Moab
What does (Est/Avg Backlog) mean in showstats

Issue: What does (Est/Avg Backlog) mean in showstats

Symptom:

[root@moab ~]$ showstats

moab active for 00:00:54 stats initialized on Wed May 20 13:19:37 2015

Eligible/Idle Jobs: 0/0 (0.000%)
Active Jobs: 1
Successful/Completed Jobs: 0/0 (0.000%)
Avg/Max QTime (Hours): 0.00/0.00
Avg/Max XFactor: 0.00/0.00

Dedicated/Total ProcHours: 0.02/0.02 (100.000%)

Current Active/Total Procs: 1/1 (100.000%)

Avg WallClock Accuracy: <N/A>
Avg Job Proc Efficiency: <N/A>
Est/Avg Backlog: 00:59:17/00:00:00

Solution: Estimated backlog creates a statistical estimate for the length of time the scheduler will require to complete all running and queued workload. It does this using the following algorithm:

Backlog = WorkloadRemaining / SystemThroughput

WorkloadRemaining

WorkloadRemaining = (QueuedWorkload + RemainingActiveWorkload) * AverageWallClockAccuracy

SystemThroughput
SystemThroughput = SystemResources * SystemEfficiency

So in the case of "Est/Avg Backlog: 00:59:17/00:00:00" my average historical average jobs walltime is 1 hour or 59 minuits 17 seconds. Note that Moab uses historical information about a clusters workload to determin these values so if your average job ran 3 days and then you submit small 1 minuit jobs you would see a

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drasticaly larger number on the Est Backlog.

Unique solution ID: #1009
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