

What's new in CA Test Data Manager 3.8 ?

CA Test Data Manager Product Team

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Projects & Versions, Variables,
GTExcel/FD Publish and XSD
Constraints Validation.



TDM Portal - New Enhanced Projects & Versions View

- Project Driven workspace - Generators, Objects, Variables and other components will behave in the context of the selected Project and Version.
- Easy navigation through the workspace by selecting a Project and Version.
- Manage the project and versions through a dedicated Project Management option.

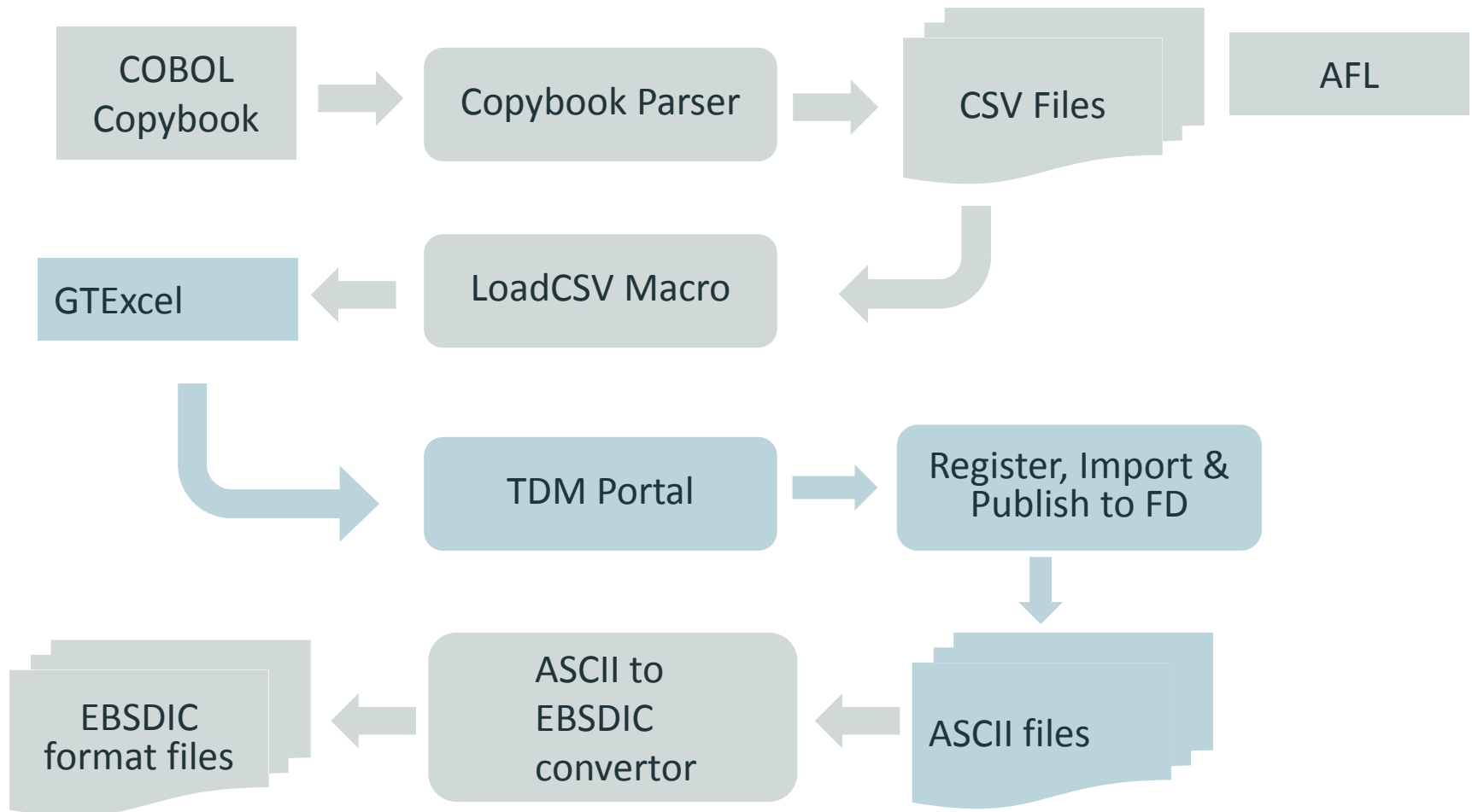
Variables Support in TDM Portal

- **Variable Scope:** Define variables with the following scope -Repository, Project, Version, Generator
- **Variable Types:** String, Number, Date and Boolean
- **Variable Display Types:** Text Box, Drop Down, Multi Select List and Radio Button
- **Variable Access Permissions :** Provide access to the specific security functions that are required to manage variables

GTEXcel Support for COBOL Copybooks

- GTEXcel is an customized excel file format, which can be used to manage and generate fixed-width flat files in the Portal.
- Portal Supports registration of GTEXcel files generated from a COBOL Copybook.
 - Portal also supports import of sample files to Data Generators which will help in Data Generation.
- Tools required for Copybook file generation:
 - Copybook Parser
 - LoadCSV Macro
 - ASCII to EBCDIC convertor

TDMPortal – GTExcel Support for COBOL Copybooks Flow



XSD Column Constraints Validation

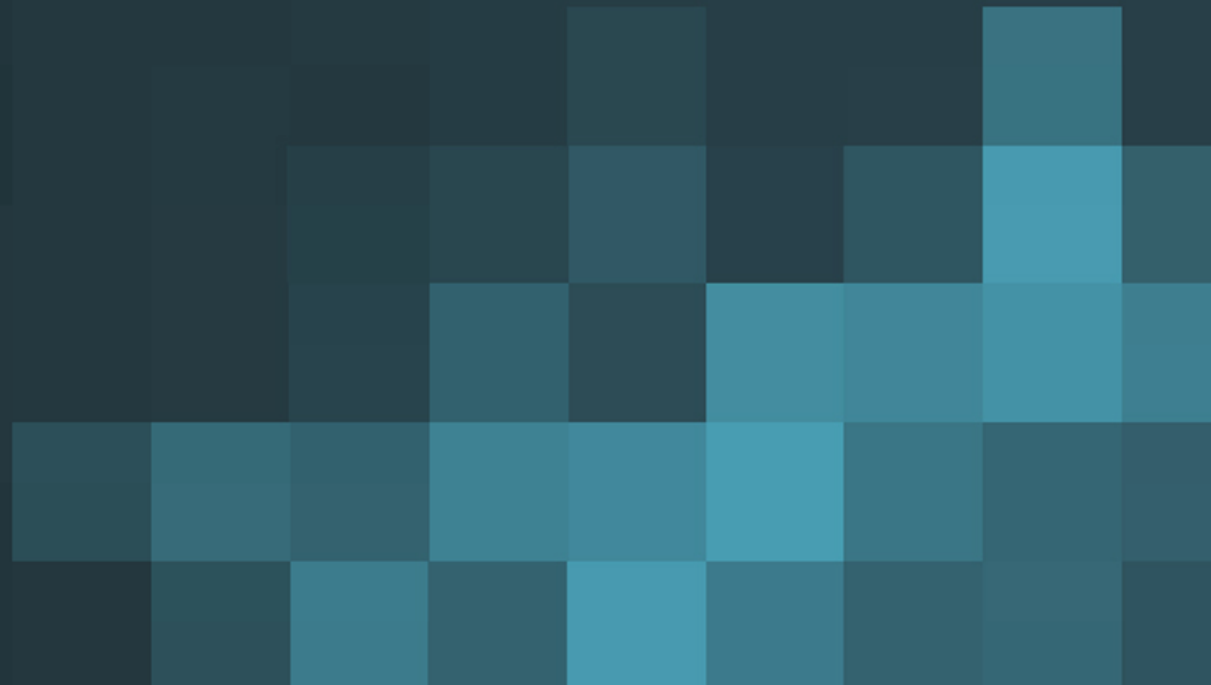
- Constraints defined in an XML schema definition are saved while converting the XML schema to a relational schema will be shown for reference while writing rules for Data Generation.
- The constraints will be specific to a column and will also be validated against the rule written for the column.

Note: Validation will happen only on one of the resolved value for the rule written for the column.

Demo



Data Generation & Enable Tester Self Service



Registration and Data Generation

- Registration
 - Register and un-register CSV file
- Data Generation
 - Row and column copy options in data definition table
 - Table repeat count using data painter functions
 - Variable support in publish using default values and file
 - Variable dependency calculation in publish
 - Publish to files SQL, CSV and TXT

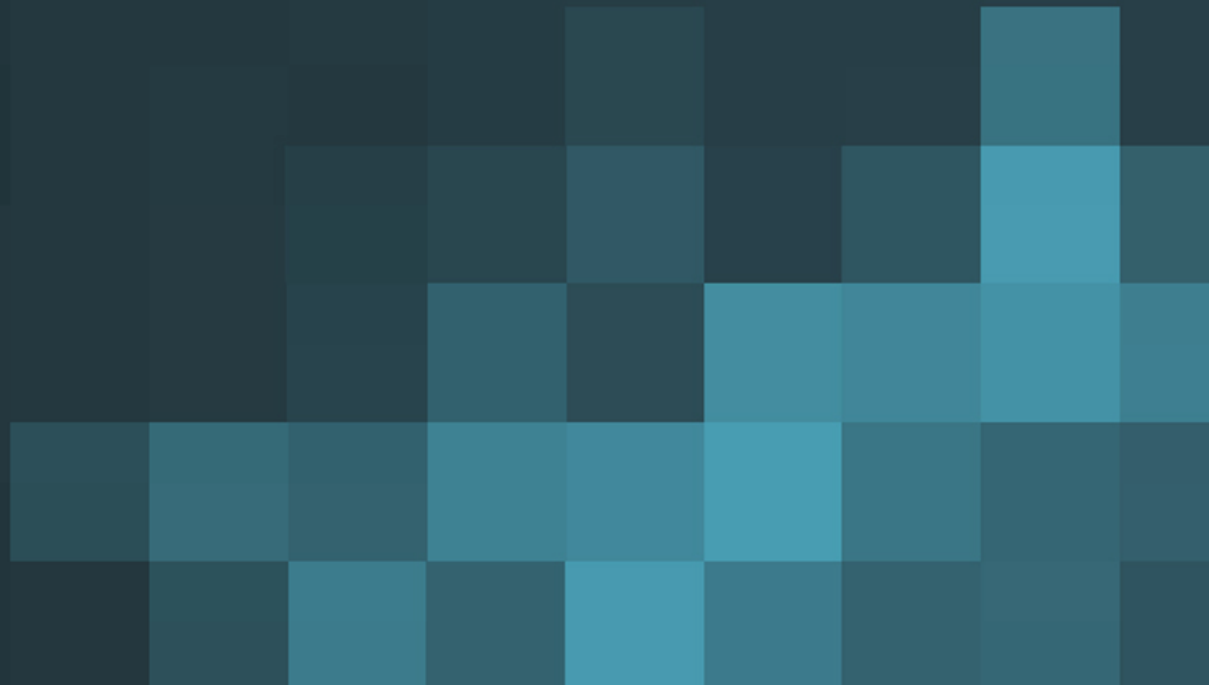
Data Generation From Portal & Using Tester Self Service

- Publish Actions – UI
- Manage ARD flows (sandbox)
- Generator Configurations (sandbox)
- Using TDMPublisher service
- Settings in application.properties file

Demo



Publish Service – Optimizations



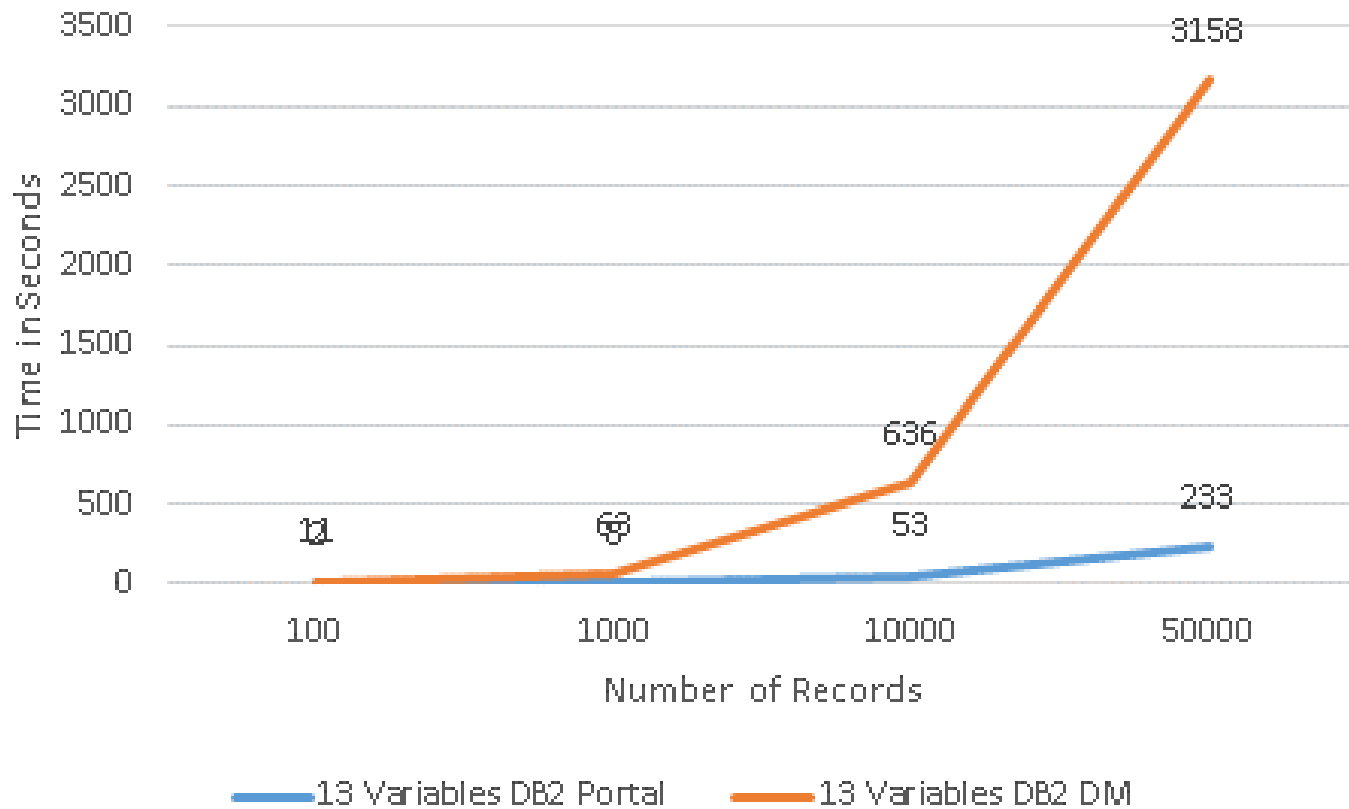
Publish Engine Improvements

- Processing in iteration loop
 - Minimise processing inside main iteration loop(s)
 - Maximise processing in pre-publish stage
 - Datamaker not optimal – re-used functions, POC & deprecated code
- Checking for Generated Duplicates
 - Temporary table in repository – store only primary and unique keys
 - Generated duplicate detected by DBMS on insert
 - Scalable - generated rows not stored in memory
- Column references
 - Column references refer to rows in same (main) iteration
 - Store only generated rows of current iteration
- Variable substitution
 - For each expression, iterate over list of variables, search and replace
 - Scan expression looking for variables, look up from hash map

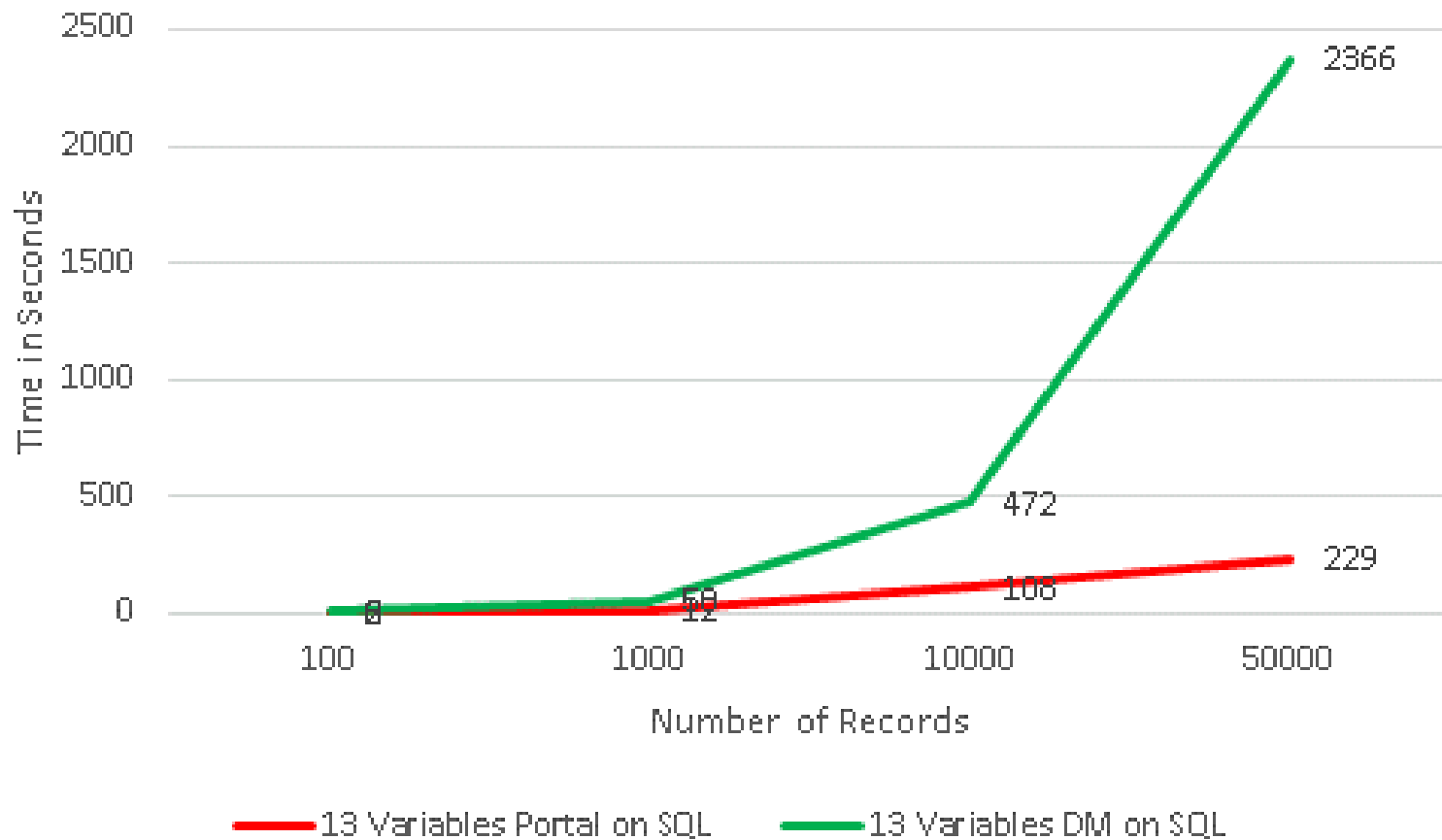
Publish Engine Stats

Table Name	No of Rows	No of Functions/ Columns	Global Repeat Count	Data Maker - Remote	Data Maker -Immediate	TDM Portal
Customer Data	1	72	1000	2min 24sec		20sec
Customer Data	1	72	10000	24min 56sec	22min	2min 1sec
Customer Data	1	72	20000	49min 36sec	42min 46sec	3min 37sec
Customer Data	1	72	30000	1hr 14min 48sec	1hr 0min 27sec	5min 38sec
Customer Data	1	72	40000	1hr 39min 23sec	1hr 25min 4sec	7min 3sec
Customer Data	1	72	50000	Publish Failed	1hr 52min 24sec	8min 46sec
Customer Data	1	72	75000			13min 32sec
Customer Data	1	72	100000		3hr 53min 39sec	17min 57sec

Portal vs DM performance on DB2



Portal vs DM performance on SQL



Demo



Questions?

