

“...paper mountains filled with millions of part and reference numbers ...the Cross Reference List alone was 10 feet high!”

FED LOG: Logistics Information Evolution in Action

At a glance ...

Customer

Defense Logistics Information Services (DLIS), a Defense Logistics Agency (DLA) service center, manages the catalog of nearly 7 million active supply items used by all branches of the Armed Services and military contractors.

Challenge

Provide a portable logistics information system published on optical disc that can accommodate the nearly 7 million supply items ... all indexed, and searchable. The system must be updated and distributed monthly to all branches of the Armed Services and to military contractors.

Solution

FED LOG – Federal Logistics Data – a searchable logistics catalog developed and published by OPTIMUS on CD and DVD that can be accessed via the network or from disc.

Benefits

- Increased data capacity. Four gigabytes of indexed, highly compressed, searchable logistics data from multiple databases ... nearly 7.2 million parts .. stored on 5 CDs or one DVD.
- Decreased production time. From 12 days to 14 hours to process ten times the data!
- Decreased search time. Search through millions of parts in just a few seconds.
- Decreased costs. 8:1 reduction in man hours spent processing and searching for logistics information, 33% reduction in operation costs, and \$10 million savings annually.



OPTIMUS® Corporation 4715 Innovation Drive Fort Collins CO 80525

sales@OPTIMUSsoftware.com 800.869.7989 970.226.3466 www.OPTIMUSsoftware.com

*About 175,000 CDs and DVDs
are distributed per month ..
with an average seven-day
turn around time*

A Problem with Data Volume and Portability

In the 1970s, technicians and supply officers dug through paper mountains filled with millions of part and reference numbers for everything any branch of the Armed Services ever ordered ... from shoe laces to fighter jet brake shoes.

In fact, the Master Cross Reference List alone was 10 feet high! A transition to microfiche in the latter half of the decade brought about a simpler distribution method, but did nothing to speed up research - the average search time to locate a single part was 40 minutes.

Eventually, the DLIS (formerly DLSC, the Defense Logistics Service Center), turned to a computerized system on a main frame to store its logistics information. However, all users had to be in Battle Creek, Michigan to access the data. Thus began the hunt for a vendor to develop FED LOG ... a portable logistics information system published on optical discs that would:

- Consolidate data from multiple databases.
- Put the data on CD or DVD, along with an application for search and retrieval.
- Update the data on a monthly basis and distribute it to all DLIS customers.

Challenges Aboard

With its experience in data archival and retrieval, OPTIMUS® was awarded the initial FED LOG contract, and went on to win two subsequent follow-on contracts.

As OPTIMUS® embarked on the FED LOG project, its greatest challenge was compressing the raw data delivered by the government to fit it onto a limited number of discs. The next hurdle was meeting the stringent requirements for data search and display time. DLIS demanded that users be able to find specific types of items within a specific amount of times. Both data compression and indexing challenges were met by the superior power of OPTIMUS®' own products.

Solution Evolution

Marine Corps, Navy) and the Federal Logistics Information System (FLIS), put the data on CDs, and distributed the discs; however, it was a single-user system running on DOS with a text-based interface. As the available technology evolved, so did FEDLOG. With the advent of networking, the Internet, and CD and DVD writers, OPTIMUS continued to enhance FED LOG. Eventually, FED LOG became a multi-user application it is today, with a graphical user interface that now runs on Windows, DOS, and UNIX.

Additionally, the entire production process improved. Today, DLIS sends FED LOG data via the Internet to an OPTIMUS® ftp site. OPTIMUS downloads the data, cleanses it, indexes it, compresses it, and then produces a master set of 5 discs. These discs are tested in-house, as well as sent to DLIS in Battle Creek, Michigan for more testing. Once approved, a “glass master” with the ISO 9660 image is replicated and distributed to all DLIS customers on the subscription list. About 175,000 CDs and DVDs are distributed per month, in preprinted and labeled government envelopes, with an average seven-day turn around time.

FED LOG

A wide variety of users including engineers, technical researchers, maintenance, supply, and cataloging professionals use FED LOG to access logistics information quickly and easily. These users can retrieve management and supplier data for procurement, requisition, and storage purposes. They can even locate freight and packaging standards for shipping. FED LOG also allows users to search for parts based on their characteristics and to obtain line drawings or photos of items contained in FED LOG.

To search for any item of supply, FED LOG users can enter a partial or complete Part Number, National Stock Number (NSN), National Item Identification Number (NIIN), or Commercial and Government Entity Code (CAGE). Additionally, users can search for an item based on its characteristics (what it looks like, what it is made of, and other descriptive information). The system will return all matches so the user can scan through them. If the search results are particularly long, the user can narrow the search by providing other search criteria. When the correct result is located, the user can review all its information, including drawings or special packing instructions.

Benefits to DLIS Customers

Over the years, the variety of additions and the increased functionality have made FED LOG the main logistics information product for DLIS. When FED LOG first emerged on CD, there were around 5,000 monthly subscribers; today there are more than 40,000. Here are some of the benefits FED LOG has provided its users:

- **Increased data capacity.** FED LOG has successfully consolidated data from multiple databases into a delivery package of four gigabytes, delivered on five CDs or one DVD, with an estimated 7.2 million parts ... all itemized, indexed, and searchable.
- **Decreased search time.** Searches that took 40 minutes under the microfiche system take no more than 40 seconds with FED LOG. Chief Master Sergeant Karl Pruett says “FED LOG probably provides the fastest application retrieval time I’ve ever seen.”
- **Decreased production time.** When FED LOG was first released, it took 14 days to produce the CDs after the magnetic tapes were received ... now it takes 12 hours ... and the amount of data being processed has increased 10 times!
- **Decreased costs.** FED LOG has had the greatest impact in cost containment with an 8:1 reduction in man hours spent, 33% reduction in operating costs, and \$10 million in savings annually.

Success!

DLIS needed a way to consolidate data from numerous military databases, make that data portable and updateable, and distribute that data to its customers. With FED LOG, OPTIMUS provided a solution that has made FED LOG the most widely distributed logistics information system in the world!