HIGH AVAILABLITY
FOR DATA DEVELOPMENT
ENVIRONMENT AND EDS HOME LOANS

(January, 2015- October, 2016 | technical Project Manager)
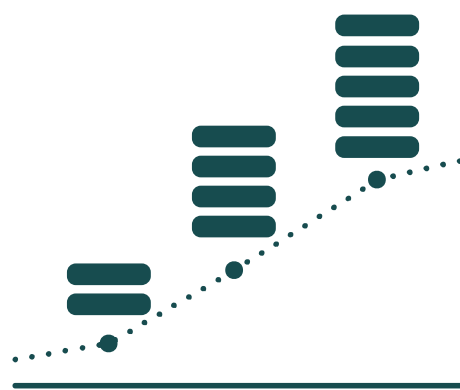
PROJECT
BACKGROUND

The client's data development environment, powered by Ab Initio with data stored in Teradata over multiple data centers. A major storage hardware failure impacted over 25% of daily jobs, leading to a catastropic failure & significant production downtime, resulting in multimillion-dollar losses. To enhance resilience, the decision was made to migrate to Hadoop for active data replication and high availability, a pioneering move for Ab Initio implementations. The transition required extensive research and large-scale remediation of affected code objects. The DDEHA project team was formed to ensure smooth operation on ABI 3.2 on Hadoop, addressing potential issues and optimizing the platform's performance

SUMMARY

THIS PROJECT WAS FIRST EVER ATTEMPT TO USE HADOOP FOR CRITICAL AND TRANSACTIONAL BANKING DATA PROCESSING PLATFORM. ITS SUCCESSFULL MIGRATION PROVIDED HIGH AVAILABILITY AND DESIRED LEVELS OF RESILIENCY AND PROTECTION AGAINST PRODUCTION ENVIRONMENT BEING TOTALLY UNAVAILABLE FOR BUSINESS.

PURPOSE

During this stint , 2 projects were delivered ,the first project tackled a major data outage by migrating their data capabilities developed on Ab Initio platform to Hadoop for high availability requiring, reenigneering of existing code base to work seamless on the new platform.
The second project built a mortgage data warehouse (MDW) for loan analysis, regulatory reporting, and data access across business units. Both projects significantly improved the company's data infrastructure and management.

PROJET LEARNING

- Unix versions have their nuances and can cause significant roadblocks which tough to debug and fix.
- Migrating accross unix versions caused delays and this should be factored into effort estimation.
- Ab initio Co-operating system works seemlessly on top of HDFS due to inbuilt parallelism in the tool.

RESPONSIBILITIES

- As a technical manager
  - Assessed the project complexities and hired/onboarded suitable talent
  - Collaborated with stakeholders to align expectations with business plan.
  - Created and shared cadence for management reporting
  - Aligned resources for the project
  - Formulated Quality plan , BCP and worl plan for team to operate
- As a solution architect
  - Verified Ab Initio on Hadoop & fixed Unix compatibility
  - Design & build utilities for migration and validation.
  - AWS Glacier data archive replacing tape backups
  - Formulate plan for rollouts & post-migration support

PROJECT
ENVIRONMENT

- Execution : Scrumban (hybrid of scrum and kanban)
- Geo distributed teams with haevy offshore component.
- Cross-functional team composed of infrastructure engineers, application engineers and Caludera experts.
- Unix, Teradata, Ab Initio, Caludera Hadoop, ControlM.
- Team Size - 24