Tier-0 Job Processing

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Tier-0 Job Processing

- Fully automated, data driven
  - Processing chain usually starts with SFO/Tier-0 DB handshake
    - RAW dataset and file creation
  - Manual sign-off also possible
  - New tasks down the chain created when their input datasets become available

- System based on ProdSys components and architecture
  - ProdDB
  - TOM processes create tasks, jobdefs, output datasets
  - Supervisor/Executor (Eowyn/TZex) process responsible for
    - jobexe record creation
    - Job submission, running, validation, retrying, post-processing, …
    - Bookkeeping with ProdDB

- Task configuration via AMI tags
  - Self-contained and sufficient (reproducibility!)
  - Users/clients define the AMI tags and configure Tier-0 processes
  - Tier-0 processes look up AMI at start-up and after configuration update

- Flexible – releases can be used as soon as they have been built on AFS

Tier-0 Monitoring

- See presentation by Tomáš Kubeš at Monitoring Workshop of last S&C Week

    – Advanced, comprehensive, powerful system

    – https://atlas-tz-monitoring.cern.ch/

- Fast and easy overview of the whole processing chain

    – Job, task and dataset level monitoring

    – Web interface for interventions by shifters and experts

Run No.	Task Name	User Name	Task Information			Job Statistics								Time Stamps	
			ID	Type	Status	#Tot.	#Done	#Run.	#Proc.	#TBD	#Abrt.	#TJF	#Events	Created	Last Modified
173857	data11_calocomm.00173857.express_express.recon.HIST.x73_m706.histmerge.t...	tzprod	579181	histmerge		1	0	0	1	0	0	0	0	02/FEB21:17	02/FEB21:17
173857	data11_calocomm.00173857.express_express.recon.NTUP_MUONCALIB.x73_m707.n...	tzprod	579179	ntupmerge	DEFINED	0	0	0	0	0	0	n/a	0	02/FEB21:08	02/FEB21:08
173857	data11_calocomm.00173857.express_express.recon.NTUP_TRKVALID.x73_m707.nt...	tzprod	579178	ntupmerge	DEFINED	0	0	0	0	0	0	n/a	0	02/FEB21:08	02/FEB21:08
173857	data11_calocomm.00173857.express_express.daq.RAW.x73.recon.task	tzprod	579177	recon		18	17 (17)	1	0	0	0	0	3242	02/FEB20:51	02/FEB21:17
173857	data11_calocomm.00173857.express_express.daq.RAW.rawmerge.task	tzprod	579173	rawmerge		3	3	0	0	0	0	0	3512	02/FEB18:33	02/FEB18:37
173857	data11_calocomm.00173857.express_express.daq.RAW.x72.recon.task	tzprod	579172	recon	TRUNCATED	18	0	0	0	0	18	54	0	02/FEB18:32	02/FEB20:46
173857	data11_calocomm.00173857.physics_CosmicCalo.recon.HIST.x73_m706.histmerg...	tzprod	579180	histmerge		1	0	0	1	0	0	0	0	02/FEB21:17	02/FEB21:17
173857	data11_calocomm.00173857.physics_CosmicCalo.merge.RAW.x73.recon.task	tzprod	579176	recon		89	1 (1)	88	0	0	0	0	201	02/FEB20:51	02/FEB21:09
173857	data11_calocomm.00173857.physics_CosmicCalo.merge.RAW.x72.recon.task	tzprod	579175	recon	TRUNCATED	75	0	0	0	16	59	178	0	02/FEB18:36	02/FEB20:46
173857	data11_calocomm.00173857.physics_CosmicCalo.daq.RAW.rawmerge.task	tzprod	579174	rawmerge		89	89	0	0	0	0	0	151813	02/FEB18:33	02/FEB20:44