Using the Red Hat portfolio for analytics:
More accurately predict your pricing and risk profile
and maintain regulatory compliance

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Agenda

● Pricing and Risk Analytics Business Process and Solution Overview

● Solution Architecture Diagram and Description of Components

● Red Hat Solution Components

● Demo
Pricing/Risk Analytics Process Overview

● Business Goals:
  ○ More accurately predict the pricing/risk profile of various combinations of assets on an intraday or multiday basis.
  ○ Maintain regulatory compliance by supporting long term data retention of the results and data used as well as reporting within a regulatory deadline.

● Typical Problems Hindering Those Goals:
  ○ Platforms are often difficult to update to meet ever changing requirements or to more accurately predict risk profile.
  ○ It's hard to get enormous amounts of disparate data aggregated and set up for processing.
Solution Architecture Diagram and Description of Components

1. Data and Event Feeds
   - Counterparty Data
   - Product Data
   - Other Data
   - Realtime Market Data

2. Data Injector
   - Extract, Transform, Normalize, Ingest
   - to cache

3. Scope of solution boundary

4. Risk Calc Hybrid Cloud
   - Calc Engine
     - Tasks
     - Cache (3) Storage

5. Workflow Manager

6. Historical
   - Aggregated results
   - Intra-day reporting repository
   - Historical long-term store

Risk reporting
In Short:

Financial firms aspire to remain competitive by more accurately predicting the risk profile of various combinations of assets while maintaining regulatory compliance. But they are challenged by:

- The ever increasing amount of internal and external data available
- The need to make changes to pricing/risk calculation algorithms without negatively disrupting its operation

Spark is one example component which transforms the raw financial data into model parameters needed to carry out the simulation. But financial institutions often struggle to manage large multi tenant Spark clusters.
Demo
QUESTIONS?