

# — Oozie, Pig, MapReduce and HCatalog — Computational Infrastructure for Big Data Analytics

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## 1 Context

- Project objectives

# Project objectives

What are we looking for?

Question	Condition	Related QAs	Ecosystem Apps	Dataset	Program(s)	Current State
How big is the gap between Pig and MapReduce execution times?	Proposed	Performance	Pig, MapReduce, Oozie	NCDC Weather	Max temperature and Mean maximum temperature station-day-month	Executed on cluster
Can Pig exploit the benefits <sup>1</sup> of Hive through HCatalog?	Proposed	Performance, Extensibility	Pig, HCatalog	NCDC Weather	Partitioned weather	Tested on Cluster
How easily does Oozie support changes in workflow apps?	Proposed	Reusability, Maintainability	Pig, MapReduce, Oozie	NCDC Weather	Mean maximum temperature station-day-month	Tested on Cloudera VM
What is the gap between Oozie and JobControl execution times?	Desired	Performance	Oozie, MapReduce	NCDC Weather	Mean maximum temperature station-day-month	JobControl instance to be coded, tested and executed.

<sup>1</sup>Benefits provided by partitioned or bucketed tables.

# Bibliography I