

RowGen^{Version 2}

Safe Test Data in Real Formats

Product Summary

The Complete Test Data Solution

- Builds Large Volumes Quickly
- Maintains Referential Integrity
- Uses Existing Metadata
- Supports Business Logic



What Does RowGen Do?

RowGen synthesizes test records and files using both randomly generated values, and randomly selected field data from user supplied 'set' files. While generating these rows, the data can be transformed and formatted into:

- One or more detail and summary files or custom reports
- Named or unnamed pipes for subsequent processes
- Custom output procedures

RowGen preserves the primary/foreign key relationships in your data models, and leverages the metadata you have already defined for any number of application formats. RowGen also uses metadata repositories so you can share and re-use test data layouts and job specifications.

What Are the Benefits of RowGen?

RowGen is a high-volume generator of intelligent test data that can reduce the risk, effort, guesswork, and costs involved in complex test data synthesis. Designed with developers, DBAs, ETL architects, and compliance teams in mind, RowGen provides an easier way to generate test data that:

- Comply with privacy laws
- Preserve referential integrity
- Conform to your business rules
- Do not tax database resources
- Do not require complex programs
- Cut development and testing time/costs
- Undergo detail and summary transforms
- Scale across an enterprise data warehouse
- Leverage existing data models and file layouts
- Improve quality control via data realism and ranging
- Populate multiple targets simultaneously, including reports

Selected RowGen Uses

Database Population

RowGen can generate millions of rows of ordered test data for loading into referentially correct database tables. Records can be built in the format, size and layout that your RDBMS can load and process. It can parse DDL models and preserve the relationships between tables. By populating tables with realistic and pre-sorted data, you can build and test very large load, unload, and query scenarios quickly, reliably, and securely.

Application Development

RowGen can synthesize, transform, and format test data to meet the volume, range, and layout requirements of any program or prototype. By creating real-looking, intelligent test data, RowGen enables the simulation and stress testing of applications, making them more likely to work in production and less likely to depend on other development stages or on confidential data.

Format Sharing

With RowGen's powerful data transformation and formatting functions, test data targets can range from simple, single-field flat files to custom-formatted, detail and summary reports with user-defined headers, footers, HTML tags and variables. By building test data that populates desired file and report layouts, real formats can be outsourced, but not private content.

Benchmarking

Utilizing fast I/O techniques, RowGen can rapidly create massive columns of output records, and build multiple representative files at once, using your desired file layouts and value ranges. RowGen can rapidly build scaling data sets, enabling you to run a complete and consistent battery of tests against different software and hardware products, helping you find the most efficient processing configurations in production environments. Large test files are also required when benchmarking high-performance file management and data processing systems.

RowGen Operations

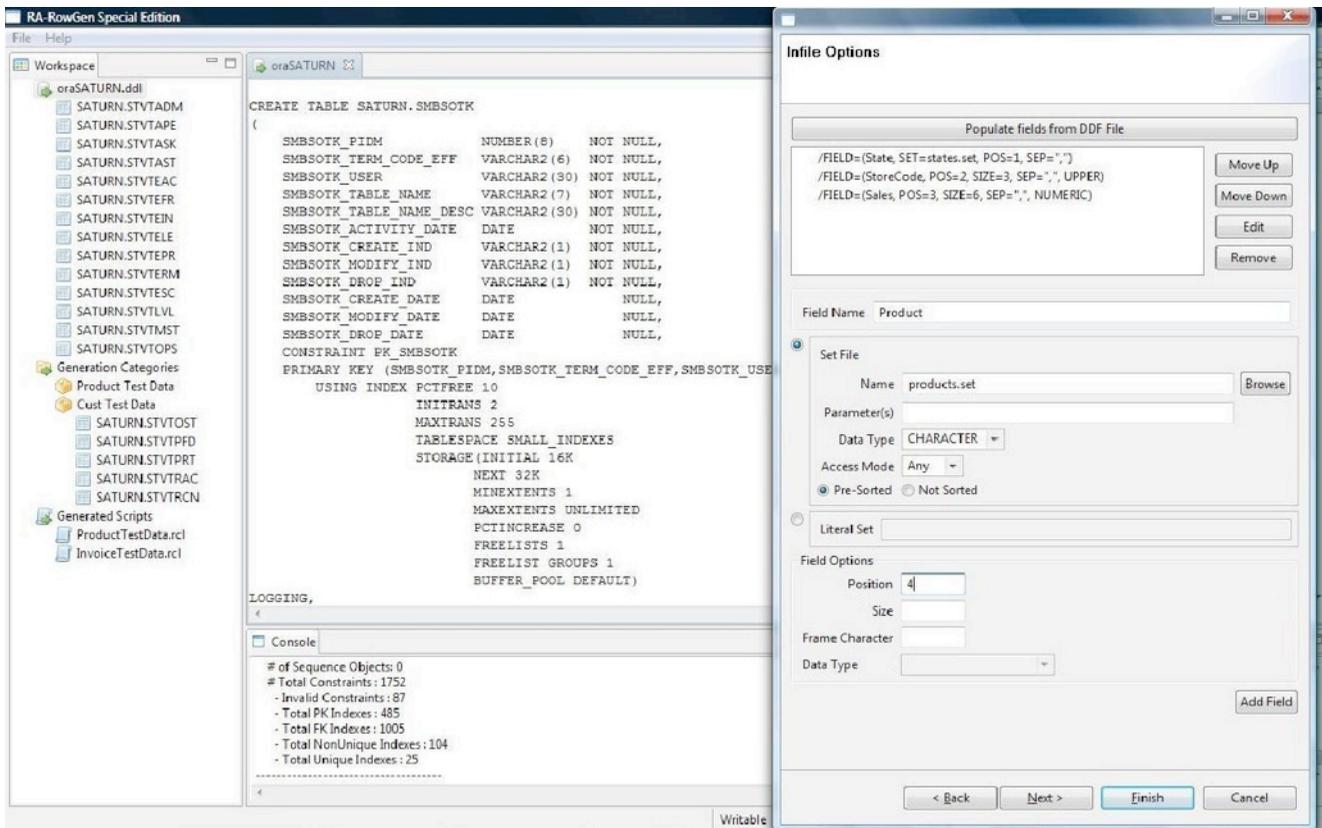
RowGen provides a fast and easy way to build multiple test data targets - all in different formats, and all at once. Through its integration with the Rapid Architectural Consolidation Engine (RapidACE), RowGen can quickly populate test files and tables for an entire enterprise data warehouse team. You can write RowGen Control Language (RCL) job scripts by hand, or create them using the RapidACE GUI for RowGen.

RowGen's Graphical User Interface

The RapidACE GUI for RowGen, RA-RowGen, automatically parses DDL models to create RowGen scripts that build structurally and referentially correct test data. RA-RowGen creates drag-and-drop categories with generic settings to handle multiple classes of tables, and then applies the script creation engine to the category. RA-RowGen also contains a scripting wizard that provides you with an easy mechanism to generate and create scripts for single structures.

RA-RowGen helps you to create test data for:

- Oracle
- Microsoft SQL Server
- Teradata
- IBM DB2 UDB
- Sybase
- Informatica
- MIMB-supported applications



The screenshot above illustrates two of the ways RA-RowGen can generate test data through RowGen scripts. The easy-to-use wizard automates RowGen script creation by directly reading DDL files from industry-leading databases. RowGen also allows you to specify the parameters of generated data using a point-and-click interface. Finally, all generated files can be further customized using the embedded text editor, providing full control over test data generation scripts.

Supported Platforms

- AIX (IBM I, p and zSeries)
- HP-UX (RISC and Itanium)
- Linux (x86, Itanium, IBM POWER & z)
- Mac OS® X
- Solaris (SPARC and Intel)
- Other UNIX (e.g. BSD, SINIX, Tru64)
- Windows® (NT/XP, 2003 Server, Vista)

Supported Metadata

- 3NF DDL and compliant data vaults
- COBOL copybooks
- CoSort (SortCL) data definition files (.ddf)
- LDIF files
- Microsoft® CSV & W3C ELF headers
- Oracle® SQL*Loader control file
- DTD/XSD, plus BI/ETL tools, via Meta Integration Model Bridge (MIMB)

Test-Related Functions

- Random Data Generation and Selection
- Parallel Sorting (faster loads & queries)
- Conditional Filtering (for value ranging)
- Multi-Targeting (esp. for table relations)
- Calculations, Aggregations, & Sequencing
- Custom Flat-File and Report Formatting
- Logging (in XML format, for compliance)

Compatible Products

- CoSort - Data Transformation & Reporting
- FACT - Fast Extract for Oracle and DB2
- FieldShield - Audited Data-Centric Security
- MIMB - Meta Integration Model Bridge
- NextForm - File and Data Type Conversion
- RapidACE - 3D Data Model Integration

Test File Formats

- ACUCOBOL-GT Vision
- Fixed- or Variable-Position Flat Text
- Line, Record, or Variable Sequential
- LDAP Interchange Format (LDIF)
- Micro Focus Variable Length & ISAM
- Mainframe Variable Blocked Format
- MS Comma-Separated Values (CSV)
- W3C Extended (Web) Logs
- W3C XML

Test Data Types

- ASCII & EBCDIC Characters
- Numeric, Whole, Currency, IP Address
- Alpha & EBCDIC Digits
- RM and MF COBOL Numerics
- Other Binary Numerics
- US, European, ISO, Japanese Timestamps*
- Unicode & Multi-byte Characters*

** requires output conversion specification*

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