

IN2P3

INSTITUT NATIONAL DE PHYSIQUE NUCLÉAIRE
ET DE PHYSIQUE DES PARTICULES



LCG-3D

DATABASE READINESS WORKSHOP

DATABASE SERVICE @ CC

- **RDBMS SOFTWARES :**
 - ORACLE
 - MYSQL
 - POSTGRESQL
- **ORACLE**
 - 9IR2 AS PRODUCTION (1 HOST)
 - TRANSITION TO 10GR2 HAS BEGUN IN JANUARY
 - 1 RAC
- **MYSQL & POSTGRESQL**
 - 1 SINGLE HOST EACH (RHEL 4)
- **HUMAN RESOURCES**
 - 2 DBAs
 - WHICH MEANS NO TIMES TO SPEND ON TESTS

ORACLE 10G RAC HARDWARE

- **RAC CONFIGURATION :**
 - **2 MAINS NODES : SUN FIRE 480R**
 - 4 PROCESSORS ULTRASPARC-III+ 1,2 GHZ
 - 16 GB RAM
 - SUNOS 5.9 64 BITS
 - INTERNAL SYSTEM DISK MIRRORED
 - **1 SAN STORAGE :**
 - STOREEDGE : 1TB
 - **1 MONITORING NODE ALSO DEDICATED TO DATAGUARD**
 - SUN V240
 - 2 PROCESSORS ULTRASPARC-III+ 1,2 GHZ
 - 8 GB RAM
 - SUNOS 5.9 64 BITS
 - INTERNAL SYSTEM DISK MIRRORED

ORACLE 10G SOFTWARE

◦ FULL ORACLE CONFIG :

- ORACLE CLUSTERWARE FOR CLUSTERING SOFTWARE BETWEEN NODES
- 10G RELEASE 2 RAC AS PRODUCTION RELEASE FOR DATABASE INSTANCES
- ENTREPRISE MANAGER GRID CONTROL 10GR2
 - DAILY ADMINISTRATION
 - TAPE BACKUPS WITH RMAN

◦ PROBLEMS

- UNEXPECTED CRASHES OF INSTANCES : DUE TO BUG 4556989
- EMGRID : RATHER DIFFICULT TO INSTALL AND TO MAKE IT FUNCTIONNAL :
 - BUGS IN INSTALL SCRIPTS !
 - SIDE EFFECT OF SHELL ENVIRONMENT VARIABLES !

RAC USAGE

- THIS CONFIG IS BUILT TO HOST ALL OUR ORACLE PRODUCTION DATABASES
- IT WILL HOST :
 - INSTANCES DEDICATED TO OUR LOCAL NEEDS
 - INSTANCES DEDICATED TO NON-LHC EXPERIMENTS
 - AND INSTANCES DEDICATED TO LHC EXPERIMENTS
- 3D TESTBED
 - ONE INSTANCE IS DEDICATED TO 3D TESTBED
 - ONE INSTANCE IS SET UP FOR ATLAS AMI DATABASE