Reliably Migrating Complex Document Structures

Luxembourg's governmental departments and public administration offices decided to introduce the consistent and standardized 'SIDOC' ECM solution. This required all existing, highly heterogeneous and distributed databases to be combined in a single system. Among the numerous tools used for previous document migration projects, migration-center from fme has proven the most powerful and flexible instrument.

Over the years, the different public administration offices of Luxembourg have been implementing a great number of document management products, ranging from Documentum, SharePoint, and Lotus Notes through to file server solutions. Data processing and exchange had become very difficult due to this heterogeneous landscape, as had the administration of the associated IT systems. The consistent and standardized SIDOC ECM solution introduces a centralized and thus much more efficient and cost-effective platform.

Out-of-the-Box migration-center Software for Handling Complex Document Portfolios

CTIE, the nation's official IT center, successfully rolled out the new ECM standard solution at several of the public administration offices. One of the key challenges was to find the best way to migrate the data stored in the legacy solutions. The answer to this problem was the out-of-the-box migration-center solution. »We carefully evaluated the tools available in the market and finally chose migration-center, which we believe is best suited for the task at hand,« explains Jean-Claude Olivier, ECM Program Manager at CTIE. He goes on to give five reasons for why migration-center came out on top:

- It offers a broad range of configuration options and is based on rules, thus meeting all migration requirements.

- The great flexibility of the tool makes it ideally suited for handling the diversity of complex, organically grown structures.

- It enables us to take a consistent approach to the various migration projects.

- It ensures automated and reliable migration of vast data volumes.

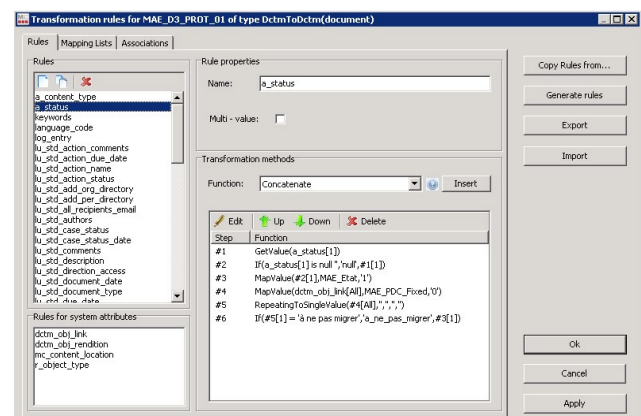- It brings about excellent transparency and enables precise migration control.

The **Centre des technologies de l'information de l'Etat (CTIE)** is the central IT service provider for the government of Luxembourg. Besides providing technical solutions for tasks such as general office communications for Luxembourg's governmental institutions, the provider also plans and coordinates projects related to implementing administrative reform.

ECM Migration, One Step at a Time

The same procedure was used for all migration projects completed to date: First, the existing range of documents was carefully analyzed (source system, number of documents, document types, attributes, etc.). Next, the information gathered was mapped in SIDOC.

»migration-center enables us to migrate even complex document structures in a clean, reliable, and transparent manner. This makes the tool truly invaluable,« says Jean-Claude Olivier, ECM Program Manager at CTIE.

The description of the target state defined the implementation concept, which was then turned into a technical specification in a staged manner. Corresponding rules were defined in migration-center for each document type and its associated attributes. Before the actual migration, the migration definition and execution were simulated in a suitable test environment. During this stage, the rules were validated for all documents, checked by users, and deviations, if any, were corrected. Following this, the data was migrated to the live system in multiple stages in order to avoid overburdening the systems and to give users enough time to validate the results.

Mix of Simple and Complex Migrations

The projects already completed by CTIE involved the transfer of documents previously stored in more or less complex structures on a single or multiple source systems. For instance, migrating 10,000 documents was considered a typical, small-scale project. This type of project was chosen first to become familiar with the migration tool, and it was completed in around 45 days.

The next migration project was much larger and significantly more complex. Over the course of six months, 500,000 documents were transferred from Documentum 5.3 in six steps, including six test stages. »What made this migration particularly difficult was the challenge of transforming the entire functional logic of the hierarchical legacy system into a task-based structure. This required us to define a large number of intelligent rules for storing the existing documents according to the guidelines of a new filing scheme,« says the ECM Program Manager. And this involved handling a rather complex document structure. For example, virtual documents comprising multiple subordinate documents needed to be resolved and transferred into a new structure consisting of single documents. The single documents were linked with one another using the original designation of the previous virtual documents as well as relations. A similar approach was applied to e-mails that had previously been stored in one complex document containing all attachments.

Again, these were resolved into single documents, indexed separately, and connected based on document names and relations.

Migration Tool Proved Powerful and Flexible

The experience gained during the previous migration projects confirmed the expected sophistication and flexibility of the migration tool. »migration-center enabled us to migrate even complex document structures in a clean, reliable, and transparent manner. This makes the tool truly invaluable,« concludes Jean-Claude Olivier. For example, the rule-based system allowed the migration team to implement the new document filing structures as required. If further modifications are necessary, migration-center offers an API programming interface for convenient customization. Additional expertise was provided by project partners euroscript International and fme AG. euroscript supported CTIE in performing pre-migration analyses in the public administration offices and offered technical assistance for using migration-center.

CTIE manager Jean-Claude Olivier is full of praise: »The migration tool fully met our expectations. It has proven a highly powerful transfer platform that allows us to reliably migrate documents from a vast range of source systems. Thanks to this, we stayed on budget, both as regards consulting and development.« User validation of the migration results took longer than anticipated. All the more important that a thorough analysis stage preceded each migration process: »The quality of the pre-migration analysis has an immense impact on the further course and final success of the project. If, for instance, complexities of a document type are missed during this stage, the time and energy required to resolve this complexity becomes much higher later on.«

Technology

- migration-center 3.2.3

- EMC Documentum D2

- File system (Windows)

Alfresco		migration ::: center		Alfresco
CSC FirstDoc				Box
SQL Database	API incl. Job Server Interface	**Client**	API incl. Job Server Interface	CSC FirstDoc
EMC Platform*		**Oracle**		EMC Platform**
File Shares		**Content Store**		File Shares
IBM Notes / Domino				OpenText®
Outlook				SharePoint
SharePoint				Veeva Vault
XML / Excel / CSV				Custom System (other)
Custom System (other)				

*EMC Documentum Content Server (D2, DCM,, xCP), eRoom

** EMC Documentum, D2, DCM, Content Server, InfoArchive, xCP, etc.

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