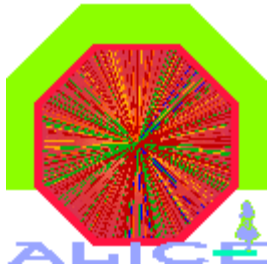
EDG 1.4 Validation
Alice PPR Production on EDG



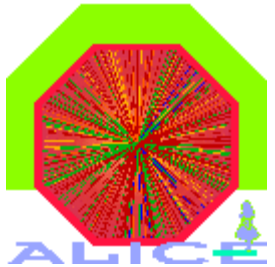
Warning: almost no access to the testbed until the review

1) Monitoring of the testbed status

2) Run a real production on the testbed

3) Development of the AliEn-EDG interface

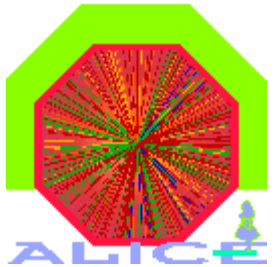
1) Monitoring the testbed status



- 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

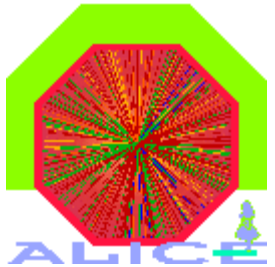
Resource Broker	*Job status: submitted*	*Job status: scheduled*	*Job status: running*	*Job status: done*	*Job status: output ready*
CNAF	254	181	174	174	174
CERN	293	165	165	165	165
Total	547	346	339	339	339

2) Running a real production



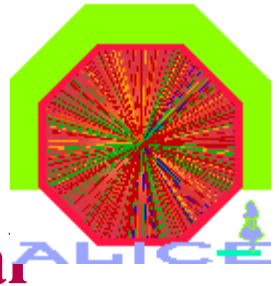
- Goal 1: simulate and reconstuct 5000 Pb-Pb central events
  - Output size: about 1.8 GB/event, so 9.0TB
  - Job duration: 12-24 hrs, so 60-120 kHours
- Goal2: analyse these events
  - 1 job to analyse all the events

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**

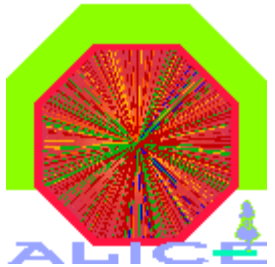
2) Running a real production



- Goal 1: simulate and reconstuct 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

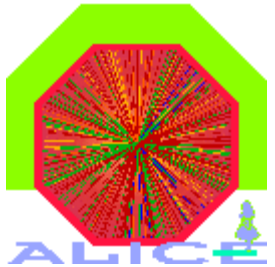
Remark: long jobs don't stress the DataManagement Services

2) Running a real production



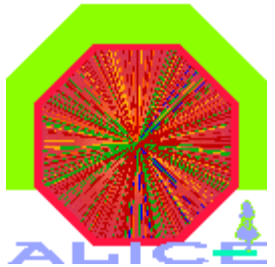
- **Goal 1: simulate and reconstuct 5000 Pb-Pb central events**
  - **Send jobs to CE with and without MSS**
  - **Store the output on MSS where available - CERN (4 TB), SARA (5 TB) or RAL (3 TB)**
    - **Successfully tested**
  - **Store on SE's a fraction (5-10%, 450-900 GB) of the output, to be used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

2) Running a real production



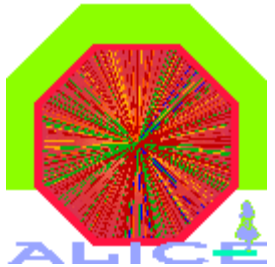
- **Goal 1: simulate and reconstuct 5000 Pb-Pb central events**
  - **3 central events run in Torino, ok**
  - **3 running at the moment (to and NIKHEF)**
  - **Installation of aliroot-3-09-06 on the whole testbed**
  - **Start (hopefully by this evening, eventually on monday)**

2) Running a real production



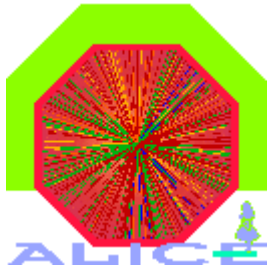
- Goal 2: analyse 5000 Pb-Pb central events
  - Macro to be executed ready
  - Test as soon as some events are available on the SE's

3) AliEn-EDG interface



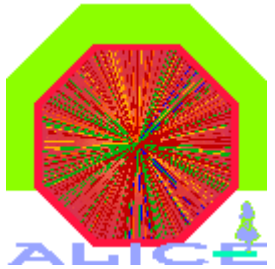
- **Goal: use the EDG testbed from the AliEn portal**
  - **AliEn rpms distributed**
  - **Job submission to EDG through AliEn: tested**
  - **Data Management (tested on one EDG node)**
    - **Write Data to the AliEn Catalogue from EDG**
    - **Read Data in the AliEn Catalogue from EDG**
    - **Read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

Remarks and Plans (2002 revised)



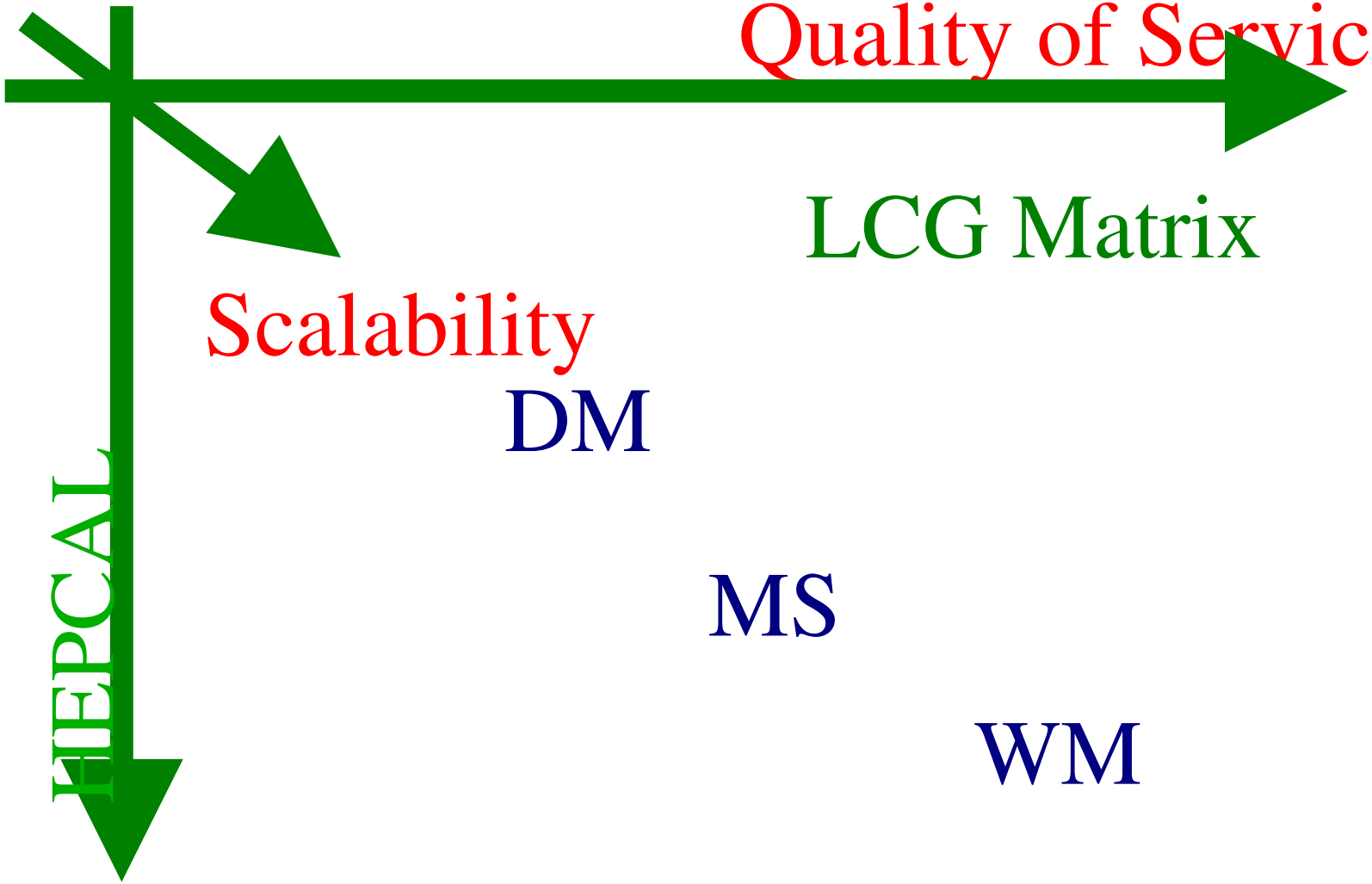
- **Testbed Stability!!!!! (improved wrt the past)**
- **Testbed uniformity is a key issue for a real Grid:**
  - for system software (i.e., X library, GCC compiler, special libraries like CERNLIB, etc.)
  - for applications software default locations and environment
    - Testbed scalability (# of users and sites)
    - Installation of EDG software on non-EDG ALICE sites
      - Replaced by the AliEn-EDG interfacec
    - 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
HEPCAL
MS
WM
Functionality