Network Analysis

Features · https://scopematch.com/docs/network-analysis/

Overview

The Network Analysis (VNA) feature helps you visualize and analyze your entire supplier ecosystem. By transforming supply lists into interactive network graphs, you can see how vendors, products, and locations are connected. This makes it easier to identify risks, bottlenecks, single-sourced products, and opportunities for diversification. The accuracy of your Network Analysis depends on complete Product Supply lists, since the graph builds from the data you've entered.

Plans

Free shows a preview of Network Analysis on your list, and Basic a preview on all your lists. Pro and Premium include the full Network Analysis, plus Network Atlas and what-if simulations. Premium adds Supply Chain Insights and Disruption Simulation. See Tiers and Features.

When to Use It

Update and manage the Vendor Network Analysis to:

1. Identify **single-sourced products** that may cause supply risks.
2. Spot **bottleneck vendors** that control multiple products or critical nodes.
3. Analyze **disconnected products** to see where vendor data is missing.
4. Analyze supply by **country of origin or vendor location**.
5. **Simulate supply disruptions** and plan alternatives.

Step-by-Step Guide

1. **Access Network Analysis**
   - Navigate to **Network Analysis** from the sidebar.
   - Choose the **Product Supply List** you want to analyze.
2. **Filter Controls**
   - Select filters for **Product Categories** and **Vendor Statuses** to narrow your view.
   - Click **Filter Graph** to refresh the visualization.
3. **Graph Visualization**
   - Vendors (green), products (red), product supply lists (blue), and locations (orange) are shown as nodes.
   - Use zoom and drag tools to explore the network.
   - Change the layout algorithm (e.g., **NetworkX Multipartite**) for clearer views.
4. **Network Statistics (right panel)**
   - **Total Products**: Number of products in the supply list.
   - **Vendors**: Number of connected vendors.
   - **Disconnected Products**: Items with no vendor linkage.
   - **Single-Sourced Products**: Products supplied by only one vendor.
   - **Bottleneck Vendors**: Vendors supplying multiple unique products.
5. **Tabs for Analysis**
   - **Vendor Locations**: See lists of vendors grouped by geography.
   - **Disconnected Products**: Review products missing vendor associations.
   - **By Country**: Explore supply dependencies by nation.
   - **Single-Sourced/Bottlenecks**: Identify risks across the vendor base.
   - **Disruption Simulation** (Premium): model the impact if a vendor or country is unavailable. See Disruption Simulation.
   - **Country of Origin**: Break down sourcing by supplier nation.

Best Practices & Tips

Do:

1. Regularly analyze your network to **spot early signs of risk**.
2. Use the **Disruption Simulation** tab before committing to major supply agreements.
3. **Group your supply lists logically** (e.g., by product line, project) for cleaner graphs.

Don't:

- Ignore disconnected or single-sourced products - these represent vulnerabilities.
- Rely on outdated supply lists; update them before running analysis.

FAQs

- **Which plans include Network Analysis?**
  - Free shows a preview of Network Analysis on your list, and Basic a preview on all your lists. Pro and Premium include the full Network Analysis, plus Network Atlas and what-if simulations. Premium adds Supply Chain Insights and Disruption Simulation. See Tiers and Features.
- **What is a bottleneck vendor?**
  - A vendor that provides multiple single-source products, making your supply chain dependent on them.
- **Why does a product show as “disconnected”?**
  - Because it is not linked to any vendor in the Product Supply tab.
- **Can I compare supply networks by country?**
  - Yes, use the **By Country** or **Country of Origin** tabs for detailed breakdowns.
- **How can I act on risks identified in VNA?**

- Use the Search Request feature to find new vendors or update your Product Supply lists to close gaps.

Troubleshooting

- **If the graph is empty** → Ensure you selected a valid Product Supply List.
- **If statistics don’t update** → Reapply filters or refresh the page.
- **If nodes overlap heavily** → Switch to a different layout algorithm for clarity.

For further details or to request upload assistance, please contact us via helprequest@scopematch.com