TDM RELEASE NOTES

TDM (TEST DATA MANAGEMENT) V8.0 RELEASE NOTES

These Release Notes describe the new fixes and updates in TDM release V8.0.

Certification of this TDM release is based on:

- Fabric 7.1.
- PostgreSQL 13.

RELATED DOCUMENTS

- Fabric_Release_Notes_V7.1.
- TDM_Upgrade_Procedure_to_V8.0.

MAIN FEATURES AND IMPROVEMENTS

1. Rule-Based Synthetic Data Generation

- Added a support of a new task action (type): Generate - for generating synthetic entities. The synthetic entities can either be generated and saved in Fabric in order to be loaded later into the testing environment or be generated and loaded into the target environment in one single task.

    TDM portal:

    o Added a new task action (type): Generate.

    o Added a choice for the user to populate data generation parameters for the data generation flow; e.g.,Generate customers where 30% live in NY and 70% live in TX.

    Added **new Data Generators Actors** (added to Fabric V7.1). For more details see https://support.k2view.com/Academy/articles/19_Broadway/actors/07a_data_generators_actors.html

    Data Generation Automation:

    o Added new templates for automating the data generation flows creation, in order to populate the LU tables with the synthetic data. For more details see https://support.k2view.com/Academy/articles/TDM/tdm_implementation/16_tdm_data_generation_implementation.html

2. Integrating the TDM Portal with Broadway Web Editors

- Added integration of Broadway editors into the TDM portal when populating either the data generation parameters or the Custom logic parameters in the task's tabs.

- This integration enables the user to select a valid value from a list, set dates and to set distributed parameters.
- The following web editors have been added to Fabric 7.1 and are also available in the TDM portal:
  - **MTable editor**:
    - An MTable is an object created in the Fabric memory from a CSV file, upon the deployment. The purpose of an MTable is to keep reference data as part of the Fabric project and to enable a fast in-memory data lookup at run-time. The data lookup can be performed by one or several MTable keys. In other words, the MTable enables defining the valid values on the data generation parameters and enforces a **dependency between multiple parameters.**

      For more information see https://support.k2view.com/Academy/articles/09_translations/06_mtables_overview.html
    - The MTable editor enables the user to select the valid values on parameters. If there are multiple parameters that are defined in an MTable, the selected value of each parameter impacts the valid values on the remaining parameters. For example, the user can select a State from a list. If the selected State is 'NY', the City editor displays only the NY cities list for the user to choose from.
  - **Distribution editor:**
    - The distribution editor enables the user to define the data type (string/integer/decimal/date), the distribution type (uniform/normal/weighted/constant value) and the distribution parameters.
    - Examples of values distribution for data generation parameters:
      - Age: set the age to be between 18 and 120 with a normal distribution. Set the mean to 40.
      - State: Generate 30% of the generated customers live in NY, 50% of the generated customers live in CA, and 20% of the generated customers live in TX.
      - Date: Generate the service start date to be between 01/01/2018 and 01/03/2023. Set a uniform distribution.
      - Product: Generate 2-5 products per customer. Set a uniform distribution.

      For more information see https://support.k2view.com/Academy/articles/TDM/tdm_implementation/15_tdm_integrating_the_tdm_portal_with_broadway_editors.html

3. Retention period

- Added a new option: Do not Retain in order to avoid saving the LUI in Fabric. This option can be used, for example, to run an Extract task on a large subset of entities in order to populate the TDM parameter's tables on each LU instance without saving the LU instances into Fabric.

- Replacement of the retention period value '0' with 'Do no Delete', thus keeping the LU instances in Fabric without a TTL.

- Added the Retention Period setting for 'Extract and Load' tasks (a setting that was previously available on 'Extract only' task).

4. TDM Portal - Load Task - Parameters Selection Method

- Enabling parameters selection of all LUs that are related to the task's BE, even if the LUs are excluded from the task. For example: the user can select customers with order type X even if the task loads the data only to the CRM system.

- Added a search to the Parameter's selection process.

5. Task Execution

- Added an option to open the Batch Monitor window from the TDM portal (Logical Units Execution Summary window), which enables better tracking and provides additional information about the task execution.

- Added the following parameters to the task execution report:
  - The parameters that are set for the entity subset, to be used when the task's selection method is Parameters.
  - The Custom logic's parameters subset, to be used when the task's selection method is Custom logic.
  - Data generation parameters.

6. TDM Portal - Task Tabs Enhancements

- Replacement of the Task Types with Task actions.
- Display of the selected task types in the header of all task's tabs.
- Addition of the Generate task action.

7. TDM Library

- TDM_LIBRARY LU:
  - Added the TDM tables to the TDM_LIBRARY schema, enabling the implementor to duplicate it when creating a new LU, instead of copying the TDM_LIBRARY objects into the LU (Freshdesk ticket https://k2view.freshdesk.com/a/tickets/34372).

---

o   Moved the enrichment functions to LU table's Broadway population flows.

- Replaced DB queries with Broadway flows for all TDM LU table populations.
- Added physical directories, under the Shared Objects, for the product's Broadway flows.

8. Masking

- Added the root_id to the caching key, in order to maintain the referential integrity on PII fields across different LUs of the task's BE.

9. TDM Portal – Reserve Only Task

- The addition of the Parameters selection method to 'Reserve only' tasks. Note that this feature depends on the TDM configuration. By default, the Parameters selection method is hidden for 'Reserve only' tasks.

RESOLVED ISSUES

- **Reference issues:**
    o   Merge the V7.6 HF2 fixes to TDM 8.0:
        ▪   Freshdesk tickets https://k2view.freshdesk.com/a/tickets/34232 and https://k2view.freshdesk.com/a/tickets/34237 - fix fnTdmReference function.
        ▪   Freshdesk ticket https://k2view.freshdesk.com/a/tickets/34233 - incorrect update statement bindings in TdmExecuteTask process (updateTaskExecutionBatchId function).
        ▪   Freshdesk ticket https://k2view.freshdesk.com/a/tickets/34235 - fix the 'Get Details of Reference Table' Actor in the TDMReferenceLoader flow.
        ▪   Freshdesk ticket https://k2view.freshdesk.com/a/tickets/34057 - fix the insert to task_ref_Exe_status TDM table on scheduled tasks.
    o   Fixed the Reference record load when the source data has an empty date field.
    o   Fixed the Reference load process - if a transaction failed during the load, the task was stuck in a 'running' status instead of ending with a failure.
    o   Filtered out the TDM Reference LU when LUs are being added to a Business Entity in the TDM portal.
    o   Fixed the date handling when loading date fields to either Oracle, Cassandra or PosgreSQL DB.
    o   trnRefList - changed the data type of the ref id to auto increment.
    o   Fixed the running Reference task progress bar in the task execution window (TDM portal).

- Fixed the Reference tables insertionto the task_Execution_entities on failed Reference task, allowing for a view of the failed Reference tables' list.

- **Masking** - fixed the enable_masking key setting: The enable_masking must be set to false if the LOAD_MASK_FLAG Global is false.

- **TDM portal - Tester's permissions**
  - TDM failed to return the user's environment if the user is attached to the env with the 'ALL' permission set. Issue is now resolved.
  - A tester was not allowed a to edit tasks created by another tester. Issue is now resolved.
  - Load task – fixed the check of the max number of entities allowed for the user in a task: check both task's environments, source and target, and validate the task's number of entities against the lower number of entities.

- **TDM portal – Miscellaneous:**
  - Reservation window – fixed the error message that appeared when populating a note with spaces only on the selected reserved entities.
  - Tasks list window – fixed the task's selection method display, in case where the selection method is Custom logic.
  - Task list window - previously defined number of tasks is now preserved. When the user changes the default number of tasks in **tasks list tab**, it is fixed to be saved and not reset (Freshdesk ticket https://k2view.freshdesk.com/a/tickets/34094).
  - Disabled the list of copied and failed entities while the task is still running.
  - Data Versioning load task the user is now able to proceed and click 'Next' only after a data version has been selected.
  - Fixed the set task variable popup window.
  - Open a task by the tester - the 'replace sequence' is now displaying again, as it should, after it was previously displaying as cleared, despite its true status in the task.
  - Task's General tab - the user is now unable to select a Business Entity (BE) if it is not connected to any environment.
  - Tasks List - when the entire version is reloaded, the number of entities for load data versioning is now populated with the number of succeeded entities of the selected version; it was previously populated with 0.
- **TDM Library:**
  - Custom Logic - performance improvement: the TDM separators are now retrieved only once, which leads to a single call and then the separators' value is retrieved

from the memory (session variables). (Freshdesk ticket
https://k2view.freshdesk.com/a/tickets/34618).

- o Limited the number of entities in the execution report (Freshdesk ticket
  https://k2view.freshdesk.com/a/tickets/34521).

- o Fixed the date format in the fnEnrichmentChildLink enrichment function
  (Freshdesk ticket https://k2view.freshdesk.com/a/tickets/34436).

- o Fixed the execution start time of the task execution: if a custom logic exists - the
  start time is now set to match its flow's start and not the root LU execution's start
  (Freshdesk ticket https://k2view.freshdesk.com/a/tickets/33889).

- o Fixed the create TDMDB flow (Freshdesk ticket
  https://k2view.freshdesk.com/a/tickets/34361).