

Big Data on AWS

Big Data Agility and Performance Delivered in the Cloud



Managed Services for Analytics



Retrospective analysis and reporting



Here-and-now real-time processing and dashboards



Predictions to enable smart applications



Elastic and highly scalable No upfront capital expense Only pay for what you use Available on-demand

= the Cloud removes constraints



The Cloud Was Built for Big Data



Agility: Try more, fail fast, go big or start small, and process data at any scale



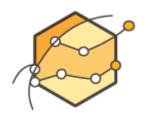
Scalability: Run jobs any time, without guessing capacity or limiting functionality



Broadest and Deepest
Capabilities: Access 70+
managed Big Data services
to address any workload



Low Cost: Pay only for the IT you use, when you use it



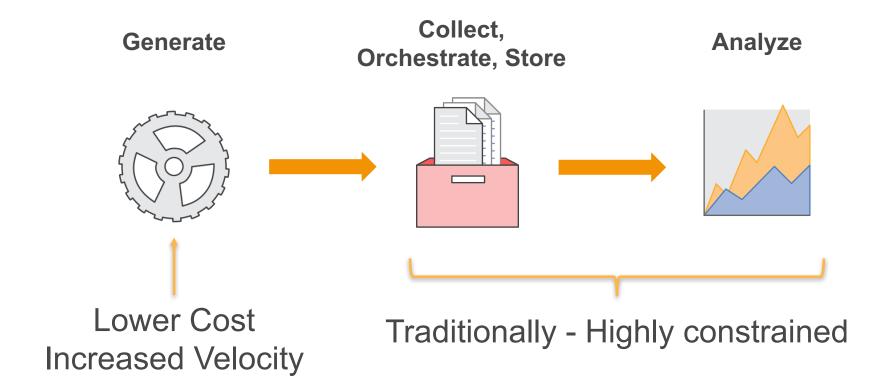
Get to Insights Faster:
Focus on data science not
the heavy undifferentiated lift
of managing raw data



Data Migrations Made
Easy: Move exabyte-scale
data to the cloud quickly and
cost-effectively



Common Big Data Flow





AWS Big Data Platform

Collect Orchestrate Store Analyze



























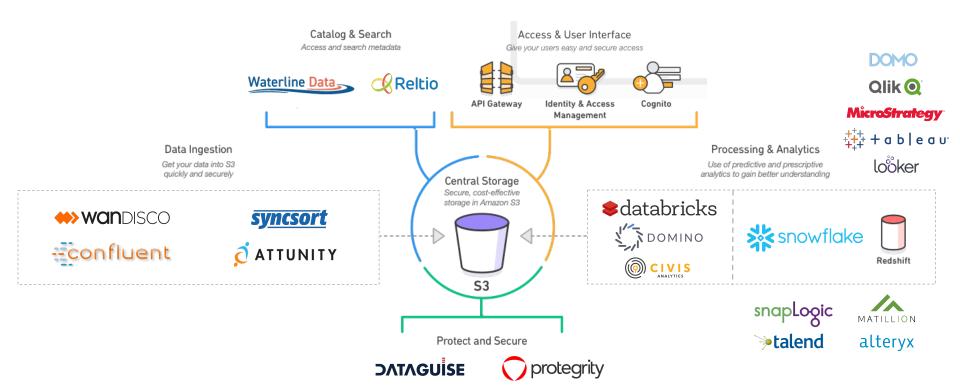


The AWS Approach

- Flexible Use the best tool for the job
 - Data structure, latency, throughput, access patterns
- Low Cost Big data ≠ big cost
- Scalable Data should be immutable (append-only)
 - Batch/speed/serving layer
- Minimize Admin Overhead Leverage AWS managed services
 - No or very low admin
- Be Agile Fail fast, test more, optimize Big Data at a lower cost

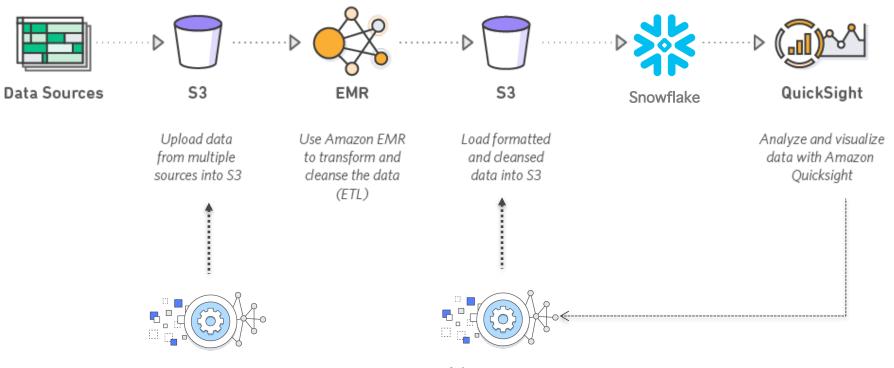


Building a Data Lake on AWS





A Sample Batch Analytics Pipeline

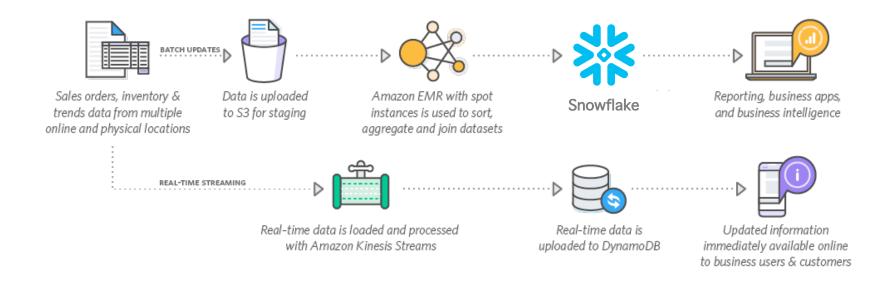


Ad-hoc access to data using Athena

Athena can query aggregated datasets as well



On-demand Big Data Analytics





Data Warehousing



Upload data from multiple sources into S3 Use Amazon EMR to transform and cleanse the data (ETL) Load formatted and deansed data into S3 Analyze and visualize data with Amazon Quicksight



Summary













- Build sophisticated Big Data applications cost-effectively and support retrospective, real-time and predictive analysis
- You can build incrementally, scale automatically and add use cases as you go
- AWS delivers added benefits of security and auditing features to enable you to meet your stringent requirements
- Build hybrid applications that span across your datacenters and the AWS Cloud



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Store Multiple Files to Amazon S3 using the AWS CLI

10-Minute Tutorial



10-Minute Tutorial
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Application
with AWS Elastic Beanstalk



10-Minute Tutorial Create and Query a NoSQL Table with Amazon Dynamo DB

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