

Moab

What are the meanings of the fields returned by the "mstats" command.

Issue:

The statistics for mstats are labeled with cryptic names, and are not descriptive

Affected Version:

All currently supported releases

Problem:

Running the **mstats --xml** command provides a lot of statistics, but no descriptions.

Solution:

The following list of fields should provide this information

Field ID	Field Description
ABP	Job weighted average bypass count, Bypass / JC
APS	active job proc-seconds remaining
AQT	Job weighted average qtime, TotalQTS / JC
ATAPH	average time queued PH ?
ATQPH	average time queued PH ?
AXF	PS weighted average xfactor, PSXFactor / PSRun
GCAJobs	current active jobs
GPHAvl	total processor hours- @see mstat_t.TotalPHAvailable -- processor hours available
GPHDed	total processor hours dedicated - @see mstat_t.TotalPHDed
GPHSuc	proc hours dedicated to jobs which have successfully completed
GPHUtl	total processor hours used - @see mstat_t.TotalPHBusy
IC	number of iterations contributing to record
IMEM	idle mem
INC	idle node count
IPC	idle proc count
MBP	maximum bypass count

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MinEffIteration	mininum efficiency iteration
MQT	max queue time of finished jobs, $\text{MAX}(\text{QT}[\text{JJ}])$ -- max queue wait time
MXF	max xfactor
RMPI	RM poll interval
SCJC	successful completed job count
StartTime	most recent time job started execution
statInitTime	date stats were initialized
TJA	total job accuracy
TJC	total jobs finished during period, $[\text{JJ}] \rightarrow \text{JC}$
TMSA	total memory-seconds (MB * sec) available
TMSD	total memory-seconds (MB * sec) dedicated
TMSU	total memory-seconds (MB * sec) utilized
TNJA	total node weighted job accuracy
TNJC	node weighted finished job count, $\text{SUM}(\text{NC}[\text{JJ}])$ -- total allocated node count (only updated on job completion)
TPSD	per iteration -- total proc-seconds (proc * sec) dedicated
TPSE	proc-seconds executed associated w/completed jobs ($\text{WallRunTime} * \text{PC}$) -- total proc-seconds (proc * sec) executed
TPSR	proc-seconds requested associated w/completed jobs ($\text{WallReqTime} * \text{PC}$) -- total proc-seconds (proc * sec) requested
TPSU	per iteration -- total proc-seconds (proc * sec) utilized
TStartJC	S->StartJC (field 50) -- jobs started this interval
TStartPC	S->StartPC -- proc-weighted jobs started this interval ($\text{avg job pc} = \text{TStartPC} /$ TStartJC)
TStartQT	S->StartQT -- total queue time of jobs started this interval ($\text{avgqt} = \text{TStartQT} /$ TStartJC)
TStartXF	S->StartXF -- total xfactor of jobs started this interval ($\text{avgxf} = \text{TStartXF} / \text{TStartJC}$)
TSubmitJC	S->SubmitJC -- jobs submitted this interval
TSubmitPH	S->SubmitPH -- proc-hours submitted this interval ($\text{avg job ph} = \text{TSubmitPH} /$ TSubmitJC)
UPN	up node count

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