

MC Production Package

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- Package description
- Current status
- Future developments/improvements

Package description:

- A collection of all necessary binaries and tcls available in one place (i.e. MC Production tarball)
- Freedom to do production anywhere without worrying about local CDF software installation (not needed at all).
- Ensures consistency across all official MC samples.

MC Production tarball:

- Typical build prescription: see “user” documentation in http://www-cdf.fnal.gov/internal/mcProduction/mcprod_5_3_3_howto_v5.txt
- Tools are in CDF software under *mcProduction*. (with specific CVS tags for MC Production package versions)

MC Production tarball (content):

- typical size is about 800 Mb (< 200Mb compressed)
(cdfSim+TRGSim+ProductionExe+Edm_EventLister = 520 Mb)

- actual content:

```
CalTrigger/      RootObjs/      TriggerMods/      bin/      cint/  
etc/      lib/      svtsim/      SimulationMods/      XFTSim/      cdfopr/  
dab/      farmsonly/      mcProduction/      Production/      TclUtils/  
XTRPSim/      cesData/      dbt/      include/      rcpdb/
```

- try to use (wherever possible) official 5.3.3 SimulationMods and Production tcl files (for smoother release to release migration/upgrade).
- current version is MCProd_v5_3_3_v4.tar.gz, built under mcProduction CVS tag v5_3_3_v4

MC Production machinery:

- default behavior: run dependent MC production
(a la CDF 7055)
- main script is “*MCProd*” (in *mcProduction/scripts/*)
(understanding this script = understanding MC Production!)
- dataset definition file controls the behavior of the production (minimum bias option, hepg file option, etc.).
- relatively user friendly (with a proper documentation)

Todo list:

- ISAJET handling (leftover from 4.9.1 machinery)
- new build procedure for Herwig (proper compiled library)
- “single run number” MC production (not officially available)
- Possibility to mix 5.3.4 simulation with 5.3.3 production
- +AOB