

DIRAC Production Management

1. **Users** formulate Production Requests using a detailed Web form. Multiple similar requests are easy to make by creating subrequests

Registered Production Requests						
/ Requests / 79						
ID	Type	State	Priority	Name	Sim. conditions	Proc. pass
2	Simulation	New	2a			Gun (2)
3	Simulation	New	1a			Gun
5	Simulation	New	1a			
31	Simulation	New	1a			
33	Simulation	New	1a			
35	Simulation	New	1a			
37	Simulation	New	1a			
45	Simulation	Done	2b			
47	Simulation	New	2b			
48	Simulation	Submitted	2b			
49	Simulation	New	1a			
78	Simulation	New	2b			
79	Simulation	New	2b			

**Request 79**

ID: 79  
Name: B inclusive  
Type: Simulation  
State: New  
Priority: 2b  
Author: azhelezo  
Event type: 1000000  
Number of events: 5000000

Simulation Conditions:  
Beam: Collision Beam energy: 450 GeV Generator: Pythia 6.325.2  
Magnetic field: 0% Detector: Normal Luminosity: Fixed 2 10^32

Processing Pass: DC06-Sim-Reco\_v30  
Pass 1: Gauss-v259  
Pass 2: Book-v1210  
Pass 3: Brunel-v3014

Comments

2. **Physics Coordinator, Bookkeeping Manager and Technical Experts** approve the formulated Production Requests checking its technical validity and physics appropriateness and using the special Web Interface

Registered Production Requests Edit request 79

Request

Name: B inclusive

Type: Simulation

Priority: 2a

Simulation Conditions: 1a

Description: 2a

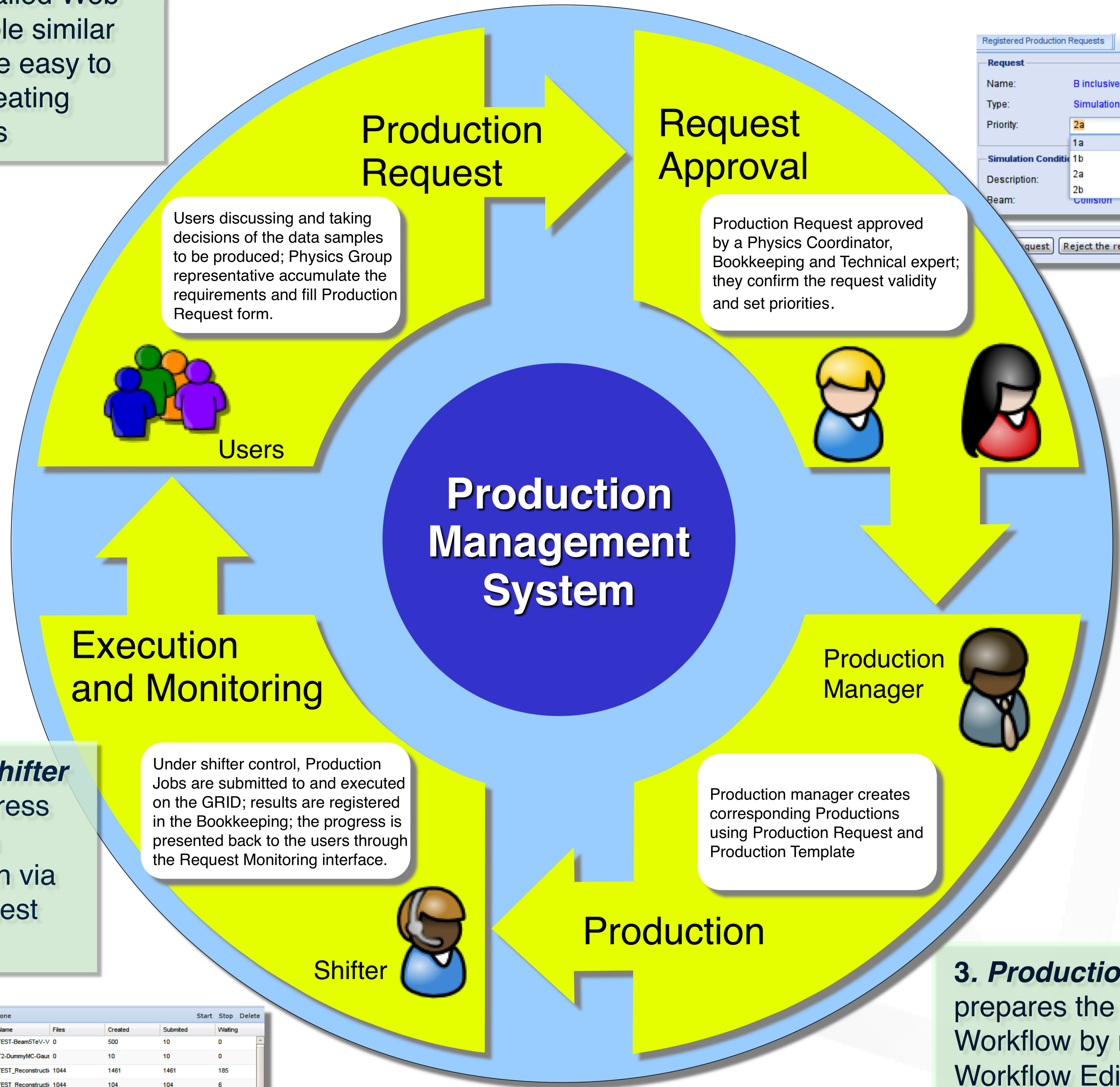
Beam: 2b

State: Submitted

Author: azhelezo

Reject the request (better first comment why)

Cancel



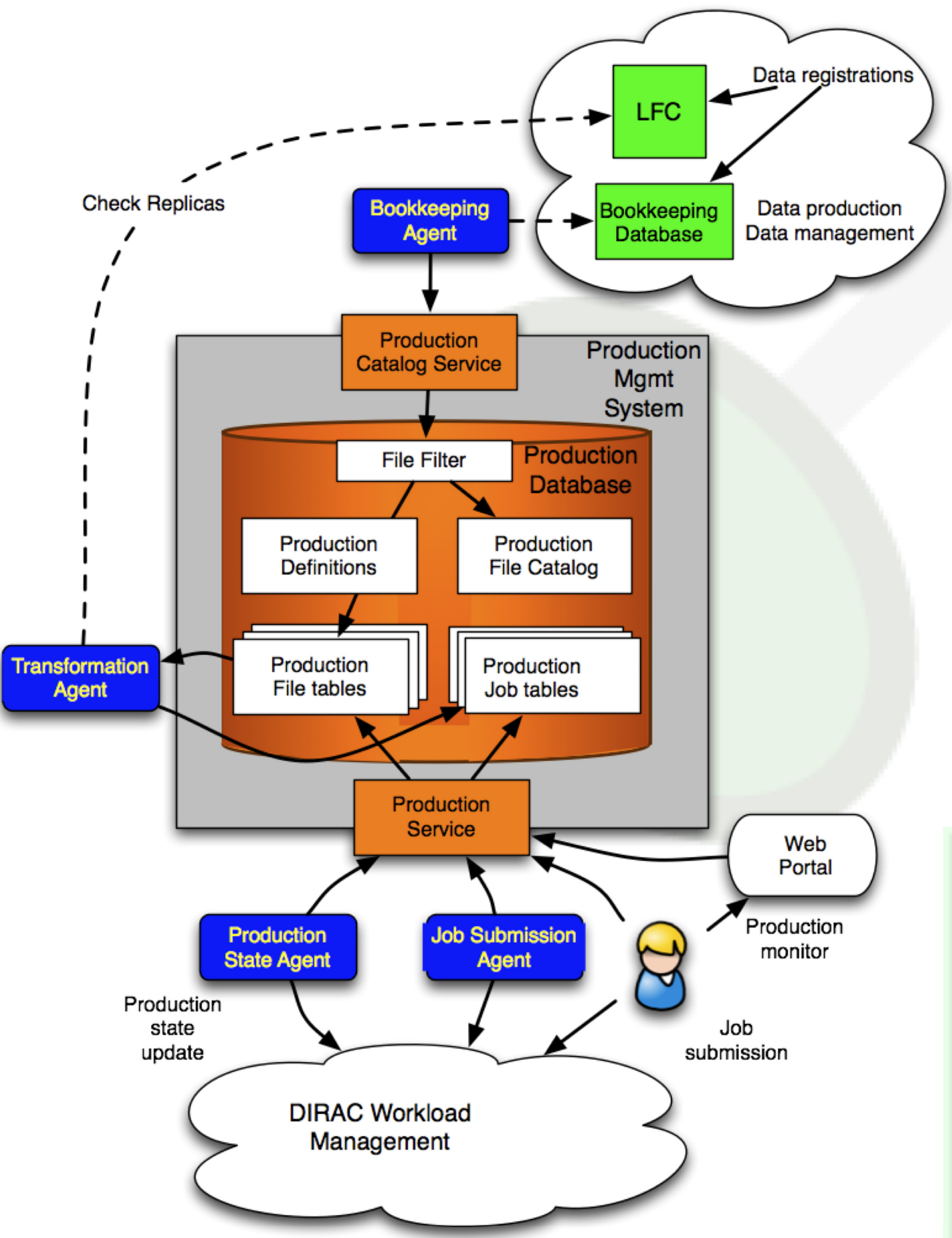
5. **Production Shifter** Follows the progress of the production request execution via of the Web Request Monitor

3. **Production Manager** prepares the Application Workflow by means of the Workflow Editor combining an arbitrary number of different execution steps

ProductionMonitor									
Select All Select Name									
ID	Status	Name	Files	Created	Submitted	Start	Stop	Delete	
4606	Active	FEST_BeamTeV_V_0	500	10	0				
4605	Active	T2-DummyMC-Gaus	10	10	0				
4602	Stopped	FEST_Reconstruct_1044	1461	1461	185				
4601	Stopped	FEST_Reconstruct_1044	104	104	6				
4600	Stopped	FEST_Reconstruct_1044	100	100	1				
4599	Stopped	FEST_Reconstruct_1064	1097	1097	23				
4598	Active	EXPRESS_FEST_Rv_29	34	34	0				
4597	Stopped	EXPRESS_FEST_Rv_18	2	2	0				
4595	Stopped	EXPRESS_FEST_Rv_18	2	2	0				
4314	Stopped	Fest_MOF_Merge_v_98126	240	240	0				
4311	Stopped	FEST_BeamTeV_V_0	140000	139958	0				
4005	Stopped	Short_DummyProd_0	120	120	1				

4. The **Production Management System** treats the defined and activated production automatically:

- **Bookkeeping Agent** update the Production Input Data from the Bookkeeping Metadata Database;
- **Transformation Agent** creates jobs;
- **Production Job Agent** submits jobs to DIRAC WMS
- **Production State Agent** updates the production progress information



Workflow Steps Modules

MCStandard3.2

Up

Remove

Down

Append step

Name: MCStandard3.2

Type: Workflow

Short description: Simulation 2 steps template

Description: Workflow of GaudiApplication

Origin:

Version: 3.2

Apply

Cancel

Parameters

Show linked input output

Table with 5 columns: Name, Value, Edit, Remove, Config, New

The **Production Management System** was successfully used in the FEST'09, creating and executing automatically RAW Data Reconstruction jobs in multiple LHCb Tier-1 centers. It is used routinely for the ongoing MC Data production of LHCb.

