# EPV Technologies
*Newsletter*

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This message contains news related to EPV products produced and distributed by EPV Technologies.
The EPV products suite answer problems such as **Managing Performance, Tuning and Capacity Planning** on the most common platforms, **allowing huge savings on HW and SW costs.**
Greater details and information on EPV products and solutions can be found at **http://www.epvtech.com** or writing to  **epv.info@epvtech.com**.

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### 1)  Tech Papers

**How much money can be saved using zAAP ?**
Fabio Massimo Ottaviani - EPV Technologies

In 2004 IBM announced the availability of a new processor type called **z**Series **A**pplication **A**ssist **P**rocessor (zAAP).
These processors work together with the standard general purpose processors but are used only by Java code; they are much less expensive than the other ones and, more important, their usage doesn't influence the z/OS software license costs.

Whatever policy you adopted (WLC, PSLC, etc.) the current cost of IBM software is still very high and it is normally 2 or 3 times higher than the hardware one.

Depending on the amount of MSUs, the policy adopted, the products installed and many other (non technical) factors, the software cost per MSU can be very variable.
If we assume a price of 10.000,00 Euro per MSU per year, serving 50 MSU (about 350 MIPS) of Java eligible work thru zAAP will reduce the annual software license costs by 500.000,00 Euro.

The promise of a big reduction in software costs is the reason why so many companies are interested in zAAPs.

To use zAAP the minimum requirements are:

- z990 machines
- z/OS 1.6 or above
- SDK 1.4.1

However before moving to zAAP you have to evaluate, in your capacity planning studies, how much of your workload wil be zAAP eligible.
Depending on the hardware and software levels available in your environment, different techniques can be used. This paper will discuss these techniques showing real life examples.

*If you want to receive the white paper you can reply to this e-mail writing* "**How much money can be saved using zAAP ?"** *in the subject.*

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## 2) Tech News

### EPV Technologies presentations at CMG-Italia & EuroCMG 2006

The 20th CMG-Italia Annual Conference will host the 9th EuroCMG edition.
A detailed agenda is available on the CMGItalia web site.

EPV Technologies will sponsor the conference. Short abstracts of the EPV presentations follow.

### Monday 8 may - 14,30

**Capacity Planning in Windows Environments (half day workshop)**
Fabio M. Ottaviani, EPV Technologies
Massimo Orlando, EPV Technologies

*Since many years we perform Capacity Planning studies in mainframe environments.*
*We always thought the same methodology could be applied to Unix and Windows systems too.*
*This year we had the opportunity to perform Capacity Planning activities in Windows Environments at three different customer sites.*
*As expected the problem was not the methodology.*
*Whatever the system will be you have to:*

- *Analyze historical data;*
- *Define growth scenarios*
- *Define baselines*
- *Characterize the workload*
- *Perform What-If Analysis and Reporting*

*The major problems we had to face were essentially basic problems:*

- *we didnt have the same amount of historical data we were used to;*
- *the release of new application in production was not planned in detail*
- *workload characterization is always very difficult (no service class, no report class, no transactions, )*
- *there is not a common metric (like MIPS) to compare the machines*
- *there are normally lot of monitoring agents but not the needed metrics*

*In this workshop a Capacity Planning methodology will be described showing what to do to overcome such problems.*
*Real life examples will also be presented and discussed.*

### Tuesday 9 may - 11,45

### IT Power under Control with EPV for z/OS V6 (Vendor Session)
Danilo Gipponi, EPV Technologies

*New features, design and reports of EPV for z/OS Version 6 will be presented.*

### Wednesday 10 may - 12,25

### AIX Micropartitioning
Mark Cohen Austrowiek, EPV Technologies

*Starting from year 2000 IBM announced the possibility to run partitioning for the AIX pseries family. Initially it was only possible to run dedicated processors in a logical partition. Now p5 series has integrated new virtual engine system technologies into their hardware and software. This introduced new features as Micro partitioning which provides the ability to share physical processores among logical partitions, Virtual Lan which provides network utlilization, features capabilities that permit you to prioritize traffic on shared networks and allows secure communication between logical partitions without the need of a physical I/O adapter, Virtual I/O which provides the ability to dedicate I/O adapters and devices to a virtual server. It allows a single physical I/O adapter to be used by multiple logical partitions on the same server. This allows consolidation of I/O servers and minimizes the amount of I/O adapters required. New concepts of shared partitioning have been implemented in the P5 series compared to the IBM mainframe.*
*In this paper I will provide a detailed overview of shared partitioning and its performance metric considerations.*

### Wednesday 10 may - 15,25

### WLM Work Manager Delays
Fabio Massimo Ottaviani, EPV Technologies

*Since many years performance analysts look at the WLM General Execution Delay states to understand the reasons why a service class is not getting good performance. Unfortunately there are situations where most of the delay samples are in the unknown bucket (waiting for WLM not managed resources). In this case a further step is needed. By defining a*

*transaction service class for IMS or CICS transactions it is possible to collect useful information about the delay states experienced inside the subsystems. DB managers such as DB2 and IMS cooperate with the transaction managers providing their delay samples. This information is maintained by WLM and used for managing and reporting purposes. Since z/OS 1.4 also subsystems using enclaves (such as the Websphere Application Servers) may collect delay states information. Also in this case a transaction service class has to be defined and used in order to collect them.*
*This information is sampled by WLM and used for reporting purposes only. This paper shortly describes the services used to collect the information, the implications of the different subsystems structure and the meaning of each delay state. Some real life examples showing how to use this information are also presented.*

**Ulteriori informazioni e iscrizione sul sito del CMG-Italia a:**
 **http://www.cmgitalia.it/incontri_cmg.htm**

**Se siete interessati a partecipare ma non siete iscritti al CMG Italia, contattateci all'indirizzo epv.info@epvtech.com.**

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