



SUPPLY CHAIN
AND PROJECT
MANAGEMENT

TECHNOLOGY LICENSE OPPORTUNITY

*A nonconfidential, no-obligation summary of technology available from
Science Applications International Corporation*

BENEFITS

Locates and organizes data distributed over private networks and the Internet Improves the ability of users to access, classify, and use data from multiple data sources

Provides access to data in easy-to-use formats

Reduces the amount of time, energy, and money that users invest in the acquisition of goods and services

WHAT MAKES IT DISTINCT?

MISTI® supply-chain management software enables companies and their suppliers to communicate in a common language throughout their products' life cycles, allowing these users to define dynamically, discover, and evolve specific reports that best meet their mutual needs.

MISTI®

This supply-chain-management software tool suite enhances information management from disparate data sources in supply chains.

TECHNOLOGY DESCRIPTION

MISTI supply-chain-management software is an XML-based technology for managing information distributed over private and public networks, including the Internet. This software structures, categorizes, searches, extracts, and fuses information from disparate data sources, based on semantic content, and organizes the results into reports tailored to the users' needs. This technology improves users' ability to access, classify, and use data stored in simple, natural formats, without requiring complex database-management software, organizations, or machines.

APPLICATIONS

Supply-chain-system design, implementation, and maintenance for a wide range of vertical markets representing a broad array of industries, including automotive, aerospace, electronic components, consumer electronics, real estate, and banking.

OVERVIEW

MISTI supply-chain-management software accomplishes its ultimate objective— to empower companies to reduce significantly costs related to their supply chains—through several means.

- Uses open, standards-based Internet technologies and protocols
- Develops object-oriented information-modeling constructs
- Uses the Internet as a backbone for information distribution and transmission
- Uses patented Lorentzian fuzzy search algorithms to perform precise data ranking of search results
- Enables industries to develop a distinct, powerful approach to dynamically define industry sector-specific hierarchies and vocabularies

The primary technology in MISTI supply-chain-management software is the use of information tags embedded in electronically published information. These tags enable the creation of metadata (information about data), allowing rapid search and retrieval of detailed information from existing, disparate digital sources. MISTI supply-chain-management software uses passwords, digital certificates, multiple levels of security, and SSL technologies to handle security issues related to access control, authentication, and privacy of data for both suppliers and end users.

TECHNOLOGY DESCRIPTION

MISTI supply chain management software includes the following major elements:

- **UCLP** (Universal Commerce Language and Protocol). An open, object oriented product-specification grammar that uses XML/HTML Web pages with embedded tags as the information transport. By treating information as data objects, MISTI supply-chain-management software applies powerful object-oriented concepts—such as inheritance, aggregation, composition, attributes, and methods—to sets of distributed information.
- **Dynamically Extensible Indexing Scheme.** A methodology that determines the relationships between metadata descriptions, which categorize the distributed information. These relationships are referred to as the ontology, and they define the hierarchies within which information is categorized as well as the set of descriptors associated with each category. This unique feature eliminates the administrative burden associated with traditional databases.
- **Publication Software.** A suite of tools to link or map legacy databases to a classification scheme and to automate the direct creation of UCLP-compliant pages. Both sets of tools help users classify information within domain-specific hierarchies, and they provide a lexicon of attributes for each information class, based on the union of attributes defined by all users who have previously classified information in that specific category.
- **Gateway Software.** Software to collect, interpret, organize, and interrogate information in UCLP and to manage the dynamic ontology and indexing scheme. Web crawling is used to collect information across multiple participating information supplier sites. A catalog-of-catalogs gateway architecture provides information users with the ability to perform multisource cross-vendor comparisons, open-ended text searches, parametric searches, fuzzy searches, and composed-of/type-of component searches.
- **Knowledge Management Software.** Tools that assemble ordered sets of user-selected information items retrieved via the gateway and then integrate the selected information with other applications. The first capability helps engineers and designers define product breakdown structures, bills of materials, and other logical arrangements of the retrieved information. The second function enables information to be autonomously passed to other routinely used computer programs.

**FOR MORE
INFORMATION
REGARDING THIS
TECHNOLOGY,
CONTACT:**

Gian A. Brown
702-328-8495
gian.a.brown@saic.com

**CASE NUMBER
99-017**

STAGE of DEVELOPMENT

MISTI® supply-chain-management software is covered by U.S. patents 6,038,668 and 6,292,894 and 6,701,312 and 6,799,174.

I.P. SUMMARY

MISTI® supply-chain-management software currently is being used in the U.S. government and in commercial businesses.

MISTI® is a registered trademark of Science Applications International Corporation in the United States and/or other countries.

*© 2008 SAIC.
All Rights Reserved.*