

FABRIC V6.5.1 RELEASE NOTES

These Release Notes describe the new features in Fabric release V6.5.1 and lists bugs that have been fixed since release V6.5.0.

Certification of this Fabric release is based on:

- Cassandra version 3.11.9.
- SQLite version 3.34.0.
- Open JDK version jdk-8u292.
- Confluent Kafka version 5.5.1.
- OrientDB tp3-3.1.2.
- Elastic oss-7.6.0.

MAIN FEATURES AND IMPROVEMENTS

1. Command Enhancements and Additions

- Test_connection command now provides a connection status for ALL deployed interfaces
 according to the active environment. The output structure of the command was extended
 to bring the interface type and indicate if it's active or not. The command supports three
 optional filtering parameters:
 - a. Interface, to filter the results set to a given list of interfaces.
 - b. Filter, to filter the results set according to regex criteria.
 - c. Active=true/false, to filter the results set for active or inactive interfaces.
- list command has a new parameter called INTERFACES, which returns the list of all
 interfaces. The DB_SOURCES parameter still exists but it returns only a list of DB
 interfaces. The output structure of the list command was enhanced to return the interface
 type as well.
- **ps** and **kill** commands now support the task id parameter as prepared statement.
- Batch_pause command was added: Pauses a batch process.
- Batch_retry command was added, which works as follows:
 - If the original batch process execution was not completed: This command retries a batch process by processing all failed or not handled entities.
 - o If the original batch process execution was completed: This command retries only failed entities.
- Batch_cancel command was added: Cancels a batch process.



- Batch_edit command was added: Allows overriding MAX_WORKERS_PER_NODE on the fly
 during a batch a process run without changing the config.ini file.
- Batch execution_id was added to the output structure.
- Batch_details node_id was added to the output structure when SORT_BY_PROCESS_TIME is true.
- **Batch_list** command was enhanced so that it returns the original full batch command syntax also in case of a prepared statement.
 - o **execution_id** was added to the output structure.
 - It is now possible to filter the results according to the new execution_id field.

2. Data Explorer

 The name of Data Editor application on the Fabric Web framework was changed to Data Explorer.

3. Web-Admin

- Batches screens have been enhanced to support the new and modified batches commands.
- Interface screen was enhanced to reflect the test_connection and list INTERFACES commands enhancements.
- At API Key creation screen, the checkbox "secure" title was changed to "Signed by client".
- At API Keys list screen- table header was changed from "secured" to "signed by client".

4. Soft Deploy

• Fabric Deploy functionality was enhanced with the Soft Deploy feature – the ability to exclude starting automatic processes such as user jobs and parsers when deploying the LU to a given environment.

The changes include the following:

- The **DEPLOY** command was enhanced with the new **SOFT_DEPLOY** optional parameter.
 The default value is FALSE. If set to TRUE, the following processes are not be triggered by the deployment even if they are marked to run automatically in the implementation:
- Interface listener
- User jobs
- Parsers
- **User Preferences** screen includes a Soft Deploy checkbox to mark the server for soft deployment execution. By default, Soft Deploy is set to FALSE (unchecked).
- The deploy & build scripts were updated accordingly.



• The **Data Catalog Write** activity from Studio now *always* works in a SOFT_DEPLOY mode.

5. Studio

- A Test connection button was added to all type of interfaces (including Non-DB) on both interfaces and environments windows.
- Added active True or False property to non-DB interfaces.
- Upgraded JDK component on new Studio installation to OpenJdk 1.8 latest version (1.8.0.292).
- Fabric Studio already supports creating a category on any level, for example: several Broadway flows within Shared Objects can be grouped into a category, or several LUs can be grouped into a category. What is new in this release is that during an import all/custom import and export to another project, these groupings are preserved.
- New interface type LDAP was added, supporting the following attributes: URL, user, password and security level.

6. Broadway

Modified Actors

The following Actors were modified:

- **BatchWait** Actor was modified to allow it to wait for batch in pause status in addition to the other situations where it waits for a batch.
- FabricGet Actor was enhanced to align to the GET command by supporting the fetch of
 multiple instances from different LUs and giving it the ability to set parallel and
 stop_on_error arguments.
- Connect a list of LU types to the luType input argument and a list of Instance IDs to the iid
 input argument.
- Adding a new input is now possible, as well as changing the input name to the luType name and set the value is iid.
- FabricRelease Actor was enhanced to enable providing an LU name in the Actor's input.
- DateParse and DateFormat Actors can now receive a locale (such as en / es / fr) to be used for parsing or formatting.
- MaskingSequence Actor now has the capability of bringing the next sequence value from DB2.
- Is Actor can now show the directories when the directories input argument is set to TRUE.
 It also displays the following file attributes: createTime, lastModifiedTime and lastAccessTime.



- **InnerFlowAsync** Actor can now return the results of the inner flow. The non-empty results are obtained from completed flows. Empty results are not saved.
- Publish Actor now runs in async mode by default if there is a Kafka queue and when using
 a transaction management. In this case, acknowledgement for a success or failure
 message is triggered only when the transaction is committed.

New Actors

The following new Actors were added:

- ResetActors can be used to reset the state of other actors in the flow. It receives a list of Actors IDs (names) in the flow to reset their state.
- MaskingRandomCharacter this actor randomly masks each character in a given string using the following rules:
 - o Lower case character with random lowercase character.
 - Capital letter with random capital letter.
 - Numeric with random numeric.
 - Non alpha numeric character keep the same character.

Reset on Iteration 0

A new menu item Reset on iteration 0 was added to the Actor's context menu. It works as follows:

- The menu item is only visible when the Actor is inside an internal iteration (loop inside a loop, level 2 or more).
- When selected, the Actor's state is reset on the iteration zero of the inner iteration.

Access Custom Interface from the Broadway Custom Actor

Custom interface properties can now be accessed from a Broadway flow by writing a custom Actor and creating an IoSession in the Actor's Java class as follows:

Map m = (Map) context.ioProvider().createSession("my-custom-interface").object(null);

This capability allows the system to access the custom interface properties directly from a Broadway Actor, without the need to invoke the Java code via the LU Function Actor.

7. Common tables

• Improved performance when dealing with huge reference tables (more than 200M records) was achieved by adding a new table property called 'Index Post Sync'. This property determines if the index creation will happen before or after syncing the data. Default value is FALSE.



8. Miscellaneous

- Support for basic authentication (also known as basic access authentication) when calling Fabric Web-Services is now available. This is a method for an HTTP user-agent to be authenticated by providing a user name and password, when making a request. The client sends HTTP requests with the Authorization header that contains the word Basic followed by a space and a base64-encoded string of username:password. To activate the helper, add this additional parameter to the web service request: basicAuth=true. When activated, a browser popup will appear, when sending the request. The user can populate the popup fields with the username and password.
- Swagger UI was upgraded to 3.49.0.
- SQLite was upgraded from 3.27.2 to 3.34.0.
- Upgrade server side to latest Open JDK (jdk-8u292).
- CDC performance improvements in IF_SETUP mode.
- getGlobal new API was introduced to UserCode class.
- Broadway SDK was added to the Fabric web framework documentation application.
- When opening a JDBC connection to Fabric it is now possible to use conn.getMetaData()getExportedKeys or getImportedKeys methods in order to get the LU tables relations.

RESOLVED ISSUES

- A value of a global is not reset when switching between environments.
- Environment deployment is triggering an interface close and open connection only in case of interface properties changes.
- Merge defect fixes from all 6.4 maintenance releases till 6.4.5
- When running get command for several LUs with parallel=true and stop_on_error=false, if
 one of the instances doesn't exist, it is not reflected on the command results set.
- SMTP interface was fixed to work not only on _dev environment.
- Ticket 22701- fix local deploy what dealing with share objects.
- Ticket 22929 fix cql command help
- Graphit when scrolling down across a big Graphit file, the main toolbar now remains on the same position.
- Data Catalog When using API field with a special name like a 'dot' in the name, it doesn't show a connection to other API fields.



Web Admin

- When adding a new batch process, the Instance Group / Instance List / DB Query options work properly now.
- Fix Ent./Sec(pace) and Ent./Sec (Avg) fields presentation on Batch Summary window.
- When JWT cookie exists, any try to authorize with JWT bearer will fail when API key isn't found.

Audit

- Extra internal auditing reporting were removed.
- Ticket 22190 Fabric SQLparser throws an error on RANK() OVER.
- Ticket 22921 REF_SYNC if failing on the second reference deployment.
- Batch List window- error column is presented as empty now in case of "null" value.

Studio

- Improve K2View logo resolution.
- Deleting LU while local fabric is down causes an error on the drop LU command and the LU
 is still visible in the project tree.
- Ticket 22660 fixing "Object reference not set to an instance of an object." error message when opening a project.
- Ticket 22177- Change of root function input parameter doesn't auto-update method calls for that variable.

Broadway

- Ticket 22477 SourceDbQuery is failing when parent has a record where the link to the child is null.
- Ticket 22210: Profiler was removed from the Broadway population menu.
- Actor that was created on the shared level was not available on the LU level.

iidFinder

- iidFinder.xml is now not generated when deploy fails.
- When deploy process fails it is not required now to restart fabric in order to clean iidFinder leftovers.