Public Safety Clouds

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  - National UK Police Lead for GIS
  - Olympics 2012 GIS Security Lead
- CIO British Transport Police
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“The prevention of, or rapid response to, incidents that impact on the safety or wellbeing of people and society”
Every Day Event?

Exceptional Event?

Threats to Public Safety

- Road Accident
- Critical Incident
- Crime
- Public Disorder
- Disaster
- Terrorism
- Extremism
- Cyber Attack

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Why do we need big data!
Big Data? What is Big Data?
Big Data? What is Big Data?
# Public Safety Agencies

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Data Types

- GEOINT
- SOCINT
- VIDINT
- OSINT
- SIGNIT
- FININT
- HUMINT
Data Types

GEOINT  SOCINT  VIDINT  OSINT  SIGNIT  FININT  HUMINT
Social Media

83% of law enforcement personnel use social media to conduct investigations.
Big Data Philosophically
Big Data – The Needle or The Question
Big Data – Finding the needle in the Haystack
Longgang Police

Clear-up rate: 32.3%
Public Safety case: 28.79%
UK Police National Database

- Over 260 Police Databases shared
- For the first time
- 4.3 Billion intelligence records created
- 87 Million nominals
- Accessible from anywhere in the UK
- First test
- 8 new Paedophile suspects identified
Global Research into Big Data

- **Strategic investment of 1,000+ engineers** in Big Data field
- **World-class data mining and AI experts**
- **80+ patents in the Big Data field**

**Canada Research Center:**
Yarn/Large-scale scheduling
Hardware acceleration
Finance-related Big Data analysis

**America Research Center:**
Spark
SQL on Hadoop/MPP DB
Big Data system acceleration

**Russia Research Center:**
Big Data mining algorithm

**Europe Research Center:**
Distributed computing algorithm

**HTIPL:**
Hadoop kernel optimization
Data visualization MOLAP

**Xi'an/Beijing Research Center:**
Hadoop productization
Big Data algorithm
SQL on Hadoop/MPP DB
Big Data solution

**Hangzhou/Shanghai Research Center:**
Hadoop & Spark
Stream computing
Big Data algorithm
Big Data solution

**Shenzhen Industrial Base/Hongkong:**
Big Data insight platform
Big Data solution
Data mining algorithm
Unique **C-C4ISR** Collaborative Public Safety Solutions  

Collaborative - Command, Control, Communication, Cloud, Intelligence, Surveillance and Reconnaissance.
Thank You