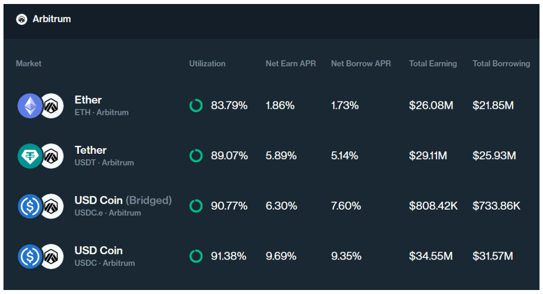
alpha growth

DeFi Operations

February 2, 2025

AI Agent Swap Rules

1. Swap Positions IFF
    a. $T = APR_2 - APR_1 > \frac{52F}{X}$
        i. $F = Fee = 0.2\%$
        ii. $X = Target\ Recoup\ Weeks = 10$
        iii. $APR_2 = \frac{T}{T+V} \times APR_{new}$
    b. Double required swap APR-difference for each swap that has occurred in the last X weeks.
        i. $T = 1.04\%$
        ii. $T = 2.08\%\ for\ swap\ \#2\ in\ 10\ weeks$
        iii. $T = 4.16\%\ for\ swap\ \#3\ in\ 10\ weeks\ldots$
    c. Example
        i. 

Arbitrum

Market	Utilization	Net Earn APR	Net Borrow APR	Total Earning	Total Borrowing
Ether ETH · Arbitrum	83.79%	1.86%	1.73%	$26.08M	$21.85M
Tether USDT · Arbitrum	89.07%	5.89%	5.14%	$29.11M	$25.93M
USD Coin (Bridged) USDC.e · Arbitrum	90.77%	6.30%	7.60%	$808.42K	$733.86K
USD Coin USDC · Arbitrum	91.38%	9.69%	9.35%	$34.55M	$31.57M

            1. $V = \$1M\ in\ USDT\ Vault;\ earning\ 5.89\%$
        ii. $\frac{34.55}{34.55+1} \times 9.69\% - 5.14\% = 9.417\% - 5.14\% = 4.277\% > 1.04\% = True$
            1. Swap for USDC Vault!