DP POC Architecture

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Outline

- Hardware platform
- Software platform
- COTS products
- Sizing/timing

DP POC Deliverable Platform

- **Previously proposed:**
  - HP 9000 K460, HP-UX
  - 4 CPUs
  - 2 GByte RAM
  - 100 Mbit FAST Ethernet
  - 100 GByte local hard disk
  - 52 GByte RAID
  - 500 disk CD jukebox
  - Tape backup system
  - CD Writer
- **Currently proposed:**
  - HP 9000 K460, HP-UX
  - 4 CPUs
  - 2 GByte RAM
  - 100 Mbit FAST Ethernet
  - 150 Gbyte local hard disk
  - 500 disk CD jukebox
  - CD Writer

DP POC Development Platform

- HP J282 (SRS department resource)
  - 2 CPUs
- Sun Ultra 2200
- 200 MHz. Pentium Pro

DP POC Software Platform

- GNAT Ada 95 compiler
  - Science Algorithms
- GNU C++ compiler
  - Execution Control
  - Data Reformatter
  - Data Manager
  - Operator Interface
  - Utilities
- Java Development Kernel (2.0.1)
  - User Interface
- Perl, CGI, Java, HTML
  - Webserver Capability

DP POC COTS Products

- IDL
- CD writer software
- Hierarchical storage manager
- Tape backup software
- Java capable web browser
- Oracle relational database

Sizing/Timing

- No software sizing studies have been performed. SSUSI baseline, because of different languages is unusable for this task. Adequate disk space is available.
- SSUSI utilized 256 KByte RAM to process 1/4 orbit. GUVI has 2 GByte RAM.
- Execution time
  - ~2 1/2 hours to process 24 hours of data utilizing 4 CPUs simultaneously