



zEnterprise Newsletter

Publisher/Editor – Hank Meetze

INSIDE THIS ISSUE:

| | |
|-------------------------|-----|
| Mobile Workload Pricing | 1 |
| z/VM CPU Pooling | 2 |
| DevOps | 3-4 |
| Education | 4 |
| Trivia Answer | 5 |
| Trivia Question | 5 |
| Help Wanted | 5 |



The Value of Mobile Workload Pricing for z/OS?

By David Chase – dchase@us.ibm.com

Enterprise clients are seeing a huge increase in activity levels from the growing use of mobile devices, which in turn drives significant increases in back-end transactions. In response, IBM has announced Mobile Workload Pricing (MWP) for z/OS, a price offering for mobile-driven activity on IBM System z platforms that takes this new dynamic into account.

Mobile workloads are defined as the transactions processed by a named mobile application, or transactions that can be identified as originating from a smart phone or tablet device. MWP can reduce the cost of growth for mobile transactions processed by certain eligible programs (CICS, DB2, IMS, MQ, and WAS), mitigating the impact of mobile workloads on sub-capacity license charges, specifically in the cases where higher mobile transaction volumes cause a spike in machine utilization. MWP does not require you to isolate your mobile work in separate partitions, but rather is an enhanced way of reporting utilization for billing.

The Mobile Workload Reporting Tool (MWRT), a new tool that supports MWP, enhances sub-capacity reporting by reducing the mobile transaction contribution to reported LPAR utilization by 60%. That is, for each 1-hour measurement interval, the reported MSUs coming from the mobile transactions will be reduced by 60%. This will result in a lower rolling 4-hour average value for each interval when mobile transactions were present during the month. The peak for the month of this adjusted rolling 4-hour average will be reported and used for sub-capacity charges. Note that the actual system throughput is not changed or reduced, the only thing changing is the number of MSUs being reported by MWRT for sub-capacity billing.

You must be able to track the general purpose processor time (CPU Time) for the mobile transactions and provide those values in a pre-defined format to MWRT each month in order to take advantage of this price offering. MWRT will use the re-

ported mobile transaction data to adjust the 4-hour rolling average MSUs reported for sub-capacity eligible programs on a given machine.

MWP is available for mobile workloads running on zEnterprise EC12 or zEnterprise BC12 servers which have implemented sub-capacity pricing under the AWLC, AEWLC, or zNALC price metrics. Alternatively, if you install and operate one of those servers anywhere in your enterprise, you will be eligible for MWP when running mobile workloads on sub-capacity zEnterprise 196 or zEnterprise 114 servers.

For additional information about Mobile Workload Pricing for z/OS, see http://www-01.ibm.com/common/ssi/rep_ca/3/897/ENUS214-223/ENUS214-223.PDF

For additional information about the Mobile Workload Reporting Tool, see the MWRT Users Guide, available at <https://ibm.biz/MWRTguide>

z/VM CPU Pooling

The Value of z/VM CPU Pooling

By Romney White – romneyw@us.ibm.com and David Chase – dchase@us.ibm.com

System z with z/VM offers an ideal platform for consolidating multiple Linux workloads in a single environment that can be managed efficiently. Those multiple workloads often depend on different software products to deliver their services, and those software products must be licensed. This article describes an enhancement to software licensing that enables additional cost-effective consolidation.

Sub-Capacity Pricing for Linux on System z

The principles of pricing Linux software on System z include the notion of aligning with the value that software provides. Accordingly, the price is limited by the extent to which the software could be exploited. This in turn is determined by the size, in terms of virtual CPUs, of the Linux systems running the software and is constrained by the total amount of CPU resource available.

z/VM CPU Pool Concept

A CPU Pool is a new construct in z/VM V6.3 that can

be used to further constrain the amount of CPU resource that a software product could consume. A CPU Pool has a capacity expressed in terms of CPUs and can be associated with one or more Linux systems. Those systems can consume in aggregate only as much CPU resource as the pool contains.

Sub-Capacity Pricing with CPU Pooling

A CPU Pool provides an additional constraint on the value the software products in those systems can deliver, and thus can be used to limit the cost of licensing that software. Together with new support in the IBM License Metric Tool (ILMT) V9.0.1, a no-charge tool for tracking IBM software product use, CPU pooling enables more cost-effective consolidation of workloads on System z. For example, a CPU Pool can be created to constrain the licensing costs of the software required to develop and test a new application so that spare capacity can be added to an existing sys-

tem. Or, capacity can be added to an existing system for new workloads while CPU Pools are used to avoid increases in license costs for existing software products.

Conclusion

CPU Pool support in z/VM and ILMT, together with an enhanced pricing methodology for Linux software, allows clients to deploy additional workloads in existing environments while keeping the associated software license costs in line with the value they deliver.

For additional information about implementing CPU Pooling in z/VM, see <http://www.vm.ibm.com/perf/reports/zvm/html/630cpupl.html>.

For additional information about Sub-Capacity software licensing in a z/VM CPU Pooling environment, see <http://ibm.com/systems/z/swprize/subcap/linux.html>

DevOps

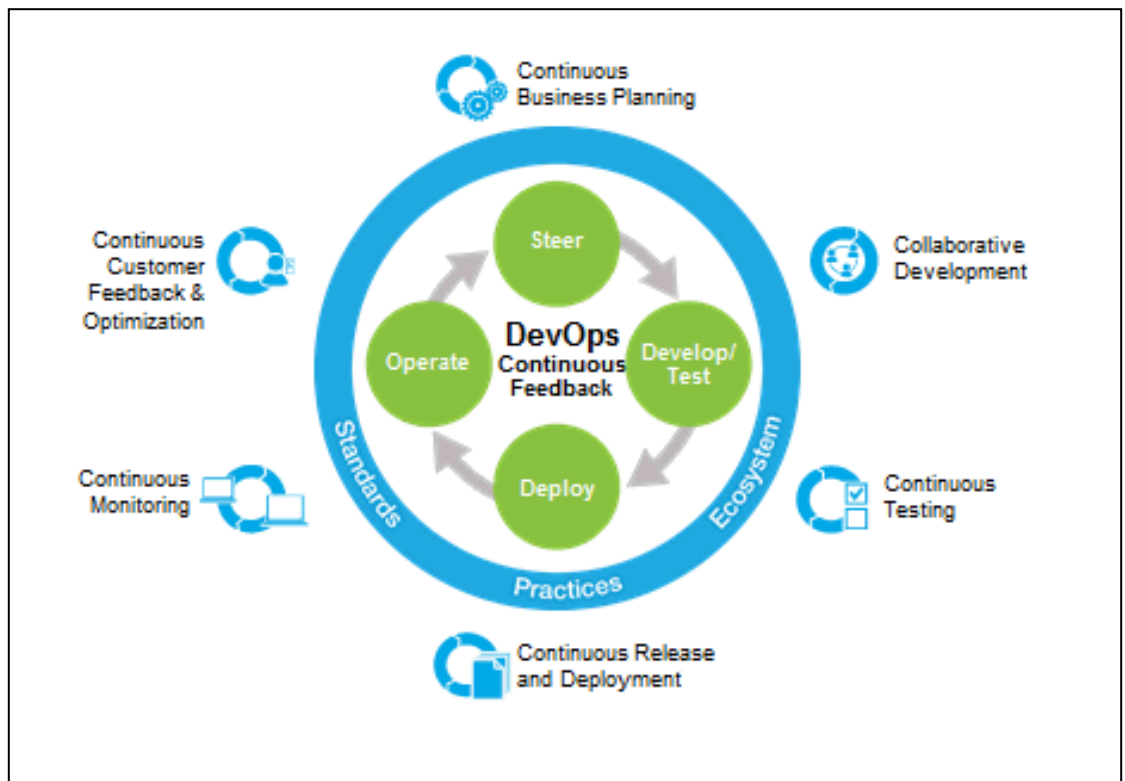
DevOps: What is it and how does it relate to System z?

By Rosalind Radcliffe— rradclif@us.ibm.com

DevOps, as a term, has been used to indicate the bringing together of the Development and Operations organizations. It's more than that; it's a way

for software development to integrate all the involved people, process and tools, from the beginning of the lifecycle to production. It's

expanding the processes of Agile Development or Lean IT to the full software development life cycle.



It is about collaboration between teams, transparency, and using automation to get feedback faster to reduce risk. The above diagram shows some of the common processes when discussing DevOps. But how does this relate to System z?

Let's start with the current state of System z development. Development pro-

cesses for z/OS has been stagnant for years; the same tools and processes used 30 years ago are still in use today. These processes and tools generally don't facilitate continuous feedback, parallel development, or automated testing. They do however provide a level of automated release and deployment, though only for traditional z/OS applications with no integra-

tion for other systems. The processes are generally different from those used by the distributed teams, and the tools are generally z/OS specific. This has begun to change with the adoption of tools such as Rational Developer for System z but the underlying SCM, build, and deployment tools have remained the same.

DevOps - Conclusion

These separate processes and tools are a major cause of the silos between the z/OS development teams and the rest of the development organization.

What about Linux for System z? Generally, it follows the distributed development models and tools, which can complicate the deployment process even more. One would think System z deployment could be done together, but with the separation of tools, it generally can't be. What makes this even worse is actually Java and the new artifacts in the USS file system used by the

z/OS subsystems. These files are also not generally managed or deployable by the same tools as the rest of the z/OS application.

Since DevOps is about breaking down the silos and bringing the teams together across the organization, not only is it applicable to the System z space, but System z must participate or the organization will not have an enterprise DevOps strategy. Breaking down the silos does not mean the concepts of separation of duties go away, it is that the teams need to be able to

work together. The tools need to allow the right individuals to do their work at the right times with the right approvals in place. It also means that the same tools should be used across the teams doing distributed and System z development.

DevOps is as applicable to the System z environment as it is to any other platform for more information see <http://devopsenterprisesystems.wordpress.com>

Education

2014 Education

By Kurt Acker – bfishing@us.ibm.com

Note: This education is a USA exclusive offering



| | | | |
|----------------------------------|-----------|-----------|---|
| Enterprise 2014 | Las Vegas | Oct 6-10 | Explore the latest innovations, expertise and best practices for building an IT infrastructure that matters, one that can reshape industries, improve customer service, enable better decisions through improved use of data, and enhance collaboration across the value chain. |
| IBM Insight 2014 | Las Vegas | Oct 26-30 | Is one of the largest System z software events, delivering know-how to help you improve business performance, gain more value from existing business analytics deployments, and get the latest innovations and success strategies. |

Trivia Answer



REXX is a structured procedural language that is integrated into the z/OS software bundle. It can be run in TSO/E and non-TSO/E address spaces. What does the acronym REXX stand for?

Answer: Restructured eXtended eXecutor

Trivia Question



In cryptography what type of algorithm provides data integrity only?

Please send your answer to Hank Meetze @ hmeetze@us.ibm.com

Stand up and be recognized!

Help Wanted



Articles wanted for next newsletter

If you have an experience or information that would benefit our zEnterprise community please send along your two to three paragraph article(s) to Hank Meetze @ hmeetze@us.ibm.com. Deadline 12/12/2014