Are you wasting money because of SIIS?

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June 2020

1 Introduction

A big part of performance analysts time is dedicated to find and tune system components and applications which use an excessive amount of resources, especially CPU.

The CPU usage is important because it determines a large portion of z/OS hardware and software costs.

When the software pricing is based on the monthly peak of the MSUs used in 4-hour rolling average the analysts focus mostly on the workloads contributing to those peaks.

With the advent of TFP (Enterprise Consumption solution) the situation is changing: all the MSUs are now relevant for the software bill, no matter the time of the day when they are used.

So, with TFP, identifying and eliminating any MSU waste has become even more important than before.

In the last machine generations, IBM has identified the “Store Into Instruction Stream” (SIIS) issue as possible reason for a reduction of the processor cache effectiveness and a consequent significant increase of CPU utilization.

In this paper, after a short overview of the SIIS issue we will provide formulas and report examples to help you understand how relevant are the number of MSUs wasted in your systems because of SIIS events.

We will also provide suggestions on what you need to do to identify SIIS culprits.