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.
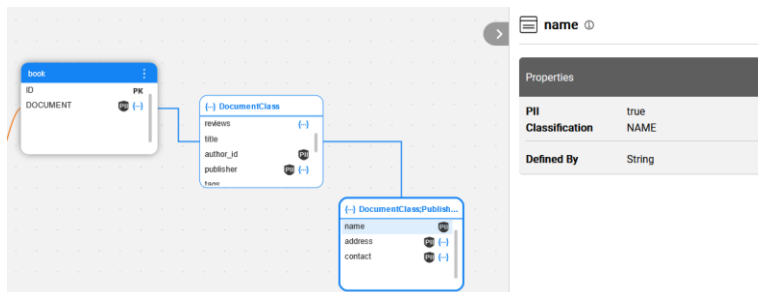
Certification of this Fabric release is based on:

- Cassandra version 4.1.3
- SQLite version 3.44.1
- OpenJDK Runtime Environment 21.0.3
- Confluent Kafka version 7.2.1
- 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.

- **Split and Combine Artifacts** - the Catalog's artifacts can now be split into separate files per each data platform and schema of the Catalog version. Then, the files are combined into a single MTable in Fabric memory. This feature allows to combine separate artifacts created in different working environments (spaces) into one single artifact.
    - Split 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 supports now parsing of arrays. The arrays are marked in the Catalog as Collection using the *definedBy* property.

- **Complex fields** enhancement - ability to parse BLOB/CLOB/VarBinary as a complex field.

  https://support.k2view.com/Academy/articles/39_fabric_catalog/plugins/01_complex_field.html
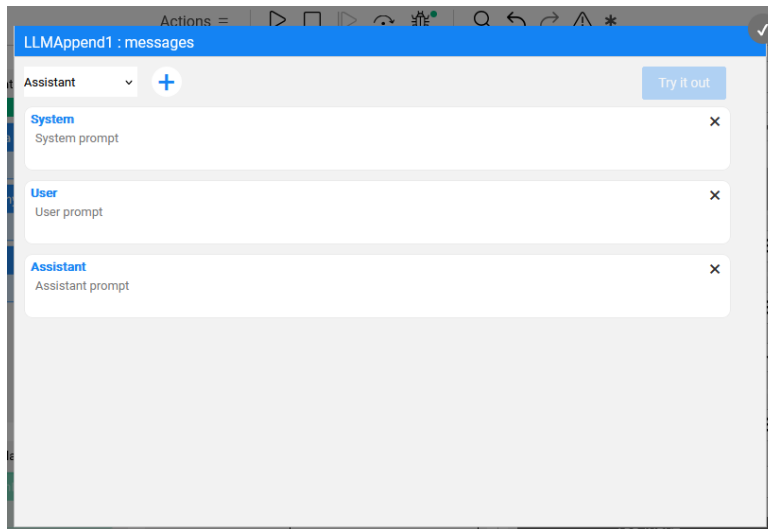
- **Delete Catalog** – all the Catalog data from neo4j GraphDB can now be deleted using a new menu option in Navigator > Actions.

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

- Minor usability changes in the Monitor.

2. Broadway

General

- **LLM Prompt editor** is a new Broadway editor that allows to interact with an AI interface. It provides a streamlined way to access AI capabilities without needing 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 like text generation, analysis, and more

- **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
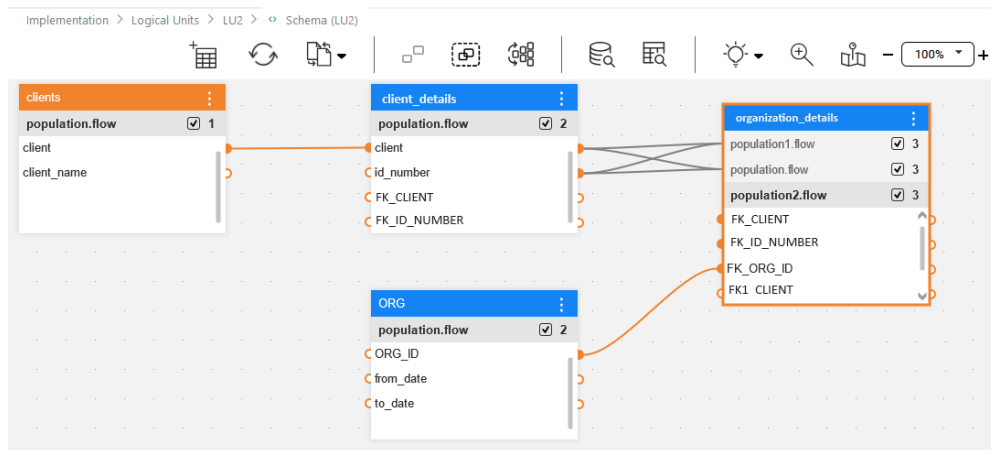
New Actors

- The following LLM Actors have been introduced in Broadway.
  - **LLMConst** Actor defines a LLM prompt transcript. The content can include parameter references in the form of ${value}.
  - **LLMApend** Actor merges any number of inputs into a single LLM prompt.
  - **LLMInvoke** Actor generates a stream of tokens from a given prompt transcript using a language model (e.g. OpenAI, Anthropic, Ollama) to generate the tokens. The actor requires an AI interface type definition in the project.

3. Web Studio

- **Automatic creation of multiple populations** – the LU Schema creation has been enhanced to support the automatic creation of multiple populations for the same LU table in the following cases:

  o **Multiple foreign keys:** When there are 2 (or more) FKs between 2 tables, while each FK can include 1 or more fields.

  o **Multiple parents to one child:** When a table has FKs to multiple parent tables.

  o In both cases, a population will be created automatically for each FK. If a table has a PK, a **DbLoad** actor will include an **UPSERT** command and if there is no PK, it will include an **INSERT** command (as usually).

4. Cluster Configuration Automation

- As part of the Admin application a new tab called 'Configuration' was added, where its main objective is to expose an interface that enables a user with suitable permissions to the Admin page to change values in the config.ini file, for a specific node, and to save these changes (overrides) in the system DB so it will be distribute to the Fabric cluster.

- The following capabilities are supported

  o Update parameter value and save changes to a system DB.

  o Adding new parameters and sections.

  o Indication of a parameters' change, which requires a restart via the GUI.

  o View hidden parameters.

  o Revert a parameter to default value.

  o A new role permission was added, called SET_GLOBAL_CONFIG_OVERRIDES, to allow only authorized users to override the configuration parameter.

5. Miscellaneous

- **AWS secret manager**, support access by IAM role, instead of access ID and secret.
- **Secret manager**, support also JDBC's database and port attributes.
- **Batch with streaming**. It is now possible to feed the batch command with 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 now not allowed to be performed during the IID Generation stage.
- **Fabric Terminal** (also at Fabric console within Web Studio), support history also for later sessions.

RESOLVED ISSUES

- Ticket #38231 – K2Studio Environments Inconsistent behavior. The problem has been resolved.
- Ticket #38762 – Fabric does not support CLOB data type. The problem has been resolved.
- Ticket # 39059 – MetadataFileAnalyzerPlugin not working in fabric .NET Studio. The problem has been resolved.
- Ticket #39094 – Permissions Admin page does not show all the permissions defined. The problem has been resolved.
- Ticket #39185 – Typo in a Graphit screen. The problem has been resolved.