

## Chronological List of Projects in Healthcare

### May 2022-August 2022 Premera Blue Cross – Senior Developer

#### Federal No Surprises Act API Upgrade Project

As part of their compliance with the Federal No Surprises Act and other internal program initiatives, Premera Blue Cross Blue Shield wanted to put the processes in place that would handle the exchange of updated provider information with other systems, including both internal and external ones (like Quest).

Initially, the request was to have the inbound data from Quest parsed and reorganized into an internal record format. The ETL work on this inbound provider data was sent to Premera Blue Cross Blue Shield in the form of a csv file. The Federal No Surprises Act necessitated that the data be kept current and updated within 48 hours of any change. The acquisition of that inbound data from Quest was transitioning from a push process from Quest to a pull process by Premera by accessing a newly created remote Quest API and pulling that data on an as needed basis.

- Continue to develop the inbound data model to include previously unused data elements included in a daily csv file sent to Premera from Quest, a third-party clearing house that provided updates to Provider data
- Analyze the output of multiple API calls that Quest was just beginning to make public so that the daily acquisition of Provider data could be done on an as-needed basis through a data “Pull” rather than waiting for Quest to “Push” the data to Premera.
- Analyze the data format provided by Quest inbound file pertaining to the providers’ hospital affiliations, and parse that data into a collection of an internal data format associated with the rest of the provider data.

### July 2018-November 2018 All Scripts/Avenel – Senior Developer

#### Azure Service Fabric Micro Services API Project

The client wanted to develop Azure-based Service Fabric Micro-Services that would 1) provide an audit trail of other micro-service activity and save that activity to a Cosmos DB, and 2) create another micro-service that would provide an externally accessible API that would communicate with and interact with an Azure Data Lake Factory API. The result was an API that would provide a list of Data Lake Factories, Data Lake Factory Jobs, their execution status, and provide the ability to start a predefined job at will.

- Developed an audit Micro-Service on Azure Service Fabric
- Developed a Micro-Service Web Service API on Azure Service Fabric that would authenticate and communicate with a Data Lake API that would serve up data related to the operation of the Data Lake storage resources.
- Developed the Postman test scripts for remote API execution and the X-Unit test scripts for unit-testing the internal methods.
- Developed the HTML, CSS, and C# code that was a part of the ASP.NET website that communicated with the web services and backend micro-services.

### February 2016-May 2016 Fidelis Care – Developer

#### Sybase Database Engine Upgrade Project

The client was upgrading their Sybase Database Engine Platform in preparation for the upgrade of their Facets Software Application to the current release. In an effort to increase the speed and performance of the new DB engine, new hardware was purchased on which the database was to operate and it was that hardware that would be utilized in the new production environment. In order to minimize the effort required at Go-Live and in an attempt to make other future upgrades run more smoothly, Fidelis made a decision to update all code that referenced any static IP addresses to a more dynamic DNS name. My role was to help the Fidelis development team identify all of the source code containing IP addresses so that their development teams and I could remediate the code. I was also asked to analyze stored procedures, modify VB.NET applications, and modify a VB6 application that needed, not only an update of the IP addresses to DNS names, but a number of other business logic and database schema modifications.

- Analyzed SQL stored procedures and made suggestions for improving speed, performance, logic, error reporting, and logging functionality
- Modified VB.NET applications to point to a DNS name rather than a hard-coded IP address.

- Modified a VB6 application, incorporating configuration files that identified the DNS name of the Sybase and MS SQL Server database servers.
- Updated the MS SQL Server database schema, eliminating 7 fields and adding 12 others.
- Helped develop and modify a PowerShell script that would traverse the entire TFS directory structure and a network drive/directory structure looking for files with IP addresses, and once found, would report the filename, line number, and content that needed to be changed.
- Helped Fidelis establish a working VB6 development environment so that any future modifications, that needed to be performed prior to converting the application to a .NET platform, could be performed within that environment.

## August 2015-January 2016 Lumeris/Essence Group Healthcare – Sr. Developer

### Electronic Healthcare Record Transaction Processing Project

Lumeris, the software development arm of Essence Group Healthcare, needed to provide additional Electronic Healthcare Record (EHR) transaction processing (specifically 270/271 and 276/277) for multiple trading partners and two separate Blue Cross Blue Shield organizations through the Blue Exchange. Two separate C# applications were developed, both of which used a common function library. The two applications were 1) a Windows Service application and 2) a Test Suite testing tool. The service ran on a Facets Application Server and read the inbound queue of the IBM WebSphere MQ Server, performed some pre-processing edits, sent the transaction to the HIPAA Gateway Web Service, performed some post-processing edits on the response, and placed the edited response on the outbound queue. The service also provided external web service access providing trading partners the ability to submit those same transaction types directly. The Test Suite testing tool allowed the QA tester to load and send specific transactions through the MQ Server, through the external Web Service, or through an internal direct connection and capture the resulting response transaction for compliance analysis. It also provided the ability to identify multiple transaction files to run through the system in mass, thus allowing easy regression and performance testing.

- Developed a written requirements document detailing the design and functions of each of three applications.
- Solely developed the pre and post-edits used to manipulate the content of the 270, 271, 276, 277, 997, and 999 X12 transactions being processed.
- Solely designed and developed the Test Suite Testing Tool. This included:
- A selectable configuration that allows the tool to point to one of 4 environments
- An override section that allows individual overrides of any environment variable
- A single transaction processor that allows the submission of a request transaction through one of three delivery mechanisms
- A multi-transaction processor that allows the tester to load multiple transactions at one time and have them submitted for processing at a predetermined time interval.
- Solely developed a reporting tool that would extract pertinent data from the transaction logs and provide both detailed and summary reports for MQ and Web Service transaction activity.

Secondary Clients:      Blue Cross Blue Shield of Louisiana  
                                    Blue Cross Blue Shield of Kansas  
                                    Essence Group Healthcare

## June 2014-January 2015 Express Scripts, Inc. – Sr. Project Manager

### Benefits Long Term Remediation Project

### Copay List on Tier 3 Level Coding Project

### Tier1 Applying to Deductible Project

The client was updating the claims processing logic for multiple high volume clients that required some special handling of their member's pharmaceutical prescriptions. The modification of the business logic and claims adjudication process required the coordination and combined efforts of both onshore and offshore personnel. Express Scripts Inc. (ESI) utilized a very strict and well-defined "Express One" methodology that clearly separated the multiple phases of a project and a list of deliverables that needed to be completed and approved within each phase in order to move from one phase to the next. Over the term of my contract, I managed three separate projects and

delivered all three under-budget and two out the three on time (one was postponed due of its dependency on another project's delayed implementation date).

- Worked with multiple onshore and offshore teams in multiple locations to define, design, develop, and test solutions to the identified business requirements prior to implementing them into the production environment.
- Worked with multiple department heads to more accurately define the level of effort (LOE) from an initial rough order of magnitude (ROM) created as a part of the project charter.
- Converted the multiple LOE's into individual tasks that identified the number of resources needed by each team to complete their portion of each project phase which lead to a complete work breakdown structure for each project.
- Worked within the EPMO department of ESI to coordinate the use of matrixed resources who were also working on several other projects, simultaneously.
- The successful deployment of each project's solution into production.
- The post-production support effort for each solution.
- Simultaneously managing multiple projects, each having different delivery dates – one having at least one implementation each month over a six-month span.

Secondary Clients: Department of Defense  
Anthem/Wellpoint  
BCBS of Maryland

## March 2014 Horizon Blue Cross Blue Shield of New Jersey - ICD-10 Assessment Lead

### ICD-10 Assessment Project

The client was preparing for the eventual replacement of the ICD-9 Diagnostic and Procedures Codes used in claims adjudication with the ICD-10 version of the same that is used throughout the world and was scheduled for national adoption on October 1, 2014, but has now been postponed to October 1, 2015.

- Lead ICD-10 Business Operational Testing Readiness Assessment Team to help client determine whether or not Horizon BCBS was ready for the ICD-10 implementation on October 1, 2014.
- Facilitated question and answer sessions with key client representatives to review claim pending procedures and activities.

## 2013-2013 Noridian Mutual Insurance Corporation - Senior Project Manager

### EDI Front-End Replacement Project

The client was replacing its EDI processing engine with a more robust, configurable, and scalable suite of products. Because the X12 transactions were being processed for BCBSND, BCBSWY, Iowa Medicaid, and CMS, extra care was taken to ensure that those X12 transactions were processed accurately, efficiently, and within the SLA's dictated by CMS and the Blues Association. Noridian Healthcare Solutions was awarded the contract to process CMS Medicare claims for Jurisdiction E, in addition to Jurisdiction F, and the anticipated increase in transaction volume needed a more robust and more economical solution. As Senior Project Manager for this effort, I needed to coordinate the activities of multiple departments within not only NHS, but also coordinate those activities with a number of other organizations, like BCBSND, BCBSWY, IAMCD, CoreLink, and the software vendor. I was responsible for:

- Working primarily with the NHS EDI Team and TIBCO, the 3<sup>rd</sup> party software vendor, to develop the project plan that would encompass the efforts of 6 separate business entities and multiple departments within those business entities.
- Working within the EPMO department of NMIC (the parent company) and helping to coordinate the use of resources that were working on several federally demanded projects, like the Affordable Care Act (PPACA or Obama Care), Health Insurance Exchange (HIX), and the newly acquired contract for Jurisdiction E of CMS.
- Working on the design, procurement, and installation of a significant infrastructure that transcended four separate environments within their SDLC model.
- Defining, and then communicating the processes that would connect that infrastructure to various internal platforms including a mainframe and various external sources including the Blue Exchange.
- The research, design, and implementation of a multi-company, multi-departmental claims processing testing effort that included issue tracking, triage, resolution (break-fix), and retesting.
- The successful deployment of that solution into production
- The support network for that solution, thereafter.

### Provider Web Portal Project

I was also asked to take over the project management of a Provider Portal Project which used the Agile development methodology and Jira to manage, track, and report on its progress. This portal was used to register providers and test the validity of their electronic claims submissions.

Secondary Clients:      Noridian Healthcare Solutions  
                                 Blue Cross Blue Shield of North Dakota  
                                 Blue Cross Blue Shield of Wyoming  
                                 Blue Cross Blue Shield of Nebraska  
                                 Iowa Medicaid  
                                 Centers for Medicare and Medicaid Services

## 2012-2013 Government Employees Health Association (GEHA) - Business Analyst / Report Designer

### Facets Conversion/Implementation Project (v5.01)

The client was moving to TriZetto's Facets V5.01 application after using its predecessor, Erisco's Claim Facts, for a number of years and wanted to duplicate a number of reports they had become accustomed to using in their daily operations. The implementation included the development of multiple report technical specification documents, including Story Cards and the associated SQL for each report utilizing both the Facets data model and the HPXR data model, after performing the necessary business analysis to determine the needs of the business owners that would be using those reports in the daily operation of their respective departments.

- Worked with the Business Owners and Subject Matter Experts (SMEs) to develop the report design documents used by the offshore team to develop the reports.
- Since most of the reports were duplications of the existing reports that GEHA used with their existing Erisco Claim Facts system, the design documents included both a current state and future state definition and comparison.
- Also created the Structured Query Language (SQL) used to generate the data used in the report.
- Since the reports were designed to run from the hpXr Data Mart used in conjunction with the Facets application and database, the SQL generated included both a Facets version and an hpXr version.

## 2011-2012 MED3000 - Technical Lead / Web Developer

### Facets CWS Web Portal Upgrade Project (v4.41-4.61)

#### Florida CMS Web Portal Implementation Project

The client wanted to deploy TriZetto's WebSphere-based CWS Web Portal to 5 separate environments for 3 separate customers, including the State of Florida's Children's Medical Services, and perform custom modifications, specific to each customer, to each web portal. The web portal was used by providers to review claims history, claims payment history, and to submit authorization for services by another provider. The pre-authorizations impacted the claims processing activities and payment of those claims. The modifications involved Java Server Pages, JavaScript, HTML, CSS, MS SQL stored procedures, Web Services, Windows script command files, and WebSphere configuration changes. Some of the modifications made to the CWS web portal were in concert with C# extensions made to the Facets GUI application. All modifications included the creation of supporting documentation and storing all file modifications within the TFS source code repository.

- Worked with the Development Team to develop the modifications to the TriZetto's standard CWS web portal to address the specific needs of each of the client's customers.
- Installed the CWS web portal and supporting software on the associated SQL Server Database Servers and Facets Application Servers in each of 5 separate environments (15 separate servers).
- Created documentation that defined the step-by-step process for performing those installations in case the client needed to install additional environments. This led to a standardized installation process and a standardized deployment.
- Created a standard directory structure and supporting command files to start, stop, and monitor the operation of the web portal and supporting software.

## 2010-2011 HealthNow of New York - Environment Manager

### Facets Upgrade Project (v4.41-4.71)

The client, Blue Cross Blue Shield of Western New York and Blue Cross Blue Shield of Northeastern New York dba HealthNow of New York wanted to upgrade its TriZetto Facets 4.41 application to the 4.71 version and upgrade its ITS Blues Association application to 11.2 on the same weekend. They also wanted to perform this upgrade in a more structured and controlled testing environment that followed a very strict SDLC model and they wanted to do it using the newest testing methods and tools. In order to accomplish all of this, additional development and test environments and their associated support systems needed to be constructed along with the installation of a number of development tools, testing tools, and a variety of additional applications to support the initiative. The multiple development environments along with multiple test environments were established for this upgrade which allowed the execution of multiple parallel development efforts, as well as QA Testing, User Acceptance Testing, and Performance Testing.

- Worked with Project Teams to gather specific project details and requirements associated with proposed environments and/or changes to existing environments
- Assisted in preparing environment project plans with schedule, budget and resources
- Coordinated the completion of the necessary activities and tasks with technical teams based on approved project plans
- Defined SLAs for environment support and maintenance
- Established and executed standards to maintain integrity and productivity of environment
- Reviewed/approved proposed coding and/or data changes to assigned environment based on defined entry/exit criteria and SLAs
- Reviewed/approved proposed application and/or infrastructure changes to each environment
- Implemented and maintained environment management process
- Oversaw environment management risks and mitigation strategies
- Maintained log of environment infrastructure / applications
- Confirmed compatibility of integrated application versions and infrastructure
- Facilitated environment update analysis discussions
- Served as an escalation point for environment issues
- Acted as a liaison with business and IT support teams

Secondary Clients:      Blue Cross Blue Shield of Western New York  
                                     Blue Cross Blue Shield of Northeastern New York

## 2010-2010 Western & Southern Financial Life - Technical Analyst

### Facets Conversion/Implementation Project (V4.51)

The client wanted to migrate from its legacy system, Erisco's Claim Facts, to TriZetto's Facets 4.51 application since Claim Facts was no longer going to be supported. Unlike most major health plan organizations that use Facets, Western & Southern Financial Life (WSFL) was primarily a life insurance company that did not pursue external health plan clients or members. They used this software to simply provide health plan coverage to all of their employees, spouses, and dependents.

- Worked with the Interface Team in identifying gaps in the multiple interfaces that were developed for communicating between third-party trading partners, clearinghouses, and other external business entities that were responsible for submitting claims to the system.
- Created an automated utility for comparing the contents of each interface file with a "golden" copy. The row by row and column-by-column comparison helped confirm whether or not the interface was paying the claim properly and whether or not the interface was ready for production.
- Worked with the Reporting Team in developing templates to be used in creating a "standard" look to all of the Crystal Reports developed for the project.

## 2007-2010 Blue Shield of California - Architect, Environment Governance Lead, SCRUM Project Manager

### Facets Implementation Project (v4.61)

The client wanted to migrate from its legacy system to TriZetto's Facets 4.61 application to take advantage of the flexibility that change would provide to their core business processes and their ability to respond to the ever-changing customer needs. Although the initial plan was to migrate just the core business processes, the scope was expanded to include the revamping and modernization of BSC's major infrastructure as well. This included the implementation of an Enterprise Service Bus that would insulate changes made to external systems having significant impact on internal systems or processes. The project also involved the combined efforts and coordination of activities between not only BSC and TriZetto, but also two additional vendor partners, EDS and CTS, who were included in the development and deployment of this very complex and integrated system.

- Identified the need for environment rationalization and the need to create an authoritative body within Blue Shield that could help control the proliferation of environments that would occur without that governing body.
- Defined and helped create three separate governing bodies designed to rationalize, analyze, scrutinize, approve or disapprove the creation of new environments for the Shield Advance program.
- Helped select the members of the three governing bodies so that appropriate membership from all business and technical areas of the company would be represented.
- As the appointed meeting facilitator of the Environment Governance Board, helped its membership make intelligent business decisions by analyzing the cost and ROI associated with each requested environment. The EGB was the executive level governing body that had the budgetary approval authority to approve the expenditure of funds needed for the addition of new environments and subsystems.
- As the appointed meeting facilitator of the Environment Management Team, as well, was responsible for developing the weekly agendas, organizing the topic presentations, helping the membership rationalize, analyze, scrutinize, and vote on the addition of new requested environments, and then tabulate and record the votes collected and publish the results.
- Responsible for streamlining the environment requirements gathering process. Defined the process, created the documents to collect the data, and created the template documents used to solicit the request for environment approval.
- Worked with, instructed, and helped multiple teams define and gather their business and technical requirements so that the system architects could properly design and size the solution systems that would be used by these teams.
- Brought a great deal of Facets knowledge and experience to the table in every discussion and meeting held within the Shield Advance program allowing BSC to avoid some of the pitfalls experienced by other clients.
- Developed a project plan that identified the tasks, activities, deliverables, and milestones pertaining to the work of the Software Configuration & Release Management (SCRUM) Team and managed that team of 10 to complete them on time.
- Interconnected the SCRUM project plan with the other teams projects plans through a defined set of "Gives" and "Gets" to and from each other's plans.
- Identified risks and issues associated with inter-team handoffs, delays, workarounds, etc. that would impact the SCRUM Team's ability to complete their tasks on time and within budget.
- Conducted weekly meetings with team members to review progress toward the completion of each assigned task.
- In the initial stages of the project, helped to define the system architecture of the Facets application and reporting platforms, the Informatica data warehouse platform, the enterprise service bus, and the network storage systems used.

## 2007-2007 APS Healthcare - Technical Lead / QA Manager / Co-Project Manager

### Facets Upgrade Project (v4.01-4.31)

The client was a four million-member mental health insurer that wanted to upgrade its version 2.96 Facets application and database to version 4.01 and then from 4.01 to 4.31 in a single weekend. The physical conversion time was originally expected to take almost 90 hours. After analyzing the list of tables to be converted, the order in which they were to be converted, the database configuration, and server configuration, recommendations and subsequent adjustments were made that allowed the double conversion to version 4.31 to occur in less than 30 hours. Being a hosted client, the upgrade required the involvement and coordination of activities between the client and TriZetto's hosting center in Denver, Colorado. Because of the increased functionality built-in to the new version, the upgrade required the redefinition of multiple Customer Service business processes and workflows, the incorporation of new EDI forms processed through the HIPAA Gateway, and the remediation of several custom

applications, interfaces, extracts, DTS packages, and reports. The project required not only technical leadership overseeing the upgrade of custom reports, interfaces, DTS packages, and custom applications, but also, due to the untimely exit of the project manager, required the assimilation of project management leadership, as well.

- Provide technical leadership on the Facets conversion process, including the automation and execution of over 200 custom SQL scripts that extracted data from both systems, compared the results, and provided feedback to the business teams of the outcome.
- Re-organize and complete the project plan
- Provide technical leadership on the testing of business processes and scenarios that would validate the effective conversion of the data.
- Coordinate the activities of 10 business areas (Benefits, Claims, Customer Service, EDI, Finance, Manual Eligibility, Member Referral, Provider Networks and Pricing, Provider Operations, Reporting) with the activities of the IT department.
- Oversee the QA of all data, interfaces, and processes used in the new version.
- Work with the technical staff at the hosting center to resolve any technical issues that arose from the upgrade process.
- Provide technical leadership on the conversion of reports, interfaces, DTS packages, and custom applications.
- Help define, organize, schedule, and coordinate all activities involved in performing a Parallel Test of the old and new systems, in performing the Claims Adjudication Process, System Integration Tests, and the End to End Tests of all jobs, interfaces, reports, and output.
- Provide technical leadership to the client's staff regarding the installation, configuration, and integration of the non-hosted Letter Server.
- Provide technical leadership to the reporting staff regarding the use of XML output files and the incorporation of same into their reporting process.

## 2006-2007 Blue Cross Blue Shield of Louisiana - Technical Lead / Project Manager

### Facets Implementation Project (v4.11)

After converting approximately 50,000 HMO members in "Wave 1" of this activity, the client continued the "Wave 2" activity by converting about 400,000 PPO members from their legacy system to Facets version 4.11 using a monthly installment approach of converting 1/12th of the membership per month based on anniversary date. This conversion included not only the transfer of basic data like membership, groups, billing, eligibility, claims history, and provider information, but also included the creation of over 35 interfaces, 200 reports, 6 custom applications, additional tables and table content in their local data mart, and additional operational utilities to maintain and control the additional functionality provided. The client also requested help in analyzing various aspects of their automated batch schedule to determine the best configuration for current claims volume and the best configuration for the anticipated claims volume after completing the final phase of the "Wave 2" membership conversion.

- Provide technical leadership on the development and implementation of over 35 interfaces.
- Provide technical leadership on the development and implementation of over 200 reports.
- Provide technical leadership on the development and implementation of 6 custom applications.
- Provide technical leadership on the configuration and performance tuning of the database, servers, and batch schedule.
- Provide technical leadership on the design and development of a data warehouse, data mart, and data store and the automated population of same via the interfaces.
- Provide technical leadership throughout the SIT Testing effort and on through the Volume and Stress Testing effort.

## 2006-2006 OSF Healthcare - Technical Lead

### Facets Upgrade Project (v2.96 -> 4.21)

The client wanted to upgrade its version 2.96 Facets database to version 4.11 and then from 4.11 to 4.21 in a single weekend. The physical conversion time alone was expected to be in excess of 25 hours. After analyzing the list of tables to be converted, the order in which they were to be converted, the database configuration, and server configuration, recommendations and subsequent adjustments were made that allowed the double conversion to version 4.21 to occur within a 14 hour timeframe. The client also wanted to implement an ASO reinsurance Data Mart that would extract data from that Facets database and two external data sources, integrate them into a single

Data Mart, and produce automated reports that would be available via a SharePoint Portal and SQL Server Reporting Services. This was a fast-track project that included discovery, requirements definition, design, development, testing, implementation, and rollout into production in a 45 day time period.

- Provide technical leadership on the Facets conversion process and the automation thereof.
- Provide technical leadership on the configuration and performance tuning of the database.
- Provide technical leadership on the design and development of a data warehouse, data mart, and data store and the automated population of same.

## **2004-2006 TriZetto Hosting Center - Blue Cross Blue Shield of Michigan - Technical Lead**

### **Facets Data Conversion & Implementation Project**

The client wanted to add hundreds of customized reports and letters to the standard Facets application configuration. Each report needed to be capable of being launched separately or combined with several others on a predetermined schedule. The task required a complete analysis and understanding of the two operating system platforms and 10 different servers for each of five separate environments. It necessitated the development and use of a code generator that allowed for the continued refinement of over 1500 scripts in those five environments. This positively affected the code promotion process, reducing the error rate from 28% of the problems to less than 2% of the problems. This also prevented an \$18M penalty from being levied because it was the most significant reason that the client was able to meet its targeted delivery date with its customer.

Provided technical leadership and consultation to Blue Cross Blue Shield of Michigan, on behalf of The TriZetto Group, for the ongoing support of the technical infrastructure and supporting scripting system (dubbed Launchware) that provided standardization, environment independence, multi-server communication, and task-launching capabilities to 10 separate Windows and UNIX servers in each environment.

- Provide technical leadership on the upgrade and implementation of two major application servers.
- Provide technical leadership on the reconfiguration and implementation of Launchware on the two new application servers and its incorporation into a Facets 4.11 environment from 2.96
- Provide technical leadership on the redesign, development, and consolidation of three separate applications into one.
- System Architect & Designer of LaunchWare.
- Designer and Developer of the Automation of the Bill Print Solution.
- TierMed ftp and VPN communication subsystem.
- Business Objects Archive and Purge Automation
- Data Integrator Parameter Table Standardization and Automated Update
- Automated Archive File Purge on ALL systems
- LaunchWare Notification Subsystem Development & Implementation
- LaunchWare Runstats Gathering Development & Implementation
- Development, Implementation, & Production Code Promotion
- Development, Implementation, & Production Troubleshooting & Support
- Scripting Technical Issue Management
- UNIX & Windows Scripting Development & Maintenance
- UNIX & Windows Scripting Automated Code Generator
- UNIX & Windows PERL Scripts
- UNIX & Windows ftp communication and ftp scripts
- Sybase SQL and Stored Procedures
- Windows VBA and XML
- Creation and Continued Revision of Trizetto Coding Standards
- Creation and Revision of Transition Documentation

## **2005-2005 TriZetto Hosting Center - United Health Care of Colorado - Technical Lead**

### **Facets Database Split Project**

Provided technical leadership and consultation to United Health Care, on behalf of The Trizetto Group, for the creation of the technical and functional design documents involving the separation of a production database into two. The process replicated some of the parent-child relational data where necessary while filtering other

unnecessary data from the target. This separation included membership data, group data, provider data, claims data, and system/security data.

- Provide technical leadership on the separation of the production database into two production databases.
- Provide expertise and step-by-step details to the functional design of the separation.

## 2005-2005 TriZetto Hosting Center - Caresource Indiana - Technical Lead

### Facets Data Conversion / ETL Project

The client was moving from a legacy system to Facets and needed to convert its legacy data to a format that could be loaded into Facets. This required the analysis of the legacy data, the relationships between the multiple tables from which the data was to be extracted, and the reassembly of that data for insertion into the Facets relational data model.

- Automate loading of relational data from flat files into an RDBMS.
- Automate the filtering of the data into target database tables
- Automate the creation of SQL code that will insert the filtered data into a Facets 2.96 database.

## 2004-2004 TriZetto Hosting Center - EC Gateway Project - Technical Lead

### EC Gateway Script Duplication System Project

The creation of EC Gateway scripts was done differently by just about everyone responsible for developing them. The purpose of these scripts was to properly route inbound claims to the appropriate destination for further edits or claims adjudication. TriZetto management asked for a system that would reduce the hours spent in producing a script, as well as a system that would provide some standardization in the code creation process. It was initially stated that developers were having to spend an inordinate amount of time creating and then, debugging the scripts they created for moving medical record documents around from one server to the next. The system I developed would not only create the script itself, but would also create the supporting files including all of the Word documents used in the Code Review process, the Visio flow diagrams, the code listings, the log listings, the trace files, the test files, and the test files directory hierarchy. What used to take a week or more to complete, was now capable of being done in hours.

- Designed and built the EC Gateway Script Duplication System from the ground up.
- Conducted individual and classroom training sessions to transfer the knowledge to the local full-time and contracted staff members.

## 2003-2003 TriZetto Hosting Center - United Health Care of Colorado - Technical Lead

### Facets Database Merge Project

The client wanted to combine an active Facets production database (Life) with a new Facets configuration database containing similar information but for a totally separate line of business (Dental). The task required a complete analysis of the two databases, the tables in common, and the hierarchical structure of the tables that would need to be merged to insure referential integrity. Data needed to be extracted from the Dental database, and then used as source data for constructing SQL statements for inserting the Dental data into the Life database. These insertions had to be performed in top-down order; using existing Facets "INSERT" stored procedures and the newly created SQL statements. The result was a fully relational Sybase database that contained both Life and Dental membership data, group data, provider data, claims data, and system/security data. Using Perl as the main programming language, the process was refined, streamlined, and optimized to reduce its initial execution time to extract and reinsert almost 8 million records from 18+ hours to approximately 3 hours.

- Developed a PERL common function library to eliminate the duplicate code that was repeated throughout the existing scripts prior to my arrival.
- Utilized PERL as an automated code creation engine for creating other PERL scripts, SQL statements, and SQL stored procedures.

- Designed and developed a spreadsheet that identified every field within every Facets table, each table's hierarchical level within the database schema, each table's dependency on foreign key fields and the tables associated with those key fields, and, in addition to several other pieces of information, included a (Y/N) selection criteria column that allowed one to choose whether or not a table was to be included in the merge process. After the selection process, an automated procedure was executed to create a "top-down" list of tables stored in a data file that would then be used by the PERL scripts.
- Designed and developed an automated logging and error reporting system that not only archived process output, kept track of and tabulated individual record and error counts, but also supplied its output as input to an automated Audit report that reconciled the individual record counts on every table merged.
- Identifying the software and hardware needed to run the merge process internally or remotely without negatively impacting any other internal processes.

## 2001-2002 Blue Cross Blue Shield of Missouri - Technical Lead / Project Manager

### Common Function Library Project

The client was moving from a mainframe IMS system platform to an HP/UX platform. Data needed to be extracted from the IMS database, ftp'ed to the HP/UX platform, and inserted into a fully relational Sybase database. Prior to my arrival on the project each UNIX Bourne and Korn shell script and SQL stored procedure used in the transfer and conversion process had its own logic, style, format, logging mechanism, and error reporting logic. In addition, each new script continued to be created independent of any code previously created.

- Developed a UNIX common function library to eliminate the duplicate code that was prevalent throughout the existing scripts prior to my arrival. (over 3300 lines of code)
- Developed a series of templates that other developers could use in order to take maximum advantage of the common library and reduce subsequent development time (approximately 1000 lines of code).
- Designed and developed an automated logging and error reporting system that became a subcomponent in all subsequent programs written.
- The automated logging system automatically emailed a predetermined list of recipients the program's logged output, whether successful or not.
- The automated error reporting system trapped and identified errors in the conversion process and notified a predetermined list of support personnel via pager that an error had occurred.
- The error reporting system made it easy for the users to quickly correct inappropriate data BEFORE it was inserted into the application.

### Automated Group Conversion Project

The client implemented Facets 2.95. They required assistance in transferring multiple lines of business data from their mainframe IMS system into a Sybase 12.0 database on an HP/UX platform. In addition, a number of modifications and customizations to the standard Facets application were identified and completed to meet their business needs.

- Using the common function library described above, designed and developed a monthly automated process that would accept data ftp'ed from the mainframe, convert it, and insert it into a Sybase database, thereby making it available to an online UNIX-based application (over 29,000 lines of code).
- This monthly process would, in addition to updating the data in Sybase, would extract a subset of the data and send it back to the mainframe for further processing.
- Provide support for the functional and technical teams involved in the conversion project.

### Identification Card Creation Project

The client implemented Facets 2.95. After transferring specific lines of business data from their mainframe IMS system into a Sybase 12.0 database on an HP/UX platform, it was necessary to recreate an automated process for generating ID cards for members of those lines.

- Helped define the logical and physical data models for the extension tables used in the project.
- Using the common function library described above, designed and developed an automated daily batch process that would extract the necessary information from multiple sources so that a secondary application, responsible for creating the BCBSMO group ID cards, could be used (over 10,000 lines of code).
- Once the \*data subset was created, this monthly process would send it back to the mainframe for further processing by a secondary application.

### **WARP Project**

The client implemented Facets 2.95. In the middle of that activity, WellPoint negotiated a merger of the two companies. Some of the legacy data and most of the newly converted data needed to be reformatted and retransmitted to WellPoint for inclusion in their accounting system. Provisions had to be made to incorporate more of the converted data, rather than the legacy data, as that converted data became available.

- Developed the initial load process that extracted specific data from the existing business in the Blue Cross Blue Shield system, reorganized and reformatted it, and reported it back to the newly merged owner of the company, WellPoint.
- Developed an automated daily process that extracted any new business from the Blue Cross Blue Shield system, reorganized and reformatted it, and then sent it back to the newly merged owner of the company, WellPoint (over 11,000 lines of code).
- Provided technical assistance and problem solving abilities to other technical team members.

### **Web-based COM+ Object ftp Project**

The client was developing a new Windows-based intranet/internet website that would allow clients to download important claims documents directly to/from BCBSMO Web Servers. The HTML employed ASP, JavaScript, XML, XSLT, and ODBC connectivity to an Oracle 8i database to control client access and a special directory connected to a UNIX platform to store the selected documents to be downloaded.

- Designed, developed, and tested an ftp COM+ object that could be called by intranet and internet web pages to transfer files from Blue Cross Blue Shield to any of their clients' computers (about 1000 lines of code).
- The COM+ object would allow direct transfer as well as transfers through a remote Proxy Server.