Rocket® software

Rocket® Performance Essential

Customer optimizes IBM z/OS® environment with Application Performance Analysis utility

Why mainframe batch optimization is critical

The mainframe accounts for at least 75% of enterprise data generation. Amidst this data growth, mainframe batch windows are under pressure, while processing time is constrained by SLAs or license agreements. By optimizing batch, namely improving batch I/O throughput, you can reduce processing time, increase processing efficiency, and reduce costs associated with batch processing.

Challenge

A Rocket Software customer had Performance Essential implemented only for Virtual Storage Access Method (VSAM) data. VSAM is an IBM DASD file storage access method used in MVS, z/OS®, and OS/390 operating systems to organize data as files in mainframes.

The customer identified two goals to achieve with Performance Essential:

- Understand and confirm Execute Channel Program (EXCP)—a macro that initiates I/O—and processing savings for the current configuration targeting VSAM
- Determine if expanding the Performance Essential configuration to include non-VSAM data would result in similar savings

The Challenge?

Confirm processing savings with Performance Essential for VSAM data and determine if similar results could be achieved for non-VSAM data.

Solution

Rocket Performance Essential optimizes buffers for loading and use of data files. This optimization is measured in EXCPs. Lowering EXCPs generates a chain reaction that lowers I/O, accelerates job run times, reduces CPU usage, extends the life and capacity of your z/OS environment, and ultimately saves you time and money.

Performance Essential includes a low-overhead utility called Application Performance Analysis (APA) that analyzes batch data and finds high- activity candidates using SMF data to help lower EXCPs.

Results

By running APA, the customer discovered LOAD and PROCESS of VSAM data using Performance Essential significantly reduced EXCPs. PROCESS on non-VSAM data using Performance Essential also significantly reduced EXCPs, as seen below:

Customer Environment

2,000 MIPS z/OS environment with 6 LPARs

LPARs are a mix of Test and Production

APA reporting is an ESTIMATE of CPU reductions expressed in percentages

Report measurements:

Load of VSAM files – LSR

Process of VSAM – Non-Load

Process of non-VSAM files

APA Report Section Excerpt:

LPAR	Non-LOAD	LOAD	Non-VSAM
LPAR1	75%	59%	36%
LPAR2	92%	75%	56%
LPAR3	80%	99%	37%
LPAR4	91%	75%	87%
LPAR5	25%	99%	36%
LPAR6	0%	99%	90%

*Data is from a Rocket customer environment and anonymized