



MICE Collaboration

MCproduction on the grid



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Outline



- Changes in MC production on the grid since last CM
- MC production information web pages
- Finished MCproductions on the grid since last CM
- To do



Changes in Mcproduction on the grid



Output storage and access:

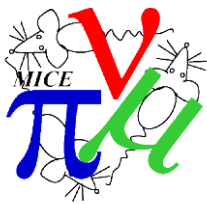
- MAUS writes a tarball like **<RunNumber>_mc.tar** for each chunk in G4BL list.
 - All **<RunNumber>_mc.tar** are stored on [Imperial SE for http access](#).
 - When all jobs are done, one job will get all created **<RunNumber>_mc.tar** files (with their MD5 info) and make **<MCSerialNumber>_mc.tar**. The **<MCSerialNumber>_mc.tar** is stored on [RAL castor](#).

G4BL used

- there is a patched version of Version 3 libraries:
http://micewww.pp.rl.ac.uk/projects/operations/wiki/Version_3a
- Latest production G4BL lists still need to be moved from personal page.

DB MCSerialNumber entries

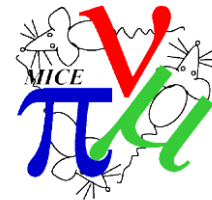
- DB for storing datacards for each MCproduction request is switched from **preprodcdb** to **cdb**.



- **Information about finished and running MCproductions on the grid:**
<http://micewww.pp.rl.ac.uk/projects/analysis/wiki/MCProduction>
- **Information (and also as examples) of MCproduction Requests**
<http://micewww.pp.rl.ac.uk/projects/analysis/wiki/MCProductionRequests>
- Information about MCproduction requests entries in CDB
You can check MCSerialNumber entries in CDB and preprodCDB:
http://147.91.87.158/cgi-bin/get_mcserial
- The scripts used for MC production on the grid are available on launchpad
 - <https://launchpad.net/mice-mc-batch-submission>



Finished Mcproductions since last CM



Since last CM, **12** MCproduction request were finished.

There were 8 Multiple Scattering study MC productions:

- Run number 7563. Status (Done) output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000001/>
- Run number 7586. Status (Done) output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000002/>
- Run number 7785. Status (Done) output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000003/>
- Run number 7652. Status (Done) output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000004/>
- Run number 7517. Status (Done) output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000005/>
- Run number 7798. Status (Done) output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000007/>
- Run number 7790. Status (Done) output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000008/>
- Run number 7666. Status (Done) output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000009/>

2 Energy loss MC productions:

- Energy loss study, LiH absorber. Status (Done)
 - output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000010/>
- Energy loss study, Empty absorber. Status (Done)
 - output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000011/>

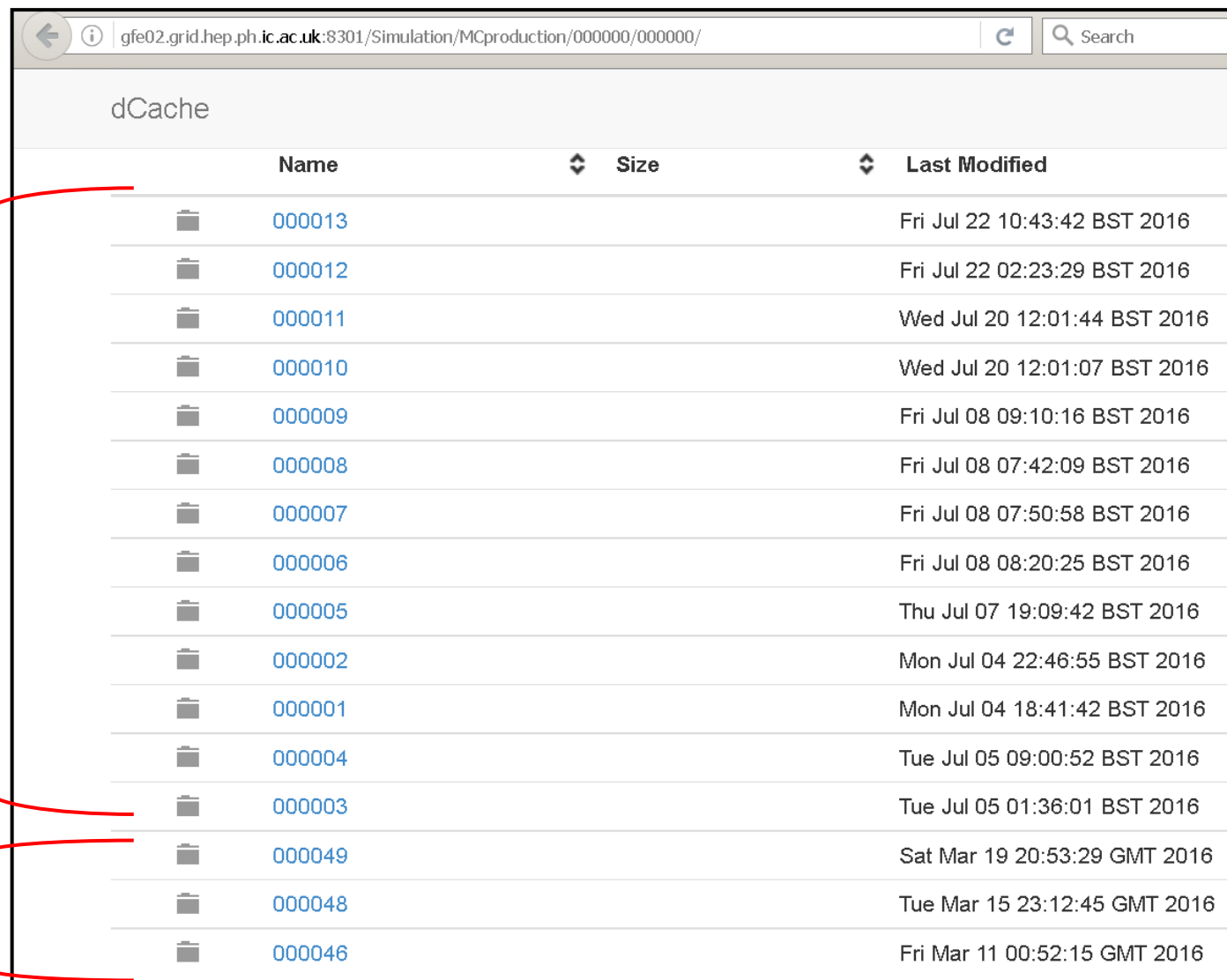
1 Magnet study MC production

- SSU-SSD-ECE. Run number 8070. Status (Done)
 - output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000012/>

1 Emittance study MC production

- Run number 7469. Emittance production. Status (Done)
 - output: HTTP: <http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/000000/000000/000013/>

<http://gfe02.grid.hep.ph.ic.ac.uk:8301/Simulation/MCproduction/>



Name	Size	Last Modified
000013		Fri Jul 22 10:43:42 BST 2016
000012		Fri Jul 22 02:23:29 BST 2016
000011		Wed Jul 20 12:01:44 BST 2016
000010		Wed Jul 20 12:01:07 BST 2016
000009		Fri Jul 08 09:10:16 BST 2016
000008		Fri Jul 08 07:42:09 BST 2016
000007		Fri Jul 08 07:50:58 BST 2016
000006		Fri Jul 08 08:20:25 BST 2016
000005		Thu Jul 07 19:09:42 BST 2016
000002		Mon Jul 04 22:46:55 BST 2016
000001		Mon Jul 04 18:41:42 BST 2016
000004		Tue Jul 05 09:00:52 BST 2016
000003		Tue Jul 05 01:36:01 BST 2016
000049		Sat Mar 19 20:53:29 GMT 2016
000048		Tue Mar 15 23:12:45 GMT 2016
000046		Fri Mar 11 00:52:15 GMT 2016

New MCproductions.
With
MCSerialNumber
entries in CDB

Old MCproductions.
WithNO
MCSerialNumber
entries in CDB,
only in preprodcdb

To do



- Check if there is a need for **quick MCproduction validation** when doing (or finishing) each MCProduction on the grid. Discuss what could be checked at that point.
- See **if everyone is happy with new file sizes?** Earlier one big output file, near maximum file size (<25GB), now thousands files with sizes of 10-30 MB.
- Check how to insert old MCSerialNumber from preprodcdb into CDB.
- When done with each MCproduction request, create big tarball of all files, store on RAL castor and populate MICE meta DB.
- Henry is copying latest G4BL library chunks, each library in one tarball and will store them on Imperial SE. This additional copy will allow that productions continue even if there is some problem like Glasgow SE disks updates problem during latest productions at the beginning of July.