

# What's new in CA Test Data Manager 4.0 ?

CA Test Data Manager Product Team

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# Agenda

1

What's in 4.0?

2

Quality Remediation

3

Relational Data Generation

4

Tester Self Service

5

Q & A

# What's in 4.0?

Improved customer experience for IMS Masking

## 64bit Data Generation engine enhancements

- Support for multiple connection profiles and/or schemas in single publish
- Support for non-blocking asynchronous host actions
- Publish Data to Excel files
- Support for stored SQL
- Overriding Default Values of Variables
- Being able to cancel publish jobs

Quality remediation – address all high severity defects across the product

# What's in 4.0?

## Ease of managing TDM Project using portal

- Automatic Selection of the Last-Accessed Project in the Portal
- Copying Publishing Actions and CA ARD Flows During Version Upgrade

## CA TDM Portal Tester Self-Service

- Test Data Engineer can configure to show Repeat count field

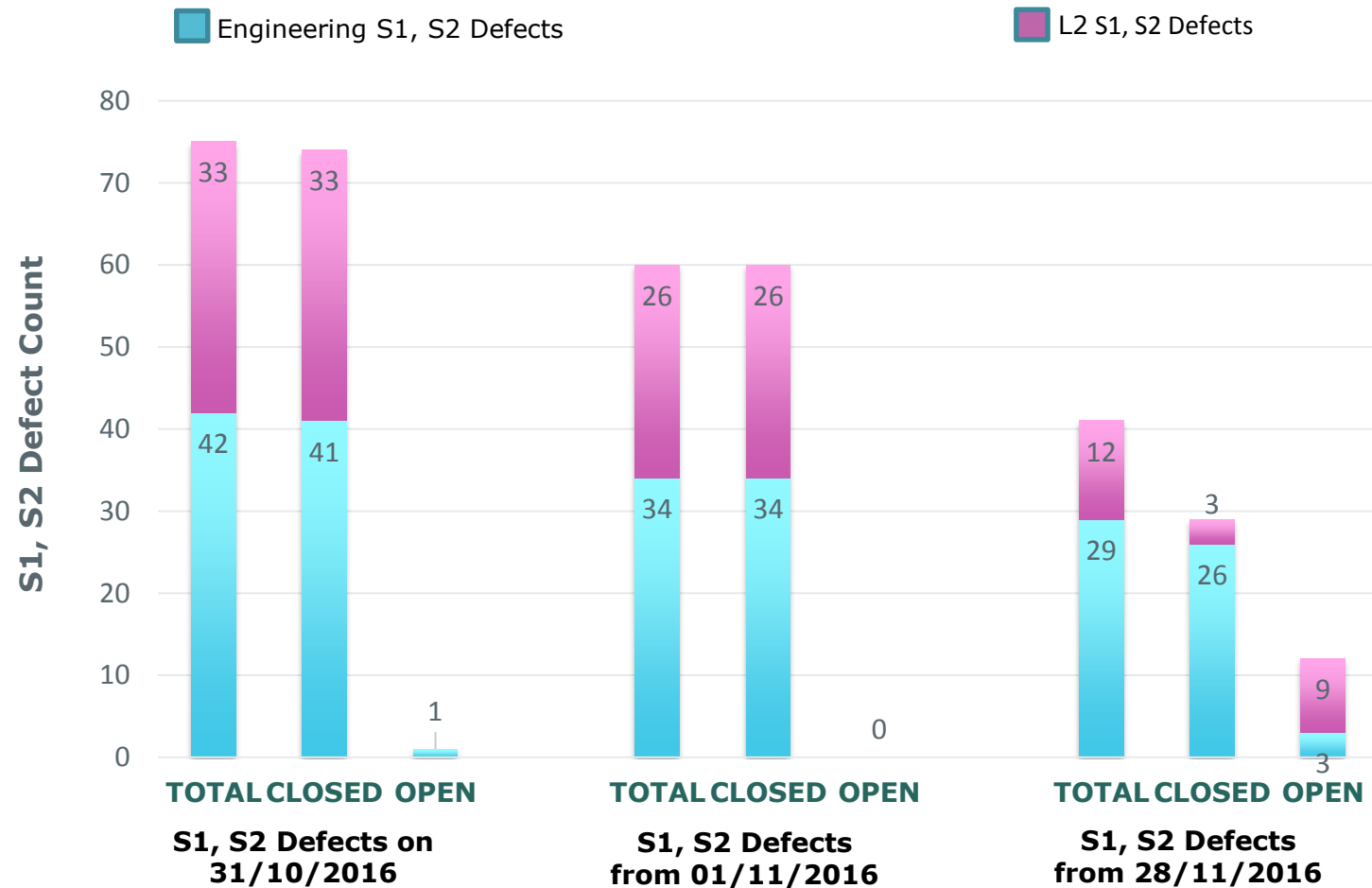
## Fast Data Masker

- Support for Turkish local masking functions
- New masking options for hash values and keys

## Installation and Administration

## Support for JRE 1.8

# Quality Remediation



Note: 1 defect open from 31/10/2106 is pending verification from ARD team.

# Relational Data Generation

- Support for registration of relational schemas, CSV and GTExcel
- Comprehensive data generation support
- Create and Manage Generator Configurations and Publish Actions
- Manage CA Agile Requirements Designer Flows

The screenshot displays the 'Test Data Manager Portal' interface for a project named 'Order Management [1.0]'. The left sidebar contains navigation links: Modeling, Generators (selected), Orchestration, Self-Service Flows, Self-Service Catalog, Submitted Requests, and Configuration. The main area shows the 'Generators > Clone Orders' configuration. It includes a table with columns 'Description', 'ID', 'Project', and 'Project Version'. The 'Clone Orders' generator is listed with ID 2486 and Project 'Order Management'. Below this, there are two data preview sections: 'Orders' and 'OrderDetails'. The 'Orders' section shows a table with columns 'Row', 'OrderID', 'CustomerID', 'EmployeeID', and 'OrderDate'. The 'OrderDetails' section shows a table with columns 'Row', 'OrderID', 'ProductID', and 'ProductName'. On the right, a 'Registered Tables' panel lists various tables and schemas, including 'Orders' and 'OrderDetails' from the 'dbo' schema.

Description	ID	Project	Project Version
Clone Orders	2486	Order Management	1.0

**Orders**

Row	OrderID	CustomerID	EmployeeID	OrderDate
1	@xref(Orders.-COLUMN_NAME...	@seqlov(0,@sqlist(P-DataSo...	@seqlov(0,@sqlist(P-DataSo...	@seqlov(0,@sqlist(P-DataSo...

**OrderDetails**

Row	OrderID	ProductID	ProductName	OrderDate
1	@xlookup(Orders.OrderID,@se...	@seqlov(0,@sqlist(P-DataSo...	@seqlov(0,@sqlist(P-DataSo...	@seqlov(0,@sqlist(P-DataSo...

**Registered Tables**

Name	Schema
Orders	dbo
OrderDetails	dbo
TESTCASE_DATA_CRITERIA	GT_INTER
Categories	dbo
CustomerDemographics	dbo
Customers	dbo
Employees	dbo
Region	dbo
Shippers	dbo
Suppliers	dbo
CustomerCustomerDemo	dbo
Products	dbo
Territories	dbo

# 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



# Publish Engine Improvements

- 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

# Clone performance improvements

	Datamaker	TDM Portal
100k rows (3 columns)	1 hour	< 2mins
100k rows (columns in different generator/data pool )	1 hour	< 2mins
100k rows (with insert batching)	1 hour	~ 1 min

NOTE:

- Tested in Oracle and MSSQL
- Local DBs

# 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

# Questions?

