IBM

IBM WebSphere CloudBurst Appliance V2.0

IBM License Metric Tool integration

WebSphere software

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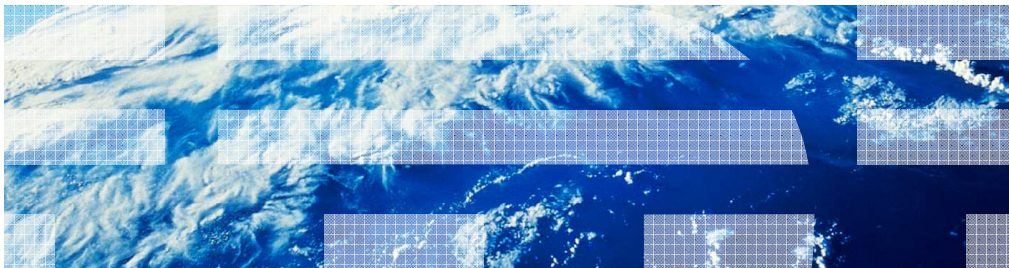
This presentation will look at how to integrate the IBM License Metric Tool with the WebSphere® CloudBurst™ Appliance.

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- IBM License Metric Tool overview
- Configuring WebSphere CloudBurst to use the License Metric Tool

IBM License Metric Tool integration

This presentation provides information on how to use the IBM License Metric Tool with WebSphere CloudBurst. The first section provides an overview of the License Metric Tool, and the second section covers details for configuring your appliance to use the IBM License Metric Tool for license tracking.

Section

IBM License Metric Tool overview

IBM License Metric Tool integration

This section provides an overview of the License Metric Tool and how it integrates with the IBM WebSphere CloudBurst Appliance.

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Integration with IBM License Metric Tool

- WebSphere CloudBurst communicates with the IBM License Metric Tool server
  - IBM License Metric Tool server available as a no-charge product
  - Installed separately to the appliance
- 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

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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 available as a software download from IBM, apart from the WebSphere CloudBurst Appliance. The appliance 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 appliance configuration. The virtual images that the appliance 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.

Terminology for the License Metric Tool

- To enable license tracking with the License Metric Tool, you need to have an instance of the IBM License Metric Tool server installed
  - **IBM License Metric Tool server:** a server component that communicates with agents running in your cloud and maintains a database of installed software products
- When license tracking with the IBM License Metric Tool is enabled, every virtual machine deployed by WebSphere CloudBurst contains the IBM License Metric Tool agent
  - **IBM License Metric Tool agent:** a service that runs on your virtual machine, gathers information about installed software
- Configuration objects in the IBM License Metric Tool server required for use with IBM WebSphere CloudBurst:
  - **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

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To understand how to use the License Metric Tool with the appliance, you need to be familiar with the software components and configuration objects that make up the IBM License Metric Tool environment for WebSphere CloudBurst. 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 appliance, new virtual systems that you deploy will 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 appliance: 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 WebSphere CloudBurst Appliance. 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.
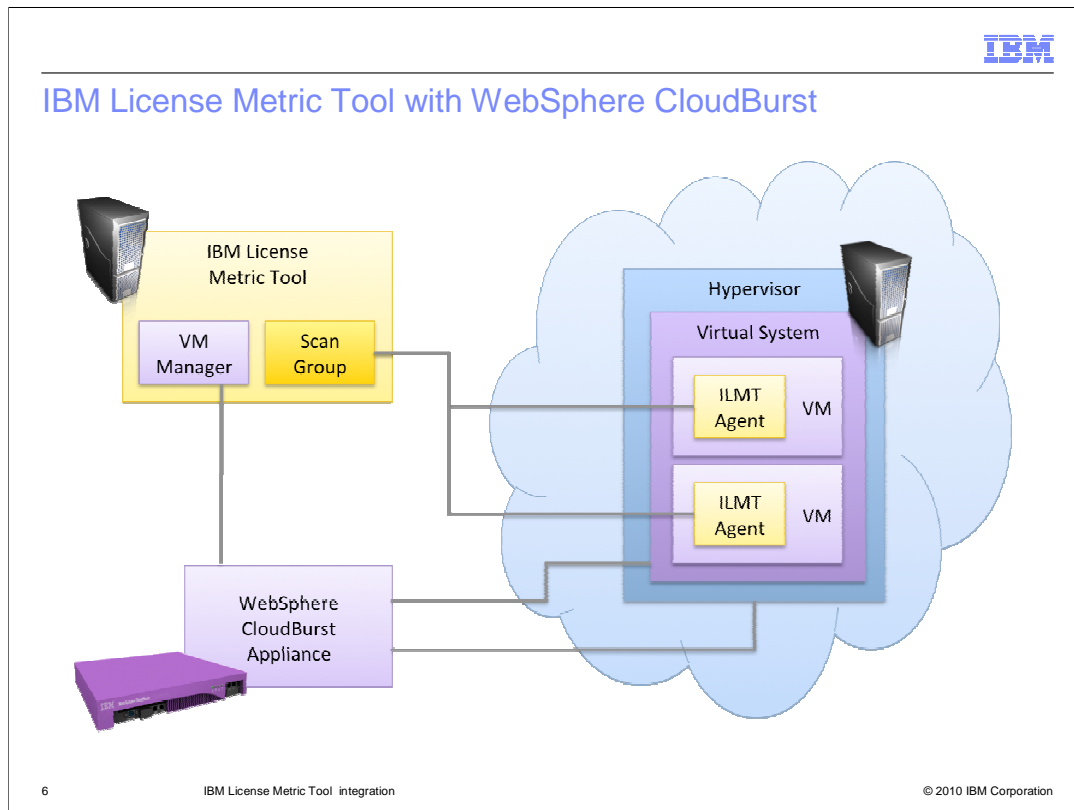
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In the context of WebSphere CloudBurst, IBM License Metric Tool provides visibility into your license usage and reporting and auditing capabilities. This diagram shows the structure of the IBM License Metric Tool server (the yellow box in the upper left), and how it connects to the WebSphere CloudBurst Appliance through a VM manager and then accesses information about deployed software packages from the IBM License Metric Tool agent that is running in deployed virtual machines. The License Metric Tool does not have functionality to control how the appliance handles placement of virtual system components based on actual license consumption.

Section

Configuring WebSphere CloudBurst to use the License Metric Tool

IBM License Metric Tool integration

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

Configuring the IBM License Metric Tool for use with the appliance

- 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 IBM WebSphere CloudBurst Appliance
      - 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 WebSphere CloudBurst console, on the **Catalog > Product Licenses** page, provide the License Metric Tool server address and scan group information

Product Licenses

License reporting

☐ Track license usage

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

    Server name   ilmt.mycompany.com

    Scan group   DEFAULT

    [Test connection]

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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 appliance as a VM manager and create a scan group to point to all of the agents running in your cloud. Then, in the appliance, 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 will track all of your agents in the default scan group.

VM manager in the IBM License Metric Tool server console

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

VM Managers

The table lists VM managers used in your IT infrastructure. Polling interval refers to the amount of time between two communication attempts.

Polling interval: 30 min

Select	Operation Status	Manager Type	Web Address	User Name	Last Successful Operation	Comments
○	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			

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The License Metric Tool and the appliance 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 WebSphere CloudBurst Appliance. 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

After the License Metric Tool server has connected to the WebSphere CloudBurst Appliance, 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 will 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. If you want your agent status to be updated more frequently, try running software scans on a daily basis. 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

- IBM License Metric Tool is made up of a centralized server that gathers software usage information from specialized agents
- WebSphere CloudBurst 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
  - Does not make deployment or placement decisions based on the license usage

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, WebSphere CloudBurst 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. The server tracks all license usage information in its central database and can generate audit reports to meet IBM's license tracking requirements. The IBM License Metric Tool does not make deployment or placement decisions based on license usage.

References

- IBM License Metric Tool
  - http://www.ibm.com/software/tivoli/products/license-metric-tool/
- PVU table
  - http://www.ibm.com/software/lotus/passportadvantage/pvu_licensing_for_customers.html
- Counting PVUs in virtualized environments
  - http://www.ibm.com/software/lotus/passportadvantage/Counting_Software_licenses_using_specific_virtualization_technologies.html

IBM License Metric Tool integration

This slide contains links to useful references for further reading on the IBM License Metric Tool and IBM's license tracking policies.

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