

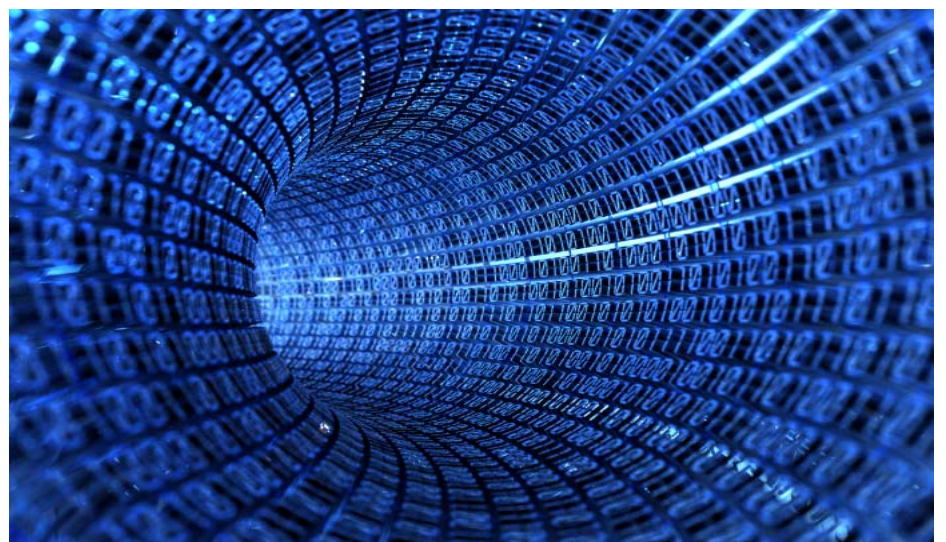
Progressive Casualty Insurance Company selects ATERAS to automate field expansion using DB-Shuttle™

Overview

- ✓ **Challenge:**
Expand field lengths and change data types to meet business goals and to comply with government mandates without disrupting business

- ✓ **Solution:**
ATERAS DB-Shuttle™
Enterprise Field Change Manager, patent pending

- ✓ **Key Benefits:**
 - Instant visibility into each field scheduled for expansion, its use and how it must be changed
 - Automated impact and cross-field analysis
 - Automated application of thousands of changes that are consistent
 - Program changes documented with change log and date/time information
 - No manual changes applied to any code
 - Increased flexibility for the future



DB-Shuttle reaches across your enterprise, identifies every line of code affected by a field length or field type change, and then makes the required code changes.

Progressive Casualty Insurance Company (Progressive), headquartered in Mayfield Village, Ohio, is the third largest auto insurance group in the USA. In business since 1937, Progressive allows consumers to purchase their policies online, over the phone or via an agent.

Progressive was the first to provide 24/7 customer and claims service and the first to offer consumers the opportunity to buy their auto insurance policies online.

To accommodate the ever-increasing number of Progressive policyholders and to meet the business needs for expanded status, form and address fields, Progressive faced a major project

to expand more than 30 database columns along with all related application code.

Progressive chose ATERAS to automate the massive analysis and change process. ATERAS' Enterprise Field Change Manager reduces the risk associated with mass database and application change, reduces the timeframe and cost of enterprise-wide field-level changes, and ensures a complete, well-defined and repeatable solution.

To ensure its position as an industry leader for years to come, Progressive is using ATERAS and DB-Shuttle to complete the massive application and database expansion project involving more than 14 million lines of code.



Leading Requirement: Automated Expansion

As the teams at Progressive faced the challenge of expanding the field sizes and types of more than 30 database columns, they knew that the level of project success would be based upon the level of automation used in identifying and making the changes. They looked to ATERAS to define the process strategy and to provide the level of automation needed for this massive set of application and database changes.

ATERAS had already proven their project and automation capabilities with Progressive during the conversion of their Core Claims database and applications from IDMS to DB2 in 2006. ATERAS was the natural choice to ensure yet another major success in the new field expansion project.

As with the IDMS database and application conversion, ATERAS would use DB-Shuttle to perform the impact analysis, to provide the

rules for change across the Progressive enterprise, and to apply all application and data changes. DB-Shuttle's new Enterprise Field Change Manager ensures fast, efficient and effective processing for system-wide impact analysis and code change.

With DB-Shuttle, Enterprise Field Changes are applied in three automated phases:

1. Specification of Change
2. Impact Analysis
3. Conversion

Specification of Change

Progressive's field expansion requirements included not only expansion of field lengths, but also changes in field data types from numeric to alphanumeric. Application logic and data field definitions both require change to accommodate processing using fields that are changed this way.

Several major IT applications in the Progressive production environment use the fields that are changing. These applications consist of almost 10,000 programs and shared record definitions. A single-phase approach would allow all changes to be made and tested as a single process. A multi-phase approach would require that bridges be constructed and de-constructed between the various applications, or that data duplication or replication be implemented to accommodate phased implementation of the data and application changes.

Knowing that DB-Shuttle's level of automation provides the ability to make all of the changes across the 14 million lines of code within a matter of hours, Progressive determined that the fastest and lowest risk approach was the one that required one-time changes to the code and fewer testing iterations and scenarios.

The Progressive teams defined the origin of the data for each change, either a database column or a



With DB-Shuttle's Enterprise Field Change Manager, you can easily expand field definitions and change data types across your enterprise applications with confidence.

shared record definition. The ATERAS team then defined the target field lengths and data types for each of these in DB-Shuttle's Field Redefinition Workbench. These two pieces of information become DB-Shuttle's specification for change.

Impact Analysis

The 14 million lines of code that could be affected by the changes were collected and loaded into DB-Shuttle's database for the Impact Analysis and Conversion phases. The Change Specifications, which define the originating columns or fields that are changing and how they are changing, are also stored in DB-Shuttle's database. The collection of source code and the field Change Specifications provide the input to the Field Change Manager for the Impact Analysis.

During Progressive's Impact Analysis, the Field Change Manager analyzed each of the 14 million lines of code, marking each line of code that referenced any of the original columns or fields, adding additional fields to the change scope because of the business logic on the affected line of code, and adding group-level fields to the growing scope of change.

The Impact Analysis resulted in a complete account of the 60,000 lines of code affected by the Change Specifications, including which fields were affected on each line of code and why. Progressive also received a summary of the 2000 actual code change rules

that would be applied to each program or shared record layout across all applications.

Conversion

DB-Shuttle's Transporter Engine (which is also used for full language conversions) generated the modified programs and shared components using ATERAS' standard generation and delivery process.

The modified components were grouped by DB-Shuttle at delivery according to Progressive's naming standards for simpler introduction back into the Progressive configuration management system, and to allow multiple Progressive teams to easily identify requirements for QA and UA testing in various applications.

The new source code has been generated and verified by the Progressive teams. Integrated testing is beginning. If additional rule changes, field expansions or custom rules are identified during the testing phase, the Change Specification, Impact and Conversion steps will be repeated and any components affected by the revised rules will be re-delivered within a matter of hours.

Progressive's production change process is also unaffected by the mass change project -- no code freeze or retro-fits. The source code for any production changes made during the testing cycle will be collected and re-processed by DB-Shuttle to apply changes for the field expansion.

Conclusion

In all, more than 14 million lines of code were analyzed. Almost 2,000 rules were automatically generated to affect more than 54,000 lines of code in 3,828 programs. Every related reference to each expanded column or field was modified to accommodate the new field size and type.

Progressive is now positioned to continue the rapid expansion of its policyholder base for many years to come.



ATERAS has supported global enterprises for over 20 years offering state of the art services to our clients by modernizing legacy systems to the most current IT environment.

Please contact your ATERAS representative at 1-800-801-9005.

Visit ATERAS at: www.ateras.com



For more information about Progressive Casualty Insurance Company, visit:

www.progressive.com

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