Rocket

Protect Cost Savings from Sub-Capacity License Agreements with Rocket® Performance Essential

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Introduction

Few sporting events ever end in a tie. One team always wins, but not necessarily in the allotted time frame. Games that are tied at the end of normal play often go into overtime, and the teams continue play until one wins. That can be exciting for sports fans, but it doesn't translate to the data center. When it comes to mainframe batch windows, running overtime can mean losing millions from your IT budget.

Sub-capacity licenses exist to help you manage your mainframe costs. They give you all the benefits of the mainframe platform without breaking the bank. The catch? Your batch jobs typically need to run in a four-hour window, or those sub-capacity savings no longer apply.

Managing batch jobs to fit the allowable window was easier when more modest volumes of data made batch tuning less critical. But while mainframes keep getting faster, the flow of data is also increasing exponentially. Many mainframe shops are finding it difficult to complete batch jobs within the time limit, and are concerned about incurring large, unplanned cost increases as a result. Going back to our sports analogy, the game will end with a winner and the batch job will get done—but if you exceed the sub-capacity SLA, your operation will be the loser.

You can put an end to capacity over-runs with Rocket® Performance Essential software. It can help you:

- Meet the demands of digital transformation by reducing I/Os by up to 90 percent
- Reduce overall processing times for batch jobs by up to 75 percent
- Modernize enterprise applications with confidence by keeping them running efficiently

Ultimately, these improvements can help ensure you don't violate your sub-capacity licensing constraints, as well as defer the need for hardware upgrades.

Let's look at what's threatening your SLAs and help you get back on track.

Inefficient I/O Can Ruin Your Budget

One major culprit in extended batch job processing times is inefficient I/O. It's likely that your enterprise applications weren't written to accommodate today's data volumes, and if I/O and buffering aren't optimized, your jobs can't run at peak speed and may require more time than is allotted to complete. The problems manifest as:

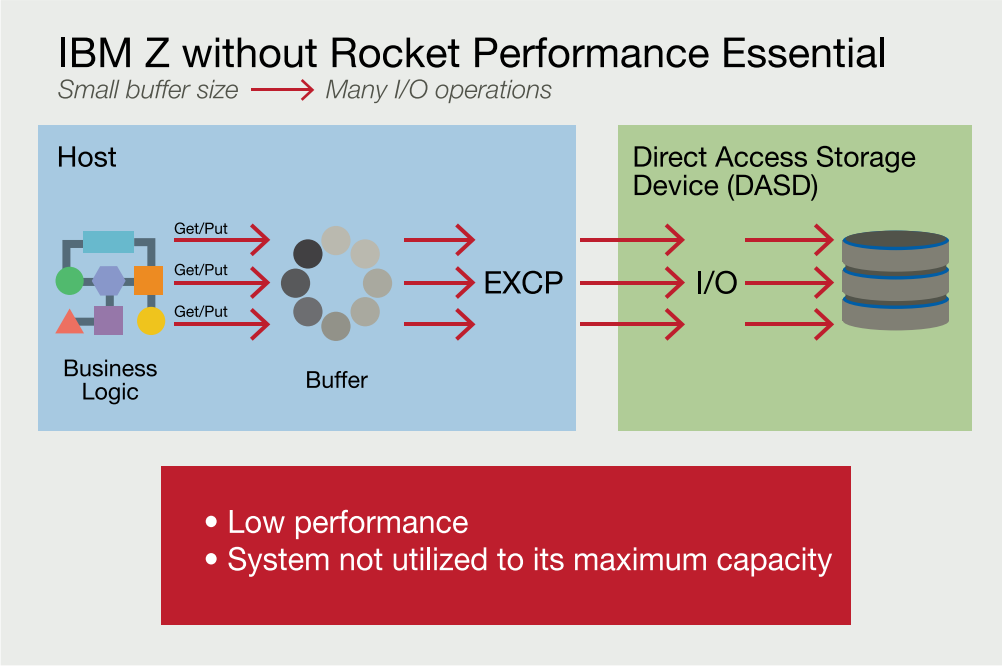
- One-to-one write ratio inside Control Intervals
- Redundant formatting of Control Areas
- Different buffering requirements for direct versus sequential

The more calls there are to disk, the more slowly the batch job will run. Optimizing I/O and buffering are critical if you want to support the growing needs of the business without requiring system upgrades that entail not only increased hardware costs, but also the increased software licensing costs you're trying to avoid.

You could try to manually tune each unique batch, but that's a labor-intensive activity. IT budgets are under a lot of pressure, and your organization may not have the specialists you need to do this tuning–or they may already be overwhelmed with work. What's more, manual tuning isn't always successful, and it's difficult to determine how it will affect the entire system. You could rewrite the application, but that's an ambitious (and expensive) solution. Rocket Performance Essential automates batch I/O and buffer tuning for VSAM and non-VSAM data sets, and optimizes them by up to 90 percent with very little administrative effort.

Inefficient I/O Can Ruin Your Budget

Each batch job is different. Some may run efficiently, and that's good news. But if you've ever over-run a sub-capacity batch window, you know how expensive it can be. This is a case where time really does equal money, so it pays to find out which jobs are candidates for optimization. They typically rely on system defaults and lack the flexibility to change from sequential to random access (or vice versa). That combination results in poor performance and a system that's not being used to its maximum capacity, with small buffers and many I/O operations.



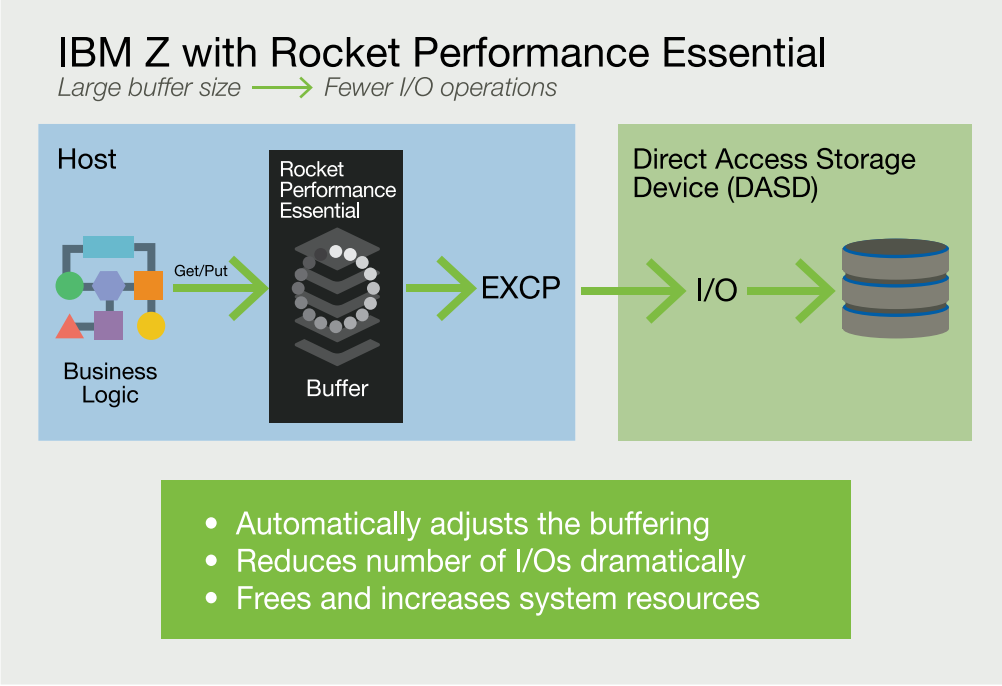
Batch Optimization Can Protect Your Sub-Capacity Agreements

To identify batch jobs that will benefit from optimization, simply run the Rocket Application Performance Analyzer (APA), a tool that analyzes your data and predicts how much Performance Essential will be able to reduce EXCPs. All you need is one month of SMF data (the APA uses SMF data records 14, 15, 30, and 64 as input). Below are two real examples of the projected savings the APA reported for Rocket customers, looking at both VSAM and non-VSAM EXCPs:

VSAM EXCPS for Non-Loads in Candidate List	
Actual	373,889,031
Projected with VSAM Component	25,080,137
Savings with VSAM Component	348,808,894
Percentage Savings	93%
VSAM EXCPS for Dataset Loads in Candidate List	
Actual	113,725,968
Projected with Load Component	2,491,437
Savings with Load Component	111,234,531
Percentage Savings	97%
Non-VSAM EXCPS in Candidate List	
Actual	261,814,243
Projected with NVSAM Component	85,779,380
Savings with NVSAM Component	176,034,863
Percentage Savings	67%

Batch Optimization Can Protect Your Sub-Capacity Agreements

Once you've identified which batch jobs will benefit from optimization, it's time to put Performance Essential to work. It will tune the batch jobs automatically, optimizing the use of buffers, reducing the number of I/Os, shortening the elapsed time to complete the job, and lowering the EXCP consumption. With Performance Essential, the picture looks like this:



Conclusion

If your organization is at risk of exceeding the batch windows allowed by your sub-capacity licensing, use the Rocket Application Performance Analyzer to see how much I/O churn Performance Essential can cut from your batch jobs. Performance Essential provides intelligent, automated, and integrated optimization that:

- Enhances buffering automatically to improve batch cycles, with no JCL changes needed
- Works with most data set types (VSAM and non-VSAM)
- Runs independently of any storage platform
- Reduces batch processing resources
- Shortens elapsed and CPU times significantly for batch processing across your IBM® z/OS® system

With Performance Essential, you can increase your flexibility in applying scarce IT resources where needed while enhancing confidence in your ability to adhere to sub-capacity licensing agreements. That's a game-winning strategy.

Find out why many of your peers and your competitors have already adopted Rocket Performance Essential to help them process batch jobs more efficiently. If you're ready to make a change, the first step is easy: contact us for a risk-free consultation, and see how our solutions can help you keep pace in an ever-changing world.

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