

S.No	Problem Statement ID	Problem Statement Name	Domain
21	CT-OSINT - 03	Crypto Analysis & Intelligence Mapping Tool	OSINT / Threat Intelligence

### Description:

The **Crypto Analysis and Intelligence Mapping Tool** is designed to trace cryptocurrency transactions and provide a clear understanding of their flow. Using spider maps and detailed reports, the tool helps uncover the trails of digital assets, mapping out wallet connections and identifying potential patterns of suspicious activity.

The tool can trace IP addresses linked to specific transaction IDs and compile a tabulated report of wallet history, providing valuable insights for law enforcement agencies (LEAs) to investigate cryptocurrency-related crimes.

### Objectives:

#### 1. Track Cryptocurrency Trails:

- Trace the flow of cryptocurrency from one wallet to another, creating a spider map for visualization.

#### 2. Provide Wallet History:

- Generate a detailed, tabulated report of wallet activities, showing transaction amounts, timestamps, and counterparties.

#### 3. Identify IP Addresses:

- Capture and analyze IP addresses linked to nodal transactions for added intelligence.

#### 4. Support LEA Investigations:

- Equip law enforcement agencies with tools to investigate illicit activities like money laundering, fraud, or ransomware payments.

#### 5. Simplify Data Representation:

- Present complex data in an easy-to-understand format for better analysis and decision-making.

## **Expectations:**

### **For Hackathon Participants:**

#### **1. Develop a Crypto Trail Mapping Tool:**

- Build a prototype capable of tracing cryptocurrency flows and generating spider maps.

#### **2. Integrate with Blockchain APIs:**

- Use blockchain data to track transactions and extract insights from the public ledger.

#### **3. Focus on Visual Representation:**

- Create spider maps and easy-to-read tabular reports for clarity.

#### **4. Automate IP Address Tracing:**

- Integrate the ability to trace and capture IP addresses linked to transactions.

#### **5. Ensure Accuracy and Speed:**

- Optimize the tool to process large volumes of data quickly and accurately.

### **For Law Enforcement Agencies (LEAs):**

#### **1. Comprehensive Crypto Trails:**

- Gain detailed visibility into cryptocurrency movements for investigative purposes.

#### **2. Actionable Insights:**

- Identify key wallets, transaction patterns, and potential connections to criminal activities.

#### **3. Enhanced Reporting:**

- Access tabulated reports and visual maps to simplify complex investigations.

#### **4. IP Tracking Capability:**

- Leverage IP data to trace transactions back to potential perpetrators.

#### **5. Ease of Use:**

- Ensure the tool is user-friendly and requires minimal technical expertise to operate.

## **Expected Results:**

### **1. Complete Crypto Trails:**

- Provide a full map of cryptocurrency flows, connecting wallets, amounts, and timestamps.

### **2. IP Address Insights:**

- Identify the source and destination IPs associated with nodal transactions.

### **3. Clear Reporting:**

- Generate detailed and easy-to-understand reports for investigative teams.

### **4. Enhanced Investigative Capability:**

- Help law enforcement agencies tackle cases involving cryptocurrency with more precision.

### **5. Fraud Detection:**

- Identify and flag suspicious patterns indicative of illicit activities.