

Ratabase® – Unparalleled Performance and Scalability

THE IMPORTANCE OF SCALABILITY

“Scalable” has become a popular buzzword in the hardware and software industry, with many companies claiming their solutions can adapt to meet future increased demands. Ultimately, system scalability is the capability of software to handle an ever increasing amount of work without requiring extensive and expensive modifications, or even worse, having to replace the software altogether. Proven scalability is critical to an organization because it means that it can invest in a system with confidence, knowing the system will grow along with the organization.

As insurance companies begin to refocus on growth, rather than cost cutting and other bottom line measures, executives are looking to add new products and services and expand into new markets. Shouldn't you have a product that can support your future growth and not inhibit your growth goals?

What increased demands, mandated by these new growth strategies, are forcing systems to become scalable? Insurance carriers have identified three critical scalability dimensions:

Organizational scalability – the ability to increase the number of users as the rating product is rolled out to additional distribution channels

Load scalability – the ability to support policies with a large number of rating items—vehicles, locations, class codes, coverages, etc.

Functional scalability – the ability to modify the pricing rates and rules of an insurance product quickly and with minimal effort

Ratabase addresses organizational scalability

CGI appreciates that there are two separate and distinct users of Ratabase—business users creating the rating product on the development side and end users rating policies for quotes and policy transactions. On the development side, Ratabase Product Builder, the business rate and rule configuration toolset, has been architected to allow access to any number of concurrent development users with no specified limit.

In addition, Product Builder is designed in such a way that each user can work on various aspects of the database simultaneously. Security locks an algorithm or rate table down to the individual filing level. This feature allows multiple users to work within the same states' algorithms and tables while still protecting them from being overwritten. As your pricing model evolves to meet the challenges of industry changes or the consolidation of multiple in-house systems and platforms, you can have confidence that Ratabase will support your accessibility needs.



GROWING WITH RATABASE

Ratabase® is the industry's leading insurance rating and underwriting software. Ratabase's proven functionality, scalability and flexible technology empowers business users from more than 100 carriers to quickly deploy extremely complex rating programs and product segmentation in a fraction of the time and cost of other solutions. These 100 carriers span the spectrum of the insurance industry, making up the largest install base of any external rating engine.

Ratabase can remove the shackles of your current systems' limitations and equip actuaries and pricing groups with powerful tools to assess risks and calculate premiums, allowing you to capitalize on new opportunities and regulatory changes by releasing innovative products ahead of your competition.

On the production side, Ratabase is currently being used in a broad spectrum of scenarios:

- Very large-scale Tier 1 implementations where thousands of quotes are processed hourly from thousands of users
- Smaller regional carriers that process for 4,000 agents simultaneously

There are no fixed or pre-set limits within the runtime production engine, and it has been implemented into transaction systems running internal to organizations, as well as on the Internet supporting thousands of concurrent users. The engine is implemented as a stateless shared object/library and accesses the database in read-only mode. Based on carrier and insurance product requirements, multiple instances of the production rating engine can be deployed and will scale to the resources available (memory, CPU).

Ratabase addresses load scalability

Ratabase is deployed by insurance carriers in environments that require high throughput and consistent availability. Large Tier 1 insurance companies are processing policies in production through Ratabase with thousands of vehicles, locations or class codes.

The average insurance company needs to support a wide range of policy sizes, from a single automobile personal auto policy to a commercial package policy covering thousands of locations. Ratabase can provide the flexibility to handle these disparate policy sizes and all policy sizes in between.

For large policies, parallel production runs are simple to set up. The production rating engine can be easily scaled out by distributing the workload across multiple instances of the engine and data. The engine accesses the data in read-only mode at runtime and is stateless; facilitating workload distribution as no WIP data must be maintained or synchronized. To manage the load balancing, customers often implement appliances (such as an F5 appliance) to route the rating requests to the appropriate server.

The rating engine is optimized for the OS and DBMS in which it is implemented. CGI is in the midst of completing performance evaluations for each of the supported platforms and recently completed testing for the first environment. The results were as follows:

Number of Processes (on 8 core Customer server)	Extrapolated policies / hour (Research)	Extrapolated policies / hour (full rating)
2	460,000	960,000
4	920,000	1,920,000
7	1,610,000	3,360,000
8	1,840,000	3,840,000

WHY RATABASE?

Ratabase provides you competitive advantages that will enable your company to react nimbly in an increasingly aggressive marketplace. With its powerful configuration toolset and proven growth capabilities, Ratabase can provide you the agility you need to become an industry leader, rather than a follower. Create unique rating programs using complex calculations and multi-variant tables, open up web rating to your agents and brokers, and/or aggressively pursue large commercial risks, all with the confidence that your back end rating system is there to support you into the future.

For more information about CGI, visit www.cgi.com or email us at info@cgi.com.

The production rating engine proved to be scalable and stable in this environment with no degradation of performance. The range in timings for transactions is the result of the complexity of the transactions and algorithms required to complete the testing.

Ratabase addresses functional scalability

The Product Builder component is a robust toolset through which your business experts develop rating products to deploy into production. Providing full cut, copy and paste functionality, along with context buttons, a user can create new programs or modify existing programs in a matter of minutes. New data can be added to tables either manually or by using the Ratabase import/export functionality via MS Excel. The import/export functionality can be used in two ways:

- Allowing for the import of data from other systems, which expedites the creation of new tables
- Facilitating table changes simply by applying an Excel formula to the table data (e.g., a 2% increase to all rates)

The Product Builder is also equipped with industry unique functionality to assist the business user in leveraging data within the Ratabase database. Some of these unique features include the ability to copy or share tables and formulas in individual or batch modes, date change utilities, testing facilities and full reporting functions. Filing Manager gives the Ratabase rating expert the ability to manage rate filings through each stage of the data maintenance lifecycle, from creation through deployment.

After testing, the business user invokes the Ratabase Data Distributor to prepare the rate change for distribution to the test/QA and/or production environments. Ratabase Data Distributor utilities are provided in the production environment, which allow the carrier to define the process of loading to adhere to its system security processes for rate change promotion. Various levels of rating data developed in your Product Builder database can be extracted and loaded into your production database.

The Ratabase Data Distributor process allows the user to choose the data to be distributed by company, line of business or region (state), and also down to the individual rule and rate table level. Once the data is extracted from the Ratabase Product Builder environment, it can be loaded and replicated into multiple production databases, depending on your application architecture's needs.

About CGI Ratabase

CGI Ratabase is the industry's leading insurance rating and underwriting software. Its proven functionality, scalability and flexible technology empowers business users at more than 100 carriers to quickly deploy extremely complex rating programs and product segmentation in a fraction of the time and at fraction of the costs of other solutions.

ABOUT CGI

With 69,000 professionals operating in 400 offices and 40 countries, CGI fosters local accountability for client success while bringing global delivery capabilities to clients' front doors. Founded in 1976, CGI applies a disciplined delivery approach that has achieved an industry-leading track record of on-time, on-budget projects. Our high-quality business consulting, systems integration and outsourcing services help clients leverage current investments while adopting new technology and business strategies that achieve top and bottom line results. As a demonstration of our commitment, our average client satisfaction score for the past 10 years has measured consistently higher than 9 out of 10.