

IBM Cloud Manager with OpenStack for z Systems, V4.2 delivers a quick and easy cloud management solution that is built on the OpenStack Juno distribution

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At a glance

IBM® Cloud Manager with OpenStack for z Systems, V4.2 offers the following benefits:

- Access to OpenStack Juno APIs, backed with IBM support
- Seamless upgrade from Cloud Manager with OpenStack, V4.1 to the new release
- Integrated scheduling capabilities
- Evaluation version available via download

For ordering, contact your IBM representative, an IBM Business Partner, or IBM Americas Call Centers at 800-IBM-CALL (Reference: LE001).

Overview

IBM Cloud Manager with OpenStack for z Systems, V4.2 is a simple-to-use cloud management solution that serves as a control point for cloud managed resources based on the OpenStack Juno distribution. New function in V4.2 enables IBM z Systems to operate as the cloud management hub with the ability to manage IBM Power®, IBM Flex System®, and x86, as well as IBM z Systems computing resources from one central point of control.

IBM Cloud Manager with OpenStack for z Systems, V4.2 delivers access to OpenStack Juno APIs, backed with IBM support. A downloadable evaluation version of IBM Cloud Manager with OpenStack will be available on March 13, 2015, for businesses that want to begin building a future cloud environment. When ready to move to a fully supported production environment, they can purchase licenses for the product and IBM Software Subscription and Support.

Key prerequisites

IBM Cloud Manager with OpenStack for z Systems requires one of the following IBM z Systems servers running z/VM® V6.3:

- IBM z13
- IBM zEnterprise® EC12

- IBM zEnterprise BC12
- IBM zEnterprise 196
- IBM zEnterprise 114
- IBM System z10® Enterprise Class
- IBM System z10 Business Class

Applicable z/VM PTFs as documented at

<http://www.ibm.com/vm/sysman/osmntlvl.html>

Planned availability date

March 13, 2015

Description

IBM Cloud Manager with OpenStack for z Systems, V4.2 is based upon the OpenStack project, a global software community of developers collaborating to create a standard, scalable, and open source cloud operating system.

IBM Cloud Manager with OpenStack for z Systems, V4.2 is an innovative, cost-effective approach for organizations and service providers that also includes basic security, automation, metering, and integrated platform management. It is designed to help you achieve these benefits:

- Lower administrative overhead through simplified cloud administration with an intuitive interface.
- Improve operations productivity with an easy, intuitive user interface.
- Reduce management costs and improve responsiveness to changing business needs by standardizing virtual machines and images.
- Improve the usage of your infrastructure by enabling you to consolidate and automate highly optimized IBM systems and software.

Cloud Manager with OpenStack for z Systems, V4.2 includes the following key capabilities:

- An enhanced OpenStack experience, offering simplified implementation and advanced resource management that is backed by IBM support
- Access to the latest OpenStack community release (Juno)
- A single management interface to manage IBM Power Systems™ servers, IBM Flex System servers, and x86 servers, in addition to IBM z Systems servers
- Support for additional IBM hardware configurations, including additional support for OpenStack drivers such as Cinder storage drivers
- Extensibility through a REST API, which enables easy customization for tailoring the program to unique business environments
- A modular, flexible design that enables rapid innovation, interoperability, and freedom from vendor lock-in

Rapidly and easily deploy OpenStack-based cloud solutions:

- Easily install and configure the IBM Cloud Manager with OpenStack user interface and features.
- Easily customize the configuration.
- Standardize across hypervisors with support for existing client images and new image formats.

IBM Cloud Manager with OpenStack for z Systems now includes IBM Platform Resource Scheduler, which extends the basic scheduling capabilities in OpenStack. Using this scheduler extension, infrastructure teams can help reduce costs and

save labor by having the scheduler automatically manage large numbers of virtual machines, by migrating them as necessary to meet site-specific policy objectives.

Platform Resource Scheduler delivers the following features and benefits:

- Virtual machine (VM) placement policies that include these types of scheduling:
 - Packing
 - Striping
 - CPU load balance
 - Memory load balance
 - VM Affinity
 - VM Anti-Affinity
 - Resource over-commitment
- Run-time optimization policies such as CPU load balance, memory load balance, striping, and packing
- User-defined policy framework and user-defined metrics

IBM Cloud Manager with OpenStack for z Systems continues to deliver a robust cloud management user interface that includes the following features:

- An easy-to-deploy, simple-to-use cloud management solution, featuring an intuitive portal for workload provisioning and virtualized image management
- Support for deploy, resize and capture, backup and restore, image management, approvals, expiration, billing, and metering

If you have IBM Cloud Manager with OpenStack V4.1, you are encouraged to upgrade at no charge to this latest z Systems offering provided that you have purchased, and are current with your Subscription and Support (S&S).

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM, you may link directly to Business Partner information for this announcement. A PartnerWorld® ID and password are required (use IBM ID).

<https://www.ibm.com/partnerworld/mem/sla.jsp?num=215-106>

Accessibility by people with disabilities

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

http://www.ibm.com/able/product_accessibility/index.html

Section 508 of the US Rehabilitation Act

IBM Cloud Manager with OpenStack for IBM z Systems, V4.2, when used in accordance with IBM's associated documentation, satisfies the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it. A US Section 508 Voluntary Product Accessibility Template (VPAT) can be requested at

http://www.ibm.com/able/product_accessibility/index.html

Product positioning

IBM Cloud Manager with OpenStack for z Systems, V4.2 delivers a quick and easy cloud solution to manage IBM z Systems, IBM Power Systems, IBM Flex System, and x86 servers. It is an ideal choice for you to get started with a private cloud solution that can scale as you expand the number of cloud users and workloads.

IBM Cloud Manager with OpenStack for z Systems provides you with comprehensive infrastructure as a service (IaaS) capabilities.

For enterprises that need advanced cloud benefits, such as deployment of multiple workload patterns and platform as a service (PaaS) capabilities, IBM offers a range of advanced cloud solutions.

Reference information

For additional information on IBM Cloud Manager with OpenStack for z Systems, refer to Software Announcements [214-362](#), dated September 09, 2014 and [214-199](#), dated May 19, 2014.

For additional information on IBM Cloud Manager with OpenStack (PA), refer to Software Announcement [214-381](#), dated October 06, 2014.

For additional information on IBM Cloud Manager with OpenStack for Power V4.2, refer to Software Announcement [214-377](#), dated October 06, 2014.

Availability of national languages

For information related to national language support for IBM Cloud Manager with OpenStack for z Systems, refer to Software Announcement [214-199](#), dated May 19, 2014.

Program number

Program number	VRM	Program name
5648-OSZ	4.2.0	IBM Cloud Manager with OpenStack for z Systems
5648-OSS	1.1.0	IBM Cloud Manager with OpenStack for z Systems S&S

Offering Information

Product information is available via the Offering Information website

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

Publications

No hardcopy publications are shipped with this program.

The following publications will be available in Adobe™ PDF format on March 13, 2015.

Title	Order number
z/VM: Enabling z/VM for OpenStack (Support for OpenStack Juno Release)	SC24-6249-00
z/VM: Systems Management Application Programming	SC24-6234-08

These publication PDF files can be obtained from the IBM Publications Center at

<http://www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss>

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You can view a PDF file using the Adobe Reader, which is available at no-charge from the Adobe website at

<http://www.adobe.com>

You can also print the entire publication or just the section in which you are interested.

IBM Knowledge Center is a worldwide central repository of IBM technical publications hosted in a single application, located at

<http://www.ibm.com/support/knowledgecenter/>

You can find and navigate technical content more efficiently and easily with improved search, filtering, and user experience. Create your own collections of IBM documents with PDF output on-demand. IBM Cloud Manager with OpenStack product collection is located at

<http://www.ibm.com/support/knowledgecenter/SST55W/welcome>

Services

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/>

Technical information

Specified operating environment

Hardware requirements

IBM Cloud Manager with OpenStack for z Systems requires one of the following IBM z Systems servers running z/VM V6.3:

- z13
- zEnterprise EC12
- zEnterprise BC12
- zEnterprise 196
- zEnterprise 114
- System z10 Enterprise Class
- System z10 Business Class

Prior to installing, refer to the following Preventive Service Planning (PSP) buckets for the minimum MCL level and any required updates or PTFs:

- DEVICE2964 for the z13
- DEVICE2827 for the zEnterprise EC12
- DEVICE2828 for the zEnterprise BC12
- DEVICE2817 for the zEnterprise 196
- DEVICE2818 for the zEnterprise 114
- DEVICE2097 for the System z10 Enterprise Class
- DEVICE2098 for the System z10 Business Class

Refer to the *IBM Cloud Manager with OpenStack Administrators Guide* for additional information. This document is located on IBM Knowledge Center at

<http://www.ibm.com/support/knowledgecenter/SST55W/welcome>

Software requirements

IBM Cloud Manager with OpenStack for z Systems requires z/VM V6.3 and prerequisite PTFs for z/VM that can be found at

<http://www.ibm.com/vm/sysman/osmntlvl.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.

Planning information

Packaging

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, 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 Cloud Manager with OpenStack is available for evaluation purposes to manage z Systems servers.

IBM Cloud Manager with OpenStack for z Systems prerequisite PTFs for z/VM and information on how to download the evaluation version can be found at

<http://www.vm.ibm.com/sysman/osmntlvl.html>

All users must be licensed under the terms and conditions of the IBM International License Agreement for Evaluation of Programs. The use of the IBM Cloud Manager with OpenStack is limited to evaluation and non-production usage only, and does not include IBM support. This program, when used with the applicable z/VM PTFs, and downloaded from a website, contains the applicable IBM license agreement and License Information, if appropriate, which will be presented for acceptance at the time of installation of the program. For future reference, the license and License Information will be stored in a file such as LICENSE.TXT. Additional information and the technical forum are available on the IBM Cloud OpenStack Platform Service Management Connect website located in the Cloud/Virtualization Management community at

<http://www.ibm.com/developerworks/servicemanagement/cvm/sce/index.html>

Access to the IBM Cloud Manager with OpenStack for z Systems is available through z/VM APARs and documented on the z/VM Cloud Manager with OpenStack Service Management website at

<http://www.vm.ibm.com/sysman/osmntlvl.html>

Direct customer support

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

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

Security, auditability, and control

IBM Cloud Manager with OpenStack for z Systems uses the security and auditability features of the host hardware or software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering information

Charge metric

Program name	PID number	Charge metric
IBM Cloud Manager with OpenStack for z Systems	5648-OSZ	Per managed engine
IBM Cloud Manager with OpenStack for z Systems	5648-OSS	Per managed engine

IBM Cloud Manager with OpenStack for z Systems, when managing z/VM resources, is eligible for IBM Software On/Off Capacity on Demand (On/Off CoD). If you are running On/Off CoD on your IBM servers, you can also pay for IBM Cloud Manager with OpenStack for z Systems on a processor per-day basis during your peak periods when managing z/VM resources on a z Systems server. For additional information about On/Off CoD, refer to Software Announcement [203-202](#), dated August 12, 2003, and Marketing Announcement 304-004, dated January 13, 2004.

Managed Engine

Managed Engine is a unit of measure by which the Program can be licensed. An Engine is a standard processor (CP) or Integrated Facility for Linux™ (IFL) processor on a z Systems server. Licensee must obtain Managed Engine entitlements for each engine managed by the Program.

In addition to the Managed Engine entitlements needed for each engine managed by the Program, Licensee must obtain an additional Managed Engine entitlement for each server running the Program.

Basic license

For ordering information on IBM Cloud Manager with OpenStack for z Systems, refer to Software Announcement [214-199](#), dated May 19, 2014.

For On/Off Capacity on Demand ordering information on IBM Cloud Manager with OpenStack for z Systems, refer to Software Announcement [214-199](#), dated May 19, 2014.

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 IBM Agreement for Acquisition of Software Maintenance.

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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 z Systems Operational Support Services - SoftwareXcel is an option if you desire added services.

License Information number

License number	Program name
LC23-5154	IBM Cloud Manager with OpenStack v4.2

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

<http://www.ibm.com/software/sla/sladb.nsf>

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).

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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.

Volume orders (IVO)

No

Passport Advantage applies

No

IBM Operational Support Services - SoftwareXcel

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.

On/Off Capacity on Demand (CoD)

To be eligible for On/Off CoD pricing, you must be enabled for temporary capacity on the corresponding hardware, and the required contract, Attachment for IBM z Systems On/Off Capacity on Demand (Z125-7883), must be signed prior to use.

Statement of good security practices

IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed, or misappropriated or can result in misuse of your systems to attack others. Without a comprehensive approach to security, no IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective. IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.

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