THE BEST OF THE REST

Other relevant technologies, in brief

Impala

TM

- Cloudera's alternative to Hive
- Massively parallel SQL engine on Hadoop
- Impala's always running, so you avoid the start-up costs when starting a Hive query
 - Made for BI-style queries
- Bottom line: Impala's often faster than Hive, but Hive offers more versatility
- Consider using Impala instead of Hive if you're using Cloudera

Accumulo



- Another BigTable clone (like HBase)
- But offers a better security model
 - Cell-based access control
- And server-side programming
- Consider it for your NoSQL needs if you have complex security requirements
 - But make sure the systems that need to read this data can talk to it.

Redis

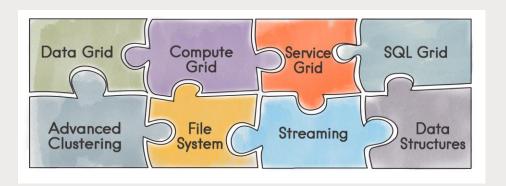


- A distributed <u>in-memory</u> data store (like memcache)
- But it's more than a cache!
- Good support for storing data structures
- Can persist data to disk
- Can be used as a data store and not just a cache
- Popular caching layer for web apps

Ingite



- An "in-memory data fabric"
- Think of it as an alternative to Redis
- But it's closer to a database
 - ACID guarantees
 - SQL support
 - But it's all done in-memory



Elasticsearch

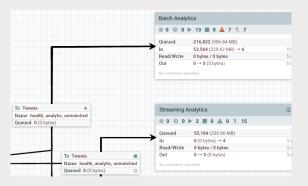
- A distributed document search and analytics engine
- Really popular
 - Wikipedia, The Guardian, Stack Overflow, many more
- Can handle things like real-time search-as-you-type
- When paired with Kibana, great for interactive exploration
- Amazon offers an Elasticsearch Service



Kinesis (and the AWS ecosystem)

- Amazon Kinesis is basically the AWS version of Kafka
- Amazon has a whole ecosystem of its own
 - Elastic MapReduce (EMR)
 - S3
 - Elasticsearch Service / CloudSearch
 - DynamoDB
 - Amazon RDS
 - ElastiCache
 - Al / Machine Learning services
- EMR in particular is an easy way to spin up a Hadoop cluster on demand

Apache NiFi



- Directed graphs of data routing
 - Can connect to Kafka, HDFS, Hive
- Web UI for designing complex systems
- Often seen in the context of IoT sensors, and managing their data
- Relevant in that it can be a streaming data source you'll see

Falcon



- A "data governance engine" that sits on top of Oozie
- Included in Hortonworks
- Like NiFi, it allows construction of data processing graphs
- But it's really meant to organize the flow of your data within Hadoop

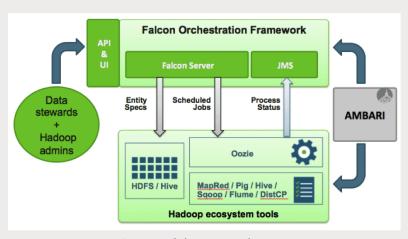


Image: falcon.apache.org

Apache Slider



- Deployment tool for apps on a YARN cluster
- Allows monitoring of your apps
- Allows growing or shrinking your deployment as it's running
- Manages mixed configurations
- Start / stop applications on your cluster
- Incubating

And many more...

Is your head spinning yet?

