# Midwest Data, Inc

Midwest Data traces its origins to 1967 as a small data processing company, then known as VSC, that specialized in independent telephone company billing services. Acquired by the Willmar Poultry Group in 1980, Midwest now provides a wide variety of billing solutions and data processing services to telecommunications and utility service providers throughout the upper Midwest. It is a telephone billing provider for 27 companies in Minnesota, North Dakota, South Dakota and Iowa, and a cable billing provider for three companies in Minnesota and South Dakota. In addition, Midwest supports its corporate parent by providing network and custom application support for 14 operating divisions under Willmar Poultry Company.

Willmar Poultry began using Glink for Windows in August 1993. Four years later, Midwest Data ordered a forty-user Glink for Windows license for use as the user interface to their billing applications running on a GCOS7 system; then they doubled their license size in early 2001.
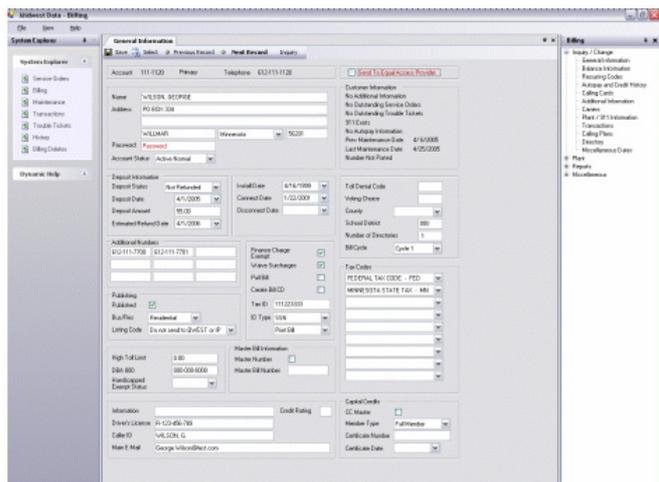
As competition in the telecommunications billing market became increasing fierce, Midwest Data found that their existing and prospective customers were looking for a more modern user interface on their 21st century Windows workstations. Midwest Data was one of the last billing providers still offering a pure mainframe package using terminal emulation for the user interface; but implementation of a completely new Windows-oriented package would take years to design, develop, test and deploy.
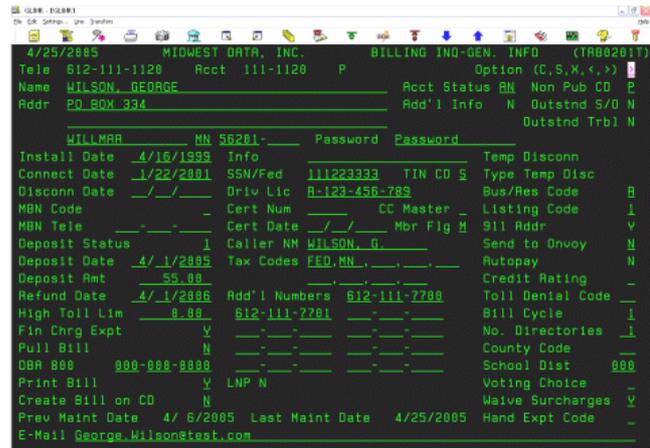
Glink emulator view of the original Billing Inquiry screen as generated by the GCOS7 mainframe application.

As reported by Elton Fordyce and Mike Walters at Bull's Summit 2005 conference in Phoenix, they elected to use the COM+ API of Glink Enterprise Edition and Web Services to access data from their GCOS7 mainframe. They determined that this was the fastest way they could bring a new Windows GUI to market, using their existing in-house staff expertise. It was also the least risk implementation, since it did not require any changes to their mainframe applications, and it could be done at a lower cost than any of the other options that had been considered. This approach would give Midwest a competitive product while they undertook the design, development, testing and implementation of a full Windows software package.

Midwest decided to develop a Rich Windows client providing a GUI interface to an XML data stream between the client and Web Services. The Web Services logic is 95% driven by SQL server, including generation of maps to read the mainframe screens. These are accessed using the Glink COM+ API to interact with Midwest Data's mainframe system. The Glink COM+ API resides on Midwest Data's Web Server, together with Web Services. Web Services integrates mainframe and SQL data into XML. The client builds screens dynamically, based on the values returned from the mainframe and SQL server, using full Windows functionality wherever possible. Mainframe restricted fields are now drop-downs, check boxes, radio buttons or other Windows strict controls. For the rollout of their

View of Billing Inquiry screen accessed using Glink Enterprise Edition COM+ API, and formatted by the Rich Windows client.

new user-friendly Windows GUI, Midwest Data upgraded to a 200-session Glink Enterprise Edition license.

Midwest Data developed an ASP.NET Web Service, and enclosed Glink's COM+ API in a 'wrapper' in order to use it from .NET. This served as an inspiration and impetus for G&R's subsequent implementation of a native ASP.NET version of Glink API, and a .NET version of GlinkWeb that utilizes it.