

# Measuring IMS Transactions - Part 1

*Giuseppe Giacomodonato – EPV Technologies*

*Fabio Massimo Ottaviani – EPV Technologies*

*Enzo Rossi – EPV Technologies*

November 2013

## 1 Introduction

After almost half a century, IMS (Information Management System) is still alive and in good health. According to IBM, more than 75% of the world's Top 25 companies listed in the Fortune 100 entrust IMS to run their business.

So being able to measure and tune IMS applications is still an essential skill for every z/OS performance analyst.

From the measurement point of view, IMS is a kind of exception in the z/OS world; unlike all the other subsystems, IMS doesn't write any SMF records. All the relevant events are mapped to a specific log record number and written to the IMS log.

For many years IMS didn't provide a specific IMS log record, collecting all the performance related information. This information was spread across many different log records (e.g. x'07' for program termination and x'08' for program schedule) which had to be combined, by using a fairly complex algorithm, to analyse application throughput, response time and resource utilisation.

This has been one of the reasons for the success of the BMC Mainview for IMS (a.k.a. IMF) product. From the beginning Mainview for IMS has written its own IMS log records which are designed to analyse application performance. The most important of them is the "Transaction log record", identified by the log record number x'FA' (FA in the following), which provides all the details you could wish, about each IMS transaction execution, in a simple and straightforward way.

From IMS V10, IBM finally decided to provide an IMS log record specifically designed to collect performance information: the x'56FA' log record (56FA in the following).

In this presentation we will discuss what you have to do in order to produce, manage and analyse both 56FA and FA records.

We will also present a case study where we will compare the values of the most important performance metrics collected in these records.

Finally we will briefly discuss the new metrics available to analyse zAAP/zIIP usage of IMS applications.