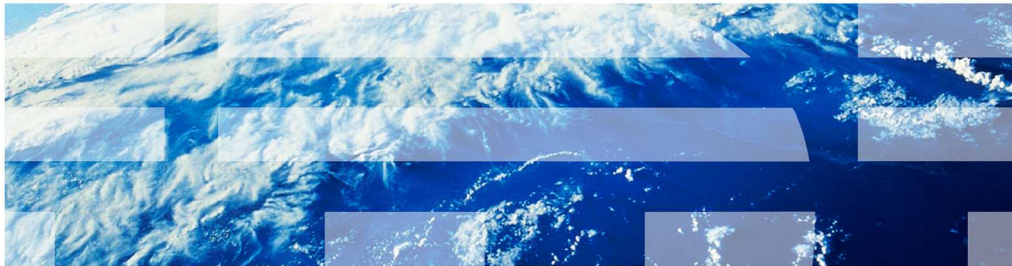


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# IBM PureApplication System

## IBM License Metric Tool



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This presentation describes the IBM License Metric Tool support available in IBM PureApplication™ System.

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## Table of contents

- IBM License Metric Tool overview
- Configuring PureApplication System to use the License Metric Tool
- Summary and references

This presentation shows you how to configure the IBM License Metric Tool with PureApplication System. You see an overview of the License Metric Tool and then an overview of the configuration process for PureApplication System to use the License Metric Tool. The presentation ends with a summary of the topic.

## Integration with IBM License Metric Tool

- PureApplication System communicates with the IBM License Metric Tool server
  - IBM License Metric Tool server available as a no-charge product
  - Installed separately to the PureApplication System
- IBM License Metric Tool agent is included in deployed virtual systems
  - Agent sends license usage data to the server for reporting
- License Metric Tool generates audit reports so you can track enterprise-wide license usage
  - **IBM License Metric Tool does not collect information about non-catalog product licenses**
    - Non-catalog product licenses is a new feature for PureApplication System V1.1
    - The native license tracking collects non-catalog product license data

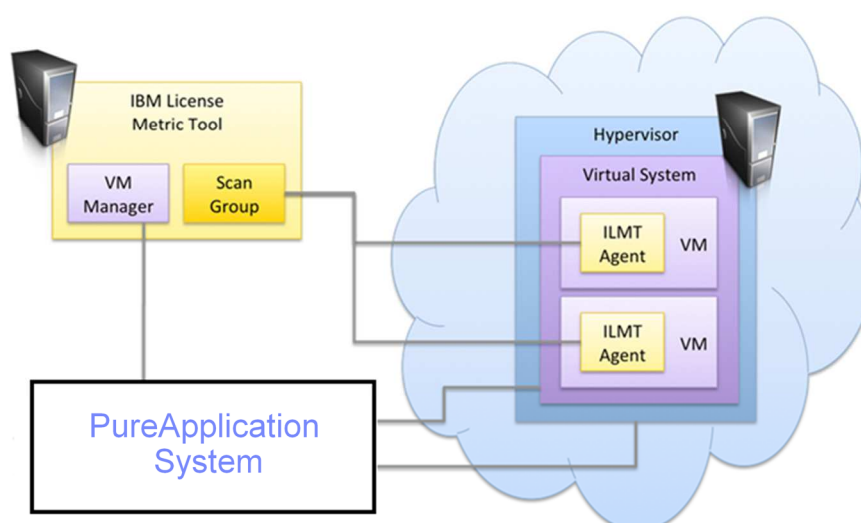
The IBM License Metric Tool is a no-charge product used for license tracking across a broad range of IBM software products. This means that the License Metric Tool is packaged on its own and is available as a software download from IBM, apart from the PureApplication System. The PureApplication System supports communication with the IBM License Metric Tool to produce enterprise-wide license usage reports. To use this feature, you must point to an IBM License Metric Tool server in the PureApplication System configuration. The virtual images that the PureApplication System deploys include the IBM License Metric Tool agent. This agent runs on the VMs that are deployed in the cloud and collects data about the software running there along with the licenses being consumed. The agent then sends this information to the License Metric Tool server. IBM License Metric Tool does not collect information about non-catalog product licenses, which is a new feature in PureApplication System V1.1. The native license tracking in PureApplication System collects the non-catalog product license data.

## Terminology for the License Metric Tool

- To enable license tracking with the IBM License Metric Tool requires an installation of **IBM License Metric Tool server**
  - Server component that communicates with agents running in cloud
  - Maintains a database of installed software products
- When license tracking with IBM License Metric Tool is enabled, every virtual machine deployed contains the IBM License Metric Tool agent
  - Runs on your virtual machine
  - Gathers information about installed software
- Configuration objects in the IBM License Metric Tool server required for use with PureApplication System:
  - **VM manager**: collects information about virtual machines that are installed in your infrastructure
  - **Scan group**: collection of related agents that are regularly scanned to discover new software

To understand how to use the License Metric Tool with the PureApplication System, you need to be familiar with the software components and configuration objects that make up the IBM License Metric Tool environment for PureApplication System. Before enabling license tracking with the IBM License Metric Tool, you need to install the License Metric Tool server. The server component is an application that runs on top of WebSphere® Application Server and stores information about the software products you have installed and the quantity of PVUs being consumed by those products. The server stores information about your software consumption in a DB2® database instance. After enabling license tracking on your PureApplication System, new virtual systems that you deploy contain the IBM License Metric Tool agent. The agent runs in each of your deployed virtual machines and communicates information about installed software products back to the License Metric Tool server. The IBM License Metric tool requires two configuration objects to support license tracking with the PureApplication System: a VM manager and a scan group. The VM manager's job is to collect information about the virtual machines that have been deployed by the PureApplication System. Those virtual machines each contain an instance of the IBM License Metric Tool agent. A scan group is a collection of related agents that are scanned regularly to discover new software.

## IBM License Metric Tool with PureApplication System



*Note: For sub capacity license auditing, use the PureApplication System-generated license audit reports*

5

IBM License Metric Tool

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IBM License Metric Tool helps you maintain an up-to-date inventory of the IBM distributed software assets in your IT infrastructure and to measure the processor value units (PVU) available to them. Virtualization technologies aid in optimizing hardware and software maintenance costs by sharing and dynamically managing assets. The IBM License Metric Tool offers license models that support virtualized environments and allow for calculating license fees based on the available processor power (the measure of processor usage is the processor value unit, or PVU). Information about installed software is collected from monitored virtual machines and stored on a central server. The software data can be accessed through preconfigured reports in the IBM License Metric Tool server available through a browser interface. The audit reports generated can be used to assess your position relative to your entitlement as specified in your license agreement. The IBM License Metric Tool cannot be used measure sub-capacity licensing; however, the PureApplication System-generated license audit reports is used for that purpose.

In the context of PureApplication System, IBM License Metric Tool provides visibility into your license usage and reporting and auditing capabilities. This diagram shows the structure of the IBM License Metric Tool server (the yellow box in the upper left). It shows how the License Metric Tool connects to the PureApplication System through a VM manager, accessing information about deployed software packages from the IBM License Metric Tool agent running in deployed virtual machines. The License Metric Tool does not have functionality to control how the PureApplication System handles placement of virtual system components based on actual license consumption.

## **Configuring PureApplication System to use the License Metric Tool**

This section describes how to configure PureApplication System to use the IBM License Metric Tool for license tracking.

## Configuring the IBM License Metric Tool for use with the PureApplication System

- Prerequisite: IBM License Metric Tool server is already installed
- Configuration steps:
  - In the IBM License Metric Tool:
    - Add a VM manager that points to your PureApplication System
      - Use address of the form: `https://<MGMT_IP>/resources/topology`
    - Create a scan group to hold the agents for virtual machines in your cloud
  - In the PureApplication System console:
    - Navigate to **System Console > System > Product Licenses** page
    - Provide the License Metric Tool server address and scan group information

### Product Licenses

#### License reporting

<input type="checkbox"/> Track license usage		Upgrade the IBM License Metric Tool agent that is added to your virtual machines:
<input checked="" type="checkbox"/> Track processor value units (PVUs) with IBM License Metric Tool	Server name <input type="text" value="172.16.15.246"/>	<input type="text" value="Browse..."/>
Scan group <input type="text" value="IPAS822"/>		<input type="button" value="Upgrade"/>

Before configuring license tracking with the IBM License Metric Tool, you need to have an instance of the IBM License Metric Tool server installed and available on your network. In the server, define the PureApplication System as a VM manager and create a scan group to point to all of the agents running in your cloud. Then, in the PureApplication System, go to the Product Licenses page and select the option to track PVUs with the IBM License Metric Tool. Specify the host name or IP address of your License Metric Tool server and provide the name of your scan group. If the specified scan group is not found, the License Metric Tool tracks all of your agents in the default scan group.

## Upgrading the IBM License Metric Tool agent

- Provides a method to upgrade IBM License Metric Tool agent stored on PureApplication Systems
  - Version supplied is 7.5
  - IBM License Metric Tool Agent stored on PureApplication Systems is included in each deployment
- Upgrade steps:
  - Click **Browse**, navigate to the upgrade package and select it
  - Click **Upgrade**
- After an upgrade, subsequent deployments use the new version of the IBM License Metric Tool agent
- For IBM License Metric Tool upgrade instructions for existing deployments, visit IBM License Metric Tool Information Center
  - <http://pic.dhe.ibm.com/infocenter/tivihelp/v53r1/index.jsp>
  - Optionally, redeploy the virtual systems or applications to use the new IBM License Metric Tool level

### Product Licenses

#### License reporting

##### Track license usage

- Track processor value units (PVUs) with IBM License Metric Tool

Server name 172.16.15.246

Scan group IPAS822

Upgrade the IBM License Metric Tool agent that is added to your virtual machines:

Browse...

Upgrade

When you deploy a system on PureApplication System, the IBM License Metric Tool agent stored in the system is added to the deployment for license tracking purposes. PureApplication Server initially provides V7.5 of the License Metric Tool agent so this is the level that is initially installed into each deployment. If this agent needs to be upgraded, you can use the graphical interface found under “Track license usage” to upgrade the level of the agent stored in PureApplication Server. This does not upgrade the level of the agents already deployed, but subsequent deployments have the new License Metric Tool agent level automatically installed. For upgrade instructions for the License Metric Tool agents already installed on existing deployments, visit the information center for the IBM License Metric Tool linked from this page.



## VM manager in the IBM License Metric Tool server console

- IBM License Metric Tool and PureApplication System check with each other every thirty minutes
  - May take up to 30 minutes for the status of the VM manager to change to **OK**

Select	Operation Status	Manager Type	Web Address	User Name	Last Successful Operation	Comments
<input type="checkbox"/>	OK	WebSphere CloudBurst	https://9.3.75.157/resources/topology	cbadmin	Mar 4, 2010 7:45:46 PM	There are no problems with the VM manager.

Page 1 of 1      Total: 1    Filtered: 1    Displayed: 1

The License Metric Tool and the PureApplication System only check in with each other every 30 minutes, so it can take up to 30 minutes for changes to appear in the server console. This slide shows a screen capture from the administrative console for the IBM License Metric Tool server of a VM manager for a PureApplication System. This VM manager has connected successfully and learned about deployed virtual systems.

## Scan groups in the IBM License Metric Tool server console

- Agents in the cloud are discovered and added to the scan group

Scan Groups

Manage Scan Groups > Scan Details

Scan Details

The table shows the status of each agent for the chosen software scan. The *Scan date* above the table refers to the agent time.

To add agents to a scan group, [go to the Agents panel](#).

Scan group name: DEFAULT

Software Scan Status	Host Name	Operating System	Server ID	Last Software Scan
OK	aimcp138	Linux 2.6.16.60-0.39.3-vmi	IBM aimcp123_2	Mar 3, 2010 6:02:00 PM
OK	aimcp137	Linux 2.6.16.60-0.39.3-vmi	TLM_VM_VMware-56 4d 59 5a 41 27 77 3c-8e 20 73 d5 44 56 6a cb	Mar 3, 2010 6:02:00 PM
OK	aimcp136	Linux 2.6.16.60-0.39.3-vmi	TLM_VM_VMware-56 4d 8e a2 c7 dd e2 3f-54 ad de dc f5 59 c1 06	Mar 3, 2010 6:02:01 PM
OK	aimcp140	Linux 2.6.16.60-0.39.3-vmi	IBM aimcp123_2	Mar 3, 2010 6:02:00 PM

Page 1 of 1 Total: 4 Filtered: 4 Displayed: 4

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After the License Metric Tool server has connected to the PureApplication System, it can locate the virtual machines in your cloud and talk to the IBM License Metric Tool agents running on those VMs. Agents are discovered on a regular basis - approximately every thirty minutes. But software scan status does not show as complete until after the scan group has run a full software scan of all the agents in the group. The software scan schedule is a configurable parameter in the scan group. After the agents have been discovered by the IBM License Metric Tool server, you can track usage in the server and generate detailed audit reports.

## Summary and references

This section contains a summary and references.

## Summary

- IBM License Metric Tool is made up of a centralized server that gathers software usage information from specialized agents
  - PureApplication System includes the agent in deployed virtual machines, identifies new virtual machines to the server
  - License Metric Tool tracks license consumption across deployed virtual machines, generates audit reports
    - Exception: sub capacity license usage is tracked using the PureApplication System-generated license audit report

PureApplication System provides built-in capabilities for license tracking and reporting. The PureApplication System allows you to track license usage, generate audit reports, and enforce placement decisions based on license availability. Having knowledge of how you are consuming product licenses can help you understand how many licenses you need to purchase to make the most use of your cloud. Using license tracking can also help you to keep from inadvertently going over your license entitlement. Using the environment profiles, you can spread subsets of licenses of your own across environment profiles.

The IBM License Metric Tool is made up of a centralized server that gathers software usage information from specialized agents. When license tracking with the License Metric Tool is enabled, PureApplication System includes the IBM License Metric Tool agent in new deployed virtual machines. These agents report license consumption information back to the License Metric Tool server. With the exception of sub capacity license usage, the IBM License Metric Tool server tracks license usage information in its central database and generates audit reports to meet IBM's license tracking requirements.

## References

- IBM License Metric Tool  
<http://www.ibm.com/software/tivoli/products/license-metric-tool/>
- IBM software catalog  
[ftp://ftp.software.ibm.com/software/tivoli\\_support/misc/CandO/TivoliCatalog/ibm/SwKBT/](ftp://ftp.software.ibm.com/software/tivoli_support/misc/CandO/TivoliCatalog/ibm/SwKBT/)
- PVU table  
[http://www.ibm.com/software/lotus/passportadvantage/pvu\\_licensing\\_for\\_customers.html](http://www.ibm.com/software/lotus/passportadvantage/pvu_licensing_for_customers.html)
- Virtualization capacity license counting rules  
[http://www.ibm.com/software/lotus/passportadvantage/Counting\\_Software\\_licenses\\_using\\_specific\\_virtualization\\_technologies.html](http://www.ibm.com/software/lotus/passportadvantage/Counting_Software_licenses_using_specific_virtualization_technologies.html)

This page provides links to additional license-related resources.



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