PROCESSING AND MANAGING DATA

Since May 1999, the BABAR Database System has stored 201,404,275,985,952 bytes of data. In 2009, we expect to store that amount of data every few days.

The Challenge of the Increasing Rate of Growth

The BABAR Database System Integrates:
- access to tens of thousands of CPUs
- a commercial Object-Oriented Database System: Objectivity/DB
- all running on one 3000 CPUs
- 4100 servers

Optimizing, Tuning...
- reworking
- auto-tuning
- understanding and removing bottlenecks
- introducing faster hardware

Look at a Running System...
(Yes, in real time)

A Distributed System, with a Non-Trivial Data Flow

An example: storage system across the globe to handle tens of thousands of objects per second. The system needs to handle processing of very large data sets and processing data in parallel on thousands of processors across the globe.