522381.93,
  cashAmount: 1831300,
  creditCardAmount: 0,
  otherAmount: 3143400,
  totalCreditCardTransaction: 0,
  totalTransaction: 214,
  depositAmountUsd: 1359.43,
  depositAmountRiel: 4605300,
  exchangeRate: 4000
}
Start posting data ...
Updating Access Token ...
401 Unauthorized undefined
C:\Users\Ayoung\project\ykkdbposting-cli>
```


Showing Transaction by Store and Date.

```
ykkdbposting-cli s TLJAEON1 2019-12-13
```

```
C:\Windows\system32\cmd.exe
netSale: 4522381.93,
cashAmount: 1831300,
creditCardAmount: 0,
otherAmount: 3143400,
totalCreditCardTransaction: 0,
totalTransaction: 214,
depositAmountUsd: 1359.43,
depositAmountRiel: 4605300,
exchangeRate: 4000
}
Start posting data ...
Updating Access Token ...
401 Unauthorized undefined
C:\Users\Ayoung\project\ykkdbposting-cli>ykkdbposting-cli s TLJAEON1 2019-12-13
{
  grossSale: 4974700,
  taxAmount: 452238.23,
  netSale: 4522381.93,
  cashAmount: 1831300,
  creditCardAmount: 0,
  otherAmount: 3143400,
  totalCreditCardTransaction: 0,
  totalTransaction: 214,
  depositAmountUsd: 1359.43,
  depositAmountRiel: 4605300,
  exchangeRate: 4000
}
C:\Users\Ayoung\project\ykkdbposting-cli>
```

## Running and Create New Script

1. script posting daily transaction

 ykkdbposting.bat

02/10/2022 18:00

Windows Batch File