CA Test Data Manager
Release 4.5

Deba Chatterjee, Director of Products, TDM
April 2018
You need better test data and you need it quickly!
Biggest Test Data Management Challenges

1. Finding Test Data - Tester
   - Up to 50% of the average tester's time is spent waiting for test data, looking for it or creating it by hand.
   - The Result: Testing delays, increased software defects

2. Protecting Test Data - Compliance
   - Over 90% of organizations believe that the GDPR will impact the way they collect, use and process personal data.
   - The Result: Hefty fines up to 4% of revenues or 20 Million Pounds

3. Improving Test Data - Test Engineer
   - Production Data by itself lacks outliers needed for negative testing.
   - The Result: Incomplete testing, defects occur after software release

4. Delivering Test Data - Operations
   - 70% of all test data is still created manually.
   - The Result: Incomplete test data, application delivery delays

1. CA Technologies implementation field experience with actual customers
3. Positive and negative testing paths are needed to ensure proper coverage

© 2018 CA. Confidential. All rights reserved.
CA Test Data Manager

Challenges:
- Lack of test data delays testing: Teams can wait days or weeks for the right test data to be located or manually created.
- Test Data Creation Inefficiency: 70% of all test data creation is done manually.

What We Do:
1. Complete Solution: Masking/sub-setting, synthetic data gen, find and reserve, virtual data, and more.
3. Compliance Focus: Locate existing PII data, generate heat maps & reports, demonstrate compliance.
4. Agile Testing: Deliver testers with high quality test data for maximum coverage within a sprint.

Complete Test Data Management

Builds **Test Data at the Speed of Agile** by:
- Finding existing test data and generating missing test data for complete coverage—synthetically, virtually and compliantly (supports GDPR+ other regulations).

For complete coverage.

Business Results
- Immediate test data
- Compliant test data
- Better test data
Changing TDM landscape

Data Source Type
- Mainframe
- RDBMS
- Hadoop
- NOSQL

Data Location
- On-Premises
- Cloud
- Hybrid

Organization changes
- TDE based teams
- DevOps
- Waterfall vs Agile

Other Forces
- Regulatory Changes
- Keeping with competition
- New Technologies – Microservices
PII Data Discovery and Profiling

Mitigate risk by quickly and easily identifying potential compliance issues.

- Identifies PII data quickly from multiple database sources
- Generates a heat map to visualize where PII data resides
- Flags sensitive data to document PII hot spots
- Masks sensitive data to mitigate compliance challenges

A large credit card company has purchased CA Test Data Manager (in part) to address test data compliance for GDPR and other regulations.
## What’s in Test Data Manager 4.5?

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Automated Data Model Discovery</strong></td>
<td>Allows relationships between tables to be discovered within and between data sources</td>
</tr>
</tbody>
</table>
|                                 | - Relationship Discovery  
|                                 | - Relationship Editing  
|                                 | - Relationship Visualization & Analysis                                     |
| **PII Data Discovery Enhancements** | Usability enhancements to PII data discovery  |
|                                 | - Ability to specify scan depth  
|                                 | - Scan filtering  
|                                 | - Heatmap interaction improvements  
|                                 | - and more ..                                                                |
| **Enhanced Find and Reserve**    | Productivity enhancements  |
|                                 | - Pre-fetch data from various sources for scalability and response time  
|                                 | - Auto-suggest drop downs for search criteria  
|                                 | - Include already reserved data in search results                           |
Automated Data Model Discovery

- Quickly build data model even with limited understanding of the actual application
- Discover relationships between different tables in a complex, multiple database application
- Automatically discover relationships between tables across disparate but connected data sources
- Ability to add or edit relationships that are not captured in the database metadata
- Rich visualization of these relationships, accompanied by Entity Relationship diagrams
Intelligent Data Model

PII Data Discovery → Data Masking → Synthetic Data Generation → Find & Reserve → Copy & Clone → Subset Data → vTDM

CA TDM INTELLIGENT DATA MODEL

STEP BY STEP FLOW
1. DATA DISCOVERY LANDING SCREEN → 2. SELECT ENVIRONMENT → 3. SET EXCLUSIONS → 4. RELATIONSHIPS DISCOVERED & VISUALISED → 5. REUSABLE DATA MODEL

© 2018 CA. Confidential. All rights reserved.
Usability enhancements in PII discovery

- Ability to provide scan depth – Users can specify what percentage of records will be scanned for PII data
- Provide filters to include/exclude tables from the scan list
- Improved Heatmap interaction
Enhanced Find & Reserve

- Ability to pre-fetch data referenced by test data models from multiple sources
  - Dramatically improves search performance for the test engineer
- Auto suggest drop-downs to help testers quickly complete their search criteria
- View the status of data which matches their search criteria but that has already been reserved.
CA Test Data Manager – Upcoming Event
Learn how CA TDM can help you address GDPR and other regulations


April 24, 2018
Why CA Test Data Manager?

**TIME**

90% Reduction in time needed to generate test data

**PRODUCTIVITY**

30% Increase in resource productivity

**COST**

25% Reduction in IT project cost avoidance

Source: Forrester Research CA Test Data Manager TEI Study (includes customer interviews and comments)

“ABN/AMRO accelerated the speed at which they test applications because they don’t wait for test data and increased their test coverage because they can test using a wider range of data attributes since adopting CA Test Data Manager.”

ABN AMRO, TechValidate Survey, August 2017

CA Test Data Manager

“CA offers support for a wide range of databases, including NoSQL environments. There is also significant support for unstructured data. Mainframe support is provided.”

Top Champion: Test Data Management

© 2018 CA. Confidential. All rights reserved.
Thank You.