DMQ4: Instruments & Sensors for online remote access

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Outline of Work Package

Objective:
Provide online, remote access to pilot working instruments/sensors
Outline of Work Package (cont.)

- Developing visualization tools for data collected from instruments and sensors – to provide the user a friendly interface to request past data in a particular period or satisfying some constraints.

- Data processing and data mining for living data streams collected from instruments and sensors – to monitor and analyze especially interesting or emergent data from extensive data streams on-the-fly.
Current work

- Document Review
  - CIMA – Common Instrument Middleware Architecture
  - SRB – Storage Resource Broker
  - Techniques for developing Visualization tools:
    - SMIL – Synchronized Multimedia Integration Language
    - HTML+TIME – Timed Interactive Multimedia Extensions for HTML
    - SVG – Scalable Vector Graphics
    - Software that Suzanne developed
      - http://metadata.net/sunago/fusion/visualisation/index.html
Current Work (cont.)

- Make some simple demo
- Begin JCU collaboration
  Meet Ian and Mat in the middleware workshop
Future Expansion/Work Plans

- Install components of CIMA? to access the real-time sensor data streams created in JCU
- Finish the demo for advanced search interfaces
- Implement the visualization tools on the real sensor data

- Familiarise with the grid technologies
- Survey the research work in grid DB, sensor networks and data streams
- Identify application with data intensive and real-time requirements for CIMA
Thank You