

EDG 1.4 Validation

Alice PPR Production on EDG



Warning: almost no access to the testbed until the review

1) Monitoring of the testbed status

2) Run a real production on the testbed

3) Development of the AliEn-EDG interface

1) Monitoring the testbed status

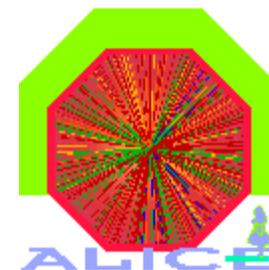


- Use the tool we developed in 2002 for automatic job submission (<http://alice-grid.ca.infn.it/cronedg1.2/>)
- Submit one short job per RB per CE per day
- Check the evolution of its status
- Monitor the efficiency for completed jobs
- In place since Feb, 1st, job completion after Feb, 13th
- Let's take a look at the Web site

<i>Resource Broker</i>	<i>Job status: submitted</i>	<i>Job status: scheduled</i>	<i>Job status: running</i>	<i>Job status: done</i>	<i>Job status: output ready</i>
CNAF	254	181	174	174	174
CERN	293	165	165	165	165
Total	547	346	339	339	339

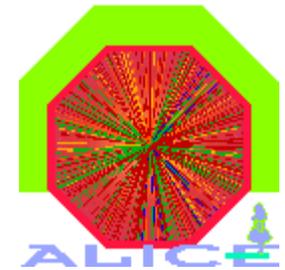


2) Running a real production



- **Goal 1: simulate and reconstuct 5000 Pb-Pb central events**
 - **Output size: about 1.8 GB/event, so 9.0TB**
 - **Job duration: 12-24 hrs, so 60-120 kHours**
- **Goal2: analyse these events**
 - **1 job to analyse all the events**

2) Running a real production



- **Software distribution**

- **3 rpm files for ROOT+AliRoot (200 MB)**
- **3 (+3 optional) rpm files for AliEn (27 MB)**
- **Quick feedback from the testbed team**
- **Some problems with rpm relocation in Lyon (our fault): now solved, new version available**
- **Some problems with files used for reconstruction and not distributed (our fault): now solved, new version available**
- **Test job (1 central event) up to reconstruction:OK**
- **Aliroot 3-09-06 in place at Torino, CERN, NIKHEF**

2) Running a real production



- Goal 1: simulate and reconstruct 5000 Pb-Pb central events
 - Job submission through 4 RB's
 - CNAF009, CNAF010, CERN, IC ok
 - Register output LFNs in the ALICE RC at NIKHEF
 - 100% successful until now
 - New LogicalCollection opened
 - 5 files/job, so 25,000 files
- Remark: long jobs don't stress the DataManagement Services*

2) Running a real production



- **Goal 1: simulate and reconstuct 5000 Pb-Pb central events**
 - **Send jobs to CE with and without MSS**
 - **Store the output on MSS where available - CERN (4 TB), SARA (5 TB) or RAL (3 TB)**
 - **Successfully tested**
 - **Store on SE's a fraction (5-10%, 450-900 GB) of the output, to be used for the development of the analysis script, running on a distributed input**

2) Running a real production



- **Goal 1: simulate and reconstuct 5000 Pb-Pb central events**
 - 3 central events run in Torino, ok
 - 3 running at the moment (to and NIKHEF)
 - Installation of aliroot-3-09-06 on the whole testbed
 - Start (hopefully by this evening, eventually on monday)

2) Running a real production



- **Goal 2: analyse 5000 Pb-Pb central events**
 - Macro to be executed ready
 - Test as soon as some events are available on the SE's

3) AliEn-EDG interface



- **Goal: use the EDG testbed from the AliEn portal**
 - **AliEn rpms distributed**
 - **Job submission to EDG through AliEn: tested**
 - **Data Management (tested on one EDG node)**
 - **Write Data to the AliEn Catalogue from EDG**
 - **Read Data in the AliEn Catalogue from EDG**
 - **Read Data in the EDG Catalogue from AliEn**



Remarks and Plans (2002 revised)



- **Testbed Stability!!!! (improved wrt the past)**
- **Testbed uniformity is a key issue for a real Grid:**
 - " for system software (i.e., X library, GCC compiler, special libraries like CERNLIB, etc.)
 - " for applications software default locations and environment
 - **Testbed scalability (# of users and sites)**
 - **Installation of EDG software on non-EDG ALICE sites**
 - **Replaced by the AliEn-EDG interface**
 - **Develop a common use case for the 4 LHC experiments (HEPCAL)**
 - *Setup Transatlantic Testbed and focus on GRID interoperability (LCG testbed...)*

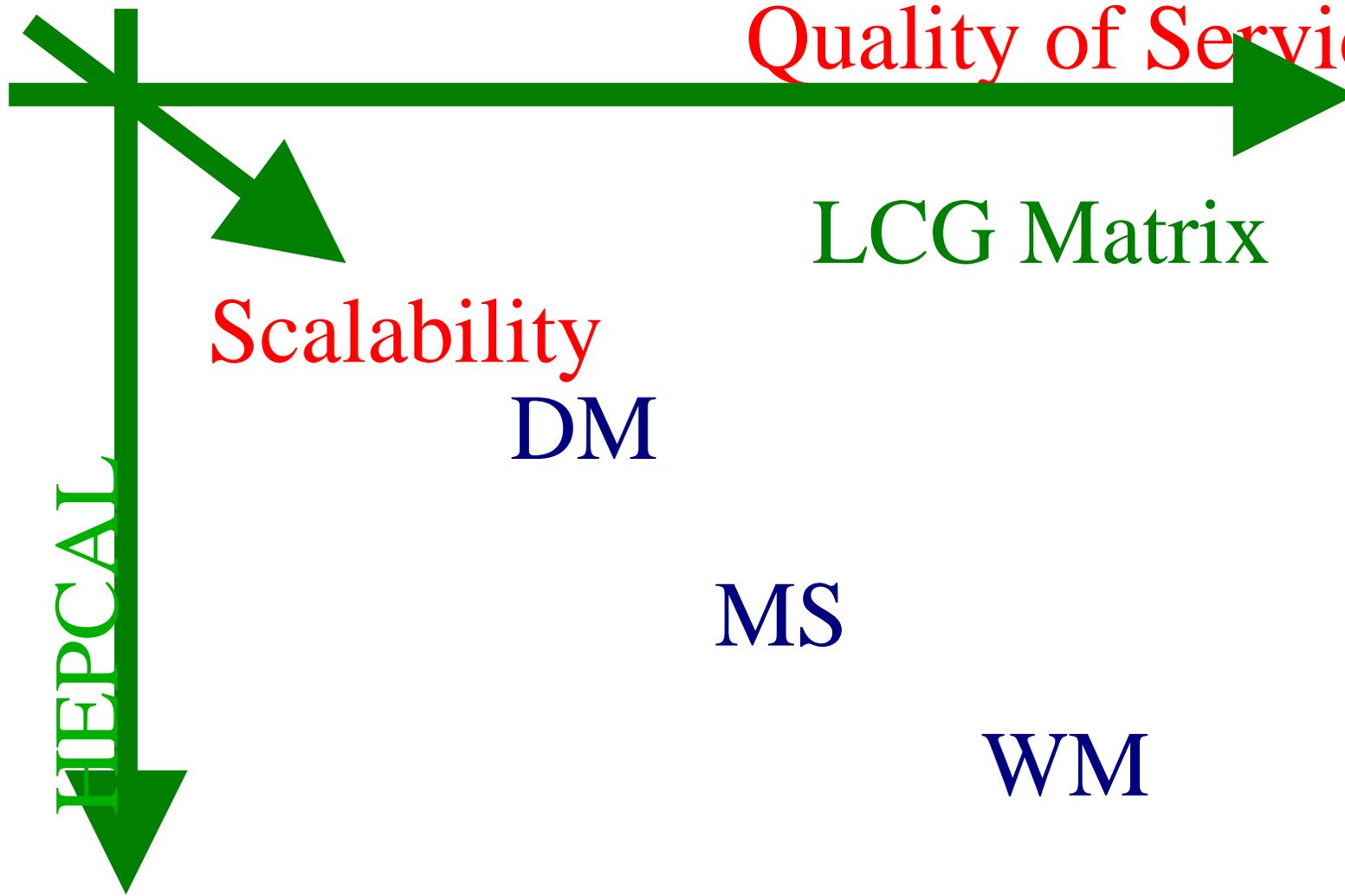


Remarks and Plans (2003)



- **Testbed Stability & Resources (storage) !!!!!**
 - **LCG testbed**
- **Require OUTBOUND connectivity on WN's**
 - **Complete the test production**
 - **Complete the AliEn -EDG interface**
 - **Run a high level (analysis) use case**
 - **Use ALICE resources + LCG testbed under AliEn control**

Plans (2003-)



Quality of Service

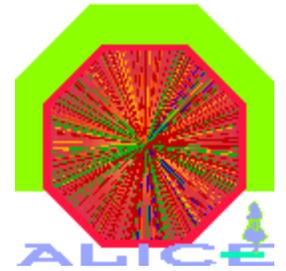
LCG Matrix

Scalability

DM

MS

WM



Functionality

