Big Data Solutions
Overview

Frank Ketelaars
Technical Leader BigData Europe

Agenda

1. **Big Data Customer Examples**
2. The IBM Big Data Platform
3. Analyzing Data at Rest
4. Analyzing Data in Motion (at Warp speed)
5. Accelerators
6. Questions and Answers

What we hear from customers . . . .

Lots of potentially valuable data is dormant or discarded due to size/performance considerations

Large volume of unstructured or semi-structured data is not worth integrating fully (e.g. Tweets, logs, . . .)

Not clear what should be analyzed (exploratory, iterative)

Information distributed across multiple systems and/or Internet

Some information has a short useful lifespan

Volumes can be extremely high

Analysis needed in the context of existing information (not stand alone)

Wind Turbine Manufacturer optimizes capital investments based on 2.5 Petabytes of information.

- Model the weather to optimize placement of turbines, maximizing power generation and longevity.
- Reduce time required to identify placement of turbine from weeks to hours.
- Incorporate 2.5 PB of structured and semi-structured information flows. Data volume expected to grow to 6 PB.

Cisco turns to IBM big data for intelligent infrastructure management

- Optimize building energy consumption with centralized monitoring and control of building monitoring system
- Automates preventive and corrective maintenance of building corrective systems
- Uses Streams, InfoSphere BigInsights and Cognos
  - Log Analytics
  - Energy Bill Forecasting
  - Energy consumption optimization
  - Detection of anomalous usage
  - Presence-aware energy mgt.
  - Policy enforcement

KTH – Royal Institute of Technology analyzes real-time data streams to identify traffic patterns

Need

- Gather real-time traffic data from a variety of sources; integrate and analyze data to better manage traffic

Benefits

- Uses diverse data -- including GPS locations, weather conditions, speeds and flows from sensors on motorways, incidents and roadwork
- Analyzing large volumes of streaming data in real time is leading to smarter, more efficient and environmentally friendly traffic in urban areas