CASE STUDY

AUTOMATING DATA MIGRATION FOR BUSINESS MANAGEMENT SYSTEM ENHANCEMENT

Client Background

Our client is a leader in software, services, information and connectivity solutions that empower physicians and other healthcare providers to deliver best-in-class patient care, safety, clinical outcomes and financial results. Nationwide, more than 160,000 physicians, 800 hospitals and thousands of other healthcare providers in clinics, postacute care facilities, and homecare agencies, use the company's solutions to automate and connect their clinical and business operations.

Business Challenge

Our client needed to enhance their business management system, so they developed a new highly scalable Practice Management system. Migrating data from a Practice Management system to the new solution can be a long and complicated process.

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The company partnered with SoftServe to design and implement a solution for automating the migration of data.
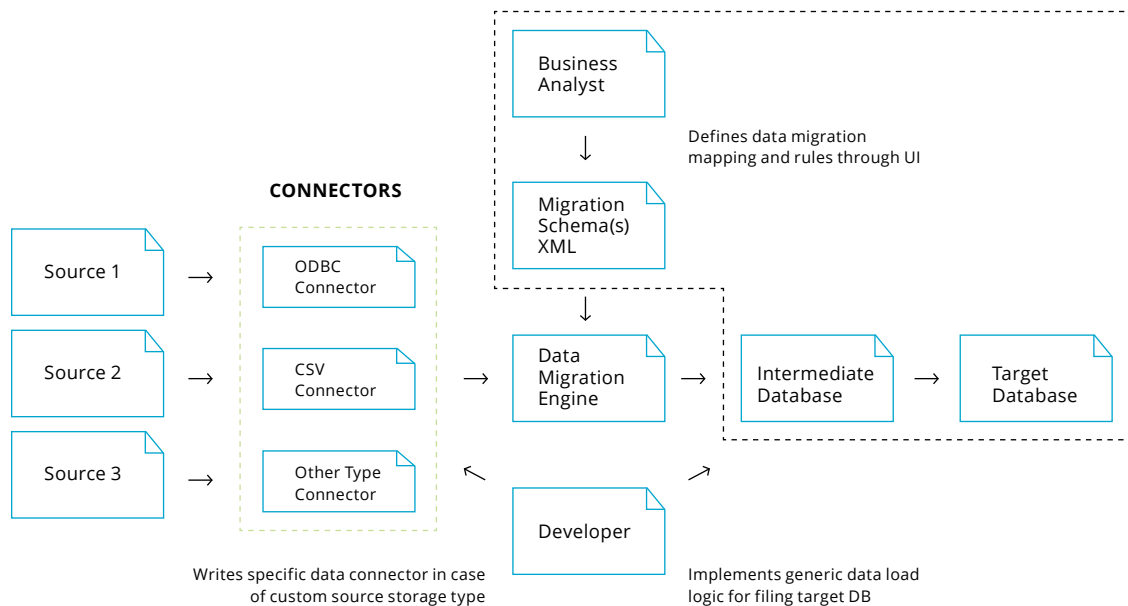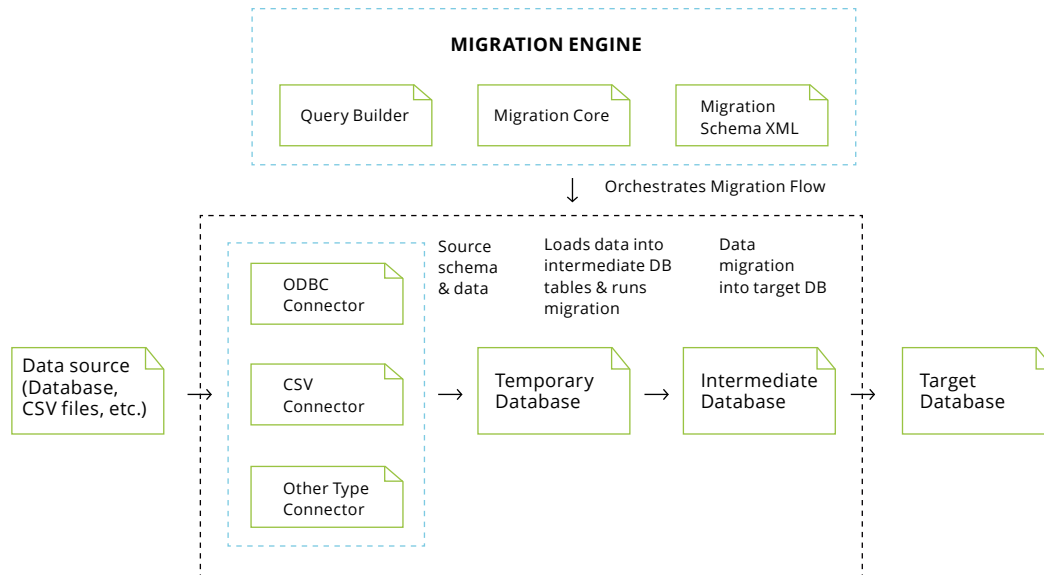
Challenges included:

- Ensuring fast data migration;
- Preserving the integrity and consistency of the source data;
- Increasing the speed of the configuration and making it consistent through the data migration process.

Project Description

The SoftServe and the client's team performed the following actions:

- Developed a concept of "pluggable data connectors" and "a data migration constructor"
- Developed a data validation tool
- Completed the synchronization/ merging process to reapply a custom configuration after the data migration.

CONNECTORS

Business Analyst

↓   Defines data migration
mapping and rules through UI

Migration Schema(s) XML

Source 1 → ODBC Connector

Source 2 → CSV Connector → Data Migration Engine → Intermediate Database → Target Database

Source 3 → Other Type Connector ↖   ↗

Developer

Writes specific data connector in case
of custom source storage type

Implements generic data load
logic for filing target DB

MIGRATION ENGINE

Query Builder | Migration Core | Migration Schema XML

↓ Orchestrates Migration Flow

Data source (Database, CSV files, etc.) → ODBC Connector / CSV Connector / Other Type Connector

Source schema & data → Temporary Database

Loads data into intermediate DB tables & runs migration → Intermediate Database

Data migration into target DB → Target Database

Business Value

As a result, the Data Migration Constructor allows Business Analysts (with the minimal help of technical staff) to:

- Configure data mapping between source and target systems
- Define data transformation rules
- Preview data migration results
- Export migration schema for further usage in Migration Wizard

The pluggable data connector's engine enables data load from various types of data sources, including:

- ODBC;
- CSV;
- Any custom data source.

The validation tool (for CSV data sources only) ensures both source data integrity and source data conformance to the predefined schema.

Partnering with SoftServe, the client received a highly efficient data migration process ensuring the following business advantages:

- Data migration with minimal interruption to customers' businesses
- High level of automation to complete the system configuration / migration / integration independently via a self-directed application wizard
- Understandable and self-explanatory migration logs to help quickly define and isolate any discrepancy that may occur during the migration process.

ABOUT US

SoftServe is a digital authority that advises and provides at the cutting-edge of technology. We reveal, transform, accelerate, and optimize the way enterprises and software companies do business. With expertise across healthcare, retail, media, financial services, software, and more, we implement end-to-end solutions to deliver the innovation, quality, and speed that our clients' users expect.

SoftServe delivers open innovation—from generating compelling new ideas, to developing and implementing transformational products and services.

Our work and client experience are built on a foundation of empathetic, human-focused design that ensures continuity from concept to release.

We empower enterprises and software companies to (re)identify differentiation, accelerate solution development, and vigorously compete in today's digital economy—No matter where you are in your journey.

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