



What are the advantages of using the Priority Manager In PCRE 2.7/3.7?

Parallel Crystal 2.7/3.7 now allows you to designate individual report jobs as having high, medium, or low priority. It processes them through separate queues. Example might include on-demand reports as high priority and batch reports as low priority. Previous versions of Parallel Crystal treated all reports as the same priority.

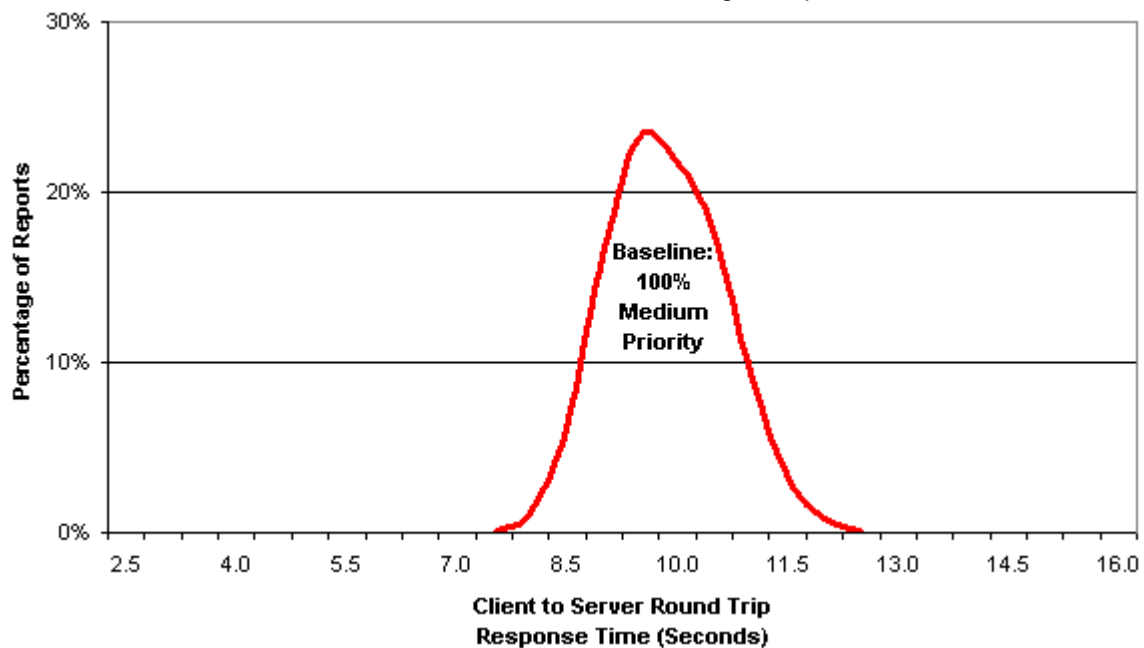
You will have control over the assignment of report jobs to each queue. In the case of PDF reports, you will additionally have control over the number of server threads allocated to the production of reports passing through each queue.

These features not only improve response time -- they allow you to improve response time for your most time-sensitive reports, using most of the hardware and software that you already have.

See the following example with requests for 20 concurrent, short reports run on a dual 1 GHZ Intel Pentium III processor report server costing approximately USD 3000 during the spring of 2002. The report server was configured with a hard throttle of 8 concurrent report jobs. Six of the "slots" were available to report jobs of any priority and two of the "slots" were reserved for high priority report jobs only.

Chart 1 shows that when all reports jobs are medium priority the response time graph shows a normal distribution around an average of 10 seconds.

"Priority Manager" for Parallel Crystal 2.7, beta1, April 7, 2002
Dual 1 GHZ Pentium III, 512 MB RAM, Throttle=8 Concurrent Jobs
100% Medium Priority Jobs
Normal Distribution with **10 Seconds** Average Response Time



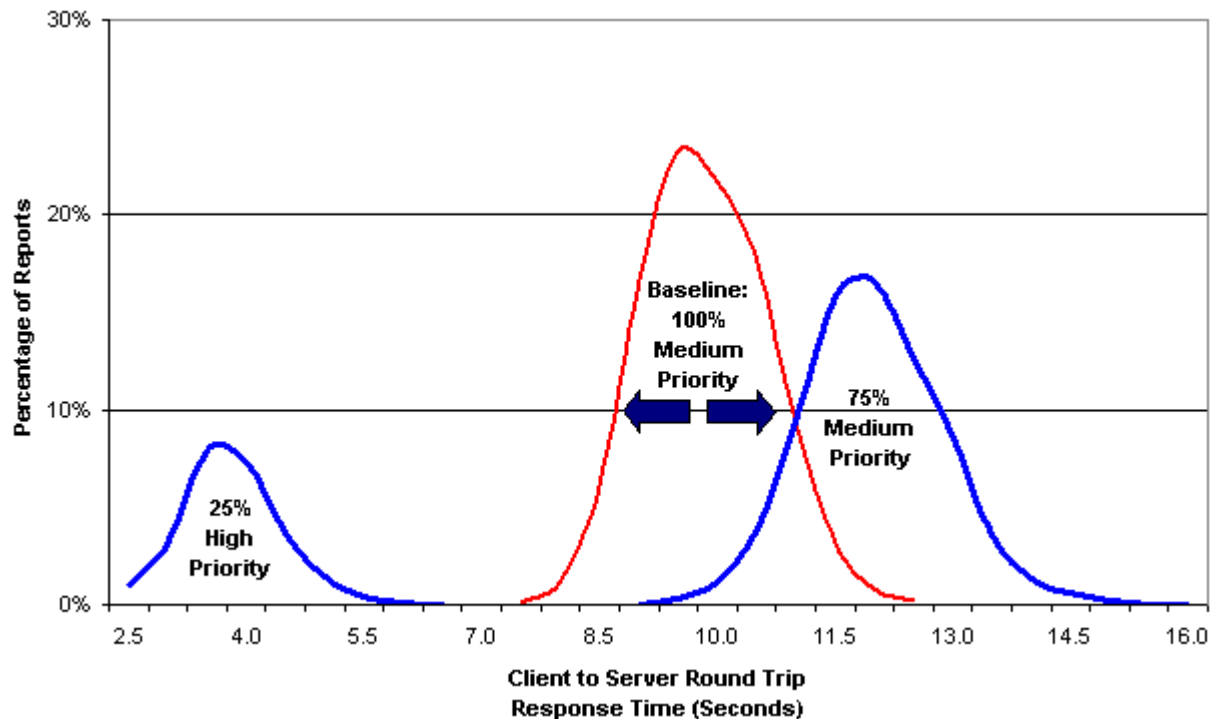


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However, when these report jobs are divided into a mixed load of two groups, 25% of the jobs with high priority, competing for CPU and other computing resources against 75% of the jobs with medium priority, the distribution changes. See Chart2. To increase the response time of the 25% High Priority Jobs to 4 seconds, there is a tradeoff of decreasing the response time of the remaining 75% Medium Priority Jobs to 12 seconds.

"Priority Manager" for Parallel Crystal 2.7, beta1, April 7, 2002
Dual 1 GHZ Pentium III, 512 MB RAM, Throttle = 8 Concurrent Jobs
Arbitration Policy set to Favor High Priority

25% High Priority Jobs with 4 Seconds Average Response Time
competing with
75% Medium Priority Jobs with 12 Seconds Average Response Time



Note: that for Parallel Crystal 3.7 (based on Crystal Reports 8.5), customers may need to buy additional run-time, expansion pack, or broadcast licenses from Crystal Decisions. Customers may match the concurrencies of Parallel Crystal and Crystal Reports 8.5 and successors by using the throttle feature of Parallel Crystal.