

FABRIC V6.4.1 RELEASE NOTES

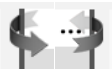


These Release Notes describe the new features in Fabric version 6.4.1 and also lists bugs that have been fixed since version 6.4.0

Certification of this Fabric release is based on:

- Cassandra version 3.11.6 (updated package for Cassandra as a service).
- SQLite version 3.27.2.
- Open JDK version jdk-8u252.
- Confluent Kafka version 5.5.1.
- OrientDB tp3-3.1.2.
- Elastic oss-7.6.0.

MAIN FEATURES AND IMPROVEMENTS

Broadway

- The following indicators have been updated in the Broadway interface:
 - The  Loop indicators have been added.
 - The Stage Parallel Execution indicator has been replaced by .
 - The Recovery Point indicator has been replaced by .
- **Iterate close** is now automatically added to last level if a loop has not been closed by the user.
- The Execution Time is now displayed in Run Results.
- UTF8 BOM support has been added for StringsToBytes and BytesToStrings Actors to enable handling special characters.
- Additional support has been added for HTTP PATCH methodology.

iidFinder

- The Delta sync mode is now available for the iidFinder in Delta Partition mode. When there is no data in the delta, run the iidFinder on a local node and set the sync mode to OFF.
- `show_delta`, a new Fabric command has been added to retrieve delta updates for a given instance.

- When two LUs using the iidFinder share the same 3-lettered prefix names, deployment of the second LU fails due to a conflict.
- A partition job can now be forced to get an updated SYNC_WORKERS_COUNT value from the config.ini in the background without the need to redeploy the project, restart Fabric or the job.
- initCacheLoader now supports an LU and its related tables as parameters in the script.
- Fabric Studio, the following properties have been added to an LU Schema under the IID Finder category:
 - Number of Partitions – default 100.
 - Number of Jobs – default 50.
 - Number of Partitions in Priority – default 0.
 - Number of Jobs in priority – default 0.

Data Catalog

- A Search can also be made in table layout.
- Enhancements have been made to the Search functionality's performance.
- Write catalog runtime has improved by 85%.
- Fabric Studio > Data Catalog interface type, the Transactional property's default value is now False. In multiple Fabric clusters, Transactional=True by default to enable synchronization of the graph's orientation for multiple writes.
- The build-catalog.sh script has been added to enable building a Data Catalog in offline mode.

Miscellaneous

- The Search.execute() API has been replaced by the Search command.
- Fabric now uses the default JDK trusted store/JDK defined store whereby SSL KeyStore properties have been removed from the Search interface. Note that this change is relevant for any Fabric interface that should interact seamlessly with the Java trusted store.
- Masking, a secret code has been added to key hashing (Salting). A move has been made from MD5 to SHA256/512.
- Support for prepared statements have been added for Fabric transactions.
- The default size of chunks for storing large LUI in Cassandra has been enhanced to improve the overall sync time.
- Shared jdbc drivers have been added to support Fabric when calling a remote Fabric that is referred to in a different release.

- When using authentication type OAuth on http interface and token URL doesn't include host or port, Fabric will concatenate it automatically to the URL.
- The Search command has been enhanced to support the following date formats by default:
 - yyyy-MM-dd
 - yyyy-MM-dd HH:mm:ss
 - yyyy-MM-dd HH:mm:ss.SSS

Note that this upgrade applies only for newly defined date columns. A full reindex is required for existing values.

RESOLVED ISSUES

Miscellaneous

- Ticket 20404, help for the set_global global command has been added.
- Ticket 20605, shared objects can now be accessed by other project tree objects.
- The Sqlite parser no longer fails when using max/min functions with multiple parameters.
- A warning message has been added before overriding Graphit or Resource files.
- Fabric Studio, an error message is displayed when a new function is not attached to a category.
- Help has been added to the Set From command.
- Ticket 20174A, a rollback can now be executed outside a transaction message when running a get to the same instance from parallel threads.
- Ticket 20486, in the Fabric Studio, when an output parameter in a population function is modified from uppercase to lowercase, the updated name is displayed in the table population.
- Large Graphit files can now be debugged.
- Fabric Studio, a Drop LU is now available not only if a Debug environment points to the local environment.
- Ticket 20278, CDC: the clean up option for old transactions has been improved.
- Ticket 20504, CDC: duplicate rows are no longer created when the IID holds special characters.
- Fabric Studio Templates, dynamic parameters now support special characters.
- Ticket 20603, the Fabric Studio no longer changes the cluster_id in the node.id file after upgrading a project from Fabric 6.2.

- Fabric Studio > HTTP interface: a port number is now updated based on both the Auth Type and the Protocol Type.
- A Batch retry no longer starts the entire batch from the beginning and now resumes only the failed/unprocessed entities.
- Web Services, the Boolean class default is null and primitive is false.
- Web Services, the ability to enforce encoding using UTF-8 has been added.
- Get with a remote command no longer fails when the remote server name starts with numbers.
- Support 'null' status in jobs system. If job is active and status is null job will go down. Job with status null should not affect other jobs.

Broadway

- An Error Handler now catches abort exceptions as a result of a get instance timeout exception.
- A Broadway flow no longer fails when a Custom Actor is not found when Fabric restarts after modifying a flow.
- The first value in a Link Type property no longer only returns the first element of a simple parameter.
- The Parallel & Recovery indicator is now displayed after a stage is renamed.
- When a stage is split using a recovery point, the recovery point is copied to the new stage.
- The population flow no longer fails when the source DB is Postgres.
- Defects can now be fixed in Collapse and Split functionalities.
- Ticket 20417, ConstTable Actor values are no longer deleted on a second Save.
- Recovery point, an Actor created by Editor Actor no longer fails to run.
- An ErrorHandler Actor no longer runs after it has been disabled.
- Fabric Studio, Save as a Broadway Flow before running the original Broadway flow now works.
- Enhancements have been made to error validations in a Broadway flow with recovery points.
- The end of an open inner flow no longer overlaps the flow name of long names.
- The Data Inspection schema now displays all Type elements.
- An Inner Flow exception is now cleared after it is run again from an outer flow.
- The Debug / Run Arguments window now works when an external parameter name is modified.

- Setting an environment within a Broadway flow is not working properly.

iidFinder

- The InitialCacheLoader process stops at the end.
- Ticket 20374, the IIDFinder no longer consumes messages from Kafka and runs a commit when Kafka is down.
- Delta Partition mode, the most updated data from Cassandra is displayed when getting instance data on a remote node in sync off/on mode.
- Tickets 20300 and 20355, the InitialCacheLoader script now handles several database types.
- Ticket 20339, Fabric no longer adds a fraction when consuming messages from a delta table's integer column.
- Storage is now deleted when a partition job is down.
- The ssl_enabled parameter is no longer taken from the kafka_ssl section instead of the partitioned_delta section.
- Ticket 20408, transactions that are updated to failed are now displayed in the LUI.
- When a partition job of a given instance is down, the instance is synced locally without getting updated data on the delta.
- Fabric no longer throws an error when async_trx is true and no longer performs a get outside of a transaction.
- The Release 6.3 upgrade script now has an exit at the end.
- In a Windows environment the iidFinder process no longer writes incorrect logs to the init_iid_finder.log file.
- A deployment no longer fails when an LU has less than three characters.
- In Partition Delta mode, an error is no longer displayed when running a drop LU on a local node and deploying an LU with the same prefix on another node.
- The LU prefix is not saved in the luTablesCache when a deployment fails.
- Ticket 20623, an update query in source is now translated to delete data and insert it in the delta.

Data Catalog

- When pressing CTRL and dragging a node the node is no longer displayed twice in a graph.
- The Catalog Search default is now ADD/REPLACE.
- The height of the table headers in the Table View has been fixed.
- Build Catalog no longer fails with a null point exception.
- A second node is not displayed in the Data Catalog if two nodes are defined in a Graphit file on the same level and a node is empty.
- Node relations are no longer missing in the Data Catalog.
- When more than one project is introduced to the same orientDB and first project is expanded, an expand symbol is displayed in the second project.
- Support has been added for GraphIt after a get is defined for a child node.
- In table layout, after exporting a filtered table only the filtered rows are displayed.