

Edgewater Technology develops & deploys a consolidated e-billing system for Middle-Market Insurance Organization

Customized solution enables Insurer to exchange real-time, on-line group billing transactions with employer groups in a completely paperless environment

Edgewater Technology's solution:

- Enables consolidated bill reconciliation;
- Provides multiple bill options;
- Centralizes maintenance and updates to client information;
- Utilizes FTP and fully encrypted file transfer for data security;
- Supplies complete payment history and copies of past bills on-line by group and employee; and
- Reduces costs by improving process efficiency.

Customer Focus:

Headquartered in the Southern part of the United States, this Insurance organization was chartered to write Insurance in 1980 and has grown to become a premier Insurance organization with over \$180 million in assets and over \$77 million in total revenue. The financially strong organization offers a full line of group and individual products, sold at the worksite to meet the needs of employers and employees. The organization insures over 653,000 individuals and is admitted in 48 states including the District of Columbia.

The Challenges:

The billing and reconciliation process at the Insurer's organization was a highly-driven manual process that required numerous resources. The organization was utilizing a policy administration system of record, which was generating and printing all of the Insurer's statements for clients. Once printed, the bills were then sent by standard mail to the Insurer's respective employers or "groups". Part of the manual process included a review of the statements by the employee's group administrator. If inaccuracies were found, the administrator would make the necessary changes manually to the statements. Changes might entail literally taking a pen/pencil and crossing a terminated employee off of the statement or noting changes to the premium for an employee in a handwritten script. The administrator would forward the bill and payment back to the Insurer, who would then manually key the changes back in to the system and generate a new statement. In order to provide the functionality for statement presentation and reconciliation, the Insurer purchased a billing software package. This package was running in tandem with the

Insurer's policy administration system of record. It was the Insurer's intention to utilize the policy administration system to generate all statements and capture all census information, excluding the billing software package from the maintenance of any policy information. In order to support the Insurer's needs, they required an e-billing system that would not only integrate with their legacy systems, but also maintain the same "look and feel" as billing software package to keep the user screens consistent. To mitigate the risk of errors and streamline the process of data entry, the Insurer wanted the ability to update both their billing software package and the policy administration system from a single transaction screen. Without an integration strategy, this would have required the billing system's functionality be removed and/or changed. In addition, the Insurer required the ability to have multiple bills from different groups appear on one consolidated statement.

The Business Solution:

With complicated integration needs, the Insurer partnered with Edgewater Technology to create a customized solution that would meet their needs and support their plans for continued growth. The solution was a consolidated e-billing system that enables clients to perform numerous tasks via one point of entry with consolidated reconciliation. The functionality of the consolidated reconciliation allows the clients' administrators to reconcile statements, enter new employees into the system, update/modify existing employee information, terminate employees, and adjust payments required by the employee. Consolidated billing enables the administrators to reconcile statements and maintain census records for both group and individual policies.

The Technical Solution:

The customized solution Edgewater developed and deployed for the Insurer leverages a web-based application, which features three integration points to support billing, reconciliation and enrollment (census) data flows.

The billing feed is responsible for extracting all data required to present and reconcile a bill from the legacy system and applying it to the billing software's database. The reconciliation feed extracts all reconciliation data from billing software after a bill is finalized and applies it back into the legacy system. Billing and reconciliation data flow is supported by a pair of message queues that transfer the

data between the legacy systems and the billing software. The current implementation uses Microsoft MSMQ, although MQSeries can also be used if required.

The architecture supports a pluggable dispatcher mechanism, so transferring the data using another mechanism (flat files, RPC, Web services, etc.) can be easily implemented. However, message queuing offers several advantages in the scenario. A real benefit is the system guarantees a message will be delivered whether the queue endpoints are available or not. In addition, the system has the ability to run in batch mode, or near real-time, depending on the business requirement and how the queue processing is configured.

The system utilizes a custom XML format to represent the bill and reconciliation information. The architecture allows new data formats to be plugged in with minimal development effort.

The system supports a real-time flow of the enrollment data into the backend system, as and when it is modified by the user. This means any enrollment changes made in the system are immediately available at the backend, and can be used by the legacy system without waiting for a bill to be fully reconciled and finalized. Direct access also means business rules stored in the legacy system can be utilized by the enrollment entry screens. The current solution

utilizes direct database access via a custom data access layer, which supports ADO, ADO.NET or ODBC.

Technologies & Tools:

- Microsoft MSMQA
- Microsoft .NET
- Pervasive SQL 2000
- SQL Server 2000
- XML

