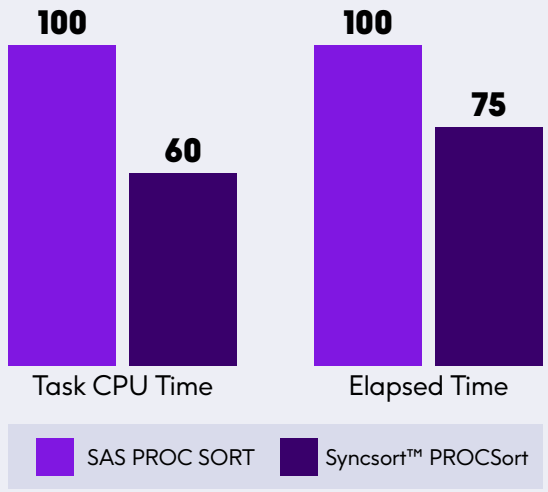
Syncsort™ PROCSort

Syncsort™ MFX customers use Syncsort™ PROCSort to drive significant additional resource and cost savings for SAS® sorting

The impact of sort on SAS processing

Mainframe sort processing in SAS® applications typically consumes as much as 30% of all SAS CPU time and drives higher SAS elapsed times. Even organizations that enjoy the unprecedented speed, efficiency and ease-of-use delivered by Syncsort™ MFX face increased costs, and risk failure to meet batch window requirements and service level agreements (SLAs), due to SAS sorting.

Benchmark tests show dramatic performance advantages using Syncsort™ PROCSort



Note: Individual results may vary

- 40% reduction in task CPU time
- 25% less elapsed time
- Requires no changes to existing programs using SAS PROC SORT

Optimize SAS sort processing and reduce costs with Syncsort™ PROCSort

For more than 20 years, Syncsort™ MFX customers have added Syncsort™ PROCSort to overcome the resource drain caused by SAS sorting.

Syncsort™ PROCSort is a high-performance, transparent replacement for the SAS-provided sort procedure PROC SORT. Benchmark tests with Syncsort™ MFX users show significant performance advantages when using Syncsort™ PROCSort instead of SAS PROC SORT, including an additional 40% reduction in task CPU time and 25% lower elapsed time.

Additional performance advantages translate into significant cost savings.

- In sub-capacity pricing environments, lowering CPU utilization for SAS applications that run 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 SAS sorting supports **more work on an MSUcapped 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.**

Best of all, Syncsort™ PROCSort requires no changes to any of your existing SAS programs.

> **“We found that SAS PROC SORT took 133 hours to complete the largest 1% of its SAS sort jobs while MFX PROCSort took only 72 hours. This meant that Lilly could save about 60 hours of SAS processing every week on these sorts with MFX PROCSort on its system.”**
>
> **Fred Forst**
> Team Leader, Eli Lilly

How Syncsort™ PROCSort works

The SAS system is delivered with a choice of three sort options: SAS, HOST, and BEST. All of these options use SAS PROC SORT to handle SAS sorting.

- The SAS parameter instructs the SAS system to use its own internal sort exclusively to process SAS sort applications.
- The HOST parameter tells the SAS system to use only the sort on the host machine, which is often Syncsort™ MFX itself.
- The BEST parameter allows the SAS system to choose whether to use its own internal sort or call the host machine's sort, based on file size.

Syncsort™ PROCSort offers another alternative - an advanced interface between SAS applications and Syncsort™ MFX, replacing PROC SORT. Syncsort™ PROCSort allows Syncsort™ MFX to use all of its proprietary sorting algorithms and dynamic optimization techniques directly to improve SAS sorting and overall system efficiency.

Although Syncsort™ MFX users benefit from Precisely's sophisticated sort processing for SAS applications even when SAS PROC SORT is used, only the unique functionality of Syncsort™ PROCSort delivers significant additional CPU and elapsed time savings, as noted above.

Because Syncsort™ PROCSort was developed as a SAS procedure, it is totally transparent to SAS users, requires no changes to existing programs that execute SAS PROC SORT, and is invoked automatically once installed.

Assessing the potential benefits of Syncsort™ PROCSort

Determining the benefits of adding Syncsort™ PROCSort is a straightforward process, and Precisely provides the resources to help.

Use Preciselys PMAT analysis tool to measure SAS sorting and project the potential impact of adding Syncsort™ PROCSort. This simple SAS program reads and interprets the appropriate System Management Facility (SMF) records to report on the resources consumed by SAS sorting, list the most resource-intensive SAS sorts, and project the resource savings that could be achieved using Syncsort™ PROCSort. Precisely offers this analysis tool free of charge.

Current Syncsort™ MFX customers can also evaluate the performance and savings offered by Syncsort™ PROCSort with a free trial copy of the software.