

Downloading raw CSV Files from TOS

Raw data is downloaded from the Thinkorswim (TOS) scanner as 11 CSV files and stored in **Downloaded CSV Files** folder. Each file is named according to the sector (e.g., Technology.csv, Healthcare.csv).

Follow these steps to update raw data:

1. Log in to Thinkorswim → main window → **Scan** tab → **Stock Hacker**
2. Third ribbon:
Scan in: All Listed Stock (in **Category**)
Intersect with: By Industry → Choose an industry → **Select All** <industry>
Exclude: All OTC Stocks
3. Use the following filters:
 - **Stock:** Market cap, \$M → **min:** 250M, no max value is specified
 - **Fundamental:** Choose any fundamental metric, and leave min and max values empty. This step is done to make sure OTC stocks are excluded just in case sometimes the **Exclude** condition does not work properly.
4. Make sure required columns are set up in the right order:
 - Use the **Table Schema.xlsx** in the project folder to see the required columns.
 - Click the little **settings wheel** below the **Scan** button to customize columns.
5. Click **Scan** button on the right: It may take a while for data to fully load.
6. At the top right corner, under **On Demand:** click drop-down menu → **Export** → **To file...** → Navigate to **Downloaded CSV Files** folder → Replace the CSV file of the current industry

Running Python Scripts

1. Open the project folder terminal
2. Install all the required libraries (if not yet installed): Run **pip install -r requirements.txt**
3. To output stock screening result: Run **py -m SCRIPTS.etl**
4. To output exit signal detection result: Run **py -m SCRIPTS.exit_signals**
5. To output snapshots of selected stocks: Run **py -m SCRIPTS.stock_snapshot**

Using Power BI Dashboard

Follow the these steps when using the .pbix files for the first time:

1. Copy the path of the project folder
2. Open **Undervalued Stock Scanner.pbix** or **Exit Signals.pbix**
3. **Home tab** → Click **Transform data** drop-down → **Edit parameters** → Click on the **FolderPath** parameter → Paste the current folder path to replace the default folder path → Click **OK**
4. Click **Apply changes** in the popup

Refresh data when you open the dashboards after running Python scripts: **Home tab** → Click **Refresh**