Run II Data Preservation 3/28/2014

Dzero Calibration Database Servers
&
CDF Frontier
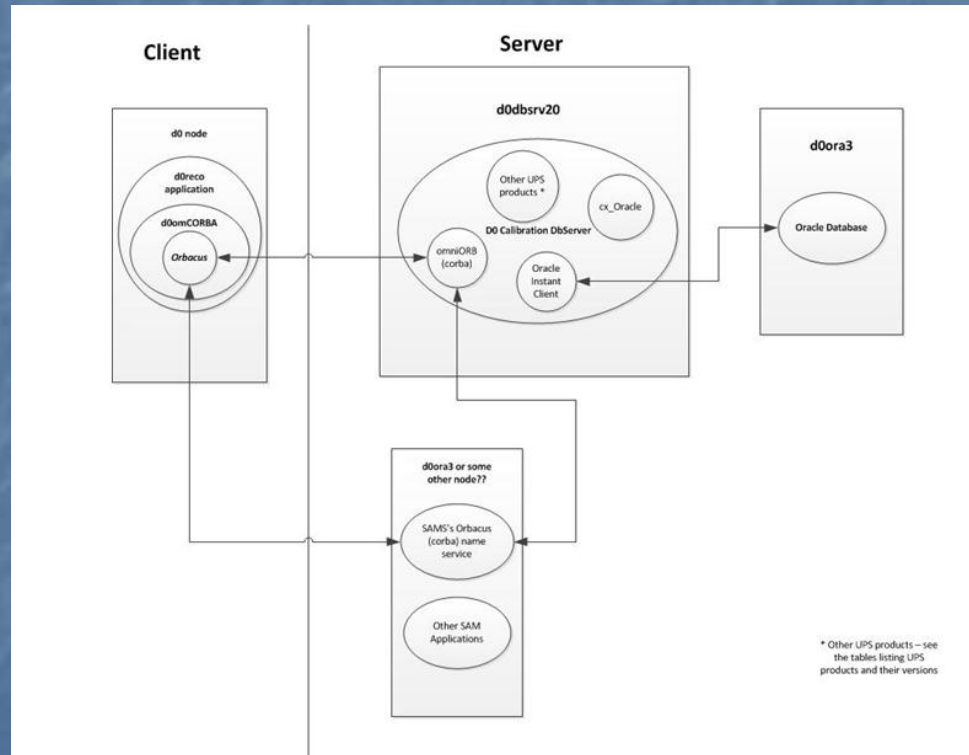
Stephen P. White

Dzero Calibration Dbservers

- Created to reduce direct access to the database.
- There are thirteen different server types.
  - SMT, CFT, CPS....
- All built on the same base ups product
  - calibration_db_server

Dzero Calibration Servers

- Three Main Components
  - Oracle
    - Accessed by Oracle Client and cx_Oracle
  - Python
    - Provided through sam_python
      - No longer supported.
  - CORBA
    - Provided through omniORB
      - Using an older version
      - Supported by a small company, with an unknown future.
- All running on SLF 5.2
  - Run2DP requires SLF 6.x on a VM
  - Current host: D0dbsrv20.fnal.gov an aging physical machine.

Dzero Calibration DbServers
General Overview

Dzero Calibration DbServer

- All Products were rebuilt with the latest version.
- All Products built on SLF 6.2
- Testing
  - Reconstruction was run with a subset of data on the old and new servers.
  - Results were compared, successfully.
- On April 1st the NEW Production Calibration DbServers will be started on d0dbcalibgpvm01
  - VM at SLF 6.2
- Outstanding Issue:
  - Corba Name Service must be moved prior to 12/2015.
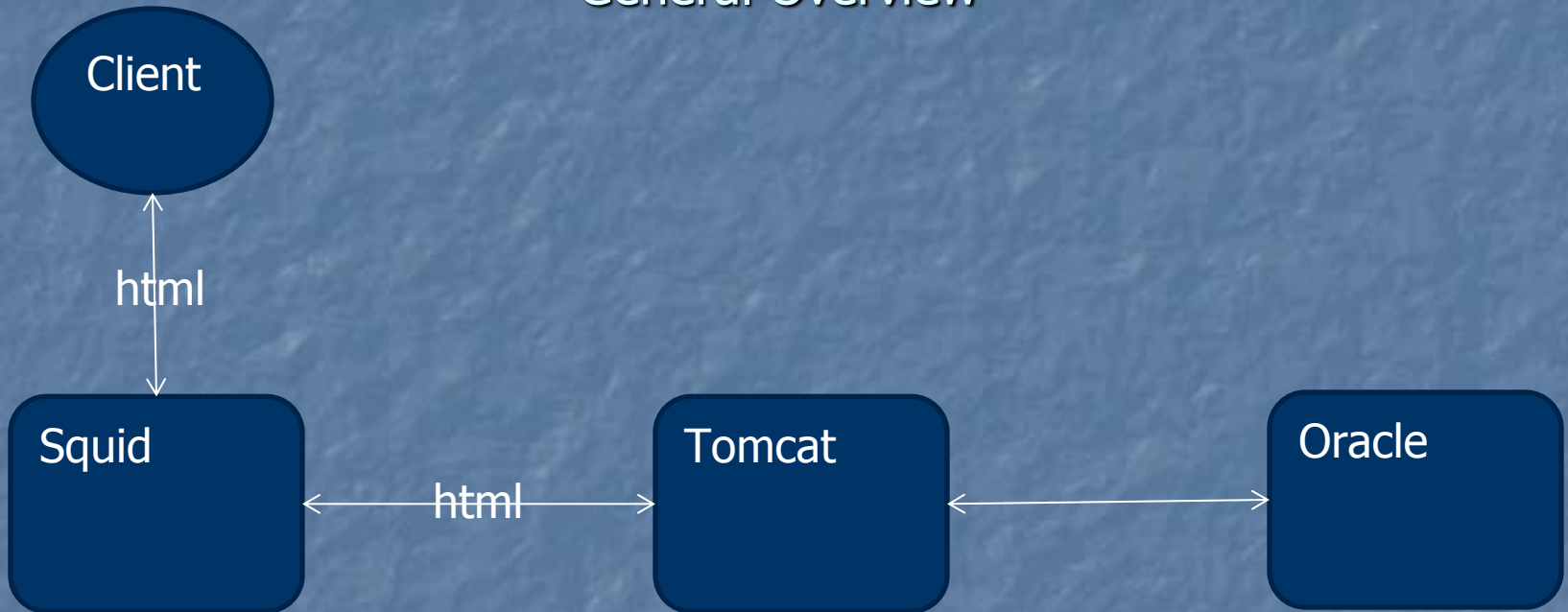
CDF Frontier

- CDF requested a cached delivery system for Calibration data
    - Database was becoming overwhelmed
- Did not want Calibration DB Servers
    - Heavy CORBA based system
- Frontier was constructed
    - Lighter HTML/XML based delivery system
    - Easier to manage

CDF Frontier

- **Three main components**
  - Tomcat
    - 5.0
  - Squid
    - 2.6-STABLE18
  - Java
    - 1.4.2-fcs
    - Plugin to Tomcat
- **Running on three machines SLF5**

CDF Frontier
General Overview

Client

html

Squid ←→ html ←→ Tomcat ←→ Oracle

CDF Frontier

- Frontier rebuilt with
  - Java 1.6
  - Tomcat 7
  - Squid kept at 2.6-STABLE18
- Tested
  - Multiple data sets were successfully obtained from newer versions

CDF Frontier

- CDF updated dbfrontier hosts to VMs running SLF 6.x
  - Used existing Frontier
  - Running with no issues
- Plan
  - Existing version has been running very well, continue with it.
  - If issues develop, install new version.