

# TVL coverage of Ref Smart Routing

Report generated 03 February, 2022 at 06:33:51 UTC

## Basic Stats

Total number of pools = 2583

Total number of “nonzero” pools = 236

## Connectivity and Path-length

### Most connected Tokens

Intuitively, we can see that many tokens are connected in a pool to wNear. We’d like to quantify how connected it is, as well as to determine if there are any other well-connected tokens. The measurement is called degree centrality, widely utilized in graph analysis.

- wNEAR 0.8118811881188119
- REF 0.2079207920792079
- USDT 0.1782178217821782

### Shortest Paths between tokens

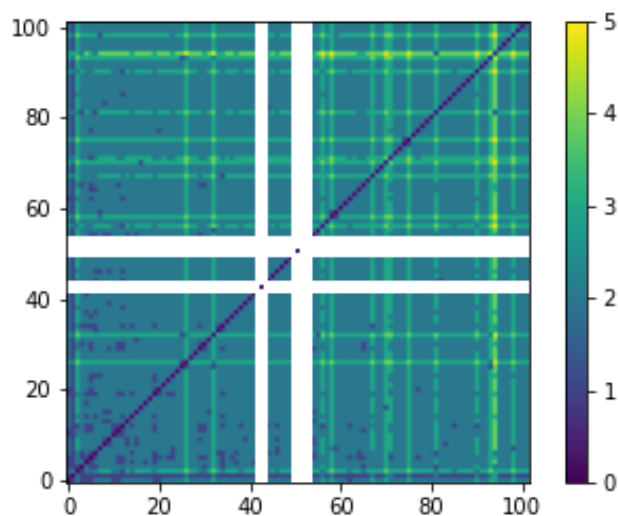


Figure 1: Shortest Path Matrix

On this path matrix, we can see how many hops are required to get from any token to any token. The values of the diagonal are all zero, meaning it is the same token. The white bands are infinite, where there is no connection whatsoever. The points that show they are equal to 1 are direct swap opportunities. The points that show they are equal to 2 will be enabled by smart routing, with a single intermediate hop. The few cases that equal 3 or 4 could be reached if more hops were enabled.

### **How many pools and tokens are covered**

The total number of tokens in Ref = 127

Number of pools with wNear = 2034

The total number of tokens in pools with wNear = 111

## **Results**

### **Number of pools covered**

Total number of pools that can NEVER be connected to the main graph = 4

Total number of pools that are indirectly connected but 1 hop away from wNear = 42

Total number of pools that are indirectly connected but 2 or more hops away from wNear = 1

### **TVL in covered pools**

Total TVL in Ref = 63754326.839278206

Total TVL directly connected to wNear = 63562961.75619022

Total TVL 1 hop away from wNear = 191365.08308798634

Total TVL 2 or more hops away from wNear = 0.0

Total TVL NEVER connected to wNear = 0.0

### **TVL percentage**

**Percentage of TVL covered by 1 hop using wNear: 99.70%**

Percentage of TVL that *could* be covered by 2+ hops using wNear: 0.30%

Percentage of TVL completely disconnected from wNear: 0.00%

### **Covered Tokens**

The total number of tokens in pools with wNear = 111

The total number of tokens 1 hop away from wNear = 11

The total number of tokens 2 or more hops away from wNear = 0

Number of tokens that can NEVER be connected to wNear = 5

**Tokens in Ref that are indirectly connected but 1 hop away from wNear:**

- O
- TCKT
- UNI
- CZDOG
- OIN
- SLUSH
- SHIT
- METACOIN
- HT
- PUTT
- MRKTNG

*Note:* These tokens may still be pretty well connected and will be able to swap with some other tokens, but will not reach the entire rest of the network in 1 intermediate hop.

**Tokens in Ref that are indirectly connected but 2 or more hops away from wNear:**

**Tokens in Ref that are totally disconnected from wNear:**

- NVC
- KVLAD
- NGMI
- LFG
- nTRASH