

MiChoice's Hybrid Solution Internet/Intranet Data Hosting Schema Decentralizing Applications and Databases

MiChoice's software modules utilize a scalable Internet/Intranet data hosting schema rather than a single master centralized database. Our Hybrid Solution allows for "Real Time" or Batch connectivity via the Internet/Intranet between multiple Microsoft® SQL databases with data replication for exchanging data, providing the data retrieval, and reporting features of a master centralized database.

What are the benefits of this hybrid approach and decentralized databases?

A major benefit is speed and reliable service

In the school environment, fast, reliable applications and fast, reliable service is critical. With a typical centralized application, or web based application, if the connection is slow, or if there is a technical issue – or even a loss of network connectivity to the centralized database, that can mean major trouble. By using our solution of a hybrid data replication software module approach, each software module bi-directionally exchanges data via the Internet/Intranet in a "Real Time" or batch process. The ending result of this approach is the information is literally right at the fingertips of employees at all times, because all applications and data are accessible from multiple databases.

How important is data redundancy?

MiChoice's decentralized solutions provide a valuable layer of redundancy and are tolerant of failures.

The school sites in decentralized systems can operate efficiently whether or not the central site server is operational, and whether or not the communication lines to the central server are functional. MiChoice's Hybrid Solution can be configured to automatically keep all school sites synchronized on a regular basis, or perform On Demand "Real Time" data retrieval. The MiChoice Hybrid solution is fault tolerant if the communications with the primary server, local or in the cloud, is interrupted.

The data demands of individual schools are growing rapidly. Point of Sale systems are no longer just for sales, for instance. They also function as general computing devices for a range of applications, such as inventory management, menu planning, production records, time clocks, and so on. Thus, there is an ever-increasing reliance on an ever-broader range of business functions. If any of those applications are slow or off-line, it affects productivity. MiChoice's decentralization schema means employees have access to all their applications and data, all the time, even if the district's wide-area-network or Internet goes down completely.

MiChoice's hybrid decentralized software module approach eliminates centralized information systems as a point of failure in school district operations.

Does decentralizing make the solution more susceptible to security problems?

Not at all. Our solution provides a unique data slicing technology that lets school districts distribute in "Real Time" or in a batch process, only the data that each school needs, as opposed to just shipping the entire database everywhere. This intelligent data distribution limits the amount of data that is exposed during the replication process. Also MiChoice Software provides centralized control over all distributed data. So even though the data itself is distributed, the central office still controls the data as a single, logical centralized database.