## Enyxus: An Asset-to-Asset Trading and Tracking Control Center

info@enyxus.com www.enyxus.com

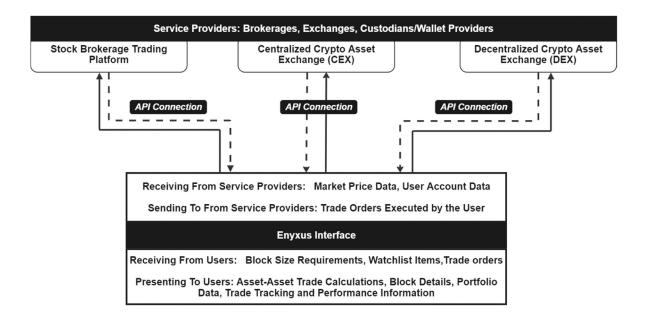
Abstract. An asset-to-asset trading middleware would create greater market visibility for traders and investors, revealing trades between assets for potential unit growth rather than simple predictive tools available now. Traders and active investors are currently provided with tools geared toward guessing the future direction of the market, which ultimately leads to high rates of failure, attrition, and limited trading activity as traders either suffer losses or hold positions indefinitely [1][2][3]. We propose a solution that offers three key interconnected components all with a focus on facilitating portfolio growth through asset-to-asset trading where unit accumulation can be recognized by the user regardless of market direction or the presence of fiatbased profitability at the moment of a potential trade. Beyond the simple recognition of these new opportunities, we propose a method of facilitating individualized positions within assets. This allows the trader to effectively break up their holdings of an asset into smaller pieces of value or "Blocks" to assist the trader in building positions at times when pricing becomes more advantageous rather than going all in. This system supplants the current limited view of each asset generally provided on other trading platforms, where individual positions are simply averaged together, forcing sophisticated traders to keep notes on each position they've opened in an asset. We propose that each individualized position effectively has its own performance metrics that should be clearly presented to the user so the user can make more informed trading decisions. Finally, we propose a novel system of tracking the movement of these pieces of value as they travel between assets, are split or merged with other Blocks of a similar asset type, and are evaluated against other assets in the users' watchlists, allowing further opportunities to identify asset-to-asset trades for unit growth.

#### 1. Introduction

Trading and investment activities are almost entirely focused on the binary relationship between individual risk assets versus fiat currency. This simplistic paradigm ignores the inherent value relationships that exist between risk assets and forces investors and traders into two limiting categories; either 1. purchasing an asset and holding it indefinitely (often described as investing), or 2. Attempting to "time the market" using predictive methodologies in an attempt at entering and exiting positions at perceivably advantageous times, in the hopes of achieving short-term profit (otherwise described as trading). Because trading and investing platforms are designed to accommodate this binary approach, both the individual user and the service provider suffer from a lack of available opportunities. The individual investor suffers in the form of missed portfolio growth and rebalancing opportunities. The trader suffers in the form of dependence on demonstrably inconsistent performance from indicators and thus overall inconsistent and often poor trading performance and the service providers suffer from inactivity among investors who simply buy and hold, and attrition among traders who lose money and stop trading. This problem can be clearly identified in the financial reports of publicly traded companies providing brokerage and exchange services, whose profits from trading activity are dependent on a very limited segment of their user base and which are greatly diminished during bear markets.

What is needed is visibility into asset-to-asset-based trading opportunities and a more granular presentation of the positions that users acquire in various risk assets over time. By simply seeing opportunities to trade one asset for another, to gain more units of the target asset than was previously achievable, investors can benefit by unlocking value in portions of their portfolio to grow their holdings in the assets they wish to own, without necessarily having to invest more fiat to do so. Traders will benefit from new opportunities to exit positions into other assets, rather than hoping to perfectly time entries and exits, and simply taking fiat-based profit or stop losses. By allowing investors and traders the ability to see individualized positions in each asset and track and trade portions of each asset, traders and investors, armed with more information on each position, can incrementally enter and exit positions as opportunities present themselves. Finally, Service Providers will benefit from more activity on their platforms regardless of market conditions as investors become more active in growing their portfolios and traders employ new loss mitigation techniques.

In this paper, we propose a solution to the blind spots imposed through the current fiat-focused trading and investing platforms, using an asset-to-asset based equivalency tracking and trading middle-ware. This "control center" permits the user to view and treat their individualized positions in assets in their connected brokerage and exchange accounts, as inventory that can, itself, be treated as trading capital. This solution empowers a shift in the mindset of the user to an approach encapsulated in Modern Portfolio Theory [4]. Additionally, this solution employs modern technology to advance this proposition through expanded market visibility and robust tracking tools that provide information specific to the user's unique experience, rather than generic market information. The following illustration depicts how Enyxus operates as a middleware, connecting to service providers via API access, and facilitating new visibility and functionality for users while working within the framework of the brokerages, exchanges, etc. where users maintain funded accounts.



#### 2. Relativity of Pricing

While it is universally accepted that assets have both an intrinsic value and a relative value that can be calculated through fundamental analysis [5] and an analysis of comparable asset values, the market phenomenon of price discovery impacts an asset's market value at any particular moment in time, as the market prices and reprices an asset, relative (primarily) to fiat currencies. With the advent of crypto-asset trading, crypto-asset trading exchanges began offering "markets" in assets other than fiat, most often in assets like Bitcoin and Ethereum. As arbitrageurs have sought to capitalize on inconsistency in pricing [6], stability in pricing has become more regular, as has the notion that assets other than fiat currencies can act as the medium through which assets might be traded. This, of course, expands the concept of pricing as well. For instance, if an asset has a price in a fiat currency like dollars, as well as a price in say Bitcoin, it therefore follows that it has a price in every other tradable asset, by way of the medium asset through which one asset can be traded for another. Thus, every asset that can be held (which we refer to as a "From Asset") has a value relative to every other asset that could be acquired (which we refer to as a "To Asset") following the sale of the From Asset into a Medium Asset.

Theoretical Transaction:



When trading asset-to-asset we, therefore, must establish the price of an asset that would be acquired in the transaction (To Asset) by determining its potential unit quantity relative to one (1) whole unit of the From Asset that would be sold in the transaction. To establish basic pricing, we utilize fiat as the medium in establishing a basis through which the transaction could occur.

Fp =Price of one unit of the "From Asset" (the asset we are considering for disposition) expressed in fiat currency (p).

Tp = Price of one unit of the "To Asset" (the asset we are considering for acquisition) expressed in fiat currency (p).

Tf = Price of one unit of the "To Asset" (the asset we are considering for acquisition) expressed in the "From Asset".

$$Tf = \frac{1(Fp)}{1(Tp)}$$

It should be noted, however, that as markets in assets like Bitcoin and Ethereum currently already exist on crypto-asset exchanges, there are instances where greater pricing efficiency exists through one of these mediums. Where direct markets do not exist between assets, a medium asset must be used to accommodate a transaction. This is true of most crypto-asset markets and all stock trading platforms where asset-to-asset trading is not supported and requires specialized connected software like Enyxus. We define such transactions, involving two or more transactions to facilitate a move from one asset to arrive at another, as Smart Swaps. Within its Trading Modules, the Enyxus platform immediately reviews all available routes for the transaction and presents the user with the pricing that can produce the greatest number of units of the To Asset after accounting for fees and order book consumption (commonly referred to as slippage).

The following diagram depicts the process whereby Enyxus instantly evaluates all possible routes for a trade, including direct market trades and potential Smart Swaps, to find the route that generates the greatest number of units in the To Asset.

#### ABC DEF **DIRECT PAIRING** SMART SWAP: OPTION 1 SMART SWAP: OPTION 2 SMART SWAP: OPTION 3 Exists on Exchange: Y/N Required Asset Route Required Asset Route Required Asset Route Fiat (Stable Asset) DEF → BTC (Risk Asset) BTC → ETH Yes No Calculate Resulting Units Calculate Resulting Units Calculate Resulting Units Calculate Resulting Units n(ABC) Price in Fiat n(ABC) Price in BTC n(ABC) Price in BTC $\frac{n(ABC)}{Price in DFF} = n(DEF)$ - n(DEF) in Fees - n(Fiat) in Fees - n(BTC) in Fees - n(BTC) in Fees - n(DEF) in Slippage (OB Consumption) - n(Fiat) in Slippage (OB Consumption) - n(BTC) in Slippage (OB Consumption) - n(BTC) in Slippage (OB Consumption) = n(DEF) = n(Fiat) = n(BTC) = n(BTC) $\frac{n(Fiat)}{Price\ in\ DEF} = n(DEF)$ $\frac{n(BTC)}{Price\ in\ DEF} = n(DEF)$ n(BTC) Price in ETH = n(ETH)- n(DEF) in Fees - n(DEF) in Fees - n(ETH) in Fees - n(DEF) in Slippage (OB Consumption) - n(DEF) in Slippage (OB Consumption) - n(ETH) in Slippage (OB Consumption) = n(DEF) = n(DEF) = n(ETH) n(ETH) Price in DEF = n(DEF) - n(DEF) in Fees - n(DEF) in Slippage (OB Consumption) RETURN OPTION WITH GREATEST NET = n(DEF)"TO ASSET" (DEF) UNIT COUNT

PAIRING

# 3. How Portfolio Growth is Made Possible Through Asset-to-Asset Trading

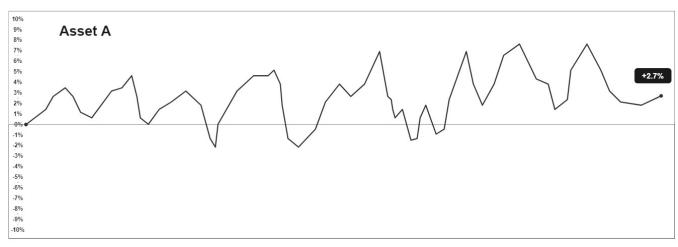
Relativity of Pricing has implications well beyond tracking one asset's price relative to another over time. While strategies based on perceived trends in this data and attempts at timing these new markets will undoubtedly be employed by traders in due time, a more immediate advantage clearly surfaces: the ability to trade assets within a portfolio with a focus on growth in units.

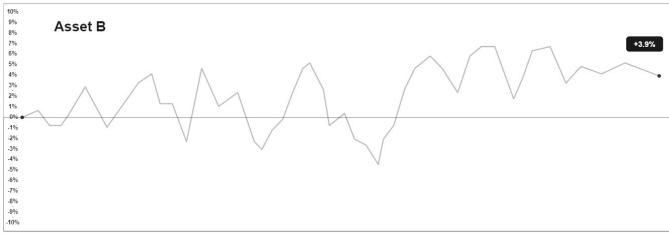
Traders on the Enyxus platform can see the change in the relative values of any asset against any other asset they wish to acquire, over any time frame they wish to employ, including:

- a. simple calendrical time frames,
- b. the date/time of the last trade made into the asset(s) held,
- c. the date/time of the start of trading
- d. the date/time of the last trade at which the realization of the greatest number of units of any particular asset was achievable (which we define as "All Time High")

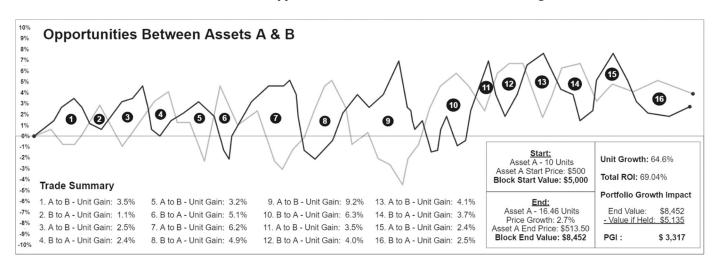
This visibility allows traders to immediately identify opportunities to make trades from assets they hold to assets in their watchlist, which can result in more units of the assets they want to hold over the time frame specified. This allows users to actively grow their portfolios using assets they already have to "fund" the acquisition of other assets.

#### Traditional Platform Visibility - Asset Performance Presented in % Growth Against Fiat





Enyxus Platform Visibility – Asset to Asset Unit-Growth Opportunities For Assets Presented in Preceding Charts



Enyxus employs novel methods of tracking value movement and new tools to facilitate a unit-accumulation approach to investing and trading including, Blocks, Time Entities, Block Maps, and Matrices (including the Market Matrix and the Smart Matrix). Enyxus also introduces new metrics to track the performance of the trading activities as they relate to accumulating more units of assets in one's watchlist including Portfolio Growth, Value if Held, and Portfolio Growth Impact (PGI).

#### 4. Block Creation, Time Entities, and Value Movement

One of the greatest obstacles investors and traders face when tracking their performance is understanding the impact of time as it relates to capital contributions. This becomes even more difficult when capital contributions and withdrawals are made with crypto-assets, as these risk assets are subject to greater volatility than fiat currencies, while at the same time having greater liquidity and ease of movement between individual wallets, exchanges, and brokerages that support crypto-asset deposits and withdrawals. Given the new challenges that come with the added flexibility of asset movement across service providers, combined with a new focus on relative asset pricing and the potential for unit accumulation strategies, an entirely new and more advanced method of tracking value movement is required.

Because, as we established in the previous sections, all assets have a relative value to all other assets, and because that value is ever-fluctuating, all capital, including both fiat and crypto-assets, that enters a trading ecosystem is timestamped so that relative value in all other assets may be determined. From this point, assets can be divided into smaller units for incremental trading or merged back together without losing important reference points. This flexibility is absent in most trading platforms and requires sophisticated traders and investors to maintain copious notes. Enyxus solves this problem by introducing a new style of inventory management known as Blocks.

#### Blocks and Time Entities: Enyxus' Display and Tracking of Users' Holdings

Enyxus displays inventories of assets in tradable Blocks that provide users with more advanced tracking of performance than they can achieve on any exchange or brokerage platform, but with a simple graphical interface that lets traders manage their inventory with extreme flexibility.

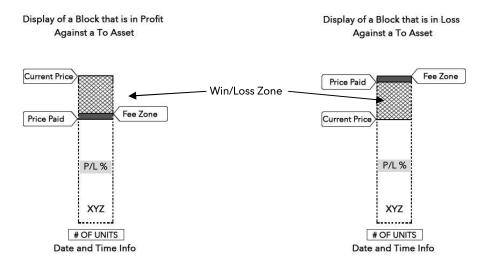
Upon connecting an exchange or brokerage with Enyxus via API, all holdings of any assets are immediately treated as new blocks and assigned a Block ID. For example, if a user were to open an account with an exchange or brokerage and fund the account with USD, Enyxus would display a single block of USD. However, if the user had previously traded within the account, and had say 10 different assets in the account at the time of the connection, Enyxus would then display 10 different blocks of different assets. Each block would have an "Entry Value" that correlates to the date and timestamp of the first date that the block was recognized by Enyxus. Enyxus treats these Entry Values as your Capital Invested Value or the original contributions the trader has made to their trading accounts. Additionally, these origin blocks are referred to as Time Entities as these blocks, regardless of their asset type, are related by the time they originated on Enyxus. This additional tracking methodology allows Enyxus to facilitate the merging of blocks of similar assets once splits and trades have been done over time, while still maintaining historical reference points in the history of blocks. Block Splits and Merges will be addressed in more detail in the pages that follow.

We recognize that traders may wish to change their entry value to reflect values that they may already know are pertinent, for instance, when a trader records trades on spreadsheets and knows the actual price paid for a particular asset. As such Enyxus offers a "Capital Invested" module where all deposits and withdrawals made per connected exchange or brokerage are recorded and editable. Users may unlock and edit the custom entry columns to change their Entry values as needed and lock them again once they have been made. Once complete, this edit initiates a recalculation of various elements of the position's metrics to reflect the updated values.

#### **Anatomy of a Block**

A block can represent the entirety of an asset's inventory or just a piece of it. Please note that blocks are specific to each symbol in one's inventory. This means that a block cannot contain more than one asset type within it. Each block offers a graphical depiction that can be found in the Block Module view of any asset, however, each block (and its relevant corresponding metrics) is also represented individually within other modules, including the Portfolio Module, the Smart Matrix, the List View module, etc.

Within the Block Module, a block's height at inception is based on the price paid for the block, or in the case of a block that represents a Time Entity, the value at the time of recognition by Enyxus. The top of the block is drawn relative to where the entry price is on the price graph over which the block is positioned within the GUI. As the market price of the asset increases against any other asset to which it is being compared, a green top forms on the block to illustrate the value growth. Conversely, as the market price of the asset decreases against any other asset to which it is compared, a red area forms from the top of the block, down to the current price to illustrate the loss in value against the other asset to which the block is being compared. The block also clearly displays the name of the asset, as well as the number of units of that asset that the block represents. As additional Blocks are created, either through additional purchases of the asset or by the splitting of a block, the additional blocks are presented in the Block View.



Hovering the mouse over various areas of the block reveals additional details about the block including:

- The price paid for the block at inception
- The percent gain or loss that the block is currently experiencing.
- The date upon which the block was created

Clicking on the block brings up the Action Window allowing traders options to:

- Merge the block with any other block(s) selected
- Split the block into smaller block(s)
- Analyze the block's trade history and equivalency information to aid in trading decisions, and
- Initiate a trade of the block

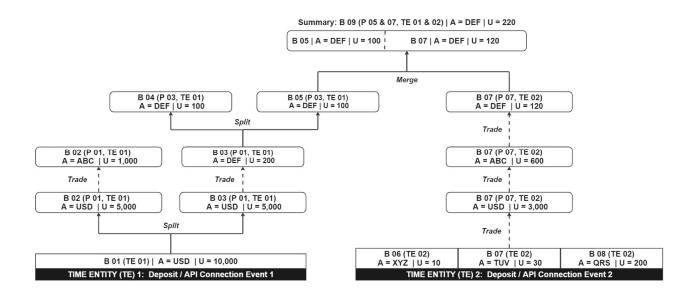
### Block Parents and Block Children - Splits & Merges

As previously noted upon connecting an exchange or brokerage with Enyxus, any holdings on the exchange are immediately treated as new blocks (as well as new Time Entities) and assigned a Block ID. While the vast majority of exchanges and brokerages provide a single averaged position in each asset, regardless of situations where a trader may have made numerous acquisitions of an asset over various points in time, Enyxus treats the holdings in each asset as blocks that can be split into smaller portions and traded as the trader sees fit, while tracking each piece's activity and performance separately. These new split blocks are considered "Child Blocks" by Enyxus for the purpose of tracking and maintaining the associated trade history.

Enyxus "maps" the movement of the Child Blocks behind the scenes and maintains a full record of which Blocks were split and merged over time so that the true history and equivalency information can be accessible when needed. The following example illustrates an example of basic parent block—child block tracking within Enyxus.

- B = Block ID Denotes the identifier added when each new block is created to assist in tracking value movement regardless of the asset vehicle occupied by the block at any point in time.
- TE = Time Entity an origin block resulting from a deposit or new API connection to Enyxus.
- P= Parent ID –. Tracks the blocks from which new blocks are created via splits and merges to maintain tracking of lineage and original cost basis.
- A = Asset type depicted in call symbol.
- U = Units Quantity of Assets of each type in the block.

#### Example of Block Parent, Block Child and Time Entity Tracking Method



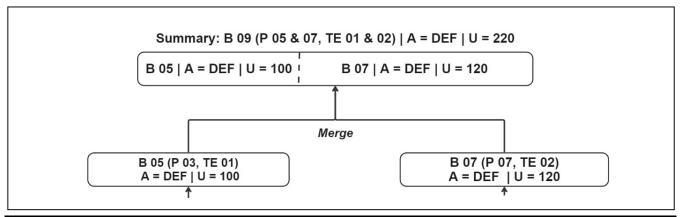
As the preceding illustration demonstrates, Enyxus not only allows blocks to be split into smaller components of the same holding of an asset but also to be merged into other blocks of the same asset. Enyxus tracks the history of each block's trades to maintain equivalent value references for any other asset the user wishes to evaluate/trade. As such, additional considerations for calculating data points relative to the individual components that comprise a merged block must also be made. This is where the distinction between blocks that originate from the same Time Entity versus blocks merged from different Time Entities must be considered.

In the preceding example, two blocks of Asset DEF (B05 and B07) were merged into one block (B09), resulting in 220 units of DEF. The blocks that comprise the new merged block, however, came from different Time Entities, and for the sake of our example, let's assume that Time Entity 2 came into Enyxus sometime after Time Entity 1. As such, for the user to truly maintain data useful in determining the block's performance, each component's contributory values must be considered in two distinct ways. While the current market value for each contributory component is as simple as multiplying the current pricing of the compared asset to which the block could be traded (which we refer to as the "To Asset") by the unit count for each component, deriving a historical point of reference requires a different calculation. The values at the resulting Block's inception, which we simply refer to as its Entry Value, require the combination of independent Entry Values for each component at their respective points in time. As such, while merged blocks with different Time Entities have no singular Entry Value date and time, the Entry Values themselves represent true pricing at the time of calculating each component in the merged block. Therefore, this combined Entry Value provides a useful point of reference to allow the trader to maintain a basis from which to work and evaluate performance.

The reader will recall from the preceding diagram, that Block 05 originated from a Time Entity that had a value of \$10,000 USD at the time of origination on Enyxus. The reader will also note that Block 05 was split twice prior to the merge and that each split was an equal 50% of its Parent Block. This means that Block 05 had an inception value of \$2,500 USD. For the sake of our example, let's assume that Block 07 had a market value of \$2,800 USD at the time of origination of its Time Entity. Enyxus continues to maintain these reference points to maintain historical accuracy and to assist users in effectively tracking performance metrics, so they can make informed trading decisions in the future.

The following example, drawn from the Merged Block illustration from the previous example, demonstrates how the calculations maintained on the blocks that comprise the new Merged Block provide insight into the performance generated through unit accumulation (which we refer to as "Portfolio Growth"). This is compared to a buy-and-hold scenario (which we refer to as "Value if Held") where the user, rather than making these trades that culminated in the results of Block 09, simply immediately bought and held the number of units in DEF that could have been purchased as of the date and time of the creation of the Time Entity, given the Entry Values noted at the time as well as the pricing of DEF at the time.

It is important to note that while traders have used simple "Buy and Hold" comparison scenarios to test the efficacy of strategies for many years, a typical Buy and Hold analysis is often performed using an index, a single prominent asset, or a single asset that is the focus of a strategy that incorporates timing the market. While Portfolio Growth Impact may appear to be a similar measure to a traditional Buy-and-Hold analysis, it differs quite significantly. Enyxus calculates the Portfolio Growth Impact figure by measuring the difference between the current Market Value of the account and the Value if Held. It makes this calculation on a block-by-block basis and therefore adjusts to the current asset held in each specific block as trades of the block are made into different assets. Additionally, the entire portfolio's overall Portfolio Growth Impact figure is reflective of all of the individual blocks of assets held, and the proportions of those assets being held as they relate to the whole. Because of this, the Enyxus Portfolio Growth Impact metric is dynamically changing with each trade and allows traders to evaluate the impact of their unit accumulation performance in real-time and on data tailored specifically to their portfolio.



Tracking Value Metrics and Growth Metrics of a Merged Block															
Current Me	Value Metrics in USD							Growth Metrics in DEF							
Block ID	Units	Ratio	Entry Value USD	Ratio	Current Price (USD)	Current Value (USD)	ROI (\$)	ROI (%)	Entry Price DEF (USD)	Entry Value Units of DEF	Ratio	Unit Growth	Value if Held	PGI (\$)	PGI (%)
B05	100	45.5%	\$2,500	47.2%	\$30	\$3,000	\$500	20.0%	\$31	80.64516	48.7%	19.35484	\$2,419	\$580.65	24.0%
B07	120	54.5%	\$2,800	52.8%	\$30	\$3,600	\$800	28.6%	\$33	84.84848	51.3%	35.15152	\$2,545	\$1,054.55	41.4%
B09 (Totals)	220		\$5,300			\$6,600	\$1,300	24.5%	\$64	165.49365		54.50635	\$4,965	\$1,635.19	32.9%

This same logic applies to calculating performance in any other asset, given the relativity of pricing across assets, and can assist in tracking performance in an asset-to-asset trading scenario, allowing the trader to continue seeking unit accumulation opportunities. The following chart illustrates how Enyxus maintains the Equivalency Values of other "Target Assets", allowing the user to assess the opportunity for unit growth and the impact of unit growth over the theoretical value if the user had simply bought and held the Target Asset with the same respective initial capital value per block at the time of each Time Entity.

	Comparing Equivalencies and Growth Metrics in Target Asset (ABC)																	
Merged DEF Block Current Value Entr					Entry Value Metrics (in USD)			Growth Metrics in ABC										
Weiged DET Block Current Value				Entry value wiethes (in OSD)			Entry Value Equivalency			Curr	ent Value U	nit Growth P	Portfolio Growth Impact Calc.					
Block ID	Units	Current Price (USD)	Current Value (USD)	Entry Value USD	Entry Price DEF (USD)	Entry Value Units of DEF	Entry Price ABC (USD)	Entry Value Units of ABC	Ratio	Current Price	Potential Current Units	Unit Growth	Unit Growth (%)	Value if Held	PGI (\$)	PGI (%)		
B05	100	\$30	\$3,000	\$2,500	\$31	80.64516	\$4.50	555.55556	48.5%	\$4.25	705.8824	150.32680	27.06%	\$2,361	\$638.89	27.1%		
B07	120	\$30	\$3,600	\$2,800	\$33	84.84848	\$4.75	589.47368	51.5%	\$4.25	847.0588	257.58514	43.70%	\$2,505	\$1,094.74	43.7%		
B09 (Totals)	220		\$6,600	\$5,300		165.49365	\$9.25	1145.02924			1552.941	407.91194	35.62%	\$4,866	\$1,733.63	35.6%		

#### 5. The Block Map - Tracking Value Movement Through Assets

While trading platforms universally allow traders to see a trade's performance in the fiat currency used to open the position, once that position is closed by selling the risk asset back into fiat, the value in fiat, is returned to the account after the transaction, is simply blended into any other fiat holdings in the account. The record of the trade is kept in the record of closed trades, but the value associated with that trade is not segregated or tracked any further. This may seem reasonable given the nature of most trading platforms to facilitate prediction-based trading, where results from individual trades are simply tallied up for the user into simplified trade "performance", however, the limitations inherent in this style of tracking and reporting become debilitating over time, as many traders entirely lose track of the performance of each trade and lose important points of reference on outstanding positions over time. This forces the most sophisticated traders to undertake tedious record-keeping

activities outside of the platforms on which they trade. Because trading is a business and assets acquired are effectively liquid inventory, a more rigorous tracking and reporting mechanism is needed.

Given that Enyxus not only facilitates direct asset-to-asset trading (utilizing a series of instant trades through medium assets) as well as a more granular treatment of holdings with individualized "block" position tracking, an entirely new and more advanced approach to trade tracking is required to assist the trader in truly understanding performance and has been constructed within the Enyxus platform. Enyxus introduces the Block Map, a completely novel system that perpetually tracks the flow of value as it moves through assets, while simultaneously tracking equivalency values of any other asset the user wishes to see, at the time of each trade.

The Block Map offers a one-of-a-kind presentation of historical trades, made on a per-block basis, linking each trade in a chain of events that illustrates each step in a block's journey. Additionally, by maintaining a record of equivalent values in other assets the trader has chosen, it is the World's First tool designed for assessing unit growth opportunities, specific to a trader's actual positions as they relate to any other asset a trader wishes to consider.

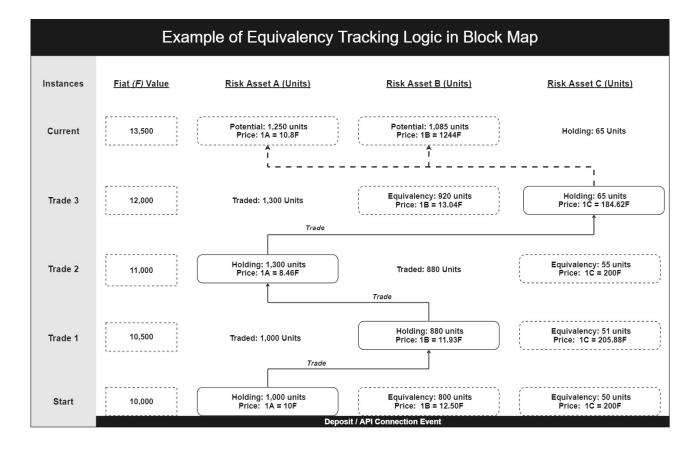
At the very heart of the Block Map Function is the core concept that all assets are universally priced against one another and therefore, the volatility inherent in the process of price discovery provides an opportunity for unit growth as values of risk assets, relative to one another, are trackable and tradable. This novel approach to trading, while entirely self-evident, has never before been promoted or fully supported within trading platforms, in large part, because it requires both:

- 1. fractional ownership of assets to facilitate a complete transfer of value between assets (a concept that itself, was native to crypto-asset trading markets and becoming more widely adopted now in equities markets [7]), and
- 2. a technically complete way for a trader to effectively break units of value within their holdings into smaller "blocks" of value and independently manage them more strategically.

As users add to their watchlists in Enyxus, the platform immediately gathers all historical price points for each asset at the time of every trade of each block to which the asset is being added for review. This allows the user to review how much each trade could have generated in units of each asset. Users armed with this information can make more informed decisions when making their next trade by knowing if the trade generates growth in their portfolio, over:

- 1. the resulting unit potential at the time of the last trade,
- 2. the resulting equivalent unit potential from blocks Entry Value,
- 3. the resulting maximum unit potential realizable in any particular asset, or
- 4. if all three of the above conditions are met

The following diagram depicts the logic behind tracking equivalency values of assets that can be evaluated by an investor or trader.



The preceding diagram illustrates how a user with three risk assets (as well as fiat) in the watchlist develops a history of trades specific to a single block in the user's portfolio and how that history informs the user about opportunities to grow units in any particular asset in the list, prior to executing the trade. By the time this theoretical user has reached the "Current" instance, the user has a choice to make between trading the holdings in Asset C into either Asset B for a gain of 165 units (or 17.9%) since the time of the last trade, or the option of taking a small unit loss of -50 units (or -3.9%) since the time of the last trade in Asset A. However, both Asset A and Asset B have enjoyed overall gains of 25% and 35% overall, since the inception of the block. The user also has the option to exit into Fiat for a gain of 1,500 units or 12.5% since the last trade. Having the ability to see these additional data points offered within the block map, however, offers the trader much more latitude than simple asset to fiat-based performance tracking. Additionally, because the trader has the ability to split the block and trade portions of it, the trader may also elect to make all three available trades or some combination of them, allowing even greater flexibility.

#### 6. Conclusion

We have proposed a complete and robust system to facilitate a more modern approach to trading and investing in an age where fractional interest in assets has become standard, near-instant movement of assets and settlement of trading is growing ever more prevalent, and self-management of at least a large portion of one's liquid assets is on the rise. Current centralized and decentralized trading service providers' primary focus is on execution and security, and rightly so, however, as advancements have been made in the types of assets available and their functionality, the traditional trading platform has not kept up and now lacks sufficient market visibility, versatility in asset management, and granularity in performance tracking. We have proposed three key features, incorporated within a middleware, SAAS product called Enyxus, to better serve the end user and as such, better serve the growing financial needs of the service providers, reliant on trade activity. These three features are summarized as:

- 1. Matrix Trading: An asset-to-asset-based market evaluation tool for finding trading opportunities among an array of chosen assets, and directly executing these trades, regardless of whether or not the service provider offers a direct market in them, through the incorporation of Smart Swapping technology.
- 2. The Block Module: An individualized position creation and tracking tool, allowing traders to split their holdings in the same asset into smaller portions, for more incremental trading, while easily seeing the profitability of each block separately, or merging blocks into larger positions, and
- 3. The Block Map: A novel tracking tool that not only tracks units of value as they travel from one asset to another, but also displays equivalency values of all other assets in a user's watchlist to help the user identify the potential for unit growth trade opportunities.

Each of these three individual components represents a leap in the advancement of trading and active investing. However, as useful as each component is as a stand-alone tool, the combination of each component working together, brings immeasurable advantages to the user and allows them to enjoy a single seamless experience across multiple service providers, each of which has its own idiosyncratic representations of data. While Enyxus offers numerous features and functions and will continue to be updated with additional features as they are released, the three core features noted herein provide the core base components of the platform and represent a tectonic shift in how assets can be viewed, managed, and traded.

#### References

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