



CIO TRAINING GUIDE – MANAGING EXISTING BUILDING BLOCKS

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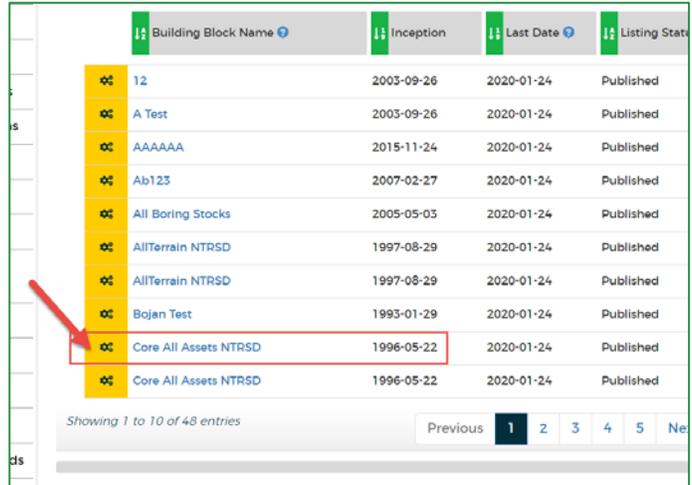
Once a building block is created, Emotomy offers several options to edit, update and manage each block. Choose the item from the outline below that best suits your needs.

1. [Describe Your Building Blocks](#)
2. [Change Component Allocations](#)
3. [Change Risk Management Rules](#)
4. [Review and Compare Building Block Performance](#)

DESCRIBE YOUR EMOTOMY BUILDING BLOCKS

Create a description of the investment philosophy, approach and main exposures of a building block strategy that users will be able to see.

1. From the home screen, click on the yellow button to the left of the building block you want to edit.

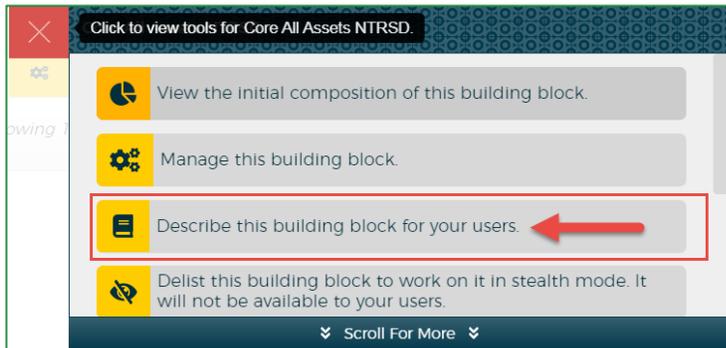


| Building Block Name | Inception | Last Date | Listing State |
|-----------------------|------------|------------|---------------|
| 12 | 2003-09-26 | 2020-01-24 | Published |
| A Test | 2003-09-26 | 2020-01-24 | Published |
| AAAAAA | 2015-11-24 | 2020-01-24 | Published |
| Ab123 | 2007-02-27 | 2020-01-24 | Published |
| All Boring Stocks | 2005-05-03 | 2020-01-24 | Published |
| AllTerrain NTRSD | 1997-08-29 | 2020-01-24 | Published |
| AllTerrain NTRSD | 1997-08-29 | 2020-01-24 | Published |
| Bojan Test | 1993-01-29 | 2020-01-24 | Published |
| Core All Assets NTRSD | 1996-05-22 | 2020-01-24 | Published |
| Core All Assets NTRSD | 1996-05-22 | 2020-01-24 | Published |

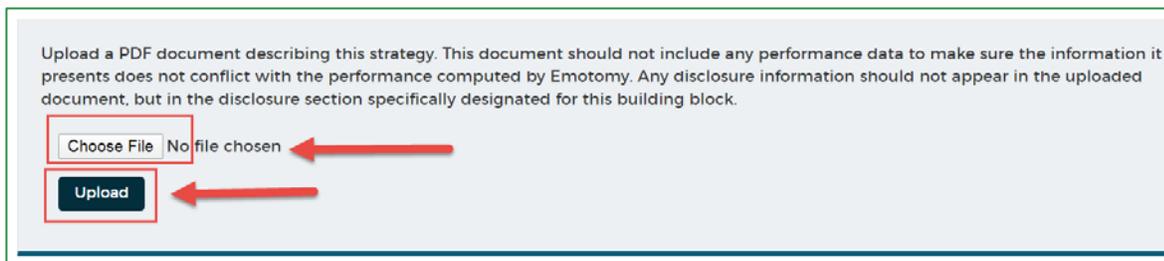
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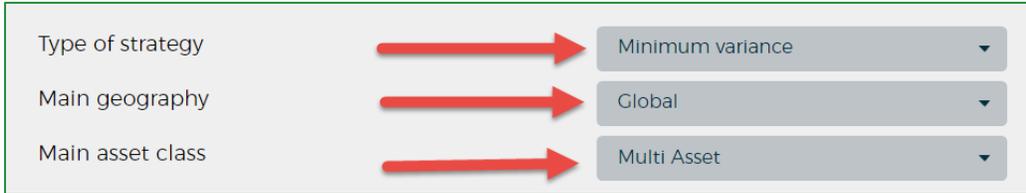
2. Click on 'Describe this building block for users'.



3. Use this first section to upload a factsheet or PDF document about the building block. Click on 'Choose File' to select the file from your drives and then click 'Upload'.



4. Use the drop down menus to update the type of strategy, main geography and main asset class. Note that if you uploaded this building block with ticker symbols, the system may be able to pull in this information for you.

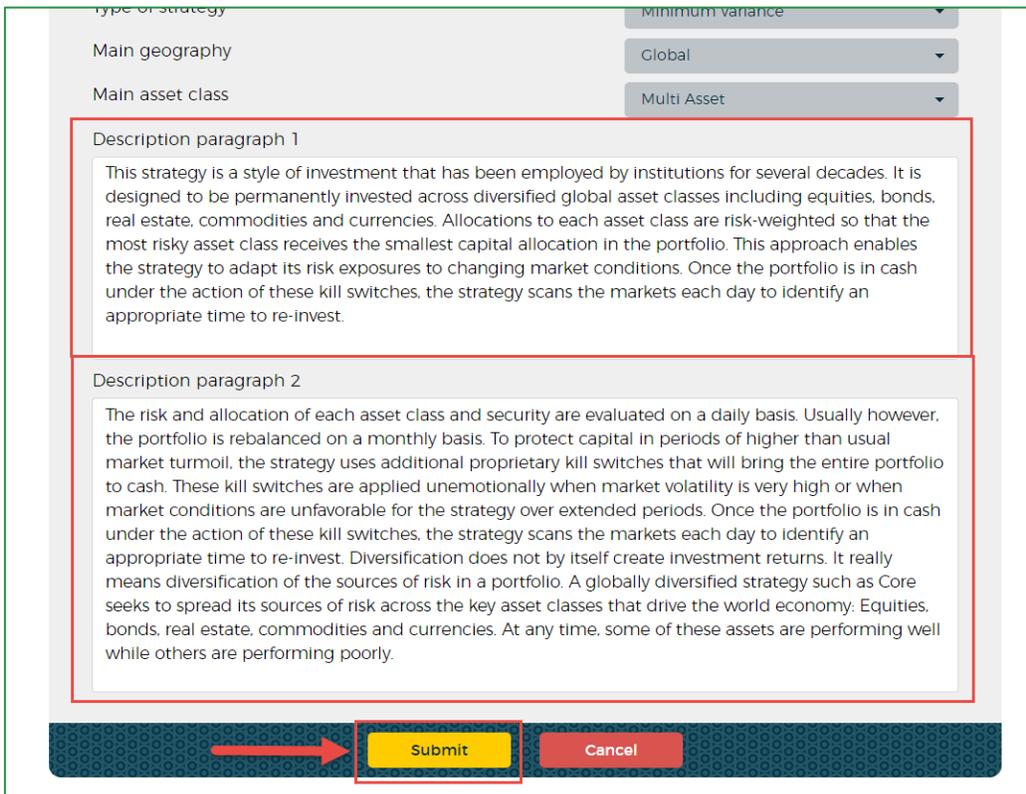


Type of strategy Minimum variance

Main geography Global

Main asset class Multi Asset

5. Fill in the open paragraph fields as desired. Note that not all paragraphs need to be filled in. Once complete, click 'Submit'.



Type of strategy Minimum variance

Main geography Global

Main asset class Multi Asset

Description paragraph 1

This strategy is a style of investment that has been employed by institutions for several decades. It is designed to be permanently invested across diversified global asset classes including equities, bonds, real estate, commodities and currencies. Allocations to each asset class are risk-weighted so that the most risky asset class receives the smallest capital allocation in the portfolio. This approach enables the strategy to adapt its risk exposures to changing market conditions. Once the portfolio is in cash under the action of these kill switches, the strategy scans the markets each day to identify an appropriate time to re-invest.

Description paragraph 2

The risk and allocation of each asset class and security are evaluated on a daily basis. Usually however, the portfolio is rebalanced on a monthly basis. To protect capital in periods of higher than usual market turmoil, the strategy uses additional proprietary kill switches that will bring the entire portfolio to cash. These kill switches are applied unemotionally when market volatility is very high or when market conditions are unfavorable for the strategy over extended periods. Once the portfolio is in cash under the action of these kill switches, the strategy scans the markets each day to identify an appropriate time to re-invest. Diversification does not by itself create investment returns. It really means diversification of the sources of risk in a portfolio. A globally diversified strategy such as Core seeks to spread its sources of risk across the key asset classes that drive the world economy. Equities, bonds, real estate, commodities and currencies. At any time, some of these assets are performing well while others are performing poorly.

Submit Cancel

CHANGE COMPONENT ALLOCATIONS IN YOUR BUILDING BLOCKS

Change the underlying securities or update the allocations to each security within an existing building block.

- From the home screen, click on the yellow button to the left of the building block you want to edit.

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| Core All Assets NTRSD | 1996-05-22 | 2020-01-24 | Published |
| Core All Assets NTRSD | 1996-05-22 | 2020-01-24 | Published |

Showing 1 to 10 of 48 entries

- Click on 'Manage this building block'.

Click to view tools for Core All Assets NTRSD.

- View the initial composition of this building block.
- Manage this building block.**
- Describe this building block for your users.
- Delist this building block to work on it in stealth mode. It will not be available to your users.

Scroll For More

- To change the component securities, click 'Change'.

Manage Your Building Block Strategy Named: All Boring Stocks

PORTFOLIO CONSTRUCTION | PROPERTIES | SETTINGS | PERFORMANCE | MONTH-END REPORT

Performance analysis: All Boring Stocks

Model number: 1

Yield on cash: 0%

Sub-advisor name: None

Embedded sub-advisor fee: 0%

Benchmark: VTSMX (Vanguard Total Stock Market Index Fund)

Uses the persistent momentum feature: No

Rebalancing frequency: Monthly

Rebalancing basis: Business days

Rebalancing method: Reset to initial weights

Disk free rate: 100 basis points

MAD (Sortino): 0 basis points

Uses securities trading groups: No

Uses a custom overlay: No

Uses portfolio-level stop losses: Yes

Portfolio stop loss: After a 6% drawdown

Re-investment after a stop loss: After month end

Uses trailing stop losses: No

Uses an override to reentry after stop losses: No

Cash replacement symbol: None

Components at inception: 3

Symbols at inception: MORN, NTRS, SCHW

Contains securities that changed ticker symbol: No

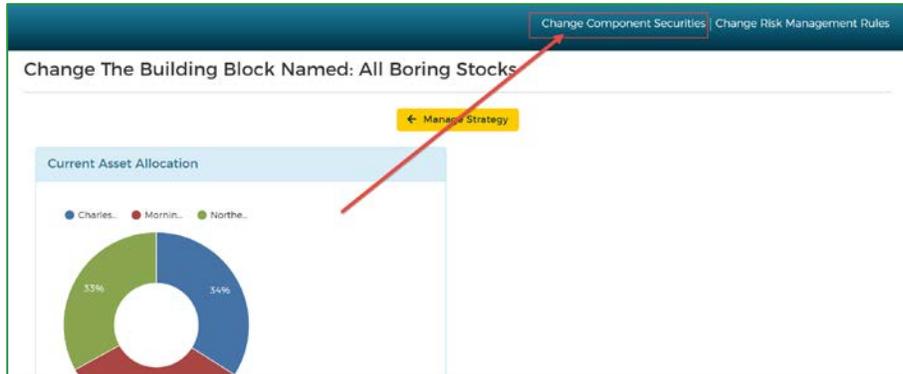
Composition at inception: Charles Schwab (54%), Northern Trust Corp (23%), Morningstar Inc (23%)

Legend: Charles... (53%), Mornin... (55%), Nornho... (34%)

Click and Drag

- Change
- Describe
- Delist
- Compare
- Delete
- Move To User Accounts

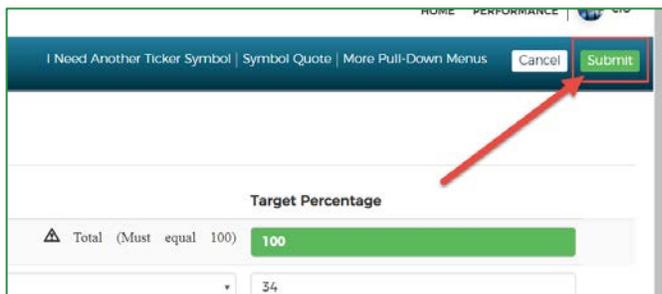
4. Click 'Change Component Securities'.



5. Add or change the ticker symbols on the left and assign a target percent allocation on the right. The allocations must add up to 100.



6. Once complete, click 'Submit'.



CHANGE RISK MANAGEMENT RULES

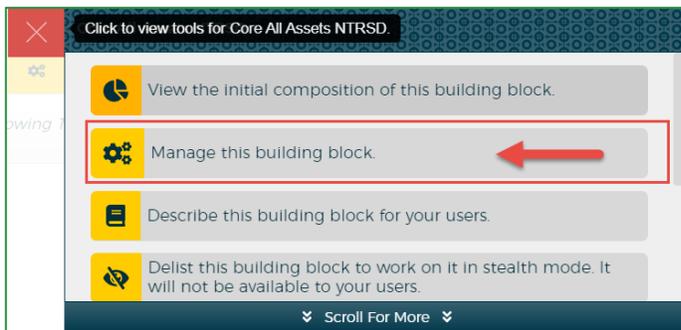
Change portfolio rules such as the investment fee, rebalancing frequency, and others within an existing building block.

- From the home screen, click on the yellow button to the left of the building block you want to edit.

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| Core All Assets NTRSD | 1996-05-22 | 2020-01-24 | Published |

Showing 1 to 10 of 48 entries

- Click on 'Manage this building block'.



- To change the risk management rules, click 'Change'.

Manage Your Building Block Strategy Named: All Boring Stocks

PORTFOLIO CONSTRUCTION | PROPERTIES | SETTINGS | PERFORMANCE | MONTH-END REPORT

Performance analysis: All Boring Stocks

Model number: 1

Yield on cash: 0%

Sub-advisor name: None

Embedded sub-advisor fee: 0%

Benchmark: VTSMX (Vanguard Total Stock Market Index Fund)

Uses the persistent momentum feature: No

Rebalancing frequency: Monthly

Rebalancing basis: Business days

Rebalancing method: Reset to initial weights

Risk free rate: 100 basis points

MAD (Sortino): 0 basis points

Uses securities trading groups: No

Uses a custom overlay: No

Uses portfolio-level stop losses: Yes

Portfolio stop loss: After > 6% drawdown

Re-investment after a stop loss: After month end

Uses trailing stop losses: No

Uses an override to reentry after stop losses: No

Cash replacement symbol: None

Components at inception: 3

Symbols at inception: MORN, NTRS, SCHW

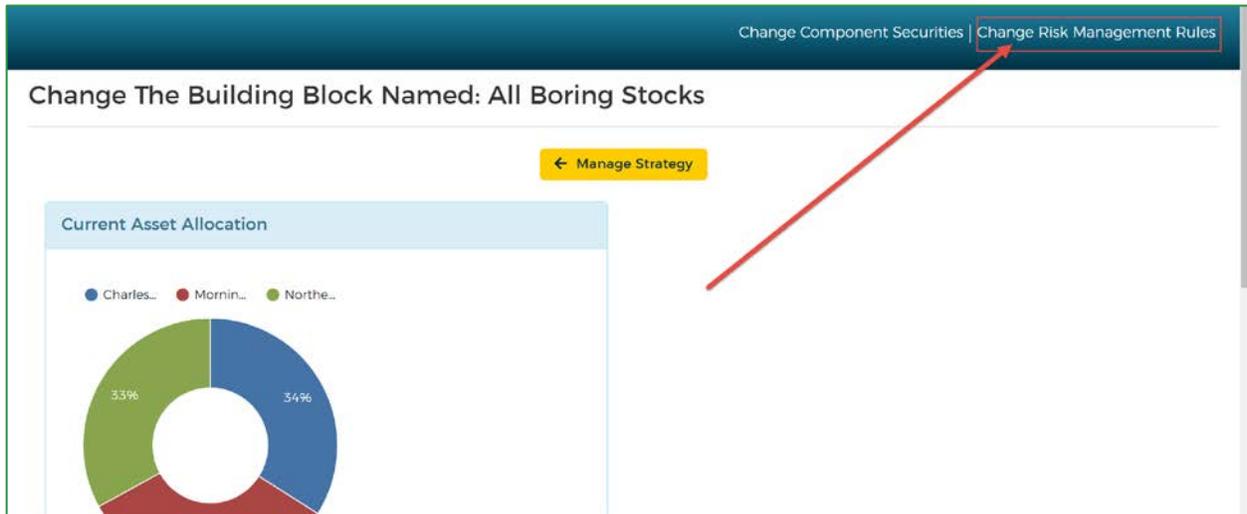
Contains securities that changed ticker symbol: No

Composition at inception: Charles Schwab (54%), Northern Trust Corp (23%), Morningstar Inc (23%)

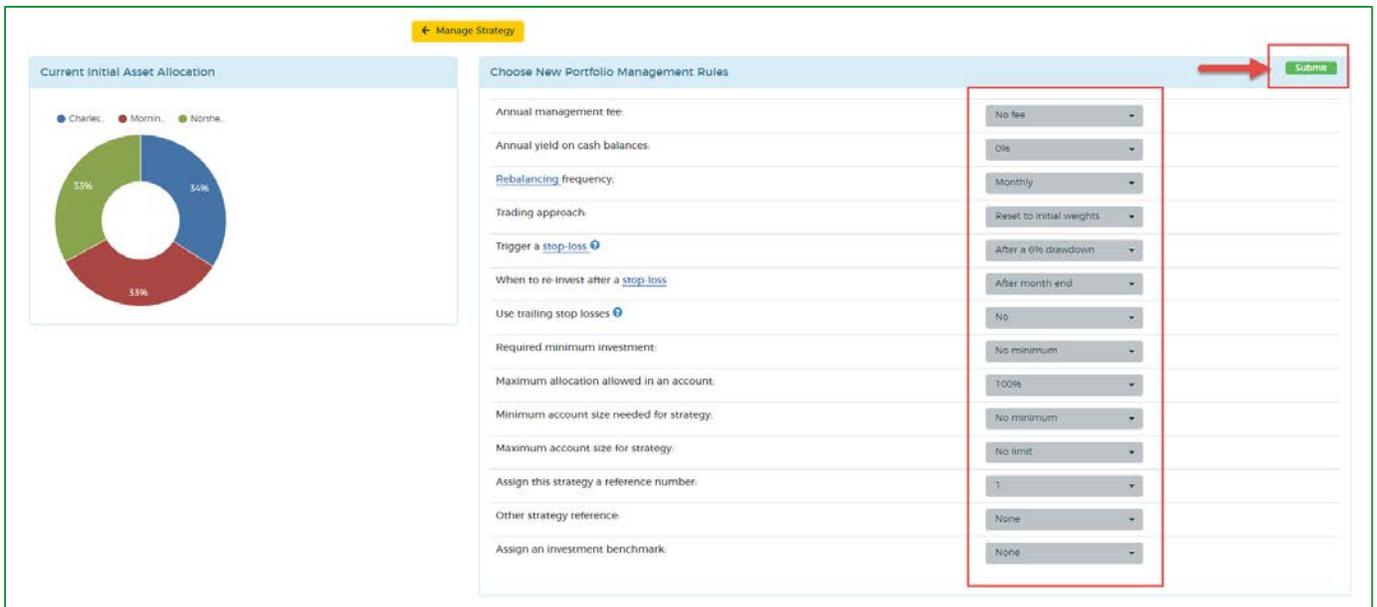
Click and Drag

- Change
- Describe
- Delist
- Compare
- Delete
- Move To User Accounts

4. Click 'Change Risk Management Rules'.



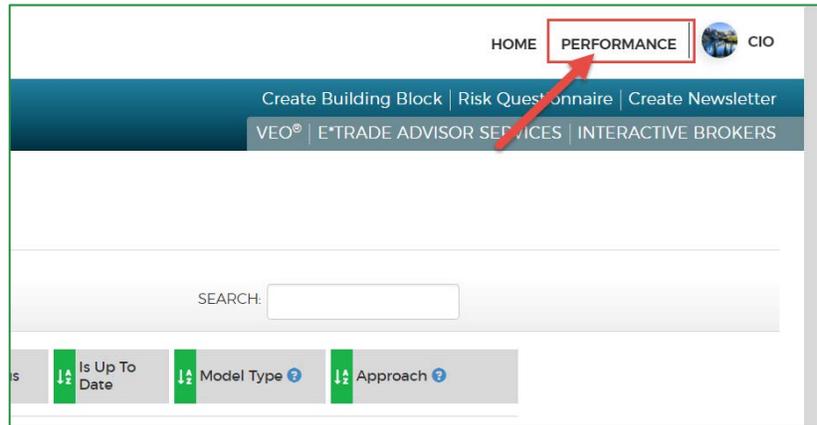
5. Use the drop down menu on the right to change items like investment fee, rebalancing frequency, trading approach, required minimum investment, etc. Once you have completed your selections, click 'Submit'.



REVIEW AND COMPARE BUILDING BLOCK PERFORMANCE

Emotomy offers several options for viewing and comparing performance. Follow the steps below to see the performance of your portfolios.

1. Click on 'Performance' on the top right hand corner.



2. This page offers basic performance statistics for Market Indices and Building Block performance. By clicking on the names of each item, you are given a detailed look into the performance statistics.

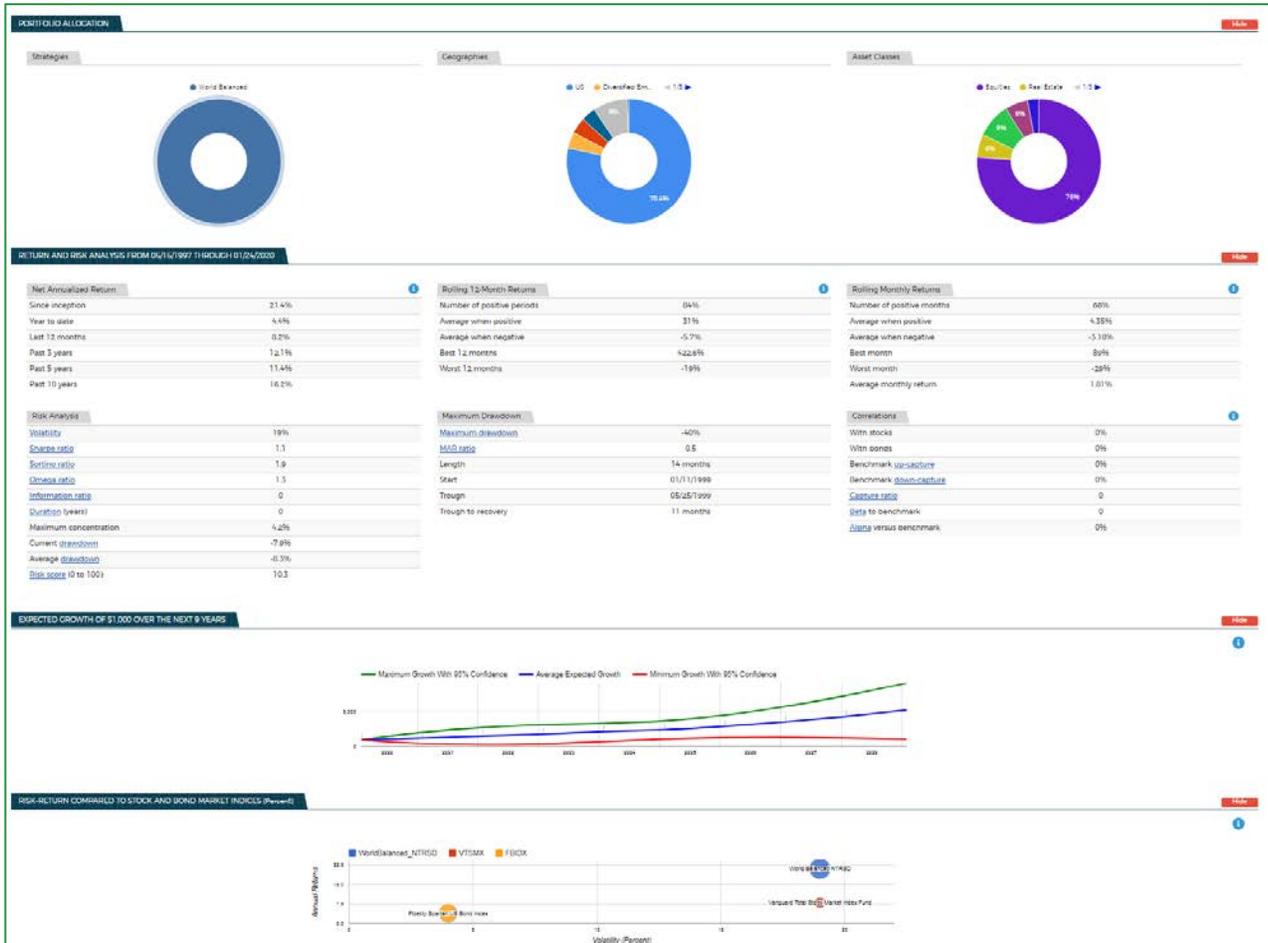
Market Indices And Building Block Performance
As Of 2020-01-17

YIELD CORPORATE BOND (HYC) 88.06 ▼ -0.31% POWERSHARES QQQ (QQQ) 223.48 ▼ -0.17% FLEXSHARES READY ACCESS VARIABLE INCOME FUND (RAVI) 75.87 ▲ +0.01% SPDR S&P 500 (SPY) 330.01 ▼

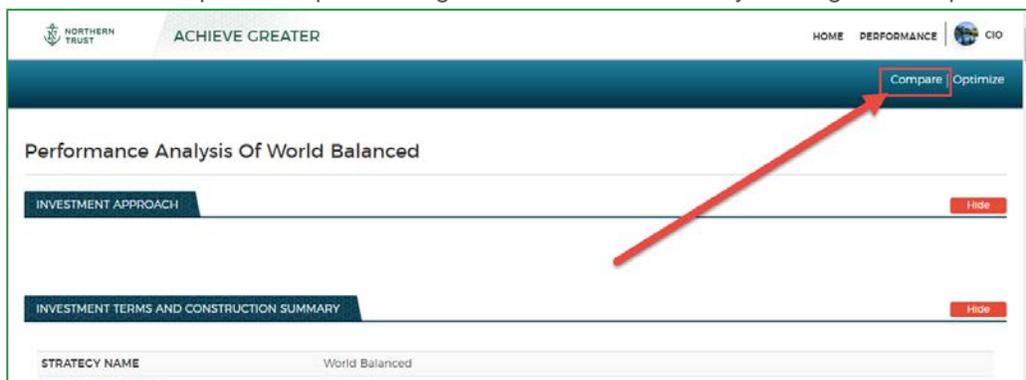
† Prices delayed 120 minutes. [View market data](#)

| | Name | YTD | YTD Rank | MTD | Last 3 Months | Last 12 Months | 2019 | 3 Years | 5 Years | 10 Years | Since Inception | 2008 | 2002 | Maximum Drawdown |
|--|--|-------|----------|-------|---------------|----------------|-------|---------|---------|----------|-----------------|--------|--------|------------------|
| MARKETS | iShares Core Total Aggregate US Bond (AGG) | 0.61% | | 0.61% | 0.83% | 9.3% | 8.5% | 4.2% | 2.9% | 3.6% | 5.2% | 8.2% | 10.4% | -13% |
| | SPDR Dow Jones Industrial Average ETF (DIA) | 2.87% | | 2.87% | 10.11% | 21.3% | 25% | 16.5% | 13.4% | 13.2% | 8.5% | -32.2% | -14.4% | -52% |
| | Nasdaq-100 Index Fund (NASDAQ) | 5.17% | | 5.17% | 16.98% | 35.4% | 38.2% | 22.3% | 17.7% | 17.9% | 4.7% | -41.5% | -37.4% | -83% |
| | SPDR S&P 500 (SPY) | 3.13% | | 3.13% | 11.95% | 26.9% | 31.2% | 15.7% | 12.7% | 13.4% | 9.8% | -36.8% | -21.6% | -55% |
| | iShares Barclays 20+ Year Treasury Bond (TLT) | 1.87% | | 1.87% | -0.62% | 18.2% | 14.1% | 7.1% | 3.2% | 7.3% | 5.4% | 33.9% | 19.2% | -27% |
| | Vanguard Emerging Markets Stock Index (VEIEX) | 2.95% | | 2.95% | 11.79% | 17% | 20.1% | 10.1% | 5.2% | 3.3% | 7.2% | -52% | -7.4% | -66% |
| | Vanguard Emerging Markets Bond Investor (VEMB) | 0.99% | | 0.99% | 3.01% | 14.9% | 17.7% | 9.5% | 10.3% | 10.3% | 10.3% | 0% | 0% | -6% |
| Vanguard Total International Stock Index (VGT) | 1.74% | | 1.74% | 8.84% | 16.8% | 21.4% | 9.4% | 6.2% | 4.8% | 5% | -44.1% | -14.7% | -61% | |
| TOP 3 YTD | Tech Leaders Portfolio NTRSD | 8% | 1 | 8% | 29.35% | 40.5% | 30.1% | 31.6% | 28.7% | 20% | 19.9% | 0% | 0% | -28% |
| | World Balanced NTRSD | 5.72% | | | | | | 3.4% | 12.1% | 16% | 21.5% | -3.3% | 2.1% | -40% |
| | World Select NTRSD | 7.67% | 2 | 7.67% | 14.73% | 7.7% | -0.1% | 16.4% | 15.9% | 20.1% | 26.9% | -10.3% | -0% | -48% |
| BOTTOM 3 YTD | 12 | 0.61% | 25 | 0.61% | 0.83% | 9.3% | 8.5% | 4.2% | 2.9% | 3.6% | 4.1% | 8.2% | 0% | -13% |
| | AllTerrain NTRSD | 1.01% | 23 | 1.01% | 3.63% | 8.1% | 8.4% | 3.6% | 2.7% | 3.9% | 5.6% | -3.4% | 7.8% | -13% |
| | Core All Assets NTRSD | 0.95% | 24 | 0.95% | 2.48% | 12.7% | 13.2% | 4.5% | 2% | 4.8% | 6.3% | 12.6% | 6.3% | -13% |
| TOP 3 LTM | Tech Leaders Portfolio NTRSD | 8% | 1 | 8% | 29.35% | 40.5% | 30.1% | 31.6% | 28.7% | 20% | 19.9% | 0% | 0% | -28% |
| | Test Building 123 | 3.81% | 6 | 3.81% | 12.78% | 36.8% | 40.3% | 24.4% | 20.9% | 20.9% | 20.9% | 0% | 0% | -14% |
| | Test Building Block | 3.38% | 7 | 3.38% | 15.24% | 35% | 39.3% | 23.2% | 17.7% | 13.5% | 10.5% | -45.1% | -17.1% | -60% |

- When you click on a portfolio, the resulting page provides investment terms and construction summary, Sharpe and Sortino ratios, drawdown statistics, many other various risk and return charts such as the growth of \$1000, performance compared to global asset classes, the efficient frontier, best and worst monthly periods, etc.



- Review and compare multiple building block details at a time by clicking on 'Compare'.



5. Use the drop down menus to select the securities, building blocks or benchmarks you want to compare. Then select 'Compare Securities'.

Select Securities To Compare

Listed Securities

Building Blocks ←

Benchmarks

Core All Assets NTRSD ×

World Select NTRSD ×

Compare Securities

RESET

Securities or building blocks selected will be listed here.

6. The resulting performance statistics and charts include: Net annualized returns, portfolio allocation, risk and return analysis, comparative growth of \$1,000, annualized volatility, 6-month correlations and performance comparison

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