



TDM (TEST DATA MANAGEMENT) V8.1 RELEASE NOTES

These Release Notes describe the new fixes and updates in TDM release V8.1.

Certification of this TDM release is based on:

- Fabric 7.2.
- PostgreSQL 15.4.

RELATED DOCUMENTS

- [Fabric_Release_Notes_V7.2.](#)
- [TDM Upgrade Procedure to V8.1.](#)

MAIN FEATURES AND IMPROVEMENTS

1. TDM Support of Postgres as Fabric System DB

- Previous Fabric versions supported only Cassandra to serve as Fabric System DB (to store history of jobs execution, etc.). From Fabric 7.2 onwards, it is possible to use either Cassandra, SQLite or PostgreSQL. This improvement involved some adjustments in the TDM code to support the use of a PostgreSQL DB as a Fabric System DB.

For more information about Fabric System DB, read:

https://support.k2view.com/Academy/articles/02_fabric_architecture/06_cassandra_keyspaces_for_fabric.html

- You may check the TDM Upgrade document for more details regarding the configuration changes.

2. Simplifying the TDM Implementation in the Web Studio

- Replacing the previous TDM translations with MTable objects to support TDM development on both Fabric Studios: Desktop-Studio and Web-Studio.

3. Implementation Simplification

- Automating the TDM setup on an LU – all TDM objects are added by one single flow.

For more information, read:

https://support.k2view.com/Academy/articles/TDM/tdm_implementation/05_tdm_lu_implementation_general.html

- Adding the **TDMOrchestrator** flow to the Shared Objects, which avoids the need for generating this flow separately on each LU.



4. Parameters Handling – Improvements

a. Performance Improvements - Removing the Parameters Materialized Views

- Previous TDM versions created a Materialized view in the TDM DB on each combination of BE and source environment to have the linkage between the root entity and their child entities. From this version onwards, the parameters handling no longer creates the Materialized views. This ensures a better performance, as there is no need to refresh the Materialized views on each LUI sync (Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35121>).
- For more information about the parameters handling, read:
 - https://support.k2view.com/Academy/articles/TDM/tdm_implementation/07_tdm_implementation_parameters_handling.html
 - https://support.k2view.com/Academy/articles/TDM/tdm_architecture/07_tdm_architecture_parameters_handling.html

b. Simplify Implementation

- It is no longer required to define all LU's parameters as fields in the LU_PARAM LU table.

c. Tasks – Adding the IN and NOT IN Operators on Parameters

- An addition of the IN and NOT IN operators to Task's parameters to simplify the parameters setting (Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/34163>).

d. Performance Improvement on Combo Parameters

- Improving the performance when checking if a parameter is a combo parameter. A combo parameter has a limited number of values, entailing a display of a valid drop-down list of values by the TDM portal for this parameter type. Freshdesk <https://k2view.freshdesk.com/a/tickets/35762>.

e. Supporting Parameters for Entity Clone Task

- Adding a parameters support for a TDM task that includes an Entity Clone selection method. Cloning is done for the first entity found by the selected parameters.

f. Supporting Spaces in Parameter Names

- Supporting of spaces in the LU parameters' names (Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35097>).



5. Custom Logic Improvements

Enabling 2 execution modes for the Custom Logic flows:

1. **Direct call** –
 - a. The task execution gets the entity list without pre-populating the entities in a dedicated table. This approach is **available only when the flow is based on one DbCommand**, i.e., when only one Select query is run to get the required entities. This newly added mode is recommended as it improves the **performance when running a task**.
 - b. Provides a product custom logic flow that enables the user to set a Select statement in the task and executes this query to get the task's entities.
2. **Indirect call** - creates and populates a dedicated table in the TDM DB instead of in Cassandra. The table is created per execution and is dropped from the DB following completion of the task execution.

For more information about the Custom Logic, read:

https://support.k2view.com/Academy/articles/TDM/tdm_implementation/11_tdm_implementation_using_generic_flows.html

6. Masking and Sequences Improvements

a. TDM Portal

- A new checkbox - Mask Sensitive Data - has been added to the Environment window. It replaces the Masking Globals setting in the Environment and the Task windows and indicates that the environment contains sensitive data, which should be masked before it is saved into Fabric.

For more information about the Mask Sensitive Data, read:

https://support.k2view.com/Academy/articles/TDM/tdm_gui/08_environment_window_general_information.html

b. TDM Library

- A **new custom value** has been added for the Masking Actors' category and is set to true if the task needs to either mask sensitive data or replace the entity IDs (sequences) before loading them to the target. **It is used mainly for PII fields, such as SSN, that must have unique values.**

For more information about the TDM masking implementation, read:

https://support.k2view.com/Academy/articles/TDM/tdm_implementation/11_tdm_implementation_using_generic_flows.html

- A new Actor has been added for the data generation flow to ensure the referential integrity on generated PII fields.

For more information about the data generation implementation, read:



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https://support.k2view.com/Academy/articles/TDM/tdm_implementation/16_tdm_data_generation_implementation.html

- Sequences: populating only the TDM_SEQ_MAPPING table in the TDM DB to avoid a duplication of the sequence population in both locations - k2masking keyspace and TDM DB.
- Sequences: enabling the user to exclude the replaced sequences from the execution report.

For more information about the sequence implementation, read:

https://support.k2view.com/Academy/articles/19_Broadway/actors/08_sequence_implementation_guide.html

c. Catalog Masking

- Adding an Integration with the new Fabric 7.2 feature – Fabric Catalog – to enable masking of PII fields by the Fabric Catalog. New TDM templates have been added to generate LU population flows that invoke Fabric Catalog for masking the PII fields before storing the data in Fabric.

Note that this functionality is only available on Fabric Web-Studio.

For more information about Fabric Catalog masking, read:

https://support.k2view.com/Academy/articles/39_fabric_catalog/README.html

7. Synthetic Data Generation

a. Catalog Data Generation

- Adding an Integration with the new Fabric 7.2 feature – Fabric Catalog - to enable using the catalog to generate a synthetic data. This version has added new TDM templates to create data generation flows that invoke Fabric Catalog to populate the table fields with default values.

Note that this functionality is only available on Fabric Web-Studio.

For more information about Fabric Catalog, read:

https://support.k2view.com/Academy/articles/39_fabric_catalog/README.html

b. TDM Portal – Generate Tasks

- Adding the marking of mandatory data generation parameters.
- Keeping the order of data generation parameters to be aligned with the task creation setting when opening a data generation task.
- Supporting special characters in the values of data generation parameters.



8. Entity Reservation Improvements

a. Adding a *Reservation only Permission Set* on a TDM Environment

- Adding a support of a TDM environment's permission set that allows users only to reserve entities on the environment, without read and write permissions. These users can create a *Reserve only* task on this environment (Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35235>).

For more information about the TDM portal's environment's permissions, read:

https://support.k2view.com/Academy/articles/TDM/tdm_gui/10_environment_roles_tab.html

b. *Reserve Only* Task with Parameters Selection Method

- Supporting of the Parameters selection method to *Reserve only* tasks (this option depends on the TDM configuration). The **Filter out Reserved Entities checkbox** has been enhanced to *Reserve only* tasks for filtering out all reserved entities, including those that are reserved by the user that executes the task (Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35669>).

9. TDM Custom JMX Statistics

- Previous TDM versions required a manual update of the TDM LU to enable the TDM custom JMX statistics generation. Such update is no longer required, as instead, you need to set the POPULATE_JMX_STATS Global to true.

10. TDM Portal – Adding the *Select a Predefined Entity List* Option for Extract and Load Tasks

- Adding a *Select a Predefined Entity List* selection method for Extract and Load tasks (this option was previously available only for Extract tasks).

11. TDM Portal – Adding Validations on Added/Removed LUs to/from a Business Entity

- Adding validations on LUs that have been added/removed to/from a Business Entity (BE), in order to verify that the BE definition is aligned with the Fabric implementation.



RESOLVED ISSUES

- Parameters handling:
 - Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35673> - fixed the handling of an LU parameter with a value that contains double quotation marks or special characters.
 - Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35742> - fixed the check (regex) of the task's parameter value to identify numeric parameters.
- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35302> - fixed an entity clone issue – removal of the root_entity_id attribute from the LUIs. The root entity id has been added to the task_execution_entities table instead.
- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35518> - fixed the TDM SourceDbQuery Actor: when manually added to a Broadway population flow, it got an incorrect type (PopulationArgs instead of a SourceDbQuery type).
- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35596> - fixed the fnGetRootEntityId function: added the DB schema to the SQL statements.
- Fixed the processing of Reference tables related to a child LU in the task.
- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35616> - TDM Portal - fixed the task creation: do not enable a double-click on the Finish button to avoid errors. Wait until the task API returns a response before the user can click the Finish button again to update the task.
- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35342> - TDM Portal – fixed the horizontal scroller in the TDM windows.
- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35319> - TDM Portal - fixed the display of a TDM environment's permission set that contains only one permission (read **or** write) if the environment type is Both (read and write).
- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35318> - TDM Portal - task summary – populated the number of entities with 'N/A' for post-execution processes.
- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35723> - TDM Cassandra query aborts when querying batchprocess_entities_info, causing the task to fail. This TDM version replaces the Select statement with the use of the BATCH_DETAILS Fabric command to get all batch entities and their status.
- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35234> - fixed an error that occurs when opening a task without parameters. This error was caused due to an unnecessary call to the analysisCount API when moving to 'Requested Entities' tab.



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- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/35039> - displays the number of processed entities on all root LUs for Reserve tasks.
- Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/36070> - an error message has been added to the task window if the user selects the Delete task action, but does not have a delete permission for the task's target environment.
- Adding of a Global variable for the table schema when accessing the `tdm_generate_task_field_mappings` TDM DB table.
- Reserved Entities window – actions on a selected entity ID are now enabled, even if the entity ID contains a non-numeric value.
- TDM Portal - fixed the task summary execution status from 'running' to 'failed' for a failed task execution.
- TDM Portal - fixed the tester's permissions on *Reference only* task: the tester is now able to create a data version on the selected tables if the user has data version permissions on the task's environment.
- TDM Portal - Task with a Custom Logic selection method - fixed the default value population in the Boolean external parameter.
- Freshdesk <https://k2view.freshdesk.com/a/tickets/35693> - fixed the start execution time population for Reference tasks.
- Task execution report:
 - Reference task: Freshdesk ticket <https://k2view.freshdesk.com/a/tickets/34015> - added the number of records of the processed Reference tables to the task execution report.
 - Reserve task: fixed the report to display the task's environment in the target environment's fields instead of the source environment's fields.
 - Avoiding a display of the task execution overridden parameters if the task execution does not override the task's attributes.