

TS-PortfolioMerge User Manual

Version 1.13.1

George Pruitt Trading Software – www.georgepruitt.com

Recent Update Notes

December 2025 – Forex compatibility (updated guidance)

TS-PortfolioMerge now supports additional Forex pair formats, including pairs **not quoted in U.S. Dollars**. Please see the **last pages of the manual** for the step-by-step workflow (required symbol/pair naming and FX rate file placement).

Important: Roll Credit is not included in Forex results

In this Forex update, **roll credit (swap/rollover interest)** is **not** included in the conversion or P&L results. If your broker/statement includes roll credit, your totals may differ slightly from TS-PortfolioMerge—this is expected. (In other words: TS-PortfolioMerge is converting price/P&L using FX rates, but it is not adding the separate roll credit component.)

Trade file output folder has changed (Public Documents)

Trade files that were previously written under your user Documents folder (e.g., C:\Users\\Documents\...) are now written to **Public Documents** so the location is consistent across Windows user accounts:

C:\Users\Public\Documents\PortfolioMerge-TradeFiles\

(For example, FX rates are stored in ...PortfolioMerge-TradeFiles\FXRates\.)

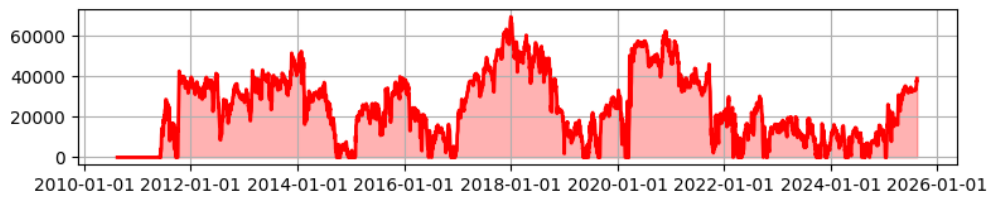
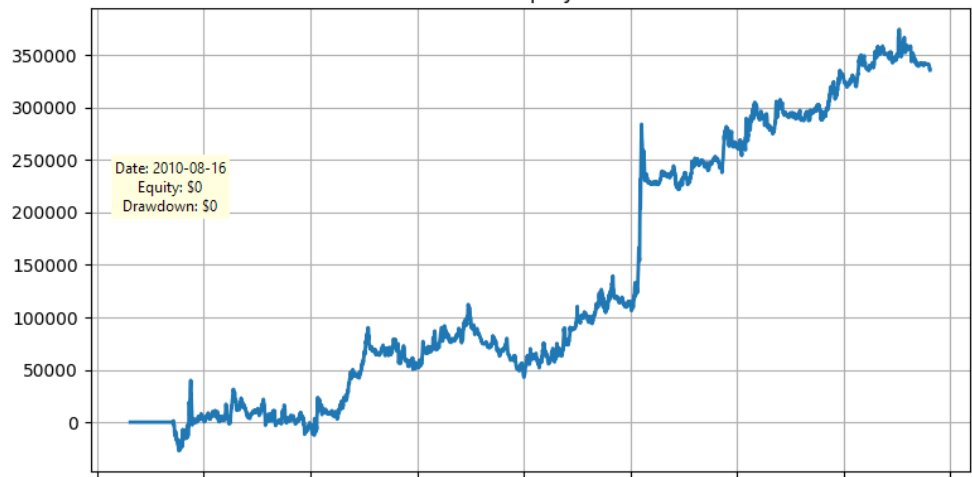
Install note (Windows): uninstall the prior version first

If you already have TS-PortfolioMerge installed, please **uninstall your current version before installing this release**. This prevents “ghost” Start Menu shortcuts and ensures the Start Menu icon launches the correct version. After installing, if the Start Menu entry still looks odd, a quick Windows Explorer restart usually refreshes it.

January 2026 – strategies and inputs reporting page.

A simple, yet sophisticated, tool to combine TradeStation and MultiCharts xml reports into a portfolio analysis report. *October 2025 update – csv files are now compatible by using the TradeStation companion strategy – TS-PortfolioMergeOutPut_v3.*

Portfolio Equity Curve



1. Introduction

TS-PortfolioMerge is a utility for traders and analysts who work with the TradeStation and MultiCharts platforms. It combines multiple system or portfolio equity files into a single consolidated equity curve. The program also generates performance statistics and charts to help evaluate results. For TradeStation users, it functions as an alternative to Portfolio Maestro.

Companion Video

Watch this video! It will get you started quickly.

TS-PortfolioMerge Visual Manual

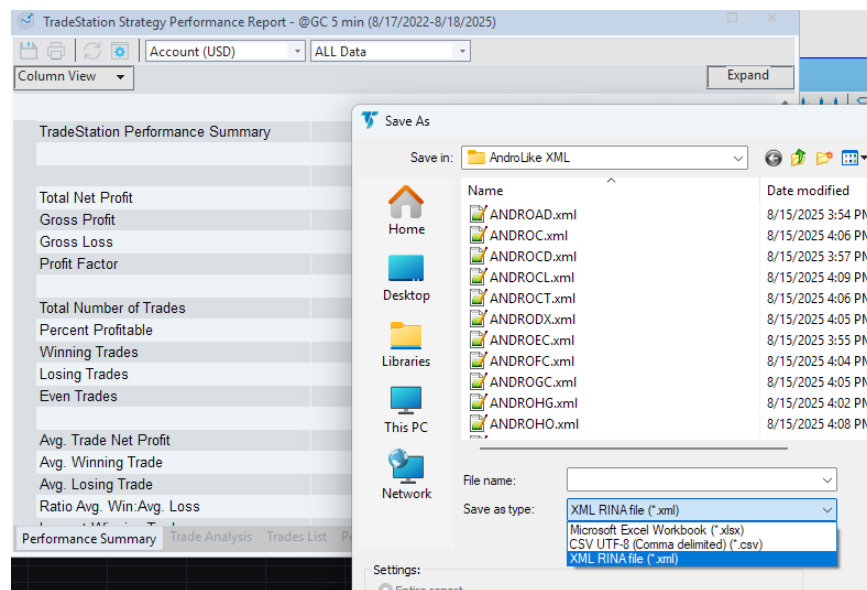
[TS-PortfolioMerge using .csv files and the TSPortfolioMergeOutPut v3.ela](#)

System-Market Concept

Version 1.13 and Greater – XML output and CSV output using the TradeStation companion TS-PortfolioMergeOutPut_v3 Strategy

XML export

When a TradeStation Performance Report is exported as an XML file, it contains both the chart data and all trades from the report. These files can become quite large, especially when the strategy is based on minute bars. Because the XML includes both data and strategy information, this manual refers to the file as a *System-Market*. Although these System-Market files may be large, they can be quickly separated into their data and strategy components. Once separated, the components can be normalized and combined efficiently. This process serves as a practical alternative to building a Portfolio Maestro portfolio, which is often time-consuming and prone to errors.



File Naming Convention when saving Performance Report as XML

When exporting XML files, it is best to use a clear and consistent naming convention. Follow these steps:

1. Choose a file name
 - a) Use a shortened version of the strategy name along with the chart symbol.
 - b) Example: Andromeda-ES for the Andromeda-Like strategy on the S&P 500.
2. Save the first file
 - a) Select File → Save As in the Performance Report.
 - b) Enter the strategy-symbol name and choose XML Rina file (*.xml) as the file type.
3. Save additional files for other markets
 - a) Highlight the previously saved file name.
 - b) The File name field will auto-populate.
 - c) Replace only the symbol with the new market's symbol.
4. Repeat as needed
 - a) Continue saving System-Market files for each strategy/market combination.
 - b) Use the same naming convention for consistency.
5. Note
 - a) This tool allows strategies tested on minute bars to be combined with strategies tested on daily bars.
 - b) TradeStation does not enforce naming standards—it is up to you to maintain your own file naming system.

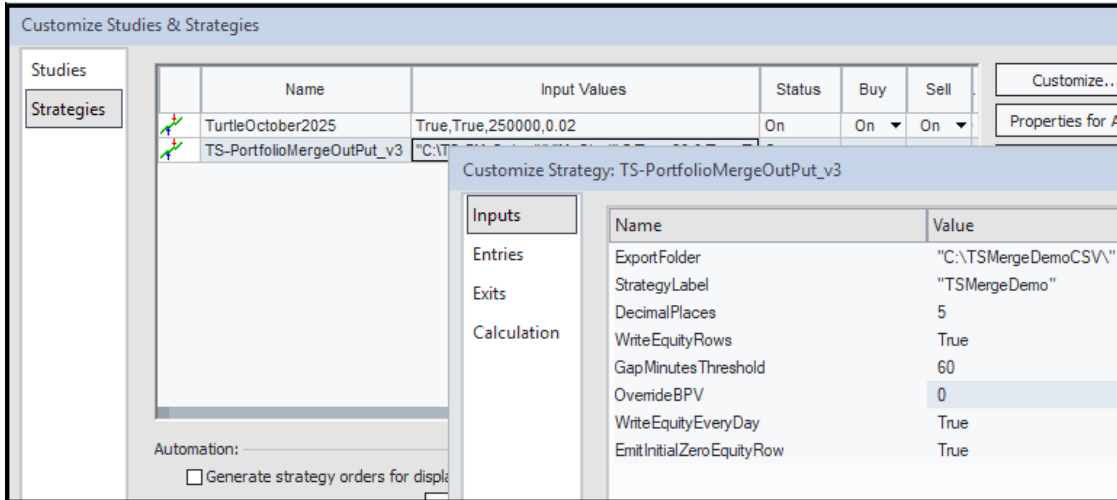
Organizing XML Files into Project Folders

It is recommended to create a dedicated folder for each project to keep XML files organized. For example, if the project involves only the *Andromeda-Like* strategy, create a folder specifically for its output. Store all related XML files in that folder using the System-Market naming convention. If you later decide to combine another strategy with *Andromeda-Like*, continue saving the additional XML files in the same project folder. This approach keeps related files together and makes it easier to manage and combine System-Market files.

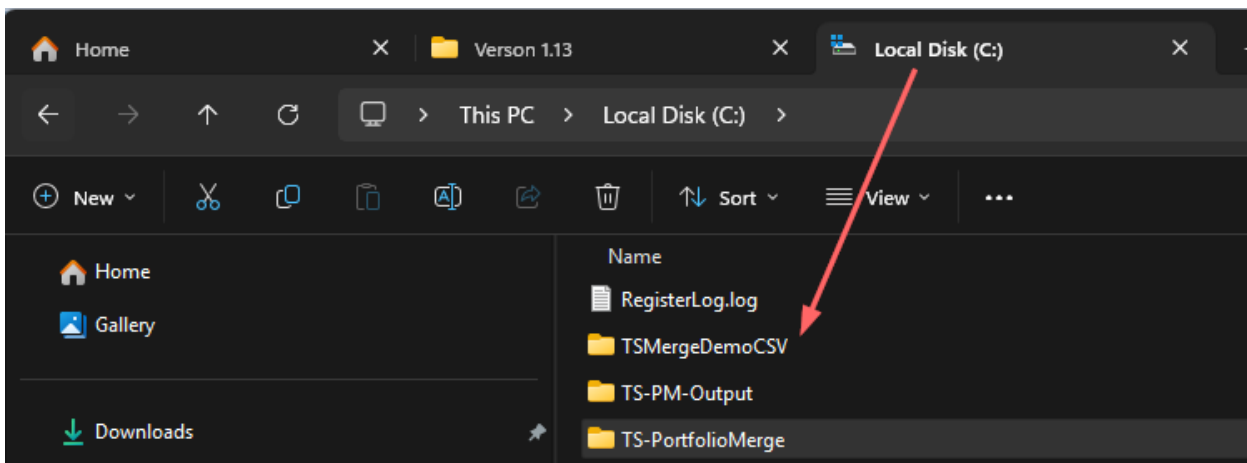
CSV output using the TS-PortfolioMergeOutPut_v3 Companion Strategy

Saving the performance report as XML is the most accurate method of getting the trades from TradeStation to **TS-PortfolioMerge**, but it can be very tedious. I have created a companion strategy that you can add to the strategy that you want to analyze. However, it does require some forethought. When you downloaded the **TS-PortfolioMerge** you will receive two ELD files. One of the file contains the **TS-PortfolioMergeOutPut** strategy. You will need to import this ELD to gain access to the strategy.

This is a companion strategy that is to be inserted along with your existing strategy. In the image below, I have a Strategy named **TurtleOctober2025** AND **TS-PortfolioMergeOutPut_v3** applied simultaneously.

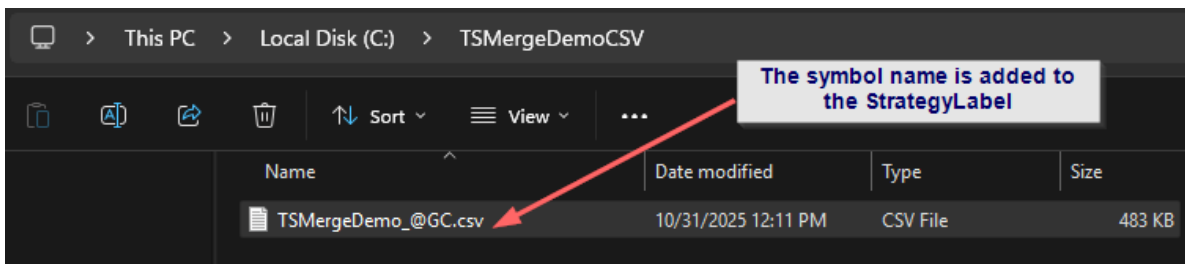


The only inputs you need to concern yourself with are the **ExportFolder** and the **StrategyLabel**. Before applying the strategy, you **MUST HAVE A FOLDER** at the location you specified in **ExportFolder**. If you don't you will receive an error message.



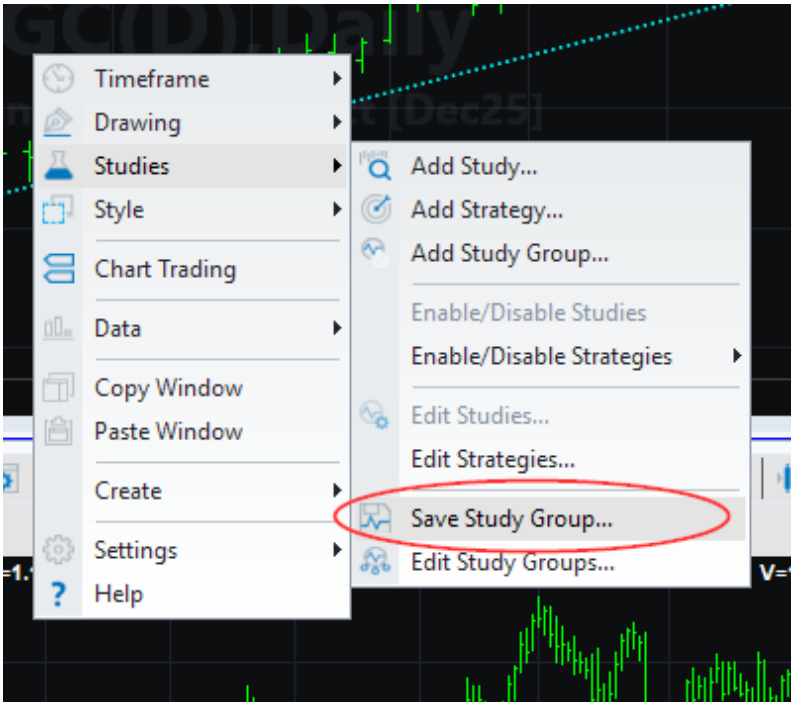
The name of the folder must exactly match the name you input in **ExportFolder**. You will want to use an appropriate name for the **StrategyLabel** too. Here I have chosen **TSMergeDemo** as the label. It is vitally important to include your names inside double quote marks for both inputs – "C:\TSMergeDemoCSV\' and "TSMergeDemo".

Once you are set up, the output that TS-PortfolioMerge needs will be in the **TSMergeDemoCSV** folder. The symbol name will be added to the Strategy Label.

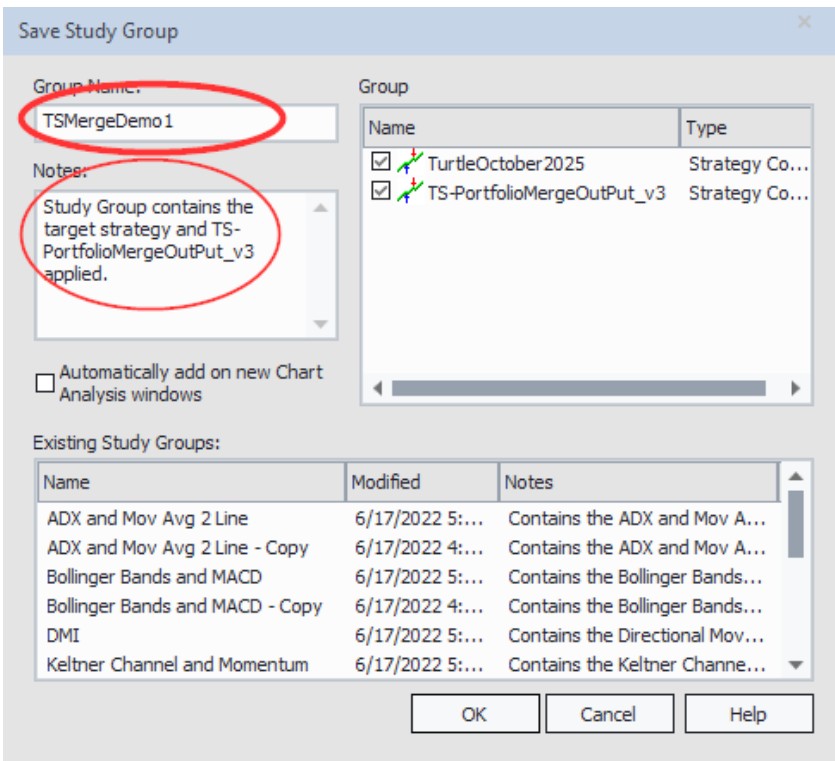


The next step to making things easier is to save the two strategies as a **Study Group**.

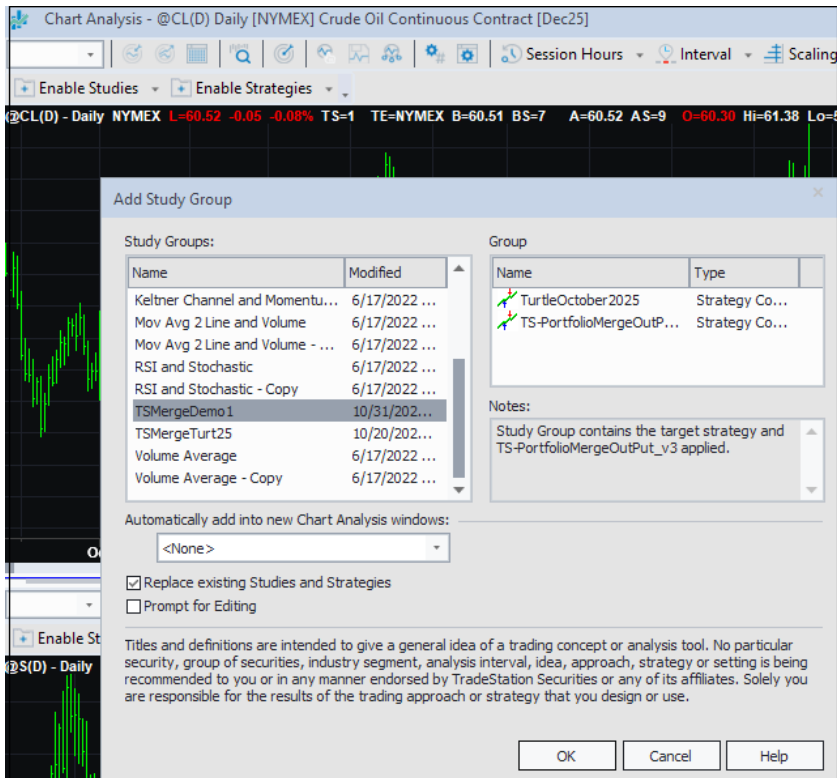
- Edit Strategies and setup you commission and slippage and any other settings the target strategy may need.
- Right click in the chart and select **Save Study Group**. Choose an appropriate name.



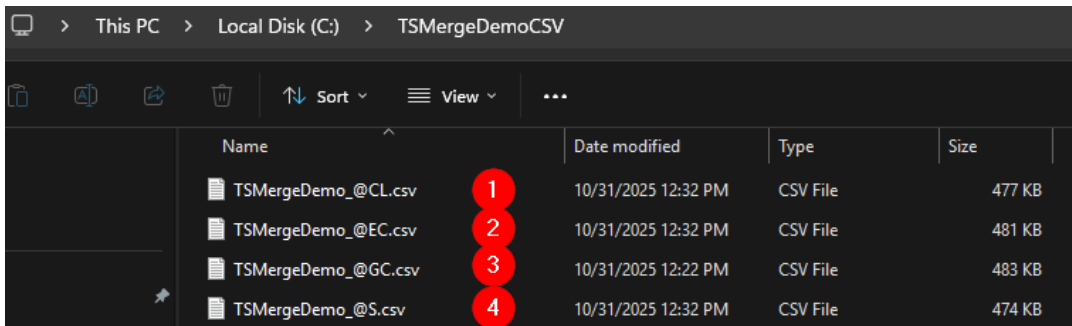
In my workspace, I have four charts. Now that I have one chart with my target strategy and its **Properties for All** set up, and the companion strategy, TS-PortfolioMergeOutPut_v3, I then go to **Save Study Group**.



Now I can quickly add the strategies as one unit to my other three charts.



Once you have applied your new Strategy Group to all your charts your folder should contain one file for each chart.



Version 1.13 accepts XML and CSV

This version now accepts data in the TradeStation XML output and now a specially formatted .CSV file. I have tested many systems and have received identical output results for either format. If you have a problem with the new CSV format, just email me and let me know.

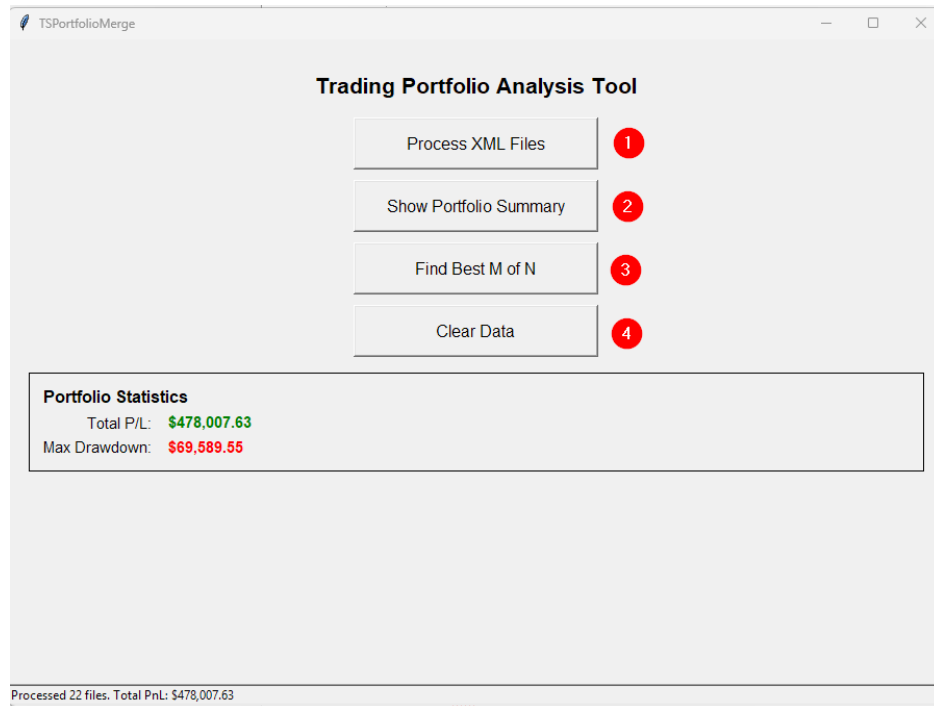
System Requirements

- Windows 10 or later
- Python 3.10+ or packaged executable
- TradeStation or MultiCharts generated XML equity files
- Minimum 4 GB RAM, 100 MB disk space

2. Installation Instructions

1. Download the installer package provided with the distribution.
2. Double-click the installer and follow the on-screen instructions.
3. Launch TS-PortfolioMerge from the Start Menu or desktop shortcut.
4. On first launch, ensure that you have exported equity XML files from TradeStation or MultiCharts.

3. Quick Start Guide – Main Interface



Getting Started with TS-PortfolioMerge

1. **Open the application.**
Launch TS-PortfolioMerge from the Start Menu or desktop shortcut.
2. **Process XML files.**
 - a) Click **Process XML Files**.
 - b) Select one or more XML equity files.
 - c) The program will parse each file, build daily equity data, and merge them into a combined portfolio equity curve.
3. **View results.**
 - a) The combined equity curve and drawdowns are plotted automatically.

b) In the main control panel, Total P/L and Maximum Drawdown are displayed in tabular form.

4. Show detailed summary.

a) Click **Show Summary** to view per-system net profit, drawdowns, trade counts, and equity ratios.

? **Tip:** Right-click on summary reports to access additional options such as copying or saving data.

This tool is great to quickly analyze combining a few System-Market xml files. However, it does much more.

Version 1.11 update – Expanded Portfolio Analysis

The screenshot displays the TSPortfolioMerge application window. The title bar reads 'TSPortfolioMerge'. The menu bar includes 'Report' (highlighted with a red box) and 'Help'. The 'Report' menu is open, showing options: 'Export Performance Report... (Preview then Save)' and 'Save Performance Report As...'. The main area is titled 'Trading Portfolio Analysis Tool' and contains five buttons: 'Process XML Files', 'Select System/Markets', 'Show Portfolio Summary', 'Find Best M of N', and 'Clear Data'. At the bottom, a 'Portfolio Statistics' box shows: Total P/L: \$561,974.80 and Max Drawdown: \$35,752.50.

| Portfolio Statistics | |
|----------------------|--------------|
| Total P/L: | \$561,974.80 |
| Max Drawdown: | \$35,752.50 |

The following pages show the new in-depth analysis that has now been incorporated.

TS-PortfolioMerge - Portfolio Report

Report Range & Capital

Start: 2010-09-20

End: 2025-09-18

Initial Capital: \$75,000.00

Final Equity: \$760,650.13

Merged Systems / Markets

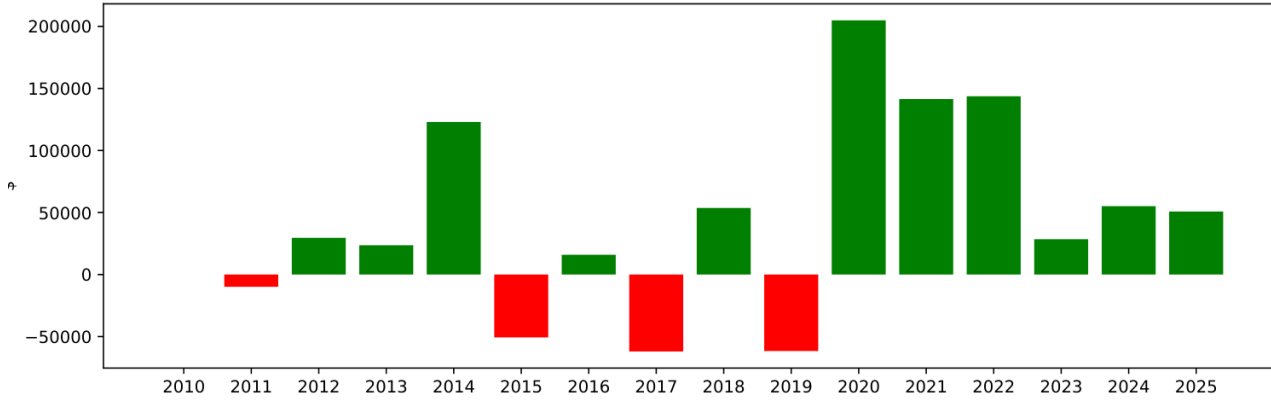
- @AD — CovelAD.xml
- @C — CovelC.xml
- @CD — CovelCD.xml
- @CL — CovelCL.xml
- @CT — CovelCT.xml
- @DX — CovelDX.xml
- @EC — CovelEC.xml
- @ES — TURINGES.xml
- @FC — CovelFC.xml
- @GC — CovelGC.xml
- @HG — CovelHG.xml
- @HO — CovelHO.xml
- @JY — CovelJY.xml
- @KC — CovelKC.xml
- @LB=11INC — CovelLB.xml
- @LBR=11INC — CovelLBR.xml
- @LC — CovelLC.xml
- @NG — CovelNG.xml
- @NQ — EUCLIDNQ.xml
- @NQ.D — NQDayTrade.xml
- @OJ — CovelOJ.xml
- @S — CovelS.xml
- @SB — CovelSB.xml
- @SI — CovelSI.xml
- @TY — CovelTY.xml
- @US — CovelUS.xml

Performance Summary

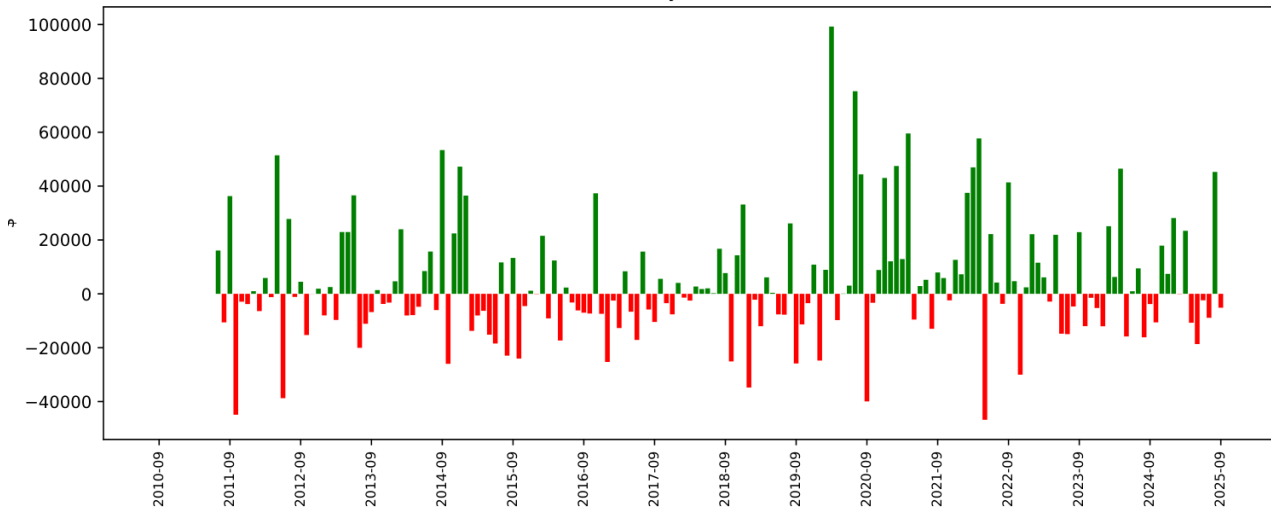
| | | | |
|-------------------------|-----------------|-----------------------------------|--------------|
| Initial Capital | \$75,000.00 | CAGR | 16.71% |
| Total Net Profit | \$685,650.13 | Sharpe (monthly) | 0.62 |
| Gross Profit | \$3,343,391.85 | Sortino (monthly) | 1.45 |
| Gross Loss | \$-2,657,741.73 | MAR | 0.07 |
| Profit Factor | 1.26 | Avg Monthly Return | \$3,788.12 |
| % Profitable | 38.93% | Std Monthly Return | \$21,209.76 |
| Avg Trade | \$275.47 | % Profitable Months | 46.96% |
| Avg Win | \$3,450.35 | Avg Annual Return (\$) | \$43,459.70 |
| Avg Loss | \$-1,748.51 | Avg Annual Return (% init) | 57.95% |
| Largest Win | \$51,875.00 | Longest DD (days) | 1,398.00 |
| Largest Loss | \$-5,710.00 | Longest Flat (days) | 2,016.00 |
| Max Cons Winners | 9.00 | Total Trades | 2,489.00 |
| Max Cons Losers | 12.00 | Wins | 969.00 |
| Max Drawdown | \$-184,227.50 | Losses | 1,520.00 |
| Max Intraday DD | \$-184,227.50 | Total Slippage | \$103,300.00 |
| Recovery Factor | 3.72 | Total Commission | \$103,300.00 |

Periodical Returns - Annual & Monthly

Annual Net Profit



Monthly Net Profit

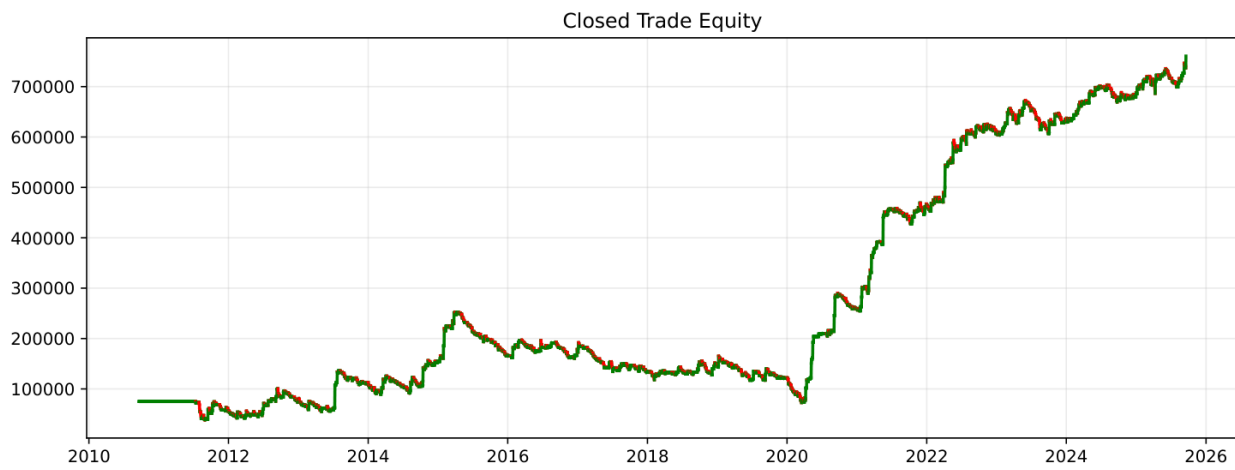
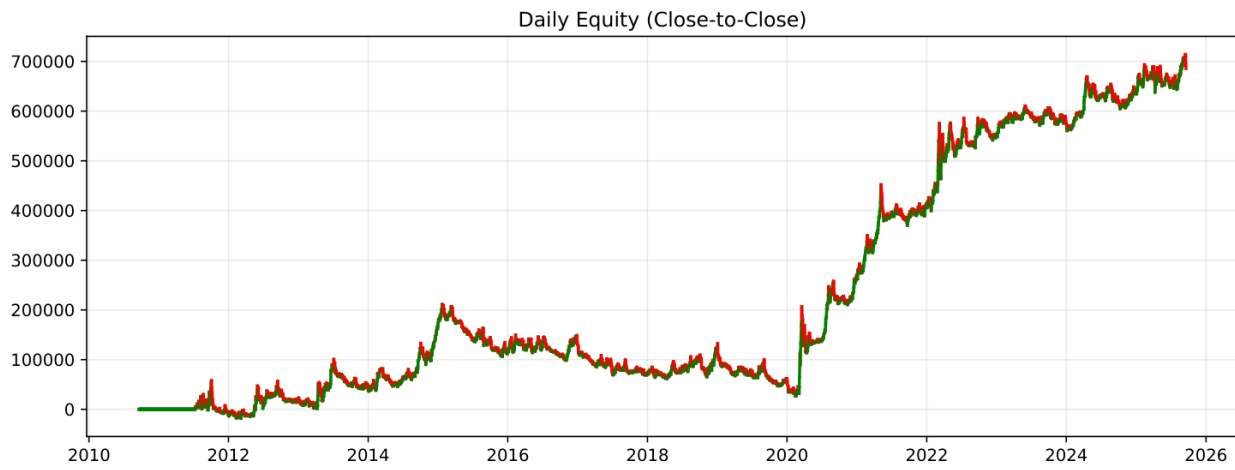


Annual Month-by-Month Profit/Loss Summary

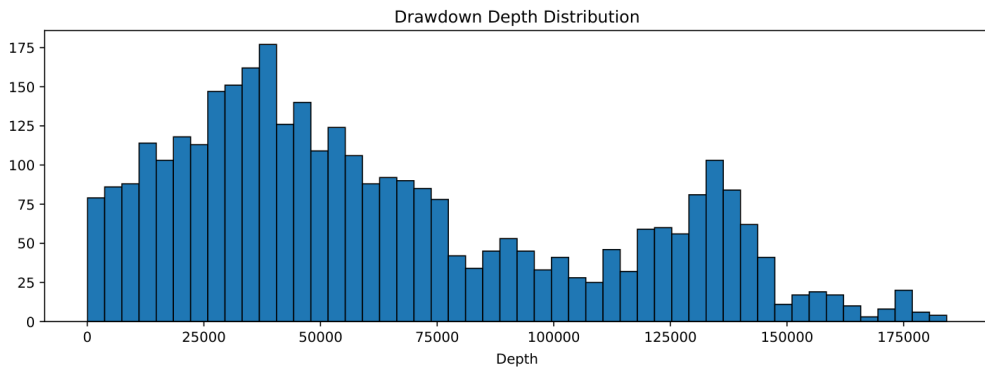
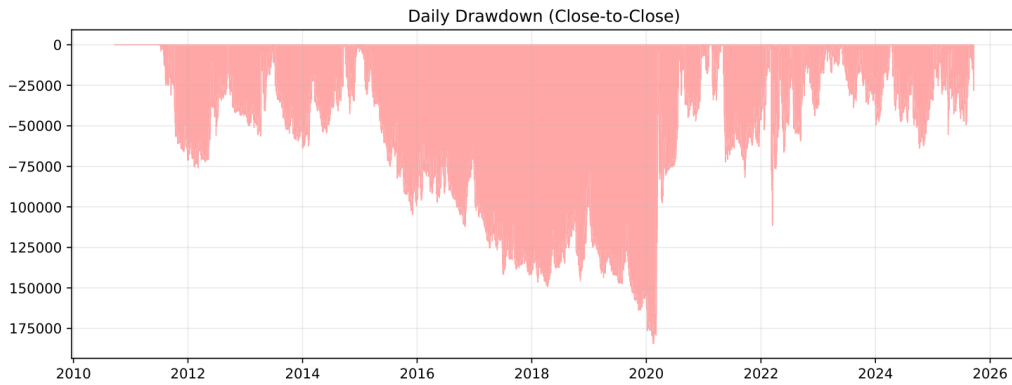
| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Cumul |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|----------|---------|
| 2010 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2011 | 0 | 0 | 0 | 0 | 0 | 0 | 16,061 | (10,607) | 36,286 | (44,896) | (2,935) | (3,798) | (9,889) | (9,889) |
| 2012 | 980 | (6,426) | 5,878 | (1,240) | 51,419 | (38,731) | 27,780 | (1,149) | 4,473 | (15,313) | (32) | 1,912 | 29,550 | 19,661 |
| 2013 | (8,014) | 2,524 | (9,708) | 22,938 | 22,931 | 36,548 | (20,050) | (11,120) | (6,782) | 1,365 | (3,759) | (3,263) | 23,611 | 43,272 |
| 2014 | 4,651 | 23,959 | (8,038) | (7,905) | (4,811) | 8,438 | 15,684 | (6,029) | 53,354 | (25,984) | 22,421 | 47,214 | 122,955 | 166,227 |
| 2015 | 36,462 | (13,772) | (8,040) | (6,315) | (15,170) | (18,443) | 11,667 | (22,943) | 13,332 | (24,048) | (4,568) | 1,139 | (50,700) | 115,527 |
| 2016 | (99) | 21,546 | (9,119) | 12,384 | (17,340) | 2,327 | (3,219) | (6,160) | (7,007) | (7,316) | 37,321 | (7,424) | 15,895 | 131,422 |
| 2017 | (25,297) | (2,506) | (12,711) | 8,372 | (6,640) | (17,118) | 15,668 | (5,818) | (10,444) | 5,550 | (3,473) | (7,628) | (62,044) | 69,378 |
| 2018 | 4,055 | (1,414) | (2,509) | 2,699 | 1,774 | 2,025 | 235 | 16,733 | 7,695 | (25,094) | 14,290 | 33,148 | 53,639 | 123,017 |
| 2019 | (34,785) | (2,198) | (12,043) | 6,103 | 390 | (7,648) | (7,744) | 26,136 | (25,853) | (11,366) | (3,486) | 10,834 | (61,659) | 61,358 |
| 2020 | (24,785) | 8,909 | 99,227 | (9,766) | 117 | 3,037 | 75,212 | 44,333 | (39,949) | (3,335) | 8,851 | 43,014 | 204,865 | 266,223 |
| 2021 | 12,049 | 47,436 | 12,908 | 59,526 | (9,555) | 2,880 | 5,199 | (12,993) | 7,920 | 5,856 | (2,416) | 12,618 | 141,429 | 407,652 |
| 2022 | 7,236 | 37,483 | 46,944 | 57,692 | (46,755) | 22,168 | 4,181 | (3,712) | 41,374 | 4,680 | (30,025) | 2,406 | 143,674 | 551,326 |
| 2023 | 22,135 | 11,548 | 6,102 | (2,893) | 21,923 | (14,792) | (14,967) | (4,708) | 22,898 | (12,016) | (1,470) | (5,285) | 28,474 | 579,800 |
| 2024 | (12,049) | 25,096 | 6,250 | 46,457 | (15,828) | 955 | 9,451 | (16,155) | (3,795) | (10,589) | 17,891 | 7,395 | 55,080 | 634,880 |
| 2025 | 28,118 | (96) | 23,398 | (10,746) | (18,670) | (2,398) | (8,916) | 45,260 | (5,178) | 0 | 0 | 0 | 50,770 | 685,650 |

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Equity Graphs



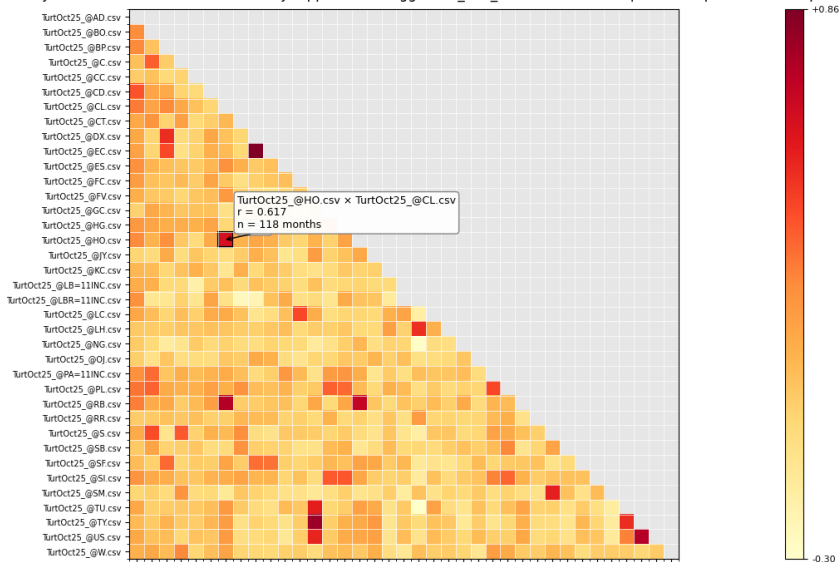
Drawdown Graphs



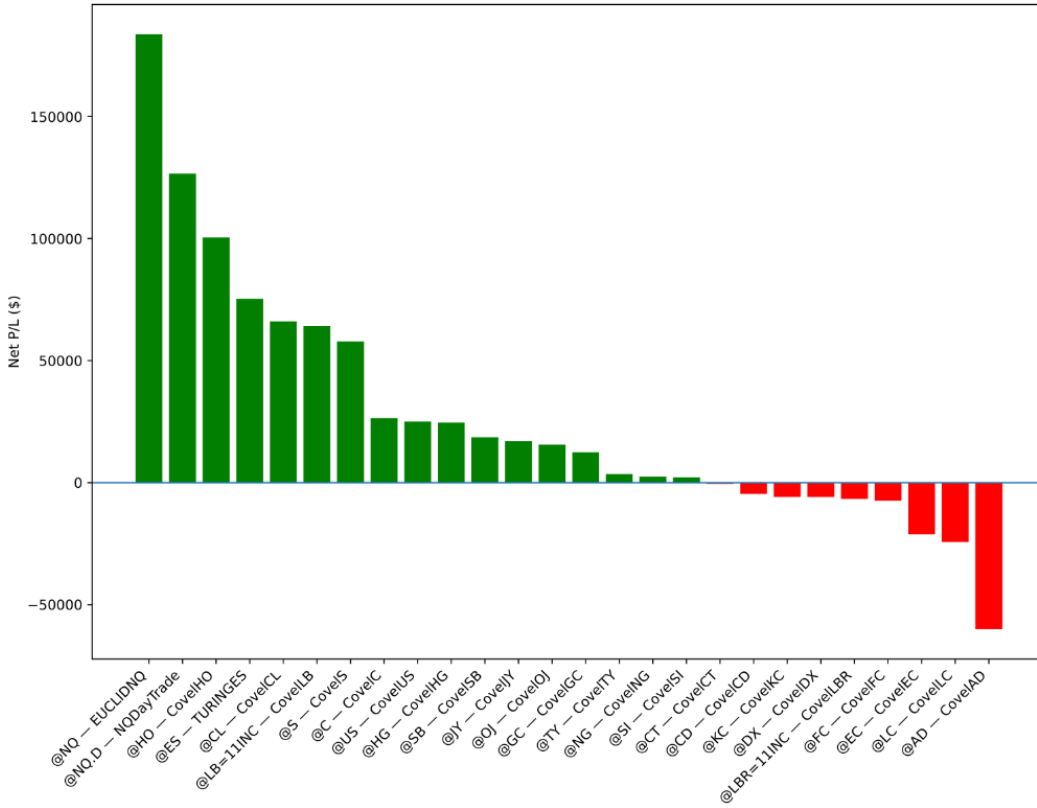
Bins: 50 | Range: 56→184,228 | Bin width: 3,683|Edges: 56, 3,740, 7,423, 11,107, ..., 176,861, 180,544, 184,228

Correlation HeatMap Version 1.13

Cross-System Correlation (PhL) — monthly (approx 21d), agg=sum_nan_safe — lower — sequential — pairwise overlap

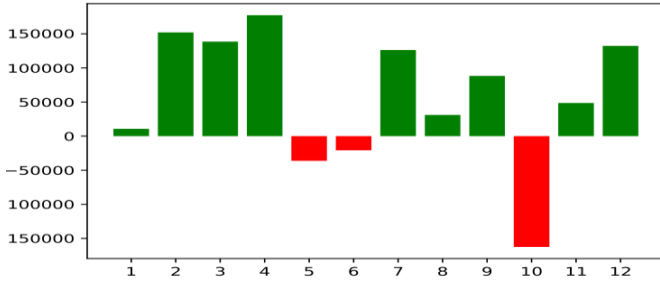


Per-File Net Profit / Loss

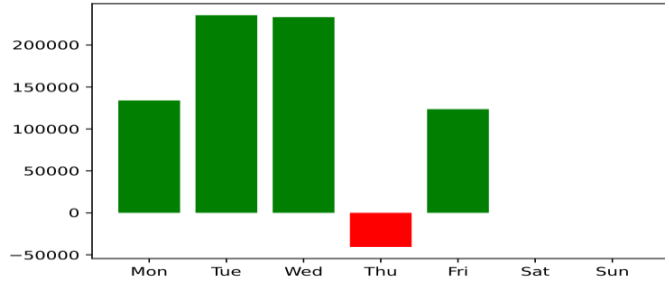


Periodicity - Seasonality Views

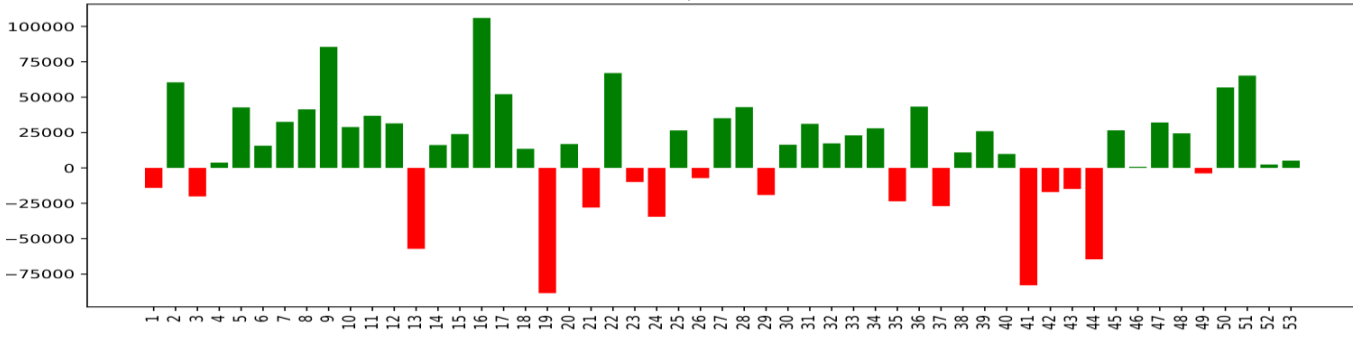
Net Profit per Month of Year

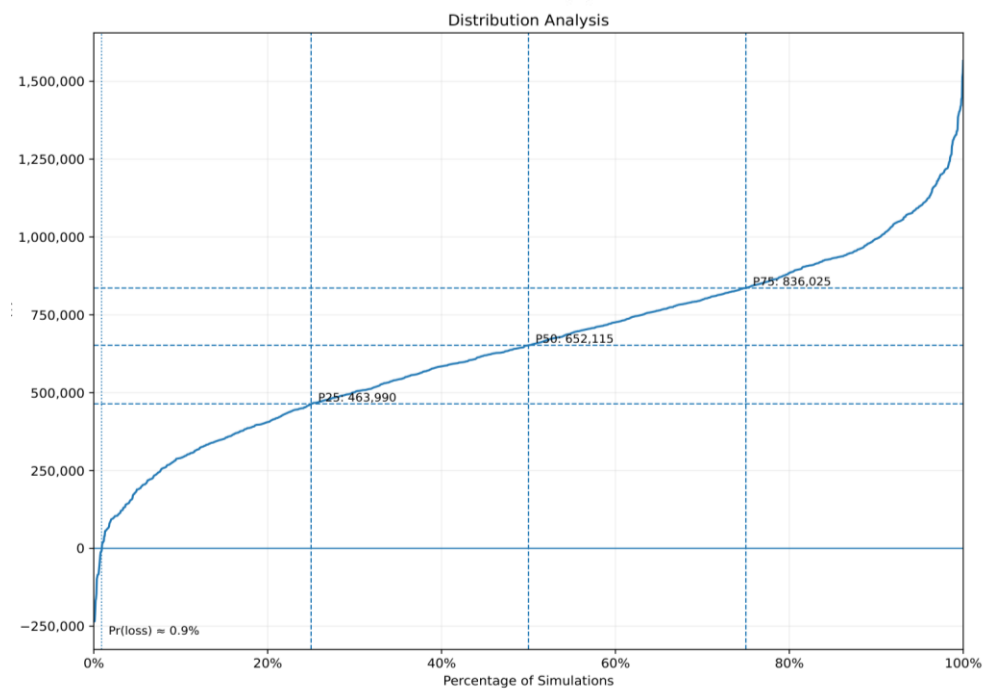
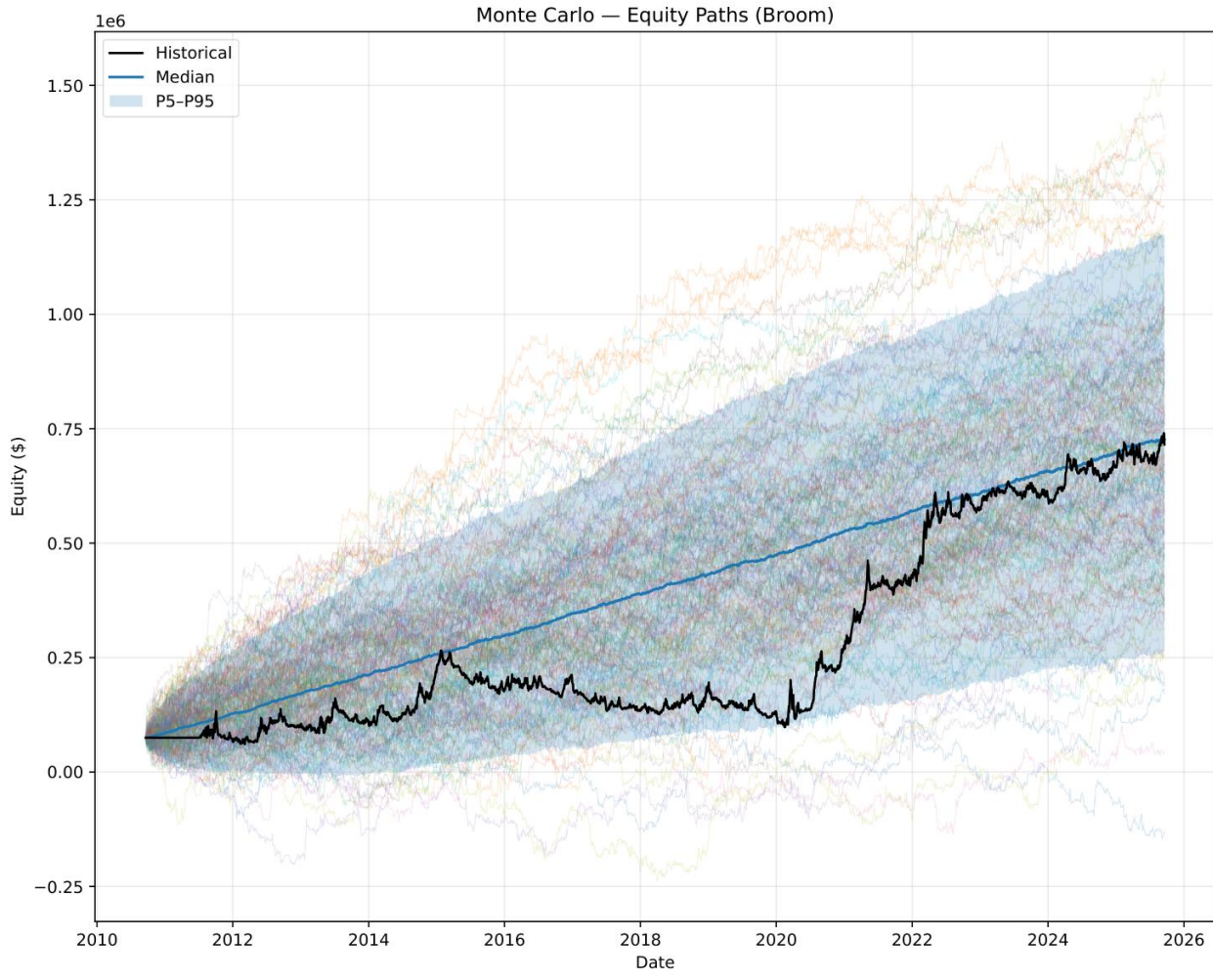


Net Profit per Day of Week



Net Profit per Week of Year





Strategies and Inputs (cont.)



Advanced Features: Ranking Portfolio Combinations

TS-PortfolioMerge includes an optimizer that evaluates different combinations of strategies to identify the most effective portfolios. This feature is designed for advanced users who want to test how groups of strategies perform together, beyond simple equity curve merging. Two modes are provided: **NumPy speed mode** and **Exhaustive permutations**.

1. NumPy Speed Mode – use with large number of iterations 300K+

- **What it is:** NumPy is a high-performance numerical library that allows calculations to be performed in bulk, rather than one at a time.
- **How TS-PortfolioMerge uses it:** The software aligns all equity curves onto a common date axis and then performs vectorized operations. This approach speeds up evaluation dramatically, especially when testing large numbers of strategies.
- **Benefit:** Users can analyze hundred of thousands of portfolio combinations quickly, without long processing times.

2. Exhaustive Permutations – use with smaller number of iterations sub 300K

- **What it is:** An exhaustive search tests *every possible combination* of M strategies chosen from the N available strategies. This is sometimes written as “C(N, M)” in combinatorics.
- **How TS-PortfolioMerge uses it:** The optimizer will calculate performance metrics (Net Profit, Maximum Drawdown, and Profit-to-Drawdown ratio) for every possible combination.
- **Benefit:** This guarantees that the absolute best combination is found, rather than relying on random sampling.
- **Trade-off:** For large N, the number of combinations grows very quickly. For example, with 20 strategies and choosing 5 at a time, there are over 15,000 possible combinations. While NumPy helps speed up calculations, exhaustive mode can still be time-consuming for large projects.

3. Choosing a Mode

- **Use NumPy mode** when working with many strategies and you want results quickly.
- **Use Exhaustive mode** when working with a smaller set of strategies (e.g., fewer than 30 total) and you want the exact best combination without approximation.

Growth of Combinations

The following table shows how quickly the number of combinations increases when selecting M systems out of N available:

| N \ M | 3 | 4 | 5 | 6 |
|-------|-------|--------|---------|---------|
| 8 | 56 | 70 | 56 | 28 |
| 10 | 120 | 210 | 252 | 210 |
| 12 | 220 | 495 | 792 | 924 |
| 15 | 455 | 1,365 | 3,003 | 5,005 |
| 18 | 816 | 3,060 | 8,568 | 18,564 |
| 20 | 1,140 | 4,845 | 15,504 | 38,760 |
| 24 | 2,024 | 10,626 | 42,504 | 134,596 |
| 30 | 4,060 | 27,405 | 142,506 | 593,775 |

Table: Number of possible combinations (C(N,M)) for different portfolio sizes. With 20 system-markets and M=6, the software evaluates 38,760 combinations...

Practical Guidance

- **Exhaustive mode** is best when N is relatively small (around 25 or fewer) or when testing small subsets of strategies.
- **NumPy mode** is recommended when the total combinations exceed hundreds of thousands.

4. Sample Output

Portfolio Summary Report

This analysis is straightforward. The **top section** shows metrics for the **combined portfolio** based on the XML files you selected. Below that, the report lists **each XML file individually** with its own statistics.

Note on XML exports

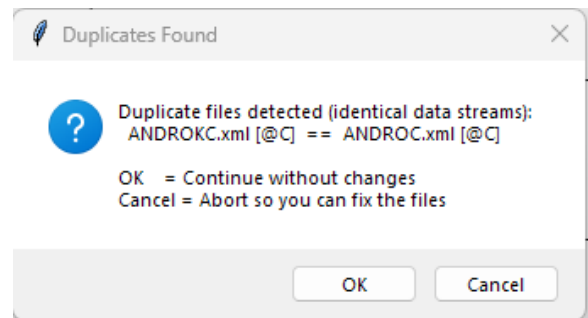
Exporting Performance Reports to XML in TradeStation is a manual process and prone to naming mistakes. Use a consistent *System-Market* naming convention and double-check symbols before saving.

If a file is mislabeled—for example, the filename suggests one symbol but the data inside is from another—the program will warn you. A typical message might say:

- “ANDROKC.xml [@C] == ANDROC.xml [@C]”

At that point you can:

- **Cancel** to stop and fix the file (recommended), or
- **Continue** if you intentionally used the same data under different names.



Fixing a mislabeled file

1. Rename the file (or re-export from TradeStation) so the **filename** matches the **actual symbol** in the data.
2. Re-run **Process XML Files**. You can locate anomalies by comparing the xml file name with the symbol located within that xml file.

If you continue with the process, you will also be able to locate the problem in the report. At the top of the report, the file name, the file symbol and the file system are displayed.

File Equity Summary

Selected Systems / Markets (9 of 26)

| # | File | Symbol | System | Start |
|---|------------|------------|-------------------------------|------------|
| 1 | CovelCL | @CL | TF-Covel | 2010-09-20 |
| 2 | CovelLBR | @LBR=11INC | TF-Covel | 2022-08-05 |
| 3 | CovelOJ | @OJ | TF-Covel | 2010-09-20 |
| 4 | CovelS | @S | TF-Covel | 2010-09-20 |
| 5 | CovelSB | @SB | TF-Covel | 2010-09-20 |
| 6 | CovelUS | @US | TF-Covel | 2010-09-20 |
| 7 | EUCLIDNQ | @NQ | Euclid_Open | 2010-09-20 |
| 8 | NQDayTrade | @NQ.D | Profit Target, EZDT-Template2 | 2020-09-18 |
| 9 | TURINGES | @ES | Turing_Open | 2010-09-20 |

This allows you to make sure you have the right systems and symbols selected. Here I have a couple of other systems selected other than Andromeda-Like. Best case would be to have a different filename for those files. The rest of the report shows the performance metrics at the portfolio level and on a file by file basis.

PORTFOLIO METRICS (selected subset)

Total P/L: \$561,974.80
 Max Drawdown: \$35,752.50
 Trades: 1304
 Avg Trade: \$430.96
 Avg Win: \$2,740.31
 Avg Loss: \$-1,531.16
 Max Win: \$36,390.00
 Max Loss: \$-3,265.00
 Sharpe (notional \$100k): 1.20
 Sortino (notional \$100k): 1.93
 Negative-return days: 1635 (of 3781)

 CovelCL --> @CL --> TF-Covel

Final Equity: \$66,050.00
 Max Drawdown: \$50,090.00
 Trades: 63
 Avg Trade: \$1,048.41
 Avg Win: \$8,481.00
 Avg Loss: \$-2,408.60
 Max Win: \$36,390.00
 Max Loss: \$-2,600.00

 CovelLBR --> @LBR=11INC --> TF-Covel

Final Equity: \$-6,648.75
 Max Drawdown: \$17,397.50
 Trades: 13
 Avg Trade: \$-511.44
 Avg Win: \$2,397.00
 Avg Loss: \$-2,329.22
 Max Win: \$4,478.75
 Max Loss: \$-3,262.50

 CovelOJ --> @OJ --> TF-Covel

Final Equity: \$15,574.50
 Max Drawdown: \$25,500.50
 Trades: 66
 Avg Trade: \$235.98

Avg Win: \$4,028.91
Avg Loss: \$-1,792.80
Max Win: \$23,562.50
Max Loss: \$-3,265.00

Cove1S --> @S --> TF-Cove1
Final Equity: \$57,837.50
Max Drawdown: \$29,987.50
Trades: 57
Avg Trade: \$1,014.69
Avg Win: \$6,147.62
Avg Loss: \$-1,979.51
Max Win: \$20,550.00
Max Loss: \$-2,975.00

Cove1SB --> @SB --> TF-Cove1
Final Equity: \$18,592.80
Max Drawdown: \$12,154.40
Trades: 57
Avg Trade: \$326.19
Avg Win: \$1,908.12
Avg Loss: \$-1,097.55
Max Win: \$7,034.40
Max Loss: \$-2,608.80

Cove1US --> @US --> TF-Cove1
Final Equity: \$25,043.75
Max Drawdown: \$28,093.75
Trades: 63
Avg Trade: \$397.52
Avg Win: \$4,076.25
Avg Loss: \$-2,022.70
Max Win: \$13,868.75
Max Loss: \$-2,600.00

EUCLIDNQ --> @NQ --> Euclid_Open
Final Equity: \$183,640.00
Max Drawdown: \$19,195.00
Trades: 248
Avg Trade: \$740.48
Avg Win: \$3,536.19
Avg Loss: \$-1,966.47
Max Win: \$6,900.00
Max Loss: \$-2,115.00

NQDayTrade --> @NQ.D --> Profit Target, EZDT-Template2
Final Equity: \$126,560.00
Max Drawdown: \$13,470.00
Trades: 564
Avg Trade: \$224.40
Avg Win: \$1,523.92
Avg Loss: \$-952.20
Max Win: \$2,775.00
Max Loss: \$-2,920.00

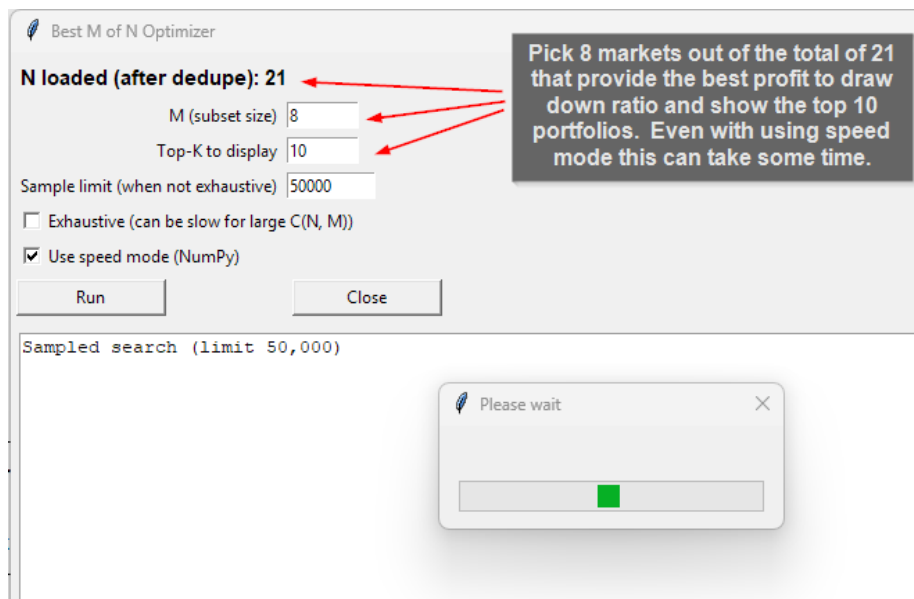
TURINGES --> @ES --> Turing_Open
Final Equity: \$75,325.00
Max Drawdown: \$29,200.00
Trades: 173
Avg Trade: \$435.40
Avg Win: \$2,782.10

Avg Loss: \$-1,994.12
Max Win: \$12,275.00
Max Loss: \$-2,675.00

Common Issues:

- **No Data Loaded:** Ensure XML files are correctly exported from TradeStation/MultiCharts.
- **Incorrect Dates:** Verify that your data uses consistent time zones.
- **Application Crashes:** Try clearing data and reloading, or reinstall the software.
- **Drawdown Discrepancy:** Remember that drawdown is calculated on daily closes, not intraday highs/lows.

Portfolio Optimization



Numpy Speed Version: Sampled search (limit 50,000) – Surface Scan

```
#1 P/DD=8.310 NetProfit=198,265.75 MaxDD=23,857.50
   ANDROC.xml, ANDROCT.xml, ANDROEC.xml, ANDROGC.xml, ANDROHG.xml, ANDROHO.xml,
   ANDROJY.xml, ANDROKC.xml, ANDROUS.xml
   Symbols: @C, @CT, @EC, @GC, @HG, @HO, @JY, @KC, @US
#2 P/DD=8.120 NetProfit=228,942.75 MaxDD=28,193.20
   ANDROC.xml, ANDROCL.xml, ANDROCT.xml, ANDRODX.xml, ANDROEC.xml, ANDROHO.xml,
   ANDROJY.xml, ANDROS.xml, ANDROUS.xml
   Symbols: @C, @CL, @CT, @DX, @EC, @HO, @JY, @S, @US
#3 P/DD=7.988 NetProfit=214,685.75 MaxDD=26,876.00
   ANDROC.xml, ANDROCD.xml, ANDROCL.xml, ANDROCT.xml, ANDRODX.xml, ANDROEC.xml,
   ANDROJY.xml, ANDROS.xml, ANDROUS.xml
   Symbols: @C, @CD, @CL, @CT, @DX, @EC, @JY, @S, @US
#4 P/DD=7.911 NetProfit=189,844.50 MaxDD=23,997.50
   ANDROC.xml, ANDROCD.xml, ANDROCT.xml, ANDROGC.xml, ANDROHG.xml, ANDROHO.xml,
   ANDROJY.xml, ANDROKC.xml, ANDROUS.xml
   Symbols: @C, @CD, @CT, @GC, @HG, @HO, @JY, @KC, @US
```

#5 P/DD=7.904 NetProfit=232,559.50 MaxDD=29,421.30
ANDROC.xml, ANDROCD.xml, ANDROCL.xml, ANDROHO.xml, ANDROJY.xml, ANDROKC.xml,
ANDRONG.xml, ANDROS.xml, ANDROUS.xml
Symbols: @C, @CD, @CL, @HO, @JY, @KC, @NG, @S, @US

Exhaustive Version - Deep Scan - Use with less than 300K iterations. Or more if you have the time.

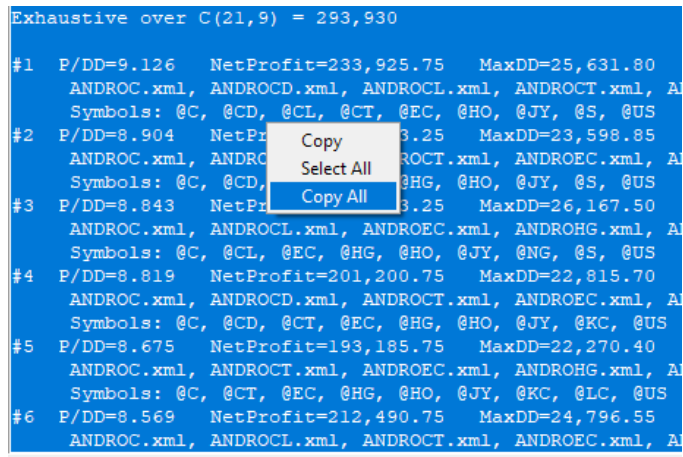
Exhaustive over C(21,9) = 293,930 combinations

- #1 P/DD=9.126 NetProfit=233,925.75 MaxDD=25,631.80
ANDROC.xml, ANDROCD.xml, ANDROCL.xml, ANDROCT.xml, ANDROEC.xml, ANDROHO.xml,
ANDROJY.xml, ANDROS.xml, ANDROUS.xml
Symbols: @C, @CD, @CL, @CT, @EC, @HO, @JY, @S, @US
- #2 P/DD=8.904 NetProfit=210,113.25 MaxDD=23,598.85
ANDROC.xml, ANDROCD.xml, ANDROCT.xml, ANDROEC.xml, ANDROHG.xml, ANDROHO.xml,
ANDROJY.xml, ANDROS.xml, ANDROUS.xml
Symbols: @C, @CD, @CT, @EC, @HG, @HO, @JY, @S, @US
- #3 P/DD=8.843 NetProfit=231,393.25 MaxDD=26,167.50
ANDROC.xml, ANDROCL.xml, ANDROEC.xml, ANDROHG.xml, ANDROHO.xml, ANDROJY.xml,
ANDRONG.xml, ANDROS.xml, ANDROUS.xml
Symbols: @C, @CL, @EC, @HG, @HO, @JY, @NG, @S, @US
- #4 P/DD=8.819 NetProfit=201,200.75 MaxDD=22,815.70
ANDROC.xml, ANDROCD.xml, ANDROCT.xml, ANDROEC.xml, ANDROHG.xml, ANDROHO.xml,
ANDROJY.xml, ANDROKC.xml, ANDROUS.xml
Symbols: @C, @CD, @CT, @EC, @HG, @HO, @JY, @KC, @US
- #5 P/DD=8.675 NetProfit=193,185.75 MaxDD=22,270.40
ANDROC.xml, ANDROCT.xml, ANDROEC.xml, ANDROHG.xml, ANDROHO.xml, ANDROJY.xml,
ANDROKC.xml, ANDROLC.xml, ANDROUS.xml
Symbols: @C, @CT, @EC, @HG, @HO, @JY, @KC, @LC, @US

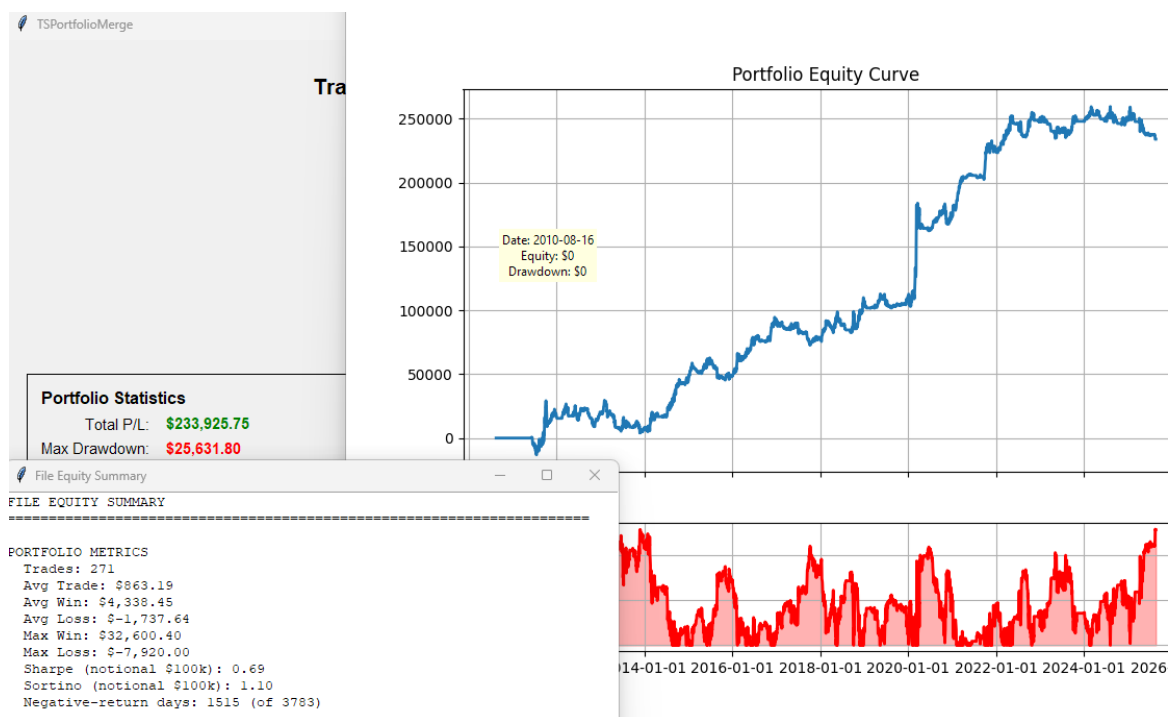
Results

The results were quite a bit different. The deep scan or exhaustive method uncovered the **Symbols: @C, @CD, @CL, @CT, @EC, @HO, @JY, @S, @US portfolio. This is the best combination from a Profit to draw down ratio perspective.**

It is hard to remember these combinations, so you can click and copy and paste the results into a text file.



If you want to see the performance of this portfolio, then go back to Select XML files and choose just those files.



File Output

In your **Documents** directory you will find a folder labeled **PortfolioMerge-TradeFiles**. This folder contains a condensed version of the all the trades recorded in each .xml file that you selected to process.

```

Symbol,EntryDateTime,EntryType,EntryPrice,ExitDateTime,ExitType,ExitPrice,PnL,CumeEquity
@ES.D,2020-11-03 10:05:00,Long ,3898.00,2020-11-03 10:20:00,Lexit,3918.00,1000.00,1000.00
@ES.D,2020-11-09 10:40:00,Short,4147.50,2020-11-09 11:00:00,Sexit,4147.50, 0.00,1000.00
@ES.D,2020-11-11 11:20:00,Long ,4109.50,2020-11-11 14:30:00,Lexit,4109.50, 0.00,1000.00
@ES.D,2020-11-12 10:15:00,Long ,4102.00,2020-11-12 10:55:00,Lexit,4102.00, 0.00,1000.00
  
```

5. Contact & Support

For support and updates:

Website: <https://www.georgepruitt.com>

Email: support@georgepruitt.com

v1.06 (August 2025): First public release featuring portfolio summary metrics, XML equity merging, M-of-N portfolio optimization, equity/drawdown visualization, and CSV trade exports.

v1.11(September 2025): Second public release featuring enhance portfolio analysis metrics that can be exported as a PDF.

v1.13(October 2025): Third public release featuring faster portfolio analysis metrics, csv format input and correlation heat map report.

v1.13.1(December 2025): Fourth public release featuring FOREX compatibility for those forex pairs quoted in currencies other than US dollars. A new page in report has been created to help ensure the user of the exact system names and inputs used to generated the report.

Forex Compatibility

Some Forex pairs are **not quoted in U.S. dollars** (for example, **USDJPY, USDCHEF, USDCAD**). In those cases, TradeStation's XML trade output does **not** include a built-in USD conversion factor. To generate a correct USD-based equity curve, **TS-PortfolioMerge must have access to historical daily conversion rates** that cover your test period.

Because you already have Forex price data in TradeStation, the easiest solution is to use the included indicator **TS-PortfolioMergeFXDB** to build a daily conversion-rate database.

FXRates folder location

When you install **TS-PortfolioMerge v1.13.1**, the installer creates this folder:

Documents → PortfolioMerge-TradeFiles → FXRates

This is the folder you will tell the indicator to write the conversion-rate files into.

What TS-PortfolioMerge does

- TS-PortfolioMerge automatically detects whether a Forex trade requires conversion.
- If a conversion rate is required, TS-PortfolioMerge looks in the **FXRates** folder for the appropriate daily rate file.
- If the file is missing or does not go back far enough in history, TS-PortfolioMerge will display a message telling you to rebuild/update the FX database.

Creating the FX conversion database

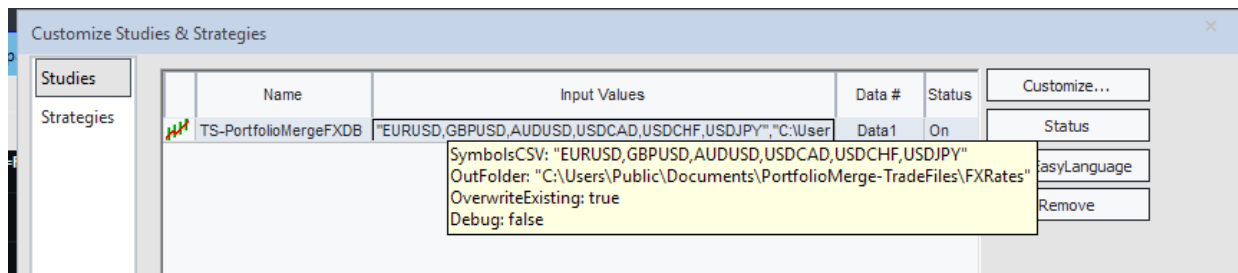
1. Open the ForexDatabaseOutput workspace in TradeStation – it is preloaded with a test chart with the **TS-PortfolioMergeFXD** indicator already inserted. It expects a folder labeled **FXRates** in the directory: "C:\Users\Public\Documents\PortfolioMerge-TradeFiles\FXRates".
2. Confirm the FXRates folder exists (and create it if needed)

- After you open the ForexDatabaseOutput workspace in TradeStation, you should confirm that the FXRates folder exists. The indicator will not run correctly unless this folder is present.
 1. Step 1 — Check for the folder
 1. Open File Explorer (Windows key + E).
 2. Click in the address bar at the top.
 3. Copy and paste this path, then press Enter:
C:\Users\Public\Documents\PortfolioMerge-TradeFiles\FXRates
 4. If the folder opens, you're done.
 5. If Windows says the location can't be found (or the folder is missing), create it using the steps below.
 2. Step 2 — Create the folder (if it's missing)
 1. In File Explorer, go to:
Either browse to the folder or paste the path
 1. Browse: This PC -> Local Disk -> Users -> Public -> Documents
 2. Paste: Click the address bar, paste this, and press Enter
 1. C:\Users\Public\Documents
 2. Create the folders in this order (only if they don't already exist):
 1. **PortfolioMerge-TradeFiles**
 2. inside that folder, create: **FXRates**

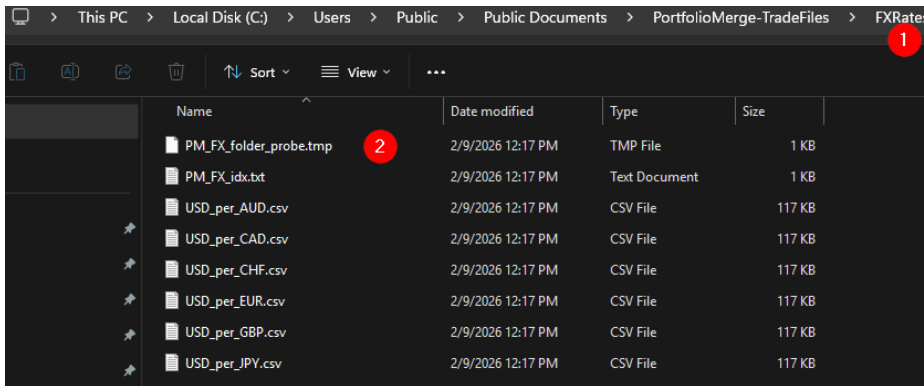
When finished, the final folder path should be exactly:

C:\Users\Public\Documents\PortfolioMerge-TradeFiles\FXRates

Note: If you installed the latest version of TS-PortfolioMerge, the installer typically creates this folder automatically—but it's still worth verifying before running the FX database build. Below is an example of the indicator's input screen. Notice that **OutFolder** is set to *my FXRates* folder where TS-PortfolioMerge will read the conversion files. You will need to make sure this aligns!



Once the indicator processes the chart – you should see the USD_PER_EUR and other files listed in the FXRates folder.



These CSV files form your historical FX database. **TS-PortfolioMerge** uses them to convert any non-USD trade results into U.S. dollars (account currency) using the correct daily conversion rate for the backtest dates.

New Strategies and Inputs Report

Strategies and Inputs

CovelTrail.xml

Market: @CL — Crude Oil Continuous Contract [Feb26]

System: TF-Covel, Percent Trailing

Test Period: 01/13/2011 - 01/14/2026

- Percent Trailing - PositionBasis(false)
- Percent Trailing - FloorAmt(3500)
- Percent Trailing - TrailingPct(50)

- TF-Covel - initCapital(200000)
- TF-Covel - rskAmt(.02)
- TF-Covel - useMoneyManagement(False)
- TF-Covel - longEntryLen(89)
- TF-Covel - shortEntryLen(89)
- TF-Covel - longExitLen(13)
- TF-Covel - shortExitLen(13)
- TF-Covel - maxTradeLoss\$(2500)

EUCLIDNQ.xml

Market: @NQ — E-Mini NASDAQ-100 Continuous Contract [Dec25]

System: Euclid_Open

Test Period: 09/20/2010 - 09/18/2025

- Euclid_Open - mavLen(140)
- Euclid_Open - stopLoss\$(2000)
- Euclid_Open - profitAmount\$(7000)
- Euclid_Open - atrMult(1.5)

NQDayTrade.xml

Market: @NQ.D — E-Mini NASDAQ-100 Continuous Contract [Dec25]

System: Profit Target, EZDT-Template2

Test Period: 09/18/2020 - 09/18/2025

- Profit Target - PositionBasis(True)
- Profit Target - Amount(2800)
- EZDT-Template2 - waitPeriodMins(30)
- EZDT-Template2 - tradeSize(1)
- EZDT-Template2 - buySellDayCode(1)
- EZDT-Template2 - initTradesEndTime(1430)
- EZDT-Template2 - liqRevEndTime(1200)
- EZDT-Template2 - rangeCompressionMult(0.9)
- EZDT-Template2 - daysOfWeekToTrade("MTWRF")
- EZDT-Template2 - optDaysOfWeek1To31(0)
- EZDT-Template2 - thrustPrcnt1(0.3)
- EZDT-Template2 - thrustPrcnt2(0.6)
- EZDT-Template2 - useClearOut(1)
- EZDT-Template2 - clearOutPrcnt(0.15)
- EZDT-Template2 - failedClearOutPrcnt(0)
- EZDT-Template2 - useStopAndReverse(1)
- EZDT-Template2 - protStopPrcnt1(0.25)
- EZDT-Template2 - protStopPrcnt2(0.2)
- EZDT-Template2 - protStopAmt(3)
- EZDT-Template2 - breakEvenPrcnt(0.5)
- EZDT-Template2 - avgRngLength(10)
- EZDT-Template2 - stopReverseBars(4)
- EZDT-Template2 - trailBars(3)