Moab

What are the fields in the events statistics files?

These events files are found in the $MOABHOMEDIR/stats directory, and contain detailed logging of job-related events. The filename is of the format "events.<weekday>_<month>_<day>_year. For example, "events.Wed_Mar_22_2023".

The first five fields are fixed-format, and are as follows:

1. <Recorded time in HH:MM:SS>
2. <Event time (epoch date)>:<Event id>
3. <Object type: 8 characters, left justified (%-8s)>
4. <Object id: 12 characters, left justified (%-12s)>
5. <Event type: 12 characters, left justified (%-12s)>

The remaining fields are space-delimited attribute/value pairs, and are defined as follows (I'll also attach a PDF file with the same information)

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Description of the named fields in the event logs

Attribute	Description
NAME	User specified name of job, job ID
REQUESTEDNC	Number of nodes required by job, job's total "compute" node count
REQUESTEDTC	Number of tasks required by job, job's total "compute" task count
UNAME	UserID under which job will run, User credential name
GNAME	GroupID under which job will run, Group credential name
USER	Proxy user if a proxy submission, otherwise will match UNAME
WCLIMIT	Walltime required by job, requested walltime limit
STATE	State of job, RM job state
RCLASS	List of <CLASSNAME>:<COUNT> pairs indicating type and number of class instances required per task. (i.e., [batch:1] or [batch:2][tape:1]), Class name
SUBMITTIME	Time job was submitted to resource

	manager, time job was submitted to RM by the user
DISPATCHTIME	time job was dispatched by RM
STARTTIME	Time job was started by the resource manager, time job began most recent execution
COMPLETETIME	Time job completed execution, time job execution completed (according to Moab's clock)
RARCH	Architecture required by job, HW arch
ROPSYS	Operating system required by job, required OS
RMEMCMP	Real memory comparison (i.e., node must have >= 512MB RAM), One of '>=', '>', '==', '<', or '<='
RMEM	Real memory (RAM, in MB) required to be configured on nodes allocated to the job
UMEM	job's total memory usage
RDISKCMP	Local disk comparison (i.e., node must have > 2048 MB local disk)
RDISK	Local disk space (in MB) required to be configured on nodes allocated to the job, required disk resources
RFEATURES	List of features required on nodes
SYSTEMQUEUETIME	time job was initially eligible to start
TASKSPERNODE	Exact number of tasks required per node
REQUESTEDQOS	Quality of service requested, quality of service requested
QOS	Quality Of Service credential name
FLAGS	Job flags
ACCOUNT	Account credential name
COMMAND	job executable command
RMXSTRING	Resource Manager Extensions
BYPASSCOUNT	number of times lower prio job was backfilled
PSUTILIZED	procseconds utilized by job
PARTITION	assigned partition
DPROCS	Number of processors dedicated to the job, job's total processor count
DMEM	Quantity of memory (in MB) that must be dedicated to each task of the job, job's total memory count (for first req)
DDISK	Quantity of local disk space (in MB) that must be dedicated to each task of the job, total dedicated disk resources (for first req)
DSWAP	Quantity of virtual memory (swap, in MB)

	that must be dedicated to each task of the job, total dedicated swap resources (for first req)
STARTDATE	Earliest time job should be allowed to start, user specified earliest start time
ENDDATE	Time by which job must complete, user specified latest completion date
GRES	all GRes from all reqs
TASKMAP	The allocation taskmap for the job, nodelist map with task counts
SRM	rm to which job is submitted
HOSTLIST	List of required hosts on which job must run, required hosts
REQRSV	Name of reservation where job must run, required rsv name/group
TEMPLATE	List of 'job match' structures
MESSAGE	job messages
EXITCODE	Job exit code, execution completion code
SID	System ID (global job system owner), session id of primary task
VARIABLE	list of (job) variables
NODEALLOCATIONPOLICY	Node Access Policy (I know, it is named one thing and reports another)
GMETRIC	utilized total generic metric values
EFFECTIVEQUEUEDURATION	duration of time job was eligible to run
RMSUBMITSTRING	raw command file
DRMJID	destination resource manager job ID

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