

NEW DATA FOR NEW APPROACHES TO RESEARCH SECURITY

MAY 4, 2022





**“ABSENT A SIGNIFICANT REALIGNMENT OF RESOURCES,
THE U.S. GOVERNMENT AND INTELLIGENCE COMMUNITY
WILL FAIL TO ACHIEVE THE OUTCOMES REQUIRED TO
ENABLE CONTINUED U.S. COMPETITION WITH CHINA.”**

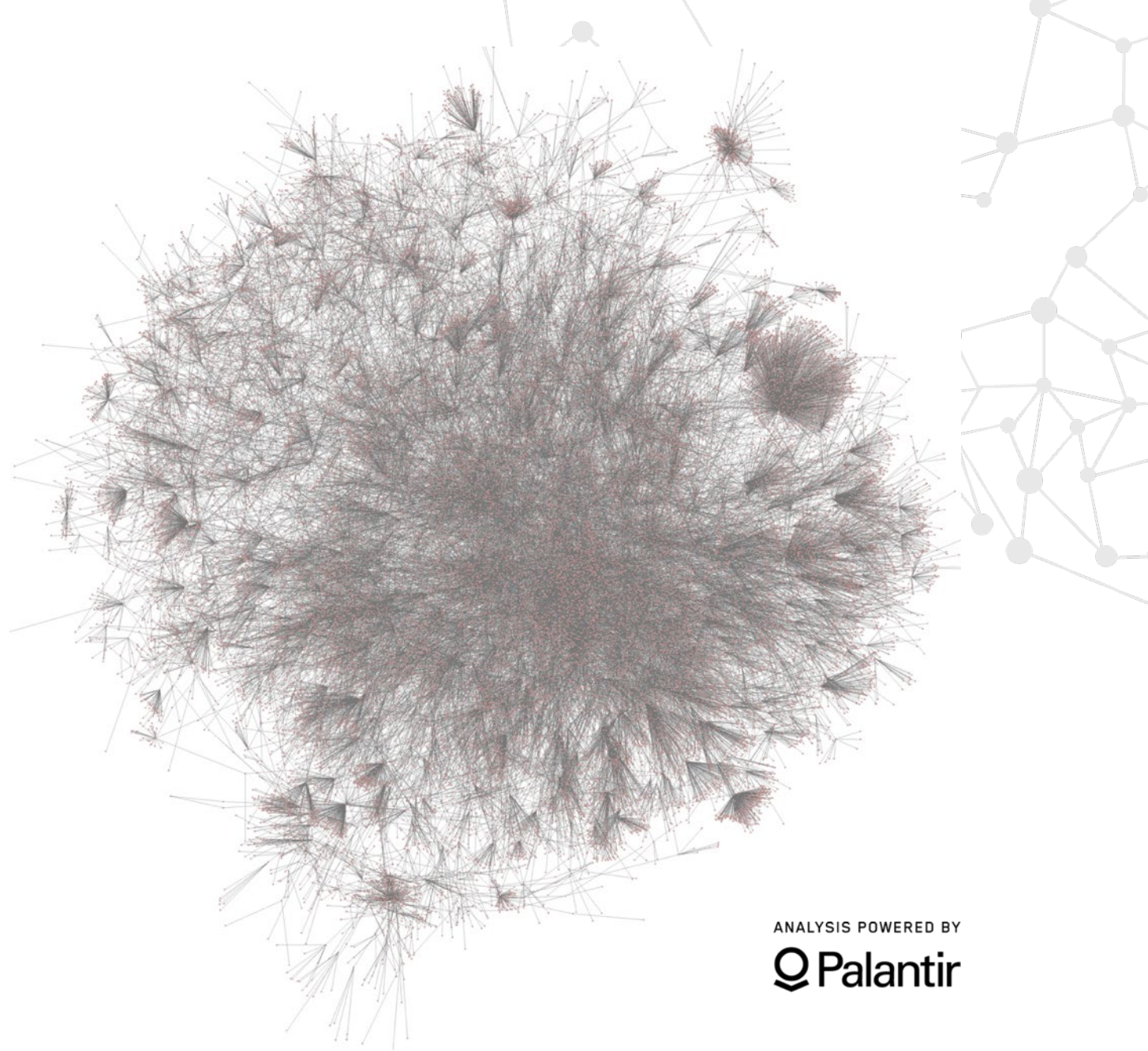
House Permanent Select Committee on Intelligence
The China Deep Dive, September 2020

**PUBLICLY AVAILABLE INFORMATION
WILL BE **INDISPENSABLE** IN EFFORTS
TO PRESERVE RESEARCH INTEGRITY &
SECURITY**

THE CHALLENGE

It is difficult to characterize the relationships between China's party-state and non-state actors in China's commercial and academic system

1. Complex
2. Diversified
3. Politicized



ANALYSIS POWERED BY
 Palantir

THE OPPORTUNITY

China's military-industrial complex leaves a data footprint through its interactions with the economy

Corporate

Corporate registries from source (China) and target jurisdictions

Trade

US Import/Export Records, Chinese trade data, third country trade data

Investment

Foreign direct investment & securities data

News

Other open source information for targets of interest

Social Media

Public platform posts of companies and their associated individuals

Tax Information

Local tax registries verify identifiers for companies of interest

Note: Each box represents a type of data source, for which many discrete datasets exist.

Procurement

Chinese military & government procurement portals

Certificates

Open source searches for military production licenses

MCF Platforms

Continued scrape of Chinese MCF platforms

Patents

Google Patent records

Academia

Chinese academic articles, talent program associations

Litigation

Hong Kong, PRC, Macau court records

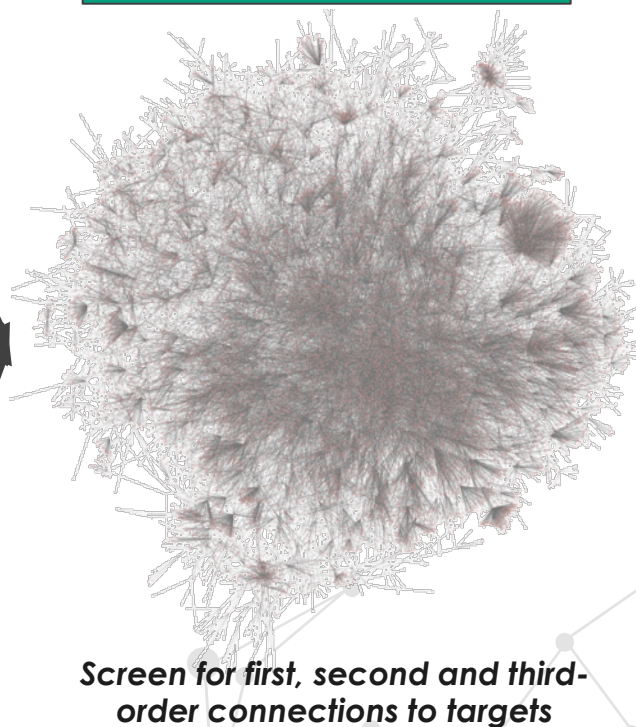


Goal: Identify Chinese state-sponsored threats.

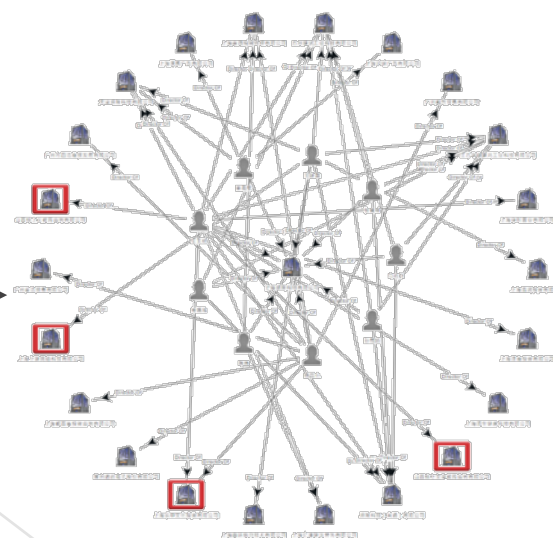
Step 1: Gather Baseline Data

- Corporate records
- Social media profiles
- Civil society organizations
- Government membership
- Junket operators
- Academic publications

Step 2: Layer Risk Indicators / Seed Lists



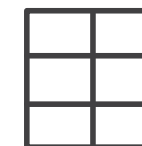
Step 3: Conduct Deep-Dive Analysis



4. Produce Analysis to Drive Action



Dossier



Structured Data



Source Documents

BUILD BASELINE DATA

C4ADS analysts identify, collect, translate, and curate high-advantage datasets from publicly available sources. C4ADS data engineers then integrate the datasets.

16k

subsidiary companies
of SASAC (core SOEs)
& their officers

23k

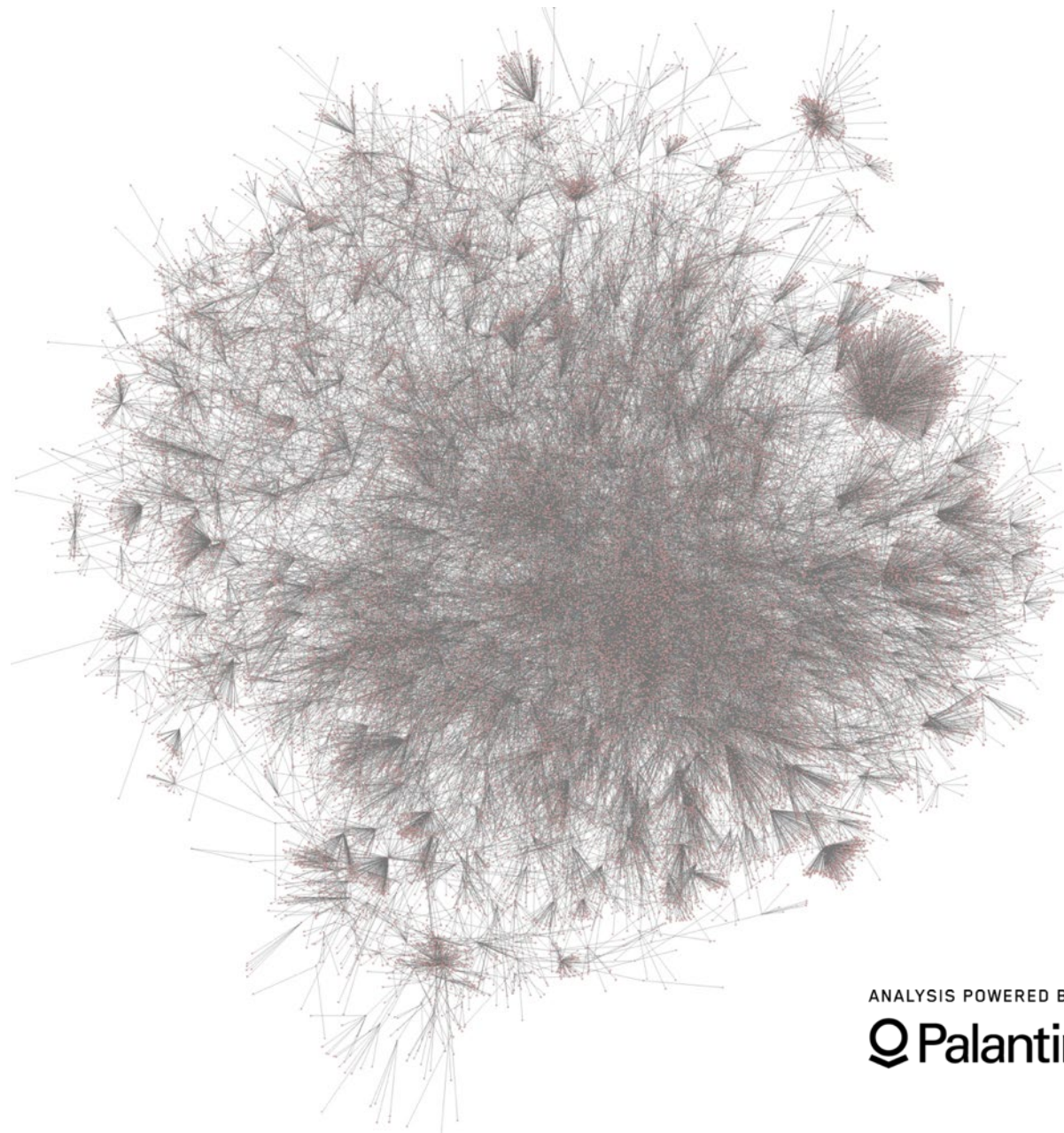
subsidiary companies
& officers of defense
universities

100k

civil society
organizations & their
controlling entities
(e.g. UFWD)

26k

members of national
& provincial
governments or
CPPCC bodies

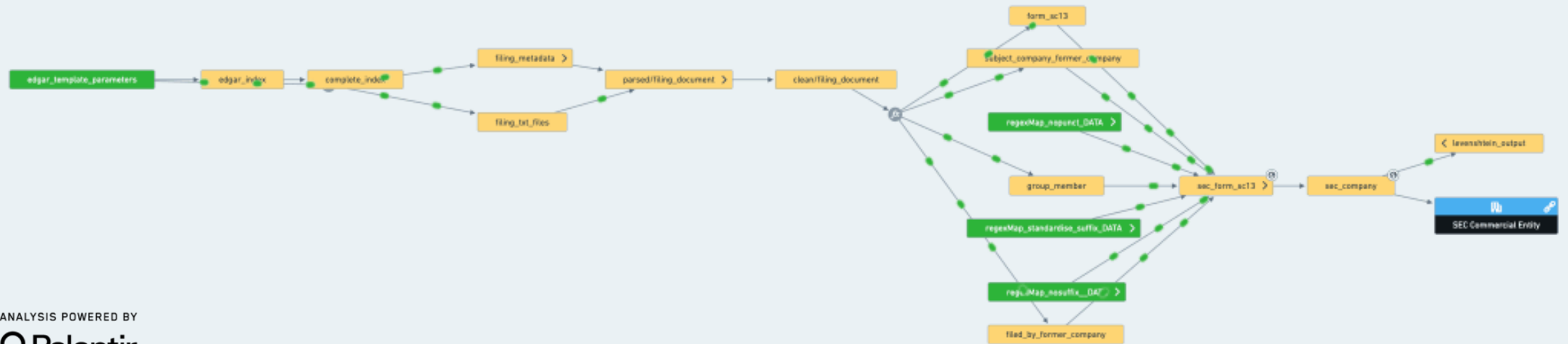


ANALYSIS POWERED BY
 Palantir

pipelines to internal &
external data sources

processed & integrated
with code

continuously refreshed
datasets for analysts

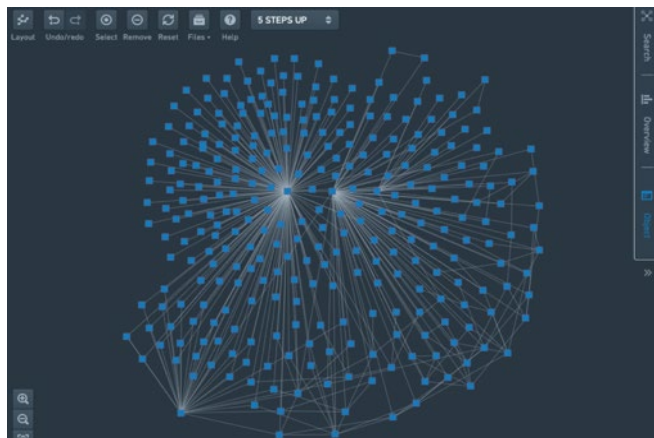


ANALYSIS POWERED BY



FLEXIBLE APPROACHES TO ANALYSIS

High-scale data integration supports a range of analytic workflows depending on specific requirements



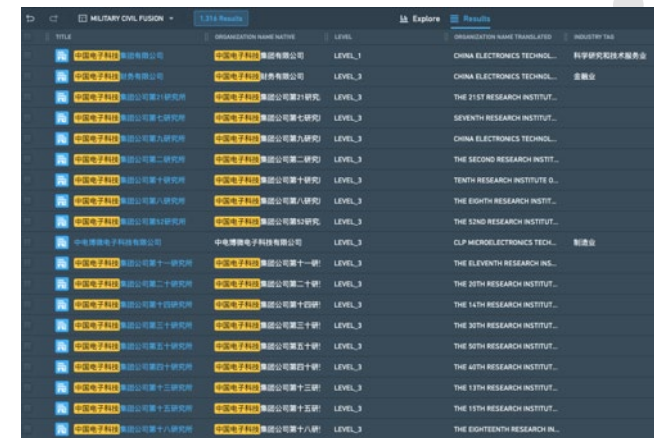
Entity-Centric Analysis

For a company, person, or organization of interest, users can search for relevant identifiers and network connections across all datasets. Users can conduct investigations within the platform.



Top-Down Analysis

For an industry, region, or typology of interest, users can search across all data to return entities that meet specific criteria, e.g. all universities in China that have synthetic biology research programs.

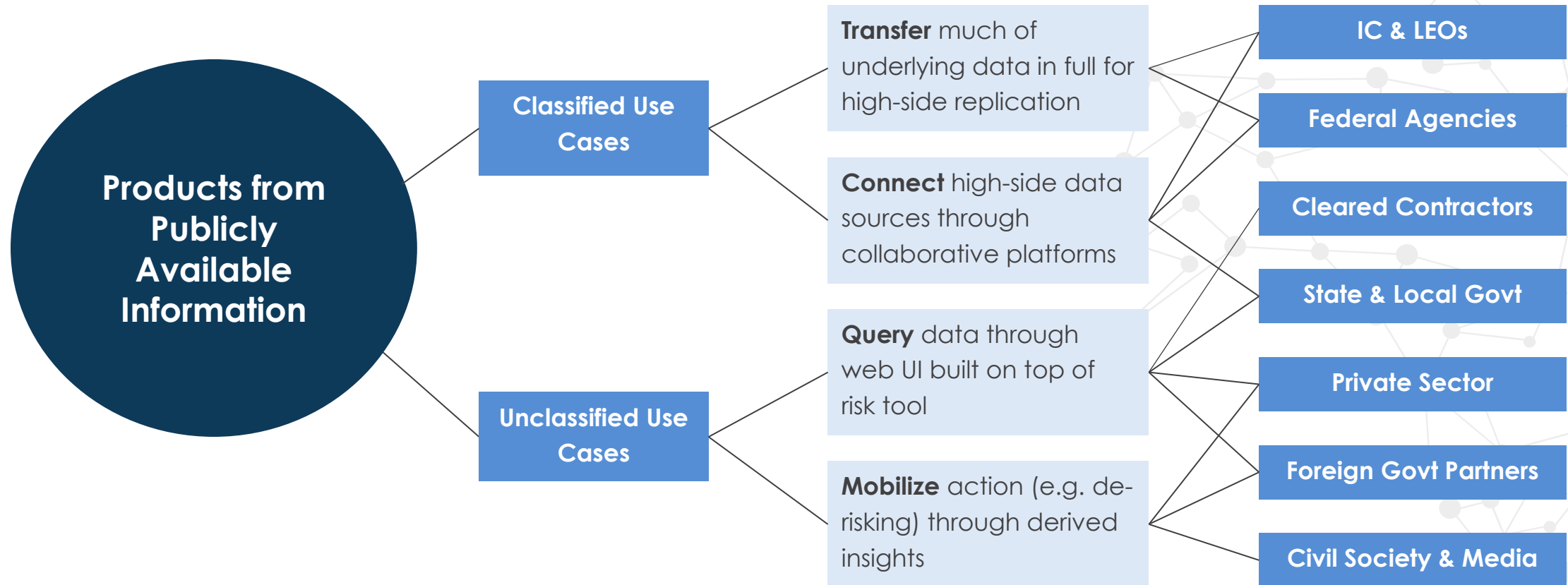


Bulk Screening

Users can conduct bulk screens across the data asset for people, companies, or organizations of interest. Users can also configure alerting within the platform for data that is regularly refreshed (e.g. trade data).

COORDINATE TAILORED RESPONSE

Underlying architecture can be used as foundation to bring together entire community in whole-of-society response



EXAMPLE APPLICATIONS



JOINT VENTURES BETWEEN SOES & UNIVERSITIES

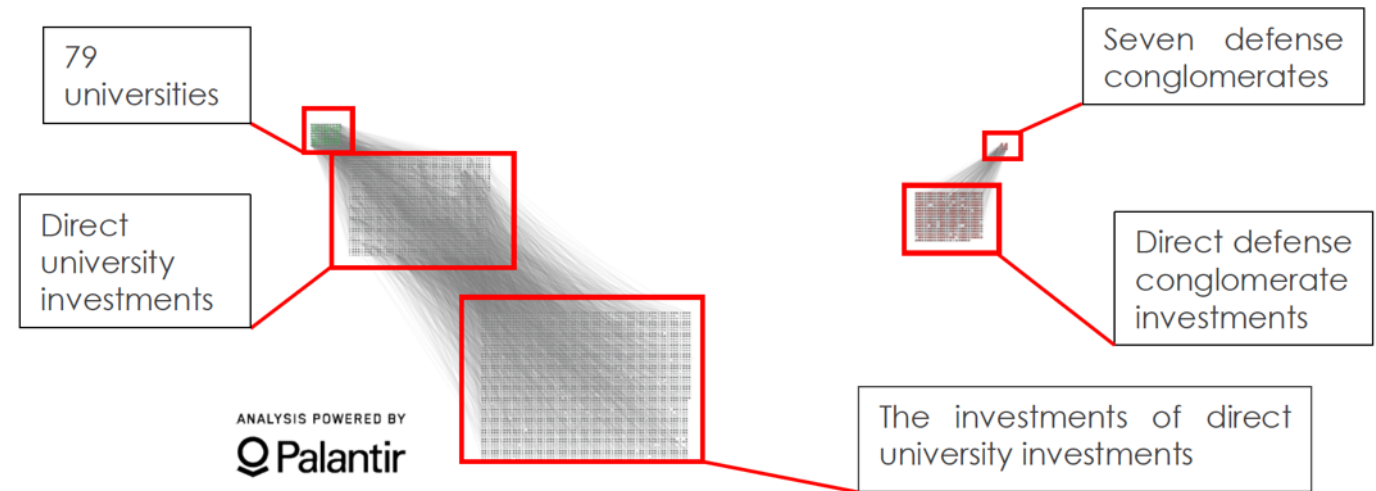
Corporate data can provide greater precision in understanding where state capital supports research

The Challenge:

University faculty work at joint ventures with subsidiaries of major state-owned enterprises, and “civilian” universities transfer hundreds of patents for defense technology to them. This may expose U.S. universities to China’s military.

The Solution:

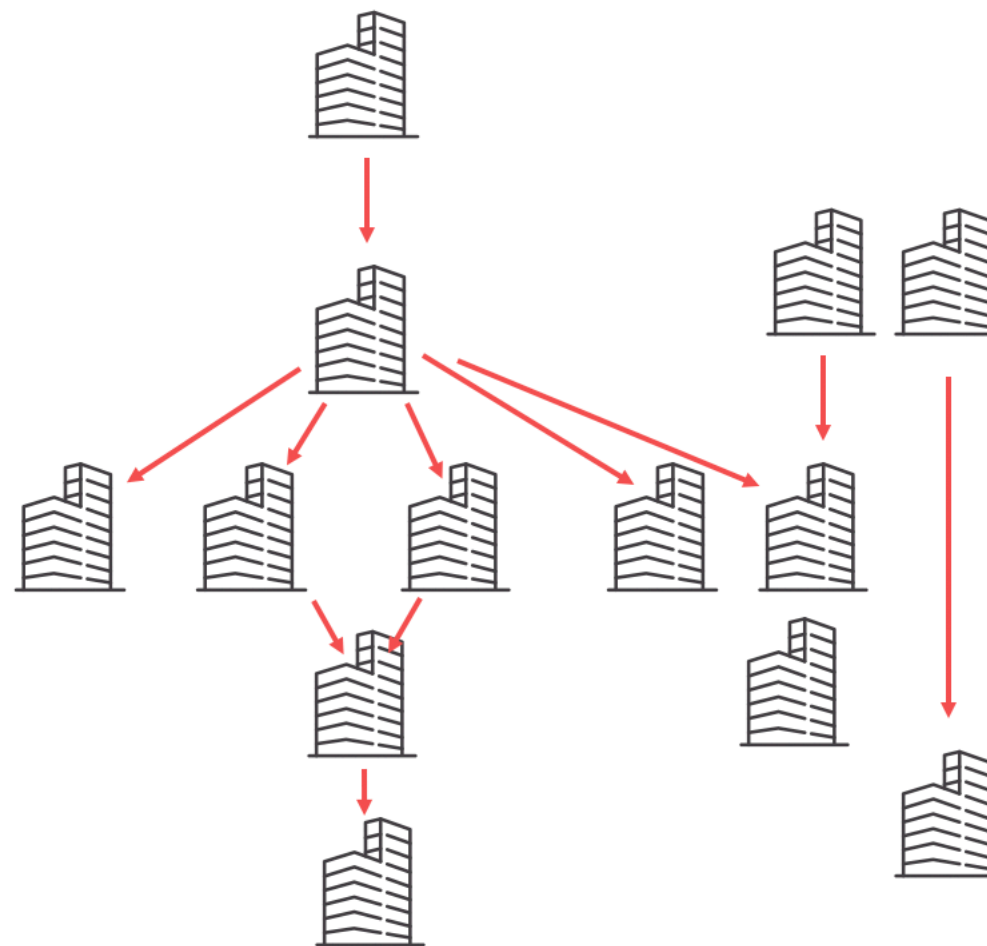
Corporate records and investment data can **identify the joint ventures that Chinese state-owned defense conglomerates maintain with specific labs at Chinese universities.**



OUTBOUND INVESTMENT & TECHNOLOGY TRADE

The complex nature of Chinese corporate networks can obscure foreign investments by risky entities.

Using investment data paired with our mapped corporate networks, C4ADS identified foreign companies overseas that have received investments from Chinese state-owned enterprises and national champions.



PATENTS FOR CRITICAL TECHNOLOGIES

Chinese patent filings can identify the key people and institutions that commercialize technology from research labs.

What companies, universities, and research institutions conduct research with China's defense conglomerates?

Which university researchers hold concurrent jobs working for defense conglomerates?

What researchers and labs within defense conglomerates, universities, or companies are working on key technologies of concern from USG perspective?

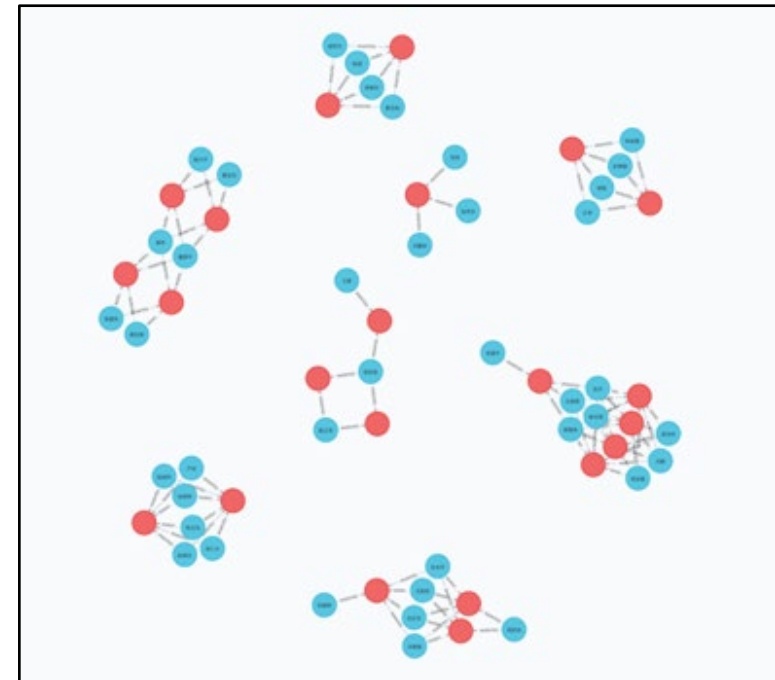


Figure: Technology patent networks between universities and defense conglomerates



“The issue is less that China’s political economy is riven with ‘contradictions’ ... but rather that **the analytical frameworks that many of us are using to understand China’s economy are stuck in past paradigms** that view ‘state’ and “market” as standing in tension.”

Jude Blanchette (2020)

THANK YOU

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C4ADS
innovation for peace

