

Data Dictionary: xalt_run table

full name	description	datatype	null	example
allocation	The administrative account that that users run jobs against and a user may have multiple allocations. The string has been anonymized for publication. This string is consistent across the entire dataset.	string	Yes	A00084719
date	The job's start date and time. Format, YYYY-MM-DD HH:MM:SS.	string	no	2015-04-01 00:16:21
exec_path	Mapped codes that represent the user's executable path. If the executable is known to TACC then the name of the real executable is mapped to a list of executable names mappings. Denoted by an asterisk by the path code. If the executable is not a common one then the executable name (with the path removed) is converted to a sha1 string. For example, any user running the "SamBill" code will have the same sha1 string.	string	no	WRF*
field_of_science	The associated scientific domain of the user	string	Yes	biology***
host	The computing cluster that ran the job.	string	no	stampede
job_id*	Identifies a user's job. The job_id may be associated with multiple runs. This string is consistent across the entire dataset.	string	no	4922626

linkA	Collection of libraries used to complete instructions in executable files. Format, structured series of arrays with two values: module_name and path.	string	no	[{"library_module_name": null, "library_path": "/lib64/libc-2.12.so"}]
library_module_name	Software libraries that define functions which allow the executable to run. part of linkA	string	yes	"library_module_name": null
library_path	The directory location and name of a library used during the job. part of linkA	string	no	"library_path": "/lib64/libc-2.12.so"
module_name	Executables maintained by TACC that users employ	string	yes	valgrind/3.8.1
num_cores	The number of processors used during a job.	integer	no	48
num_nodes	The number of nodes used during a job.	integer	no	3
num_threads	The number of threads that make up a job.	integer	no	1
run_time**	The number of seconds it took to complete the job.	float	no	11.79
start_time	The time the job started formatted in Unix time.	float	no	1427864961.87
user****	Anonymized unique user id for the account's owner. This string is consistent across the entire dataset.	string	no	U00361810

build_user	<p>The user who built the executable. The user and build_user may not be the same. There are three possible values: system, the user_id, and unknown.</p> <p>system - the executable was built by a TACC staff member. The user and build_user may not be the same.</p> <p>user_id - the executable was built by a user. The user_id will match the sanitized user id that represents the account's owner.</p> <p>unknown - the builder of the executable is unknown</p>	string	no	system
build_time	When the program was built formatted in Unix time. The time could be seconds or years before start_time.	float	no	1427864951.87

**If a job does not finish in the allocated time, run_time will equal the designated time from accounting. The run_time will only be 0.0 if the job_id is unknown.

***If the user wipes the environment, the field of science will be null

****There are some users that wipe the environment prior to working as a part of their scientific practice. For those jobs, the user, job_id, and other environmental variables may not be available. When the job_id is unknown, the run_time will be 0.0.

library – a collection of self-contained component of a program (module), with a well-defined purpose and boundary.