How Big Data Applications Support Streamlined Operations and Risk Management
WE ARE THE NEW GENERATION DATABASE

Any Structure Era
“For all your data!”

- Schema-agnostic
- Massive scale
- Query and search
- Analytics
- Application services
- Faster time-to-results

We are the new generation database.

Relational Era
“For all your structured data!”

- Normalized, tabular model
- Application-independent query
- User control

Hierarchical Era
“For your application data!”

- Application- and hardware-specific
More Than Just A Database
Real Value From Big Data

- Make The World More Secure
- Provide Access To Valuable Information
- Create New Revenue Streams
- Gain Insights to Increase Market Share
- Reduce Bottom Line Expense
New Generation Data Consolidation

Load and index data “as is”

UNIFIED DATA

SEARCH

MarkLogic®
New Generation Data Consolidation

Load and index data “as is”

UNIFIED DATA

SEARCH

PDF

Word

CAD
New Generation Data Consolidation

UNIFIED DATA

Search

Load and index data “as is”

PDF
Word
CAD

MarkLogic

CMS

Condé Nast

Federal Aviation Administration

Mitchell

Springer
New Generation Content Delivery

- Company Data
- Industry Data
- Filings
- Reports

Dedicated Product Infrastructure (database + search engine)
New Generation Content Delivery

Load and index data “as is” from ever-changing sources

Deliver the right content, to the right user, in the right format, in real time
New Generation Data Management

METADATA STORE

Load and index data

SEARCH
New Generation Data Management
The MarkLogic Advantage

NoSQL (Not Only SQL) Database

✓ Schema-agnostic
✓ Scalable
✓ Scale out on commodity hardware
✓ Document-centric
✓ Can handle multitude of data types
The MarkLogic Advantage

Only Enterprise NoSQL Database

✓ ACID compliant
✓ Big data search
✓ High availability
✓ Replication
✓ Point in-time recovery
✓ Government-grade security
✓ Real-time your Hadoop
✓ Proven customer success
The FAA increases airline safety by providing real-time monitoring of incidents in a common operational picture.
The FAA Enhances Airline Safety with Real-Time Monitoring

Goals
Allow Emergency Operations Network (EON) to monitor and track emergencies and severe weather

Solution
MarkLogic is used as the all source repository to give an accurate picture of emergencies across the FAA

Benefits
FAA ensures flight safety with real-time crisis management system and drastically reduced development timetable for critical project
EON Map with Facets
EON Geospatial Search
EON Architecture

Microsoft SharePoint
- Collaboration
- COOP
- Situational Awareness

Anti-Virus Scanning
- Security
- Permissioning
- Web Parts
- COP / UDOP

Google Earth
- GIS / Mapping
- FAA / Other layers provide context and extra information

External Sources
- AAP / TFR Waivers
- Twitter

MarkLogic Data Discovery
- Powerful Search
- Rapid accommodation of new data structures

MarkLogic
- Data / Trend Analysis
- Alerting
- Exporting of nearly any format

External Sources
- AAP / TFR Waivers
- Twitter
Why MarkLogic

- **Agility**
  - Could ingest unstructured and semi structured content and make sense of it
    - Identify and generate metadata
    - Tag Geospatial coordinates
    - Mark paragraphs

- **Ease of implementation**
  - Pilot built in less than two weeks

- **Lots of features**
  - Alerting, geospatial, Gazeteer
  - Facets, full text and metadata search, mobile (future)
  - Integration with Google Earth

- The MarkLogic pilot provided features with their content in two weeks which they had been trying to do for over a year
Any Questions?

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