



EPV TECHNOLOGIES NEWSLETTER

July 2019



THIS MONTH HIGHLIGHTS

Tailored Fit Pricing
(r)evolution of IBM software pricing - Part 1

IBM z/OS Version 2 Release 4
Unleashing innovation through an agile, optimized, and
resilient platform

IBM z/OS Version 2 Release 4 – Manuals available

Upcoming conferences in Europe

FORMULA OF THE MONTH

CPI normalization

The CPI index represents the average number of CP cycles needed to perform an instruction.

There is not a Rule of Thumb for the ideal CPI value but to exploit the processor power the CPI value should be as low as possible.

CPI can be used to evaluate the performance benefits of a new machine but special care is needed when the old and the new machines belong to different generations.

In this case, you have to normalize the CPI of each machine by calculating the Ghz / CPI ratio and use it for comparison.

Example

Let's suppose that CPI in the peak hours is 3,0 on a zEC12.
After moving to z13 the CPI is now 2,7.

What is the performance improvement with the new machine? It seems to be 10% but the correct answer is: about 1%.

$$\begin{array}{l} \text{zEC12} = \frac{5.500 \text{ M-cycle/sec}}{3,0 \text{ cycle/inx}} = 1.833 \text{ M-inx/sec} \\ \text{z13} = \frac{5.000 \text{ M cycle/sec}}{2,7 \text{ cycle/inx}} = 1.851 \text{ M-inx/sec} \end{array}$$

Where:

M-cycle means million cycles
M-inx means million instructions

So the performance improvement with the z13 is: $(1.851 - 1.833) / 1.833 = 1\%$

Tailored Fit Pricing (r)evolution of IBM software pricing - Part 1

For many years the z/OS software has been paid based on the size of the machine. This is still possible but, from 1999, most of the companies adopted the sub-capacity pricing.

This evolution was, at that time, requested by most of the customers who wanted to pay for the CPU they used. The sub capacity pricing solution proposed by IBM was not exactly what customers expected. As you know it was based on the monthly peak of the CPU used, in MSU, calculated across a mobile average of 4-hours (4HRA). In addition, the products cost was determined by the CPU used by the LPAR where the product runs not by the CPU used by the product itself.

This mechanism may easily produce uncontrolled cost increase due to anomalies or workload peaks, so IBM invented the defined and group capacity limit to allow customers controlling software costs through the soft capping function.

The sub capacity pricing model has been successful for 20 years, but it has also been an obstacle to the introduction of new applications in the z/OS environment.

To try to remove this obstacle, in the last years IBM introduced many

additional and more favourable pricing options, such as container pricing for development/test environments and new applications[1]. However, the explosion of new applications, mostly generated by mobile devices, and of cloud computing made these efforts not enough. A revolution is needed to completely change the software pricing paradigm.

On May 14th, IBM announced Tailored Fit Pricing (TFP). This new pricing model includes the following options:

- Enterprise Capacity solution
- Enterprise Consumption solution

Both options eliminate the need of measuring the 4-hour rolling average and the need of using the soft capping functions to manage the software costs.

Both options will not reduce the customers current software costs. Consistent savings can be obtained in case of any type of workload growth, not only for new applications.

This is clearly the IBM goal: making the z/OS environment a more attractive choice for all customers applications.

Even if the adoption of TFP is not mandatory, we expect that, as it happened for sub capacity pricing, it will become the standard in the next years.

It's important to note that, at the moment, TFP can't be adopted by outsourcing providers.

In this paper we will discuss the two TFP options trying to understand the benefits that customers can get and the capacity management issues they may need to address when adopting them.

If you want to receive the paper you can reply to this e-mail writing "Tailored Fit Pricing: (r)evolution of IBM software pricing - Part 1" in the subject

IBM z/OS Version 2 Release 4 Unleashing innovation through an agile, optimized, and resilient platform

"Enterprises are turning to digital transformation to address new business challenges, reach new markets, and deliver new value to clients. Addressing new business opportunities demands effective digital transformation through the orchestration of technologies ranging from cloud, analytics, cognitive computing, mobile, and the Internet of Things to enable new internal and external client experiences.

IBM's approach is to unleash the rich application development talent that clients possess by enabling new application development processes and optimizing their existing application investment in new and innovative ways, while providing the application-level resiliency and security that clients have come to expect from IBM Z.

Business success will be predicated on embracing agility, optimization, and resiliency:

Agility in the adoption of new technologies in DevOps, microservices, and consumption models that are delivered as a service to accelerate their time to value

Optimization through the ability to run computing workloads in the most efficient environment

Resiliency to deliver continuity of business services through exploitation of attributes such as encryption and high availability

These factors provide the ability to deliver results on demand and without interruption, which is critical to creating and maintaining a highly satisfying client experience.

With the IBM z/OS V2.4 operating system, IBM intends to unleash innovation through an agile, optimized, and resilient platform that helps clients to build applications and services based on a highly scalable and secure infrastructure that delivers the performance and availability for on-premises or provisioned as-a-service workloads that enable businesses to digitally transform."

Complete announcement letter at:

<https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?subtype=ca&infotype=an&supplier=897&letternum=ENUS219-344>

IBM z/OS Version 2 Release 4 – Manuals available

The z/OS 2.4 manuals are now available. Please note that at the moment the revision markers may not show up in the Knowledge Center content (for both V2R4 and V2R3).

They are correctly shown in the PDF version.

Download them at:

<https://www-01.ibm.com/servers/resourcelink/svc00100.nsf/pages/zOSV2R4Library?OpenDocument>

Upcoming conferences in Europe

EPV User Group 2019 - September 26, 2019 – Hotel Cicerone, Rome, Italy

More details at:

<http://www.epvtech.com>

SpDUG forum 2019 - October 8, 2019 - Hotel Meliá Avenida de América, Madrid, Spain

More details at:

<https://www.spdug.org/spdug-forum/spdug-forum-2019>

IDUG Db2 Tech Conference - October 20-24, 2019 - Postillion Convention Centre WTC, Rotterdam, Netherlands

More details at:

<https://www.idug.org/emea2019>

RECIPES



Risotto in bianco, Caciotta, pere e pinoli

Ingredients

Rice 320 gr
Caciotta 150 gr
Williams pears 2
Pine nuts 30 gr
Shallot
Extra virgin olive oil
Butter
1 walnut
Vegetable broth 1 lt
White wine 1 glass
Parsley
salt
pepper

Method

Toast the pine nuts in a non-stick pan for a few minutes and set them aside.
In a saucepan, sauté the chopped shallot and the diced pears in extra virgin olive oil for 2 minutes.

Add the rice and toast it for a few minutes, then add a glass of white wine. Continue cooking over medium heat for 15 minutes, stirring and adding boiling broth.

At the end of cooking stir the risotto with the cubes of Caciotta and a knob of butter. Serve the risotto with toasted pine nuts, freshly ground black pepper and chopped parsley.

QUOTES



"Profesor, soy Nairobi, Berlín no esta en condiciones así que a partir de ahora estoy al mando yo, empieza el matriarcado"

"Professor, it's Nairobi. Berlin is indisposed so from now on, I'm in charge. Let the matriarchy begin"

La Casa de Papel

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