Cloudera Streaming Analytics 1.4.1

Upgrade

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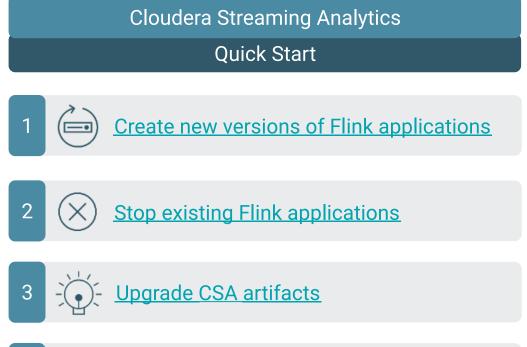
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Quick Start for Upgrading CSA

You can use the Quick Start to easily upgrade Cloudera Streaming Analytics (CSA) to the latest version. You can learn more information by clicking on the high level steps covered in the illustration.





Creating new Flink application versions

You need to build new versions of your existing Flink applications by updating the Cloudera Streaming Analytics (CSA) dependencies to the latest version.

You need to verify that your new application versions are compatible with the planned CSA release. For example, if you build your project with Maven, you need to increment your version number in the pom.xml.

Old version: <flink.version>x.x.x-csax.x.x.x</flink.version>

New version: <flink.version>y.y.y-csay.y.y</flink.version>

Stopping Flink applications

You must stop your Flink applications before updating the artifacts. You can use the stop command to create a savepoint of your application. You can also use the cancel command to stop your Flink application without creating a savepoint.

About this task

You can use savepoints to resume the application state after the upgrade.

Procedure

1. Determine the related Flink job IDs.

flink list

2. Stop your Flink applications.

You have two choices:

• Stop your applications with a savepoint to store the application state.

```
flink stop <Flink job ID>
```

The command returns an HDFS path, which is the automatically created savepoint that stores the application state.

• Cancel your applications without creating a savepoint.

```
flink cancel <Flink job ID>
```

Use this method if you do not need to restore the application state after the upgrade.

Upgrading CSA artifacts

You need to upgrade the Cloudera Streaming Analytics (CSA) artifacts to the newer version by manually deleting the old CSD file from the repository, and adding the latest CSD file to the same location.

Procedure

1. Download the new CSD and parcel files from the Download location.

In case you are upgrading to the latest CSA version that includes SQL Stream Builder (SSB), you also must download the SSB CSD, and add it to the /opt/cloudera/csd folder with the new Flink CSD. For more information, see the Installing parcel and CSD documentation.

- 2. Delete the old CSD version from /opt/cloudera/csd.
- 3. Copy the new artifacts to the /opt/cloudera/csd folder.



Warning: The upgrade process fails if you only add the new parcel file in Cloudera Manager. You must add the Flink and SSB CSD to the /opt/cloudera/csd folder as well.

- 4. Ensure that you maintain the appropriate file ownership and access the attributes if needed.
- **5.** Restart the Cloudera Manager Server with the following command:
 - RHEL 7 Compatible, SLES 12, Ubuntu: systemctl restart cloudera-scm-server
 - RHEL 6 Compatible: service cloudera-scm-server restart
- Restart the Cloudera Management Services.
- 7. Install and activate the new CSA parcel from Cloudera Manager.
- 8. Restart the Flink service when prompted in the wizard.

For more information about the general process of Service Management, see the Cloudera Manager documentation.

Resuming Flink applications

After updating the Cloudera Streaming Analytics artifacts, you can resume your application by the Flink run command. In case you have stopped your application by creating a savepoint, you must add the savepoint location to the command.

If you had stopped your Flink applications with a savepoint, you must define the path to the savepoint with an additional -s <savepointPath> parameter to the original run command.

```
flink run -d -ynm YarnApplicationName -s <savepointPath> application.jar
```

To start your stateless applications or stateful applications with an empty application state, use the original Flink run command.



Important:

Additional TLS related properties were added to the Gateway role. If you previously enabled TLS on your cluster, you can define Gateway TLS/SSL Client Trust Store File and Gateway TLS/SSL Client Trust Store Password configurations. You can set {{CM _AUTO_TLS}} as the property values when using Auto TLS in Cloudera Manager.

Gateway TLS/SSL Client Trust Store File security.ssl.rest.truststore	Gateway Default Group 🤚
	{{CM_AUTO_TLS}}
Gateway TLS/SSL Client Trust Store Password	Gateway Default Group 🦱
security.ssl.rest.truststore-password	*****

You can verify your settings by running the flink list -yD security.ssl.rest.enabled=true command.

Related Information Running a Flink job

Upgrading SQL Stream Builder

In the Cloudera Streaming Analytics 1.4.1 release, SQL Stream Builder (SSB) cannot be updated directly from CSA 1.4.0. This means you have to stop your SQL jobs, install and configure the 1.4.1 version of SSB, and restart your SQL jobs on the 1.4.1 version. It is really important that you remove the 1.4.0 version of metadata databases, and set up the 1.4.1 version of them as described in Configuring databases for SSB.

Related Information

Downloading CSA Installing CSD and parcels Adding SSB as a service