FABRIC V6.4.5 RELEASE NOTES

These Release Notes describe the new features in Fabric version 6.4.5 and lists bugs that have been fixed since version 6.4.4.

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

Watchdog

- The Fabric watchdog.sh script was added. This script keeps a specific command alive. The script is located under $K2_HOME/fabric/scripts.
- Script flow:
  - Execute a command that is input to the script. Watchdog runs on Fabric itself by default if a specific command is not provided.
  - Restart the command upon failure automatically according to the number of retries, during the grace period.
  - The number of retries and the grace period are both configurable.
- Script syntax:
  - ./watchdog.sh <command> [-r=WATCHDOG_MAX_RETRIES] [-g=WATCHDOG_VERIFICATION_GRACE_SEC]
  - <command>: The command that must be kept alive.
  - WATCHDOG_MAX_RETRIES [optional (default=3)]: The watchdog will try to execute the provided command upon failure, up to this number of attempts. This parameter is configured using the -r option or as an environment variable.
  - WATCHDOG_VERIFICATION_GRACE_SEC [optional (default=60)]: A verification grace period (in seconds) during which the service tries to execute the provided command. It tries to do this WATCHDOG_MAX_TRIES attempts. If, by the time the grace period expires, the executed command has failed, the counter is reset. This parameter is configured using the -g option or as an environment variable.

- **Note:** The watchdog script only works with commands that are not running in the background.

Broadway

- The Kafka Publish Actor now takes transaction management into account. Kafka is committed only once the transaction iteration is completed or committed.

- A group id property was added to Kafka Publish Actor. This id property enables the subscribe Actor to consume Publish Actor messages only once transaction is completed within the same group.

iidFinder

- iidFinder process was enhanced to allow it to consume the next several Kafka batches to avoid getting stuck on a message that takes a long time to process. The number of upcoming batches to be consumed (ie, how many are "several batches") is controlled by a new parameter added to iifConfig.ini called MAX_ACTIVE_MESSAGE with a default value 2500. This parameter can be fine-tuned according to the needs of the project. Specifically, you should take into account memory consumption and performance impact vs. the utility of this feature. iidFinder can still read several kafka batches in parallel and is still controlled by the KAFKA_POLL_RECORDS parameter. It is recommended to set MAX_ACTIVE_MESSAGE as KAFKA_POLL_RECORDS multiplied by ~25-50.

- A new optional parameter was added to iid_finder.sh script called **watchdog.** When the parameter is used, iidFinder will run in a watchdog mode automatically.

- JMX Matrix (counts the iidFinder Kafka lag) was removed to improve performance.

RESOLVED ISSUES

- Ticket **22481**: Interface post connection command is not working properly when used for environment different than dev.

- Ticket **22499**: Changing a global in environment does not impact all references to that global.

- Ticket **22672:** Admin Role for a user is not being revoked from Fabric GUI.

- Ticket **22740:** Common tables replicate job should use the logical IP on the job affinity.

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