**Cloudera Streaming Analytics 1.5.3** 

# **Release Notes**

Date published: 2019-12-17 Date modified: 2021-12-21



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# CVE-2021-45105 & CVE-2021-44832 remediation for CSA

Learn more about the CVE-2021-45105 and CVE-2021-44832 remediation for Flink and SQL Stream Builder in Cloudera Streaming Analytics (CSA).

Cloudera released maintenance versions for CSA on CDP Private Cloud Base to address CVE-2021-45105 and CVE-2021-44832 identified as critical vulnerability issues for Log4j2.

Cloudera encourages users to upgrade to the following CSA versions to avoid any possibility of exploitation:

- CVE-2021-45105: CSA 1.5.3 or higher version
- CVE-2021-44832: CSA 1.6.1

For more information about the impacts of CVE-2021-45105, see the TSB 2021-547: Critical vulnerability in log4j2 CVE-2021-45105 Knowledge Base article.

**Related Information** CSA 1.5.3 Installation guide CSA 1.6.1 Installation guide

# What's new in Cloudera Streaming Analytics

As the Cloudera Streaming Analytics 1.5.3 is a maintenance release, there are no new features available. For more information about the issues fixed in the maintenance release, see the *Release Notes - Fixed issues* section.

# **Fixed issues**

Review the list of Flink and SQL Stream Builder issues that are resolved in Cloudera Streaming Analytics 1.5.3. Log4j2 vulnerability issue is fixed

On December 21, 2021 Cloudera released a maintenance version for Cloudera Streaming Analytics on Private Cloud Base. The maintenance release addresses CVE-2021-45105 identified as critical vulnerability issue for Log4j2. Cloudera encourages users using to upgrade to Cloudera Streaming Analytics 1.5.3 or the latest version to avoid any possibility of exploitaion.

For more information about the impacts of CVE-2021-45105, see the TSB 2021-547: Critical vulnerability in log4j2 CVE-2021-45105 Knowledge Base article.

# **Component support**

Learn more about which Apache Flink component version is supported in the Cloudera Streaming Analytics (CSA) releases.

| CSA version | Component version |
|-------------|-------------------|
| CSA 1.5.3   | Apache Flink 1.13 |
| CSA 1.5.1   | Apache Flink 1.13 |
| CSA 1.5.0   | Apache Flink 1.13 |
| CSA 1.4.1   | Apache Flink 1.12 |

| CSA version | Component version  |
|-------------|--------------------|
| CSA 1.4.0   |                    |
| CSA 1.3.0   |                    |
| CSA 1.2.0   | Apache Flink 1.10  |
| CSA 1.1.0   | Apache Flink 1.9.1 |

## **Related Information**

CSA 1.5.1 Release Notes CSA 1.5.0 Release Notes CSA 1.4.1 Release Notes CSA 1.4.0 Release Notes CSA 1.3.0 Release Notes CSA 1.2.0 Release Notes CSA 1.1.0 Release Notes

# **Known issues and limitations**

Learn about the known issues in Flink and SQL Stream Builder, the impact or changes to the functionality, and the workaround in Cloudera Streaming Analytics 1.5.1.

### **SQL Stream Builder**

### CSA-1232: Big numbers are incorrectly represented on the Streaming SQL Console UI

The issue impacts the following scenarios in Streaming SQL Console:

- When having integers bigger than 253-1 among your values, the Input transformations and User Defined Functions are considered unsafe and produce incorrect results as these numbers will lose precision during parsing.
- When having integers bigger than 253-1 among your values, sampling to the Streaming SQL Console UI produces incorrect results as these numbers will lose precision during parsing.

None

#### CSA-1454: Timezone settings can cause unexpected behavior in Kafka tables

You must consider the timezone settings of your environment when using timestamps in a Kafka table as it can affect the results of your query. When the timestamp in a query is identified with from\_unixtime, it returns the results based on the timezone of the system. If the timezone is not set in UTC+0, the timestamp of the query results will shift in time and will not be correct.

Change your local timezone settings to UTC+0.

#### CSA-1673: SSB operations are not showing in Atlas

Due to a communication issue SQL Stream Builder (SSB) operations are not showing in Atlas.

None

## CSA-1985: DROP TABLE limitation when using Webhook table

DROP TABLE cannot be executed against Webhook type tables. The following error message is displayed when trying to delete a Webhook table using the SQL window: Table with identifier 'xyz' does not exist.

Use the Delete button on the Streaming SQL Console.

#### CSA-2016: Deleting table from other teams

There is a limitation when using the Streaming SQL Console for deleting tables. It is not possible to delete a table that belongs to another team using the Delete button on the User Interface.

Use DROP TABLE statement from the SQL window.

## CSA-2559: Materialized View settings can be overwritten while running job

Materialized View settings are overwritten when submitting a new job with the same name.

None

## Flink

In Cloudera Streaming Analytics, the following SQL API features are in preview:

- Match recognize
- Top-N
- Stream-Table join (without rowtime input)

### **DataStream conversion limitations**

- Converting between Tables and POJO DataStreams is currently not supported in CSA.
- Object arrays are not supported for Tuple conversion.
- The java.time class conversions for Tuple DataStreams are only supported by using explicit TypeInformation: LegacyInstantTypeInfo, LocalTimeTypeInfo.getInfoFor(LocalDate/LocalDat eTime/LocalTime.class).
- Only java.sql.Timestamp is supported for rowtime conversion, java.time.LocalDateTime is not supported.

## Kudu catalog limitations

- CREATE TABLE
  - Primary keys can only be set by the kudu.primary-key-columns property. Using the PRIM ARY KEY constraint is not yet possible.
  - Range partitioning is not supported.
- When getting a table through the catalog, NOT NULL and PRIMARY KEY constraints are ignored. All columns are described as being nullable, and not being primary keys.
- Kudu tables cannot be altered through the catalog other than simply renaming them.

### Schema Registry catalog limitations

- Currently, the Schema Registry catalog / format only supports reading messages with the latest enabled schema for any given Kafka topic at the time when the SQL query was compiled.
- No time-column and watermark support for Registry tables.
- No CREATE TABLE support. Schemas have to be registered directly in the SchemaRegistry to be accessible through the catalog.
- The catalog is read-only. It does not support table deletions or modifications.
- By default, it is assumed that Kafka message values contain the schema id as a prefix, because this is the default behaviour for the SchemaRegistry Kafka producer format. To consume messages with schema written in the header, the following property must be set for the Registry client: store.schema.version.id.in.header: true.

# **Unsupported features**

The following features are not supported in Cloudera Streaming Analytics 1.5.3.

# **SQL Stream Builder**

• Direct SQL Stream Builder upgrade from 1.3.0



**Important:** This does not impact Flink, you can directly upgrade Flink as described in the documentation.

For more information, see the Upgrading SQL Stream Builder in the 1.3.0 documentation.

# Flink

- Apache Flink batch (DataSet) API
- GPU Resource Plugin
- Application Mode deployment
- SQL Client
- Python API
- The following features are not supported in SQL and Table API:
  - HBase Table Connector
  - Old Planner
  - Non-windowed (unbounded) joins, distinct