

# EPV Technologies Newsletter

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### 1) **Tech Papers**

#### **Practical Capacity Planning for Memory - Part 2**

The cost of mainframe memory has been substantially reduced during recent years; however its current cost is still in the order of some thousands of Euro per GB.

On the other hand the number of GBs supported by the newest z/OS releases has greatly increased making it possible to almost eliminate paging activity and to fully exploit the many available DIM (Data In Memory) techniques.

While it's true that z/OS can sustain high paging activity, paging and especially page faults are very disruptive to online applications performance.

If a CICS region is getting 10 page faults per second this means that 10 transactions per second are stopped (or a transaction is stopped 10 times) and have to wait for the required pages to be loaded from page datasets. Furthermore you have to consider that CPU cycles are needed to perform paging. This is one of the sources of uncaptured CPU time.

Maintaining data in memory has two additional advantages: it improves performance by avoiding the I/O operations delay and it eliminates the CPU consumption still needed to perform I/O operations.

It's also important to remember that I/O operations can only be performed by standard CPUs and not by specialty processors (zAAP and zIIP) so the I/O reduction has positive effects on the software bill too.

All these factors mean that memory capacity planning is still a very important activity to perform.

The good news is that from a conceptual point of view the process is always the same:

- evaluate current capacity;
- estimate the utilization baseline;
- estimate the growth;

- forecast future resource needs.

The bad news is that dealing with memory, because of its nature, is more complicated than with other resources.

In this paper we'll discuss a practical methodology to do that.

*If you want to receive the paper you can reply to this e-mail writing **"Practical Capacity Planning for Memory - Part 2"** in the subject*

2) Tech News	<b>VIII EPV User Group Preliminary Agenda</b>
<p>The VIII EPV User Group will be held in Rome on <b>28th October 2010</b>.  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.</p> <p>Preliminary agenda</p> <p>09:30 Registration  10:00 Welcome and introduction - Danilo Gipponi, EPV Technologies  10:15 Controlling z/OS Performance from zLinux, TBC  10:45 What's new in EPV for z/OS 10.0 - Giuseppe Giacomodonato, EPV Technologies  11:15 Coffee break  11:45 Service Capacity Management at MPS - Roberto Gioi, MPS  12:15 Customer experience - TBC  12:45 What's new in EPV for DB2 V5 - Fabio Massimo Ottaviani, EPV Technologies  13:15 Lunch  14:45 z/OS 1.11 and z196 Capacity Planning issues (Part 1) - Fabio Massimo Ottaviani, EPV Technologies  15:30 Coffee break  15:45 z/OS 1.11 and z196 Capacity Planning issues (Part 2) - Fabio Massimo Ottaviani, EPV Technologies  16:30 User Group end</p> <p>To registrate just send an e-mail to <a href="mailto:epvtech@epvtech.com">epvtech@epvtech.com</a></p>	

3) Tech Support	<b>z/OS 1.11 MIPS Tables</b>
<p>MIPS tables based on the z/OS 1.11 benchmarks, the only designed for z196 machines, are available for customers running EPV for z/OS V8 and V9 through maintenance.  Please contact EPV support if you need them.</p>	

4) Tech Notes	<b>z/OS 1.12 and zPCR 7.1a</b>
<p>The z/OS V1.12 pdf manuals are available at:</p>	

<http://www-03.ibm.com/systems/z/os/zos/bkserv/r12pdf/>

zPCR 7.1 supporting z/OS 1.11 benchmarks and z196 machine is available at:

<http://www-03.ibm.com/support/techdocs/atsmastr.nsf/WebIndex/PRS1381>

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