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# **EPV Technologies Newsletter**

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### January 2016

- Tech Papers CPU and zIIP usage of the DB2 system address spaces - Part 1
- Tech News EPV Performance University Update
- Tech Notes EPV for DB2 V13 GA
- Tech Support IBM z/OS V2R2: Performance

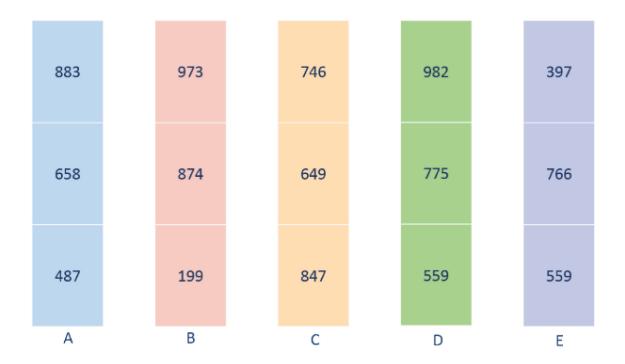
Every month we will invite Newsletter readers to send us the solution to a simple logic test. The editorial staff will collect the results and at the end of the year we will send a symbolic prize to the participant with the highest number of correct answers. In case of a tie the winner will be chosen by drawing.

The real prize is that he will also decide the NGO EPV Technologies will donate 1.000,00 Euro to, choosing from: MSF (www.medicisenzafrontiere.it), TDH (www.terredeshommes.it) and WWF (www.wwf.it).

## When Logic Matters

The solution of December 2015 quiz is: 54





Identify the column that contains the foreign element

A B C D E

### Tech-papers

### CPU and zIIP usage of the DB2 system address spaces - Part 1

Each DB2 subsystem always includes three system address spaces:

- Master (MSTR), providing overall control functions such as logging and backout;
- Database Manager (DBM1), providing database related functions such as buffer pools and EDM pool management;
- Internal Resource Lock Manager (IRLM), providing locking support.

The z/OS standard accounting mechanism, based on cross memory services, attributes CPU usage to the requesting address space. Only a part of the CPU used to serve requests arriving for DB2 is charged to MSTR, DBM1 and IRLM address spaces. This part, which can be considered as wholly DB2 overhead, is normally a small percentage of the DB2 application CPU but it can be pretty high in absolute terms.

For many years the focus of DB2 overhead analysis has been on DBM1 that was, among the DB2 system address spaces, the major CPU consumer.

DB2 evolution during the recent years significantly changed this picture by allowing the offloading of a big portion of DBM1 and, from V11, also part of MSTR activity to zIIP.

DB2 evolution during the recent years significantly changed this picture by allowing the offloading of a big portion of DBM1 and, from V11, also part of MSTR activity to zIIP. However at the same time new functions have been provided in the MSTR address space which greatly increased its CPU usage and sometimes may become real issues to address.

#### In this paper we'll discuss:

- the amount of work which has been offloaded or could be offloaded to zIIP;
- the impact of new functions available in the MSTR address space on CPU usage;
- the impact of insufficient zIIP capacity on DB2 CPU usage and performance.

If you want to receive the paper you can reply to this e-mail writing "CPU and zIIP usage of the DB2 system address spaces - Part 1" in the subject

## Tech-news

### **EPV Performance University Update**

Few places are still available to participate to the first edition of the EPV Performance University.

A very special price is reserved to EPV customers.

Hurry up to avoid missing this opportunity.

The following training courses are scheduled on Q1 2016 at Hotel Cicerone in Rome:

- z/OS Performance, 22-24 February 2016
- WLM, 25-26 February 2016

Subscription forms at: http://www.epvtech.com



## Tech-notes

#### EPV for DB2 V13 GA

EPV for DB2 will enter general availability on 15th February.

Major technical enhancements:

- z13 support and zIIP SMT support
- Complete abend reporting
- Top Packages hourly views
- Top packages trend views
- Views providing Buffer Pool details by page set
- SYSIBM.SYSSTATSFEEDBACK support

The new priced product EPV Graph for DB2 will add graphical features to DB2 subsystems and application analysis

# Tech-support

#### IBM z/OS V2R2: Performance

This IBM Redbooks publication helps you to become familiar with the technical changes that were introduced into the performance areas with IBM z/OS V2R2.

This book is one of a series of IBM Redbooks publications that take a modular approach to providing information about the updates that are contained within z/OS V2R2. This approach has the following goals:

- Provide modular content
- Group the technical changes into a topic
- Provide a more streamlined way of finding relevant information based on the topic.

We hope you find this approach is useful. We value your feedback.

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Chapter 1. Resource Measurement Facility

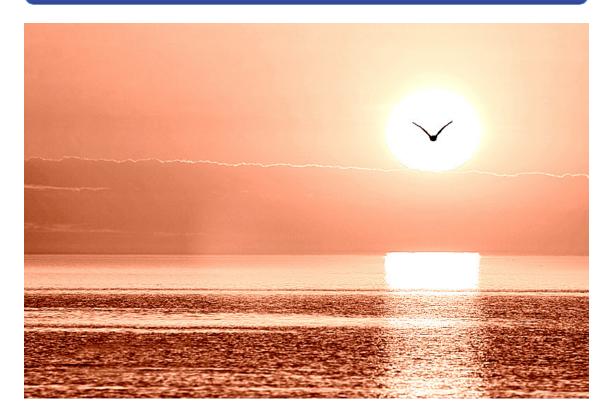
Chapter 2. Workload Manager

Chapter 3. Real Storage Management scalability

Chapter 4. zFS Monitoring Enhancements

Download it at: http://www.redbooks.ibm.com/abstracts/sg248292.html?Open

## Quote of the month



### "Only those who dare may fly" *Luis Sepúlveda*

