Computing and database activities

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STATUS

- Just started a collaboration with the SuperB Computing Group (coordinator: F. Bianchi INFN – Turin)
- Obtained SuperB account @CNAF and SuperB VO membership
- Specific tasks:
  - (distributed) computing model
  - DB design: data placement database (official and user production), GRID resources
- Work in collaboration with A. Fella (INFN – Pisa) and INFN – Ferrara (L. Tomassetti and other)
- A lot of things to learn about HEP Computing

DISTRIBUTED COMPUTING MODEL

- To be completed before the end of 2013
- A lot of R&D work to do
- Priority: production framework

DATABASES

- Data placement DB: *maintain information regarding data structure and data location on distributed environment. The client systems should be the GANGA (r/w and definition of dataset) and PhEDEx/FTS (information backend)*
- Porting metadata from book-keeping to placement DB
- Generalisation for Fast and Full simulations
- Access to SBK4 DB (Fast/Full)
- Grid Resources DB: *collects information about the present time grid services status all over the VO enabled sites. A daemon is responsable to fill up the tables every time quantum asking to GIS and Nagios VO service. Ganga and production systems will rely on information residing in such a DB. Pros: immunities by GIS and Nagios downtime.*

SBK4

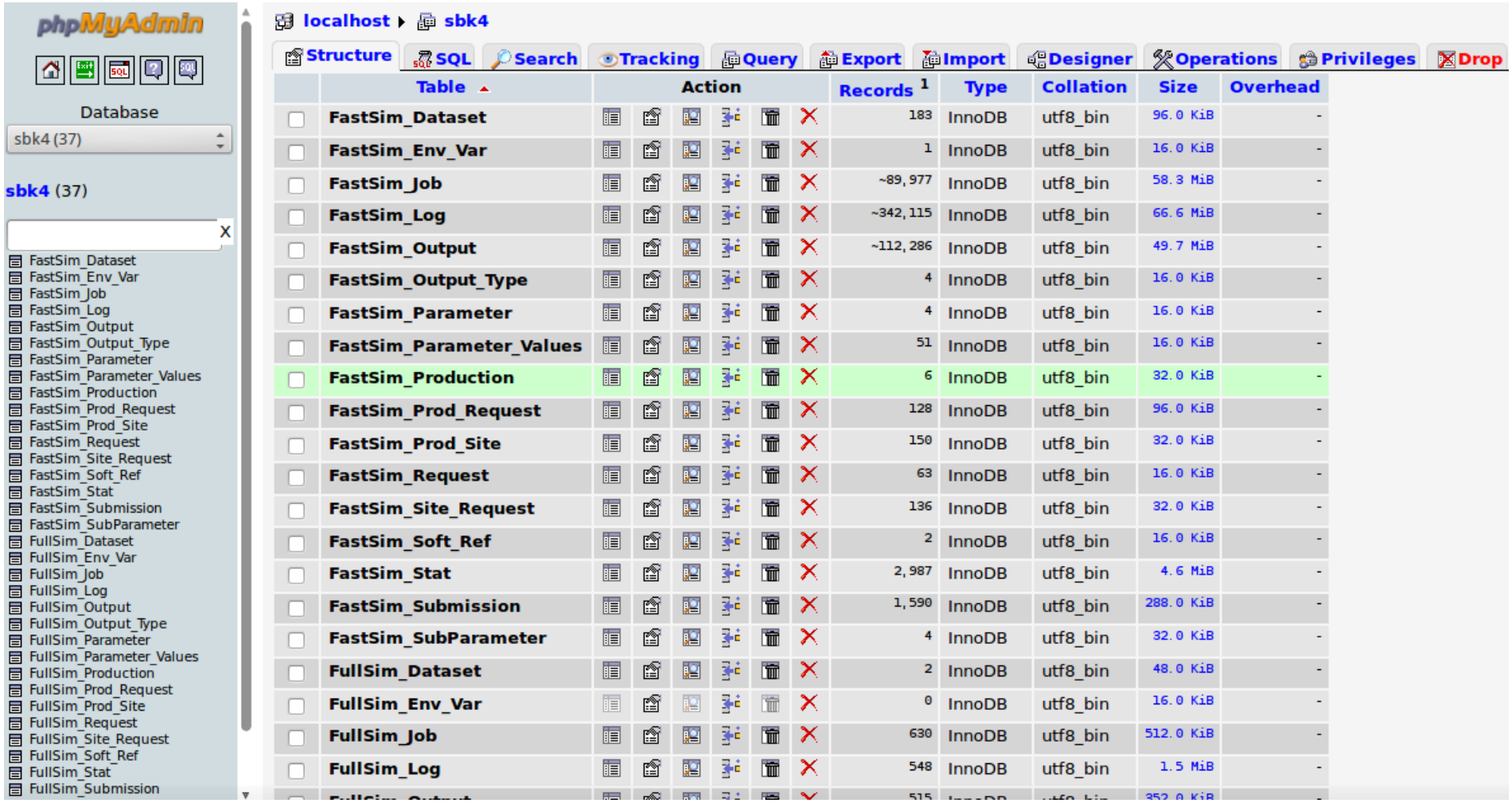

Table	Action	Records [1]	Type	Collation	Size	Overhead
FastSim_Dataset		183	InnoDB	utf8_bin	96.0 KiB	-
FastSim_Env_Var		1	InnoDB	utf8_bin	16.0 KiB	-
FastSim_Job		~89,977	InnoDB	utf8_bin	58.3 MiB	-
FastSim_Log		~342,115	InnoDB	utf8_bin	66.6 MiB	-
FastSim_Output		~112,286	InnoDB	utf8_bin	49.7 MiB	-
FastSim_Output_Type		4	InnoDB	utf8_bin	16.0 KiB	-
FastSim_Parameter		4	InnoDB	utf8_bin	16.0 KiB	-
FastSim_Parameter_Values		51	InnoDB	utf8_bin	16.0 KiB	-
FastSim_Production		6	InnoDB	utf8_bin	32.0 KiB	-
FastSim_Prod_Request		128	InnoDB	utf8_bin	96.0 KiB	-
FastSim_Prod_Site		150	InnoDB	utf8_bin	32.0 KiB	-
FastSim_Request		63	InnoDB	utf8_bin	16.0 KiB	-
FastSim_Site_Request		136	InnoDB	utf8_bin	32.0 KiB	-
FastSim_Soft_Ref		2	InnoDB	utf8_bin	16.0 KiB	-
FastSim_Stat		2,987	InnoDB	utf8_bin	4.6 MiB	-
FastSim_Submission		1,590	InnoDB	utf8_bin	288.0 KiB	-
FastSim_SubParameter		4	InnoDB	utf8_bin	32.0 KiB	-
FullSim_Dataset		2	InnoDB	utf8_bin	48.0 KiB	-
FullSim_Env_Var		0	InnoDB	utf8_bin	16.0 KiB	-
FullSim_Job		630	InnoDB	utf8_bin	512.0 KiB	-
FullSim_Log		548	InnoDB	utf8_bin	1.5 MiB	-