

## Distributed Database Operations Workshop

Maria Girone, CERN IT-DM



- Review the Experiments and Database Operations
  - Experiments DB Strategies and Requests
  - FroNTier and Coral Server Status
  - Sites Status and Plans
- DB Services Readiness
  - Alarm and Problem Escalation and Handling
  - Storage and DB parameter configuration Review
  - DB and Streams Monitoring
  - Review the Backup & Recovery Strategy/Policies
  - Demonstrate the capability to recover production DBs with a recovery validation exercise
- Beyond the 2010 run: prepare for 11gR2

**Databases**

**A number of sites, including ASGC & RAL, have been unable to recover production databases from backups / recovery areas with major downtimes occurring as a result. A coordinated DB recovery validation exercise that is regularly tested should be considered to avoid such problems.**

Applications rely fully on database consistency and recovery after failures.

Recent recovery failures should be analysed and lessons learned are important for all participating sites.



Material: [EVO details](#)

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## Thursday 26 November 2009

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### 09:00->13:00 Experiments and Database Operations

- |       |   |                               |
|-------|---|-------------------------------|
| 09:15 | Welcome and Workshop Goals (05)                           | Maria Girone (CERN)           |
| 09:20 | LHC Start-up (30)   | Roger Bailey (CERN)           |
| 09:50 | Experiment Database Strategy (1h00)                       | Elizabeth Gallas (Oxford)     |
|       | •    ATLAS (20')  | vincenzo innocente (CERN)     |
|       | •    CMS (20')  |                               |
|       | •    LHCb (15')   |                               |
| 10:50 | Coffee break (15')  |                               |
| 11:05 | ATLAS Frontier/Squid Status Update (20)                   | Rodney Walker (SFU)           |
| 11:25 | Coral Server Status (20)                                  | Andrea Valassi (CERN)         |
| 11:45 | CERN Database Services for Physics: Status and Plans (15) | Maria Girone (CERN)           |
| 12:00 | CASTOR+SRM DB@Tier0 Status and Plans (10)                 | Nilo Segura Chinchilla (CERN) |
| 12:15 | Tier1s Status and Plans (3D and CASTOR) (1h00)            | Site Representatives          |

13:00 Lunch break (1h00)

### 14:00->18:15 Tier0 and Tier1 Service Review















- |       |  |                         |
|-------|--|-------------------------|
| 14:00 | ASM Configuration Review and Set-up Example (1h00) | Luca Canali (CERN)      |
| 15:00 | Recovery Exercise (30)                             | Jacek Wojcieszuk        |
| 15:30 | Coffee break (15')                                 |                         |
| 15:45 | Backup configuration review (30)                   | Jacek Wojcieszuk        |
| 16:15 | RAL data loss incident review (20)                 | Gordon Brown (STFC-RAL) |
| 16:35 | ASCG Incident and Recovery report (20)             | Jason Shih (ASGC)       |
| 16:55 | Analysis of the recovery exercise (1h00)           | Jacek Wojcieszuk        |

19:00 Social Dinner (2h30) (TRD)











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[top](#)09:00->12:45   **Database Administration, Monitoring and Configuration**

|       |   |  |
|-------|---|--|
| 09:00 |   Automatic recovery tools (20')                                    | Przemyslaw Adam Radowiecki                   |
| 09:20 |   Streams Service Review (30')                                      | Eva Dafonte Perez                            |
| 09:50 |   Database Monitoring (40')   | Dawid Wojcik                                 |
| 10:30 |   Streams Monitoring Enhancements (20')                             | Zbigniew BARANOWSKI                          |
| 10:50 | Coffee break (20')  |  |
| 11:10 |   Security Review (20')   | Katarzyna Maria Dzedziniewicz (CERN)         |
| 11:30 |   Memory and process limit review (Tier1s Cond. DB for ATLAS) (20') | Gancho Dimitrov (DESY)                       |
| 11:50 |   Hardware Migration using Data Guard (50')                         | Carlos Gamboa, Carmine Cioffi, Jon Westgaard |

12:45 Lunch break (1h15)

14:00->17:30   **Beyond 2010 Run: Oracle 11g New Features**

|       |   |  |
|-------|---|--|
| 14:00 |   RAC and ASM (40')                 | Dawid Wojcik                           |
| 14:40 |   Active Data Guard (40')           | Svetozar Kapusta (Comenius University) |
| 15:20 | Coffee break (20')  |  |
| 15:40 |   Advanced Compression (45')        | Jacek Wojcieszuk, Luca Canali          |
| 16:25 |   Streams New Features Review (35') | Zbigniew BARANOWSKI, Eva Dafonte       |

- Booked at 19:30 an Italian Restaurant 😊 (please sign-up for final booking and car pool)

**Le Casanova, 279 avenue Mont Blanc, 01710  
THOIRY (near Holiday Inn)**

**Coffee Breaks: kindly offered to us by WLCG!  
Many thanks!!!**