Chapter 1

Introducing *Catalog*

Keeping up with electronic catalog distribution has been difficult before now: it required communication between different systems or that all sides—you, your suppliers, and your customers—purchase the same hardware or software system in order to communicate effectively. There was no solid, simple method for exchanging information.

A Technological Breakthrough

With *Catalog* and the Internet, connectivity between different types of catalog systems is no longer a costly and difficult problem. *Catalog* takes advantage of emerging technologies such as Java and XML to simplify data exchange.

By creating a single application that accepts and converts different file formats and data sources into a standardized output, *Catalog* makes business-to-business catalog exchanges simple, with easy-to-understand configuration and usually no additional hardware.

Once your catalog is converted to a format readable by your customers' ORMS, take advantage of a simple Internet connection to automatically e-mail your catalog to the customer, or the customer can download your catalog from a secure web site.

Because of its well-integrated design, *Catalog* can help reduce operating costs, decrease cycle times, improve catalog control, and reduce the number of applications needed to deliver online catalogs. The result of this simplicity and elegance gives your company increased customer satisfaction and reduces the number of calls to support personnel.

What Is *Catalog*?

Catalog is a tightly-fused group of software components that let you create, maintain, and distribute electronic catalogs while keeping confidential information safe and secure in your own data repository.

Designed to let you create, manage, and distribute electronic catalogs over the Internet, Catalogger provides authentication of customers and supports encryption; you can be sure that the customer is getting only the information that you want that customer to have.

By translating data from your system into one used by the customer, electronic catalogs produced with *Catalog* are compatible with the customer's ORMS. Catalogs can be located on your server, the customer's site, or a combination of both. This gives your customers the freedom to browse through your catalog whenever they want, and yet it leaves your sensitive information—such as pricing and special sales events — secure within your own corporate firewall.

Catalog Architecture

The *Catalog* architecture lets you build a long-lasting foundation for transferring catalogs over the Internet. Each part of the *Catalog* architecture integrates into the whole. This architecture consists of:

- An information extraction and conversion tool. This tool allows replication of data from existing systems without changing the original data.
- An XML-based staging server. Using an Internet connection, your customers can access the data, as long as they have the proper authorization. Your data stays behind your firewall, eliminating accidental release of confidential data.
- A data delivery module that lets you generate different formats for data exchange. Customer profiles allow for personalization of messages. The data delivery portion of *Catalog* supports secure access.

Catalog is a complex yet simple-to-use solution for electronic commerce. It requires no expensive customization and installation.

Catalog uses COMPANY technology combined with new and emerging technologies to allow the extraction of data from multiple sources into a Java-based storage module. This data is then processed by a transformation module that manipulates the data and outputs it in either CIF or delimited text format. This properly formatted data is then exported to create the catalog. You map one type of data to another and *Catalog* does the work; you can define and export catalogs exactly the way your customers want them.

Catalogs can be updated easily, with minimal bandwidth. Send only the catalog changes to the buyer or resend the entire catalog—it's up to you.

Catalog integrates seamlessly. Customers using your electronic catalog view it through any compatible web browser; they do not need any special knowledge or equipment.

Existing catalog data, no matter how it was created, remains behind your own secure company firewall. *Catalog* gathers the information and keeps track of updates and changes to the electronic catalog without changing the source data. This extracted information is transformed into an XML format. Once extracted, the catalog is passed to a web server, where it can be accessed over the Internet or over your corporate intranet. Your existing security (such as LDAP and SSL) protects sensitive information.

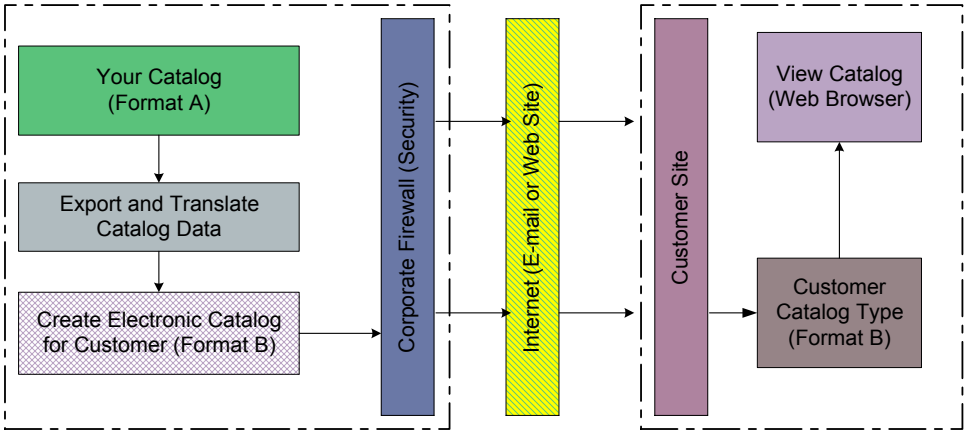

Figure 1. High-level model of catalog creation and distribution flow

The *Catalog* Modules

Catalog is the only interface needed to extract, import, create, and distribute electronic catalogs. In addition, *Catalog* keeps a record of your customer and supplier information, so that everything is right at your fingertips. *Catalog* is made up of several different modules, each with its own group of tasks. Because it is so flawlessly integrated, you do not need to open each module separately; they appear to be a single program. *Catalog* modules include:

Storage - The Storage module is based on COMPANY technology. It is Java-based and can handle schema extensions. You do not need to access the storage module directly.

Extraction - The Extraction module extracts data from one group and passes it to the storage module. This data can be extracted and stored as either CIF or as delimited text.

- **CIF** - Take advantage of the CIF format to import data into any delimited text list used by the customer. This means that you can control how the data is formatted.

- **Delimited Text** - Any delimited text list can be used. You specify the file and the delimiting factor, then import the file information as needed. This text can be exported into any delimited text as well.

Transformation - The Transformation module lets you easily transform data from one mapped type to another. Everything is within your control. The transformation module is accessed via the Catalog Management menu.

Distribution - The Distribution module lets you customize the way your customers receive electronic catalogs. Based on the customer profile you create, the distribution module either sends the catalog in answer to a request, or the customer can retrieve a catalog from an approved URL - for example, your web site.

Sending catalogs in answer to a request is called “push” technology— you push the information to the customer. Providing the URL so that the customer retrieves the file at will uses “pull” technology—called that because the customer actually pulls the information in, rather than you pushing it to the customer.

Mapping - Mapping disparate commodity types from those in your own system or in your suppliers' systems to those recognized by your customers is handled automatically or manually. The Mapping System provides the means to map these incompatible systems to each other, so that data is passed without problem.

Management - Using the Customer and Supplier Management modules, you create, modify, and delete customer and supplier records.

Privileges - Catalog administrators have access to all modules. Catalog managers, on the other hand, have access to the modules they need in order to create, maintain, and distribute catalogs.