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What is Apache Pig

1

- Platform for analyzing large datasets
- Uses its own language called Pig Latin
- Pig Latin is really easy to write!
- Automatically optimizes code execution

Apache Pig

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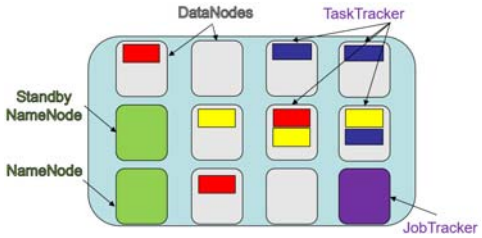
2

Pig runs on Hadoop. It makes use of HDFS and Yarn.

Hadoop 2.0 uses YARN (Yet Another Resource Negotiator)

This splits up JobTracker's two primary responsibilities, resource management and job scheduling, into two separate daemons; the Resource Manager and Application Master. These handle scheduling and accepting job submissions.

The TaskTracker is effectively replaced by NodeManager, which is responsible for monitoring node resource usage (memory, cpu etc.)



3

Apache pig philosophy

Pig.apache.org/philosophy.html

Pigs Eat Anything

istockphoto.com

Pigs Live Anywhere

shutterstock.com

Pigs Are Domestic Animals

https://www.nadineathome.com

Pigs Fly

shutterstock.com

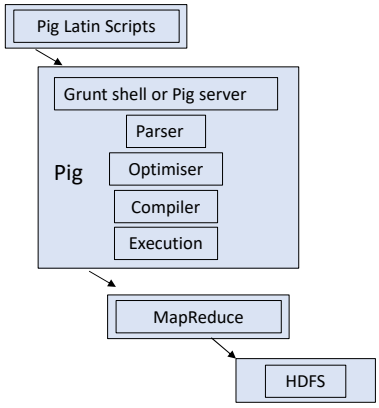
Pigs are … light?

4

Pig components

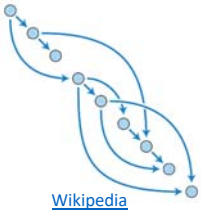
Pig is made up of two main components: the runtime engine and the Pig Latin scripting language

Runtime Engine

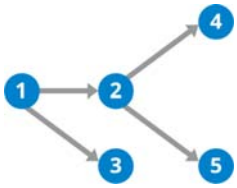


Pig Latin

- Dataflow language
- Described through a Directed Acyclic Graph (DAG)



Wikipedia



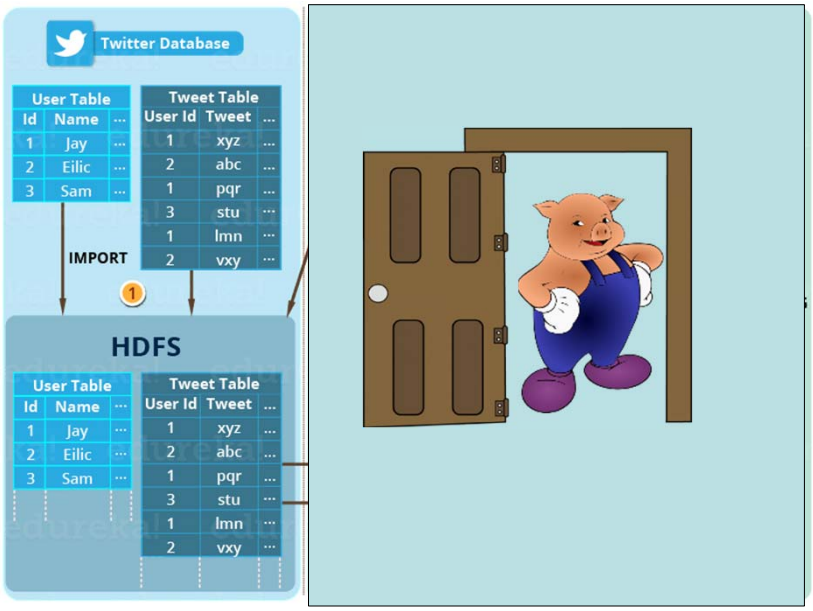
Hazelcast

Modes

Local Vs MapReduce

Interactive Vs Batch

5



Edureka

Use case is often Twitter

Though Yahoo runs about 40% of its Hadoop jobs in Pig too

Why use MapReduce at all?

- **More control**
- **Difficult jobs**
- **Faster**

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