

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.**

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1) Tech Papers

AIX Micro-Partitioning (Part 1)

Mark Cohen Austrowiek EPV Technologies

Starting from year 2000 IBM announced the possibility to partition the pSeries family systems. 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 processors among logical partitions, Virtual Lan which provides network utilization features capabilities that permit you to prioritize traffic on shared networks and allows secure communication between logical partitions without the need of a physical network 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 .

Before starting to measure shared partition activity its essential for the performance analyst to obtain a general overview of the new terms introduced and understand how logical partitioning is configured and works in the P5 series environment.

The following arguments will be discussed in this paper: Power Hypervisor, Hardware Manager Console (abbreviated as HMC), partition profiles, Micro-Partitioning, entitled capacity, virtual CPUs, logical CPUs, Symmetric Multi Processing (abbreviated as SMT), Partition Load Manager (abbreviated as PLM), performance tools as *vmstat*, *lparstat*, *mpstat* and performance case examples.

Due to the complexity of the topic the paper has been divided in two parts.

If you want to receive the white paper you can reply to this e-mail writing "AIX Micro-Partitioning (Part 1)" in the subject

2) Tech News - A bit more about zIIP (from IBM)

"Early users of the zIIP include:

*DRDA: Can offload up to approximately 40% of a given DRDA transaction into a zIIP.(1)
(Multiple concurrent DRDA transactions can each offload up to approximately 40% of their workload.)*

Other elements of DB2 can also schedule work to zIIPs; utilization information was not available when this book was being written.

- Data warehousing applications: Requests that utilize DB2 for z/OS V8 complex star schema parallel queries may have portions of these SQL requests directed to zIIP.*
- DB2 for z/OS V8 Utilities: A portion of DB2 utility functions used to maintain index maintenance structures typically run during batch can be redirected to zIIP."*

..... z/OS includes zIIP qualified time and actual time in SMF type 30 records."

(1) As with any early description, actual performance or offload percentages may be different in delivered systems. The numbers presented here are based on early experience."

from: "IBM System z9 Business Class - Technical Introduction", IBM Redbooks, SG24-7241-00, june 2006

Download at: <http://www.redbooks.ibm.com/abstracts/sg247241.html?Open>

3) Tech Notes - EPV User Group 2006

The 4th EPV User Group will be held in Rome, at the Residenza di Ripetta, on October 12nd 2006.

The EPV User Group is a "not to miss" event for all Performance Analysts; it will give you the opportunity to share ideas with qualified experts and to listen to some of the EPV customers' experiences.

The new versions of the EPV for z/OS, EPV Graph for z/OS and EPV for UNIX products will be presented. An updated version of our Capacity Planning methodology extended also to non z/OS environments will also be discussed.

The User Group agenda will be published in the next newsletter.

In the meantime mark the day in your agenda to avoid missing this event.

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