

ADABAS Conversion

The Modern Systems database conversion process includes the generation of a new relational database to replace the functionality and content of the Adabas files. The new target database can reside on or off the mainframe, and can use any of the standard relational database management systems: Microsoft SQL Server, Oracle, or IBM DB2.

DB-Shuttle™ provides automated technology that protects legacy assets, reduces maintenance costs, provides agility and flexibility, and enables Service-Oriented Architecture (SOA) within business-critical applications.

Database Functionality

The Modern Systems solution provides a complete replacement for all Adabas file functionality:

- Adabas file layouts
- Group-level elements
- MU occurrences
- PE occurrences
- Super-Descriptors
- Sub-Descriptors

Relational Results

The resulting database is fully relational. Primary keys, foreign keys and index definitions are automatically created. All constraints are generated into the resulting DDL. Table spaces, indexes, table names, and column names are all generated according to your naming standards.

Delivered Components

As part of the delivery process, Modern Systems generates and delivers the following component types for installation in the new relational database processing environment by using DB-Shuttle:

- Data Definition Language (DDL) Syntax for the new database
- Adabas Data Extract programs, generated in COBOL, to unload all Adabas data to the correct format for the relational database load utility
- Adabas Data Extract JCL, customized to your environment, to execute the extracts and other key-processing utilities
- Load Syntax (optional) for use by relational database load utility
- RI Check Syntax (optional) for use by relational database utility package
- RUNSTATS Syntax (optional) for use by relational database utility package
- DCLGEN syntax (optional) to define COBOL layouts for replacement applications

ADABAS Data Migration

The Adabas data extract and relational load process is simple and straightforward. During the extract process, all Adabas data is extracted and written to a set of sequential files that are ready to load to the new relational database target. The Adabas data extracts are fast and can be executed simultaneously.

Modern Systems can provide a number of extract variations for sites that have special requirements for a short Adabas conversion window. Data conversion during the cut-over weekend or evening is always fast and complete.

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Customization Workbenches

Special workbenches within DB-Shuttle provide additional capabilities for tailoring your Adabas conversion so that it better meets your needs and requirements:

- Re-name Workbenches to allow full naming of all tables, columns, table spaces and indexes using a rules basis or a full-name basis
- Data Cleansing Workbench to provide rule-based data cleansing during the Adabas data extract process
- Date Conversion Workbench to allow the specification of the format of Adabas date fields along with the individual Adabas date field minimum and maximum values so that the DATE type specification can be used in relational databases (all date formats are supported)
- Element Re-name Workbench that allows selection of group-level or elementary Adabas fields for use as columns in the relational database
- Record Re-Definition Workbench to allow changes to field types and lengths during the relational conversion

Visibility & Knowledge-Building

Modern Systems ensures that the customer teams (and the Modern Systems teams) have a full understanding of the existing Adabas files as well as a full understanding of the post-conversion relational database. DBShuttle generates many reports and diagrams to assist with this knowledge-building process:

- Complete Entity Relationship Model (ERM) diagrams for the new relational databases
- Summary reports of the Adabas file sizes and usage
- Matrices that relate files to tables, fields to columns and Adabas files to extract programs
- MU and PE “maximum occurrences” reports that are based upon automated mining of the Natural code base
- Date Finder reports that allow team members to define selected fields and columns to ensure that the migration addresses all requirements for date conversion
- Additional ad hoc reports that assist in further detailed identification of the unique characteristics of the Adabas database and its conversion