

# Network Visualization

**Network Visualization** is an add-on capability in the ThetaRay Investigation Centre that enables senior analysts and managers to visually explore transactional patterns, identify hidden relationships, and uncover suspicious financial networks. It presents transactional relationships in a graph-based format, where key entities—such as counterparties, customers, and alerted entities—are connected through “edges” representing transactions or other interactions.

This capability allows users to:

- ✓ Identify direct and indirect linkages between counterparties, high-risk entities, and alerted transactions.
- ✓ Trace the flow of funds between different entities, helping detect money laundering and other financial crimes, across a historical timeline.
- ✓ Spot hidden connections between seemingly unrelated entities by analysing shared transaction patterns or common counterparties.



## Client Value

### 1. Uncover Hidden Connections

- ✓ Visualization of data flows and network elements for performance monitoring. Displays who is transacting with whom and highlights risky relationships.
- ✓ Helps track fund movements between counterparties to detect financial crime.

### 2. Focus on What Matters

- ✓ Visual mapping of the network for quick root cause analysis during troubleshooting. Filter transactions by amount, frequency, country, and risk level.
- ✓ Adjust graph depth to zoom in on key connections or see the bigger picture.

### 3. Track Changes Over Time

- ✓ Timeline analysis helps monitor transactions and highlight potential vulnerabilities and abnormal traffic patterns.
- ✓ Continuous, monitoring of the network for proactive issue identification, detects unusual behaviour over days, weeks, or months.

### 4. Simplify Investigations

- ✓ Unified, clear view of the network for improved collaboration and communication.
- ✓ Search for specific entities by name or ID to quickly find relevant data.
- ✓ Export graphs and reports for audits or regulatory reviews in different formats.

## Business Impact

✓ **Faster Threat Detection:** Proactive identification of dependencies and suspicious patterns/networks and resolution of issues before they impact operations.

✓ **Improves Risk-Based Decision Making:** Improved collaboration and decision-making by providing a clear, interactive view of transaction networks, enabling faster risk assessment and decision-making.

**ThetaRay's Network Visualization** capabilities empower businesses to tackle the complex challenges of modern criminal networks and money laundering techniques. By offering clear insights into transactions and connected entities, our tool helps clients prevent potential issues, optimize their infrastructure, and make smarter, data-driven decisions. Ultimately, Network Visualization isn't just about seeing the network—it's about understanding it and using that understanding to drive operational success to detect financial crime and take appropriate action(s).