IBM Tivoli Netcool For Cisco Prime Licensing

IBM Tivoli Netcool for Cisco Prime Pricing Terminology Definitions

Note: The definitions below are either current pricing metrics or key terms used to currently license the products included in the examples as of May 2nd, 2011. This document is to assist in providing examples for new purchases of the products below.

This is not intended to be an exhaustive list of metrics used through time for Tivoli products. Please refer to the License Information (LI) document that accompanies each product. Copies of the License Information document and base license for each product are available at http://www-03.ibm.com/software/sla/sladb.nsf. The base license and License Information document control the use of the product and may differ from the examples in this document. // note definitions are also found at: http://www-01.ibm.com/software/lotus_passportadvantage/about_software_licensing.html

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Activated Processor Core
An Activated Processor Core is a processor core that is available for use in a physical or virtual server, regardless of whether the capacity of the processor core can be or is limited through virtualization technologies, operating system commands, BIOS settings, or similar restrictions. Licensee can deploy the Program using either Full Capacity licensing or Virtualization Capacity (Sub-Capacity) licensing according to the Passport Advantage Sub-Capacity Licensing Terms (see webpage below). If using Full Capacity licensing, each Activated Processor Core in the physical hardware environment managed by the Program must be counted, except for those servers from which the Program permanently no longer manages. If using Virtualization Capacity licensing, the Virtualization Capacity License Counting Rules that defines how many Activated Processor Cores must be counted, is located at: http://www.ibm.com/software/lotuspassportadvantage/Counting_Software_licenses_using_specific_virtualization_technologies.htm

Asset
An Asset is any tangible resource or item of value to be managed, including production equipment, facilities, transportation, IT hardware and software. Licensee must obtain entitlements for the total number of Assets accessed or managed by the Program.

Authorized User
Authorized User is a unit of measure by which the Program can be licensed. An Authorized User is a unique person that is given access to the Program. The Program may be installed on any number of computers or servers and each Authorized User may have simultaneous access to any number of instances of the Program at one time. Licensee must obtain separate, dedicated entitlements for each Authorized User accessing the Program in any manner directly or indirectly (for example: via a multiplexing program, device, or application server) through any means. An entitlement for an Authorized User is unique to that Authorized User and may not be shared, nor may it be reassigned other than for the permanent transfer of the Authorized User entitlement to another person.

Application Instance
Application Instance is a unit of measure by which the Program can be licensed. An entitlement is required for each instance of an application connected to or managed by the Program. An application in a test, development, staging, or production environment is each considered to be a separate instance of the application and each must have an entitlement. As well, multiple application instances in a single environment are each considered to be separate instances of the application and each must have an entitlement.

**Client Device**
Client Device is a unit of measure by which the Program can be licensed. A Client Device is a single user computing device or special purpose sensor or telemetry device that requests the execution of or receives for execution a set of commands, procedures, or applications from or provides data to another computer system that is typically referred to as a server or is otherwise managed by the server. Multiple Client Devices may share access to a common server. A Client Device may have some processing capability or be programmable to allow a user to do work. Examples include, but are not limited to actuators, appliances, automated teller machines, automatic meter readers, cash registers, disk drives, desktop computers, kiosks, notebook computers, personal digital assistant, point-of-sale terminals, sensors, smart meters, tape drives, and technical workstations. Licensee must obtain entitlements for every Client Device which runs, provides data to, uses services provided by, or otherwise accesses the Program and for every other computer or server on which the Program is installed.

**Concurrent User**
Concurrent User is a unit of measure by which the Program can be licensed. A Concurrent User is a person who is accessing the Program at any particular point in time. Regardless of whether the person is simultaneously accessing the Program multiple times, the person counts only as a single Concurrent User. The Program may be installed on any number of computers or servers, but Licensee must obtain entitlements for the maximum number of Concurrent Users simultaneously accessing the Program. Licensee must obtain an entitlement for each simultaneous Concurrent User accessing the Program in any manner directly or indirectly (for example: via a multiplexing program, device, or application server) through any means.

**Limited Use Concurrent User (Deprecated)**
Limited Use Concurrent User is a unit of measure by which the Program can be licensed. A Limited Use Concurrent User is a person who is given limited use access to the Program such as read-only capability and is accessing the Program at any particular point in time. Regardless of whether the person is simultaneously accessing the Program multiple times, the person counts only as a single Limited Use Concurrent User. The Program may be installed on any number of computers or servers, but Licensee must obtain entitlements for the maximum number of Limited Use Concurrent Users simultaneously accessing the Program. Licensee must obtain an entitlement for each simultaneous Limited Use Concurrent User accessing the Program in any manner directly or indirectly (for example: via a multiplexing program, device, or application server) through any means.

**Engine**
An engine is also referred to as a central processor (CP) or processor. Engines for traditional workloads are called General Purpose CPs. Engines for Linux workloads are called Integrated Facility for Linux (IFL) engines or Linux-only engines. Engines for Coupling Facility workloads are called Integrated Coupling Facility (ICF) engines.

**Enterprise**
Any legal entity (such as a corporation) and the subsidiaries it owns by more than 50 percent.

**External User**
An External User is a unique person that is given access to the program that is not part of, a
IBM Integrated Facility for Linux (IFL)
This optional facility enables additional processing capacity exclusively for Linux workload, with no effect on the model designation of a System z or OS/390 server. Consequently, executing Linux workload on the IBM IFL will not, in most cases, result in any increased IBM software charges for z/OS™, OS/390®, VM, VSE, or TPF operating systems or applications. There is, as indicated, a charge associated with the IFL, and there may also be a charge for applications that run on the IFL.

The IFL may be dedicated to a single Linux-mode logical partition or it may be shared by multiple Linuxmode logical partitions. Installations should note that the Linux workspace enabled by this facility will not support any of the S/390 traditional operating systems (OS/390, TPF, VSE, or VM). Only Linux applications or Linux operating in conjunction with the Virtual Image Facility, an environment that operates within a logical partition or in native S/390 mode and provides the capability to create multiple Linux images, is supported by the IBM S/390 IFL.

Install
Install is a unit of measure by which the Program can be licensed. An Install is an installed copy or instance of the Program on a physical or virtual disk made available to be executed on a computer. Licensee must obtain an entitlement for each Install of the Program.

Internal User
An Internal User is an authorized user that is part of the enterprise.

MSU
Millions of Service Units (MSU) is defined as millions of CPU service units per hour; the measure of capacity used to describe the computing power of the hardware processors on which S/390 or System z software runs. Processor MSU values are determined by the hardware vendor, IBM, or Software Compatible Vendors (SCVs).

For more detailed information about System z software pricing, go to: http://www-1.ibm.com/servers/eserver/System z/library/refguides/sw_pricing.html

Network Node or Node
Network Nodes include routers, switches, hubs, and bridges that contain a network management agent. A single network node may contain any number of interfaces or ports. Licensee must obtain an entitlement for every Network Node managed by the Program.

Network Security Device
Network security device is any network-based security appliance or server running network security software that provides a source of security events or logs. Examples include, but are not limited to, firewalls, application firewalls, intrusion detection systems, intrusion protection systems, virtual private networks (VPNs), threat protection products (antivirus gateways), content filtering (Web, e-mail), identity and access management, directory servers, network anomaly behavior products, and multifunction security appliances.

Processor Value Unit
The Processor Value Unit (PVU) is a unit of measure by which the Program can be licensed. Proofs of Entitlement for PVUs are based on processor technology (defined within the PVU Table by Processor Vendor, Brand, Type and Model Number at http://www.ibm.com/software/lotus/passportadvantage/pvu_licensing_for_customers.html). IBM continues to define a processor, for the purpose of PVU-based licensing, to be each processor core on a chip. Licensee must obtain entitlements sufficient to cover every activated processor core* in the
Unless the Program is sub-capacity eligible and Licensee has deployed the Program according to the Passport Advantage Sub-Capacity Licensing Terms (see http://www.ibm.com/software/lotus/passportadvantage/subcaplicensing.html), the Licensee must obtain entitlements sufficient to cover all activated processor cores* in the physical hardware environment.

* "Activated processor cores" are processor cores that are available for use in a physical or virtual server.

When the Program is not licensed and deployed under the Sub-Capacity Licensing Terms, the physical hardware environment includes all processor cores:

1. That are activated (available for use) when the server is shipped by the manufacturer or
2. That is activated subsequently through activation codes licensed from the server manufacturer by the customer; in each case, regardless of whether the capacity of the processor cores can be or is limited through virtualization technologies, operating system commands, BIOS settings, or similar restrictions.

Resource Value Unit

Resource Value Unit (RVU) is a unit of measure by which the Program can be licensed. RVUs are based on the number of units of a specific resource used or managed by the Program. Licensee must obtain sufficient entitlements for the number of RVUs required for Licensee’s environment or the specific resources as specified in the table(s) below. RVU entitlements are specific to the Program and the type of resource and may not be exchanged, interchanged, or aggregated with RVU entitlements of another program or resource. The RVU tables are shown for each applicable product example below.

Server

Server is a unit of measure by which the Program can be licensed. A Server is a physical computer that is comprised of processing units, memory, and input/output capabilities and that executes requested procedures, commands, or applications for one or more users or client devices. Where racks, blade enclosures, or other similar equipment is being deployed, each separable physical device (e.g., a blade or a rack-mounted device) that has the required components is considered itself a separate Server. For the purpose of Server-based licensing, Licensee must obtain entitlements for each Server which is made available to the Program, regardless of the number of processor cores and/or partitions in the Server or the number of copies of the Program on the Server.

Standby or Backup Systems

For programs running or resident on backup machines, IBM defines three types of situations: cold, warm and hot. In cold and warm situations, a separate entitlement for the copy on the backup machine is normally not required and typically no additional charge applies. In a hot backup situation, the customer needs to acquire other licenses or entitlements sufficient for that server. All programs running in backup mode must be solely under the customer’s control, even if running at another enterprise’s location.

As a practice, the following are definitions and allowable actions concerning the copy of the program used for backup purposes:

Cold: A copy of the program may reside, for backup purposes, on a machine as long as the program is not started. There is no additional charge for this copy.

Warm: A copy of the program may reside for backup purposes on a machine and is started, but is idling, and is not doing any work of any kind. There is no additional charge for this copy.

Hot: A copy of the program may reside for backup purposes on a machine, is started, and is doing work. The customer must acquire a license or entitlement(s) for this copy and there will generally be an additional charge.

Doing work includes, for example, production, development, program maintenance, and testing. It also could include other activities such as mirroring of transactions, updating of files, synchronization of programs, data, or other resources (for example, active linking with another
machine, program, database or other resource, and so on), or any activity or configurations that would allow an active hot switch or other synchronized switch-over between programs, databases, or other resources to occur. In the case of a program or system configuration that is designed to support a high availability environment by using various techniques (for example, duplexing, mirroring of files or transactions, maintaining a heartbeat, active linking with another machine, program, database, or other resource,), the program is considered to be doing work in the hot situation and a license or entitlement must be obtained.

**Terabyte (T/TB)**

1 terabyte of managed storage = 2 to the 40th power bytes = 1,099,511,627,776 bytes.
License and Definitions Document Purpose

Note: The examples below are current licensing examples for the products included as of May 2nd, 2011. This document is to assist in providing examples for new entitlements of the products below. This is not intended to be an exhaustive list of examples used through time for Tivoli products.

THIS LICENSE AND DEFINITION DOCUMENT AND THE RESULTS OBTAINED FROM IT ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR AGAINST INFRINGEMENT.

IBM Tivoli Netcool for Cisco Prime:
Distributed pricing examples (Processor Core and Processor Value Unit based)

The following examples are provided to illustrate the customer’s licensing requirements. References to processor-based licensing do not represent the actual number of entitlements required. Entitlement requirements are Value Unit based. Processors referenced in these examples represent the designated measurement on which the required number of Value Unit entitlements will be calculated. The number of Value Units required per processor core will depend on the processor type. To determine the number of Value Unit entitlements required per processor core, refer to the Processor Value Unit conversion table on the Passport Advantage Web site

The pricing example below should be used to determine required license entitlements for the following distributed products:

• IBM Tivoli Composite Application Manager for Transactions *

Products with an asterisk (*) indicator also have program-specific licensing terms, which are described later in this document. Consult the program-specific licensing terms to determine total licensing requirements for the applicable products.

Pricing example:
The following customer network (referred to as the core environment) applies to all of the examples to enable the reader to see where products tend to manage something less than the entire environment. The customer’s overall core environment includes:

Distributed servers
• 20 uniprocessor cores
• 65 2-way servers
• 12 4-way servers
• One 8-way server
• One 12-way server with two virtual or logical partitions
• One 14-way server
• One 16-way Sun Ultra server with two 8-way physical partitions (only one of which is managed by Tivoli applications)
• One 24-way server
• One z800 server with two uniprocessor IFLs running Linux (also known as “Linux on System z”)

Note: Linux on System z offerings may not be available for all Tivoli products. This licensing example assumes such availability. Linux on System z offerings have distinctly orderable part numbers in Passport Advantage, which should be used when ordering entitlements for IFLs running Linux.

If pricing products without a Linux on System z offering, you should exclude the z800 server entitlement requirement indicated below.
The customer wants to manage the applicable distributed server environment, which requires Processor Value Unit entitlements associated with the following number of processor cores:

<table>
<thead>
<tr>
<th>Systems Managed</th>
<th>Quantity in Customer Environment</th>
<th>Processor cores to be Licensed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniprocessor core</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>2-way</td>
<td>65</td>
<td>130</td>
</tr>
<tr>
<td>4-way</td>
<td>12</td>
<td>48</td>
</tr>
<tr>
<td>8-way</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>12-way (2 logical partitions)</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>14-way</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>16-way (2 physical partitions, one of which is managed by Tivoli applications)</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>24-way</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>z800 server with 2 uniprocessor IFLs (requires Linux on System z availability)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total Processors to be Licensed</td>
<td></td>
<td>274</td>
</tr>
</tbody>
</table>

**IBM Tivoli Composite Application Manager for Transactions**

**Client Response:**
Count the number of clients on which the client response monitor will be run. For example, to monitor Lotus Notes on 100 Windows XP desktop systems requires 100 Client Device licenses.

**Web response:**
The customer wants to manage the Web server environment, which requires Value Unit entitlements associated with the following number of processor cores:

<table>
<thead>
<tr>
<th>Systems Managed</th>
<th>Quantity in Customer Environment</th>
<th>Processor Cores to be Licensed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniprocessor core</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>2-way</td>
<td>65</td>
<td>130</td>
</tr>
<tr>
<td>4-way</td>
<td>12</td>
<td>48</td>
</tr>
<tr>
<td>8-way</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>12-way (2 logical partitions)</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>14-way</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>16-way (2 physical partitions, one of which is managed by Tivoli applications)</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>24-way</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>z800 server with 2 uniprocessor IFLs (requires Linux on System z availability)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total Processor Cores to be Licensed</td>
<td></td>
<td>274</td>
</tr>
</tbody>
</table>

**Robotic response:**
Similar to Web response monitoring, but in the case of robotic response monitoring, the number of licenses is determined by where the robot is being run, sometimes called points of presence. It doesn't matter how many servers or devices make up the transaction. In this example, the customer wants to monitor transactions from several points of presence, which requires Value Unit entitlements associated with the following number of processor cores:
Transaction tracking:
Transaction tracking is licensed based on the environment through which the transaction is being tracked, which determines the number of required Value Units. In this example, the transactions run across the following environment:

<table>
<thead>
<tr>
<th>Systems managed</th>
<th>Environment</th>
<th>Licensed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniprocessor core</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2-way</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>4-way</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total processor cores to be licensed</strong></td>
<td><strong>20</strong></td>
<td></td>
</tr>
</tbody>
</table>

### IBM Tivoli Netcool for Cisco Prime:
#### Distributed Pricing Examples (Processor Cores and Client Devices on Resource Value Units)

**General Example**
The following products are entitled per activated cores on resource value units (RVUs) or client device on resource value units (RVUs.)
- Products entitled by Activated Cores on RVUs
- IBM Tivoli Monitoring
- IBM Tivoli Monitoring for Virtual Servers
- ITCAM for Application Diagnostics
- ITCAM for Microsoft Applications
- ITCAM for SOA *
- ITCAM for Applications Agent

Products with an asterisk (*) indicator also have program-specific licensing terms, which are described later in this document. Consult the program-specific licensing terms to determine total licensing requirements for the applicable products.

**Pricing examples for activated cores and client devices on RVUs.**
The RVU table for Activated Processor Cores on RVUs is below:

### Activated Core Table

<table>
<thead>
<tr>
<th>Usage Level</th>
<th>Core Quantity From</th>
<th>Core Quantity To</th>
<th>Required RVU/Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>0</td>
<td>2,500</td>
<td>1.00</td>
</tr>
<tr>
<td>Tier 2</td>
<td>2,501</td>
<td>10,000</td>
<td>0.80</td>
</tr>
<tr>
<td>Tier 3</td>
<td>10,001</td>
<td>50,000</td>
<td>0.60</td>
</tr>
<tr>
<td>Tier 4</td>
<td>50,001</td>
<td>150,000</td>
<td>0.40</td>
</tr>
<tr>
<td>Tier 5</td>
<td>150,001</td>
<td>and over</td>
<td>0.20</td>
</tr>
</tbody>
</table>

The RVU table for Client Devices on RVUs is below:

### Client Device Table

<table>
<thead>
<tr>
<th>Usage Level</th>
<th>Core Quantity From</th>
<th>Core Quantity To</th>
<th>Required RVU/Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>0</td>
<td>2,500</td>
<td>1.00</td>
</tr>
<tr>
<td>Tier 2</td>
<td>2,501</td>
<td>10,000</td>
<td>0.90</td>
</tr>
<tr>
<td>Tier 3</td>
<td>10,001</td>
<td>25,000</td>
<td>0.80</td>
</tr>
<tr>
<td>Tier 4</td>
<td>25,001</td>
<td>50,000</td>
<td>0.70</td>
</tr>
<tr>
<td>Tier 5</td>
<td>50,001</td>
<td>and over</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Pricing example 1:**
A customer wishes to license for the servers in the following core environment:
- Distributed servers
- 20 One Processor, Single Core servers
- 65 One Processor, Dual Core servers
- 12 Two Processor, Dual Core servers
- 10 Two Processor, Quad Core servers
- One Eight Processor, Dual Core server with two virtual or logical partitions
- One Four Processor, Quad Core server
- One z800 server with two uniprocessor IFLs running Linux (also known as "Linux on System z")

Note: Linux on System z offerings may not be available for all Tivoli products. This licensing example assumes such availability. Linux on System z offerings have distinctly orderable part numbers in Passport Advantage, which should be used when ordering entitlements for IFLs running Linux. If pricing products without a Linux on System z offering, you should exclude the z800 server entitlement requirement indicated below.

The customer wants to manage the applicable distributed server environment:
Based on the 312 Activated Processor Cores, the customer would require 312 RVUs.

**Pricing example 2:**
A customer wishes to license in the following core environment:
- Servers with 45,000 Activated Processor Cores
- 25,000 Client Devices

The following calculation is used to determine the number of RVUs required to license the 45,000 Activated Processor Cores in the server environment:

<table>
<thead>
<tr>
<th>Tier1</th>
<th>Quantity of Activated Processor Cores</th>
<th>RVUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>2</td>
<td>7,500</td>
<td>6,000</td>
</tr>
<tr>
<td>3</td>
<td>35,000</td>
<td>21,000</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45,000</strong></td>
<td><strong>29,500</strong></td>
</tr>
</tbody>
</table>

The first tier based on the RVU table is used to calculate the first 2,500 Activated Processor Cores at a factor of 1 per core or in the case above 2,500 RVUs (2,500 x 1). The second tier is used to calculate the Activated Processor Cores from 2,501 to 10,000 at a .8 factor or (7,500 x .8 = 6,000). The third tier is used for those Activated Processor Cores between 10,001 and 50,000. In the example, 35,000 of the Activated Processor Cores reside in tier 3 or (35,000 x .6 = 21,000). Adding the RVUs together for each tier, the customer requires 29,500 RVUs to license the 45,000 Activated Processor Cores. The following calculation is used to determine the number of RVUs required to license the 25,000 Client Devices in the environment:

<table>
<thead>
<tr>
<th>Tier1</th>
<th>Quantity of Client Devices</th>
<th>RVUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>2</td>
<td>7,500</td>
<td>6,750</td>
</tr>
<tr>
<td>3</td>
<td>15,000</td>
<td>12,000</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
The first tier based on the RVU table is used to calculate the first 2,500 Client Devices at a factor of 1 per core or in the case above 2,500 RVUs (2,500 x 1). The second tier is used to calculate the Client Devices from 2,501 to 10,000 at a .9 factor or (7,500 x .9 = 6,750). The third tier is used for those Client Devices between 10,001 and 25,000. In the example, 15,000 of the managed cores reside in tier 3 or (15,000 x .8 = 12,000). Adding the RVUs together for each tier, the customer requires 21,250 RVUs to license the 25,000 Client Devices.

IBM Tivoli Application Dependency Discovery Manager

The IBM Tivoli Application Dependency Discovery Manager (TADDM) is priced per Install and per Resource Value Units for managed devices.

**Install**

At least one install license is required. The initial install license covers the first domain server (as well as an enterprise server if necessary). Multiple domain servers can be deployed at no charge. An additional install license is required for each additional enterprise server needed. The capacity and number of the domain and enterprise servers necessary for a particular environment is a function of the total number of configuration items to be managed for that environment. This capacity will vary based on the size, complexity, and depth of the information obtained for the configuration items. Refer to the TADDM Planning and Installation Guide for additional information on capacity determination. Many customers will only need one install license for a single enterprise server, regardless of the number of domain servers deployed.

**Resource Value Units**

In addition to the Install License described above, Resource Value Unit (RVU) licenses are required based on the number of devices in the managed environment. Servers, client devices, and MSUs (for System z servers only) are the designated measurements upon which the Value Units are calculated. The RVU entitlements for the managed devices are dependent on the number of unique devices managed by TADDM functions. The number of Resource Value Units required per scaled volume tier is defined below.

<table>
<thead>
<tr>
<th>Usage Level, Cumulative</th>
<th>Minimum Devices Servers</th>
<th>Maximum Devices Servers</th>
<th>Minimum MSUs (*)</th>
<th>Maximum MSUs (*)</th>
<th>Resource Value Units per Device and/or MSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>100</td>
<td>1</td>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>101</td>
<td>500</td>
<td>101</td>
<td>500</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>501</td>
<td>1,000</td>
<td>501</td>
<td>1,000</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>1,001</td>
<td>10,000</td>
<td>1,001</td>
<td>10,000</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>10,001</td>
<td>25,000</td>
<td>10,001</td>
<td>25,000</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>25,001</td>
<td></td>
<td>25,001</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

(*) Used for System z, when ordering one of the part numbers “for z/OS Data”

When licensing client devices, use the following conversion: 1 server = 100 clients (Clients round up to the nearest 100 for the purpose of Resource Value Unit calculation). In other words, 75 clients are rounded up to 100 clients for Resource Value Unit calculation.

The Resource Value Units (RVUs) for servers, clients, and MSUs are calculated independently,
using the same scaled volume tiers. RVUs for servers and clients are entitled using the same part number. RVUs for MSUs are entitled using a separate part number. Servers:
* The first 100 servers are valued at 20 RVUs each.
* The next 50 servers are valued at 18 RVUs each
Clients:
* The first 10,000 clients equate to 100 servers (10,000/100) and are valued at 20 RVUs each
* The next 5000 clients equate to 50 servers (5000/100) and are valued at 18 RVUs each
MSUs:
* The first 100 MSUs are valued at 20 RVUs each
* The next 50 MSUs are valued at 18 RVUs each

Scenario 1
A customer wishes to license TADDM to manage an environment of 550 distributed servers and 150 clients. Without the need for process automation initially, the recommended architecture includes one domain (or enterprise) server. The customer must obtain one install license for the domain (or enterprise) server, plus RVU entitlements for the managed servers, and client devices as follows:

| Resource Value Unit Calculation for 550 Servers: |
|-----------------|-----------------|-----------------|
| Servers | Resource Value Units per Server | Resource Value Units |
| Tier 1 = 100 | 20 | 2,000 |
| Tier 2 = 400 | 18 | 7,200 |
| Tier 3 = 50 | 8 | 400 |
| Total = 550 | | 9,600 |

Resource Value Unit Calculation for 150 Clients: (round up to the nearest hundred: 200)

<table>
<thead>
<tr>
<th>Clients (100 Clients = 1 Server)</th>
<th>Resource Value Units per Server</th>
<th>Resource Value Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 = 2</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Total = 2</td>
<td></td>
<td>40</td>
</tr>
</tbody>
</table>

In this example, the customer must license 1 install and 9640 Distributed Resource Value Units (9600 for servers plus 40 for clients).

Scenario 2
A customer wishes to license TADDM to manage an environment of 10,000 servers and 20,000 MSUs. The customer must obtain multiple install licenses (an initial install license plus additional install licenses for each additional enterprise server required per capacity calculation). The customer must also obtain RVU entitlements for the managed servers and MSUs indicated below.
In this example, the customer must license at least one install, 118,400 Resource Value Units (49,200 for servers plus 69,200 for MSUs). Note that the Resource Value Units for servers and the Resource Value Units for MSUs are entitled using separate part numbers.

Scenario 3
A customer wishes to license TADDM to manage an environment of 5,000 servers. This scenario describes two customer situations that would require similar entitlement.
4A) Customer A has two different lines of business and wishes to manage the supporting infrastructure for each, entirely separate from one another. Each line of business has the managed environment of 2,500 servers.
4B) Customer B is a holding company with two distinct businesses; a manufacturing factory with 2,500 servers and a distribution operation with 2,500 servers.
Both customer A and customer B must obtain two install licenses (to entitle a separate enterprise server for each of the two distinct lines of business). Domain servers may also be required for each distinct business. This depends on the total number of configuration items per distinct business as well as the size, complexity, and depth of information to be managed per configuration item. After the enterprise server entitlements, any domain servers needed, can be deployed at no charge. Customer A and customer B both own their respective 5,000 servers that they wish to manage for their distinct lines of business. They must both obtain VU entitlements for the managed servers as show below.

<table>
<thead>
<tr>
<th>Resource Value Unit Calculation for 10,000 servers:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Servers</strong></td>
</tr>
<tr>
<td>Tier 1 = 100</td>
</tr>
<tr>
<td>Tier 2 = 400</td>
</tr>
<tr>
<td>Tier 3 = 500</td>
</tr>
<tr>
<td>Tier 4 = 9000</td>
</tr>
<tr>
<td>Total = 10,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resource Value Units Calculation for 20,000 MSUs:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MSUs</strong></td>
</tr>
<tr>
<td>Tier 1 = 100</td>
</tr>
<tr>
<td>Tier 2 = 400</td>
</tr>
<tr>
<td>Tier 3 = 500</td>
</tr>
<tr>
<td>Tier 4 = 9,000</td>
</tr>
<tr>
<td>Tier 5 = 10,000</td>
</tr>
<tr>
<td>Total = 20,000</td>
</tr>
</tbody>
</table>

In this example, both customers must obtain 2 install licenses and 29,200 Resource Value Unit licenses.
IBM Tivoli Security Information Event Manager

IBM Tivoli Security Information and Event Manager addresses concerns around insider threat, compliance management, and audit. It helps you to easily understand your current position with regard to compliance management, audit, and threat.

Pricing Example

The pricing for Tivoli Security Information and Event Manager is based on Resource Value Units (RVUs). There are eight chargeable license components that may apply in any given installation. There are two license volume discount schedules. The following table illustrates the eight licenses and the volume discount that applies to that license.

<table>
<thead>
<tr>
<th>Price Metric</th>
<th>Volume Discount Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tivoli Security Information Event Manager Base Install</td>
<td>Per Install</td>
</tr>
<tr>
<td>Compliance management modules</td>
<td>Schedule 2</td>
</tr>
<tr>
<td>Event Source - Client Devices</td>
<td>Schedule 1</td>
</tr>
<tr>
<td>Event Source - Network Nodes and Security Devices</td>
<td>Schedule 1</td>
</tr>
<tr>
<td>Event Source - Servers</td>
<td>Schedule 1</td>
</tr>
<tr>
<td>Event Source - Applications, databases and zOS instances</td>
<td>Schedule 2</td>
</tr>
<tr>
<td>TSIEM Log Management Base Install</td>
<td>Per Install</td>
</tr>
<tr>
<td>Event Source – Log Management Events</td>
<td>Schedule 1</td>
</tr>
</tbody>
</table>
Transaction 1
In phase 1 of a compliance management installation the customer needs to monitor and store logs for select critical systems. In order to do this they need to monitor and collect logs from 27 servers, 15 firewalls and 10 of their databases.

- 1 TSIEM Log Manager Install
- 27 servers
- 15 firewalls
- 10 databases

All of the event sources are being used for log management only and will be calculated as TSIEM Log Management Devices (Schedule 1).

Log management gives the capability to collect logs; to store and retrieve those logs; to search and report on the log content. It requires a TSIEM Log Manager Install to support this.

Pricing Example

### Schedule 1

<table>
<thead>
<tr>
<th>Tier</th>
<th>Number of resources</th>
<th>RVUs per resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 - 10</td>
<td>1.00</td>
</tr>
<tr>
<td>2</td>
<td>11 - 100</td>
<td>0.90</td>
</tr>
<tr>
<td>3</td>
<td>101 - 250</td>
<td>0.75</td>
</tr>
<tr>
<td>4</td>
<td>251 - 500</td>
<td>0.60</td>
</tr>
<tr>
<td>5</td>
<td>501 - 5,000</td>
<td>0.45</td>
</tr>
<tr>
<td>6</td>
<td>5,001 - 25,000</td>
<td>0.30</td>
</tr>
<tr>
<td>7</td>
<td>&gt;25,000</td>
<td>0.15</td>
</tr>
</tbody>
</table>

### Schedule 2

<table>
<thead>
<tr>
<th>Tier</th>
<th>Number of resources</th>
<th>RVUs per resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 - 2</td>
<td>1.00</td>
</tr>
<tr>
<td>2</td>
<td>3 - 5</td>
<td>0.90</td>
</tr>
<tr>
<td>3</td>
<td>6 - 10</td>
<td>0.80</td>
</tr>
<tr>
<td>4</td>
<td>11 - 20</td>
<td>0.70</td>
</tr>
<tr>
<td>5</td>
<td>21 - 35</td>
<td>0.60</td>
</tr>
<tr>
<td>6</td>
<td>36 - 50</td>
<td>0.45</td>
</tr>
<tr>
<td>7</td>
<td>&gt;50</td>
<td>0.30</td>
</tr>
</tbody>
</table>
Transaction 2
In phase 2 of their implementation they need to provide alerting and compliance management reporting on their key infrastructure for compliance management with PCI-DSS and Sarbanes Oxley. This now requires them to be monitoring 250 servers, 20 databases, and existing firewalls and switches (15 devices in all). To support alerting they also need to upgrade their TSIEM Log Manager Install and their TSIEM Log Management Devices to full W7 support.
• Trade up their 27 Log Management Devices to 27 Server (for the Phase 1 servers)
• Trade up their 10 Log Management Devices to 10 Application and Database Instances and z/OS instances (for the Phase 1 production databases)
• Trade up their 15 Log Management Devices to 15 Network Devices (for the Phase 1 firewall devices)
• 223 more servers
• 10 more databases
• 2 Compliance Management modules
Pricing Scenario 2

Transaction 1 In phase 1, a customer wants to license Tivoli Security Information and Event Manager to set up compliance management for a division that runs a large financial system. They want to benefit from the built-in audit and compliance management reporting provided by Tivoli Security Information and Event Manager and to benefit from the advanced analysis and reporting provided through W7 normalization. The initial deployment goal is to consolidate information from their core application and database servers. Their initial deployment will focus on:

- 1 TSIEM Install
- 28 servers

<table>
<thead>
<tr>
<th>Price Metric</th>
<th>Quantity</th>
<th>RVU’s/Resource (Schedule 1)</th>
<th>RVU’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 TSIEM Log Management Devices to Server Tradeup</td>
<td>10</td>
<td>1.00</td>
<td>10</td>
</tr>
<tr>
<td>Tier 2 TSIEM Log Management Devices to Server Tradeup</td>
<td>17</td>
<td>0.90</td>
<td>15.3</td>
</tr>
<tr>
<td>Total Log Management Devices to Server tradeup (rounded up)</td>
<td></td>
<td></td>
<td>26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price Metric</th>
<th>Quantity</th>
<th>RVU’s/Resource (Schedule 1)</th>
<th>RVU’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 TSIEM Log Management Devices to Application and Database Instances and z/OS Instances tradeup</td>
<td>10</td>
<td>1.00</td>
<td>10</td>
</tr>
<tr>
<td>Total Log Management Devices to Application, Database Instances and z/OS Instances tradeup (rounded up)</td>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price Metric</th>
<th>Quantity</th>
<th>RVU’s/Resource (Schedule 1)</th>
<th>RVU’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 TSIEM Log Management Devices to Network Devices tradeup</td>
<td>10</td>
<td>1.00</td>
<td>10</td>
</tr>
<tr>
<td>Tier 2 TSIEM Log Management Devices to Network Devices tradeup</td>
<td>5</td>
<td>0.90</td>
<td>4.5</td>
</tr>
<tr>
<td>Total Log Management Devices to Network Devices tradeup (rounded up)</td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price Metric</th>
<th>Quantity</th>
<th>RVU’s/Resource (Schedule 1)</th>
<th>RVU’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 TSIEM Server Event Source</td>
<td>10</td>
<td>1.00</td>
<td>10</td>
</tr>
<tr>
<td>Tier 2 TSIEM Server Event Source</td>
<td>100</td>
<td>0.90</td>
<td>90</td>
</tr>
<tr>
<td>Tier 3 TSIEM Server Event Source</td>
<td>113</td>
<td>0.75</td>
<td>84.75</td>
</tr>
<tr>
<td>Total TSIEM Server Event Sources (rounded up)</td>
<td></td>
<td></td>
<td>185</td>
</tr>
</tbody>
</table>
• 4 databases
Transaction 1 tables below reflect Resource Value Units (RVUs) to order based upon per instance using Schedule 2 for each Application and Database Instances and z/OS Instances. Schedule 1 is used to calculate RVUs to order for each Server.

<table>
<thead>
<tr>
<th>Price Metric</th>
<th>Quantity</th>
<th>RVU’s/Resource (Schedule 1)</th>
<th>RVU’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSIEM Log Manager Install to TSIEM Install tradeup</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier 2 TSIEM Server Event Source</td>
<td>18</td>
<td>0.90</td>
<td>16.2</td>
</tr>
<tr>
<td>Total TSIEM Server Event Sources (rounded up)</td>
<td></td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>Tier 1 Application, Database and z/OS Instances</td>
<td>2</td>
<td>1.00</td>
<td>2</td>
</tr>
<tr>
<td>Tier 2 Application, Database and z/OS Instances</td>
<td>2</td>
<td>0.90</td>
<td>1.8</td>
</tr>
<tr>
<td>Total Application and Database Instances and z/OS Instances (rounded up)</td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Transaction 2
In phase 2 the customer wants to add:
• 20 more databases
The total number of databases licensed increases to 24.

<table>
<thead>
<tr>
<th>Price Metric</th>
<th>Quantity</th>
<th>RVU’s/Resource (Schedule 2)</th>
<th>RVU’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 Application, Database and z/OS Instances</td>
<td>2</td>
<td>1.00</td>
<td>2</td>
</tr>
<tr>
<td>Tier 2 Application, Database and z/OS Instances</td>
<td>3</td>
<td>0.90</td>
<td>2.7</td>
</tr>
<tr>
<td>Tier 3 Application, Database and z/OS Instances</td>
<td>5</td>
<td>0.80</td>
<td>4.0</td>
</tr>
<tr>
<td>Tier 4 Application, Database and z/OS Instances</td>
<td>10</td>
<td>0.70</td>
<td>7.0</td>
</tr>
<tr>
<td>Tier 5 Application, Database and z/OS Instances</td>
<td>4</td>
<td>0.60</td>
<td>2.4</td>
</tr>
<tr>
<td>Total Application and Database Instances (rounded up) and z/OS Instances</td>
<td></td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

In this phase, the customer wants to accelerate their compliance management reporting to satisfy auditor requirements. They would then license one Sarbanes Oxley Compliance Management Module to install on their IBM Tivoli Compliance Insight Manager server, as well as purchasing entitlements for other critical network components. Total additional quantities in the customer’s environment to order are:
• Sarbanes Oxley Compliance Management Module
• 20 TSIEM Network Devices
• 65 TSIEM Server
• 25 Application and Database Instances and z/OS Instances
Additional Tivoli Security Information and Event Manager pricing details, interpretations, and examples

The price charged is dependent upon the number of TSIEM Installs and the number of TSIEM LogManager Installs and the number of event sources monitored regardless of how the data from them is collected. Events or logs may be collected individually from each resource, from a central management server (like ISS SiteProtector™, McAfee ePO), or through a central point of presence. The number of resources monitored is independent of the collection implementation used. Examples of customer environments and interpretations on quantifying resources are listed below.

Note 1: A Tivoli Security Information and Event Manager license for an event source includes events only from that individual server log, application log, or database log.

Note 2: For platforms that support partitioning, each individual partition is considered to require separate entitlements for the resources monitored. Examples are: LPARs on the mainframe, Solaris Zones, Database Instances.

Example A: A customer is collecting Check Point Firewall-1 event logs from 25 firewalls through one Check Point Provider-1 management console connection via an OPSEC API. This counts as 25 Network Devices under Tivoli Security Information and Event Manager licensing. The fact that Tivoli Security Information and Event Manager collects the data via a single OPSEC connection is an implementation detail that doesn’t affect the price.

Example B: A customer is collecting Windows Event Logs from 20 servers. These Logs are all collected through the agent on a single Windows server for collection by Tivoli Security Information and Event Manager. For Tivoli Security Information and Event Manager licensing, this counts as 20 Servers. Example C: A customer is collecting Windows operating system event logs, UDB database audit logs, and SAP application logs all from 10 critical servers. This counts as 10 Servers plus 20 Application and Database Instances and z/OS Instances under Tivoli Security Information and Event Manager licensing. Example D: A customer is collecting Windows operating system event logs and UDB database audit logs from two UDB instances on a single server. This counts as one Server plus two Application and Database Instances and z/OS Instances.

Example E: A customer is collecting z/OS logs from four LPARs on a single sysplex. This is counted as four Application and Database Instances and z/OS Instances, one for each LPAR.

IBM Tivoli Monitoring for Energy Management

The following IBM Tivoli Monitoring for Energy Management components are licensed per Resource.
Value Unit (RVU):
• Basic Device Tier
• Device Tier
• EMS Tier
• IT Device Tier

Basic Device Tier - A device in the context of the Basic Device Tier is a device that is either an energy meter, environmental sensor, desktop device, telephone or printer.

Device Tier - A device in the context of the Device Tier is a stand-alone device that does not fall into the Basic Device Tier, EMS Tier, or IT Tier.

EMS Tier - A device in the context of the EMS Tier is a device managed by an element management system or an application but excluding applications used solely for consolidation of multiple data sources that would normally be Device Tier devices. Examples include devices managed by third-party and vendor element management systems.

IT Tier - A device in the context of the IT Tier is an IT device that is mounted inside of a data center rack and is managed by IBM Systems Director or is a stand-alone device that is managed by IBM Systems Director.

To determine the number of RVUs applicable to licensee use of the program, licensee must multiply the number of managed entities in a tier by the applicable RVU Factors as follows:
A different RVU factor applies to different number ranges of the managed entities.

<table>
<thead>
<tr>
<th>RVU factor</th>
<th>Range from</th>
<th>Range to</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>0.9</td>
<td>101</td>
<td>250</td>
</tr>
<tr>
<td>0.8</td>
<td>251</td>
<td>500</td>
</tr>
<tr>
<td>0.6</td>
<td>501</td>
<td>750</td>
</tr>
<tr>
<td>0.5</td>
<td>751</td>
<td>1,250</td>
</tr>
<tr>
<td>0.4</td>
<td>1,251</td>
<td>2,000</td>
</tr>
<tr>
<td>0.3</td>
<td>2,001</td>
<td>and above</td>
</tr>
</tbody>
</table>

Pricing Example:
ABC Company needs to manage 2,500 environmental sensor (Basic Device Tier), 250 servers (Device Tier), 50 building management systems (EMS Tier), and 1,000 servers using IBM Systems Director (IT Tier). The customer requires the following:
<table>
<thead>
<tr>
<th></th>
<th>Quantity in Customer Environment</th>
<th>Net Resource Value Units Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Devices</td>
<td>2,500</td>
<td>1,285*</td>
</tr>
<tr>
<td>Devices</td>
<td>250</td>
<td>235**</td>
</tr>
<tr>
<td>EMS</td>
<td>50</td>
<td>50***</td>
</tr>
<tr>
<td>IT</td>
<td>1,000</td>
<td>710****</td>
</tr>
</tbody>
</table>

• * Quantity of 2,500 requires 1,285 RVUs per RVU factor table.
• ** Quantity of 250 requires 235 RVUs per RVU factor table.
• *** Quantity of 50 requires 50 RVUs per RVU factor table.
• **** Quantity of 1,000 requires 710 RVUs per RVU factor table.
IBM Tivoli Netcool for Cisco Prime
Volume Unit Exhibit (VUE) 002 is applicable to the following products:
IBM Tivoli OMNibus and Network Manager
IBM Tivoli Netcool OMNibus
IBM Tivoli Netcool Gateway
IBM Tivoli Network Manager IP Edition
IBM Tivoli Netcool Reporter
IBM Tivoli Netcool Impact
IBM Tivoli Business Service Manager
IBM Tivoli Netcool Performance Manager
IBM Tivoli Netcool Service Quality Management Center
VUE 002 tables A, B, C, D, E, F, N apply to this set of products

Table A

<table>
<thead>
<tr>
<th>From Quantity</th>
<th>To Quantity</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
<td>1.00</td>
</tr>
<tr>
<td>11</td>
<td>250</td>
<td>0.85</td>
</tr>
<tr>
<td>251</td>
<td>750</td>
<td>0.70</td>
</tr>
<tr>
<td>751</td>
<td>1250</td>
<td>0.55</td>
</tr>
<tr>
<td>1251</td>
<td>or more</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Table B

<table>
<thead>
<tr>
<th>From Quantity</th>
<th>To Quantity</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
<td>1.00</td>
</tr>
<tr>
<td>11</td>
<td>100</td>
<td>0.90</td>
</tr>
<tr>
<td>101</td>
<td>250</td>
<td>0.80</td>
</tr>
<tr>
<td>251</td>
<td>500</td>
<td>0.65</td>
</tr>
<tr>
<td>501</td>
<td>or more</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Table C

<table>
<thead>
<tr>
<th>From Quantity</th>
<th>To Quantity</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>1.00</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>0.90</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>0.80</td>
</tr>
<tr>
<td>11</td>
<td>20</td>
<td>0.70</td>
</tr>
<tr>
<td>21</td>
<td>or more</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Table D

<table>
<thead>
<tr>
<th>From Quantity</th>
<th>To Quantity</th>
<th>Factor</th>
</tr>
</thead>
</table>
IBM Tivoli Netcool Configuration Manager V6.2
IBM Tivoli Netcool Configuration Manager is priced using the following chargeable components and metrics:
IBM Tivoli Netcool Configuration Manager Base is licensed per install. A single active database
instance is considered a single install.
The following IBM Tivoli Netcool Configuration Manager components are licensed per RVU:

**Standard Tier**
**Operating System Manager Tier**
**SmartModel Tier 1**
**SmartModel Tier 2**
**SmartModel Tier 3**

- **Standard Tier**: A device in the context of the Standard Device Tier is any element that is managed by IBM Tivoli Netcool Configuration Manager.
  
Note: A Standard Tier entitlement is required for all managed elements. Operating System Manager or SmartModel Tier entitlements are licensed in addition not as replacement.

- **Operating System Manager Tier**: A device in the context of the Operating System Manager Tier is any device for which the licensee needs operating system software upgrade support.
  
Note: Not all devices are supported for this tier.

- **SmartModel Tier 1**: A device in the context of the SmartModel Tier 1 is a low capacity device for which the licensee needs advanced modeling capabilities. Examples include, but are not limited to, consumer Customer Premise Equipment (CPE) type devices or small enterprise routers and switches used as gateways and on-premise equipment typically with 24 or less physical ports.

- **SmartModel Tier 2**: A device in the context of the SmartModel Tier 2 is a high capacity device for which the licensee needs advanced modeling capabilities. Examples include, but are not limited to, primarily aggregation and core type devices found in the network.

- **SmartModel Tier 3**: meets any one of the following criteria:
  - A very large routing or switching device
  - A high capacity device that is capable of providing higher layer (OSI layer 4+) services
  - A device capable of supporting virtual images

To determine the number of RVUs applicable to licensee use of the program, licensee must multiply the number of managed entities in a tier by the applicable RVU Factors in VUE N.

**Pricing example for Netcool Configuration Manager**

ABC Telcom deploys 1 install of IBM Tivoli Netcool Configuration Manager on 1 server and is managing configurations on 2,500 devices. ABC needs operating system software upgrade support for 250 devices (Operating System Manager Tier), and SmartModel capabilities for 1,250 devices, of which 10 are very high capacity (SmartModel Tier 3), 240 are high-capacity, core type devices (SmartModel Tier 2), and 1,000 have 24 or less ports (SmartModel Tier 1). The customer requires the following:

<table>
<thead>
<tr>
<th>Pricing Metric</th>
<th>Quantity in customer environment</th>
<th>Installs required</th>
<th>Net Resource Value Units required</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITNCM Base</td>
<td>Install</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ITNCM Standard Tier</td>
<td>RVU 2,500</td>
<td>1</td>
<td>1,285*</td>
</tr>
<tr>
<td>ITNCM OS Mgr Tier</td>
<td>RVU 250</td>
<td></td>
<td>235**</td>
</tr>
<tr>
<td>ITNCM SmartModel Tier 1</td>
<td>RVU 1,000</td>
<td></td>
<td>710***</td>
</tr>
<tr>
<td>ITNCM SmartModel Tier 2</td>
<td>RVU 240</td>
<td></td>
<td>226****</td>
</tr>
<tr>
<td>ITNCM SmartModel Tier 3</td>
<td>RVU 10</td>
<td></td>
<td>10****</td>
</tr>
</tbody>
</table>

OL-25995-01 IBM Tivoli Netcool For Cisco Prime Licensing
**Quantity of 240 requires 226 RVUs per RVU Factor table
***Quantity of 1,000 requires 710 RVUs per RVU Factor table
****Quantity of 240 requires 226 RVUs per RVU Factor table
*****Quantity of 10 requires 10 RVUs per RVU Factor table

**IBM Tivoli OMNIbus and Network Manager V8.3**

IBM Tivoli Netcool OMNIbus and Network Manager is priced using the following chargeable components and metrics:

- **Base per install** - Each application instance of an ObjectServer is considered a single installation.
- **Resource Value Unit (RVU) per tier** - RVU is a unit of measure based on the number of units of a specific resource used or managed. Licensee must obtain sufficient entitlements for the number of RVUs required for licensee's environment as specified in VUE Table N. RVU entitlements are specific to the program and may not be exchanged, interchanged, or aggregated with RVU entitlements of another program. The unit of measure for this program is per tier described below:
  - Event Device Tier
  - Event Basic Device Tier
  - Event EMS Tier
  - Event Q3 EMS Tier
  - Network Device Tier
  - Network Basic Device Tier
  - Entry Tier

**Event Device Tier or Network Device Tier** - A Device in the context of the Event Device Tier or Network Device Tier is an element that has the capability to initiate a notification or respond to a request for notification. Examples include, but are not limited to, servers, routers, and switches.

**Event Basic Device Tier or Network Basic Device Tier** - A Basic Device in the context of the Event Basic Device Tier or Network Basic Device Tier is an infrastructure sensor or network Subscriber Unit that has the capability to initiate a notification or respond to a request for notification. Examples include, but are not limited to, point-of-sale terminals, printers, VoIP telephones, dslams, cable modems, and plant equipped with sensors for event notification.

**Event EMS Tier** - An EMS in the context of the Event EMS Tier is an instance of an Element Management System or application managed using generic technologies excluding applications used solely for consolidation of multiple data sources (for example, trap consolidation) where Device pricing is to be applied. Examples include third-party and vendor element management systems, Oracle, mainframe systems per 400 MSUs, and IBM Tivoli Monitoring only for the forwarding of situation events relating to performance data.

**Event Q3 EMS Tier** - A Q3 EMS in the context of the Event Q3 EMS Tier is an instance of an Element Management System interfaced to via the Q3 protocol.

**Entry Tier** - The Entry Tier provides Event and Network Management for a device. Licensee may license RVUs to entitle management of a maximum of 1,000 devices at the Entry Tier. To determine the number of RVUs applicable to licensee use of the program, licensee must multiply the number of managed entities in a tier by the applicable RVU Factors in VUE Table N. IBM Tivoli OMNIbus and Network Manager pricing example Customer installs 1 application instance of the Tivoli OMNIbus and Network Manager base, would like network and event device management capabilities for 1,250 devices. This is a new installation of Tivoli OMNIbus and Network Manager, the customer has not previously licensed entry tier entitlements. The customer requires the following:

- Quantity of 1 Tivoli OMNIbus and Network Manager base install (1 for each instance installed)
- Quantity of 710 of Tivoli OMNIbus and Network Manager Entry Tier (100 multiplied by factor of
Because the customer has previously not licensed entry tier entitlements, the customer may license entitlements for a maximum of 1,000 devices using the Tivoli OMNIbus and Network Manager Entry Tier.

- Quantity of 235 Tivoli OMNIbus and Network Manager Event Device Tier (100 multiplied by factor of 1.0 (100), added to 150 multiplied by a factor of 0.9 (135))
- Quantity of 235 Tivoli OMNIbus and Network Manager Device Tier (100 multiplied by factor of 1.0 (100), added to 150 multiplied by a factor of 0.9 (135))

**IBM Tivoli Netcool/OMNIbus V7.3**

The new release of IBM Tivoli Netcool/OMNIbus V7.3 includes the Web 2.0 based user interface previously provided by IBM Tivoli Netcool/Webtop.

IBM Tivoli Netcool/OMNIbus is priced using the following chargeable components and metrics:

- **Base per install** - Each application instance of an ObjectServer is considered a single installation.
- **Resource Value Unit (RVU) per tier** - RVU is a unit of measure based on the number of units of a specific resource used or managed. Licensee must obtain sufficient entitlements for the number of RVUs required for licensee's environment as specified in VUE N. RVU entitlements are specific to the program and may not be exchanged, interchanged, or aggregated with RVU entitlements of another program. The unit of measure for this program is per tier described below:
  - Event Device Tier
  - Event Basic Device Tier
  - Event EMS Tier
  - Event Q3 EMS Tier

**Event Device Tier** - A Device in the context of the Event Device Tier is an element that has the capability to initiate a notification or respond to a request for notification. Examples include, but are not limited to, servers, routers, and switches.

**Event Basic Device Tier** - A Basic Device in the context of the Event Basic Device Tier is an infrastructure sensor or network Subcriber Unit that has the capability to initiate a notification or respond to a request for notification. Examples include, but are not limited to, point-of-sale terminals, printers, VoIP telephones, dslams, cable modems, and plant equipped with sensors for event notification.

**Event EMS Tier** - An EMS in the context of the Event EMS Tier is an instance of an Element Management System or application managed using generic technologies excluding applications used solely for consolidation of multiple data sources (for example, trap consolidation) where Device pricing is to be applied. Examples include third-party and vendor element management systems, Oracle, mainframe systems per 400 MSUs, and IBM Tivoli Monitoring only for the forwarding of situation events relating to performance data.

**Event Q3 EMS Tier** - A Q3 EMS in the context of the Event Q3 EMS Tier is an instance of an Element Management System interfaced to via the Q3 protocol.

To determine the number of RVUs applicable to licensee use of the program, licensee must multiply the number of managed entities in a tier by the applicable RVU Factors in VUE N.

**Pricing example:** Customer installs 2 instances of the IBM Tivoli Netcool/OMNIbus ObjectServer, is managing 300 point-of-sale terminals, and 3 Element Management Systems. The customer requires the following:
- Quantity of 2 IBM Tivoli Netcool/OMNIbus Base Install (1 for each instance installed)
- Quantity of 3 of IBM Tivoli Netcool/OMNIbus Event EMS Tier (3 instances multiplied by factor of 1.0)
- Quantity of 275 IBM Tivoli Netcool/OMNIbus Basic Device Tier (100 multiplied by factor of 1.0 (100), added to 150 multiplied by a factor of 0.9 (135))

IBM Tivoli Netcool/OMNIbus V7.3 includes the Web 2.0 based user interface previously provided by IBM Tivoli Netcool/Webtop. IBM Tivoli Netcool/OMNIbus is priced using the following chargeable components and metrics:
IBM Tivoli Network Manager IP Edition V3.9

IBM Tivoli Network Manager IP Edition is priced using the following chargeable components and metrics:

- **Base per install** - Each running instance of the program's Network Connectivity and Information Model is considered an installed copy of a Base Install.

- **Resource Value Unit (RVU) per Tier** - the unit of measure for this program is per tier described below:
  - where resources counted are Devices:
    - Network Device Tier
  - where resources counted are Basic Devices:
    - Network Basic Device Tier

**Network Device Tier** - A device in the context of the Network Device Tier is an element that has the capability to initiate a notification or respond to a request for notification. Examples include, but are not limited to, routers and switches.

**Network Basic Device Tier** - A Basic Device in the context of the Network Basic Device Tier is a resource with limited computing power, equipment monitored by a special purpose sensor or telemetry device, or Network Subscriber Unit (NSU). Examples include, but are not limited to, point-of-sale terminals, printers, VoIP telephones, dsl modems, cable modems, and assets such as production equipment, facilities related items, and transportation-related items.

To determine the number of RVUs applicable to licensee use of the program, licensee must multiply the number of managed entities in a tier by the applicable RVU Factors in VUE N.

**IBM Tivoli Network Manager IP Edition Pricing example:**
The customer is running two instances of IBM Tivoli Network Manager IP V3.9 (but sharing one Network Connectivity and Information Model instance) and would like network management capabilities for 500 network routers and switches.

The customer requires the following:

- Quantity of 1 IBM Tivoli Network Manager Base Install (1 for each Network Connectivity and Information Model database)
- Quantity of 435 of IBM Tivoli Network Manager Network Device Tier (100 multiplied by factor of 1.0 (100), added to 150 multiplied by a factor of 0.9 (135), added to 250 multiplied by a factor of 0.8 (200))

**0.9**

IBM Tivoli Netcool/Impact

IBM Tivoli Netcool/Impact is priced per install; each Impact application instance is considered a single install of Impact. It is also priced by tier by the amount of each type of technology that each Impact install (application instances) uses. The number of RVUs required per tier is defined below. Volume scaling is applied to each tier as indicated below per specific VUE (Volume Unit Exhibit).

**Tier 1 (VUE C) IBM Tivoli Netcool/Impact**

This is counted by the number of Impact installs (application instances) any of each of the following technologies is used with:

- DB2™
- Informix™
- Microsoft SQL server
- ODBC
- Oracle
- PostgresSQL
- Sybase
- MySQL
- Flat files
• XML destinations
• LDAP
• TCP/IP Socket

**Tier 1 (VUE C) Third Party IBM Tivoli Netcool/Impact**
This is counted by the number of Impact installs (application instances) any of each of the following technologies is used with:
• SNM

**Tier 2 (VUE C) IBM Tivoli Netcool/Impact**
This is counted by the number of Impact installs (application instances) any of each of the following technologies is used with:
• Alcatel 5620
• Cramer Dimension
• Smallworld

**Tier 3 (VUE C) IBM Tivoli Netcool/Impact**
This is counted by the number of Impact installs (application instances) any of each of the following technologies is used with:
• Vitria
• JMS

**Tier 3 (VUE C) Third Party IBM Tivoli Netcool/Impact**
This is counted by the number of Impact installs (application instances) any of each of the following technologies is used with:
• Tibco
• Web Services

**Pricing examples**

**Example 1a**
ABC Consumer Goods deploys IBM Tivoli Netcool/Impact over two application instances across four processor cores (multiprocessor core capable) on two servers and each appliance instance interfaces to Oracle, LDAP, and DB2 databases.
Calculation: two Impact application instances connecting to three Tier 1 databases each = six DSA Tier 1 connections.

<table>
<thead>
<tr>
<th>Impact DSA Tier 1</th>
<th>Quantity in Customer Environment</th>
<th>Installs Required</th>
<th>Net Resource Value Units Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Installs</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Impact Tier 1</td>
<td>6</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Example 1b**
ABC Consumer Goods deploys IBM Tivoli Netcool/Impact over three application instances across six processor cores (multiprocessor core capable) on three servers and each application instance interfaces to Oracle databases, LDAP systems, TCP/IP Sockets, and XML.
Calculation: 3 Impact application instances interfacing to 4 Tier 1 databases each = 12 DSA Tier 1 connections.
I

IBM Tivoli Netcool Performance Manager

- **Base per application instance** - An IBM Tivoli Netcool Performance Manager (TNPM) application instance consists of up to one IBM Tivoli Netcool/Proviso database instance and up to one IBM Tivoli Netcool Performance Manager for Wireless database instance, and the other components of the program that connect to these database instances. If a customer deploys only one IBM Tivoli Netcool Performance Manager for Wireless database instance and its associated components, this constitutes one TNPM application instance. If this same customer deployed one IBM Tivoli Netcool/Proviso database instance, this is still considered one TNPM application instance. If this customer then decides to deploy either another IBM Tivoli Netcool/Proviso database instance or an IBM Tivoli Netcool Performance Manager for Wireless database instance, this constitutes a second TNPM application instance.

- **Base per Resource Value Unit** - Resource Value Units will be calculated in the following manner. Supported entities are assigned a certain point value based on size or performance level of the entities. Resource Value Units are calculated from this total number of points based on factors in Volume Unit Exhibit (VUE) 002 Table F below.

- **Technology Pack Tier 1 - 5 per application instance** - IBM has assigned each IBM Tivoli Netcool Performance Manager Technology Pack to a Technology Pack Tier based on price. You must acquire a Proof of Entitlement (PoE) for the corresponding Tier for each Technology Pack that runs on an application instance of TNPM. You may not substitute a PoE for a Technology Pack from one Tier for a PoE for a Technology Pack from a different Tier.

- **Optional features**
  - Data access API for wireline - per application instance
  - Real time reports for wireline - per application instance

An application instance is required for each of these optional features which operates on an IBM Tivoli Netcool Performance Manager Base per application instance.

**Points** are assigned to managed entities according to the following table:

<table>
<thead>
<tr>
<th>Managed entity point table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed entity: Points:</td>
</tr>
<tr>
<td>Large switches, SP Core 5,000</td>
</tr>
<tr>
<td>WAN Services, Service Aggregation 500</td>
</tr>
<tr>
<td>Large Branch Routers / Switches 250</td>
</tr>
<tr>
<td>Small Branch and CPE Routers 70</td>
</tr>
<tr>
<td>Wireless Cell/Sector 70</td>
</tr>
<tr>
<td>Enterprise VoIP Phones 3</td>
</tr>
<tr>
<td>Carrier VoIP Phones 1</td>
</tr>
<tr>
<td>Subscriber, for example DSL, Cable 1</td>
</tr>
</tbody>
</table>

Contact your IBM representative or IBM Business Partner for a current list of managed entities.

To determine the number of RVUs applicable to licensee use of the program, licensee must
multiply the
points derived from the managed entity tiers by the applicable RVU Factors in VUE F.

**Technology Pack Tier 1:** IBM has assigned each IBM Tivoli Netcool Performance Manager Technology Pack to a Technology Pack Tier based on price. This list is accurate as of the date of this announcement.

Contact your IBM representative or IBM Business Partner for a current list of technology packs as appropriate.

**Wireline:**
- Active Directory ASM
- Alcatel 7330/7302 ISAM
- Alcatel Platform Monitoring
- Apache ASM
- Cisco AAL5 VCC (ATM Channel Endpoint)
- Cisco Catalyst Port QoS
- Cisco Class Based QOS
- Cisco CMTS
- Cisco Device
- Cisco Integrated Dashboard
- Cisco IP SLA
- Cisco IP SLA Administration
- Cisco IPT (CCM 4.0 to 6.0)
- Cisco MPLS TE (Tunnel)
- Cisco NBAR
- DISMAN Ping MIB
- DSL (RFC 2662)
- Exchange Server ASM
- Frame Relay (RFC 2115)
- Huawei Device Pack
- Huawei MPLS
- Huawei Ping
- IneoQuest Media Monitor (IPTV)
- IP Multicast
- Juniper E Series
- Juniper E Series QOS
- Juniper M/T Chassis
- Juniper M/T QOS
- Juniper MPLS TE
- Juniper RPM
- Lotus Notes ASM
- MIB-2
- Netcool/Proviso Monitoring
- Oracle ASM
- RADIUS Accounting
- RADIUS Authentication
- Redback SmartEdge 800
- SAP ASM
- Server Monitoring (SSM)
- Sybase ASM
- Weblogic ASM
- Websphere ASM

**Technology Pack Tier 2:** IBM has assigned each IBM Tivoli Netcool Performance Manager Technology Pack to a Technology Pack Tier based on price. This list is accurate as of the date of this announcement.

**Wireline:**
- ACME Packet (SBC)
- ACME Packet (SBC) HDR
Alcatel 5020 MGC
Convedia Media Server
Radcom OmniQ
Tekelec (VocalData) VoIP App Server

**Wireless:**
Alcatel BSS B9
Alcatel BSS B10
Ericsson BSS R07B
Ericsson BSS R12 06B
Ericsson GGSN R3
Ericsson GGSN R5
Ericsson MGW R4.1
Ericsson MGW R4.2
Ericsson MGW R5.1
Ericsson NSS 12.1
Ericsson SGSN R6
Ericsson SGSN R7
Ericsson SGSN R8
Ericsson UTRAN P5
Ericsson UTRAN P6
Ericsson UTRAN P7
Huawei BSS V300R002005
Huawei BSS V300R007
Huawei BSS V900R008
Huawei GGSN V800R002
Huawei GGSN V800R006
Huawei MGW V200R006
Huawei MSC-S V100R006
Huawei SGSN V800R6
Huawei SGSN V800R007
Huawei UTRAN R008
Huawei UTRAN V200R010
Motorola BSS GSR8
Motorola GGSN
Nokia BSS S12
Nokia MGW U2/U3C
Nokia MGW U4
Nokia NSS M13.5/13.2
Nokia NSS M14.1
Nokia UTRAN RAS5.1
Nokia UTRAN RAS6.0
Nortel BSS 14.0
Nortel BSS 15.0
Nortel BSS V16
Nortel EVDO 4
Nortel EVDO 5
Nortel EVDO 6
Nortel MGW 20
Nortel MSC 20

Nortel MTX 14.0
Nortel MTX 15.0
Nortel PDSN 6.0
Nortel UTRAN R5
Siemens BSS BR9
Siemens BSS BR10
Siemens GSN 4.0
Siemens ngHLR
Siemens NSS SR 12
Siemens NSS SR 13
Siemens UTRAN R5
Siemens UTRAN UMR6.5
ZTE EVDO V8.0.1.9
ZTE EVDO V8.19.04
ZTE PDSN 3.5.0.3

**Technology Pack Tier 3:** IBM has assigned each IBM Tivoli Netcool Performance Manager Technology Pack to a Technology Pack Tier based on price. This list is accurate as of the date of this announcement.
Contact your IBM representative or IBM Business Partner for a current list of technology packs as appropriate.

**Wireline:**
- Alcatel 5620 NM
- Alcatel 5620 SAM (support SAM 4.0-6.1)
- Alcatel 7510
- Alcatel 8605 MMAS
- Alcatel Lucent 5529 SDC
- Cisco NetFlow / IPFLIX
- Cisco WAN Manager
- Empirix Hammer XMS
- Ericsson Call Server
- EXFO Brixworks
- Fujitsu MSAN
- Huawei N2000 Access
- Huawei NetStream
- Huawei T2000 (Transmission)
- Nortel BCP7200
- Nortel MG3200

**Technology Pack Tier 4:** IBM has assigned each IBM Tivoli Netcool Performance Manager Technology Pack to a Technology Pack Tier based on price. This list is accurate as of the date of this announcement. Contact your Account Manager for a current list of technology packs as appropriate.

**Wireless:**
- Aircell ABS
- Aircell IP
- Aastra MX-One
- Custom Data Storage
- Ericsson MSN
- GPRS Vendor Neutral
- GSM Vendor Neutral
- Intervoice PrePaid
- Intervoice SMS-C 7
- Nokia SMSC
- Nokia WAP
- Tekelec Eagle5 STP 37.6.0
- UMTS Vendor Neutral

**Technology Pack Tier 5:** IBM has assigned each IBM Netcool Performance Manager Technology Pack to a Technology Pack Tier based on price. This list is accurate as of the date of this announcement.

**Wireline:**
- Nortel CS2K

**Wireless:**

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OL-25995-01 IBM Tivoli Netcool For Cisco Prime Licensing
A customer acquires one Base license (application instance) of the IBM Tivoli Netcool Performance Manager to manage their wireline network. The customer also wants to manage 1 Alcatel 5620 NM Element Management System (EMS), 400,000 carrier VoIP phones and 20 large branch routers (managed by the EMS). In addition, the customer also wants to deploy one instance of Real-time Reports for Wireline.

Per the Points table above, 400,000 phones and 20 large branch routers total 405,000 points. 405,000 points requires 18,000 RVUs per VUE 002 Table F (60,000*0.05 + 240,000*0.045 + 105,000*0.040).

Device RVU quantity (part number quantity) to order is 18,000. The Alcatel 5620 EMS requires a Technology Pack (Tier 3) but is not counted as an "entity". Only the devices managed through the EMS are counted as entities (20 large branch routers in this example) and participate to the points and RVU total.

** IBM Tivoli Netcool Performance Flow Analyzer **

IBM Tivoli Netcool Performance Flow Analyzer is priced using the following chargeable components and metrics:

- **Base per install** - An IBM Tivoli Netcool Performance Flow Analyzer Base consists of one instance of the product installed.
- **Base per Resource Value Unit (RVU)** - RVUs will be calculated in the following manner. Supported entities are assigned a certain point value based on size or performance level of the entities. RVUs are calculated from this total number of points based on factors in Volume Unit Exhibit (VUE) 002 Table F below.

Important: In computing the RVU, it is important to count only those network resources that are sending flow records to the flow analyzer. There may be many devices in a network, but only a subset of these are configured to track flows and forward that information in flow records to the flow analyzer. For example, in a managed Virtual Private Network (VPN), a service provider might configure the edge devices to track the flows coming in from the customer sites, with no flow monitoring in the core. In this case, only those edge devices are counted for computing RVUs. In another configuration a service provider might only configure flow collection on routers connected to peer networks. In that situation, only those peering routers are counted for computing RVUs.

Points are assigned to managed entities according to the following table:

<table>
<thead>
<tr>
<th>Managed entity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large switches, SP Core</td>
<td>5,000</td>
</tr>
<tr>
<td>WAN Services, Service Aggregation</td>
<td>500</td>
</tr>
</tbody>
</table>
To determine the number of RVUs applicable to licensee use of the program, licensee must multiply the points derived from the managed entity tiers by the applicable RVU Factors in VUE F.

TNPFA Pricing Example:
A set of customer devices that are sending flow records to the flow analyzer consists of managed entities, which total 405,000 points according to the managed entity point table.
- 405,000 points requires 18,000 RVUs per VUE 002 Table F
- (60,000*0.05 + 240,000*0.045 + 105,000*0.040)
- RVU quantity (part number quantity) to order is 18,000

IBM Tivoli Netcool Performance Flow Analyzer is not interchangeable with IBM Tivoli Netcool Performance Manager for the purpose of the calculation of points from the managed entity table, the resulting RVU calculation, nor the resulting entitlement.

BM Tivoli Netcool Service Quality Management Center
IBM Tivoli Service Quality Management Center is a bundle of three components: IBM Tivoli Netcool Business Service Manager, IBM Tivoli Netcool Service Quality Manager, and IBM Tivoli Netcool Customer Experience Manager. The bundle is priced by the following chargeable components and metrics.

All components require the following metric: Base per install - per physical site, production, hot standby, non-production are each considered a single install. The number of base per install components required are the same regardless of how many components of the bundle are being licensed.

IBM Tivoli Netcool Service Quality Manager
Data Source Tier 1 per connection - Per data source type (for example, PM data, CDR data, Probe data)

Subscribers Tier 2 per Resource Value Unit - The license for a TNSQM Service Solutions is derived from counting the total number of subscribers in the network and using the VUE 002 Table E below to determine the appropriate resource Value Units required.

IBM Tivoli Netcool Customer Experience Manager
Data Source Tier 1 per connection - Per data source type (for example, PM data CDR data, Probe data). Subscribers Tier 2 per Resource Value Unit - The license for a TNCEM Service Solution is derived from counting the total number of subscribers in the network and using VUE 002 Table E below to determine the appropriate resource Value Units required.

IBM Tivoli Netcool Business Service Manager
Tier 1 devices per Resource Value Unit - The following probes or devices are considered Tier 1. The number of Resource Value Units required is based on VUE002 Table B. This is counted by the number of end devices monitored via:

- SNMP traps
- Syslog messages
- Syslogd messages
- BMC Patrol per processor
- TL1
- Ping
- ISS SiteProtector

And the number of:

- Oracle Tables monitored
- HTTPD Common Log Format monitored
- HTTPD Server Error Log monitored
- Windows log files monitored
- Cisco PIX monitored
- Cisco SDEE monitored
- Checkpoint Firewall-1 monitored
- Cisco ACS monitored (each instance of Cisco ACS counts as 20 RVUs)
- IBM Tivoli Monitoring managed processor monitored
- IBM Tivoli Enterprise Console managed processor monitored (where these are not consolidated via a TEC server)
- Devices integrated via the EIF Probe per managed processor monitored

Tier 2 Devices per Resource Value Unit - The following probes or devices are considered Tier 2. The number of Resource Value Units required is based on VUE002 Table B. This is counted by the number of managed devices from the following list:

- Pulsepoint
- RADIUS
- Siemens DCO
- Ericsson AXE 10 per Class 5 Voice Switch
- Nortel DMS per Class 5 Voice Switch
- Alcatel DSC Dex per Class 5 Voice Switch
- Marconi System X per Class 5 Voice Switch
- Avaya Definity G3 per switch
- Lucent ECP
- Lucent 5ESS - Class 5 Voice Switch
- Ericsson ACP 1000
- Arcom Environmental Monitoring System
- Comverse
- Nortel DMS 10
- Nortel Meridian
- Alcatel MT20
- N.E.T. Promina
- Ericsson MD110
- Hewlett Packard OpenView NNM
- IBM NetView/6000
- DEC VAX Operator Communication Facility
- Oracle
- Enterprise SNMP EMS
- Polycenter Watchdog
- SUN Solstice Enterprise Manager
- Freshwater Sitescope
- SUN SunNet Manager
- Castlerock SNMPC
• Aprisma Spectrum
• Sun ManagementCenter
• Compaq Tandem
• CA Unicenter TNG
• Hewlett Packard Vantage Point Operations
• Microsoft Operations Manager (MOM)
• Microsoft System Center for Operations 2007 (SCOM 2007)
• CFS Building Management
• CMS400
• FDF Server - Single Connection
• N.E.T. IDNX
• Hewlett Packard IT/Operations Center
• Siemens Landis and Staefa
• Open NerveCenter
• N.E.T. Open/5000
• Nettlabs (DiMONS 2G)
• Nortel Multi-service Data Manager

And by the number of:
• E-mail systems
• Sockets
• Executable programs
• FIFO queues
• Stdin feeds
• Log files monitored
• RoboMon Element Manager
• TEC [AIX|HP|Solaris] Oracle
• Tivoli Enterprise Console (TEC ODBC)

And by the number of databases managed using:
• ODBC
• Informix

This is counted by the number of connections to the managed devices in the following list:

• Nokia NMS100
• Nortel BSSM
• Nortel TN-MS EC1 Element Controller for TN-1X
• Nortel SB OSS
• Nortel Universal Signalling Point (USP)
• Nortel BB STP
• Octel Voice Message Switch
• Okeford
• Telco Research ORBi-TEL
• Oryx EMS for Exel Switches
• Ascom PANMAN
• Dantel PointMaster
• Ion Networks Sentinel 2000
• Servelec
• Marconi ServiceOn Access
• Siemens EWSD Logfile
• SNM-OS probe
• Siemens TNMS (SNMP)
• Siemens HMS (rs232)
• Airspan Sitespan
• ECI/Telematics
• Ascom TimePlex TimeView/2000
• Ericsson Xmate
• PDS Snyder
• SNMP Telecom EMS
• Huawei T2000 MML
• Lucent ITM-SC
• Alcatel S12
• Nortel EV-DO
• NORTEL IEMS
• Motorola OMC-R (Iden)
• ADAM NOMS
• Lucent Agile ATM
• Alcatel 1000 E10/OCB-283
• Alcatel OMC-R (Terminal Server Connection)
• Alcatel OMC-S
• Telstra AMS
• Cisco CEMF
• Ascom CLOG
• DAWCOM
• Nortel Digital Fault Management (DFMS)
• Tekelec Eagle STP
• ECI/eNM
• Nortel EIF
• Marconi EMOS
• Fujitsu FENS
• FLEXR
• Inet Geoprobe
• Glenayre VMS
• Hughes
• KBU Fivemere
• Fibermux LightWatch
• Lucent ITM-NM/OMS
• ADC Metrica NPR
• NewNet SMS
• NICAD

• Tellabs 2100
• Alcatel NMC 1300
• Tandem SCP
• Lucent OTAF/SDHLR
• Telcordia ISCP-DRS-SPACE
• Alcatel AWS
• Lucent NFM
• Fujitsu Netsmart
• Lucent Wireless ASCII
• Telcordia Wireless ASCII
• Tekelec LSMS
• Prognosis
• Nortel MG9000
• Nortel PTM
• Marconi ServiceOn Data
• Ericsson BNSI
• Siemens TNMS (CORBA)
• Motorola OMC-R (3GPP)
• Huawei T2000 CORBA
• Huawei N2000 CORBA
• Cisco CTM (CORBA)
• NEC Director (CORBA)
• ECI Lightsoft CORBA
• Fujitsu ICS Probe
• Lucent Wavestar SNMS
Pricing Example

A service provider deploys IBM Tivoli Netcool Service Quality Management Center at its country site. The customer only wants to deploy the IBM Tivoli Netcool Service Quality Manager (TNSQM) component of the solution in its environment to manage two services (for example VoIP and IPTV). The customer uses several servers at its country site and has seven million subscribers for both services. The services they want to manage require a total of five data source types.

<table>
<thead>
<tr>
<th>Chargeable Component Metric</th>
<th>Quantity in Customer Environment</th>
<th>Installs Required, quantity of part numbers to order</th>
<th>Connections Required, quantity of part numbers to order</th>
<th>Net Resource Value Units Required, quantity of part numbers to order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>TNSQM Data Sources</td>
<td>5</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>TNSQM Subscribers</td>
<td>14M*</td>
<td></td>
<td></td>
<td>29,900*</td>
</tr>
</tbody>
</table>

* 14 million subscribers of TNSQM (7 million subscribers x 2 services) require 29,900 resource Value Units per VUE002 Table E. The quantity to order of TNSQM Tier 2 is 29,900. The first 5 million subscribers require a factor of .0045, the next 5 million require a factor of .001 and the remaining 4 million require .0006.

In a future period, the service provider expands its network to nine million users and wants to deploy IBM Tivoli Netcool Customer Experience Manager (TNCEM) in its environment. The service provider will need to entitle all nine million subscribers for the IBM Tivoli Netcool Customer Experience Manager.
Experience Manager component. However, the service provider is already entitled to the install for the entire solution. In addition, the service provider has entitlement for seven million subscribers for IBM Tivoli Netcool Service Quality Manager for two services (VoIP and IPTV.) For the additional 4 million subscribers (2 million x 2 services) of IBM Tivoli Netcool Service Quality Manager, the service provider will use the .0006 factor in VUE002 Table E.

* The 2 million additional TNSQM subscribers entitled to the 2 services require 4 million additional subscriber licenses at .0006 factor per VUE002 Table E or 2,400 Resource Value Units. The service provider is now entitled to nine million subscribers of the IBM Tivoli Netcool Service Quality Manager component for two services.

** The 9 million TNSQM subscribers for 2 new services require 32,300 Resource Value Units per VUE002 Table E. The quantity to order of TNSQM Tier 2 is 32,300. The first 5 million subscribers require a factor of .0045, the next 5 million require a factor of .001 and the remaining 8 million require .0006.

In another future period, the service provider wants to deploy the IBM Tivoli Netcool Business Service Manager (TNBSM) component. For TNBSM, the service provider's network consists of 3,000 Tier 1 devices and 20 Tier 2 devices as outlined in the metric descriptions above. The service provider is already entitled to the install metric from their original license of the solution. To deploy TNBSM, the service provider will need to entitle their 3,000 Tier 1 devices and their 20 Tier 2 devices.

* Using VUE002 Table B, the service provider requires 1,499 RVUs to entitle their 3,000 Tier 1 devices. The quantity to order is 1,499 Resource Value Units. The first 10 are at a factor of 1.0, the next 90 at a factor of .9, the next 150 at a factor of .8, the next 250 at a factor of .65, and the final 2,500 at .6.
Using VUE002 Table B the service provider requires 19 Resource Value Units to entitle their 20 Tier 2 devices. The quantity to order is 19 Resource Value Units. The first 10 at a factor of 1.0 and the next 10 at a factor of .9.

**IBM Tivoli Netcool/Reporter**

IBM Tivoli Netcool/Reporter is priced per install and per RVU. Each physical site per environment (production, hot standby, non-production) is considered a single install of Netcool/Reporter. RVU is defined below. Volume scaling is applied to tiers as indicated below per specific VUE (Volume Unit Exhibit).

**Tier 1 (VUE C) IBM Tivoli Netcool/Reporter**

Counted by the number of concurrent users.

**IBM Tivoli Business Services Manager**

IBM Tivoli Business Service Manager is priced per install and per tier RVU (Resource Value Unit). Each physical site is considered a single install of Tivoli Business Services Manager. Base per install - per physical site, production, hot standby, non-production are each considered a single install. The number of base per install components required are the same regardless of how many components of the bundle are being licensed.

RVU per tier is described below. Volume scaling is applied to tiers as indicated below per specific VUE (Volume Unit Exhibit).

**Tier 1 devices per Resource Value Unit** - The following probes or devices are considered Tier 1. The number of Resource Value Units required is based on VUE002 Table B below. This is counted by the number of end devices monitored via:

- SNMP traps
- Syslog messages
- Syslogd messages
- BMC Patrol per processor
- TL1
- Ping
- ISS SiteProtector

And the number of:

- Oracle Tables monitored
- HTTPD Common Log Format monitored
- HTTPD Server Error Log monitored
- Windows log files monitored
- Cisco PIX monitored
- Cisco SDEE monitored
- Checkpoint Firewall-1 monitored
- Cisco ACS monitored (each instance of Cisco ACS counts as 20 RVUs)
- IBM Tivoli Monitoring managed processor monitored
- IBM Tivoli Enterprise Console managed processor monitored (where these are not consolidated via a TEC server)
- Devices integrated via the EIF Probe per managed processor monitored

**Tier 2 Devices per Resource Value Unit** - The following probes or devices are considered Tier 2. The number of Resource Value Units required is based on VUE002 Table B below. This is counted by the number of managed devices from the following list:

- Pulsepoint
- RADIUS
- Siemens DCO
- Ericsson AXE 10 per Class 5 Voice Switch
- Nortel DMS per Class 5 Voice Switch
- Alcatel DSC Dex per Class 5 Voice Switch
- Marconi System X per Class 5 Voice Switch
- Avaya Definity G3 per switch
- Lucent ECP
- Lucent 5ESS - Class 5 Voice Switch
- Ericsson ACP 1000
- Arcom Environmental Monitoring System
- Comverse
- Nortel DMS 10
- Nortel Meridian
- Alcatel MT20
- N.E.T. Promina
- Ericsson MD110
- Hewlett Packard OpenView NNM
- IBM NetView/6000
- DEC VAX Operator Communication Facility
- Oracle
- Enterprise SNMP EMS
  Polycenter Watchdog
- SUN Solstice Enterprise Manager
- Freshwater Sitescope
- SUN SunNet Manager
- Castlerock SNMPC
- Aprisma Spectrum
- Sun ManagementCenter
- Compaq Tandem
- CA Unicenter TNG
- Hewlett Packard Vantage Point Operations
- Microsoft Operations Manager (MOM)
- Microsoft System Center for Operations 2007 (SCOM 2007)
- CFS Building Management
- CMS400
- FDF Server - Single Connection
- N.E.T. IDNX
- Hewlett Packard IT/Operations Center
- Siemens Landis and Staefa
- Open NerveCenter
- N.E.T. Open/5000
- Netlabs (DiMONS 2G)
- Nortel Multi-service Data Manager

And by the number of:
- E-mail systems
- Sockets
- Executable programs
- FIFO queues
- Stdin feeds
- Log files monitored
- RoboMon Element Manager
- TEC [AIX|HP|Solaris] Oracle
- Tivoli Enterprise Console (TEC ODBC)

And by the number of databases managed using:
- ODBC
- Informix

This is counted by the number of connections to the managed devices in the following list:
• Nokia NMS100
• Nortel BSSM
• Nortel TN-MS EC1 Element Controller for TN-1X
• Nortel SB OSSi
• Nortel Universal Signalling Point (USP)
• Nortel BB STP
• Octel Voice Message Switch
• Okeford
• Telco Research ORBi-TEL
• Oryx EMS for Exel Switches
• Ascom PANMAN
• Dantel PointMaster
• Ion Networks Sentinel 2000
• Servelec
• Marconi ServiceOn Access
• Siemens EWSD Logfile
• SNM-OS probe
• Siemens TNMS (SNMP)
• Siemens HMS (rs232)
• Airspan Sitespan
• ECI/Telematics
• Ascom TimePlex TimeView/2000
• Ericsson Xmate
• PDS Snyder
• SNMP Telecom EMS
• Huawei T2000 MML
• Lucent ITM-SC
• Alcatel S12
• Nortel EV-DO
• NORTEL IEMS
• Motorola OMC-R (Iden)
• ADAM NOMS
• Lucent Agile ATM
• Alcatel 1000 E10/OCB-283
• Alcatel OMC-R (Terminal Server Connection)
• Alcatel OMC-S
• Telstra AMS
• Cisco CEMF
• Ascom CLOG
• DAWCOM
• Nortel Digital Fault Management (DFMS)
• Tekelec Eagle STP
• ECI/eNM
• Nortel EIF
• Marconi EMOS
• Fujitsu FENS
• FLEXR
• Inet Geoprobe
• Glenayre VMS
• Hughes
• KBU Fivemere
• Fibermux LightWatch
• Lucent ITM-NM/OMS
• ADC Metrica NPR
• NewNet SMS
• NICAD
• Tellabs 2100
• Alcatel NMC 1300
• Tandem SCP
• Lucent OTAF/SDHLR
• Telcordia ISCP-DRS-SPACE
• Alcatel AWS
• Lucent NFM
• Fujitsu Netsmart
• Lucent Wireless ASCII
• Telcordia Wireless ASCII
• Tekelec LSMS
• Prognosis
• Nortel MG9000
• Nortel PTM

• Marconi ServiceOn Data
• Ericsson BNSI
• Siemens TNMS (CORBA)
• Motorola OMC-R (3GPP)
• Huawei T2000 CORBA
• Huawei N2000 CORBA
• Cisco CTM (CORBA)
• NEC Director (CORBA)
• ECI Lightsoft CORBA
• Fujitsu ICS Probe
• Lucent Wavestar SNMS
• Marconi MV38/PSB MNR
• Lucent OMC (CORBA)
• Ciena On Center
• Lucent JMTE (CORBA)
• Alcatel OS-OS
• Nokia Netact/NMS2000
• Nokia NetAct for Broadband
• Nortel EAI
• Nortel Magellan NMS
• Tellabs 8000/8100
• Alcatel 5620 SAM
• Marconi MV36/PFM
• Nortel MDM
• Alcatel 5620 Logfile
• Nortel Preside Wireless (3GPP)
• Nortel CDMA Element Management System (CEMS)
  Nortel CDMA Element Manager (CNM)
• Ericsson 3GPP (OSS-RC/RANOS/CNOS)
• Nokia NetAct for Wireless (3GPP)
• Alcatel OMC-R (3GPP)
• Siemens Switch/Radio@vantage Commander (CORBA)
• Alcatel 5620 NM CORBA
• Ericsson RANOS (3GPP)
• Nortel OMC-R (Q3)
• Alcatel OMC-R (Q3 Interface)
• Alcatel SMC 1360
• Motorola OMC-R (Q3 Interface)
• Siemens RadioCommander (Q3 Interface)
• Siemens SwitchCommander (Q3 interface)
Customer’s environment consists of 3,000 Tier 1 devices and 20 Tier 2 devices as outlined in the metric descriptions above. The customer will need to entitle their 3,000 Tier 1 devices and their 20 Tier 2 devices.

* Using VUE002 Table B, customer requires 1,499 RVUs to entitle their 3,000 Tier 1 devices. The quantity to order is 1,499 Resource Value Units. The first 10 are at a factor of 1.0, the next 90 at a factor of .9, the next 150 at a factor of .8, the next 250 at a factor of .65, and the final 2,500 at a factor of .45.

** Using VUE002 Table B customer requires 19 Resource Value Units to entitle their 20 Tier 2 devices. The quantity to order is 19 Resource Value Units. The first 10 at a factor of 1.0 and the next 10 at a factor of .9.

### Tivoli Business Service Manager for the Enterprise

#### Pricing Definitions

**Install**

Install is a unit of measure by which the Program can be licensed. An Install is an installed copy of the Program on a physical or virtual disk made available to be executed on a computer. Licensee must obtain an entitlement for each Install of the Program.

**Resource Value Unit (RVU)**

Resource Value Unit (RVU) is a unit of measure by which the Program can be licensed. RVU Proofs of Entitlement are based on the number of units of a specific resource used or managed by the Program. Licensee must obtain sufficient entitlements for the number of RVUs required for Licensee’s environment for the specific resources as specified in the table below. RVU entitlements are specific to the Program and the type of resource and may not be exchanged, interchanged, or aggregated with RVU entitlements of another program or resource. Instead of the entitlements required for the Resources used by the Program directly, Licensee must obtain entitlements for this Program sufficient to cover the Resources managed by the Program.

**General Charge Terms**

Resources counted for the purpose of calculating RVUs are based on devices and are organized into

<table>
<thead>
<tr>
<th>Chargeable Component metric</th>
<th>Quantity in Customer Environment</th>
<th>Net Resource Value Units required, quantity of part numbers to order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 devices</td>
<td>3,000</td>
<td>1,499 *</td>
</tr>
<tr>
<td>Tier 2 devices</td>
<td>20</td>
<td>19 **</td>
</tr>
</tbody>
</table>
Tiers.

Tier 1
The following probes or devices are counted for Tier 1 calculation. A Tier 1 probe or device is a resource that sends metrics that can be consumed by TBSM. This is counted by the number of end devices monitored via:
- SNMP traps
- Syslog messages
- Syslogd messages
- BMC Patrol per processor
- TL1
- Ping
- ISS SiteProtector

And the number of monitored devices from the following list:
- Oracle Tables
- HTTPD Common Log Format
- HTTPD Server Error Log
- Windows log files
- Cisco PIX
- Cisco SDEE
- Cisco ACS
- Checkpoint Firewall-1
- IBM Tivoli Monitoring managed processor
- IBM Tivoli Enterprise Console managed processor
- Each Integrated Facility for Linux (IFL)

Tier 2
The following probes or devices are considered Tier 2. A Tier 2 is a Special Network classification of switches/routers and specialized consolidation product(s) that sends metrics that can be consumed by TBSM. This is counted by the number of managed devices from the following list:
- Pulsepoint
- RADIUS
- Siemens DCO
- Ericsson AXE 10 per Class 5 Voice Switch
- Nortel DMS per Class 5 Voice Switch
- Alcatel DSC Dex per Class 5 Voice Switch
- Marconi System X per Class 5 Voice Switch
- Avaya Definity G3 per switch
- Lucent ECP
- Lucent 5ESS - Class 5 Voice Switch
- Ericsson ACP 1000
- Arcom Environmental Monitoring System
- Conversor
- Nortel DMS 10
- Nortel Meridian
- Alcatel MT20
- N.E.T. Promina
- Ericsson MD110
- Hewlett Packard OpenView NNM
- IBM NetView/6000
- DEC VAX Operator Communication Facility
- Oracle
- Enterprise SNMP EMS
- Polycenter Watchdog
- Sun Solstice Enterprise Manager
- Freshwater Sitescope
- Sun SunNet Manager
Castlerock SNMPC
Aprisma Spectrum
Sun ManagementCenter
Compaq Tandem
CA Unicenter TNG
Hewlett Packard Vantage Point Operations
Microsoft Operations Manager (MOM)
Microsoft System Center for Operations 2007 (SCOM 2007)
CFS Building Management
CMS400
FDF Server - Single Connection
N.E.T. IDNX
Hewlett Packard IT/Operations Center
Siemens Landis and Staefa
Open NerveCenter
N.E.T. Open/5000
Netlabs (DiMONS 2G)
Nortel Multi-service Data Manager
And by the number of:
E-mail systems
Sockets
Executable programs
FIFO queues
Stdin feeds
Log files monitored
RoboMon Element Manager
TEC (AIX/HP/Solaris) Oracle
Tivoli Enterprise Console (TEC ODBC)

And by the number of databases managed using:
ODBC
Informix®

This is counted by the number of connections to the managed devices in the following list. A connection is defined as data being consumed by TBSM from any of the following devices:
Nokia NMS100
Nortel BSSM
Nortel TN-MS EC1 Element Controller for TN-1X
Nortel SB OSSI
Nortel Universal Signalling Point (USP)
Nortel BB STP
Octel Voice Message Switch
Okeford
Telco Research ORBi-TEL
Oryx EMS for Exel Switches
Ascom PANMAN
Dantel PointMaster
Ion Networks Sentinel 2000
Servelec
Marconi ServiceOn Access
Siemens EWSD Logfile
SNM-OS probe
Siemens TNMS (SNMP)
Siemens HMS (rs232)
Airspan Sitespan
ECI/Telematics
Ascom TimePlex TimeView/2000

Ericsson Xmate
PDS Snyder
SNMP Telecom EMS
Huawei T2000 MML
Lucent ITM-SC
Alcatel S12
Nortel EV-DO
NORTEL IEMS
Motorola OMC-R (Iden)
ADAM NOMS
Lucent Agile ATM
Alcatel 1000 E10/OCB-283
Alcatel OMC-R (Terminal Server Connection)
Alcatel OMC-S
Telstra AMS
Cisco CEMF
Ascom CLOG
DAWCOM
Nortel Digital Fault Management (DFMS)
Tekelec Eagle STP
ECI/eNM
Nortel EIF
Marconi EMOS
Fujitsu FENS
FLEXR
Inet Geoprobe
Glenayre VMS
Hughes
KBU Fivemere
Fibermux LightWatch
Lucent ITM-NM/OMS
ADC Metrica NPR
NewNet SMS
NICAD
Tellabs 2100
Alcatel NMC 1300
Tandem SCP
Lucent OTAF/SDHLR
Telcordia ISCP-DRS-SPACE
Alcatel AWS
Lucent NFM
Fujitsu Netsmart
Lucent Wireless ASCII
Telcordia Wireless ASCII
Tekelec LSMS
Prognosis
Nortel MG9000
Nortel PTM
Marconi ServiceOn Data
Ericsson BNSI
Siemens TNMS (CORBA)
Motorola OMC-R (3GPP)
Huawei T2000 CORBA
Huawei N2000 CORBA
Cisco CTM (CORBA)
NEC Director (CORBA)

ECI Lightsoft CORBA
Fujitsu ICS Probe
Lucent Wavestar SNMS
Marconi MV38/PSB MNR
Lucent OMC (CORBA)
Ciena On Center
Lucent JMTE (CORBA)
Alcatel OS-OS
Nokia Netact/NMS2000
Nokia NetAct for Broadband
Nortel EAI
Nortel Magellan NMS
Tellabs 8000/8100
Alcatel 5620 SAM
Marconi MV36/PFM
Nortel MDM
Alcatel 5620 Logfile
Nortel Preside Wireless (3GPP)
Nortel CDMA Element Management System (CEMS)
Nortel CDMA Element Manager (CNM)
Ericsson 3GPP (OSS-RC/RANOS/CNOS)
Nokia NetAct for Wireless (3GPP)
Alcatel OMC-R (3GPP)
Siemens Switch/Radio/@vantage Commander (CORBA)
Alcatel 5620 NM CORBA
Ericsson RANOS (3GPP)
Nortel OMC-R (Q3)
Alcatel OMC-R (Q3 Interface)
Alcatel SMC 1360
Motorola OMC-R (Q3 Interface)
Siemens RadioCommander (Q3 Interface)
Siemens SwitchCommander (Q3 interface)

Tier 3
Tier 3 required RVUs is based on the total number of MSUs managed by TBSM. For the purpose of RVU calculation, the required number of RVUs are calculated on the full machine based MSU capacity of the machine(s) TBSM is managing.

An MSU is defined as millions of Central Processing Unit (CPU) service units per hour; the measure of capacity used to describe the computing power of the hardware processors on which S/390 or System z software runs. MSU values are determined by the hardware vendor, IBM, or Software Compatible Vendors (SCVs). For more information on mainframe MSU rated capacity, see 'The IBM System z Machines Exhibit (Z125-3901)' or this web page http://www03.ibm.com/systems/z/resources/swprice/reference/exhibits/hardware.html.

RVU Calculation
The total number of RVUs required for Licensee’s use of the Program is determined by multiplying the number of managed entities in each tier by the RVU factor determined from the following table and summing the results.

<table>
<thead>
<tr>
<th># Resources</th>
<th>RVU per Resource</th>
<th>Maximum # of RVUs</th>
<th>Cumulative # of RVUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 0</td>
<td>To 100</td>
<td>1.0</td>
<td>100</td>
</tr>
</tbody>
</table>
Pricing Example
Customer’s environment consists of 3,000 Tier 1 devices, 20 Tier 2 devices, and 1000 MSUs as.
The customer will need to entitlements for the following Tiers as follows:

<table>
<thead>
<tr>
<th>Chargeable Component metric</th>
<th>Quantity in Customer Environment</th>
<th>Quantity of Required RVUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>3,000</td>
<td>1,435</td>
</tr>
<tr>
<td>Tier 2</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Tier 3</td>
<td>1,000</td>
<td>710</td>
</tr>
</tbody>
</table>

IBM Tivoli Netcool/OMNibus Gateways
IBM Tivoli Netcool/OMNibus Gateways is priced per connection (Tier 1) and application instance (Tier 2).

**Tier 1 IBM Tivoli Netcool/OMNibus Gateways:**
This is counted by:
- The number of Oracle databases
- The number of SNMP forwarding devices or applications
- The number of sockets (software communication points) that connection is made to

**Tier 1 3rd party IBM Tivoli Netcool/OMNibus Gateways:**
This is counted by the number of databases from the following list that connection is made to:
- Sybase
- ODBC (MySQL)
- DB2
- Informix
- MS SQL

**Tier 2 IBM Tivoli Netcool/OMNibus Gateway**
This is counted by the number of application systems from the following list that connection is made to:
- Siebel Call Center
- Metasolv TMS
- Clarify
- Vantive
- Peregrine Service Center
- Remedy ARS
- Siebel eCommunications
- Siebel Field Service Desk
- Hewlett Packard Service Desk
Pricing example
The customer deploys IBM Tivoli Netcool/OMNibus Gateway, connecting to 5 Oracle databases and 5 sockets and 1 Siebel Call center.

<table>
<thead>
<tr>
<th>Pricing Metric</th>
<th>Quantity in Customer Environment</th>
<th>Applications/Connections Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 connection</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Tier 2 application</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>