

# Backcountry Buzz

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# Topics

- What Does Buzz Do?
- Business Applicability
- Learn About The Crowd
- Technical Architecture

# What Does Backcountry Buzz Do?

- Gathers data on potential customers
- Searches twitter globally by configurable parameters
  - Keywords, hashes, synonyms
  - Arrays of latitude - longitudinal coordinates
- Maps the data streams
- Visibility into when, where and what

# Learn About The Crowd

Mine and grow the customer base, globally, and over multiple channels

- Machine Learning Kernel & Data Mining
- Statistical Analysis of the changing customer behaviors
- What are they doing, when and where

# Business Applicability

- Harvest data to determine the need for changing the timing of
  - Marketing Campaigns
  - Sales
  - Crowd Outreach & Awareness
  - Forecasting

# Technical Architecture

- Search & Persist
- Data Store, Retrieve & Render

# Search and Persist

- Akka with Akka Clustered Nodes
  - Parallel processing over a grid of distributed nodes (VMs)
  - HA, Scalability & Fault tolerance
- Akka Buzz App
  - Scala
  - Twitter Search, Twitter4J API & OAuth
  - Netflix Cassandra Client API
  - Cassandra Cluster
- SBT - builds
- Tomcat - deploy



# Data Store, Retrieve and Render

- Cassandra Cluster
  - 4-node cluster for fault tolerance and scalability
  - Partitions the data in the cluster using the Murmur3Partitioner
- Apache Tomcat
  - Twitter Bootstrap, jQuery
  - jQuery AJAX requests to NodeJS
- NodeJS provides REST data APIs
  - Connects to Cassandra using the node-cassandra-client API
  - Node pushes JSON response to client
- Data plotted using the Google Maps API



# Thank You

- Find us on GitHub