

# **MEDICAL DATA SYSTEMS**



#### Client



## Challenges

Error-free loading of high-volume and time-sensitive medical collection data

## Solution

Progress DataDirect drivers for ADO.NET

#### Benefit

Reliable and high-performing database connectivity, while keeping MDS "database agnostic"

# Balancing Trust, Innovation and Speed

Their work involves revenue cycle management for the healthcare industry, but the IT department at MDS sometimes feel like anesthesiologists. Their systems have to work quickly and effectively but produce no surprises. Boring is good when it comes to processing huge volumes of data for a trusted and innovative leader in healthcare revenue cycle management. The job of the IT people is anything but that. Here is why.

Profitability at MDS is built on a blend of integrity and super-efficient business operations. Large amounts of data feed custom-coded applications. On an average day, database administrators are presented with flat files (XML, XL, CSV) containing millions of records that must be uploaded in to the systems for collections processing within 24 hours. MDS is paid based on a percentage of the receivable. As the life cycle increases, the potential value decreases, so delays or errors in uploading negatively affect the business. The viability of the company also depends on efficient use of personnel and computing resources. Having to redo or correct data uploads impedes smooth operations.

# Needing Accurate, Agile, Agnostic Custom Software

The healthcare revenue cycle is a potentially sensitive topic for many healthcare customers, so MDS takes a respectful, counseling approach to collections. At the same time, it strives to provide outstanding service by improving efficiencies and

making ongoing technological advancements, which requires developing, managing and evolving its custom-made software.

When they recently upgraded the version of Sybase ASE, their main database, they encountered "blocking locks" during upload. These essentially stopped the file processing from occurring. Up to that point, MDS had not changed any code on its custom application. The MDS team began to recode certain aspects of the application to address the blocking lock problem. However, the team was concerned about getting into a pattern of recoding every time a database was updated. This practice, which many IT departments reluctantly embrace, tends to result in applications being written for specific databases. Ultimately, the application becomes locked in to that specific database and its vendor. This outcome would undercut the entire flexible IT strategy that makes MDS competitive.

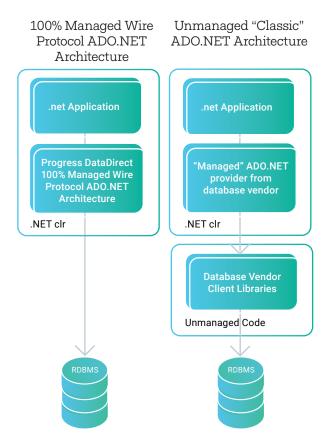
# Making the Move to Efficiency with ADO.NET

MDS had previously adopted Progress® DataDirect® for ODBC drivers to connect their applications with Sybase ASE. This choice had resulted in better performance as they were able to write directly to the ODBC spec contained instead of using proprietary database code. To overcome difficulties that sprang from application modifications and the Sybase upgrade, MDS switched from DataDirect for OBDC to Progress® DataDirect® for ADO.NET providers. The development team wanted to see if ADO.NET would correct the blocking lock error without requiring any special coding.

"We are working with huge volumes of data.

Delays in uploading this volume of data
hurts our revenue. We're relying on Progress
DataDirect drivers to give us the ODBC layer
between our application code and the database."

Karl Sanders, Network administrator Progress DataDirect for ADO.NET creates a direct connection to the RDBMS, avoiding the need for custom coding for the RDBMS or reliance on vendor client libraries.



It worked, with ADO.NET becoming the interface from their database to their applications. With a 100 percent managed wire protocol ADO.NET architecture, DataDirect for ADO.NET connects directly to the RDBMS. There is neither a need for custom coding in the RDBMS language nor a reliance on database vendor client libraries. The results include superior performance and resource efficiency—both highly relevant for the MDS business goal of cost effective, rapid uptake of data. Performance and security are further enhanced because database calls are not made outside of the common language runtime (CLR).

With DataDirect for ADO.NET in place, Sybase ASE is able to handle the large data uploads efficiently and without error. The MDS data management operation is now running smoothly, keeping the data flowing with minimal to no delays. MDS has become database agnostic, meaning they are free to update or even replace their database without having to revamp their custom applications. They have no database clients and are not "held hostage" by a database since just a switch of the driver is necessary to move to a different database.

## The Progress Approach

MDS cites the professionalism and pragmatism of the Progress account team as a major factor in selecting DataDirect for ADO.NET as its solution. "They understood they were talking to a technical person," said Tim McDonald, Senior Software Developer at MDS. "They put in a lot of work to understand what our issues were and suggest solutions we could test. There was no marketing fluff." In the testing phase, McDonald added, "The Progress support team understood what I was saying. They weren't just reading from a script. Until they found the solution, they put in a work-around. They were great at clearing hurdles we ran into throughout the testing process." Progress understood the demanding nature of IT work at MDS, where IT faces mandates for speed, high volume and integrity. To help MDS achieve its data management goals while maintaining database choice, Progress combined its superior products with a deep client support commitment.

"The Progress support team understood what I was saying. They weren't just reading from a script. They asked for ODBC traces. Until they found the solution, they put in a workaround. They were great at clearing hurdles we ran into throughout the testing process."

Tim McDonald, Senior Software Developer

## **About Progress**

Progress (NASDAQ: PRGS) is a global leader in application development, empowering the digital transformation organizations need to create and sustain engaging user experiences in today's evolving marketplace. With offerings spanning web, mobile and data for on-premises and cloud environments, Progress powers startups and industry titans worldwide, promoting success one customer at a time. Learn about Progress at <a href="https://www.progress.com">www.progress.com</a> or 1-781-280-4000.

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