



IBM Endpoint Manager for Server Automation V8.2 simplifies server management and helps reduce costs for IT operations

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At a glance

IBM® Endpoint Manager for Server Automation V8.2, an add-on to other Tivoli® Endpoint Manager solutions, offers advanced server automation capabilities to help you lower your costs and improve efficiency. IBM Endpoint Manager for Server Automation V8.2 capabilities include:

- Improved visibility and management of all endpoints (physical and virtual) through a single, intuitive user interface including desktops, laptops, and branch office and data center servers
- Automating the management of servers and standardize operations according to businesses best practices
 - Delivers an easier way to build customization through a simple scripting language
 - Contains 1,000s of automation scripts to create customized automation
 - Allows for reuse of existing scripts to design custom automation and leverage previous investments
- Automatic updates of features and content via a subscription model to deliver new features and content automatically without painful and expensive upgrades

All of this allows you to:

- Consolidate tools, teams and processes with complete visibility and control
- Deliver systems and applications with lower skill levels
- Reduce time spent on tedious deployment tasks

For ordering, contact Your IBM representative or an IBM Business Partner.
For more information contact the Americas Call Centers at
800-IBM-CALL (426-2255).

Reference: SE001

Overview

Businesses are continuously challenged with increasing levels of complexity around both the number and type of systems they have to manage. They struggle with too many tools and teams to provide what should be simple and easy automation of routine tasks that would deliver significant improvements in productivity and allow

their resources to focus on more critical business operations. They must manage multiple endpoints including laptops, desktops, branch office servers, and data center servers, encompassing both physical and virtual machines. This is made even more challenging by expectations that administrators will respond quickly to any changes in their business, while also reducing costs and increasing efficiency. As a result, truly integrated toolsets that help businesses to better manage everything from mobile devices to servers are in high demand.

The trusted and proven IBM Endpoint Manager portfolio has expanded to include server automation. IBM Endpoint Manager for Server Automation enables users to easily create and reuse their own automation flows across groups of related servers, desktops, or laptops without the need for programming skills. In addition to facilitating custom automation flows, IBM Endpoint Manager for Server Automation offers a rich set of standard automation capabilities that provides rapid time-to-value and can help reduce operating costs. This solution provides enterprise application scalability with minimal infrastructure investment, enforces real-time endpoint configuration policies, and automates feature and content updates. In short, IBM Endpoint Manager for Server Automation can help businesses optimize their IT efficiency through standardization and consolidation of their tools, teams, and processes.

IBM Endpoint Manager for Server Automation highlights:

- Allows for cross-server sequenced actions that can help simplify application deployment and deliver advanced levels of automation as a path to cloud computing.
- Provides improved visibility and management of all endpoints (physical and virtual) through a single, intuitive user interface, which includes desktop computers, laptop computers, and branch office and data center servers.
- Delivers true enterprise scalability with minimal infrastructure such as 1 console, 1 agent, 1 server supporting up to 250,000 endpoints and over 90 operating system versions.
- Helps lower operational costs through real-time, policy-based management
- Automates the management of servers and standardize operations according to your best practices by:
 - Delivering an easier way to build customization through a simple scripting language
 - Providing thousands of automation scripts to help create customized automation
 - Allowing for the reuse of existing scripts to design custom automation and leverage previous investments
- Delivers automatic updates of features and content via a subscription model to deliver new features and content automatically without painful and expensive upgrades

Key prerequisites

IBM Endpoint Manager for Server Automation V8.2 can only be installed on top of an existing IBM Tivoli Endpoint Manager solution:

- IBM Tivoli Endpoint Manager for Lifecycle Management, or
- IBM Tivoli Endpoint Manager for Security and Compliance, or
- IBM Tivoli Endpoint Manager for Patch Management

Planned availability date

- November 21, 2012: Electronic
- December 12, 2012: Physical media

Description

IBM Endpoint Manager for Server Automation V8.2 is an integrated, easy-to-implement, and easy-to-use solution that delivers automated server management with closed-loop task automation, middleware deployment, seamless physical and virtual server management. IBM Endpoint Manager for Server Automation V8.2 is built on a proven, lightweight technology that delivers unprecedented time-to-value and can help lower operational costs. Its simple and intuitive interface reduces the need for training or education, and can help simplify the system administrators job.

IBM Endpoint Manager for Server Automation V8.2 capabilities

Automation plans provide the ability to sequence simple discrete Endpoint Manager automation tasks into a broader automation flow. These cross-server sequenced tasks enable automation of previously manual operations, and this can help improve application delivery times and help reduce labor costs. This includes the automation and integration of tasks related to Server Build processes such as deploying operating systems, creating virtual machines, deploying software, and setting and enforcing configuration settings.

Physical and virtual server management provides a single interface across patch management, lifecycle management, and server automation, and simplifies operations and lowers costs. It improves the visibility and control of all your systems including the ability to view and manage both physical and virtual endpoints (laptops, desktops, and servers) from a single interface.

Middleware deployment of multitiered business applications typically require a lot of manual intervention to get them deployed and configured in the optimal way to deliver business services. IBM Endpoint Manager for Server Automation provides the ability to easily deploy, configure and manage a variety of middleware applications, which accelerate delivery times, provides consistency through automation.

Product positioning

IBM Endpoint Manager for Server Automation V8.2 is an add-on to other Tivoli Endpoint Management solutions including Tivoli Endpoint Management for Patch Management, Tivoli Endpoint Management for Lifecycle Management, and Tivoli Endpoint Management for Security and Compliance.

IBM Endpoint Manger for Server Automation V8.2 is uniquely positioned as an advanced server automation solution in the Tivoli portfolio that builds on lifecycle management capabilities to enhance IT automation and provide a bridge to cloud computing.

Program number

| Program number | VRM | Program name |
|----------------|-----|--|
| 5725-H27 | 8.2 | IBM Endpoint Manager for Server Automation |

Education support

Comprehensive education for IBM Tivoli products is offered through Worldwide Tivoli Education Delivery Services. A wide range of training options are available, including classes led by instructors, learning on demand, on-site training, and blended learning solutions.

For additional information, visit

<http://www-306.ibm.com/software/tivoli/education/>

Offering Information

Product information is available via the Offering Information website

<http://www.ibm.com/common/ssi>

Also, visit the Passport Advantage® website

<http://www.ibm.com/software/passportadvantage>

Publications

No publications will be shipped with this product.

The IBM Publications Center

<http://www.ibm.com/shop/publications/order>

The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. Payment options for orders are via credit card (in the U.S.) or customer number for 20 countries. A large number of publications are available online in various file formats, and they can all be downloaded by all countries, free of charge.

Technical information

Specified operating environment

Hardware requirements

The hardware requirements for IBM Endpoint Manager for Server Automation V8.2 are identical to those for the IBM Tivoli Endpoint Manager solution. These requirements can vary based on the managed environment and are mainly related to the machine on which the IBM Endpoint Manager Server and the IBM Endpoint Manager Console are installed and running.

The values in the following table are recommended hardware specifications that enable good performance for similar sized deployments of Tivoli Endpoint Manager. If your deployment has more than 100 Endpoint Manager Console Operators, you should consider raising your hardware specifications to the next highest scale to support the large number of users or contact IBM Technical Support for more help in selecting hardware.

For best performance, use the following recommendations:

| Deployment size | CPU | Memory | Hard disks |
|-----------------|-----------------------|----------|---------------------------|
| < 250 | 2-3 GHz | 2 GB | Standard HD |
| 1,000 | 2-3 GHz - 2 Cores | 4 GB | 1 RAID Array (RAID 10,5) |
| 10,000 | 2-3 GHz - 2-4 Cores | 8 GB | 1-2 RAID Arrays (RAID 10) |
| 50,000 | 2-3 GHz - 4 Cores | 16 GB | 2 RAID Arrays (RAID 10) |
| 100,000 | 2-3 GHz - 4-8 Cores | 16-32 GB | 2 RAID Arrays (RAID 10) |
| > 200,000 | 2-3+ GHz - 8-16 Cores | 32-64 GB | 3 RAID Arrays (RAID 10) |

Note: RAID arrays must support use of the disk cache for both reading and writing. The disk cache should be set to 50/50 read-write.

Disk space requirements

The hard disk configurations can help deliver high-performance disks for the database and Endpoint Manager Server. The physical capacity needed for Tivoli Endpoint Manager is generally considered small. A minimum of 5 GB free disk space is needed by the database, data files, and the file caches. It is recommended that an additional 20 GB to 50 GB of disk space be available for flexibility, when using for administrative tasks such as database backups and to allow for growth.

Multiple RAID arrays normally provide more than enough disk space so capacity concerns are not common.

Network card specifications

The Tivoli Endpoint Manager Server is the central communication hub for deployment and should be positioned in a data center with a high-speed network connection.

Server network speed recommendations:

- 10 Mbps network connection is possible but not recommended for performance reasons.
- 100 Mbps, or higher network connection recommended.
- 1000 Mbps network connection is recommended, if possible.

For deployments over 25,000 seats, consider using teamed network cards or 1 GB connections to provide optimal network throughput.

Console hardware specifications

The consoles are typically installed on personal workstations and terminal servers or Citrix servers.

- Users with high-speed network connections (more than 10 Mbps) to the server database can use any computer that meets the requirements in the following table.
- Remote users typically need to use a terminal server or Citrix server because of the typically slow network connection.

The hardware requirements are based on the number of managed computers, which is the number of computers that a Console Operator will see. In most deployments, the Console Operator sees a subset of the total number of computers, while a Master Operator sees all of the computers.

Workstation installations

| Number of managed computers | CPU | Memory | Hard disks (free space) |
|-----------------------------|---------------------|--------|-------------------------|
| < 250 | 1 GHZ | 512 MB | 50 MB free |
| 1,000 | 2 GHZ | 512 MB | 100 MB free |
| 10,000 | 2-3 GHZ | 1 GB | 250 MB free |
| 50,000 | 2-3 GHZ - 2 Cores | 2 GB | 1 GB free |
| 100,000 | 2-3 GHZ - 2 Cores | 3 GB | 2 GB free |
| >200,000 | 2-3 GHZ - 2-4 Cores | 4 GB | 3 GB free |

Terminal server and Citrix server installations

The primary constraints for the console are CPU and memory. The memory use goes up with the total number of managed clients. These configurations assume standard usage patterns for up to 10 to 20 simultaneous console users:

Number of
Endpoint
Manager

| Agents | CPU | Memory | Hard disks (free space) |
|---------|--------------------|----------|---------------------------------------|
| < 250 | 2-3 GHz-2 Cores | 2 GB | 1 Raid Array (RAID 5, 10)-5 GB free |
| 1,000 | 2-3 GHz-2 Cores | 4 GB | 1 Raid Array (RAID 5, 10)-10 GB free |
| 10,000 | 2-3 GHz-4 Cores | 8 GB | 1 Raid Array (RAID 5, 10)-20 GB free |
| 25,000 | 2-3 GHz-4 Cores | 8-16 GB | 1 Raid Array (RAID 5, 10)-40 GB free |
| 100,000 | 2-3 GHz-4-8 Cores | 16-32 GB | 1 Raid Array (RAID 5, 10)-80 GB free |
| 200,000 | 2-3 GHz-8-16 Cores | 16-32 GB | 1 Raid Array (RAID 5, 10)-150 GB free |

Notes :

- The preceding values above reflect the number of simultaneous consoles running on a single terminal server or Citrix server, which means a single server can support many more console operators in total depending on usage patterns. Consider using more than one terminal server or Citrix server if you have more simultaneous users than the values listed here.
- For larger deployments that expect over 50,000 agents or more than 50 operators, consult a Tivoli deployment specialist for specific recommendations on terminal server and Citrix server configurations.

Software requirements

The software requirements for IBM Endpoint Manager for Server Automation are the same as for IBM Tivoli Endpoint Manager solution, and are dependent on its components:

- Tivoli Endpoint Manager Server
- Tivoli Endpoint Manager Console
- Tivoli Endpoint Manager Agent
- Tivoli Endpoint Manager Relay

IBM Tivoli Endpoint Manager server software specifications

Supported operating systems:

- Microsoft™ Windows™ 2008 (x86, x64) Enterprise
- Microsoft Windows 2003 (x86, x64) Enterprise

Supported databases:

- SQL Server 2008 (x86, x64) Enterprise
- SQL Server 2005 (x86, x64) Enterprise

SQL Standard edition is usually sufficient for smaller deployments with fewer than 50,000 computers. For more information, refer to the Microsoft knowledge base article

<http://www.microsoft.com/Sqlserver/2005/en/us/compare-features.aspx>

Note: Always apply the latest service pack and hot fixes for SQL server and Windows operating systems.

Console system requirements

IBM Tivoli Endpoint Manager Console software specifications

Supported operating systems:

- Windows XP
- Windows 2003
- Windows Vista
- Windows 2008
- Windows 7

Required software configurations:

- Internet Explorer V6, or later.
- Microsoft Data Access Components V2.7, or later.
- Office web components.
- Minimum 1024 x 768 screen resolution.
- High speed network connection to the IBM Tivoli Endpoint Manager Server database.
- IBM Tivoli Endpoint Manager requires Microsoft XML 6 and Windows Installer V3.1.
- Flash Player V9, or later is required to see the dashboards in the IBM Tivoli Endpoint Manager Console (and some of the web reports).

IBM Tivoli Endpoint Manager Agent software specifications

Supported operating systems

Windows

- Windows Vista (x86, x64)
- Windows 2003 Itanium™
- Windows Server 2008 (x86, x64)
- Windows Server 2008 Core (x86, x64)
- Windows Server 2008 R2
- Windows Server 2008 R2 Core
- Windows 2008 Itanium
- Windows 7
- Windows Mobile 2003, 5.0, 6.5
- Windows XP Embedded, Windows Embedded Standard, Windows Embedded for Point of Service, Windows Embedded POS Ready 2009

HP UNIX™ :

- HP-UX 11.11 (RISC)
- HP-UX 11.23 (RISC)
- HP-UX 11.23 (Itanium , in compatibility mode)
- HP-UX 11.31 (RISC)
- HP-UX 11.31 (Itanium , in compatibility mode)

IBM AIX® :

- AIX V5.3 (PowerPC®)
- AIX V6.1 (PowerPC)
- AIX V7.1 (PowerPC)

Sun Solaris:

- Solaris 8, 9, 10 (SPARC)
- Solaris 10 (x86)

Linux™ :

- Red Hat Enterprise Linux 6 (x86, x64)
- Red Hat Enterprise Linux 5 (x86, x64)
- Red Hat Enterprise Linux 4 (x86, x64)
- Red Hat Enterprise Linux 4 (Linux on System z® x64)
- Red Hat Enterprise Linux 5 (Linux on System z x64)
- Red Hat Enterprise Linux 6 (Linux on System z x64)
- CentOS 4 (x86, x64)
- CentOS 5 (x86, x64)
- Oracle Enterprise Linux 4 (x86, x64)
- Oracle Enterprise Linux 5 (x86, x64)
- SUSE Linux Enterprise (SLED, SLES) 8, 9, 10, 11 (x86)
- SUSE Linux 10 Enterprise (SLED, SLES) (x64)
- SUSE Linux 11 Enterprise (SLED, SLES) (x64)
- SUSE Linux Enterprise 10 (Linux on System z x64)
- SUSE Linux Enterprise 11 (Linux on System z x64)

VMWare:

- VMWare ESX Server 3.5
- VMWare ESX Server 4

Apple:

- Mac OS X 10.4, 10.5 (PowerPC)
- Mac OS X 10.4, 10.5, 10.6 (Intel™)
- Mac OS X 10.7 (Intel)

Ubuntu:

- Ubuntu 8.04 LTS (x86, x64)
- Ubuntu 10.04 LTS (x86, x64)

Debian:

- Debian 5 (x86, x64)

Tivoli Endpoint Manager Relay

Supported operating systems

Windows :

- Windows Vista (x86, x64)
- Windows Server 2008 (x86, x64)
- Windows Server 2008 Core (x86, x64)
- Windows Server 2008 R2
- Windows Server 2008 R2 Core
- Windows 7 (x86, x64)

AIX :

- AIX V6.1 (PowerPC)
- AIX V7.1 (PowerPC)

- AIX V5.3 (PowerPC)

Sun Solaris:

- Solaris 10 (x86, SPARC)

Linux :

- Red Hat Enterprise Linux 4 (x86, x64)
- Red Hat Enterprise Linux 5 (x86, x64)
- Red Hat Enterprise Linux 6 (x86, x64)
- SUSE Linux Enterprise 11 (x86, x64)

The program's specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a readme file, or other information published by IBM , such as an announcement letter. Documentation and other program content may be supplied only in the English language.

IBM Electronic Support

The IBM Support Portal is your gateway to technical support. This includes IBM Electronic Support tools and resources, for software and hardware, to help save time and simplify support. The Electronic Support tools can help you find answers to questions, download fixes, troubleshoot, automate data collection, submit and track problems through the Service Request online tool, and build skills. All these tools are made available through your IBM support agreement, at no additional charge.

Read about the Electronic Support portfolio of tools

<http://ibm.com/electronicssupport>

Access the IBM Support Portal

<http://ibm.com/support>

Access the online Service Request tool

<http://ibm.com/support/servicerequest>

Planning information

Direct customer support

Direct customer support is provided by IBM Operational Support Services - SoftwareXcel. This fee service enhances your productivity by providing voice and electronic access into the IBM support organization. IBM Operational Support Services - SoftwareXcel helps answer questions pertaining to usage and suspected software defects for eligible products.

Installation and technical support is provided by Global Services. For more information call 800-IBM-4YOU (426-4968).

Packaging

IBM Endpoint Manager for Server Automation V8.2 is distributed with:

- International Program License Agreement (Z125-3301)
- CDs and DVDs
- License Information document
- Publications (refer to the [Publications](#) section)

Security, auditability, and control

IBM Endpoint Manager for Server Automation V8.2 uses the security and auditability features of the operating system software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Software Services

IBM Software Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based, software services team and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Also, we extend our IBM Software Services reach through IBM Business Partners to provide an extensive portfolio of capabilities. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support a wide range of critical business needs.

To learn more about IBM Software Services or to contact a Software Services sales specialist, visit

<http://www.ibm.com/software/sw-services/>

Licensing metric definitions and pricing examples

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.

Resource Value Unit (RVU)

RVU is a unit of measure by which the program can be licensed. RVU Proofs of Entitlement (PoEs) are based on the number of units of a specific resource used or managed by the program. Licensee must obtain entitlements for this program sufficient to cover the resources 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 resource table found in the program's announcement and/or License Information document. 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.

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 entitlements 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.

Pricing examples

The resource for the purpose of the RVU calculation is Activated Processor Cores managed by the program. 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 at

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

defines how many Activated Processor Cores must be counted.

The RVU table for IBM Endpoint Manager for Server Automation is below:

| Tier | From quantity | To quantity | Factor |
|------|---------------|-------------|--------|
| 1 | 0 | 2,500 | 1.00 |
| 2 | 2,501 | 10,000 | 0.80 |
| 3 | 10,001 | 50,000 | 0.60 |
| 4 | 50,001 | 150,000 | 0.40 |
| 5 | 150,001 | - | 0.20 |

Pricing example 1

A customer wishes to license IBM Endpoint Manager for Server Automation 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 IBM Endpoint Manager 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 with IBM Endpoint Manager for Server Automation:

| Systems managed | Quantity in customer environment | Processor cores to be licensed |
|---|----------------------------------|--------------------------------|
| One processor, single core | 20 | 20 |
| One processor, dual core | 65 | 130 |
| Two processors, dual core | 12 | 48 |
| Two processors, quad core | 10 | 80 |
| Eight Processors, Dual Core (2 logical partitions) | 1 | 16 |
| Four Processors, Quad Core | 1 | 16 |
| z800 server with 2 uniprocessor IFLs (requires Linux on System z availability) is managed | 1 | 2 |
| Total processors to be licensed | | 312 |

Based on the 312 managed cores, the customer would require 312 RVUs of IBM Endpoint Manager for Server Automation.

Pricing example 2

A customer wishes to license IBM Endpoint Manager for Server Automation in the following core environment:

- Servers with 45,000 Managed Cores
- 25,000 Client Devices

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

| Tier | Quantity of Managed Cores | RVUs |
|-------|---------------------------|--------|
| 1 | 2,500 | 2,500 |
| 2 | 7,500 | 6,000 |
| 3 | 35,000 | 21,000 |
| Total | | 29,500 |

The first tier, based on the RVU table, is used to calculate the first 2,500 managed 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 managed 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 managed cores between 10,001 and 50,000. In the example, 35,000 of the managed 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 managed cores.

In addition, the customer would require 25,000 of the client device part number to license the 25,000 client devices in the environment.

Pricing example 3

A customer wishes to license IBM Endpoint Manager for Server Automation in the following core environment:

- 40 virtual images running on 4 Managed Cores

The following calculation is used to determine the number of RVUs required to license the 40 virtual images running on 4 Managed Cores in the server environment.

| Tier | Quantity of Managed Cores | RVUs |
|-------|---------------------------|------|
| 1 | 4 | 4 |
| Total | | 4 |

Ordering information

Product group: Tivoli Endpoint Manager
Product Identifier Description:
5725-H27 IBM Endpoint Manager for Server Automation
Product category: Tivoli Endpoint Mngr

Current licensees

New licensees

Orders for new licenses will be accepted now.

Shipment will begin on the planned availability date.

Basic license

Ordering information for Passport Advantage

Passport Advantage allows you to have a common anniversary date for Software Maintenance renewals, which can simplify management and budgeting for eligible new versions and releases (and related technical support) for your covered products. The anniversary date, established at the start of your Passport Advantage Agreement, will remain unchanged while your Passport Advantage Agreement remains in effect. New software purchases will initially include twelve full months of Software Maintenance. Software Maintenance in the second year (the first year of renewal) can be prorated to be coterminous with your common anniversary date. Thereafter, all Software Maintenance will renew at the common anniversary date for twelve full months of maintenance.

Refer to the IBM International Passport Advantage Agreement and to the *IBM Software Support Handbook* for specific terms relating to, and a more complete description of, technical support provided through Software Maintenance.

The quantity to be specified for the Passport Advantage part numbers in the following table is per processor Value Units and per client devices. To order a chargeable option for Passport Advantage, specify the desired part number and quantity.

IBM Endpoint Manager for Server Automation

| Part number | Description |
|-------------|---|
| D0T2LLL | IBM Endpoint Manager for Server Automation per Resource Value Unit Lic + SW S&S 12 Mo |
| E0EFQLL | IBM Endpoint Manager for Server Automation per Resource Value Unit Annual SW S&S Rnw1 |
| D0T2MLL | IBM Endpoint Manager for Server Automation per Resource Value Unit SW S&S Reinstate 12 Mo |
| D0T2QLL | IBM Endpoint Manager for Server Automation for zBX and Linux on System z Resource Value Unit Lic + SW S&S 12 Mo |
| E0EFTLL | IBM Endpoint Manager for Server Automation for zBX and Linux on System z Resource Value Unit Annual SW S&S Rnw1 |
| D0T2RLL | IBM Endpoint Manager for Server Automation for zBX and Linux on System z Resource Value Unit SW S&S Reinstate 12 Mo |
| D0T2SLL | IBM Endpoint Manager for Server Automation per Client Device Lic + SW S&S 12 Mo |
| E0EFULL | IBM Endpoint Manager for Server Automation per Client Device Annual SW S&S Rnw1 |
| D0T2TLL | IBM Endpoint Manager for Server Automation per Client Device SW S&S Reinstate 12 Mo |
| D0UWHLL | IBM Endpoint Manager for Server Automation FTL per Resource Value Unit Init1 FT Lic+S&S 12 Mo |
| E0F13LL | IBM Endpoint Manager for Server Automation FTL per Resource Value Unit SubSq FT Lic+S&S 12 Mo |
| D0UWILL | IBM Endpoint Manager for Server Automation FTL for zBX and Linux on System z Resource Value Unit Init1 FT Lic+S&S 12 Mo |
| E0F14LL | IBM Endpoint Manager for Server Automation FTL for zBX and Linux on System z Resource Value Unit SubSq FT Lic+S&S 12 Mo |
| D0UWQLL | IBM Endpoint Manager for Server Automation FTL per Client Device Init1 FT Lic+S&S 12 Mo |
| E0F18LL | IBM Endpoint Manager for Server Automation FTL per Client Device SubSq FT Lic+S&S 12 Mo |

To order a media pack for Passport Advantage , specify the part number in the desired quantity from the following table:

| Description | Part number |
|--|-------------|
| IBM Endpoint Manager for Server Automation V8.2 Multilingual Multiplatform Media Pack | BJ015ML |
| IBM Endpoint Manager for Server Automation V8.2 is also available, via Web download, from Passport Advantage . | |

Terms and conditions

The information provided in this announcement letter is for reference and convenience purposes only. The terms and conditions that govern any transaction with IBM are contained in the applicable contract documents such as the IBM

International Program License Agreement, IBM International Passport Advantage Agreement, and the IBM Agreement for Acquisition of Software Maintenance.

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Corrections

(Corrected on December 3, 2012)

Changed first paragraph of Description section and updated Software requirements section.