

Propagating run info to offline for production jobs

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What's currently being used

- Google Sheet filled by shifter;
- A script parsing the sheet filled by shifter and updating SAM database for raw files' metadata;
- Production jobs relies on raw files metadata to define “datasets”, and launch different workflows for different types of datasets.

	A	B	C	D	E	F	G	H	I	J
1		Comments on Run typology	Cathode HV (kV) must be numeric value	APA included? (All list included APAs)	CE included? (Yes/No)	SSP included? (Yes/No)	CRT included? (Yes/No)	Date? (YYYY/MM/DD)	Trigger Type?	Windows Size (ms) must be numeric value
2	9829	Cosmic Run (lifetime ~5.5 ms)	180	All	Yes	Yes	YES	2019/10/13	15 Hz CRT trigger	3
3	9817	Cosmic Run (lifetime ~4.5 ms)	180	All	Yes	Yes	YES	2019/10/11	15 Hz CRT trigger	3
4	9772	Cosmic Run	180	All	Yes	Yes	YES	2019/10/09	15 Hz CRT trigger	3
5	9611	Cosmic Run	180	APA 1 to 4	Yes	Yes	No	2019/09/06	Random 0.5 Hz	3
6	9592	Cosmic Run	180	APA 1 to 4	Yes	Yes	No	2019/09/05	Random 3 Hz	3
7	9559	Cosmic Run	180	APA 1 to 4	Yes	Yes	No	2019/09/02	Random 0.2 Hz	3
8	9513	Cosmic Run	180	APA 1 to 4	Yes	Yes	No	2019/08/29	Random 5 Hz	3
9	9447	Cosmic Run	180	APA 1 to 4	Yes	Yes	No	2019/08/28	Random 5 Hz	3
10	9354	Cosmic Run	180	APA 1 to 4	Yes	Yes	No	2019/08/22	Random 10 Hz	3
11	9337	Cosmic Run, very low purity	180	APA 1 to 4	Yes	Yes	No	2019/08/21	Random 1 Hz	3
12	9335	Cosmic Run, very low purity	180	APA 1 to 4	Yes	Yes	No	2019/08/20	Random 1 Hz	3
13	9301	Cosmic Run, very low purity	180	APA 1 to 4	Yes	Yes	No	2019/08/16	Random 1 Hz	3
14	9274	Cosmic Run, very low purity	180	APA 1 to 4	Yes	Yes	No	2019/08/15	Random 1 Hz	3
15	9211	Cosmic Run, very low purity	180	APA 1 to 4	Yes	Yes	No	2019/08/13	Random 1 Hz	3
16	9204	Cosmic Run, very low purity	180	All	Yes	Yes	No	2019/08/12	Random 1 Hz	3
17	9203	Cosmic Run, very low purity	180	All	Yes	Yes	No	2019/08/12	Random 1 Hz	3
18	9181	Cosmic Run, very low purity	180	All	Yes	Yes	No	2019/08/09	Random 1 Hz	3
19	9170	Cosmic Run, very low purity	180	All	Yes	Yes	No	2019/08/08	Random 1 Hz	3
20	9168	Cosmic Run, very low purity	180	All	Yes	Yes	No	2019/08/07	Random 1 Hz	3
21	9142	Cosmic Run, very low purity	180	All	Yes	Yes	No	2019/08/06	Random 1 Hz	3

- Pros: workflows tested, worked for the past year or so;
- Cons: not reliable in terms of form format change in the Google Sheet or errors made by shifters (had one unintended change or two in the past, which broke the workflow).

Proposed changes

- Avoid using the Google sheet;
- Gathering info into the conditions database which is currently used for storing run configurations at Fermilab
 - Run configurations are saved for each run at the start of run; those contain most of the info needed by production jobs, such as HV values, readout windows, included APAs etc;
 - Some post-run information is put into Elisa elog by shifter (directly or indirectly via Run Control); these info will get scrapped into json blobs and put into the same conditions database as run configurations.
- Changes to the current workflow:
 - Need cron jobs and scripts for scrapping Elisa elog and put scrapped data into Fermilab's conditions database for run configurations;
 - Previous script for updating metadata will stop using the Google Sheet but instead querying the conditions database.
- Thanks Patricia M., Stefania B. and Roland S. for their help of scrapping Elisa elog entries.