FABRIC V8.1.0 RELEASE NOTES

These Release Notes describe the new features in Fabric release V8.1.0 and list bugs that have been fixed since the V8.0.0 release.

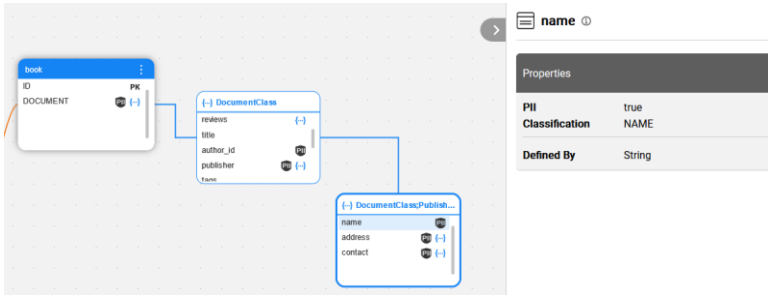
Certification of this Fabric release is based on:

- Cassandra version 4.1.3
- SQLite version 3.44.1
- OpenJDK Runtime Environment 21.0.3
- Confluent Kafka version 7.6
- Neo4j 5.18.1 - enterprise
- Elasticsearch - 8.5.3
- AWS OpenSearch – 1.3.4
- PostgreSQL 15.4

MAIN FEATURES AND IMPROVEMENTS

1. Fabric Catalog

- **Catalog-based masking of complex fields** - the Catalog Masking mechanism has been enhanced to mask values of PII fields within complex structures.



- **Splitting and Combining Artifacts** – added the ability of merging the Catalog outputs that are created by several teams, where each team works on a separate space and focuses on a specific data platform and schema. In order to achieve such merge, the Catalog artifacts can now be split into separate files per each data platform and schema of a given Catalog version. The files are then combined into a single MTable in Fabric's memory.
    - The splitting is enabled when **SPLIT_CATALOG_ARTIFACTS=ON** in the **config.ini**.

  https://support.k2view.com/Academy/articles/39_fabric_catalog/09_build_artifacts.html
- **Arrays support** – the Discovery now supports parsing of arrays. The arrays are marked in the Catalog as Collection using the *definedBy* property.
- **Complex fields** enhancement – the ability to parse BLOB/CLOB/VarBinary as a complex field.

https://support.k2view.com/Academy/articles/39_fabric_catalog/plugins/01_complex_field.html

- **Delete Catalog** – all Catalog data from the Neo4j Graph DB can now be deleted using a new menu option located in Navigator > Actions.

  https://support.k2view.com/Academy/articles/39_fabric_catalog/05_catalog_app.html

- Minor usability changes done in the Monitor.

2. Broadway

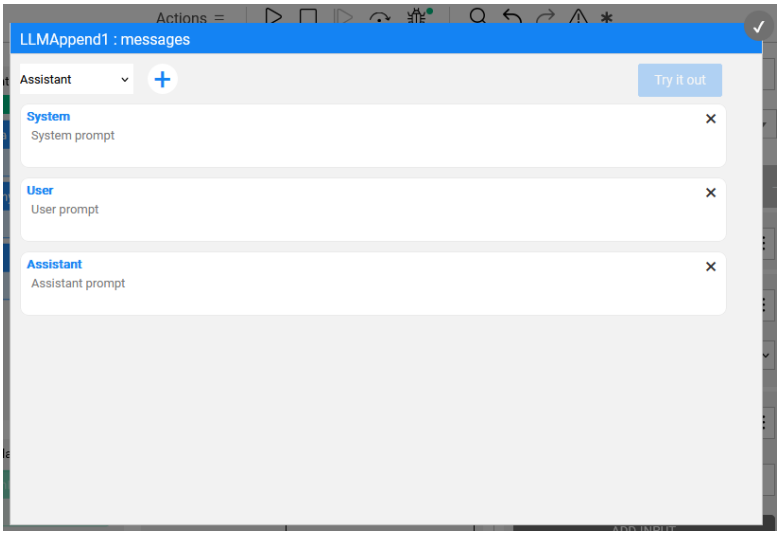
General

- **Weighted Distribution editor** is an existing editor used by a RandomDistribution actor. It has been enhanced with the ability to set the values based on a pre-selected MTable.

https://support.k2view.com/Academy/articles/19_Broadway/actors/07a_data_generators_actors.html

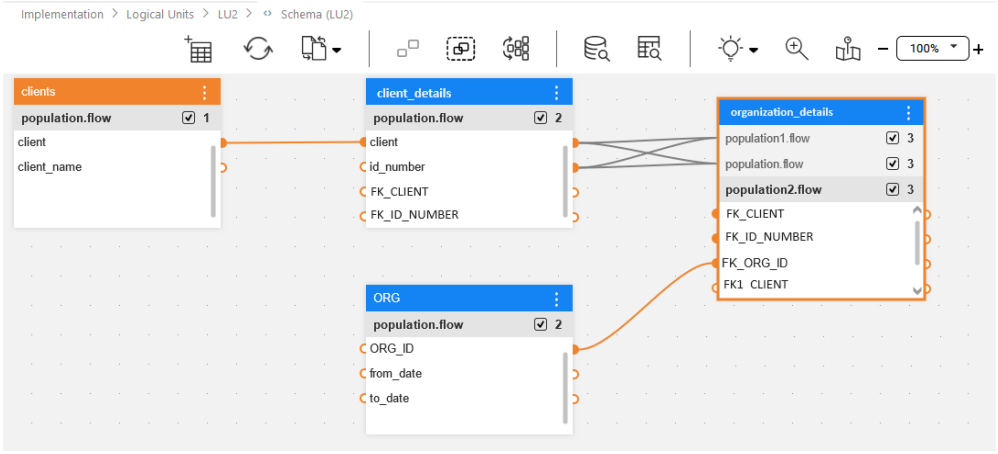
New Actors

- The following LLM Actors have been introduced in Broadway.
  - **LLMInvoke** Actor, which generates a stream of tokens from a given prompt transcript using a language model (e.g., OpenAI, Anthropic, Ollama) to generate the tokens. This actor requires an AI interface type definition in the project.
  - **LLMConst** Actor, which defines an LLM prompt transcript. The content can include parameter references in the form of ${value}.
  - **LLMApend** Actor, which merges any number of inputs into a single LLM prompt.
- **LLM Prompt** is a new Broadway editor that allows to interact with an AI interface. This editor is used by the LLM actors described above. The editor provides a streamlined way to access AI capabilities without having to use a graphical interface. Its key features are:
  - Direct access to LLM
  - Ability to send prompts and receive AI-generated responses
  - Support for various AI tasks such as text generation, analysis, and more



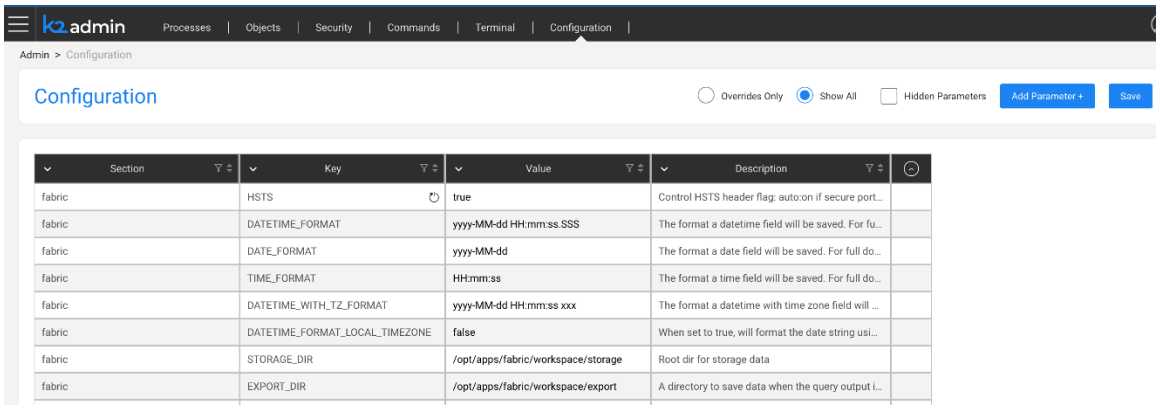
3. Web Studio

- **Automatic creation of multiple populations** – the LU Schema creation has been enhanced to support an automatic creation of multiple populations for the same LU table in the following cases:
    - **Multiple foreign keys:** When there are 2 (or more) FKs between 2 tables, where each FK can include 1 or more fields.
    - **Multiple parents to one child:** When a table contains FKs to multiple parent tables.
    - In both of the above cases, a population will be automatically created for each FK. If a table contains a PK, a **DbLoad** actor will include an **UPSERT** command, and if there is no PK, the **DbLoad** actor will include an **INSERT** command (as in a regular population).



4. Cluster Configuration Automation

- As part of the Admin application, a new tab called 'Configuration' was added. Its main objective is to expose an interface, which would enable a user with suitable permissions to the Admin page, to change values in the config.ini file. These changes (overrides) are saved in the system DB and distributed to the Fabric cluster.
- The following capabilities are supported:
    - Updating parameter values and saving changes to a system DB.
    - Adding new parameters and sections.
    - Indicating a parameters' change, which consequently requires a restart via the GUI.
    - Viewing hidden parameters.
    - Reverting a parameter to the default value.
- A new role permission, called SET_GLOBAL_CONFIG_OVERRIDES, was added to allow only authorized users to override the configuration parameter.



5. Miscellaneous

- **AWS Secret Manager**, supporting access by IAM role/service account, instead of proving access ID and secret.
- **Secret manager**, supporting also JDBC's database and port attributes.
- The **mdb_export** command was enhanced with the following:
  - Adding the option to set either the table name or the table + field name to the *Exclude* and *Include* lists.
  - If the *Include* list is set, there is an export of tables/fields in the *Include* list that are not in the *Exclude* list.
  - Working with schema reconciliation to support LU schema changes. If the LU schema changes, there is an alteration the related tables in the PG schema.
  - FK parameter - if it is true – there is an addition of all related tables and fields with PK/FK relation, even if they are not in the *Include* list.
- **Batch with streaming**. It is now possible to feed the batch command with an instances list from a Broadway flow that is listening to a message queue. The batch process starts processing the instances consumed from the queue without waiting for the Broadway flow to end. In order to end such batch process, the Broadway flow that brings the instances list should be aborted.
- **BATCH_PAUSE** is not allowed to be performed now during the IID Generation stage.
- **Fabric Terminal** (also in Fabric console within Web Studio), now supports viewing command history also for later sessions.
- Supporting Fabric system DB secrets that are stored in an external secret manager.

RESOLVED ISSUES

- Ticket #38231 – K2Studio environments' inconsistent behavior. The problem has been resolved.
- Ticket #38762 – Fabric does not support CLOB data type (in Web Query Builder page). The problem has been resolved.

- Ticket # 39059 – MetadataFileAnalyzerPlugin not working in fabric .NET Studio. The problem has been resolved.
- Ticket #39094 – the Permissions tab in the Admin does not show all the defined permissions. The problem has been resolved.
- Ticket # 39174 – Catalog plugin "connectToSource":false is being ignored. The problem has been resolved.
- Ticket #39185 – a typo in a Graphit screen. The problem has been resolved.