Controlling escalating data center costs is one of the top concerns of IT executives today regardless of whether the data center is in a physical or cloud environment. There is constant pressure to do more with less and strict SLAs must be met, all while ensuring data security. Mainframe compression and encryption consumes valuable CPU and storage, in turn jeopardizing SLAs and increasing hardware and software costs. What’s more, encrypted data can’t be compressed resulting in more data and increased costs. Many organizations bypass data management and encryption in order to conserve MIPS and MSUs. Fortunately, there are alternatives to control these costs.

OFFLOAD PROCESSING TO LOWER THE COST OF COMPUTING

With the IBM® z Integrated Information Processors (zIIP), organizations can offload select workloads by making them zIIP eligible to free up general computing capacity and lower overall total cost of computing. The zIIP specialty engine is less expensive than general CP and doesn’t increase the MSUs/MIPS on the box. System z® includes extensive hardware crypto capabilities, which reduce the overhead cost of encryption because sensitive data can be protected in an efficient way on the mainframe, rather than sending it to another server for encryption. 90% of compression processing is zIIP eligible, which translates to significant cost savings. Additionally, after compression, there is less data to encrypt. Support for the zIIP specialty engine is available today with PKZIP and SecureZIP v14.
BOOST ELAPSED TIME PERFORMANCE UP TO TENFOLD

IBM recently announced a new solution to save storage space and improve wall clock time for compression. The announcement includes new hardware; the zBC12 and zEC12 GA2; a new operating system, z/OS® v2.1; and the zEDC (zEnterprise Data Compression).

PKWARE was selected as one of ten strategic partners included in the IBM announcement which outlines how customers will benefit from a significant increase in compression rates to manage data on z/OS in physical and cloud environments. The zEDC is similar to the zIIP engine in that it allows customers to offload workloads without impacting MIPS or MSUs. The difference between the zIIP engine and the zEDC is that the elapsed time performance of compression is boosted up to tenfold with the zEDC. Support for the zEDC will be available in the fall of 2013 with PKZIP and SecureZIP v15 and includes accelerated deflate compression and automatic detection of the zEDC, meaning there is no requirement for existing PKZIP/SecureZIP customers to change JCL during the upgrade process.

REAL RESULTS: A Large Commercial Bank Reduces a Three Hour Processing Window to Fourteen Minutes

A large financial institution that provides commercial banking services processes customer data on a daily basis. The Bank was delayed in delivering large reports to partners, missing SLAs. Their mainframe was running at peak capacity and the three hour SLA window was completely consumed by the processing of 100 files totaling 5GB in size. Each missed SLA resulted in a $1,000 penalty, adding up to $10,000/month.

With PKZIP v15 and the IBM zBC12 and zEDC, the Bank is now compressing files at 70% which takes one elapsed minute and 13 minutes to transfer. The bank is now easily meeting its three hour SLA window and fines associated with missed SLAs have disappeared. The bank can now also accommodate restarts and delays, a luxury that wasn’t an option when their entire SLA window was consumed by processing.

ABOUT PKWARE: PKWARE, the industry leader in enterprise data security products, has a history rooted in innovation, starting with the creation of the .ZIP file in 1986. Since then, PKWARE has been at the forefront of creating products for reducing and protecting data — from Mainframes and zLinux to servers to desktops and into virtual and cloud environments.