

IBM Tivoli Enhanced Value-Based Pricing Examples

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GENERAL ENVIRONMENT FOR THE EXAMPLES

The following customer network applies to all of the examples to enable the reader to see where products tend to manage something less than the entire environment.

All examples assume the customer will order the License and Maintenance

Customer ABC has an environment with **100 distributed servers**, as follows:

- Twenty (20) uniprocessor
- Sixty-five (65) 2-way processors
- Twelve (12) 4-way processors
- One (1) 8-way processor
- One (1) 14-way processor
- One (1) 24-way processor

In addition, the environment includes:

- One z800 server with two processors running Linux
- One 360-MSU zSeries server
- 1,500 clients
- 100 network nodes
- 2,000 active ports on the routers and switches

ADDING PROCESSORS

In the situation above, assume that Customer ABC upgraded their 20 uniprocessor servers to twenty 2-way servers and that this is the only change to their environment. In that case, the customer would simply purchase 20 additional processor license authorizations for each of their acquired offerings.

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PERFORMANCE and AVAILABILITY

IBM TIVOLI MONITORING FAMILY

The "IBM Tivoli Monitoring for ..." offerings are a group of products that provide best practices out-of-the-box for leading middleware and applications. These products will be based on, and require licensing for and deployment of, IBM Tivoli Monitoring as a prerequisite. These products are comprised of several independent segments, called Proactive Analysis Components (PACs). The purpose of a PAC is to monitor and manage a specific application area.

From a licensing perspective, customers are entitled to use any or all of the PACs delivered with an "IBM Tivoli Monitoring for ..." solution for each server licensed. Licensing is required for each server which deploys any or all PACs of a specific "IBM Tivoli Monitoring for ..." solution.

Assume Customer ABC decides to monitor all of the servers, plus monitor ten 2-way database servers (5 DB2 and 5 Oracle). The customer also plans to monitor performance on the 10 database servers and 10 other 4-way Web servers. Customer ABC also wants to run the Synthetic Transaction Investigator (STI) player on 2 machines.

The customer will require the following licensing:

IBM TIVOLI MONITORING

System managed	Quantity in customer's environment	Total Processors required
Uniprocessor Server	20	20
2-way Server	65	130
4-way Server	12	48
8-way Server	1	8
14-way Server	1	14
24-way Server	1	24
Total		244 processors

IBM TIVOLI MONITORING FOR DATABASES

System managed	Quantity in customer's environment	Total Processors required
2-way Server	10	20
Total		20 processors

NOTE: Licensing is valid for any database supported by the PAC. IBM Tivoli Monitoring licenses are required for each processor installed in each system with IBM Tivoli Monitoring for Databases..

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IBM TIVOLI MONITORING FOR TRANSACTION PERFORMANCE

System managed	Quantity in customer's environment	Total Processors required
2-way Server (Databases)	10	20
4-way Server (web servers)	10	40
Synthetic Transaction Investigator Players	2	4
Total		64 processors

NOTE: For IBM Tivoli Monitoring for Transaction Performance, a fixed charge of 2 processor entitlements is required for each machine running the Synthetic Transaction Investigator (STI) Player/Site Investigator (SI). The entitled machine(s) may run multiple STI playback/SI tasks against multiple Web servers for the fixed 2 processor charge. There is not an additional charge for machines running the STI recorder.

IBM TIVOLI ENTERPRISE CONSOLE

The customer will require the following licensing:

IBM TIVOLI ENTERPRISE CONSOLE

System managed	Quantity in customer's environment	Total Processors required
Uniprocessor Server	20	20
2-way Server	65	130
4-way Server	12	48
8-way Server	1	8
14-way Server	1	14
24-way Server	1	24
Total		244 processors

NOTE: There is a minimum order quantity of 125 processors for IBM Tivoli Enterprise Console.

IBM Tivoli Enterprise Console is generally licensed for the same number of processors as IBM Tivoli Monitoring.

As an alternate example, assume the customer is using IBM Tivoli Enterprise Console to manage events from an HP OpenView environment. The HP OpenView server that is feeding events to IBM Tivoli Enterprise Console is a 4-way server.

The customer will require the following licensing:

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System managed	Quantity in customer's environment	Total Processors required
HP 4-way Server	1	250
Total		250 processors

NOTE: IBM Tivoli Enterprise Console requires a 250 processor entitlements to manage a non-IBM environment (per environment managed.)

IBM TIVOLI NETVIEW AND IBM TIVOLI SWITCH ANALYZER

Customer ABC wants to manage events on their 100 network nodes (routers, switches, bridges, hubs, etc.), which have a total of 2,000 ports active. The customer manages these from one of their 2-way servers. For IBM Tivoli NetView and IBM Tivoli Switch Analyzer, the application server (where the IBM Tivoli NetView or IBM Tivoli Analyzer server code is executing) is the server to which the per-processor licensing applies. These servers are exceptions to the Environment-Managed model.

The customer will require the following licensing:

IBM TIVOLI NETVIEW

Hardware managed	Quantity in customer's environment	Total Processors required
Network Nodes	100	100
Total		100 Nodes

NetView Server	Quantity in customer's environment	Total Processors required
2-way Server (Managing / Executing Server)	1	2
Total		2 processors

IBM TIVOLI SWITCH ANALYZER

Hardware managed	Quantity in customer's environment	Total Processors required
Ports (on Switches and Routers only)	2000	2000
Total		2000 Ports

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NetView Server	Quantity in customer's environment	Total Processors required
2-way Server (Managing / Executing Server)	1	2
Total		2 processors

NOTE: For IBM Tivoli Switch Analyzer, all of the active ports on switches and routers require licensing. The ports on servers, workstations and other devices do not.

IBM TIVOLI BUSINESS SYSTEMS MANAGER

Customer ABC wants to consolidate all events for all of their distributed servers and their 360 MSU zSeries server.

The customer will require the following licensing:

IBM TIVOLI BUSINESS SYSTEMS MANAGER

System managed	Quantity in customer's environment	Total Processors required
Uniprocessor Server	20	20
2-way Server	65	130
4-way Server	12	48
8-way Server	1	8
14-way Server	1	14
24-way Server	1	24
Total		244 processors

IBM Tivoli Business Systems Manager is generally licensed for the same number of processors as IBM Tivoli Monitoring.

IBM TIVOLI BUSINESS SYSTEMS MANAGER FOR Z/OS

MSUs
Managed
360

To achieve the pricing scalability that customers have come to expect for MSU-based pricing, Tivoli Management Points continue to be the vehicle to get the right prices when the customer is acquiring the product through the Passport Advantage Program.

The Tivoli Management Point value will be based on 360 MSUs as follows:

- o First 1, 2, or 3 MSUs at the Base 3 MSU point value
 - Next 42 MSUs at the Level A (4-45 MSU) point value per MSU
 - Next 130 MSUs at the Level B (46-175 MSU) point value per MSU

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- Next 140 MSUs at the Level C (176-315 MSU) point value per MSU
- Remaining 45 MSUs at the Level D (316+ MSU) point value per MSU

Total Tivoli Management Points required for 360 MSUs of IBM Tivoli Business Systems Manager for z/OS: $5200 + 42*230 + 130*92 + 140*70 + 45*46 = \underline{\underline{38,690 \text{ Tivoli Management Points}}}$.

As the z-Series server grows, only the incremental number of Tivoli Management Points is required. For example, if the system grew to 500 MSUs, which would require 45,130 Tivoli Management Points in total, Customer ABC would need to order $45,130 - 38,690 = 6,440$ additional Tivoli Management Points.

NOTE: *As a result of the portfolio consolidation, all of the object monitors are included in the per-MSU pricing.*

IBM Tivoli Business Systems Manager for z/OS

Tivoli Management point requirements

Base 1,2, or 3	Level A 4-45	Level B 45-175	Level C 176- 315	Level D 316+
5,200	230	92	70	46

IBM TIVOLI SERVICE LEVEL ADVISOR

Customer ABC wants to manage to committed service levels across all of their distributed servers.

The customer will require the following licensing:

IBM TIVOLI SERVICE LEVEL ADVISOR

System managed	Quantity in customer's environment	Total Processors required
Uniprocessor Server	20	20
2-way Server	65	130
4-way Server	12	48
8-way Server	1	8
14-way Server	1	14
24-way Server	1	24
Total		244 processors

IBM Tivoli Server Level Advisor is generally licensed for the same number of processors as IBM Tivoli Monitoring.

IBM Tivoli Enhanced Value-Based Pricing Examples

CONFIGURATION and OPERATIONS

IBM TIVOLI WORKLOAD SCHEDULER

Customer ABC desires to schedule work on their 360 MSU z-Series server, their 14-way distributed server and their 24-way distributed server. The servers include one instance of Oracle (on the 14-way distributed server), one of SAP (on the 24-way distributed server), and one custom mainframe application (on the 14-way z-Series server).

The customer will require the following licensing:

IBM TIVOLI WORKLOAD SCHEDULER

System managed	Quantity in customer's environment	Total Processors required
14-way Server	1	14
24-way Server	1	24
	Total	38 processors

MSUs
Managed
360

The Tivoli Management point value will be based on 360 MSUs as follows

- o First 1, 2, or 3 MSUs at the Base 3 MSU point value
- o Next 42 MSUs at the Level A (4-45 MSU) point value per MSU
- o Next 130 MSUs at the Level B (46-175 MSU) point value per MSU
- o Next 140 MSUs at the Level C (176-315 MSU) point value per MSU
- o Remaining 45 MSUs at the Level D (316+ MSU) point value per MSU

Total Tivoli Management Points required for 360 MSUs of IBM Tivoli Workload Scheduler: $2800 + 42*146 + 130*28 + 140*21 + 45*15 = \underline{\underline{16,187 \text{ Tivoli Management Points}}}$.

As the z-series server grows, only the incremental number of MSUs is required. For example, if the system grew to 500 MSUs, which would require 18,287 Tivoli Management Points in total, Customer ABC would need to order $18,287 - 16,187 = 2,100$ additional Tivoli Management Points.

IBM Tivoli Workload Scheduler *Tivoli* **Management point requirements** for z/OS

Base	Level A	Level B	Level C	Level D
1,2, or 3	4-45	45-175	176-315	316+
2,800	146	28	21	15

IBM Tivoli Enhanced Value-Based Pricing Examples

IBM TIVOLI WORKLOAD SCHEDULER FOR APPLICATIONS

System managed	Quantity in customer's environment	Total Processors required
14-way Server	1	14
24-way Server	1	24
14-way z-Series Server	1	14
Total		52 processors

IBM TIVOLI CONFIGURATION MANAGER

Customer ABC desires to use IBM Tivoli Configuration Manager to inventory and distribute software to all of the distributed systems in their network (100 distributed servers) and 1,500 clients, plus their z800 server.

The customer will require the following licensing:

IBM TIVOLI CONFIGURATION MANAGER

System managed	Quantity in customer's environment	Total Processors required
Uniprocessor Server	20	20
2-way Server	65	130
4-way Server	12	48
8-way Server	1	8
14-way Server	1	14
24-way Server	1	24
2-way z-800	1	2
Total		246 processors

System managed	Quantity in customer's environment	Total Clients required
Client	1500	1500
Total		1500 Clients

IBM Tivoli Enhanced Value-Based Pricing Examples

[SECURITY MANAGEMENT](#)

IBM TIVOLI IDENTITY MANAGER EXAMPLE

Scenario 1: Customer ABC wants to initially secure access for 25,000 users through one 4-way server. The customer will require the following licensing, which is based on the scalable usage model.

Transaction 1: Assume Customer ABC wants to license IBM Tivoli Identity Manager on a per-user basis.

Pricing Metric	Quantity in Customer Environment (A)	Tivoli Management Points Required per 1,000 users (B)	Total Tivoli Management Points Required (A/1,000*B)
Per 1,000 user	25,000	1,000	25,000

Transaction 2: Customer ABC now wants to secure access for 100,000 users.

Pricing Metric	Quantity in Customer Environment (A)	Tivoli Management Points Required per 1,000 users (B)	Total Tivoli Management Points Required (A/1,000*B)
Per 1,000 users	100,000	800	80,000
		Less currently entitled	<u>(25,000)</u>
		Additional TMPs required	55,000

IBM Tivoli Identity Manager Tivoli Management Points required table

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Minimum Users	1	5,001	15,001	50,001	150,001	500,001	1,000,001	3,000,001	10,000,001	20,000,001
Maximum Users	5,000	15,000	50,000	150,000	500,000	1,000,000	3,000,000	10,000,000	20,000,000	50,000,000
TMPs per 1,000 users	1,800	1,300	1,000	800	600	250	150	60	21	12

Scenario 2: Assume Customer ABC prefers unlimited user access for their server.

The customer will require the following licensing:

IBM Tivoli Enhanced Value-Based Pricing Examples

IBM TIVOLI IDENTITY MANAGER - UNLIMITED USER OPTION

IBM Tivoli Identity Manager Server	Quantity in customer's environment	Total Processors required
4-Way Server	1	10
Total		10 Processors

NOTE: *The Unlimited User Option applies only to the 4 processors licensed. If the customer implemented another server, additional Unlimited User Option processors would be required, if the number deployed exceeds the number licensed. This licensing is based on the server(s) in which IBM Tivoli Identity Manager executes.*

** There is a minimum order quantity of 10 processors for the IBM Tivoli Identity Manager Unlimited User Option. Beyond the initial 10 processors, additional processors may be ordered in any quantity.*

IBM TIVOLI RISK MANAGER EXAMPLE

Customer ABC wants to secure their distributed servers and network nodes.

The customer will require the following licensing:

IBM TIVOLI RISK MANAGER

System managed	Quantity in customer's environment	Total Processors required
Uniprocessor Server	20	20
2-way Server	65	130
4-way Server	12	48
8-way Server	1	8
14-way Server	1	14
24-way Server	1	24
Total		244 processors

System managed	Quantity in customer's environment	Total Clients required
Network Node	100	100
Total		100 Nodes

IBM Tivoli Enhanced Value-Based Pricing Examples

IBM TIVOLI ACCESS MANAGER FOR ... EXAMPLES

IBM TIVOLI ACCESS MANAGER FOR E-BUSINESS

Customer ABC wants to initially secure access for 150,000 users through one 4-way server. The customer will require the following licensing, which is based on the scalable usage model.

Scenario 1: Customer ABC needs to secure 100,000 users accessing the network through one 4-way server.

The customer will require the following licensing:

Transaction 1: Assume Customer ABC wants to license IBM Tivoli Access Manager for e-business on a per-user basis.

Pricing Metric	Quantity in Customer Environment (A)	Tivoli Management Points Required per 1,000 users (B)	Total Tivoli Management Points Required (A/1,000*B)
Per 1,000 users	150,000	165	24,750

Transaction 2: Customer ABC wants to secure access for 400,000 users (an increase of 250,000 users)

Pricing Metric	Quantity in Customer Environment (A)	Tivoli Management Points Required per 1,000 users (B)	Total Tivoli Management Points Required (A/1,000*B)
Per 1,000 user accounts	400,000	125	50,000
		Less currently entitled	<u>(24,750)</u>
		Additional TMPs required	25,250

IBM Tivoli Access Manager for e-Business Tivoli Management Points required table

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Minimum Users	1	5,001	15,001	50,001	150,001	500,001	1,000,001	3,000,001	10,000,001	20,000,001
Maximum Users	5,000	15,000	50,000	150,000	500,000	1,000,000	3,000,000	10,000,000	20,000,000	50,000,000
TMPs per 1,000 users	650	490	260	165	125	100	50	45	30	25

Scenario 2: Assume Customer ABC prefers unlimited user access for their server.

The customer will require the following licensing:

IBM Tivoli Enhanced Value-Based Pricing Examples

IBM TIVOLI ACCESS MANAGER FOR E-BUSINESS - UNLIMITED USER OPTION

IBM Tivoli Identity Manager Server	Quantity in customer's environment	Total Processors required
4-Way Server	1	10
Total		10 Processors

NOTE: *The Unlimited User Option applies only to the processors licensed. If the customer implemented another server, additional Unlimited User Option processors would be required, if the number deployed exceeds the number licensed. This licensing is based on the server(s) in which IBM Tivoli Access Manager for e-Business executes.*

** There is a minimum order quantity/entitlement of 10 processors for the IBM Tivoli Access Manager for e-Business Unlimited User Option. Beyond the initial 10 processors, additional processors may be ordered in any quantity.*

In addition, Customer ABC wants to secure all of their distributed servers with MQSeries installed as well as the systems with UNIX operating systems (one 8-way, one 14-way, one 24-way, and 50 clients (technical workstations, each with 2 processors)).

The customer will require the following licensing:

IBM TIVOLI ACCESS MANAGER FOR BUSINESS INTEGRATION

System managed	Quantity in customer's environment	Total Processors required
Uniprocessor Server	20	20
2-way Server	65	130
4-way Server	12	48
8-way Server	1	8
14-way Server	1	14
24-way Server	1	24
Total		244 processors

IBM TIVOLI ACCESS MANAGER FOR OPERATING SYSTEMS

System managed	Quantity in customer's environment	Total Processors required
8-way Server	1	8
14-way Server	1	14
24-way Server	1	24
2-way Technical Workstations	50	100
Total		146 processors

NOTE: *All UNIX systems require the per-processor charge, whether they are clients or servers.*

IBM Tivoli Enhanced Value-Based Pricing Examples

STORAGE MANAGEMENT

IBM TIVOLI STORAGE MANAGER EXAMPLES

Scenario 1: Customer ABC wants to do basic archiving and retrieval for all of the LAN-connected distributed systems in their network. One of the 4-way servers is the managing server, as well as the z800 server, and 20 clients (that is, technical workstations, desktops, and so forth.) In addition, they want to take advantage of the application specific features required to backup five 2-way Oracle database servers.

The customer will require the following licensing:

IBM TIVOLI STORAGE MANAGER

System managed	Quantity in customer's environment	Total Processors required
Uniprocessor Server	20	20
2-way Server	65	130
4-way Server	12	48
8-way Server	1	8
14-way Server	1	14
24-way Server	1	24
2-way z-800	1	2
	Total	246 processors

System managed	Quantity in customer's environment	Total Clients required
Client	20	20
	Total	20 Clients

IBM TIVOLI STORAGE MANAGER FOR DATABASES

System managed	Quantity in customer's environment	Total Processors required
2-way Server	5	10
	Total	10 processors

NOTE: Licensing is valid for any database application supported by Tivoli Storage Manager for Databases. IBM Tivoli Storage Manager is required for each system with a database managed by Tivoli Storage Manager for Databases.

IBM Tivoli Enhanced Value-Based Pricing Examples

Scenario 2: *After implementing Scenario 1, Customer ABC decides they need the added function available in the Enterprise Edition, including disaster recovery, LAN-free backup, and space management support. The customer will trade-up their 246 IBM Tivoli Storage Manager processor entitlements to 246 processors entitlements of IBM Tivoli Storage Manager Enterprise Edition, and will trade-up their 20 IBM Tivoli Storage Manager clients to 20 clients of IBM Tivoli Storage Manager Enterprise Edition. No mixing or matching of Tivoli Storage Manager and the Enterprise Edition for interconnected systems is permitted.*