KOFILE
CONVERSION SERVICES

Project Process

Experience

Kofile has extensive experience with the conversion of various document imaging, COLD archival, check archival, and signature card systems. Throughout our years in the conversion business, we have developed many applications and utilities for the conversion of products/systems that allow us to convert data from these systems with little or no modifications necessary. This allows us to be price competitive with companies large or small due to our prior engineering and development efforts.

Knowledge, experience, innovation, and flexibility give Kofile the ability to deliver on any development activity regardless of the size or complexity.

Don't trust your critical, confidential data with just anyone. Trust it with Kofile Conversion Services.

Implementation Methodology

Conversion projects are all unique, and each one requires careful planning, analysis, and implementation. No two source systems are alike. There are differences in system configurations, storage architectures, database software, metadata, image/file formats, etc. So, even though we have experience with a particular system, there is no cookie-cutter approach that can be taken. In addition, we also need to take into account the requirements for loading into the target system. As a result, we have devised a methodology that can be applied to any conversion project. This methodology is used for any type of digital conversion project, be it an imaging, reports/COLD, check repository, or other system.

The basic steps that are performed for all conversion projects are:

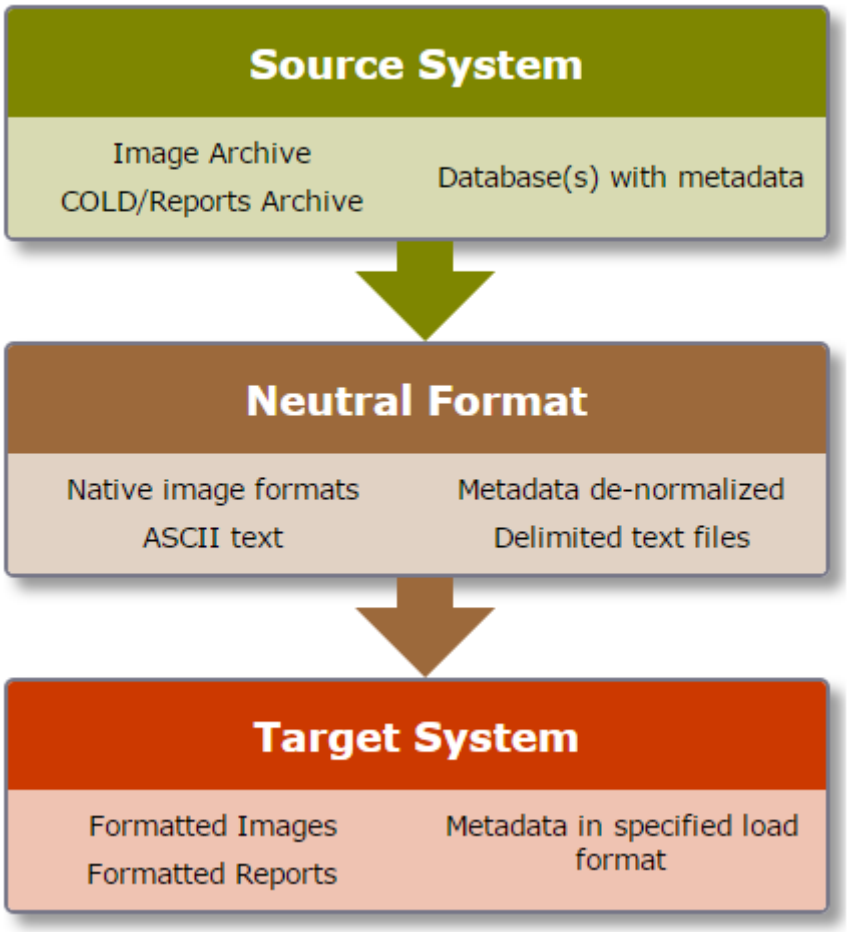
1. Extraction of data, images and metadata into a "standard" or neutral format. Generally this is TIFF images or other native format files (PDF, AFP, XLS, etc.) for imaging & check repositories, text files for reports/COLD repositories, and metadata in flat files (delimited text files) or de-normalized in database tables.

2. Massaging of the extracted data based on business rules and to meet the requirements of the target system(s). This could consist of: separating multi-page TIFF files into single-page TIFFs; merging single-page TIFFs into multi-page TIFF files; converting TIFF and other image formats (JPEG, BMP, etc.)

Project Process

into PDF files; combining reports/COLD text files into files based on report type and date. In addition to the file conversions/manipulations, report types & document types are generally remapped. Account numbers may be remapped, and other data manipulations may be performed.

3. Formatting the data into the necessary load formats for the target systems. This could be DIP files for loading into OnBase, or proprietary XML load files, or others depending on the specific requirements of the target system.



In addition to these basic steps that occur for each project, there is the need for careful analysis and the development of custom code (conversion tools, scripts, and database queries). There are also other factors that must be taken into account when performing data conversion/migration projects. The following sections go into these in more detail.

KOFILE
CONVERSION SERVICES

Project Process

Security

The secure transport and processing of all customer data is a top priority. As such we make use of encryption, secure network environments, access restrictions and other tools & technologies to ensure that all customer data is protected.

Source System Data Copy

One of the first steps in any conversion project is to obtain an offline backup copy of the source system. Generally this is a copy of the image repository along with a backup copy of the database. In the case of back-end storage management products (e.g. Tivioli and Centera), we require that the contents of the image repository be exported out via either tools or API provided with the storage management product.

Analysis

After we receive the data, the database is copied to one of our servers and restored for access via the appropriate database engine. From there, we start an analysis of the database structures and metadata that is stored. We identify document & report types, metadata index fields available and the mapping between the database records and the backup copy of the received image repository. From this work, we generate the initial mapping spreadsheet(s).

Depending on the nature of the source system databases and data structures, we may need to develop custom proprietary software components to assist with extraction of the objects and metadata from the received repository.

Development

Our development efforts can include the creation of custom proprietary utilities for data extraction and processing. Often times, the writing of these proprietary utilities entails reverse-engineering the source system data and file structures. Other development efforts include the creation of SQL database scripts and queries to convert the metadata and format it for ingestion into the target application. We also develop scripts and other proprietary automation tools to aid in the conversion process.

Project Process

Data De-Normalization

In the case of imaging systems especially, we need to take the normalized database structures from the source system and flatten or de-normalize them. Generally, this entails breaking the index data down and extracting it out at the document (or page) level. The document oriented index data is written to delimited text files for use during the actual data processing as we extract and convert the source objects (images, reports, files, etc.) into a neutral (non-proprietary) format.

Production Processing

The production processing generally consists of: 1) extracting the data objects (images or reports) from the proprietary source system formats; 2) re-formatting the extracted data objects into standard (or neutral) formats; 3) converting the "standard" format data objects into the necessary formats for loading into target application.

There is not a single monolithic application that we use for this production processing. Depending on the source system and processing that may be required, we could use a variety of our custom proprietary utilities to perform these steps.

Often times, some or all of these processing steps are automated to facilitate the processing of this data in manageable batches. However, regardless of how highly automated or not the processing is, the conversion processing is monitored by our highly trained technicians.

QA / QC and Reconciliation Process

Project reconciliation will be done on a source platter-by-platter or directory-listing basis. Verification of the document extracts from systems will be accomplished by matching the extracted documents to the index data from the database. Verification of the document imports into the selected system will be accomplished by comparing the contents of the converted systems database and image store to the index data in the new database. This will provide an end-to-end verification of the conversion of each document. The customer staff will also be expected to perform random validations of the data from within the new environment once the converted data is loaded.

Project Process

Output Data Copy

The final converted data is then copied to encrypted external disk drives for transport to the customer. The data is copied in such a way that it can be quickly and easily loaded into the customer's system with minimal impact on access or performance.

The encrypted media is then shipped to the customer, using a national carrier that can provide shipment tracking (e.g. UPS or FedEx).