

How to Update PBI Dashboard

For the Code to Run:

1. Ensure you are connected to the TTG VPN
2. Install Python
3. Using a PC to run the code is best
4. Be in a place with strong connection to the network as any break in the connection will corrupt the running process and will have to be run again.
5. Ensure all packages are installed via your command prompt (These packages are at the top of the codes and are surrounded by red highlighted language such as 'import')
6. Adjust computer sleep settings. This code takes a few hours to run, and a sleeping computer will sever the connection resulting in the same issue identified in 3.
7. When updating SQL, updating the data should not yield any negative effects so long as the same number of observations are being pulled. If one were to add millions more rows of data, the run time will lengthen.
8. It is assumed that you are updating the tables you made for us (RiskFreeCurve, Trades, TemplateHistoData)

For Most Visuals ('5sDataMerged' Table Update) ~2.5 hours

1. In the GitHub repository, enter the 'Analysis' folder and select 'Colton Analysis
2. Scroll down to line 73 and replace the username and password sections of the connection string with your own credentials
3. When prompted, select 'y' (This is a response to the question on screen)
4. Wait a while (<15 minutes) times will be appearing on the screen to show that the code is in fact running
5. When prompted, select 'y'
6. Leave your computer running, every time a chunk is uploaded, a time stamp will appear on screen. Periodically check back in on the code. This process can take (2.5 hours)
7. If upon adding many new rows of data (millions more), a rollback error may occur which requires a restart. To fix, increase the higher of the two numbers in lines 493 and 497. This breaks the data into smaller chunks to more easily upload back to SQL
8. Open the Dashboard and refresh the data for the table

For VIX and Interest Rates Visual ('With Rate Volatility' Table Update) ~2 minutes

1. In the GitHub repository, enter the 'Analysis' folder and select 'Colton Analysis
2. Scroll down to line 73 and replace the username and password sections of the connection string with your own credentials

3. When prompted to select 'y', simply hit enter
4. Analysis section is included. When the analysis selection appears on screen (OLS/LASSO prompt), you may kill the code as the table will have been updated by then. Feel free to carry on with the code but the table update in SQL for the dashboard is complete.
5. Open the Dashboard and refresh the data for the table.

SPX Volatility and Trades ('PBI' Table Update) ~2.5 hours

1. In the GitHub repository, in the SQLDB connection methods, open the PBI code.
2. Go to line 43 and replace the username and password sections of the connection string with your own credentials
3. When prompted, select 'y'
4. Wait a while (15-20 minutes) times will appear on the screen to show that the code is in fact running.
5. When prompted, select 'y'
6. Leave your computer running, every time a chunk is uploaded, a time stamp will appear on screen. Periodically check back in on the code. This process can take (2.5 hours)
7. If upon adding many new rows of data (millions more), a rollback error may occur which requires a restart. To fix, increase the higher of the two numbers in lines 197 and 201. This breaks the data into smaller chunks to more easily upload back to SQL
8. Open the Dashboard and refresh the data for the table

Market Sessions and News Sentiments PBI Pages ~ 20 minutes

1. In the GitHub repository in the "Required SQL Queries Guide", open the document and use run the respective queries for the operation you wish to do.
 - a. The first query works to create a new table of merged data to analyze market sessions and is required for the news sentiment web scraper – **Use this Query.**
 - b. The second queries work to create the new tables required for the code that calculates how much the market moves (either for the SPX or USD.CAD) between trades .
2. In the GitHub Repository in the "Analysis" folder, scroll to the bottom and select the Python file called "Mkt Sessions + News Sentiment Analysis.py".
3. Run the code, ensuring that the TTG VPN is connected beforehand, a valid SQL username and password are input in the required fields, and the SQL database is open in the background.
4. Open the Dashboard and refresh the data for the table.

Market Movement PBI Page ~ 20 minutes

1. In the GitHub repository in the “Required SQL Queries Guide”, open the document and use run the respective queries for the operation you wish to do.
 - a. The first query works to create a new table of merged data to analyze market sessions and is required for the news sentiment web scraper.
 - b. The second queries work to create the new tables required for the code that calculates how much the market moves (either for the SPX or USD.CAD) between trades – **Use this Query.**
2. In the GitHub Repository in the “Analysis” folder, scroll to the bottom and select the Python file called “Market Movement Analysis.py”.
3. Run the code, ensuring that the TTG VPN is connected beforehand, a valid SQL username and password are input in the required fields, and the SQL database is open in the background.
 - a. Alter the code as is explained in the comment in the first lines to determine if you want to update USD.CAD or SPX movement calculations.
4. Open the Dashboard and refresh the data for the table.