Sub-capacity (Virtualization) License Counting Rules

Virtualization Environment for:
WebSphere CloudBurst Appliance V2.0
IBM Workload Deployer V3.0
IBM PureApplication System W1500

IBM PureApplication System W1700

NOTE: Please use these rules along with the Passport Advantage Agreement

April 11, 2013

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Summary of Virtualization Capacity Licensing Requirements

- Customers must:
  - ‣ Agree to the terms of the Sub-capacity Attachment, and follow Virtualization Capacity License Counting rules for their Eligible Virtualization Environment(s)
  - ‣ Use Eligible Sub-capacity Products
  - ‣ Use Eligible Virtualization Technologies
  - ‣ Use Eligible Processor Technologies
  - ‣ Use the IBM License Metric Tool (ILMT) and maintain report documentation
    - • Tivoli Asset Discovery for Distributed (TADd) may be used in lieu of IBM License Metric Tool
    - • Certain ILMT / TADd use exceptions may apply

PLEASE   NOTE:

▪*The above is only a summary. For details about sub-capacity licensing requirements and other information referred to above, at the* *Passport Advantage Virtualization Capacity (Sub-capacity) Licensing* *website*

  http://www-01.ibm.com/software/lotus/passportadvantage/subcaplicensing.html

▪*Customers are responsible for the installation of the IBM License Metric Tool and for the server it runs on.*

License Counting

- For the following eligible virtualization environments
  - IBM Power Systems (with WebSphere CloudBurst Appliance V2.0 or IBM Workload Deployer V3.0)
    - *LPAR - AIX 6.1*
    - *DLPAR - AIX 6.1*
    - *Single Shared Processor Pool - AIX 6.1*
    - *Micro-Partitioning – AIX 6.2*
  - IBM System z (with WebSphere CloudBurst Appliance V2.0 or IBM Workload Deployer V3.0)
    - *LPAR - SuSE SLES11*
    - *z/VM - SuSE SLES11*
  - Intel/AMD (x86) - (with WebSphere CloudBurst Appliance V2.0 or IBM Workload Deployer V3.0)
    - *VMware ESX 3.0 – SuSE SLES10, Red Hat Enterprise Linux 5*
    - *VMware ESX 3.5 – SuSE SLES10, Red Hat Enterprise Linux 5*
    - *VMware ESX 4.0 – SuSE SLES10, Red Hat Enterprise Linux 5*
    - *VMware vCenter Server 4.0 – SuSE SLES10, SuSE SLES11, Red Hat Enterprise Linux 4 and Red Hat Enterprise Linux 5*
  - IBM PureApplications System W1500
    - *Intel/AMD (x86)*
  - IBM PureApplication System W1700
    - *IBM Power Systems*

- Refer to the Virtualization License Counting Scenarios for each of those virtualization environments at the below link
  http://www-01.ibm.com/software/lotus/passportadvantage/Counting_Software_licenses_using_specific_virtualization_technologies.html

License Counting - Adding non HV PVU products into HV VM image

- If PVU metric products (non Hypervisor-HV edition) eligible for sub-capacity licensing are added into a HV VM image and subsequently provisioned by the WebSphere CloudBurst Appliance V2.0, IBM Workload Deployer V3.0, or IBM PureApplication System

- Customers are required to follow the steps below :
  ▸ Extend the image via WebSphere CloudBurst Appliance V2.0 , IBM Workload Deployer V3.0, or IBM PureApplication System
  ▸ Add additional products to the image
  ▸ Add the additional products' PID numbers to the image metadata using the WebSphere CloudBurst Appliance V2.0 , IBM Workload Deployer V3.0, or IBM PureApplication System user Interface
  ▸ Refer to the WebSphere CloudBurst Appliance V2.0 , IBM Workload Deployer V3.0, or IBM PureApplication System Info center (which can be found at the link below) for additional information

    http://www-142.ibm.com/software/products/us/en/workload-deployer

    http://pic.dhe.ibm.com/infocenter/psappsys/v1r0m0/topic/com.ibm.ipas.doc/welcome/welcome.html

- Above steps are needed for the WebSphere CloudBurst Appliance V2.0 , IBM Workload Deployer V3.0, or IBM PureApplication System reports to capture the PVU capacity of the eligible PVU metric products (non HV)

- Note: Failure to adhere to follow the above steps, would require full capacity licensing for the PVU metric products (non HV)

- The licensing rules in the preceding pages reflect how ILMT and WebSphere CloudBurst Appliance V2.0, IBM Workload Deployer V3.0, or IBM PureApplication System will operate to calculate PVUs

- Since ILMT does not support the WebSphere CloudBurst Appliance V2.0 IBM Workload Deployer V3.0, or IBM PureApplication System Virtualization Environment, you will need to follow the Manual Calculation of Virtualization Capacity.

- The Manual Calculation of Virtualization Capacity rules can be found in the following pages

- To find out if a Eligible Virtualization Technology is supported by ILMT visit

http://www-01.ibm.com/software/lotus/passportadvantage/subcaplicensing.html

Manual Calculation of Virtualization Capacity

- **Requirements:**
  - Customers must manually manage, track and prepare Audit Reports
  - An Audit Report must be prepared at least once per quarter and identify the following detail: Each Eligible Sub-Capacity Product deployed in each Eligible Virtualization Environment
    - *WebSphere Cloudburst Appliance, IBM Workload Deployer V3.0, or IBM PureApplication System report must be used for sub-capacity licensing, as part of the Audit Report*
    - *Customer must license the peak PVU capacity during the quarter by product as listed in the WebSphere Cloudburst, IBM Workload Deployer V3.0, or IBM PureApplication System Appliance Report*
    - *The worksheet referenced in the following page is optional*
  - An Eligible Virtualization Environment can be a Single Server or a Group of Servers (Server Cluster)

- **In addition to the above detail, the report should provide a summary total of the required number of PVUs by and for each Eligible Sub-Capacity Product.**

  - Each Audit Report must be **signed and date stamped**, at least once per quarter

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The above is only a summary. For detailed terms please see the Passport Advantage Sub-capacity licensing information

http://www-01.ibm.com/software/lotus/passportadvantage/subcaplicensing.html

Manual Calculation of Virtualization Capacity - Worksheet Example

Worksheet has 2 tabs

▪Instructions & Information

▪Single Server

Web Link:

http://public.dhe.ibm.com/software/passportadvantage/SubCapacity/Manual_Calculation_of_Virtualization_Capacity_Apr_2012.xls

VIRTUALIZATION ENVIRONMENT - SINGLE SERVER

- This worksheet is for one standalone server for one Software Product
- Per the Instructions on the first tab, you may choose to leverage this approach or develop / leverage your own processes and reporting format so long as you capture all of the information below
- Enter data in input fields below (shaded area)　　　　　　　　* Mandatory

Date of this Audit Report *	March 31, 2009
Product Name *	IBM WEBSPHERE APPLICATION SERVER NETWORK DEPLOYMENT
Program Identification Number (57xx-xxx)	5724-H88
P/N Description	IBM WEBSPHERE APPLICATION SERVER NETWORK DEPLOYMENT PROCESSOR VALUE UNIT (PVU)
Part Number	D55WJLL
Server ID / Location	Server ID # F6015; Bldg 1, Room 1, Somers, NY
Server Vendor / Brand	IBM System x
Server Model	xxxxx
Virtualization Technology used *	VMware ESX 3.5
Processor Technology (Vendor, Brand,Type,Model#) * (A)	Intel Xeon Quad Core Model 35XX
PVUs per core * (A)	70
Total Activated Cores on Server * (C)	8
Full Capacity PVUs for Server * (C)	560

DO NOT DELETE ROW

VM, Partition ID * (whatever identifier used for any subdivision of a server such as LPAR #, IP address, hostname, etc.)	Cores (B) per Partition or VM *	User Comments
A	4	
B	4	
C	2	
D	2	

Sum of Virtual Cores *	12
PVUs per core *	70
Virtualization Capacity PVUs by Product for Server *	840
PVU Licenses required by Product for Server * (C)	**560**

* Mandatory Field

(A) PVU's required for each physical processor core are listed on the PVU table (see link below, including vendor/brand designations)
http://www-01.ibm.com/software/lotus/passportadvantage/pvu_licensing_for_customers.html
(B) For purposes of 'Manual Calculation' of Virtual Capacity, 1 virtual core (or CPU) is equivalent to 1 physical core. Enter values in whole cores.
(C) Lower of Full Capacity or Virtualization Capacity

Instructions + Information ╲ Single Server ╱ Group of Servers "Cluster"

Key Web Links

Passport Advantage Agreement

http://www-01.ibm.com/software/lotus/passportadvantage/agreementsandforms.html

PVU

http://www-01.ibm.com/software/lotus/passportadvantage/pvu_licensing_for_customers.html

Sub-capacity

Passport Advantage Virtualization Capacity (Sub-capacity) Licensing

http://www-01.ibm.com/software/lotus/passportadvantage/subcaplicensing.html

Virtualization Capacity License Counting Rules

http://www-01.ibm.com/software/lotus/passportadvantage/Counting_Software_licenses_using_specific_virtualization_technologies.html

Manual Calculation of Virtualization Capacity - Worksheet Example

http://public.dhe.ibm.com/software/passportadvantage/SubCapacity/Manual_Calculation_of_Virtualization_Capacity_Apr_2012.xls

IBM Workload Deployer & PureApplications System Information Center

http://www-142.ibm.com/software/products/us/en/workload-deployer

http://pic.dhe.ibm.com/infocenter/psappsys/v1r0m0/topic/com.ibm.ipas.doc/welcome/welcome.html