In today’s data-saturated analytic environment, no single analyst or group of analysts is capable of reading and comprehending the amount of data available on most topics. The need to rapidly isolate the right data necessary to solve complex problems requires a new approach.

Vorteks can ingest bulk data, pull from existing databases, monitor file structures, poll dynamic data sources (e.g., social media, RSS, etc.), or simply import via “drag and drop.” A command-line interface enables seamless integration of existing enterprise data processing pipelines.

Data is converted into a single format that the analyst can query to discover the intersections among and between data sets automatically rather than querying from individual databases and making manual connections. Vorteks queries these multiple data sources for millions of terms simultaneously and returns an automated result in the form of network relationships that can be depicted in multiple views.

Rapid, iterative processing coupled with agile analytics enables analysts, operators, planners, or computer network defense personnel to discover relationships present in the data that are not obvious.

Vorteks performs automated entity extraction, natural language processing, and relationship detection across data sets as specified by analysts, thus eliminating the need to read each document and manually tag items of interest. Vorteks exports to many existing visualization and analysis tools.
Information Collection: initial harvesting/retrieval
- More than 1 million documents and more than 5 million records; Open Database Connectivity (ODBC) plug-ins; RSS and social media streams

Format Conversion: parsing and conversion to XML
- Common data format, easily indexed and tagged, exportable to other applications

Augmentation: extraction/characterization/supplementation
- Entity extraction, normalization; extraction of phone numbers, email, social media handles, etc.

Storage and Indexing: data warehousing
- Automated relationship detection and mapping

Search: browsing, search, and retrieval
- Networks automatically generated from more than 2 million search terms

Modeling: relationship mapping
- Analyst can choose a variety of relationship indices and representations of data

Visualization: graphical representation
- Multiple views and social network analysis functions

For further information contact:
Raytheon Company
Intelligence, Information and Services
13900 Lincoln Park Drive
Suite 400
Herndon, Virginia
20171 USA
iiscommunications@raytheon.com
www.raytheon.com