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ANALYTICS

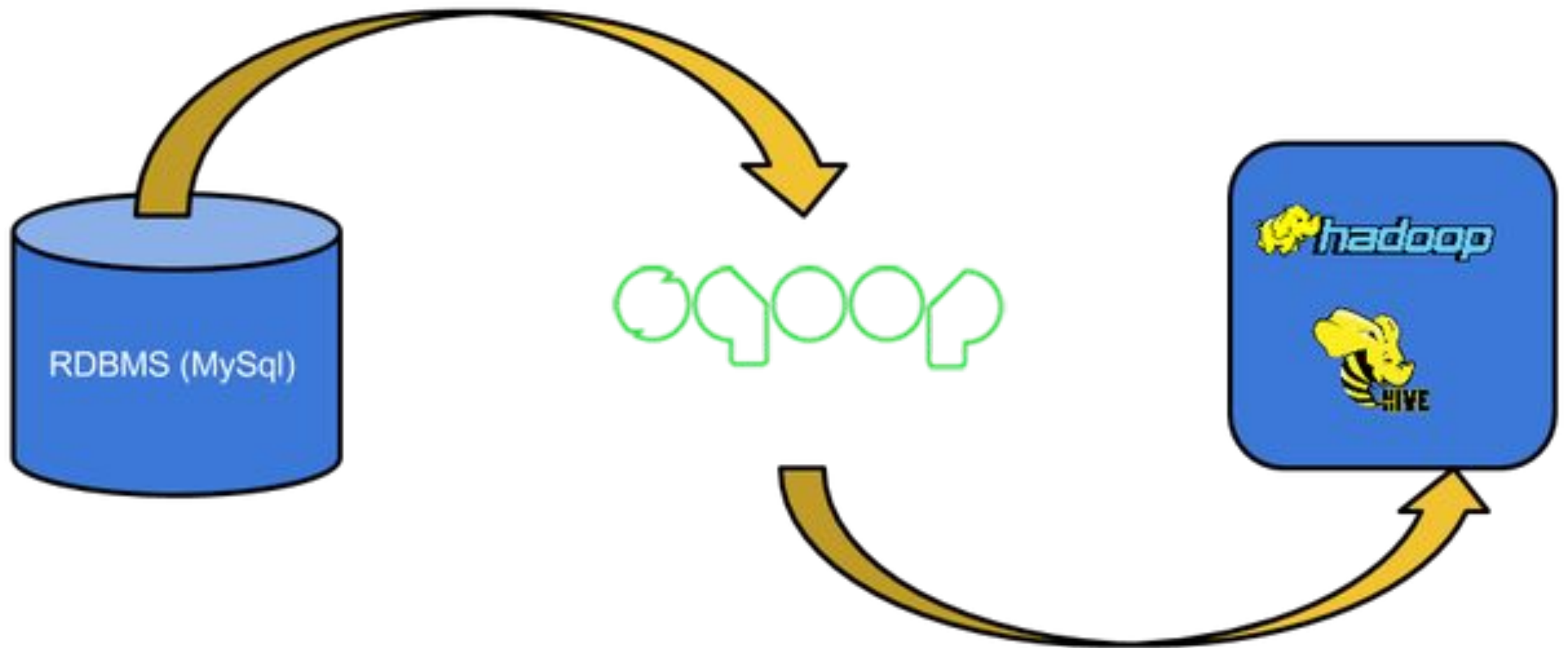
Introduction to Apache Sqoop

<https://www.facebook.com/diceanalytics>

<https://www.linkedin.com/company/13294896>



Sqoop



What is Sqoop

- Sqoop is a data transfer tool
- Sqoop transfer data between Hadoop and relational DB servers
- Sqoop is used to import data from relational DB such as MySQL, Oracle
- Sqoop is used to export data from HDFS to relational DB

Sqoop has to Major Tools

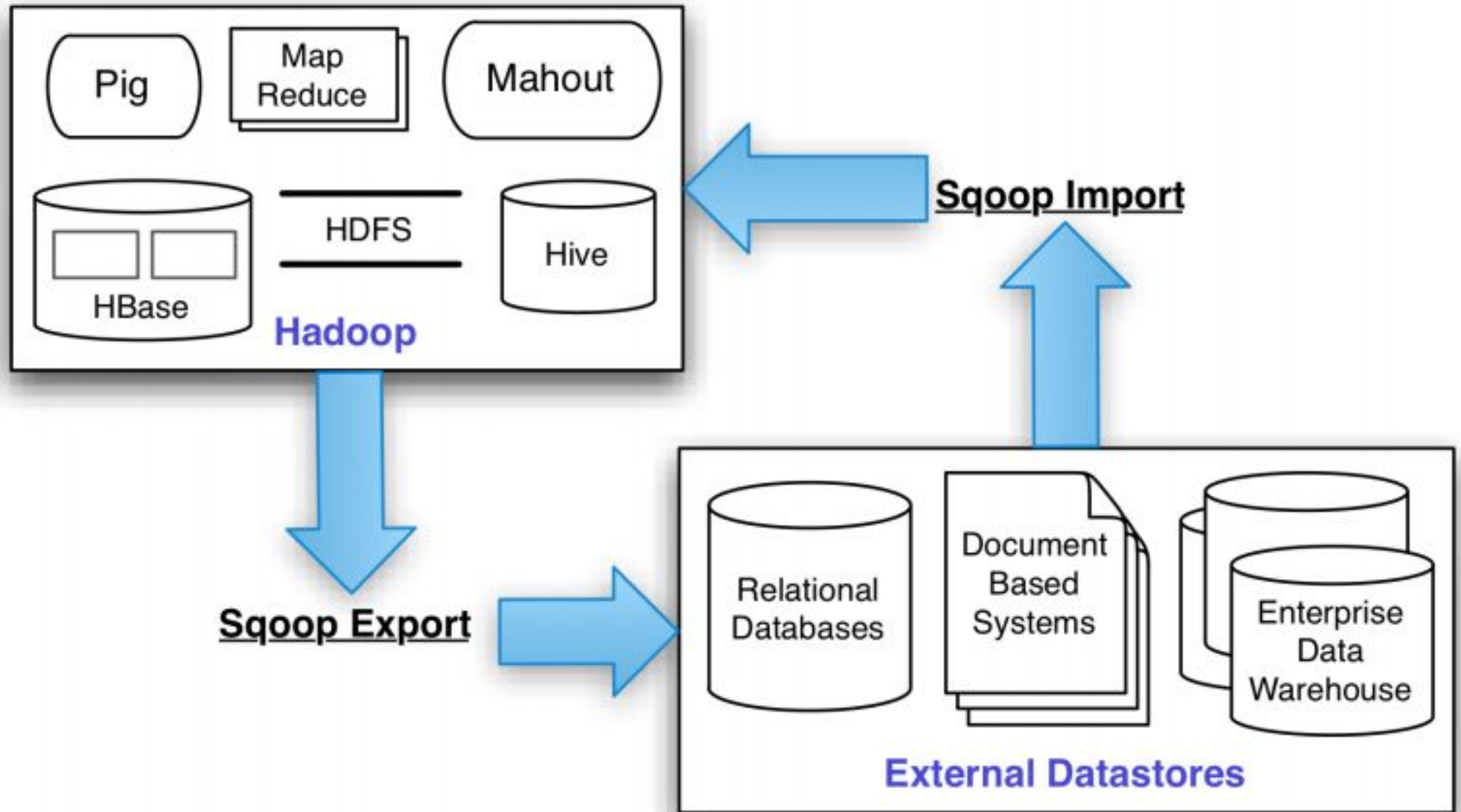


*Sqoop
Import*



*Sqoop
Export*

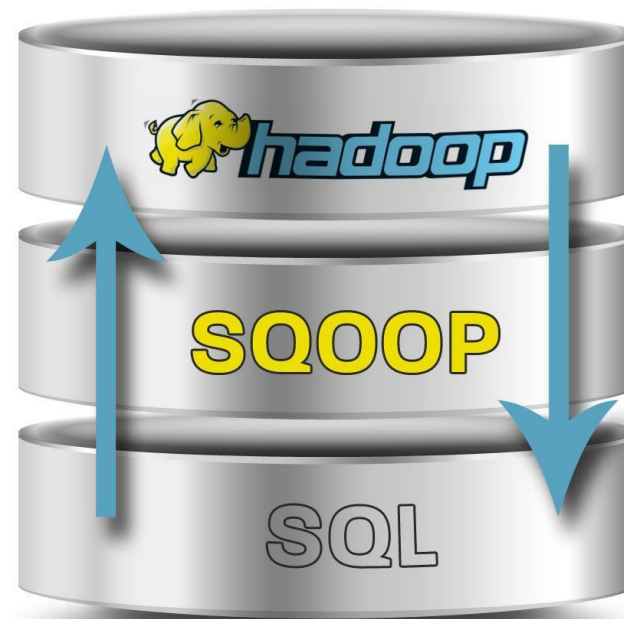
What is Sqoop



What is Sqoop

- Developed By Cloudera
- Uses Map Reduce Framework to Transfer Data
- Connectors Available for Multiple RDBMS

cloudera



ORACLE®

TERADATA

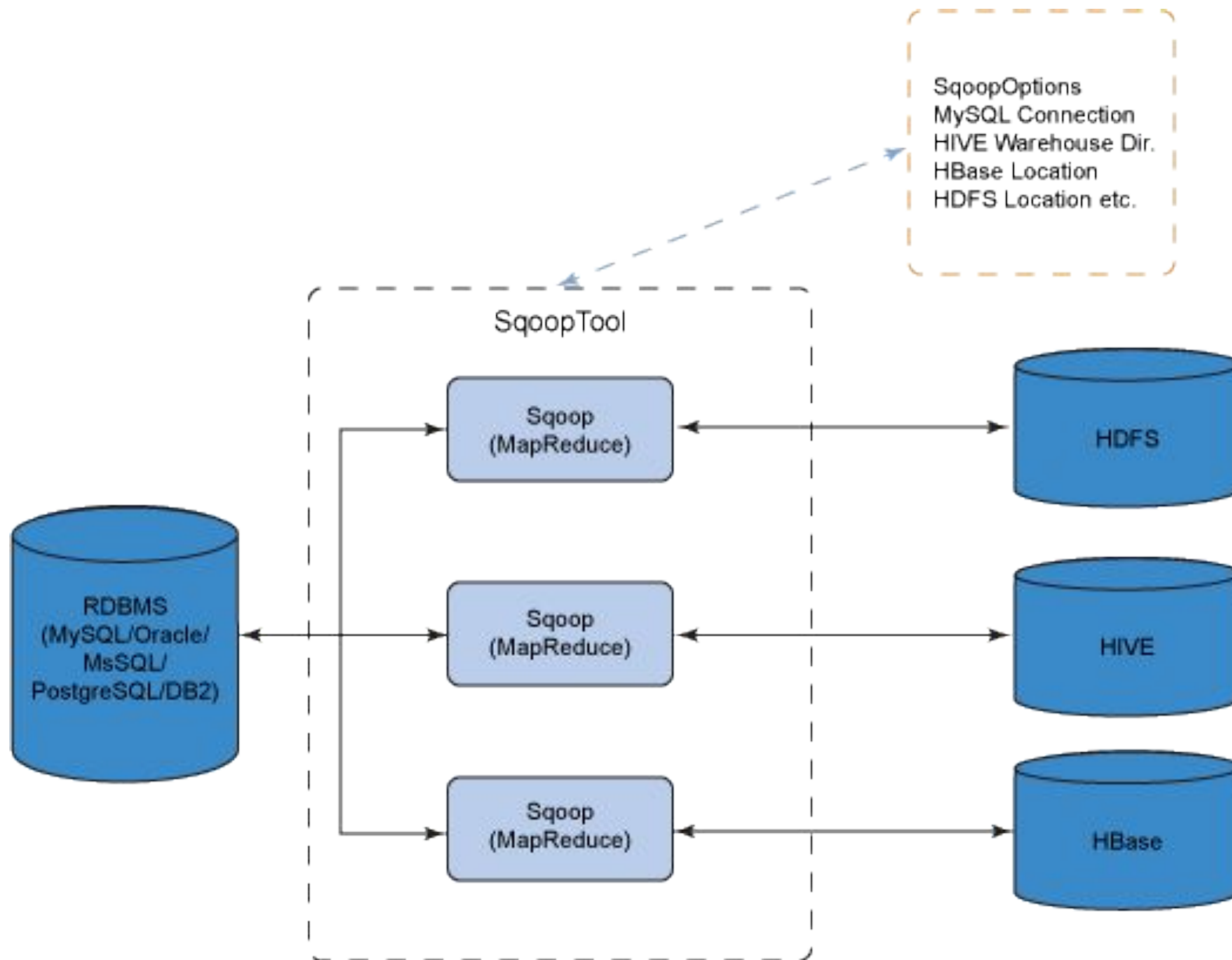
N NETEZZA
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MySQL®

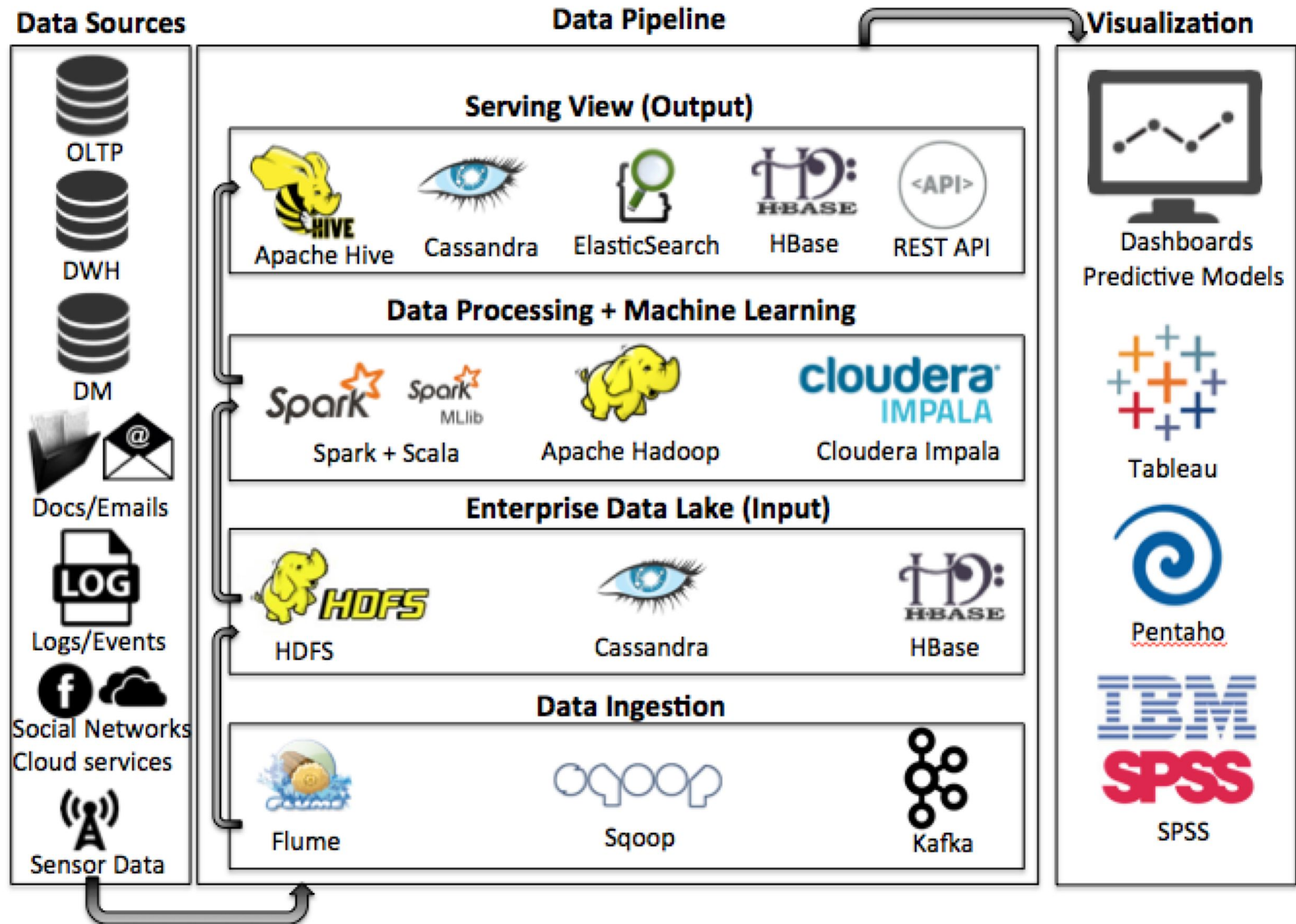
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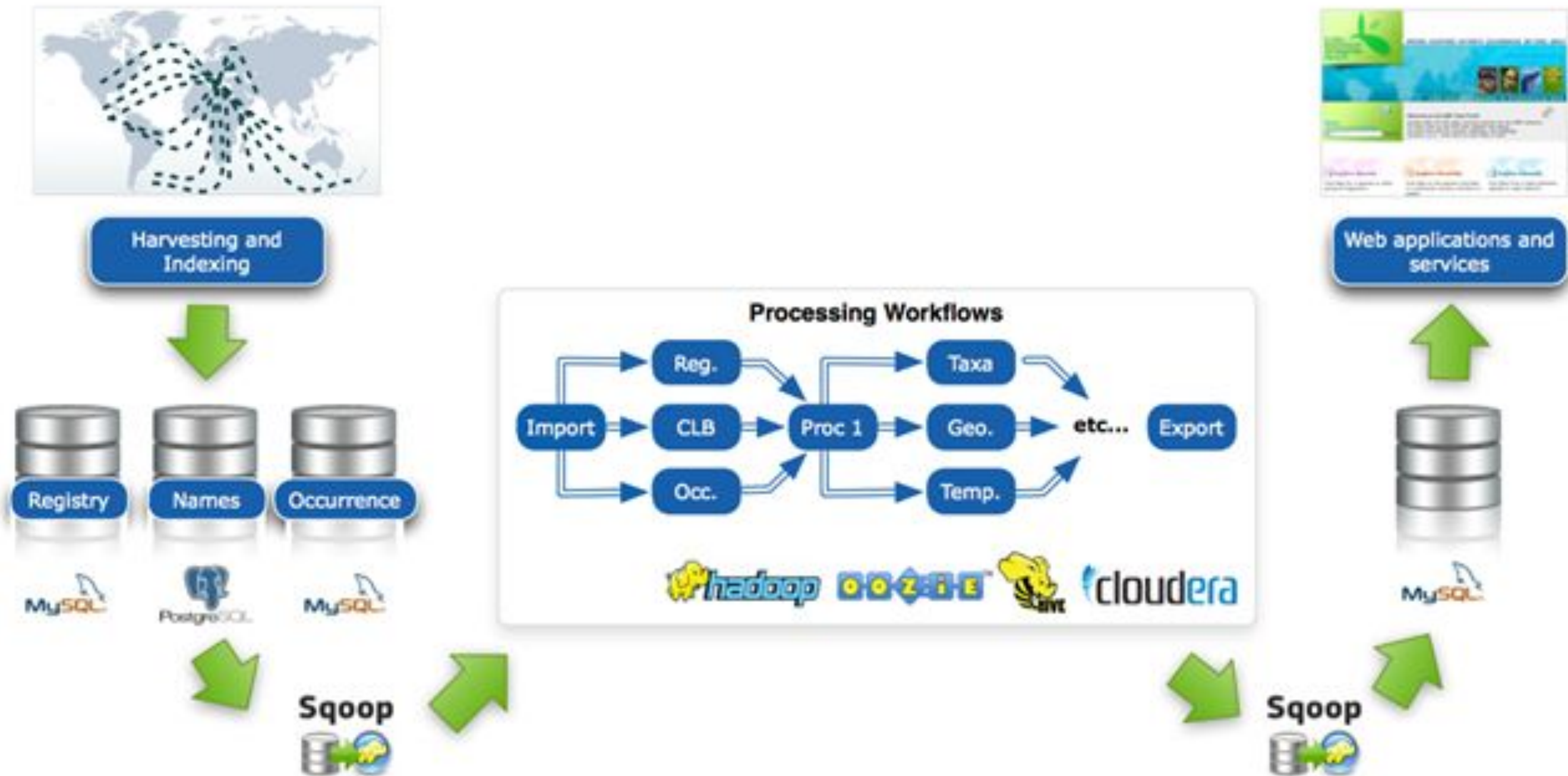
Sqoop Architecture



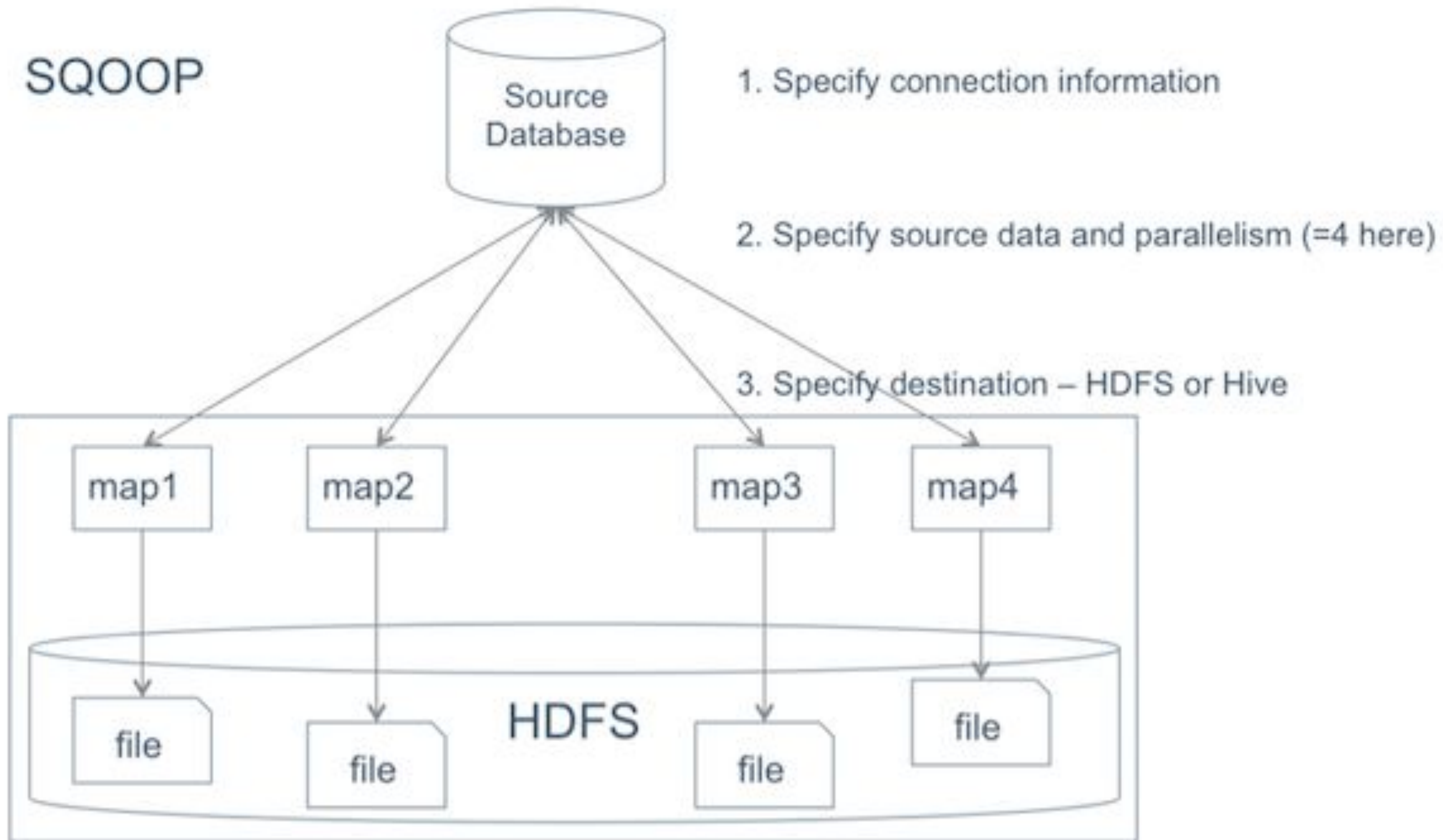
Modern Data Pipelines



Sqoop in Realworld Applications



Sqoop Import Architecture



Sqoop Tutorial

- **Open Linux Shell**
- **Show Databases;**
- **Use Database Command**
- **Show Tables;**
- **Sqoop Help**
- **Sqoop help import**
- **Import Syntax Schema**

sqoop-import (generic-args) (import-args)

- **Create Database test2;**
- **CREATE TABLE test2.sample_data (Name Varchar(200) , Age Varchar(200));**
- **Insert into test2.sample_Data (Name,Age) Values('Ali','45');**

Sqoop Tutorial

- **Insert into test2.sample_data (Name,Age) Values('Raza','44');**
- **Insert into test2.sample_data (Name,Age) Values('Ahmad','43');**
- **Insert into test2.sample_data (Name,Age) Values('Ahmad','43');**
- **Insert into test2.sample_data (Name,Age) Values('Ahmad','43');**

```
sqoop import \  
--connect jdbc:mysql://localhost/test2 \  
--username root \  
--table sample_data \  
--m 1 \  
--driver com.mysql.jdbc.Driver \  
--target-dir /tmp/test2_sampledata_mysql
```

- **hadoop dfs -ls /tmp/test2_sampledata_mysql**
- **hdfs dfs -cat /tmp/test2_sampledata_mysql/part-m-00000**

Sqoop Tutorial

```
sqoop import \  
--connect jdbc:mysql://localhost/test2 \  
--username root \  
--table sample_data \  
--m 1 \  
--driver com.mysql.jdbc.Driver  
--target-dir =  
/tmp/test2_sampledata_mysql_V2  
--where "Name = 'Ali'"
```


Sqoop Scripts

https://github.com/dgadiraju/code/blob/master/hadoop/edw/hdp/sqoop/sqoop_demo.txt

<http://sqoop.praveendeshmane.co.in/sqoop/sqoop-import-from-mysql-database-to-HDFS.js>

p

<http://sqoop.praveendeshmane.co.in/sqoop/sqoop-export-to-mysql-database-from-HDFS.js>

p

<http://sqoop.praveendeshmane.co.in/sqoop/sqoop-job-command-with-example.jsp>

<http://sqoop.praveendeshmane.co.in/sqoop/sqoop-codegen-command-with-example.jsp>