Red Hat JBoss and Hortonworks

Proof of Technology

USE CASE 1 – SENTIMENT ANALYSIS AND SALES ANALYSIS WITH HADOOP AND MYSQL

Use Case 1 - Overview

Objective:

-Determine if sentiment data from the first week of the Iron Man 3 movie is a predictor of sales
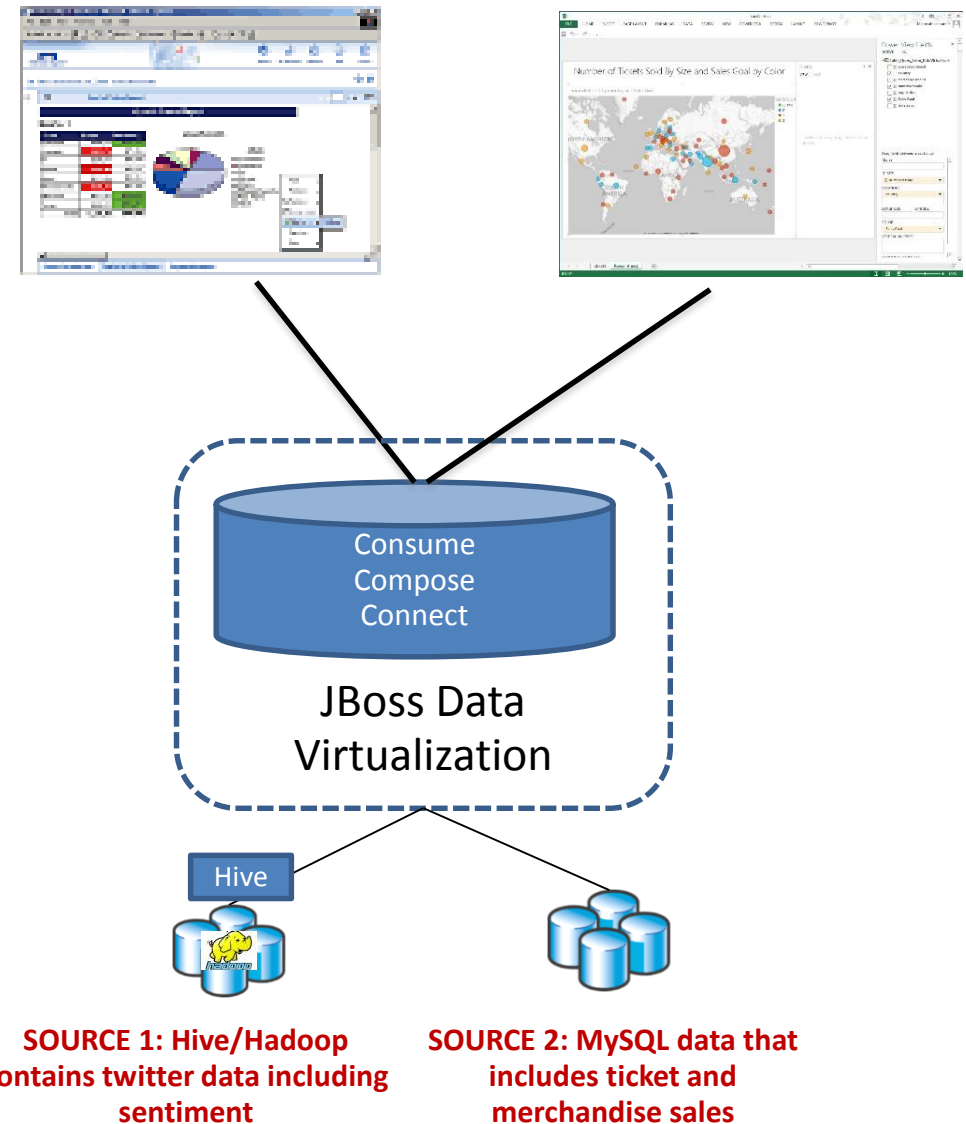
Problem:

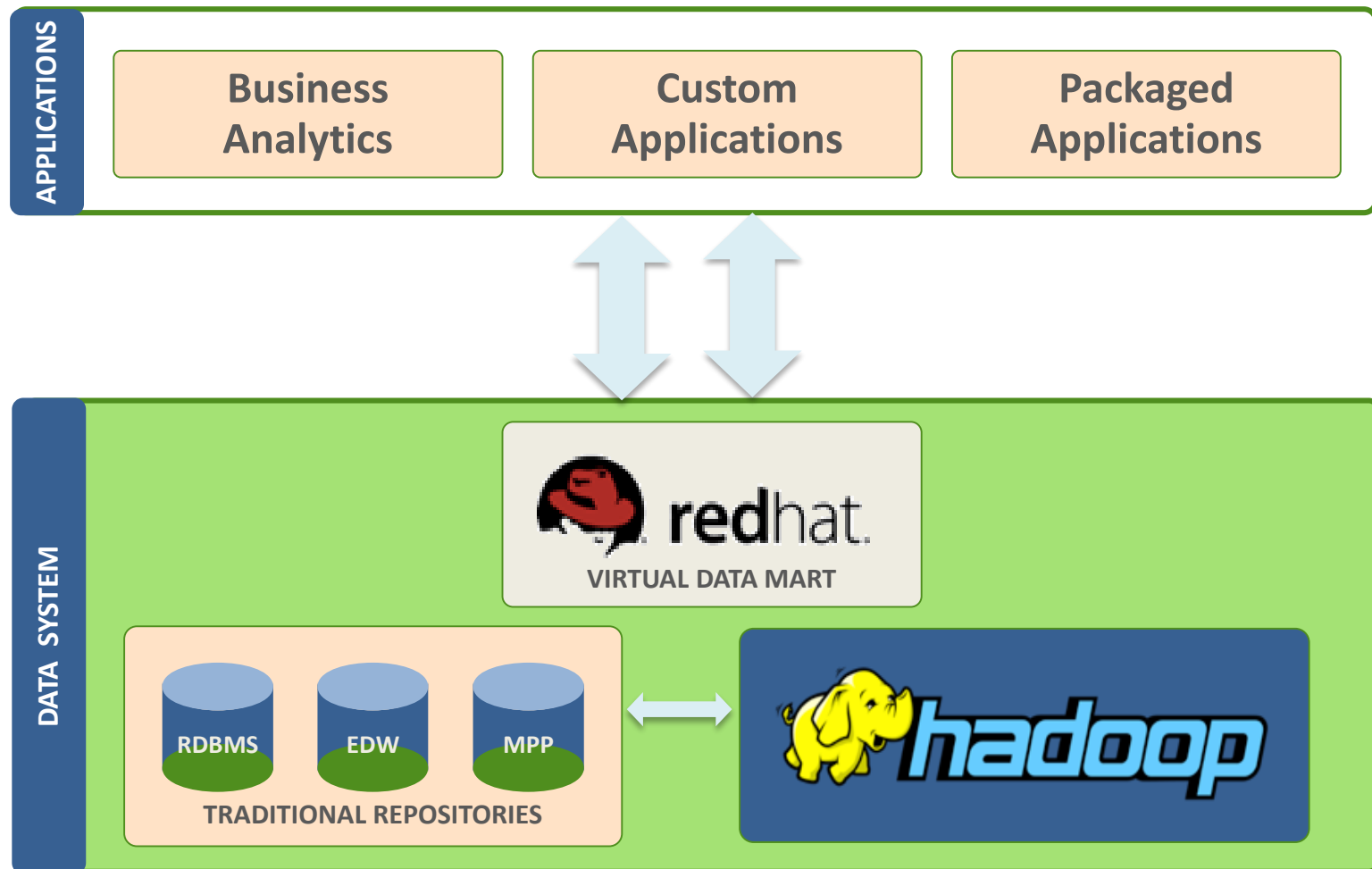-Cannot utilize social data and sentiment analysis with sales management system

Solution:

-Leverage JBoss Data Virtualization to mashup Sentiment analysis data with ticket and merchandise sales data on MySQL into a single view of the data.

Excel Powerview and DV Dashboard to analyze the aggregated data

Consume
Compose
Connect

JBoss Data Virtualization

Hive

SOURCE 1: Hive/Hadoop contains twitter data including sentiment

SOURCE 2: MySQL data that includes ticket and merchandise sales

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Use Case 1 – Architecture

Sentiment and Sales Analysis with Hadoop and MySQL

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Use Case 1 - Resources

- GUIDE

How to guide: https://github.com/DataVirtualizationByExample/HortonworksUseCase1
Tutorial: http://hortonworks.com/hadoop-tutorial/evolving-data-stratagic-asset-using-hdp-red-hat-jboss-data-virtualization/

- VIDEOS:

http://vimeo.com/user16928011/hortonworksusecase1short

http://vimeo.com/user16928011/hortonworksusecase2short

- SOURCE:

https://github.com/DataVirtualizationByExample/HortonworksUseCase1

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USE CASE 2 – FEDERATED HADOOP WITH SECURITY

Use Case 2 - Overview

Objective:

-Secure data according to Role for row level security and Column Masking
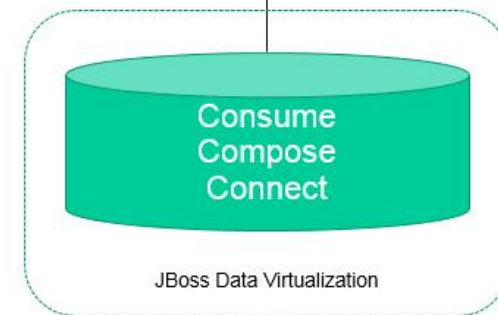
Problem:

-Cannot hide region data from region specific users

Solution:

-Leverage JBoss Data Virtualization to provide Row Level Security and Masking of columns

DV Dashboard to analyze the aggregated data by User Role

Consume Compose Connect

JBoss Data Virtualization

Hive

Hive

SOURCE 1: Hive/Hadoop in the HDP contains US Region Data

SOURCE 2: Hive/Hadoop in the HDP contains EU Region Data

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Use Case 2 - Architecture
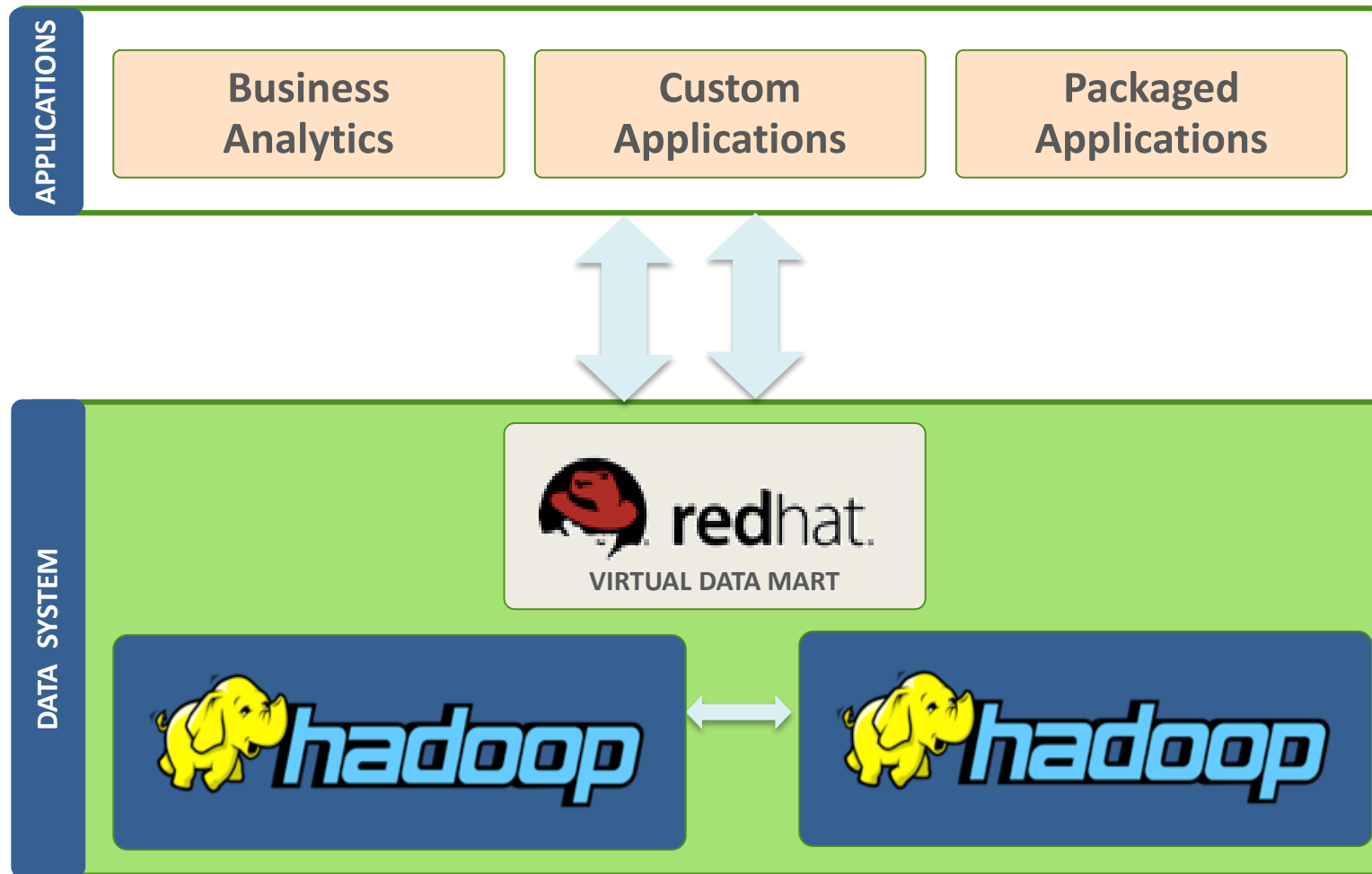
Scenario : two Hadoop clusters, different location (US & EMEA), two types of dataset for each regions.

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Use Case 2 - Resources

- GUIDE

How to guide: https://github.com/DataVirtualizationByExample/HortonworksUseCase2

Tutorial: Available soon

- VIDEOS:

http://vimeo.com/user16928011/hortonworksusecase2short

http://vimeo.com/user16928011/hortonworksusecase2short

- SOURCE:

https://github.com/DataVirtualizationByExample/HortonworksUseCase2

USE CASE 3 – HADOOP DATALAKE

Use Case 3 - Overview

Objective:
–Purpose oriented data views for functional teams over a rich variety of semi-structured and structured data

Problem:
–Data Lakes have large volumes of consolidated clickstream data, product and customer data that need to be constrained for multi-departmental use.

Solution:
–Leverage HDP to mashup Clickstream analysis data with product and customer data on HDP to answer
- Leverage Jboss Data Virt to provide Virtual data marts for each of Marketing and Product teams to …..

Use Case 3 - Architecture

APPLICATIONS

| Business Analytics | Custom Applications | Packaged Applications |

DATA SYSTEM

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VIRTUAL DATA MART

Hortonworks HDP 2.1 — hadoop

Governance & Integration | Data Access | Security | Operations
Data Management

redhat. | Windows Server 2012

SOURCES

Existing Sources
(CRM, ERP, Clickstream, Logs)

Emerging Sources
(Sensor, Sentiment, Geo, Unstructured)

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Use Case 3 - Resources

- GUIDE

How to guide: https://github.com/DataVirtualizationByExample/HortonworksUseCase3

Tutorial: Available soon

- VIDEOS:

http://vimeo.com/user16928011/hortonworksusecase3short

http://vimeo.com/user16928011/hortonworksusecase3short

- SOURCE:

https://github.com/DataVirtualizationByExample/HortonworksUseCase3

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