



# Syncsort ZPSaver

Reduce mainframe costs with zIIP offload of sort, copy and SMS compression



precisely

## Free up your Mainframe's TCB Time and Costs with Syncsort ZPSaver

Syncsort ZPSaver is a set of enhanced technologies for Syncsort MFX to offload Copy, SMS Compression and Sort processing to zIIP processors, effectively reducing the workload on the main CPU. Syncsort ZPSaver's performance advantages translate into significant cost savings:

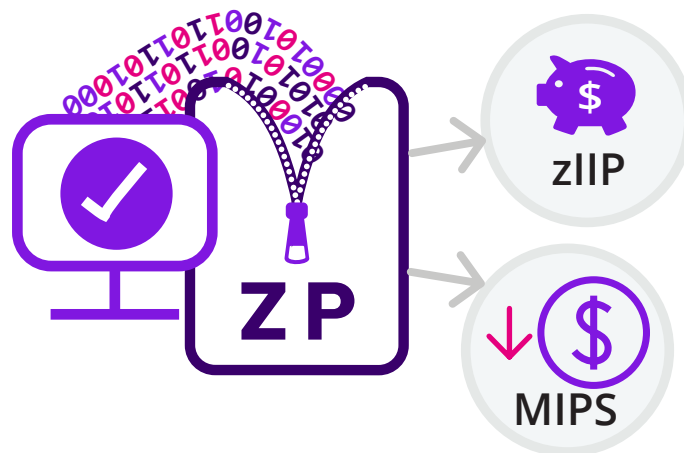
- In sub-capacity pricing environments, lowering CPU utilization during the four-hour peak window is critically important for containing overall software costs.
- Saved CPU time delays hardware upgrades in the face of increasing data volumes.
- Freed-up capacity lets you do more with less by supporting new workloads with the same resources.
- More efficient processing supports more work on an MSU-capped LPAR.
- Lowering CPU time results in lower fees for organizations that are charged based on CPU utilization for mainframe hosting or outsourcing.
- The ability to meet SLAs and batch window requirements reduces risk and associated costs to the business. Process more data on MSU-capped LPARs thanks to more efficient Copy, Compression and Sort processing.
- Encrypting sortwork in Syncsort MFX helps compliance efforts but can increase CPU usage and the peak 4HRA. Moving this work to the zIIP processor saves considerable processing time on the main CPU and licensing costs.

Best of all, Syncsort ZPSaver requires no changes to any of your existing applications.

## The Impact of Sort, Copy and Compression on CPU Usage and Batch Windows

Organizations are constantly looking for ways to maximize the value of their mainframe applications while reducing software and CPU costs. Offloading expensive processing to zIIP engines provides a huge opportunity to reduce costs and free up mainframe capacity with very little effort.

For years, Precisely customers have enjoyed the unparalleled speed, efficiency and ease-of-use of Syncsort ZPSaver which allows them to execute sort operations on the zIIP engines, saving valuable CPU time. However, mainframe z/OS® Sort, Copy and Compression processing can also consume hundreds of hours of CPU time annually and contribute to batch window bottlenecks. In many cases, the pervasive use of Sort, Copy and Compression steps in many z/OS batch jobs can easily escalate costs and jeopardize performance-based service level agreements (SLAs).



## Get More Value from zIIP Engines with Syncsort ZPSaver

Syncsort ZPSaver offers the ability to offload processing to zIIP engines. This means that for copy, SMS version 1 compression and sort processing, Syncsort ZPSaver offloads the maximum amount of TCB and SRB CPU time processing to the zIIP engines in most use cases. This offload lowers the workload on the main CPU, frees the CPU for other workloads and reduces the TCB processing time for the copy function.

**Sort in zIIP** is initiated with SORT FIELDS = (x, y, ZZ, A ...)

Benchmark tests show significant performance advantages when using Sort in zIIP:

- Significantly reduced TCB CPU time – up to 95%.

**Copy in zIIP** is used with SORT FIELDS=COPY Benchmark tests show significant performance advantages when using Copy in zIIP:

- Significantly reduced TCB CPU time – up to 95%
- Significantly reduced elapsed time – up to 25%

**Compression in zIIP** is used in most use cases when a sort or copy has SMS version 1 compression attributes on SORTIN or SORTOUT (non-VSAM, non-OUTFIL) data sets. Benchmark tests for Compression in zIIP demonstrate:

- Between 80% and 90% reduction in CPU time

## Transparent ROI

Precisely's Syncsort ZPSaver Analysis Tool measures Sort, Copy and Compression processing TCB time and estimates the benefits of adding Syncsort ZPSaver.

The Syncsort ZPSaver Analysis Tool reads and interprets the appropriate System Management Facility (SMF) records to report on the resources consumed and project the resource savings achieved by using Syncsort ZPSaver. Precisely offers this analysis tool free of charge.

## Syncsort ZPSaver analysis for copy in zIIP tcb time & count\*

COPY EXECUTIONS: 269,698

QUALIFYING COPIES: 232,613

MONTHLY TCB SAVINGS: \$28,002

YEARLY TCB SAVINGS: \$336,027

\*Sample ROI analysis from an actual customer.

