

CSG meeting, Nov. 16th 2011

FullSim Production November 2011

Alejandro Pérez
INFN – Sezione di Pisa

Outline

- **Production Work-flow**
- **November 2011 fullsim production**

Production Work-flow (I)

- **Followed guide-lines proposed by Andrea Di Simone at the Elba SuperB meeting 2011**

(<http://agenda.infn.it/getFile.py/access?contribId=51&sessionId=65&resId=0&materialId=slides&confId=3352>)

- **Added to the SuperB wiki**

- Explanation these guide lines: Path to production

(http://mailman.fe.infn.it/superbwiki/index.php/Path_to_production)

- The implementation of the production work flow to be followed for each production. There will be a wiki-page for each production. The one corresponding to the current production can be look at the link below

November 2011 production:

http://mailman.fe.infn.it/superbwiki/index.php/November_2011_production

Production Work-flow (II)

■ Software preparation:

Software preparation

[\[edit\]](#)

Summary 	BrnSvt OK (Cenci) 	BrnEmc OK (Germani) 	BrnIftr OK (Santoro) 	BrnGeoMag OK (Pérez) 	Brn3BGen OK (Pérez) 	BrnPID OK (Di Simone/Roberts) 	BrnRunTime OK (Pérez) 	BrnCore OK (Pérez/Di Simone/Paoloni) 	BrnApp OK (Pérez/Di Simone/Paoloni) 	Packages assembling OK (Pérez/Di Simone/Paoloni) 
Tag	V00-00-02	V00-00-02	V00-00-01	V00-00-02	V00-00-01	V00-00-01	V00-00-03	V00-00-03	V00-00-02	OK
Software quality OK	True	True	True	True	True	True	True	True	True	True

Before the creation of a new FullSim release the software need to be tested and fixed. There is a responsible for every BRN package that needs to create a new tag for production and sign-off on the code quality

Production Work-flow (III)

■ Release validation:

Release validation

[\[edit\]](#)

Release number	Release build/validation OK (Stroili)	Remote sites validation OK (Fella/Tomassetti)	Test release for production OK (Pérez/Paoloni)
V0.0.3	True	False	False

Once the tag for the different BRN packaged have being created, we proceed to build a new release.

- Release build/validation: Roberto Stroili
- Remote sites validation: Armando Fella/Luca Tomassetti
- Checkout/validation of the test release to be used for production: Pérez/Paoloni

Production Work-flow (IV)

■ Production requests:

Production requests

[edit]

Geometry 	Generator 	N. Events 	N. Jobs 	Event/job 	Time/job (hours) 	Size/job (GB) 	Total Size (TB) 	Pre-approval (Pérez/Paoloni) 
Geometry_CIPE_V00-00-02_PWO	Rad-BhaBha	10k	1k	10	~4	1.3	1.3	True
Geometry_CIPE_V00-00-02_PWO	Pairs	100k	340	300	~2	1.3	0.5	True
Geometry_CIPE_V00-00-02_PWO	Touschek	XXX	XXX	200	XXX	XXX	XXX	False
Geometry_CIPE_V00-00-02_ShorterFF5mts	Rad-BhaBha FastSim bg-frames	1M	XXX	XXX	XXX	XXX	XXX	False

Production request are written in a table. It needs to be specified,

- Geometry
- Generator
- Estimation of: N. events, N. jobs, N. events/job, Time/job, Size/job, Total Size

The production request needs to be pre-approved: Pérez/Paoloni

Production Work-flow (V)

■ Pre-production:

Pre-production

[edit]

Geometry 	Generator 	N. Events 	N. jobs 	Events/Job 	Time/Job 	Disk-space/Job (GB) 	Run time OK 	Physics Results OK 	Final Sign-off (Pérez/Paoloni) 
Geometry_CIPE_V00-00-02_PWO	Rad-BhaBha	1k	100	10	~4	1.3	XXX	XXX	XXX
Geometry_CIPE_V00-00-02_PWO	Pairs	10k	34	300	~2	1.3	XXX	XXX	XXX
Geometry_CIPE_V00-00-02_PWO	Touschek	XXX	XXX	200	XXX	XXX	XXX	XXX	XXX
Geometry_CIPE_V00-00-02_ShorterFF5mts	Rad-BhaBha FastSim bg-frames	100k	XXX	XXX	XXX	XXX	XXX	XXX	XXX

For all the pre-approved requests we will launch a pre-production of ~10% of all the total requested events. It need to be tested,

- Time/job, Size/job
- Physics results

If all tests give satisfactory results the request will receive a final sign-off (Pérez/Paoloni) and we will proceed with the full production

Nov. 2011 FullSim production: Requests

- Rad-bhabha with new Stefano Fwd-EMC geometry (Geometry_CIPE_V00-00-02_PWO).
 - N. Events ~10k.
 - Execution time ~10 hours (1 day being pessimistic).
 - Total disk space ~1.3T
- Pairs (2-photon).
 - N. Events: ~100k
 - Execution time: ~10 hours (1 day being pessimistic)
 - Total disk space: ~500G.
- Touschek.
 - N. Events: Need to be decided.
 - Execution time: ~10 hours (1 day being pessimistic)
 - Total disk space: ~2.0T.
- Rad-bhabha bg-frames for fast-sim:
 - N Events ~1M.
 - Execution time ~50 hours (100 hours being pessimistic, i.e. 3 or 4 days).
 - Total disk space: needs to be estimated (Expects < 100G)

Nov. 2011 FullSim production: Status

Status:

- Code have been frozen: list of tags
- Production FullSim release built: V0.0.3
- Checked out test release for production
- Launched test jobs for all the production requests,
 - Rad-bhabha and pairs: test jobs finished OK
 - Rad-bhabha bg-frames:
 - ♦ test jobs crashed.
 - ♦ Andrea just fixed bug.
 - ♦ Andrea's fix is being tested.
- Question to Roberto Stroili: Andrea's fix needs a new list of tags some packages. Is there a simple way of implementing this without building a new release?
- Next steps:
 - Will re-evaluate the time-schedule for production
 - Launch pre-production for all the requests.
 - Full production.

Backup