

Shadow Accounting

An Essential for Emerging Fund Managers May 2023



Why Emerging Fund Managers Need to Consider Fund Accounting

Rising regulatory requirements and increasing transparency requirements by allocators have led to an increased focus and importance on robust back-office processes. Investors are demanding more reports with better detail and quicker delivery times.

One area that is increasingly getting attention is shadow accounting. Shadow accounting is the process of keeping a separate set of fund records to detect mistakes and inconsistencies. For a fund, it could mean verifying an administrator's NAV calculations or replicating all of its accounting records. NAV errors can be due to complex and illiquid securities, forward contract differences, complex fee structures, mis-accounting of corporate actions, and other reasons. Moreover, with the shift of many funds to the multi-prime broker/custodian from a single-prime broker, it has become more important for investment managers to have their own books, reconcile the accounting records, and have a three-way tie-out with the prime brokers and their fund administrator.

Although a third-party administrator can calculate a hedge fund or private equity fund's official NAV, the investment manager retains the ultimate responsibility to provide timely and accurate numbers to their investors. In the past, there have been numerous instances of NAV calculation errors or overvaluing of illiquid securities. This could lead to expensive lawsuits and fines, and reputational damage, which can take years to rectify.

However, mistakes and inconsistencies aren't the only reason why investment managers are increasingly adopting shadow accounting practices. Shadow accounting capability has been recognized to increase transparency, ensure completeness, validate data integrity, and provide greater operational efficiency. Here are some reasons for adopting shadowing practices:

1. Allocator due diligence:

Investors are demanding that investment managers validate the fund administrator's accounting reports. In an overcrowded market, a tick on the diligence questionnaire can make all the difference, especially for bigger allocators like pensions and endowments. There is a consensus between all stakeholders, the investors, fund managers, and service providers that the added oversight is worth investing in. It not only fulfills investor demands but also reduces the risk for the investment manager.

2. Speed of reporting:

Institutional investors need access to high-quality data in real time, not just at specific intervals. The shadow accounting process allows firms to create and deliver reports without having to wait for the third-party fund administrator to close the books.

3. Operational efficiency and independence:

The shadow accounting process mitigates risk for the investment manager, as they are the ones ultimately accountable to investors. Through shadow accounting, any inconsistencies, variances, and mistakes can be discovered early and fixed, and the required changes can be made to the accounting process to avoid issues in the future. In addition, shadow accounting also allows the fund to not be dependent on the fund administrator for information, allowing them the flexibility to move service providers.



In 2013, Bridgewater Associates decided to perform a full shadow of its primary administrator by a third party. In fact, most of the large hedge funds and private equity firms I talked to already have a shadow accounting process. A survey done by E&Y showed that most of the investors surveyed believed that shadow accounting benefits the fund.

To set up a successful shadow accounting solution, objectives must be defined with proper workflow and processes that work for all parties involved - the investment manager, administrator, and prime broker. First, the fund manager needs to choose whether to go for a full shadow accounting or a partial shadow accounting system. The next question is whether they want to build an operating team or have a third party shadow the administrator.

As the name suggests, full shadow accounting rep<mark>licates the accountin</mark>g records completely at the portfolio and investor levels.

Partial shadowing reduces a fund's costs by focusing on higher-risk operations. Partial accounting could include anything the fund manager would want, such as the valuation and quantity of illiquid assets, tax lot appraisals/complex fee calculations, and calculations of accrued interest. It could also entail agreeing on daily P&L numbers and verifying cash positions.

Between a decision to build a team in-house and outsource this process, a fund manager can choose to outsource it initially and then decide to build a team in-house once they achieve a certain scale. However, there is an increasing trend among investment managers to outsource non-core business functions and maintain focus on their core competency.

An outsourced provider brings an unbiased, objective viewpoint and know-how on the best practices and provides operating leverage while removing human resource challenges. Outsourcing the non-core function also takes a lot of the pressure off the back office, many of which rely on Excel-based workbooks using power query and tools to monitor and report key figures. As mentioned earlier, even one of the biggest hedge funds in the world decided to have a third-party shadow accounting service provider.

We at TresVista work with private and public market asset managers and have implemented the shadow accounting processes for them, customizing the NAV packs and other operational workflows to their requirements while providing them unbiased opinions and know-how on the best practices. We work as an extended part of our client's team, and as a result, it reduces the turnaround reporting time of the fund managers to its investors.

Our CFO Office Services support asset managers in various activities like fund accounting, management company accounting, SPV accounting, and FP&A. We also work on capital calls and distributions, prepare partner capital account statements, prepare audit packs, audit support, and general bookkeeping.

To summarize, I believe any fund manager looking to move from the lower middle-market to the middle-market segment should implement shadow accounting in order to attract bigger allocators for the next phase of growth and mitigate the risk of inaccuracies in calculations. Using a third-party partner who can work as a part of your operations, like TresVista, equips fund managers with an unbiased opinion, helps maintain focus on their core competency, provides operating leverage, and solves human capital challenges.



TresVista CFO Office Services

NAV Reconciliation and Clearance of Breaks

Reconciliation of Accounting Books and Investment Portfolios

Request Overview

- To calculate the net asset values, interest accrued, management fees
- To compare the values of these parameters in the two sources of accounting books and identifying the reason for such variances
- Perform root cause analysis for the variances in asset values and breaks along with making adjustment entries and updates in transactions causing the breaks
- Publishing the financials and the NAV package for the fund

Final Deliverable and Value Add

- The date, time, and other source of variables like Market price, FX rates vary between Custodians and Administrators causing variances in the Market value of the assets
- These variances were scrutinized individually with an in-depth analysis and then making updates to the NAV report to get a better understanding of the Net asset value
- Analysis and resolution of the variance reduced the turnaround time for the client in publishing the final NAV Reports for their investors

Output Snapshot

					Sourc	e 1	Reclass	Adi	usted	Source 2	v	ariance
Net Assets					Jourc	-	receiass	۸.۵)	aotea	Jource 2		dilairee
Assets												
	Invested Cash	(excluding Ca	sh equivalen	ts)	11,0	045,247	-	1	1,045,247	11,046	,414	(1,16
	Securities Owned				5,818,688		-	- 5,818,688		5,816,658		2,03
	Derivatives - A	ssets			4	465,465	(50,607	')	414,858	404	,561	10,29
	Reverse Repo						-		-		-	-
	Interest receiv				1,2	202,384	-		1,202,384	1,192	,655	9,7
	Prepaid Expen	ses					-		-		-	-
	Other Assets				1,7	759,502	-		1,759,502	1,759	,396	10
	Receivable fro	m Broker									-	
Liabilities				Total-Assets	20,2	291,286	-	2	0,240,679	20,219	,684	20,99
	Securities sold not yet purchased				-				-		-	-
	Derivatives - L				(2	287,352)	287,352	!	-		-	-
	Repo- Borrow						-		-		-	-
	Legal Fee Paya					-	-		-		-	-
	Management f				(2	237,745)	-		(237,745)	(237	,745)	-
	Performance for	ee payable				-	-		-		-	-
	Total-Liabilit			al-Liabilities					(237,745)			-
	Total	-Net Assets			19,76	56,189	287,352.00	20,	002,934	19,981,	939	20,99
	MV Ac			crued Interest		Notional			Price			
								Notional			Price	
	Source 1 MV		MV Var	Source 2	Source 2	Al Var	Source 2 Qty Se		Qty Var	Source 2 Price	Source 2 Price	Price Va
iecurities	Source 1 MV 5,818,688		MV Var 2,030	Source 2	Source 2		Source 2 Qty Se 248,700		Qty Var		Source 2	Price Va
ecurities Bond 1		Source 2 MV		Source 2 Al	Source 2 Al	Al Var		ource 2 Qty	Qty Var	Price	Source 2 Price	Price Va
Bond 1 Bond 2	5,818,688 239,465 963,925	5,816,658 246,512 939,586	2,030 (7,047) 24,339	39,242 3,306 7,180	Source 2 Al 39,384 3,260 7,334	(142) 46 (154)	248,700 10,000 1,200	248,700 10,000 1,200	Qty Var	1,144 94 98	Source 2 Price 1,144 94 98	
Bond 1 Bond 2 Bond 3	5,818,688 239,465 963,925 196,559	5,816,658 246,512 939,586 204,362	2,030 (7,047) 24,339 (7,803)	39,242 3,306 7,180 3,654	39,384 3,260 7,334 3,817	(142) 46 (154) (163)	248,700 10,000 1,200 3,300	248,700 10,000 1,200 3,300		1,144 94 98 93	Source 2 Price 1,144 94 98 93	
Bond 1 Bond 2 Bond 3 Bond 4	5,818,688 239,465 963,925 196,559 28,027	5,816,658 246,512 939,586 204,362 29,269	2,030 (7,047) 24,339 (7,803) (1,242)	39,242 3,306 7,180 3,654 1,000	39,384 3,260 7,334 3,817 1,020	(142) 46 (154) (163) (20)	248,700 10,000 1,200 3,300 1,500	248,700 10,000 1,200 3,300 1,500		1,144 94 98 93 93	Source 2 Price 1,144 94 98 93 93	
Bond 1 Bond 2 Bond 3 Bond 4 Bond 5	5,818,688 239,465 963,925 196,559 28,027 87,499	5,816,658 246,512 939,586 204,362 29,269 83,321	2,030 (7,047) 24,339 (7,803) (1,242) 4,178	39,242 3,306 7,180 3,654 1,000 762	39,384 3,260 7,334 3,817 1,020 740	(142) 46 (154) (163) (20) 22	248,700 10,000 1,200 3,300 1,500 110,000	248,700 10,000 1,200 3,300 1,500 110,000		1,144 94 98 93 93	94 98 93 93 98	
Bond 1 Bond 2 Bond 3 Bond 4 Bond 5 Bond 6	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096	5,816,658 246,512 939,586 204,362 29,269 83,321 754,744	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352	39,242 3,306 7,180 3,654 1,000 762 8,968	39,384 3,260 7,334 3,817 1,020 740 8,600	(142) 46 (154) (163) (20) 22 368	248,700 10,000 1,200 3,300 1,500 110,000 14,500	248,700 10,000 1,200 3,300 1,500 110,000 14,500		94 98 93 93 98 98	94 98 93 93 98 98	
Bond 1 Bond 2 Bond 3 Bond 4 Bond 5 Bond 6 Bond 7	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096 440,651	5,816,658 246,512 939,586 204,362 29,269 83,321 754,744 455,020	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352 (14,369)	39,242 3,306 7,180 3,654 1,000 762 8,968 3,790	39,384 3,260 7,334 3,817 1,020 740 8,600 3,957	(142) 46 (154) (163) (20) 22 368 (167)	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000	- - - - - - - -	94 98 93 93 98 98 98	1,144 94 98 93 93 93 98 98	
Bond 1 Bond 2 Bond 3 Bond 4 Bond 5 Bond 6 Bond 7 Bond 8	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096 440,651 600,629	5,816,658 246,512 939,586 204,362 29,269 83,321 754,744 455,020 590,911	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352 (14,369) 9,718	39,242 3,306 7,180 3,654 1,000 762 8,968 3,790 3,057	39,384 3,260 7,334 3,817 1,020 740 8,600 3,957 3,124	(142) 46 (154) (163) (20) 22 368 (167) (67)	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700		1,144 94 98 93 93 93 98 98	1,144 94 98 93 93 93 98 98	-
Bond 1 Bond 2 Bond 3 Bond 4 Bond 5 Bond 6 Bond 7 Bond 8 Bond 9	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096 440,651 600,629 721,873	5,816,658 246,512 939,586 204,362 29,269 83,321 754,744 455,020 590,911 756,112	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352 (14,369) 9,718 (34,239)	39,242 3,306 7,180 3,654 1,000 762 8,968 3,790 3,057 3,019	39,384 39,384 3,260 7,334 3,817 1,020 740 8,600 3,957 3,124 2,954	(142) 46 (154) (163) (20) 22 368 (167) (67)	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000		1,144 94 98 93 93 98 98 98 98	1,144 94 98 93 93 94 98 98 98	-
Bond 1 Bond 2 Bond 3 Bond 4 Bond 5 Bond 6 Bond 7 Bond 8 Bond 9 Bond 10	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096 440,651 600,629 721,873 336,574	5,816,658 246,512 939,586 204,362 29,269 83,321 754,744 455,020 590,911 756,112 347,208	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352 (14,369) 9,718 (34,239) (10,634)	39,242 3,306 7,180 3,654 1,000 762 8,968 3,790 3,057 3,019 1,893	39,384 39,384 3,260 7,334 3,817 1,020 740 8,600 3,957 3,124 2,954 1,901	(142) 46 (154) (163) (20) 22 368 (167) (67) 65 (8)	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000 12,500	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000 12,500		1,144 94 98 93 93 98 98 98 99	1,144 94 98 93 93 98 98 98 98 98	
Bond 2 Bond 3 Bond 4 Bond 5 Bond 6 Bond 7 Bond 8 Bond 9 Bond 10 Bond 10	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096 440,651 600,629 721,873 336,574	5,816,658 246,512 939,586 204,362 29,269 83,321 754,744 455,020 590,911 756,112 347,208 855,828	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352 (14,369) 9,718 (34,239) (10,634) (4,558)	39,242 3,306 7,180 3,654 1,000 762 8,968 3,790 3,057 3,019 1,893 2,572	39,384 3,260 7,334 3,817 1,020 740 8,600 3,957 3,124 2,954 1,901 2,634	(142) 46 (154) (163) (20) 22 368 (167) (67) (65) (8) (62)	248,700 10,000 1,200 3,300 1,500 110,000 30,000 5,700 20,000 12,500 25,000	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000 25,000		94 98 93 93 98 98 98 98 98 98 99 90 93	\$\frac{2}{\text{Price}}\$ 1,144 94 98 93 93 98 98 98 99 90 93 92	
Bond 1 Bond 2 Bond 3 Bond 4 Bond 5 Bond 6 Bond 7 Bond 8 Bond 9 Bond 10	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096 440,651 600,629 721,873 336,574	5,816,658 246,512 939,586 204,362 29,269 83,321 754,744 455,020 590,911 756,112 347,208	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352 (14,369) 9,718 (34,239) (10,634)	39,242 3,306 7,180 3,654 1,000 762 8,968 3,790 3,057 3,019 1,893	39,384 39,384 3,260 7,334 3,817 1,020 740 8,600 3,957 3,124 2,954 1,901	(142) 46 (154) (163) (20) 22 368 (167) (67) 65 (8)	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000 12,500	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000 12,500		1,144 94 98 93 93 98 98 98 99	1,144 94 98 93 93 98 98 98 98 98	-
Bond 1 Bond 2 Bond 3 Bond 3 Bond 4 Bond 5 Bond 6 Bond 7 Bond 8 Bond 9 Bond 10 Bond 11 Bond 12	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096 440,651 600,629 721,873 336,574	5,816,658 246,512 939,586 204,362 29,269 83,321 754,744 455,020 590,911 756,112 347,208 855,828	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352 (14,369) 9,718 (34,239) (10,634) (4,558) 11,335	39,242 3,306 7,180 3,654 1,000 762 8,968 3,790 3,057 3,019 1,893 2,572	39,384 3,260 7,334 3,817 1,020 740 8,600 3,957 3,124 2,954 1,901 2,634	(142) 46 (154) (163) (20) 22 368 (167) (67) (65) (8) (62)	248,700 10,000 1,200 3,300 1,500 110,000 30,000 5,700 20,000 12,500 25,000	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000 25,000		94 98 93 93 98 98 98 98 98 98 99 90 93	\$\frac{2}{\text{Price}}\$ 1,144 94 98 93 93 98 98 98 99 90 93 92	
Bond 1 Bond 2 Bond 3 Bond 4 Bond 5 Bond 6 Bond 7 Bond 8 Bond 9 Bond 10 Bond 11 Bond 112 Cash & Cash Equivalents Currency	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096 440,651 600,629 721,873 336,574 851,270 565,120	5,816,658 246,512 939,582 204,362 29,269 83,321 754,744 455,020 590,911 756,112 347,208 855,828 553,828 553,736	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352 (14,369) 9,718 (34,239) (10,634) (4,558) 11,335	39,242 3,306 7,180 3,654 1,000 762 8,968 3,790 3,057 3,019 1,893 2,572 41 39	39,384 3,260 7,334 3,817 1,020 740 8,600 3,957 3,124 2,954 1,901 2,634 43	46 46 (1534) (200) 22 (200) (67) (67) (62) (20) (20) (20) (20) (20) (20) (20) (2	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000 12,500 25,000 15,000 2,759,701	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 20,000 12,500 25,000 25,000 25,700 27,759,535		94 94 93 93 93 98 98 99 90 93 92 98	Source 2 Price 1,144 94 98 93 93 98 98 98 98 99 90 93 100	
Bond 1 Bond 2 Bond 3 Bond 4 Bond 5 Bond 6 Bond 7 Bond 8 Bond 9 Bond 10 Bond 11 Bond 12 Cash & Cash Equivalents	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096 440,651 600,629 721,873 336,574 851,270 565,120	5,816,658 246,512 939,586 204,362 29,269 83,321 754,744 455,020 590,911 756,112 347,208 855,828 553,785	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352 (14,369) 9,718 (34,239) (10,634) (4,558) 11,335	39,242 33,206 7,180 3,654 1,000 762 8,968 3,790 3,057 3,019 1,893 2,572 41	39,384 3,260 7,334 3,817 1,020 740 8,600 3,957 3,124 2,954 1,901 2,634 43	(142) 46 (154) (20) 22 368 (167) (67) 65 (82) (22) 39	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000 12,500 25,000	248,700 10,000 1,200 3,300 110,000 110,000 14,500 30,000 5,700 12,500 25,000 15,000		94 98 93 93 93 98 98 98 98 98 98 98 99 90 93	Source 2 Price 1,144 94 98 93 93 93 98 98 98 98 98 98	
Bond 1 Bond 2 Bond 3 Bond 4 Bond 5 Bond 6 Bond 7 Bond 8 Bond 9 Bond 10 Bond 11 Bond 112 Cash & Cash Equivalents Currency	5,818,688 239,465 963,925 196,559 28,027 87,499 787,096 440,651 600,629 721,873 336,574 851,270 565,120	5,816,658 246,512 939,582 204,362 29,269 83,321 754,744 455,020 590,911 756,112 347,208 855,828 553,828 553,736	2,030 (7,047) 24,339 (7,803) (1,242) 4,178 32,352 (14,369) 9,718 (34,239) (10,634) (4,558) 11,335	39,242 3,306 7,180 3,654 1,000 762 8,968 3,790 3,057 3,019 1,893 2,572 41 39	39,384 3,260 7,334 3,817 1,020 740 8,600 3,957 3,124 2,954 1,901 2,634 43	46 46 (1534) (200) 22 (200) (67) (67) (62) (20) (20) (20) (20) (20) (20) (20) (2	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 5,700 20,000 12,500 25,000 15,000 2,759,701	248,700 10,000 1,200 3,300 1,500 110,000 14,500 30,000 20,000 12,500 25,000 25,000 25,700 27,759,535		94 94 93 93 93 98 98 99 90 93 92 98	Source 2 Price 1,144 94 98 93 93 98 98 98 98 99 90 93 100	Price Va

TresVista provided an effective analysis into the variances between the two accounting books that helps in analyzing the NAV better.



Fund Fees Entries

Preparing the Fund Fees Entries

Request Overview

- To pass the interest, commission, future brokerage expenses entries in the internal books after extracting these expenses manually from custodian expense statements
- To prepare a statement with the details such as entering the account name, account type, fund name, category and amount of expense and make the entries based on these records

Final Deliverable and Value Add

- Developed a power query table wherein we entered the nature and the amount of expense from the custodian reports
- The power pivot table provides us the journal entry with the relevant account to be debited and credited with the correct amount
- Reduced the overall turnaround time to complete the NAV pack and also increases the accuracy because of lesser manual intervention

Output Snapshot

Fund ▼	Account 🔻	Account Number	Date 🔻	Currency 🔻	Expense Head	▼ Total	Expense	▼ Genev	⁄a Head	
ABC	C Futures 12345ABC		4/25/2023 USD		Interest		(3,390.43)		III-InterestExpense	
ABC	Futures 12345ABC		4/25/2023 USD		Interest		7,580.00		III-InterestIncome	
DEF	ОТС	1234ABC	4/25/2023	AUD	Interest		405.42		III-InterestIncomeCollateral	
ABC	Futures	12345ABC	4/25/2023	EUR	R Commission		(3,050.13)		III-Commissions	
DEF	OTC	1234ABC	4/25/2023	USD	Custody Fees		(22,368.33) III-Future		resBrokerageExpense	
DEF	ОТС	1234ABC	4/25/2023	JPY	Interest		(41,731.00)		erestExpenseCollateral	
RecordAd	tion Portfolio	LocationAccount		Investmen	t	SettleDate	Debit	Credit	Value	
New	ABC	Morgan Stanley-FCM Futu	res Clearing-Cas	h USD-Commi	issions	4/25/2023		3,390.43	OnHand	
							3,390.43		III-InterestExpense	
New	ABC	Morgan Stanley-FCM Futu	ires Clearing-Cas	h USD-Commi	issions	4/25/2023	7,580.00		OnHand	
								7,580.00	III-InterestIncome	
New DEF		Morgan Stanley-FCM OTO	AUD-Future	AUD-FuturesBrokerageExpense		405.42		OnHand		
								405.42	III-InterestIncomeCollateral	
New ABC		Morgan Stanley-FCM Futu	h EUR-Commi	EUR-Commissions			3,050.13	OnHand		
							3,050.13		III-Commissions	
New	DEF	Morgan Stanley-FCM OTO	Clearing-Cash	USD-Future	sBrokerageExpense	4/25/2023		22,368.33	OnHand	
							22,368.33		III-FuturesBrokerageExpense	
New DEF		Morgan Stanley-FCM OTO	JPY-Futures	JPY-FuturesBrokerageExpense		25/2023 4		31.00 OnHand		
			·		·		41,731.00		III-InterestExpenseCollateral	

TresVista provided an efficient process of completing the NAV packs with checks and balances in place.



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