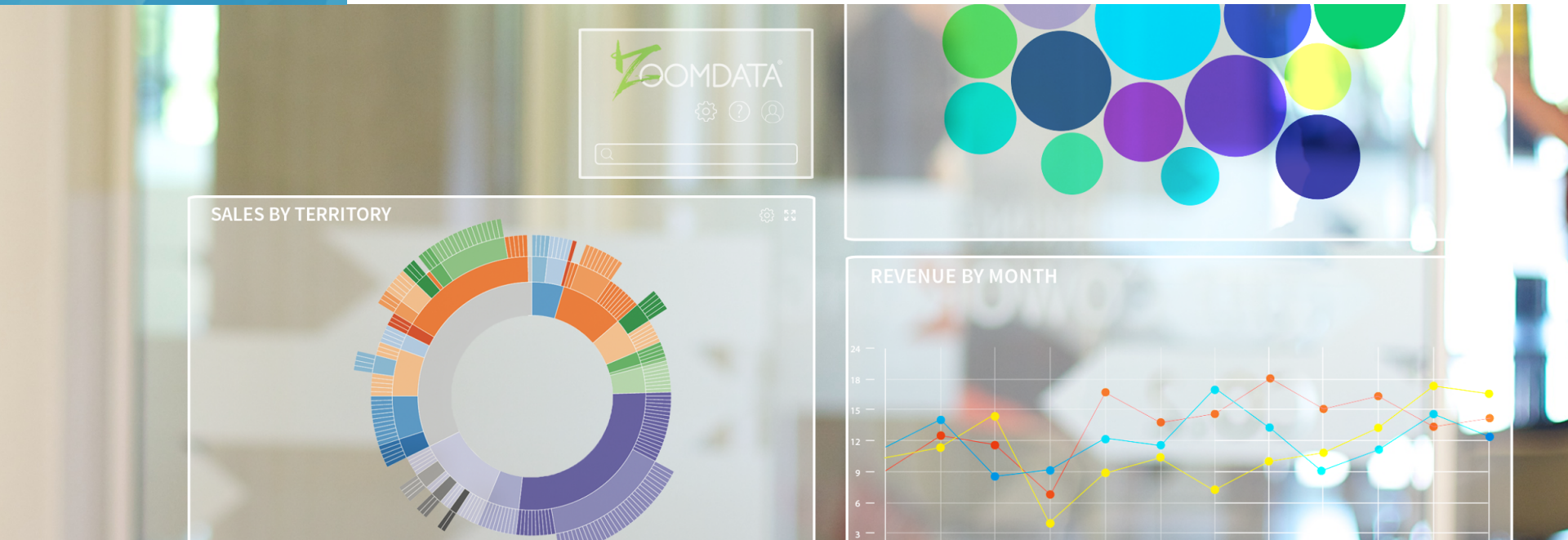
AI UKRAINE 2015

Big Data Analytic Products - Look Into The Future

Maxim Tereschenko, Product Owner

Kharkiv, 12 September 2015



About Me

2005 — BI Consultant — Consulting

2008 — BI Business Analyst — Enterprise

2009 — BI Developer — Enterprise

2010 — From BI Developer To Delivery Manager — Outsourcing

2015 — Product Owner — Product Company

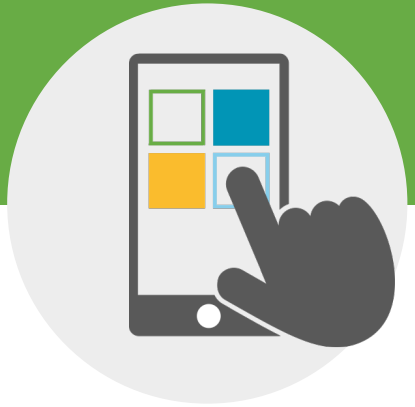
Ben Chams - Fotolia

Agenda

- Three Disruptive Trends
- Zoomdata Company Overview
- Zoomdata Architecture
- Zoomdata Answers
- Demo
- Q&A

Three disruptive trends

Big Data
Increasing data volume, variety and velocity

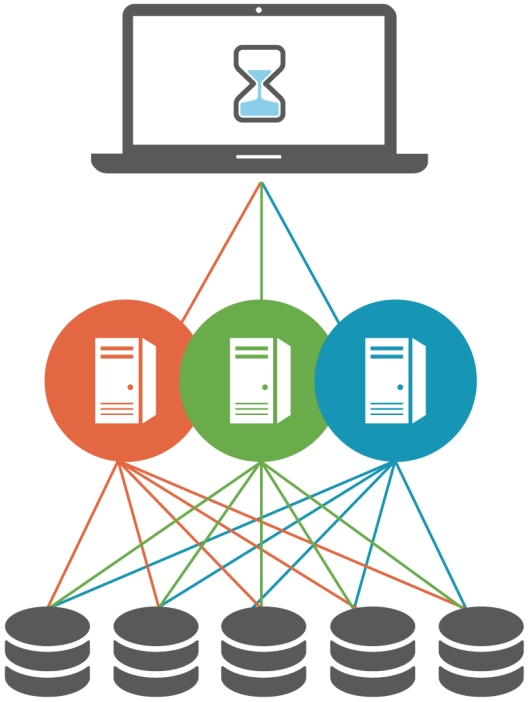


User Expectations
Business users easily access data at internet speed and scale

Modern Enterprise
Scale out services on commodity hardware in the cloud or data center

ZOOMDATA AI UKRAINE 2015

Current tools are not ready



Hard to use – designed in an age of specialized skills

- Focus on the “power user”
- Complicated workbench interfaces
- Require SQL coding quickly

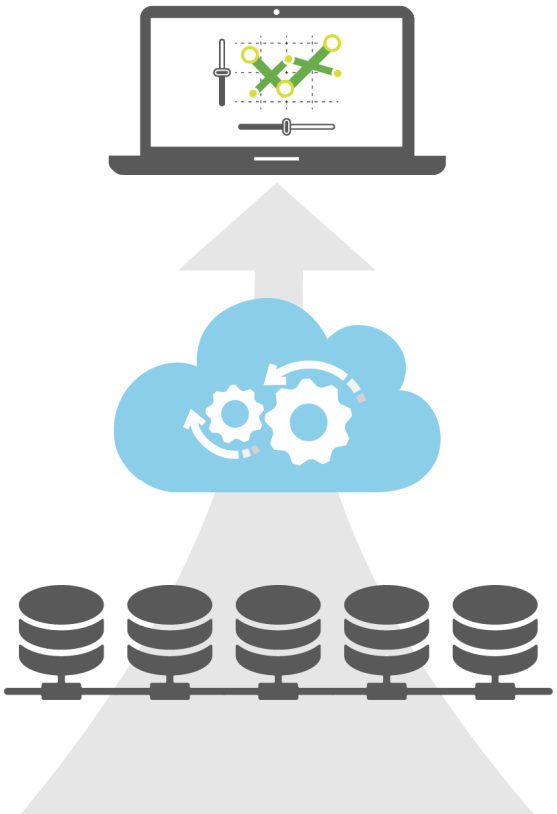
Cannot scale – deployed on desktops or monolithic servers

- Limited user scalability
- Poor performance
- Not built for embedding in other applications

Slow performance – designed for relational databases only

- Loss of functionality
- Poor performance
- Limited data scalability

Visual analysis requires a new approach



Responsive – interactive, visual & designed for business users

- In-context functionality prompts vs. expert workbooks
- Visually-driven exploration vs coding
- Push-based updates for real-time information

Agile – application architectures are cloud-native

- Designed for multi-tenancy
- Deployment is a choice not a constraint: on-prem, public or private cloud
- Applications components are fully embeddable and extensible

Fast – data processing is parallel & multi-framework

- Purpose-built processing engines have evolved for speed
- Massively parallel processing is the standard for data at scale
- Results are a combination of SQL, search, streaming and machine learning frameworks

Zoomdata company overview

Founded: 2012 **Employees:** 86 **Investments:** 21M $

Headquarter: Reston, USA

What can you do with Zoomdata?

VISUALIZE

STREAM

ZOOMDATA®

CONNECT

How it works

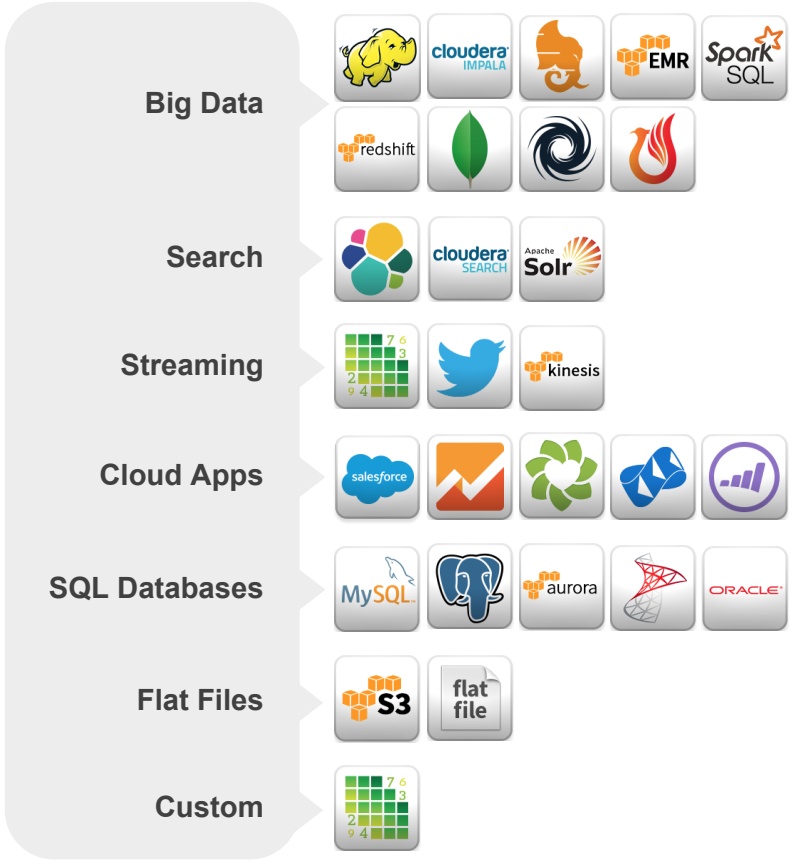
- Big Data
- Search
- Streaming
- Cloud Apps
- SQL Databases
- Flat Files
- Custom Sources

Zoomdata Server

- Smart Connectors
- Security / Admin Service
- Visualization Service
- Stream Processing Engine
- Analytics (Spark)
- Fusion (Spark)
- Result Set Caching (Spark)

- Zoomdata UI
- Extensible Zoomdata UI
- Custom Applications

Purpose built for Big Data sources



Smart Connectors leverage unique processing in each data framework

- Search facets
- Impala partitions
- Data streams

Zoomdata Fusion makes multiple sources appear as one

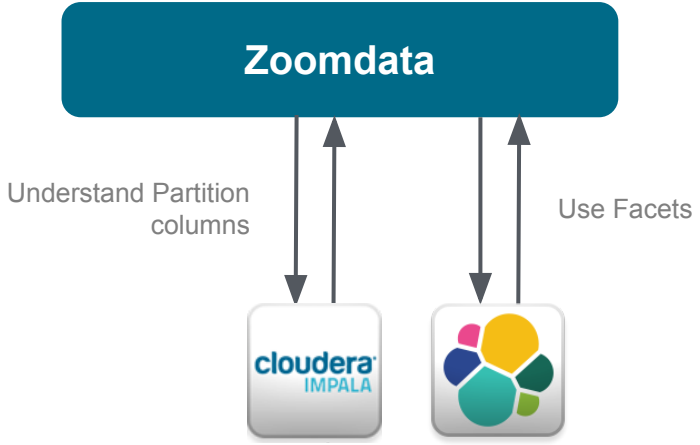
- Data is processed in-place
- Does not require data architect to pre-define
- Leverages scalability of Spark

Zoomdata Server takes the query to the data

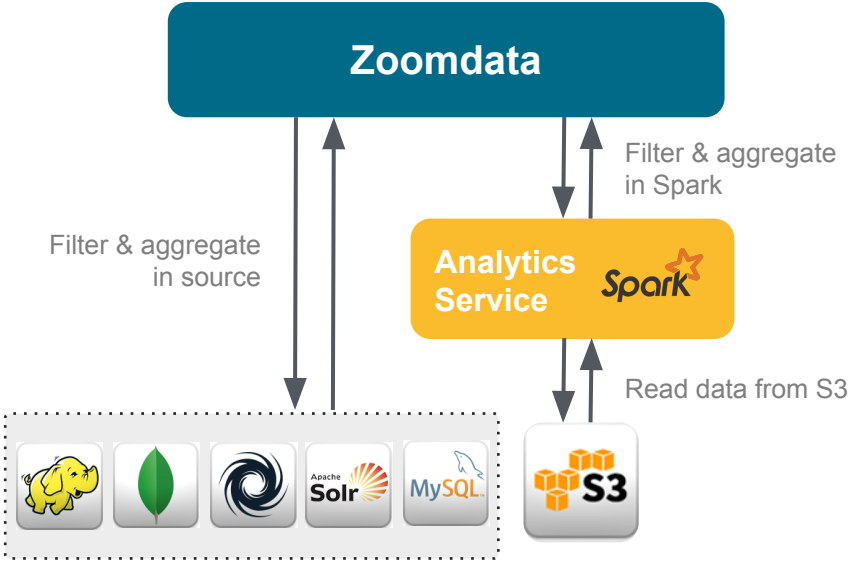
- Data is processed in-place
- Uses patented Micro-Queries
- No pre-built cubes or lenses

Native Smart Connectors are optimized for Big Data

Use full functionality of native API's not available through JDBC/ODBC



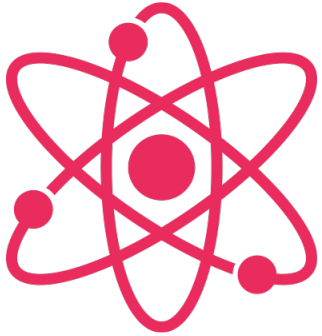
Leverage Spark to supplement capabilities of the source



Fusion makes multiple sources appear as one

- Big Data
- Search
- Streaming Data
- Cloud Apps
- SQL Databases
- Flat Files
- Custom Sources

Zoomdata Fusion



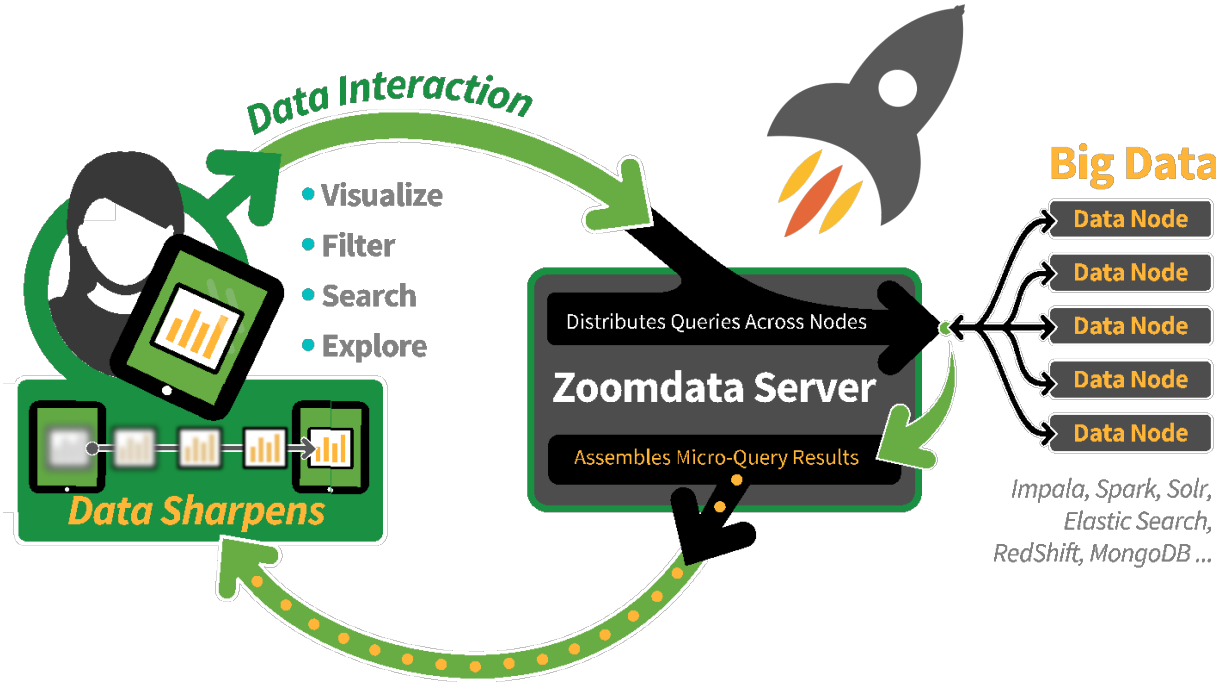
Makes multiple sources appear as one without moving data

Enrich Big Data with lookup information from relational or flat file sources

Combine metrics from Big Data source with metrics from data warehouse or other sources

Correlate real-time data feed with historical data

Process big data sets faster



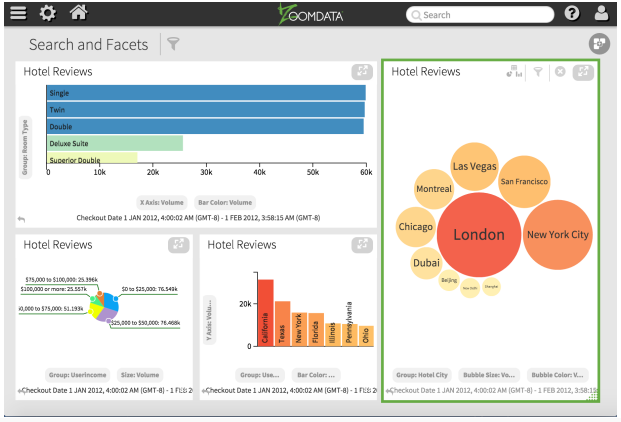
Zoomdata's **Streaming Architecture** provides the fastest experience for both real-time and historical data

Data Sharpening shows results instantly so users can act without waiting

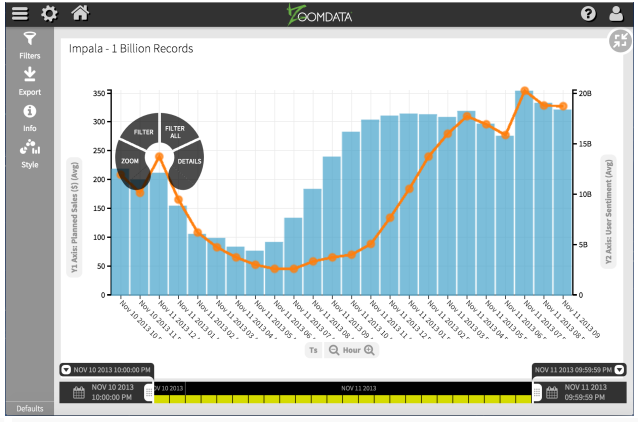
Zoomdata **leverages Spark** and other technologies for high-scale performance

Built for the Broadest Range of Users

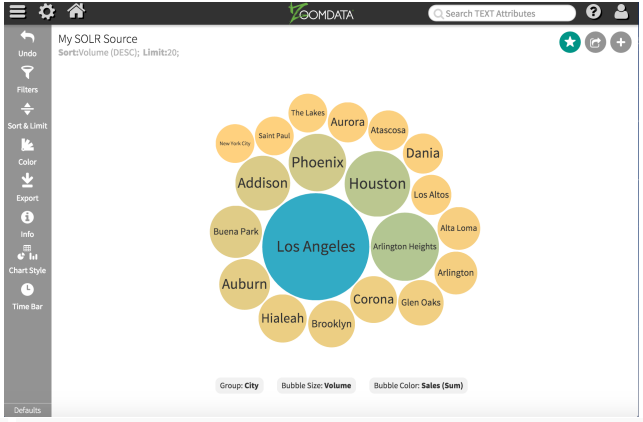
Current BI products are specialized tools for *data experts*
Zoomdata empowers *any business user* to consume data



Design-First
User Experience

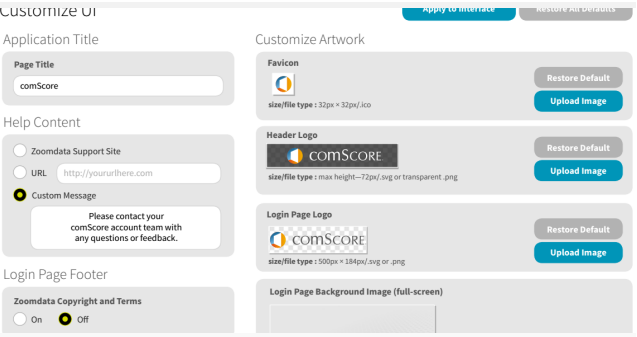


Invites users
to interact with data

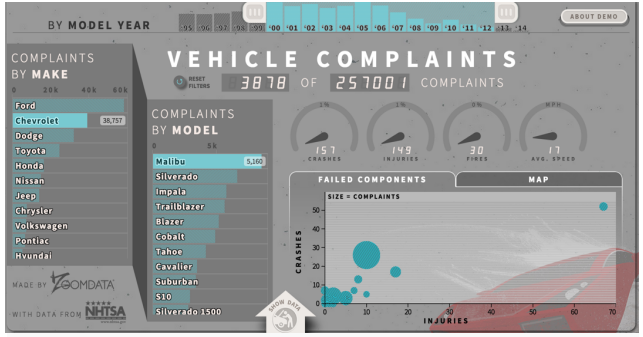


Responsive design for browser or
touch screen

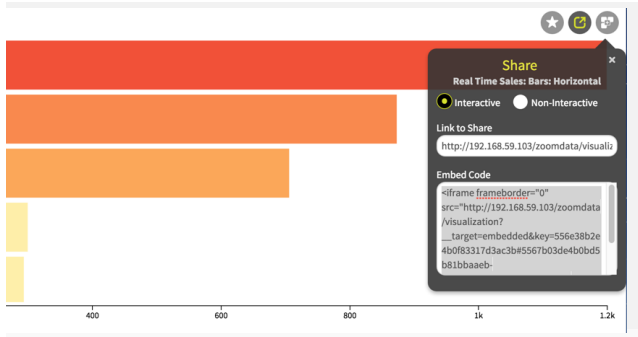
Easy to embed and extend Zoomdata capabilities



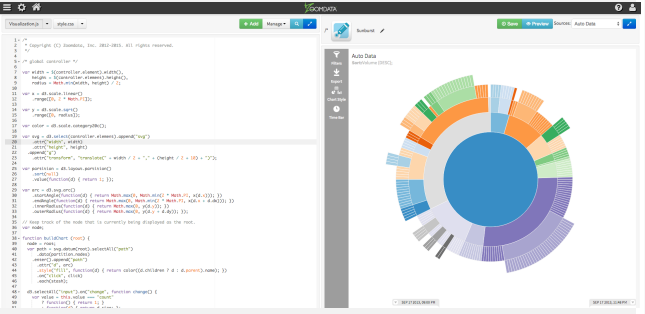
Easy to White-label



Easy to embed in Custom Apps



Easy to Share



Custom Visual Development in Visualization Studio

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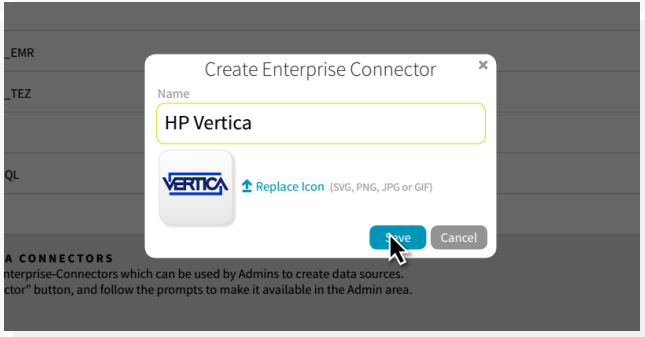


Custom Data Source Connectors

Built as a modern distributed application

Modern apps must scale

- Scale out on commodity hardware
- Scale for more users and scale for more data independently
- Designed for multi-tenancy

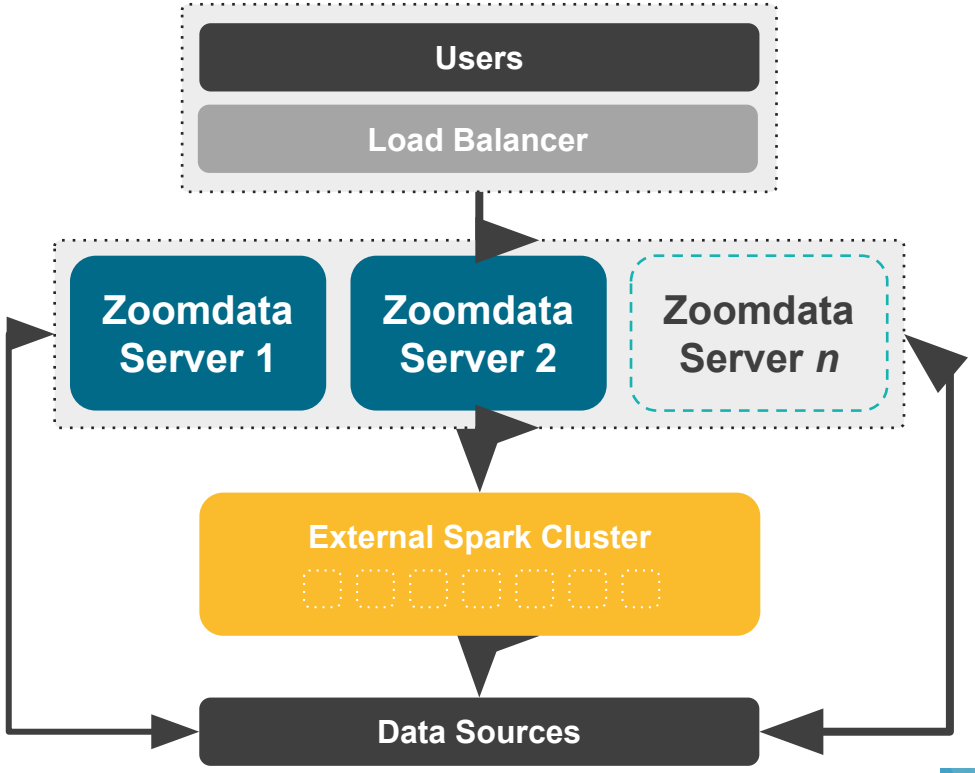
Modern apps are deployable

- Deploy on-premises or on the cloud
- Package as a container for automated deployment

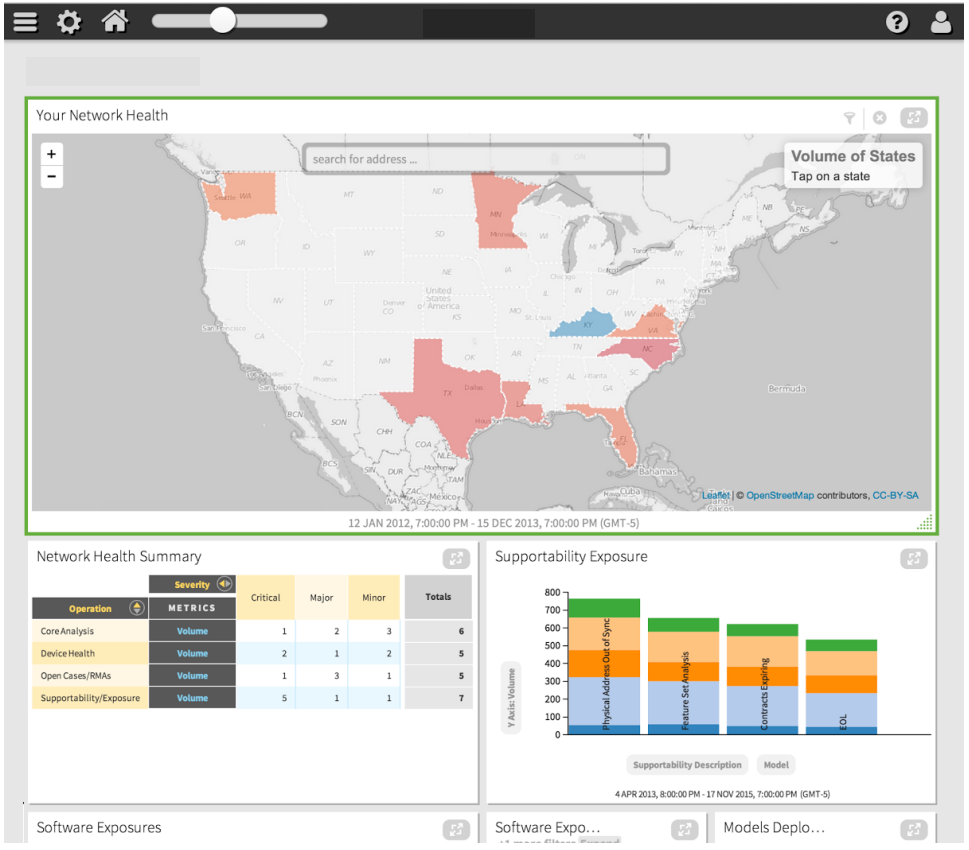
Hortonworks

databricks

cloudera LIVE



Use Case 1 : Visual analytics on Impala for IoT support portal



A Major Network Devices Company

Problem:

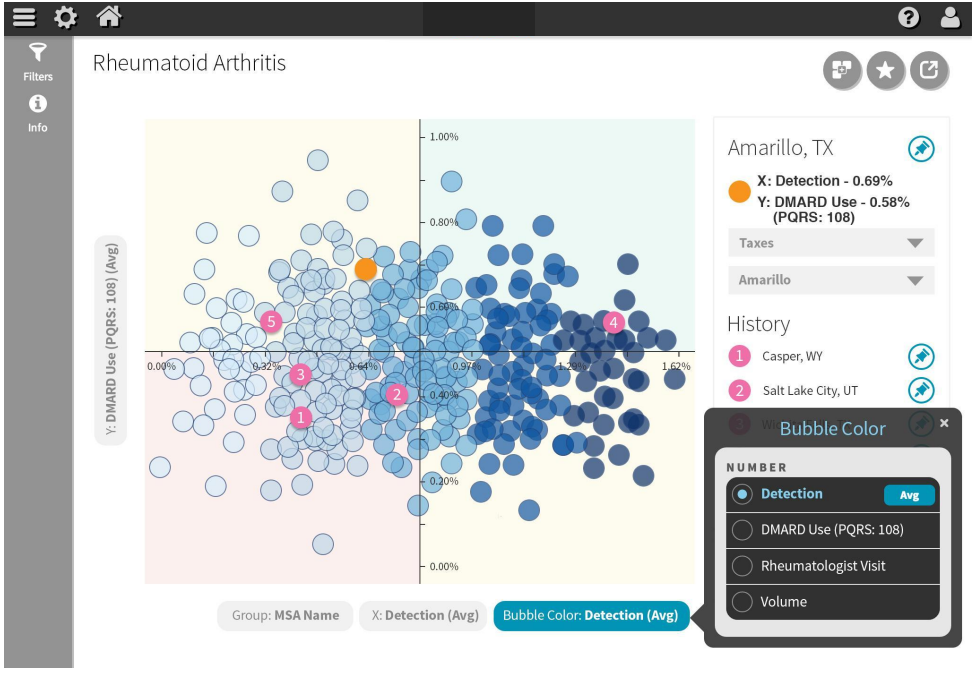
Monitor thousands of in-field devices through personalized, real-time support portal dashboards.

Solution:

Every support client has access to both an aggregate and detailed view of their devices. Enables:

- Immediate visibility
- Ability to pinpoint issues at any level of the solution - network, device, or application
- Consistent communication across parties

Use Case 2 : Identification of healthcare gaps from an iPad



A Major Pharmaceutical Company

Problem:

Provide sales executives with a simple way in the field to reveal potential gaps in prescribed therapies. Previously, queries took hours to return.

Solution:

An interactive iPad application backed by big data analysis that can query 9 billion rows in 6 seconds. Enables:

- Touch-driven navigation of regional insurance claims by hospital region
- Immediate access to statistical clustering
- Increase in evaluation rates of new therapies

Demo

Thank You!

Any Questions?

Contact Me

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