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# **DBSeeder - Release Notes**

build passing release v2.9.1 release date june github repo or version not found

# Version 3.0.0

Release Date: 01.08.2021

## **System Requirements**

- Operating system: any Java-enabled Linux, Mac or Windows variant
- Docker Desktop Community: 3.0.4
- Eclipse IDE: 2021.06 (e.g. from Eclipse Download Page)
- Gradle Build Tool: 7 (e.g. from here)
- Java Development Kit 15, (e.g. from here)
- an environment variable called HOME\_ECLIPSE that points to the installation directory of Eclipse IDE, e.g.: C:\Software\eclipse\java-2021-06\eclipse

#### **New Features**

- new control parameter DB\_SEEDER\_BATCH\_SIZE: the maximum number of DML operations of type
  addBatch 0 represents all DML operations
- new control parameter DB\_SEEDER\_DROP\_CONSTRAINTS: if the value is yes, all constraints of the types FOREIGN KEY, PRIMARY KEY and UNIQUE KEY are removed before the first DML operation and are enabled again after the last DML operation
- TimescaleDB: DBMS 2.3.1-pg13 / JDBC PostgreSQL

## **Modified Features**

CockroachDB: DBMS v21.1.6

CrateDB: DBMS 4.6.1Exasol: DBMS 7.0.11

• Firebird: DBMS v4.0.0

• IBM Db2 Database: JDBC 11.5.6.0

MariaDB Server: DBMS 10.6.3

• MonetDB: JDBC 3.1.jre8

MySQL Database: DBMS 8.0.26 / JDBC 8.0.26

• Percona Server for MySQL: DBMS 8.0.25-15

PostgreSQL: JDBC 42.2.23

• SQLite: DBMS 3.36.0.1 / JDBC 3.36.0.1

trino: DBMS 359 / JDBC 359

YugabyteDB: DBMS 2.7.2.0-b216

# Open issues

Apache Derby: (see here)

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- H2 Database Engine: (see here)
- HSQLDB: (see here)
- IBM Db2 Database: (see here)
- OmnisciDB: (see here)
- trino: (see here)
- VoltDB: (see here)

# Windows 10 Performance Snapshot

| DBMS                     | Туре     | ms Constraints               | Improvement |
|--------------------------|----------|------------------------------|-------------|
| HSQLDB                   | embedded | 3'015 active - no choice     |             |
| H2 Database Engine       | embedded | 3'536 active - no choice     |             |
| PostgreSQL               | client   | 4'048 inactive               | 2%          |
| TimescaleDB              | client   | 4'085 inactive               | 3%          |
| MariaDB Server           | client   | 4'119 active                 | -101%       |
| AgensGraph               | client   | 4'153 inactive               | 0%          |
| SQLite                   | embedded | 4'469 active - no choice     |             |
| Exasol                   | client   | 4'707 active                 | 0%          |
| MS SQL Server            | client   | 5'461 inactive               | 5%          |
| CrateDB                  | client   | 5'644 active - no choice     |             |
| CockroachDB              | client   | 5'892 active - no choice     |             |
| CUBRID                   | client   | 6'379 active                 | -9%         |
| MySQL Database           | client   | 6'776 active                 | -191%       |
| Percona Server for MySQL | client   | 6'927 active                 | -174%       |
| H2 Database Engine       | client   | 7'726 active - no choice     |             |
| Mimer SQL                | client   | 9'227 inactive               | 4%          |
| MonetDB                  | client   | 9'541 inactive               | 26%         |
| YugabyteDB               | client   | 12'892 active - no choice    |             |
| Oracle Database          | client   | 13'054 active                | -19%        |
| VoltDB                   | client   | 14'397 active - no choice    |             |
| Apache Derby             | embedded | 15'585 active - no choice    |             |
| Apache Derby             | client   | 17'081 active - no choice    |             |
| HSQLDB                   | client   | 17'651 active - no choice    |             |
| IBM Informix             | client   | 20'188 active                | -1%         |
| IBM Db2 Database         | client   | 22'617 active                | -11%        |
| OmniSciDB                | client   | 37'797 active - no choice    |             |
| Firebird                 | client   | 73'823 inactive              | 15%         |
| PostgreSQL               | trino    | 472'097 active - no choice   |             |
| MySQL Database           | trino    | 945'684 active - no choice   |             |
| MS SQL Server            | trino    | 950'590 active - no choice   |             |
| Oracle Database          | trino    | 1'503'204 active - no choice |             |

- DBMS official DBMS name
- Type client version, embedded version or via trino
- ms total time of DDL and DML operations in milliseconds
- Constraints DML operations with active or inactive constraints (foreign, primary and unique key)
- Improvment improvement of total time if constraints are inactive

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# **Detailed Open Issues**

# Apache Derby

• Issue: dropping unique key constraints - SQL statement ALTER TABLE COUNTRY\_STATE DROP UNIQUE "SQL0000000166-6f554487-017a-f4fd-c9dc-00000016e126" (see here).

# H2 Database Engine

• Issue: dropping unique key constraints - SQL statement ALTER TABLE COUNTRY DROP CONSTRAINT CONSTRAINT\_INDEX\_6 (see here).

### **HSQLDB**

• Issue: dropping unique key constraints - SQL statement ALTER TABLE COUNTRY DROP CONSTRAINT SYS\_IDX\_SYS\_PK\_10289\_10293 (see here).

### IBM Db2 Database

• Issue: Docker Image from docker pull ibmcom/db2:11.5.6.0 (see here).

#### **OmniSciDB**

• Issue: connection problem with existing OmnisciDB (see here).

#### trino

- Issue: all connectors: absolutely unsatisfactory performance (see here).
- Issue: Oracle connector: Oracle session not disconnected (see here).
- Issue: Oracle connector: Support Oracle's NUMBER data type (see here).

#### **VoltDB**

- Issue: Java 16 not yet supported: java.lang.NullPointerException: Cannot invoke "io.netty\_voltpatches.NinjaKeySet.size()" because "this.m\_ninjaSelectedKeys" is null
- Issue: dropping primary key constraints (see here).