



RED HAT® JBOSSE
MIDDLEWARE

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

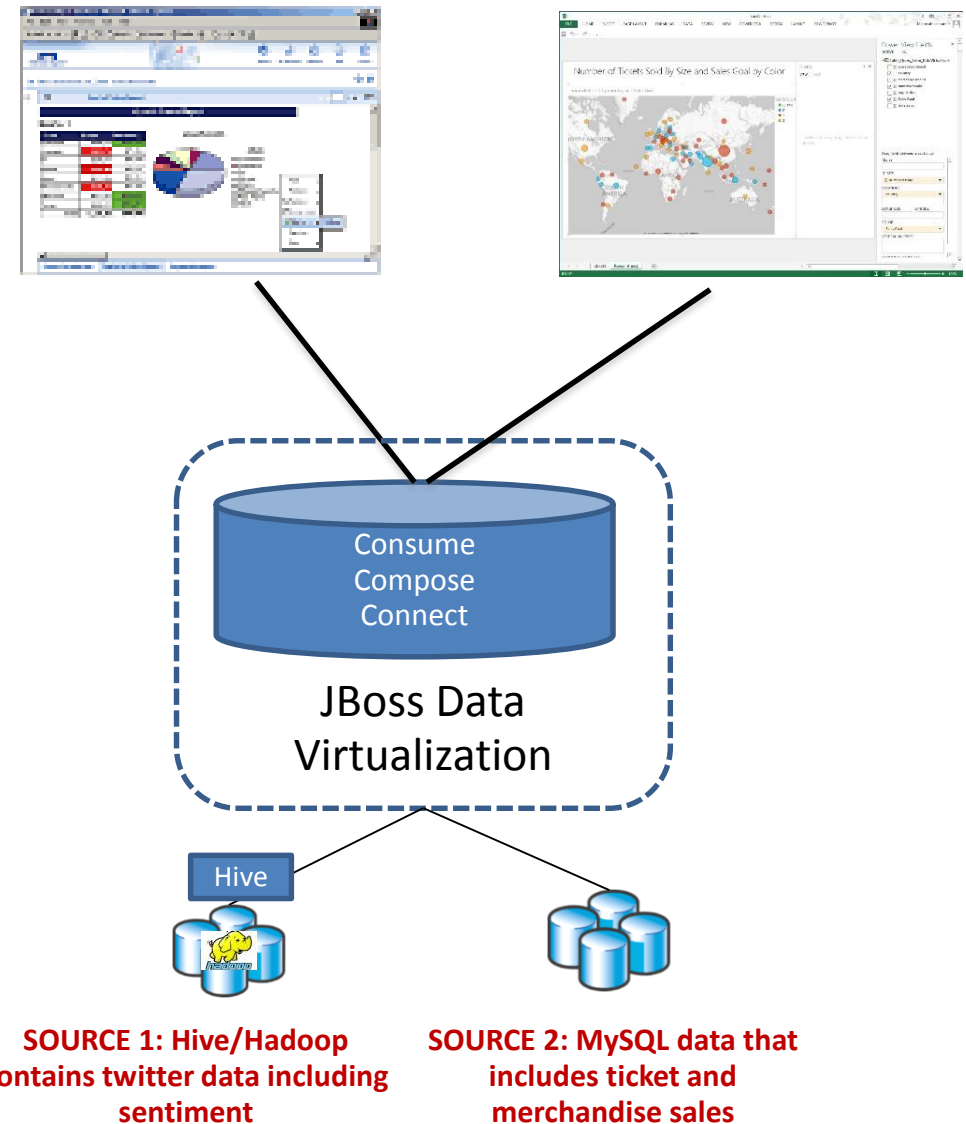
Problem:

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

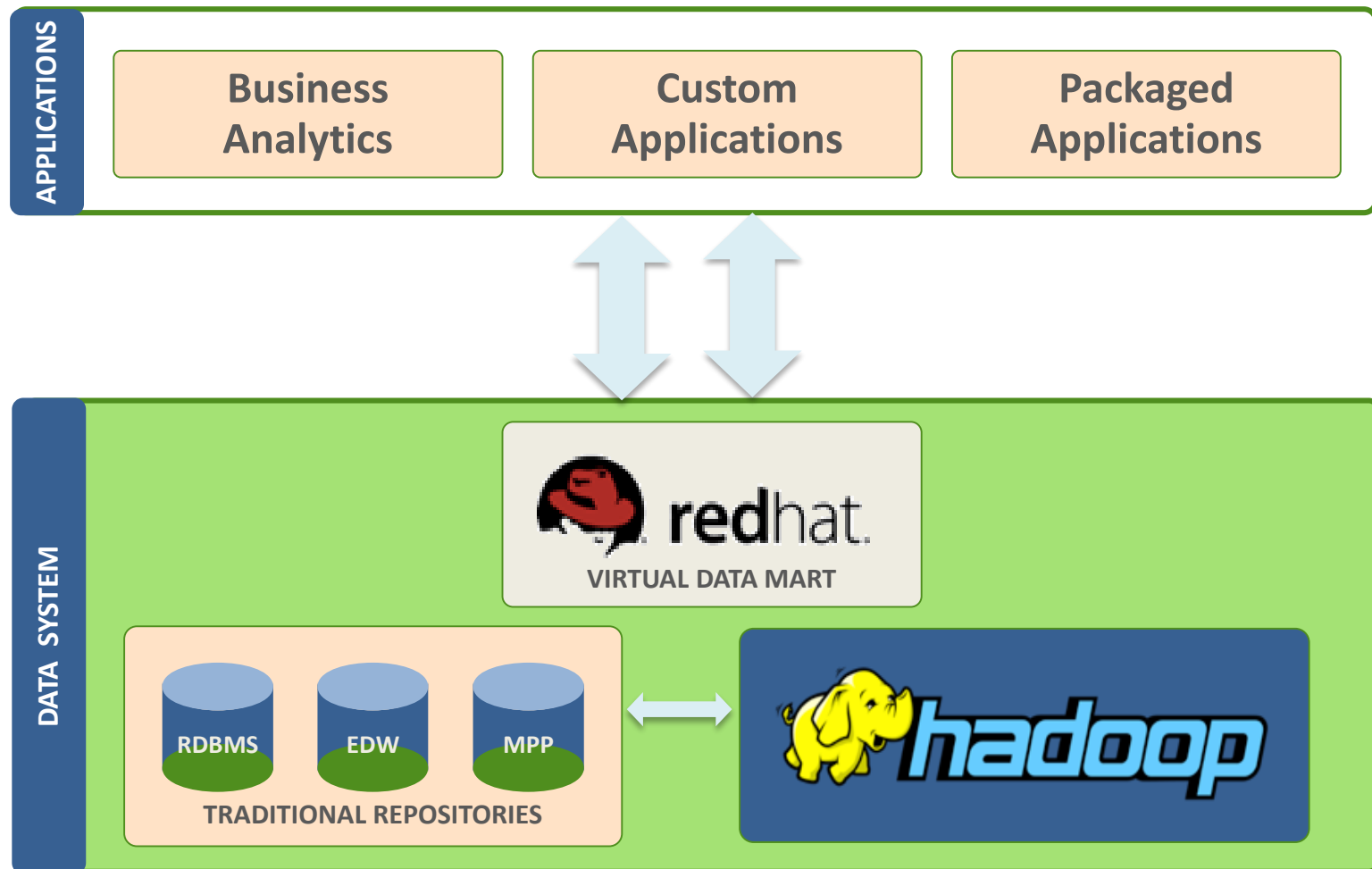
Solution:

- 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



Use Case 1 – Architecture



Sentiment and Sales Analysis with Hadoop and MySQL

Use Case 1 - Resources

- GUIDE

<https://drive.google.com/folderview?id=0B5kKwcd4kOq9RUIHcVBMVjJuX2c&usp=sharing>

- VIDEOS:

<http://vimeo.com/user16928011/hortonworksusecase1short>

<http://vimeo.com/user16928011/hortonworksusecase2short>

- SOURCE:

<https://github.com/DataVirtualizationByExample/HortonworksUseCase1>

USE CASE 2 – FEDERATED HADOOP WITH SECURITY

Use Case 2 - Overview

Objective:

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

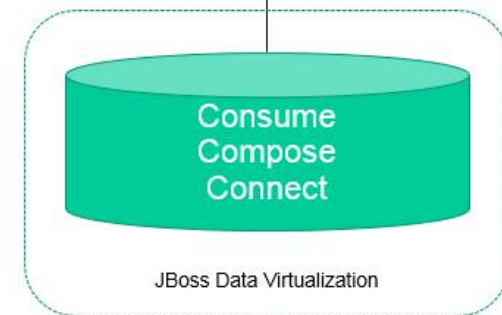
Problem:

- Cannot hide region data from region specific users

Solution:

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

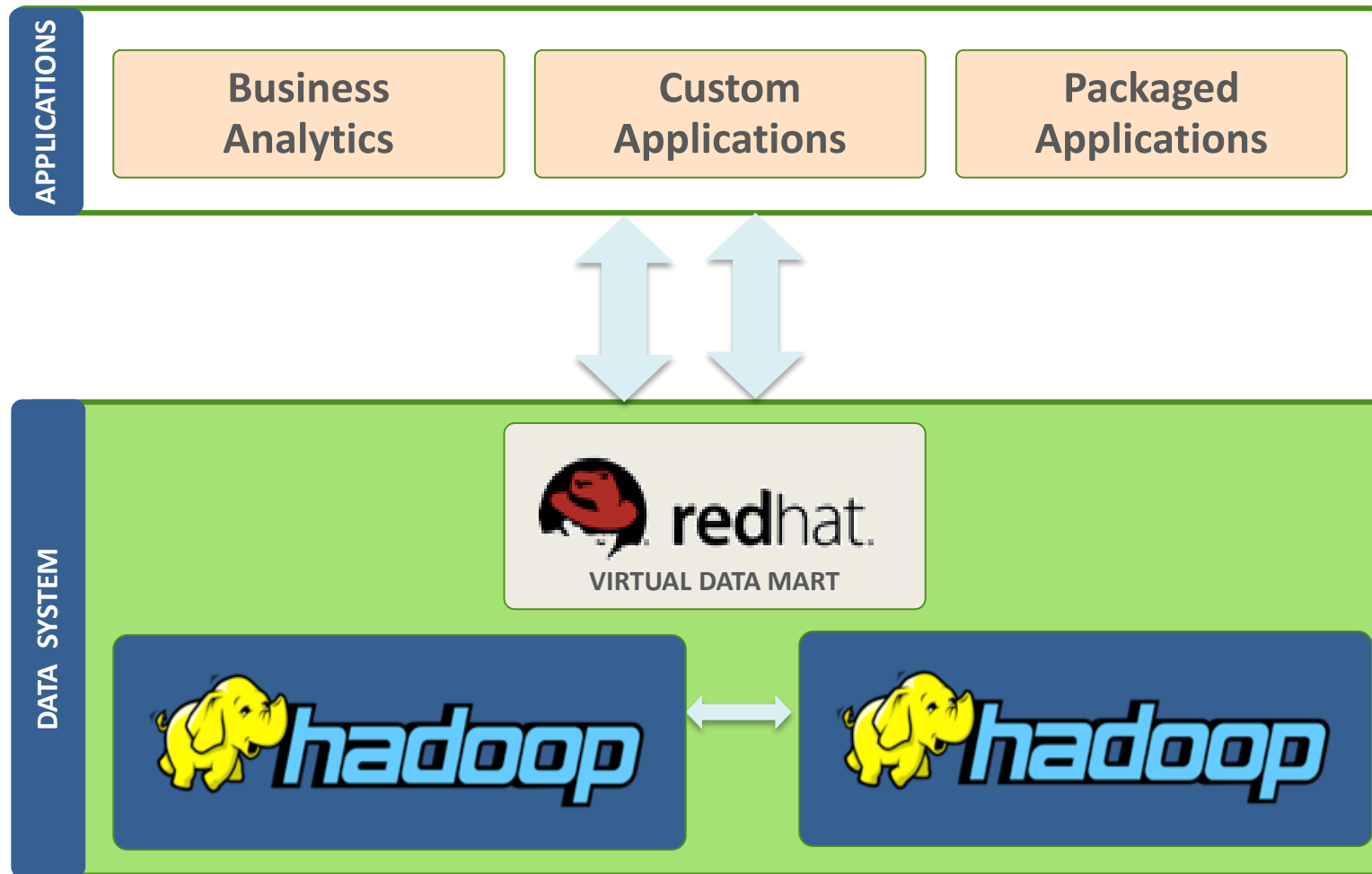
DV Dashboard to analyze the aggregated data by User Role



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

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

Use Case 2 - Architecture



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

Use Case 2 - Resources

- GUIDE

<https://drive.google.com/folderview?id=0B5kKwcd4kOq9RUIHcVBMVjJuX2c&usp=sharing>

- VIDEOS:

<http://vimeo.com/user16928011/hortonworksusecase2short>

<http://vimeo.com/user16928011/hortonworksusecase2short>

- SOURCE:

<https://github.com/DataVirtualizationByExample/HortonworksUseCase2>

USE CASE 3 – HADOOP DATALAKE

Objective:

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

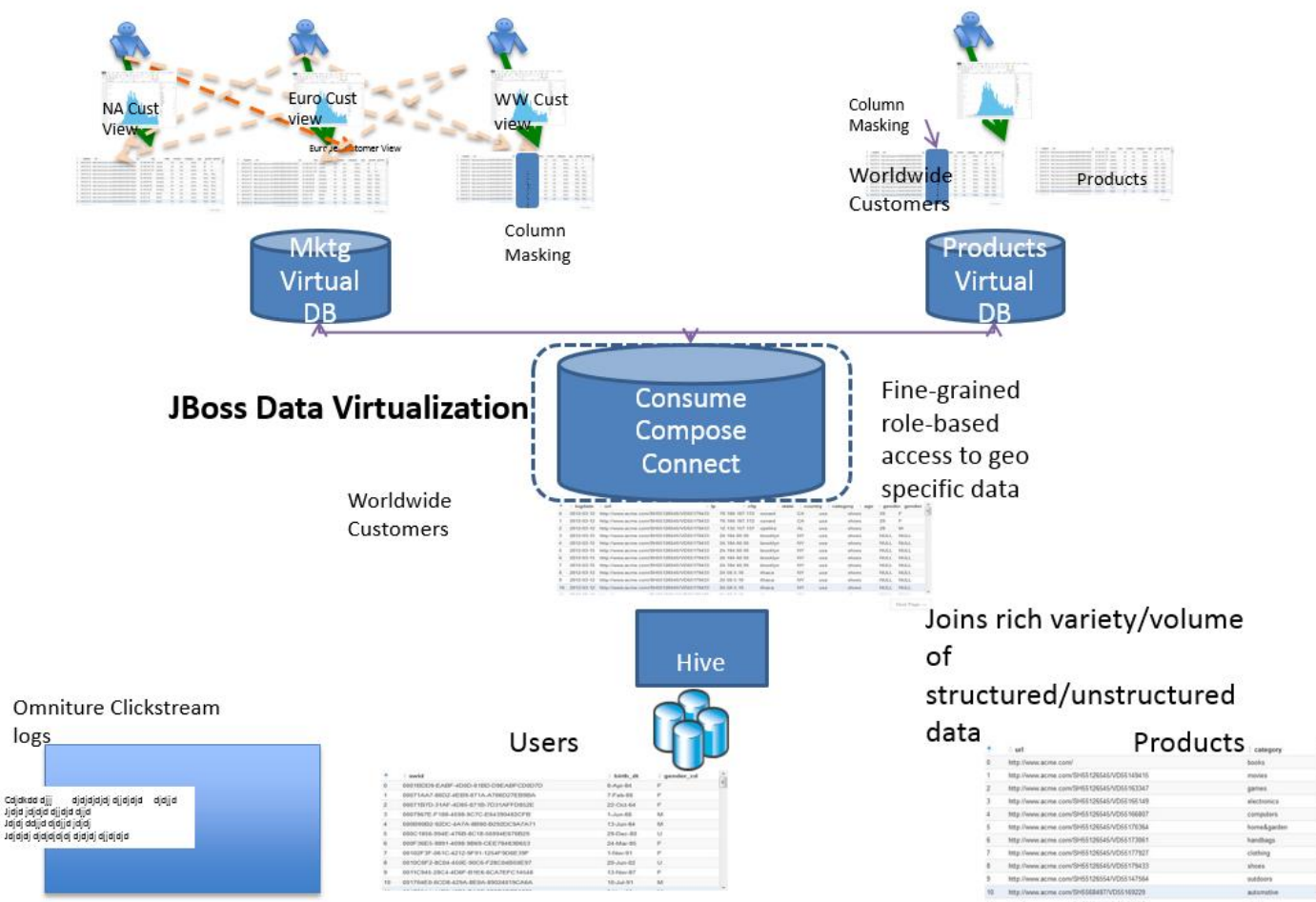
Problem:

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

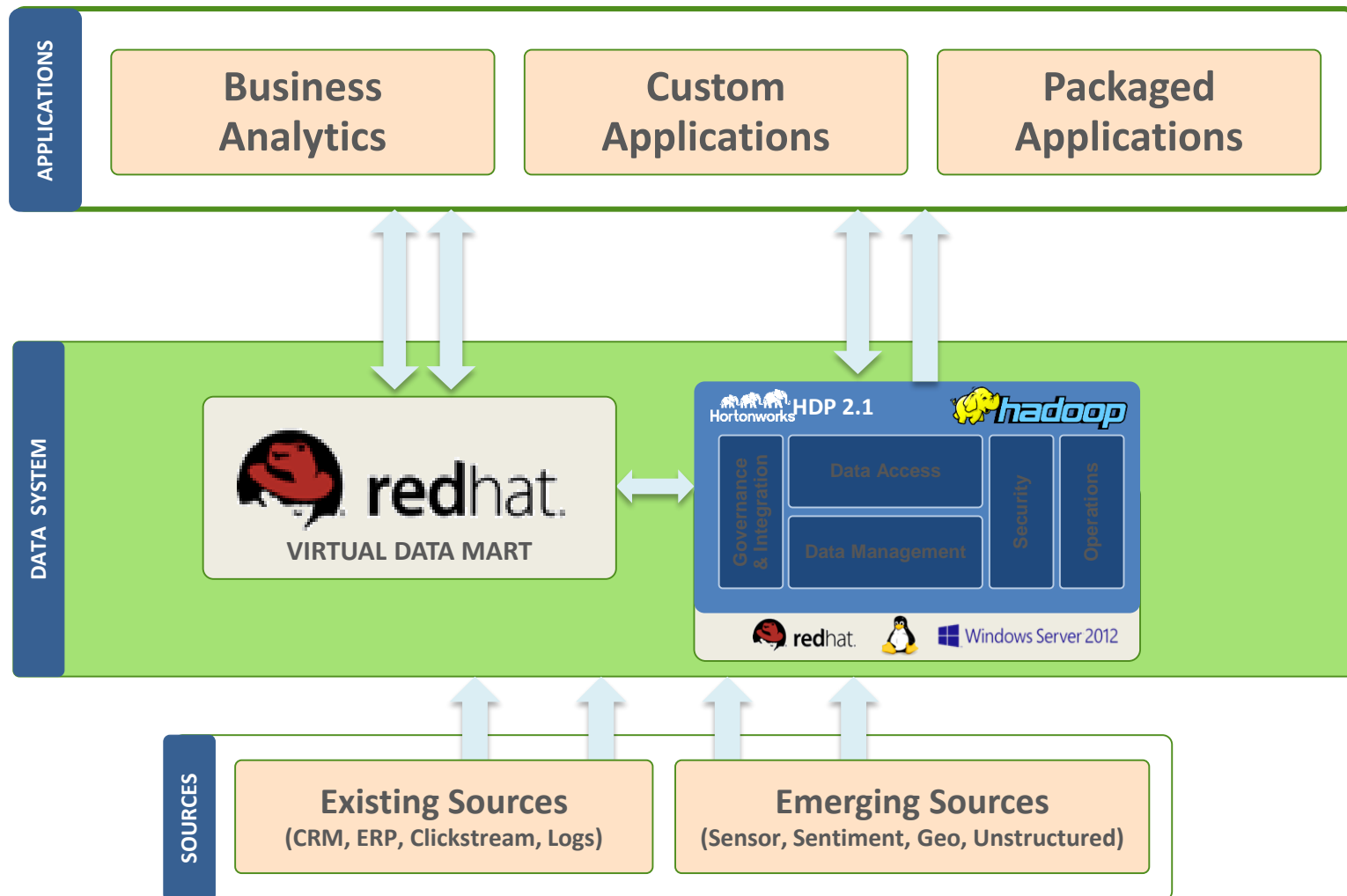
Solution:

–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 - Overview



Use Case 3 - Architecture



Use Case 3 - Resources

- GUIDE

<https://drive.google.com/folderview?id=0B5kKwcd4kOq9RUIHcVBMVjJuX2c&usp=sharing>

- VIDEOS:

<http://vimeo.com/user16928011/hortonworksusecase3short>

<http://vimeo.com/user16928011/hortonworksusecase3short>

- SOURCE:

<https://github.com/DataVirtualizationByExample/HortonworksUseCase3>