



Project Profile: Flexible Rules Server

Business Situation

The Client, a prominent insurance processing firm wanted to codify and document the rules for Auto, Workers' Comp and Group Health Insurance for each State and PPO network. The representation of the rules and edits should be flexible and versatile. Rules should be English like making them intuitive and easy to use, and not require additional programming and technology resources to maintain them. Develop a rules server and connect with other claim management and processing systems.

The Role of Masfin Consulting

Our response to this challenge was.

- Developed a representation for the rules and categorized them by jurisdictions, client specifics, attributes like surgery, anesthesia, radiology and rule modalities - each with a set of conditions and qualifiers.
- For ease and generality, the rules were maintained in a spreadsheet linked to an ODBC database.
- These rules are represented as a database of algebraic expressions, allowing the Rules specialists to administer the rules.
- Develop a run-time expression parser in VB to process the English like rules representation Map each variable and operator to classes and sub-routines for Rules evaluation in real-time.

Benefits of the solution

The main benefits of the solution for the client were:

- ❑ Efficient representation and quantification for jurisdictional rules and edits for auto, WC and group health claims.
- ❑ HIPAA compliant documentation and easy maintenance of the State and PPO rules and edits
- ❑ Flexible and versatile rules server that expresses rules dynamically as formulae and allows for pre-loading of rules.
- ❑ Cost savings since expensive technology resources are not required to maintain rules.
- ❑ Real-time rules evaluation and computation of reimbursement and savings.
- ❑ Ability to use the rules server in bill-review, claims management and work-flow applications.

Technology used

- ❑ VB, XML, ASP, Power-Designer, MS-SQL Server