

LexisNexis® Maritime Domain Awareness

Data fusion for maritime entities



Protecting the global maritime supply chain

LexisNexis is uniquely positioned to support the effort to secure the global maritime supply chain. Our enterprise Maritime Domain Awareness (MDA) solution provides a comprehensive view of all maritime data, intelligence, and global activity by assimilating and linking vast amounts of content through our Data Analytics Supercomputer (DAS). DAS brings powerful capabilities in speed and scale to the MDA data fusion challenge. DAS is engineered to address large scale disparate data problems at levels of performance unattainable on traditional systems. This solution enables organizations to fuse all relevant maritime data: ships, businesses, registries, port information, cargo, personnel, locations, and intelligence data on a single platform for a true maritime domain awareness capability. This solution can help ensure the delivery of real time, actionable intelligence to operational elements dedicated to this mission.

LexisNexis Maritime Data

LexisNexis has in-depth data repositories consisting of domestic and international maritime vessels, personnel, maritime businesses, trade organizations, and bulk and containerized cargo. LexisNexis can also assist with the acquisition of necessary third party data sets vital to the global MDA mission. We have decades of experience with the different legal, regulatory, data privacy, and policy issues required for the successful execution of Maritime Domain Awareness operations.

LexisNexis® Maritime Domain Awareness and DAS

DAS has effectively performed in secure data management environments of several hundred Terabytes and larger. Our solution also allows for the easy scaling of hardware and personnel and enables deep data comprehension and disambiguation. When applied to a sensory and semantic data fusion effort like MDA, the Data Analytics Supercomputer has demonstrated impressive benefits, such as:

- Discovery of non-obvious relationships between entities and data records
- Identification of relationships between structured and unstructured data
- Best in class entity resolution and disambiguation at levels of performance unattainable on traditional systems
- Flexibility to organize and repurpose data for new and different problem sets
- Ability to simultaneously allow aggregate and segregate views of data
- The speed to obtain data analysis results when needed

“In order to support Maritime Domain Awareness (MDA) operations, the Navy needs an enterprise-level solution to collect, evaluate, and disseminate a wide variety of information to field units and other government agencies.”

– Memorandum on Maritime Domain Awareness
The Honorable Donald Winter, Secretary of the Navy

ADVANCED GOVERNMENT SOLUTIONS

Intelligence
Analysis

Investigative

Screening &
Identity Verification

Research

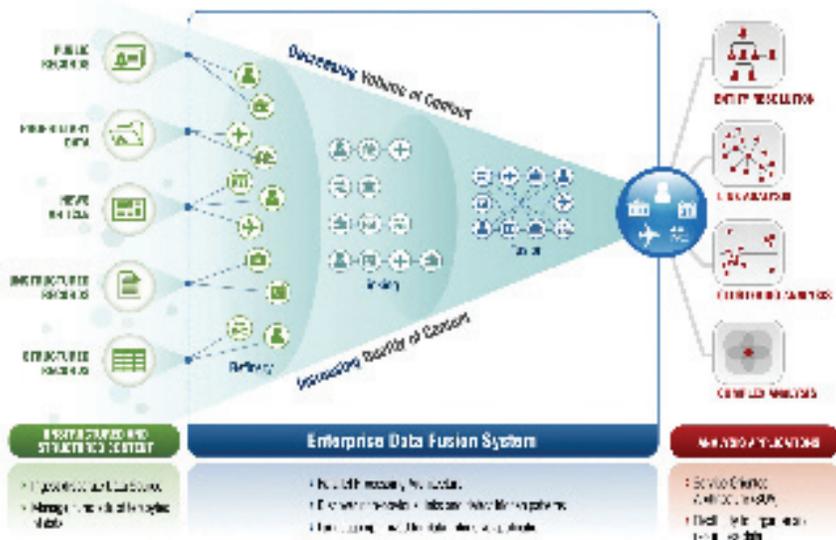
Case Management

Digital Asset
Management



LexisNexis®

Complete maritime domain awareness through data fusion



Our solution is advanced as compared to traditional compiling and analytic tools in the following ways:

- Data integrity for disparate data formats: Data and filters are computed as the data is used at query time. Data sets can be queried or merged without actually modifying the original data.
- Complex matching capabilities: Enables multi-criteria matching capabilities for the sophisticated merging of disparate data sets. Complex data relationships can be treated as re-usable attributes.
- The solution allows for data to be compiled and executed in parallel, allowing for greater speed and efficiency than sequential processing.
- DAS enables the disambiguation and correlation of data on an unprecedented scale, enabling collaboration across departmental and organizational lines.

LexisNexis and the Federal Government

DAS is based on an open standards, service oriented architecture (SOA), which makes it ideal for the cross-domain data sharing requirements inherent in MDA. DAS has been successfully implemented in the most secure environments within the DoD and Intelligence Communities. It is specifically built to operate in multi-layer security environments.

LexisNexis has successfully built some of the largest, most complex, and sensitive data projects ever undertaken by the Federal Government and commercial industry. We have in-depth experience with the legal, procedural, and policy challenges facing a data sharing solution with the size, scope, and importance of the Maritime Domain Awareness mission.

The LexisNexis Difference

The LexisNexis Data Analytics Supercomputer (DAS) is used to manage all of our internal data repositories consisting of nearly 40 billion data records compiled from over 10,000 disparate sources. This solution seamlessly incorporates the addition of nearly 7 million+ documents every week and delivers up to date information to nearly 4 million customers, world wide.

DAS allows the real time processing of vast amounts of data. It can ingest and disambiguate structured and unstructured content from any source: our own content, third party data sources, and government proprietary data and intelligence. DAS can create in depth entity correlations and analysis for anomaly detection, threat assessment, and decision making support for operators in the Department of Defense, the Department of Homeland Security and the Intelligence Community, as well as commercial organizations and fielded law enforcement agencies in multiple state, local and community installations.

To learn more about LexisNexis *Maritime Domain Awareness* call 1-800-253-4183 or visit www.lexisnexis.com/government