



Database Futures Workshop 6-7 June 2011

Engineering Requirements GS/ASE







Some Engineering Databases

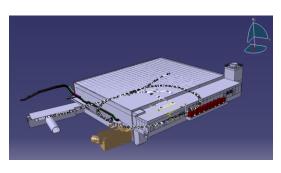


EDMS

- Several integrated Oracle DBs
 - Around 65 Gb
- Mostly based on commercial tools
- 1.2 million documents
- 1.5 million files 925 Gb (not in DB)
- 9'750 registered users; 4'000 active in 2011

CMMS

- Computerized Maintenance Management
- 680'000 assets
- 3.3 million work orders









Some Engineering Databases



TIM

- Technical Infrastructure Monitoring
- Linked to the CERN Operation
- 35 Gb
- 90'000 monitoring points
- 37'000 alarms
- 2 million updates/day in the database

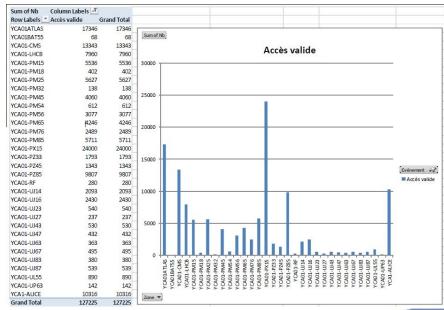


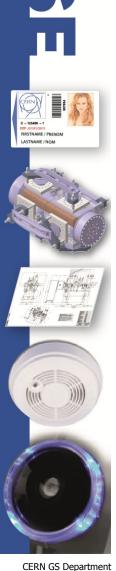


Some Engineering Databases



- Access Control Systems
 - Site Access
 - PS, SPS, LHC Access
 - Linked to beam operations
 - Site and LHC Access Control Systems on Oracle
 - 27 Gb







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Requirements



- EDMS, CMMS
 - Availability 24/24 365 days (no Xmas shutdown)
 - A few hours of downtime however acceptable
 - Dependency on the configurations certified by the applications suppliers
 - Sometimes unrealistic
 - We are on the « General Purpose » instance
 - Not really a problem





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Requirements



- TIM, Access Control
 - Availability 24/24 365 days
 - A few hours of downtime however acceptable
 - But strongly linked to the operation of the machines
 - This especially concerns major upgrades
 - Such as migration to 11g





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Requirements



- Special case for new systems around the Site Access
 - Key distributors, electronic locks, car sharing, car plate readers, restaurant cards
 - Most of the suppliers are working with MS SQL Server
 - Our 1st choice is to work with the Oracle version
 - We are sometimes forced to work with SQL Server
 - Lack of proper interfaces (Web services)
 - Even if limited to the minimum, gateways between oracle and SQL Server are required.
 - SQL Server Support in IT ?







Thank you for your attention!

Questions?



