



### **XSB Company Capabilities**

XSB, Inc. ([www.xsb.com](http://www.xsb.com)) has developed a robust and scalable system for acquiring and standardizing data about products and the companies who manufacture and distribute them. Over the last decade, XSB has completed more than 100 projects which focused on reasoning, enhancing and reporting analytics on NSNs and commercial parts for the DoD, the U.S. General Services Administration (GSA) and many Commercial customers. These projects have demonstrated our ability to rapidly transform data to serve a variety of Business Intelligence solutions including:

- **Pin Point:** A Government parts management research tool sponsored by the Defense Standardization Program Office (DSPO). Pin Point aggregates technical, management and reference data about NSNs and commercial parts on government contracts from a variety of sources. These sources include: Federal Logistics Information System (FLIS), the Central Contractor Registry (CCR), DLA's ERP System – Enterprise Business System (EBS), numerous commercial catalogs, Government e-commerce web sites, such as DOD EMALL, GSA Advantage!, and NASA SEWP, part obsolescence sources, and others. Pin Point also maintains a unique view of historical part data from *Standard Automated Materiel Management System* (SAMMS), an obsolete DLA system that was used to manage NSN data before its ERP migration. This wealth of knowledge combined with the XSB Master Data File (MDF) engine (see below) gives Pin Point an unprecedented view of the Government supply chain. Pin Point has been embraced by weapons systems program managers, engineers, item managers, and catalogers across the DoD; there are more than 5,000 active users of the system.

In 2012, XSB enhanced Pin Point through the integration of SMART, the Strategic Materials Assessment Response Tool. SMART was developed to enable a proactive response to a dynamic regulatory environment where changes in material regulations have a direct impact on the supply chain and the availability of parts to support DoD weapon systems. SMART determines the presence of regulated materials in component parts by extracting information about material constituents and regulatory compliance (REACH, RoHS, DoD Emerging Containments) from a variety of publicly available sources.

- **Price Point:** A web-based price evaluation tool that enables contract officers (COs) to validate a proposed item's price for reasonableness by comparing it to peer items already in the supply chain. Price Point standardizes manufacturer names and part numbers and compares the proposed price for each item in the catalog file to tens-of-millions of current price points for products already available on Government contract or harvested from web-based catalogs. Each matched item receives a price risk score indicating the probability of the price being too high in comparison to its peers. This

helps the CO to make informed purchasing and contracting decisions. Price Point is used by hundreds of GSA and DLA COs to validate vendor pricing.

- **Warwick:** A commercial system that provides fast web-based access to accurate, actionable data on sales, competition, and price in the public procurement market. Warwick® empowers suppliers with all of the information needed to develop and execute a successful Government sales strategy.
- **GSA NSN Cross-walk Report:** XSB used its Master Data File engine to identify commercial sources for GSA managed NSNs. This information was used to reduce inventory for readily available products and has helped the Agency setup additional contracts with part vendors. GSA-managed NSNs were matched to 80M products collected by XSB. Similar NSN cross-reference reports are regularly produced by XSB for its commercial customers that are supplying parts to DoD.
- **Cost Optimization:** XSB leverages its automated Master Data File process of determining duplicates, substitute and obsolete items within and between locations of an enterprise to build common parts libraries for large OEMs serving the Government. The resulting common parts libraries have been helped:
  - Improve spend through the identification of reasonable pricing
  - Improve economic lot size
  - Avoid obsolescence driven supply chain interruption events
- **DOD EMALL ComMDF:** There are over 20M products on DOD EMALL, with product changes submitted daily. DOD EMALL uses XSB's Master Data File technology to validate data quality in vendor's catalogs by analyzing manufacturer names and part numbers. The system cleans, standardizes and classifies vendor part data and determines compliance with the Government's environmental regulations.

#### **XSB's Patented Master Data File Generation Process:**

Information about identical parts is described differently by different sources across the supply chain. XSB's Master Data File (MDF) generation process standardizes all manufacturer names and part number representations for each product and discovers identical items described differently across various sources. This is done through statistical matching processes, knowledge of company brands, affiliations, common abbreviations and other associations. Standardized data is also matched to National Stock Numbers.

Similarly, product characteristics are described differently by different data sources. This disparity in product descriptions prevents the discovery of existing products that satisfy engineering criteria, finding substitutable items and in the end, leads to introduction of redundant parts in the supply chain. XSB uses its Master Data File technology to classify, extract and standardize product characteristics from those descriptions to a single common data representation. For DoD customers, XSB often uses Federal Catalog System representation

developed by the DLA Logistics Information System as the desired target representation. Once the data is in the standard form it is possible to do precise parametric searches as well as communicate across DoD in the common format.

XSB uses its patent-pending Web crawler technology to acquire additional product data from external data sources. Harvested web data includes information on product technical attributes, environmental regulatory and material safety data, price, stock on hand, obsolescence, etc. This external information is standardized and can be used to get the current view of the supply chain. XSB currently has 60M current price points for off-the-shelf products available from thousands of vendors. This information is used by Price Point and other products and services provided by XSB.

Packaging information is often inconsistent across and within different data sources. For example, 'EACH' (or EA) is an overload unit that may stand for a 'BOX' (BX) or a 'PACKAGE' (PK) or for a single item. As a part of Price Point, XSB's package comparison module reasons on price distributions to identify similarly packaged items.

All of the processes described above are completely automated, using patented XSB data standardization technology; no manual off-shore labor is used. The core XSB technology creates comprehensive, continuously updated and standardized data for very large engineering product databases. This data enables organizations to optimize their part selection and pricing, while reducing supply chain interruptions.

These capabilities require semantic understanding of product data. XSB relies on an ontology-driven infrastructure that describes classes of products from more general to specific and various characteristics applicable in those classes. The XSB system works with large scale taxonomies and ontologies of products and is capable of classifying hundreds of thousands of product descriptions in a day.

For additional information on XSB capabilities, products or services, please visit our website located at [www.xsb.com](http://www.xsb.com)