IBM Systems Director VMControl V2.3 manages virtualized resources across IBM platforms with a consistent interface that simplifies client administration

At a glance

IBM® Systems Director VMControl Image Manager for Linux® on System z®, V2.3, an IBM System Director plug-in, provides a comprehensive set of virtualization management tools that can be used to simplify and improve the utilization of virtual server, storage, and network resources, and to increase the level of workload resilience.

The main features in this release:

- Enhanced image management capabilities for Linux images running on z/VM® and Linux images running on Power® operating systems in PowerVM™ virtualization
- Virtual server life cycle management and relocation for VMware vCenter 4.1
- Virtual server life cycle management for Microsoft® Hyper-V V2
- System pools for IBM Power Systems™
- Data center integration and extensibility using Representational State Transfer (REST) interfaces

For ordering, contact your IBM representative, an IBM Business Partner, or IBM Americas Call Centers at 800-IBM-CALL (Reference: YE001).

Overview

IBM Systems Director VMControl Image Manager for Linux on System z, V2.3, a virtualization management plug-in for IBM Systems Director V6.2, is designed to help reduce the total cost of ownership by increasing asset utilization, and linking infrastructure performance to business goals. Whether it is for a single IBM system or many IBM systems, VMControl Image Manager for Linux on System z, V2.3 can help simplify and streamline systems management by helping your system administrators become more effective and efficient.

VMControl for Linux on System z, V2.3 expands virtual server life cycle management for VMware vCenter 4.0 and Microsoft Hyper-V V2. This release continues to provide consistent life cycle management capabilities for virtual machines implemented across multiple computing platforms and using multiple virtualization technologies. Life cycle management includes the ability to create, delete, relocate, and modify virtual machines.
VMControl for Linux on System z, V2.3 adds the capability to manage Linux images on PowerVM and the capability to delete virtual appliances from a platform-specific repository. This release continues to provide the capability to manage a repository of multiple preconfigured virtual appliances to simplify and standardize the deployment and management of virtualized workloads. Virtual appliances are virtual machine images containing the entire software stack (that is, operating system, applications, and configuration settings) for a business solution.

For Power Systems, VMControl for Linux on System z, V2.3 extends the virtual server life cycle management and image management capabilities with support for system pools. System pools is a workload optimized approach to computing, designed to potentially drive down costs and improve service. A system pool is a pool of virtualized system resources (servers, storage, and networks) that can be managed as a single entity with the simplicity of managing a single system. System pools provide the ability to make dynamic virtual server adjustments and move virtual servers around within system pools, providing efficiency and increased resilience for planned and unplanned downtime. System pools in VMControl for Linux on System z, V2.3 provides support for the deployment of either AIX® or Linux images into a system pool for Power Systems.

Key prerequisites

Refer to the Hardware requirements and Software requirements sections for details.

Planned availability date

- Web download: On or before June 25, 2010
- ESW: June 25, 2010

Description

IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 provides management simplification, improves system efficiencies within the data center, and leverages the flexibility and power of virtualization. The decoupling of the client's workload from the underlying systems and the dynamic flexibility to move resources and virtual machines allows VMControl Image Manager for Linux on System z, V2.3 provides significant value in managing today's complex and heterogeneous data centers.

Features added to VMControl Image Manager for Linux on System z, V2.3 include:

- Continued and ongoing support for the Open Virtualization Format (OVF) industry-standard format for describing and packing virtual machine images

Enhancements added to VMControl Image Manager for Linux on System z, V2.3 provide:

- The capabilities to allow virtual appliances to be:
  - Deployed, captured, and managed for Linux images on PowerVM
  - Managed in repositories including deletion, search, and version control
  - Captured from virtualized workloads
- A complete virtual server life cycle management and relocation solution for VMware vCenter 4.1 platform manager, allowing for full integration into the IBM Systems Director capabilities for monitoring, automation, and management
- A complete virtual server life cycle management solution for the Microsoft Hyper-V V2 hypervisor, allowing for full integration in the IBM Systems Director capabilities for monitoring, automation, and management
VMControl for Linux on System z, V2.3 provides the user with cross platform virtual server life cycle management. In addition, VMControl Image Manager for Linux on System z, V2.3 provides virtual server relocation tasks for VMware on x86 and PowerVM on Power Systems. This includes the ability to create, edit, delete, and move virtual servers from a single tool in a consistent fashion on all of the supported hypervisors and IBM platforms.

VMControl for Linux on System z, V2.3 provides a set of image management tools to search, delete, and manage virtual appliances (also known as virtual machine images) for z/VM systems and Power Systems. Separate charges apply for image management of IBM Power Systems. Entitlements are available with VMControl Standard Edition for Power Systems.

For Power Systems, VMControl for Linux on System z, V2.3 extends the virtual server life cycle management and image management capabilities with support for system pools. System pools is a workload optimized approach to computing, designed to potentially drive down costs and improve service. A system pool is a pool of virtualized system resources (servers, storage, and networks) that can be managed as a single entity with the simplicity of managing a single system. System pools provide the ability to make dynamic virtual server adjustments and move virtual servers around within system pools, providing efficiency and increased resilience for planned and unplanned downtime. System pools support AIX and Linux images in a PowerVM virtualization environment. IBM Systems Director VMControl Editions for Power Systems, a separately available product for an additional charge, also enables capabilities to allow pools of POWERS™, POWER6™, and POWER7™ systems to be managed as a single logical entity in the data center. For additional information on IBM Systems Director VMControl Editions for Power Systems, V2.3, refer to Software Announcement A10-0243, dated April 13, 2010.

Accessibility by people with disabilities

A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at


Product positioning

IBM’s flexible and dynamic infrastructure offers a broad set of virtualization technologies to help improve service and management, mask complexities, potentially reduce operational costs, and maximize asset utilization. IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 further exemplifies the strategy for enabling management simplification and automation with IBM Systems Director V6.2. Some of the key benefits provided by VMControl Image Manager for Linux on System z, V2.3 are:

- Increased availability and resilience can be provided on a workload-by-workload basis. When specified, VMControl monitors the individual member system for specific events that allow system failures to be predicted and used to trigger the evacuation of the system.

VMControl Image Manager for Linux on System z, V2.3, based on the Open Virtualization Format (OVF) open standard from DMTF, helps enable a single unified view of all virtual appliances and easy deployment of new virtual servers based on virtual appliances.

VMControl Image Manager for Linux on System z, V2.3 manages the life cycle of virtual appliances. It captures information from active systems and stores the information in reusable virtual appliances. VMControl also allows the import of virtual appliances from external sources (such as a vendor’s Web site).

VMControl Image Manager for Linux on System z, V2.3 provides image management capabilities for System z and for Power Systems, specifically Linux images on
System z (leveraging z/VM), AIX images (leveraging NIM), and Linux images on Power Systems. For Power Systems servers, VMControl provides the ability to manage AIX mksysb images and Linux images that can be deployed in a virtualized Power Systems environment. Clients who want to perform image management for a heterogeneous System z, Power Systems, or System x® environment may need to use a combination of VMControl for Linux on System z, V2.3 and Tivoli Provisioning Manager products (separate charges may apply). Tivoli Provisioning for Images and Tivoli Provisioning Manager for Operating System Deployment are available for Linux on System z customers and provide physical and virtual image management for x86 hypervisors. VMControl allows pools of homogeneous systems in the data center to be managed with single-system simplicity.

Some of the key benefits provided by VMControl Editions for Power Systems, V2.3 are:

- A simple interface and set of management tasks provided to manage the life cycle and capacity of one or more system pools. Both new systems and the remaining capacity of existing systems in your data center can be added and managed as part of a pool.
- System pool total aggregate capacity and utilization can be monitored and viewed in the IBM Systems Director dashboard as a new special type of system, eliminating the need to monitor the individual member systems.
- Open Standard OVF-encoded images can be deployed and dynamically placed on the most appropriate resources within the pool. Consideration for compatibility, workload capacity, and workload resilience are all used to dynamically determine the best placement, removing management complexity from the administrator.
- Storage can be assigned to and associated with a system pool, allowing for dynamic provisioning and enablement for virtual server mobility operations.
- Running virtual machines can be moved between the member systems within the pool with no disruption to the running workloads. Dynamic placement services are leveraged to help determine the target system, considering compatibility, workload capacity, and the workload resilience goals.
- Automation of management actions are configurable, allowing for incremental level of sophistication on a per workload basis. In all cases, the actions that are automatically performed by Systems Director VMControl Enterprise Edition are recorded within the IBM Systems Director Event Log.

Reference information

For additional information about IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 refer to http://www.ibm.com/systems/management/director/about/

To learn how IBM Electronic Services can work for you, refer to http://www.ibm.com/support/electronic

For information on IBM Systems Director VMControl for Power Systems, V2.3, refer to Software Announcement A10-0243, dated April 13, 2010.

For information on IBM Systems Director for Linux on System z, V6.2, refer to Software Announcement A10-0275, dated April 13, 2010.

Availability of national languages

VMControl includes support for the following languages.

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<thead>
<tr>
<th>Description</th>
<th>Availability date</th>
<th>Language</th>
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<td>IBM Systems</td>
<td>June 25, 2010</td>
<td>Brazilian Portuguese</td>
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**Program number**

<table>
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<tr>
<th>Program number</th>
<th>Program name</th>
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<tbody>
<tr>
<td>5648-I2Z</td>
<td>IBM Systems Director VMControl for Linux on System z, V2.3</td>
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<tr>
<td>5648-I2S</td>
<td>IBM Systems Director VMControl for Linux on System z, V1.1 Subscription and Support</td>
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**Product identification number**

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<tbody>
<tr>
<td>5648-I2Z</td>
<td>5648-I2S</td>
</tr>
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</table>

**Evaluation Software**

VMControl for Linux on System z includes virtual server life cycle management functions, and an evaluation version for the IBM Systems Director VMControl image manager and system pools functions.

If you download IBM Systems Director VMControl for Linux on System z, V2.3 from the Web, you are offered the life cycle management functions under the terms of the IBM International Program License Agreement (IPLA) and program License Information document (LI) and the image manager functions and system pools functions for a 60-day evaluation under the terms of the IBM International License Agreement for Evaluation of Programs (ILAE) and program LI.

After the 60-day evaluation, the image manager functions and system pools functions will not operate without a valid License Key; however, the virtual server life cycle management function for z/VM will continue to operate.

To continue to use the image manager functions for System z or Power Systems after the 60-day evaluation period, you must then obtain a valid License Key for IBM Systems Director VMControl Image Manager for Linux on System z, V2.3. To continue to use the image management and system pools functions for Power Systems after the 60-day evaluation period, you must then obtain a valid License Key for IBM Systems Director VMControl Standard or Enterprise Edition for Power Systems. The terms of the IBM IPLA and program LI will then apply to the Licensee's use of the image manager and/or system pools functions.

The VMControl keyfile is designed to operate with all release levels of VMControl V2, and does not need to be reordered or reinstalled for customers migrating from a prior release of VMControl V2 to VMControl V2.3.

**IBM Systems Director V6.2 Information Center Availability**

The IBM Systems Director V6.2 Information Center Web site at

http://publib.boulder.ibm.com/infocenter/director/v6r2x/index.jsp

This site is planned to be updated with information pertinent to IBM Systems Director V6.2 and its associated plug-ins on or before June 25, 2010.
Offering Information

Product information is available via the Offering Information Web site

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

Publications

No licensed hardcopy publications are shipped with this program.

Publications are available in U.S. English from the IBM Systems Director V6.2 Information Center.

The IBM Systems Director V6.2 Information Center provides you with a single information center where you can access product documentation for Systems Director V6.2 and its associated plug-ins. The IBM Systems Director V6.2 Information Center is available at

http://publib.boulder.ibm.com/infocenter/director/v6r2x/index.jsp

To find information, you can search, browse the contents, follow links from one topic to related topics, and print the topics you want to read offline.

Technical information

Specified operating environment

Hardware requirements
IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 will operate on:

- IBM System z10® Enterprise Class
- System z10 Business Class
- System z9® Enterprise Class
- System z9 Business Class

Additional hardware requirements for VMControl Image Manager for Linux on System z, V2.3 are available from the IBM Systems Director V6.2 Information Center at

http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.plan.helps.doc/fqm0_r_hardware_requirements.html

Management of Linux images running as guest machines (or virtual servers) of z/VM V5.4, or later, is supported by VMControl Image Manager for Linux on System z, V2.3.

Refer to the Preventive Service Planning (PSP) bucket for the minimum MCLs and any required updates for your particular server.

Software requirements
IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 is dependent on IBM Systems Director for Linux on System z, V6.2 and has the same software requirements as the IBM Systems Director V6.2 management server.

Management of Linux images on z/VM requires z/VM V5.4, or later, and the z/VM Manageability Access Point (zMAP) agent.
These software requirements are available from the IBM Systems Director V6.2 Information Center at

http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.plan.helps.doc/fqm0_r_operating_system_and_software_requirements.html

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.

**Limitations**

Limitations and work-arounds are available from the IBM Systems Director Information Center at

http://publib.boulder.ibm.com/infocenter/director/v6r2x/index.jsp

For additional information, refer to **Usage restrictions** in the Terms and conditions section of this announcement, or to the license information document that is available on the IBM Software License Agreement Web site


**Planning information**

**Customer responsibilities**

Detailed planning information for Systems Director is available in the IBM Systems Director V6.2 Information Center at

http://publib.boulder.ibm.com/infocenter/director/v6r2x/index.jsp

You can also access an interactive, dynamic planning advisor that you can use when building your Systems Director solution.

For technical support or assistance, contact your IBM representative or visit

http://www.ibm.com/support

**Packaging**

The IBM Systems Director VMControl Image Manager package contains the following:

- One CD-ROM that includes product installation documentation and files

Your Proof of Entitlement (PoE) for this program is a copy of a paid sales receipt, purchase order, invoice, or other sales record from IBM or its authorized reseller from whom you acquired the program, provided that it states the license charge unit (the characteristics of intended use of the program, for example, number of processors, number of users) and quantity acquired.

Information about how you may obtain program services will be provided by the party (either IBM or its authorized reseller) from whom you acquired the program.

IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 is planned to be available for electronic download on or before June 25, 2010 at


VMControl will be available in the following languages:
Security, auditability, and control

VMControl uses the security and auditability features inherent in the ESA/390 architecture, z/Architecture® and the Linux operating system. 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.

For technical support:

- Call IBM Operational Support Services -- Support Line at 800-IBM-SERV (426-7378), option 2; to register, visit http://www.ibm.com/software/support/

To learn more about IBM Software Services or to contact a Software Services sales specialist, visit http://www.ibm.com/software/sw-services/

Ordering information

Charge metric

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<th>Program name</th>
<th>Program number</th>
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<tr>
<td>IBM Systems Director</td>
<td>5648-I2Z</td>
<td>Per server</td>
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<tr>
<td>VMControl Image Manager</td>
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</table>

IBM Systems Director VMControl Image Manager uses a per server charging metric. A license is required for each System z server being managed by IBM Systems Director VMControl Image Manager, based on the size of the server. Servers are categorized as small, medium, or large, based on the following categories:

- Small server
  - IBM System z models with 1-4 IFL engines
• Medium server
  – IBM System z models with 5-8 IFL engines
• Large server
  – IBM System z models with nine or more IFL engines

For System z servers, the server category to be specified is based on the number of IFLs on the server being managed by IBM Systems Director VMControl Image Manager.

**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 employed, each separable physical device (for example, a blade or a rack-mounted device) that has the required components is considered itself a separate Server. A Proof of Entitlement (PoE) must be obtained for each server regardless of the number of processor cores or partitions in the Server on which the program runs and each server managed by the program.

**Basic license**

To order, specify the program product number and the appropriate license or charge option. Also, specify the desired distribution medium. To suppress shipment of media, select the license-only option in CFSW.

**Licensing for IBM Systems Director VMControl Image Manager for Linux on System z, V2.3**

<table>
<thead>
<tr>
<th>IPLA program number</th>
<th>S&amp;S program number</th>
<th>Program description</th>
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<td>5648-I2Z</td>
<td>5648-I2S</td>
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**Specific authorizations for IBM Systems Director VMControl Image Manager for Linux on System z, V2.3**

**Program name: IBM Systems Director VMControl Image Manager for Linux on System z, V2.3**

**Program number: 5648-I2Z**

<table>
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<tr>
<th>Entitlement identifier</th>
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<td>S015LS7</td>
<td>IBM Systems Director VMControl Image Manager for Managing Large Servers</td>
<td>Use-based OTC, per server</td>
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<td>S015LS8</td>
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<td>S015LS9</td>
<td>IBM Systems Director VMControl Image Manager for Managing Small Servers</td>
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IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 (5648-I2Z) - S015LS7

Orderable supply ID: Language Distribution medium
S015ML2 US English CD

IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 (5648-I2Z) - S015LS8

Orderable supply ID: Language Distribution medium
S015ML3 US English CD

IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 (5648-I2Z) - S015LS9

Orderable supply ID: Language Distribution medium
S015ML4 US English CD

Subscription and Support

To receive voice technical support via telephone during normal business hours (Support) and to receive future releases and versions (Subscription) at no additional charge, Subscription and Support (Maintenance) must be ordered.

IBM will provide software maintenance, which may also be referred to as subscription and support, for the virtual server life cycle management function of VMControl if you have acquired an entitlement to receive software maintenance for Systems Director, V6.2 or VMControl Image Manager, V2.3.

The Subscription and Support (Maintenance) offering is purchased separately under the terms of the IBM International Agreement for Acquisition of Software Maintenance (Z125-6011). This offering:

- Includes a reasonable amount of remote assistance via telephone, mail, facsimile (fax), or e-mail to address suspected IBM program defects, where available, during normal IBM business hours from Monday through Friday, except local holidays. Exceptions from normal IBM business hours are Severity 1 (high impact) problems. Support for high impact suspected IBM defects is available 24 hours a day, 7 days a week (Support).
- Entitles customers to future releases and versions during the term at no additional charge (Subscription). Note that the customer is not entitled to new products.

The quantity of Subscription and Support (Maintenance) licenses must be equal to the quantity of product licenses ordered. To order, specify the program number and the appropriate number of licenses for each of the applicable one-time charge feature numbers or entitlement identifiers.

When Subscription and Support (Maintenance) is ordered, the charges will renew automatically annually unless canceled by the customer.

Subscription and Support (Maintenance) annual support charges will be automatically added to your order. If you do not desire the Subscription and Support (Maintenance) license for IBM Systems Director VMControl Image Manager for Linux on System z, V2.3, you must take specific action to decline this support.
Subscription and Support PID - 5648-I2S

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<td>S015LSH</td>
<td>IBM Systems Director VMControl Image Manager For Managing Medium Servers S&amp;S</td>
<td>Basic ASC, per Server SW S&amp;S No charge, decline SW S&amp;S</td>
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<tr>
<td>S015LSJ</td>
<td>IBM Systems Director VMControl Image Manager For Managing Small Servers S&amp;S</td>
<td>Basic ASC, per Server SW S&amp;S No charge, decline SW S&amp;S</td>
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IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 (5648-I2S) - S015HC2

Orderable supply ID    Language         Distribution medium
S015ML5                US English       Hardcopy Pub

IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 (5648-I2S) - S015LSH

Orderable supply ID    Language         Distribution medium
S015ML6                US English       Hardcopy Pub

IBM Systems Director VMControl Image Manager for Linux on System z, V2.3 (5648-I2S) - S015LSJ

Orderable supply ID    Language         Distribution medium
S015ML7                US English       Hardcopy Pub

Evaluation Software

VMControl for Linux on System z includes virtual server life cycle management functions, and an evaluation version for the IBM Systems Director VMControl image manager and system pools functions.

If you download IBM Systems Director VMControl for Linux on System z, V2.3 from the Web, you are offered the life cycle management functions under the terms of the IBM International Program License Agreement (IPLA) and program License Information document (LI) and the image manager functions and system pools functions for a 60-day evaluation under the terms of the IBM International License Agreement for Evaluation of Programs (ILAE) and program LI.

After the 60-day evaluation, the image manager functions and system pools functions will not operate without a valid License Key; however, the virtual server life cycle management function for z/VM will continue to operate.

To continue to use the image manager functions for System z or Power Systems after the 60-day evaluation period, you must then obtain a valid License Key for IBM Systems Director VMControl Image Manager for Linux on System z, V2.3. To continue to use the image management and system pools functions for Power Systems after the 60-day evaluation period, you must then obtain a valid License Key for IBM Systems Director VMControl Standard or Enterprise Edition for Power Systems.
The VMControl keyfile is designed to operate with all release levels of VMControl V2, and does not need to be reordered or reinstalled for customers migrating from a prior release of VMControl V2 to VMControl V2.3.

**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.

**Licensing**

IBM International Program License Agreement including the License Information document and Proof of Entitlement (PoE) govern your use of the program. PoEs are required for all authorized use.

This software license includes Software Subscription and Support (also referred to as Software Maintenance).

**Agreement for Acquisition of Software Maintenance**

The following agreement applies for Software Subscription and Support (Software Maintenance) and does not require customer signatures:

- IBM Agreement for Acquisition of Software Maintenance (Z125-6011)

These programs are licensed under the IBM Program License Agreement (IPLA) and the associated Agreement for Acquisition of Software Maintenance, which provide for support with ongoing access to releases and versions of the program. These programs have a one-time license charge for use of the program and an annual renewable charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours), as well as access to updates, releases, and versions of the program as long as support is in effect.

IBM will provide Software Maintenance (Subscription and Support) for the IBM Systems Director VMControl life cycle management functions of the Program if Licensee has acquired an entitlement to receive Software Maintenance for IBM Systems Director, V6.2. IBM will provide Software Maintenance for the image management functions if the Licensee has acquired an entitlement for Software Maintenance for VMControl. IBM support will be provided pursuant to the terms and conditions of your agreement with IBM for Software Maintenance or Software Subscription and Support.

IBM System z Operational Support Services - SupportLine is an option if you desire added services.

**License Information form number**

LC23-5068

The program's License Information will be available for review on the IBM Software License Agreement Web site


**Limited warranty applies**

Yes
**Limited warranty**

IBM warrants that when the program is used in the specified operating environment, it will conform to its specifications. The warranty applies only to the unmodified portion of the program. IBM does not warrant uninterrupted or error-free operation of the program or that IBM will correct all program defects. You are responsible for the results obtained from the use of the program.

IBM provides you with access to IBM databases containing information on known program defects, defect corrections, restrictions, and bypasses at no additional charge. For further information, consult the *IBM Software Support Handbook* found at

http://www.ibm.com/support/handbook

IBM will maintain this information for at least one year after the original licensee acquires the program (warranty period).

**Program support**

Enhanced support, called Subscription and Support, includes telephone assistance, as well as access to updates, releases, and versions of the program as long as support is in effect. You will be notified of discontinuance of support with 12 months’ notice.

**Money-back guarantee**

If for any reason you are dissatisfied with the program and you are the original licensee, you may obtain a refund of the amount you paid for it, if within 30 days of your invoice date you return the program and its PoE to the party from whom you obtained it. If you downloaded the program, you may contact the party from whom you acquired it for instructions on how to obtain the refund.

For clarification, note that for programs acquired under any of IBM's On/Off Capacity on Demand (On/Off CoD) software offerings, this term does not apply since these offerings apply to programs already acquired and in use by you.

**Authorization for use on home/portable computer**

You may not copy and use this program on another computer without paying additional license fees.

**Volume orders (IVO)**

No

**IBM International Passport Advantage Agreement**

**Passport Advantage applies**

No

**Software Subscription and Support (Software Maintenance) applies**

Yes

Subscription and Support (also referred to as Software Maintenance) annual support charges will be automatically added to your order. The charges will renew automatically annually unless canceled by the customer. If you do not desire the Subscription and Support license for Systems Director VMControl Image Manager for Linux on System z, V2.3, you must take specific action to decline this support.

While your Software Subscription and Support (Software Maintenance) is in effect, IBM provides you assistance for your routine, short duration installation and usage (how-to) questions, and code-related questions. IBM provides assistance via telephone and, if available, electronic access, only to your information systems (IS)
technical support personnel during the normal business hours (published prime shift hours) of your IBM support center. (This assistance is not available to your end users.) IBM provides Severity 1 assistance 24 hours a day, every day of the year. For additional details, consult your IBM Software Support Handbook at

http://www.ibm.com/support/handbook

Software Subscription and Support (Software Maintenance) does not include assistance for the design and development of applications, your use of programs in other than their specified operating environment, or failures caused by products for which IBM is not responsible under this agreement.

For more information about the Passport Advantage Agreement, visit the Passport Advantage Web site at

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

**IBM Operational Support Services - SupportLine**

Yes

**System i Software Maintenance applies**

No

**Variable charges apply**

No

**Educational allowance available**

Yes. A 15% education allowance applies to qualified education institution customers.

**Academic use allowance:** Yes

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