



# NATIONAL SECURITY AGENCY TECHNOLOGY TRANSFER PROGRAM

Office of Research & Technology Applications

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AVAILABLE FOR LICENSING

## Identifying Connected Data in a Relational Database



BIG DATA

This technology leverages Structured Query Language (SQL) in relational databases to discover connected data. This method is faster and less error prone than other query methods because data does not need to be transformed, allowing the algorithm to operate in the database's natural information storage format. This enables efficient discovery of connected data and easy identification of a common label. If it is possible to traverse the database from node A to node B, then both nodes are assigned the same label. This approach is limited only by the processing capacity of the database and delivers results faster than other methods.

### FEATURES

Uses SQL to determine derived relations among tables

Uses SQL, a standard industry tool

Queries are limited only by the processing capacity of the database

### BENEFITS

Faster and less error-prone than manual methods of determining derived relations

Integrates with existing infrastructure and applications

Can potentially handle trillions of records

Scalable

### POTENTIAL APPLICATIONS

- Genetics
- Retail
- Epidemiology
- Social media
- Telecommunications

### DEVELOPMENT STAGE

EARLY

MID-STAGE

COMPLETE

This technology is **complete** and ready for commercial use.

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