

IBM Storage Management Pack for Microsoft System
Center Operations Manager (SCOM)
Version 2.3.0

Release Notes



First Edition (December 2014)

This edition applies to version 2.3.0 of the IBM Storage Management Pack for Microsoft System Center Operations Manager software package. Newer document editions may be issued for the same product version in order to add missing information or amend typographical errors. The edition is reset to 'First Edition' for every new product version.

© Copyright IBM Corporation 2010, 2014.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Overview	1
Compatibility and requirements	1
Supported operating systems	1
Supported storage systems	1
Required software on the host	2
Change log	3
Version 2.3.0 (December 2014)	3
Version 2.2.1 (June 2014)	3
Version 2.2.0 (December 2013)	3
Version 2.1.0 (July 2013)	4
Version 1.3.0 (November 2012)	4
Version 1.2.0 (September 2012)	5
Version 1.1.1 (September 2011)	5
Version 1.1.0 (December 2010)	6
Known issues	6
Related information and publications	7
Getting information, help, and service	8
Notices	9
Trademarks	11

Overview

The IBM® Storage Management Pack for Microsoft System Center Operations Manager (SCOM) is a set of software modules, or management packs, which allow you to access and monitor IBM storage systems using the host-based Microsoft SCOM interface.

Each individual management pack includes modules for monitoring the storage system's alerts, events, health state, physical components, and logical components. In addition, graphic diagrams show a visual representation of the hierarchy and relationship of selected storage system components, with more detailed information.

You can download the IBM Storage Management Pack for Microsoft SCOM software package at any time from the IBM Fix Central website (www.ibm.com/support/fixcentral).

In addition, a downloadable application is available on the Microsoft PinPoint website (pinpoint.microsoft.com/en-us/applications/ibm-storage-management-pack-for-microsoft-system-center-operations-manager-12884958381).

Compatibility and requirements

This section specifies the compatibility and requirements of version 2.3.0 of the IBM Storage Management Pack for Microsoft SCOM.

Supported operating systems

The IBM Storage Management Pack for Microsoft SCOM can be installed on any Microsoft Windows or Windows Server operating system that is supported by the Microsoft SCOM version that you are using.

Note: This version of the IBM Storage Management Pack for Microsoft SCOM can be installed on all site servers that run SCOM agents, in addition to the regular installation on the SCOM management server.

- For a complete list of operating systems supported by Microsoft System Center Operations Manager 2012 (including SP1 and R2), see the Microsoft System Center Operations Manager 2012 technical information website (technet.microsoft.com/en-us/library/hh205990.aspx).

Supported storage systems

The IBM Storage Management Pack for Microsoft SCOM supports different IBM storage systems, as listed in the following table.

Important: The IBM Storage Management Pack for Microsoft SCOM can detect the following IBM storage systems over IPv4 connections only.

Storage system	Microcode version	Compatibility note
IBM XIV [®] Storage System	10.2.2, 10.2.4.x 11.0.0, 11.1.x, 11.2.x, 11.3.x, 11.4.x, 11.5.x	N/A
IBM Storwize [®] V3500	6.4.1 7.1, 7.2, 7.3, 7.4	N/A
IBM Storwize V3700	6.4.1 7.1, 7.2, 7.3, 7.4	N/A
IBM Storwize V5000	7.2, 7.3, 7.4	N/A
IBM Flex System [®] V7000	6.4.x 7.1, 7.2	N/A
IBM Storwize V7000	6.1, 6.2, 6.3, 6.4 7.1, 7.2, 7.3, 7.4	N/A
IBM Storwize V7000 Unified	1.4.2, 1.4.3, 1.5.0	Only block storage is supported. File shares and file systems are not supported.
IBM SAN Volume Controller	6.1, 6.2, 6.3, 6.4 7.1, 7.2, 7.3, 7.4	N/A
IBM DS8700	5.4.3, 5.5.1, 6.x 7.0, 7.1, 7.2, 7.3, 7.4	N/A
IBM DS8800	5.4.3, 5.5.1, 6.x 7.0, 7.1, 7.2, 7.3, 7.4	N/A
IBM DS8870	7.0, 7.1, 7.2, 7.3, 7.4	N/A
IBM CIM Agent for DS8000 [®] Open API	5.4.3, 5.5.1, 5.6.x 5.7.0, 5.7.1, 5.7.2, 5.7.4	Applies to the embedded DS CIM agent version
	5.4.0	Applies to the proxy DS CIM agent version

Attention: Although the proxy DS8000 CIM agent supports IBM DS8000, IBM DS6000™, and IBM Enterprise Storage Server[®] (ESS) systems, the DS6000 and ESS systems are not supported by the IBM Storage Management Pack for Microsoft SCOM.

Required software on the host

Prior to installing the IBM Storage Management Pack for Microsoft SCOM, one of the following Microsoft SCOM versions must be installed on the host system.

- Microsoft System Center Operations Manager 2012
- Microsoft System Center Operations Manager 2012 SP1
- Microsoft System Center Operations Manager 2012 R2

Change log

This section summarizes the changes made in different version releases of the IBM Storage Management Pack for Microsoft SCOM.

Version 2.3.0 (December 2014)

Version 2.3.0 adds support for the XIV multi-tenancy feature.

Ticket ID	Description
SCOM-261212	Enhancement: Added support for the XIV multi-tenancy feature, which applies only to XIV microcode version 11.5 or later (non-domain users have access only when the access policy is set to “Open”).
SCOM-261162	Fixed: For SAN Volume Controller and Storwize systems, cluster monitoring is dependent on FlashCopy® consistency group unit monitoring, while single system monitoring is dependent on array unit monitoring. If either of the required unit monitoring is not used, the cluster or system monitoring returns to the uninitialized state.
SCOM-261241	Fixed: Updated the IBM Storage Solutions External Runtime Components (previously named “XPyV”) to version 1.4.4 to resolve man-in-the-middle (MITM) security attacks.

Version 2.2.1 (June 2014)

Version 2.2.1 resolved the following critical issue.

Ticket ID	Description
SCOM-261210	Fixed: OpenSSL security vulnerability (also known as the Heartbleed bug) could have an impact on the connection to storage systems. Version 2.2.1 uses OpenSSL version 1.0.1h, which resolves this security issue.

Version 2.2.0 (December 2013)

Version 2.2.0 added support for the following storage systems:

- IBM Storwize V5000
- IBM Storwize V7000 Unified

Version 2.2.0 also added support for newer microcode versions of the previously supported storage systems (see “Supported storage systems” on page 1), and for:

- Microsoft Windows Server 2012 R2
- Microsoft System Center Operations Manager 2012 R2

Additional changes in version 2.2.0:

Ticket ID	Description
SCOM-261154	Fixed: For XIV storage systems, only one volume is displayed as a logical component in SCOM if there are two or more volumes that share the same name with different uppercase and lowercase letters.

Version 2.1.0 (July 2013)

Version 2.1.0 added support for the IBM Storwize V3700 and IBM Storwize V3500 storage systems, and for newer microcode versions of the already supported storage systems.

Additional changes in version 2.1.0:

Ticket ID	Description
SCOM-249670	Enhancement: Only active alerts are provided in the alerts view. Closed alerts are filtered out.
SCOM-255587	Enhancement: Support for device type renaming.
SCOM-255882	Enhancement: IBM Hyper-Scale Mobility (online volume migration) operations can now be monitored for XIV systems of microcode 11.3 or later.
SCOM-238291	Fixed: When the IBM Storage Management Pack is installed on a SCOM agent and the connected storage system has a large amount of volumes (about 300 volumes per storage system), the discovery data package may exceed the SCOM size limit (4MB).
SCOM-242651	Fixed: XIV remote mirroring information cannot be viewed from SCOM if the user account is not defined on the XIV storage system as a storage administrator.

Note: If you are upgrading to version 2.1.0 by installing it over version 1.1.1, run the **upgrade_config.cmd** CLI utility after version 2.1.0 is installed. For more information, refer to the user guide.

Version 1.3.0 (November 2012)

Version 1.3.0 added support for the IBM Flex System V7000 storage system.

Additional changes in version 1.3.0:

Ticket ID	Description
SCOM-243094	Enhancement: Event IDs are now assigned to each SCOM event that is related to the SAN Volume Controller storage system. This allows event filtering and classification based on these event IDs.
SCOM-244312	Enhancement: All class objects in the IBM Storage Management Packs are now public class objects (rather than private class objects), allowing easier customization of alert rules.

Ticket ID	Description
SCOM-244842	Enhancement: The severity level of different events can be changed using the <code>scomu.cmd</code> utility. For more information, refer to the user guide.

Version 1.2.0 (September 2012)

Version 1.2.0 added support for Microsoft System Center Operations Manager 2012 and for microcode version 6.4.0 of the IBM Storwize V7000 and IBM System Storage® SAN Volume Controller storage systems.

Additional changes in version 1.2.0:

Ticket ID	Description
SCOM-22085	Enhancement: Secure storage of passwords and passphrases that are used for connection to IBM storage systems.
SCOM-205094	Enhancement: SAN Volume Controller of microcode version 6.3.0 or later can be logged into with user and passphrase credentials, without needing an SSH key in addition.
SCOM-205099	Enhancement: The IBM Storage Solutions External Runtime Components (previously named "XPyV") are now integrated within the IBM Storage Management Pack code, rather than installed separately.
SCOM-208786	Enhancement: The name of a connected XIV storage system is now displayed in Disk View and additional information panes.
SCOM-210304	Enhancement: Complete mapping of event types (information, warning, error) for Storwize V7000 and SAN Volume Controller.
SCOM-210312	Enhancement: Multiple storage systems are automatically detected in parallel.
SCOM-210314	Enhancement: The IBM Storage Management Pack can now be installed on all site servers that run SCOM agents, in addition to regular installation on the SCOM management server. This allows monitoring data to be collected by each SCOM agent service, which then sends the data to the SCOM management server.
SCOM-232514	Enhancement: A SCOM alert message is displayed if a storage system becomes unavailable.
SCOM-54232	Fixed: The passphrase required for certain SSH connections with Storwize V7000 and SAN Volume Controller cannot be entered.

Version 1.1.1 (September 2011)

Version 1.1.1 added support for:

- Version 11.0.0 of the IBM XIV microcode (XIV Gen3).

- Versions 6.2.0 and 6.3.0 of the IBM Storwize V7000 and IBM SAN Volume Controller microcode.

Version 1.1.0 (December 2010)

Version 1.1.0 was the first release of the IBM Storage Management Pack for Microsoft SCOM.

Known issues

This section details the known issues in version 2.3.0, along with possible workarounds (if workarounds are available).

Note:

- For comprehensive information about known issues in Microsoft System Center Operations Manager 2012, see the Microsoft System Center Operations Manager 2012 online release notes (technet.microsoft.com/en-us/library/hh561709.aspx).

Ticket ID	Description
SCOM-238811	<p>The detection of DS8000 storage systems stops if volumes on these systems have names with non-ASCII characters.</p> <p>Currently there is no workaround or solution for this limitation (SCOM-238811).</p>
SCOM-260923	<p>In some cases, the monitoring host can not be discovered after a certain IBM management pack is manually deleted and then and imported again.</p> <p>To resolve this issue, delete the same management pack again and then import it again. Alternatively, you can shorten the management pack object discovery interval to 30 seconds or less (for more information, refer to the relevant Microsoft SCOM documentation).</p>
SCOM-261133	<p>After upgrading to the latest version by installing it over version 1.1.0, the configuration that was made with version 1.1.0 is no longer valid.</p> <p>To resolve this issue, run the upgrade_config.cmd CLI utility after to the latest version is installed. For more information, refer to the user guide.</p>
SCOM-261147	<p>For SAN Volume Controller and Storwize systems, the same event might be displayed several times under Events, each time with a different timestamp. This occurs if the event is reported by the storage system each time with an updated timestamp.</p> <p>This is a design behaviour that might be changed in a future management pack version.</p> <p>Currently there is no workaround or solution for this limitation (SCOM-261147).</p>

Ticket ID	Description
SCOM-261151	Physical drives with an empty enclosure ID are not displayed for Storwize V3500 or Storwize V3700 systems. Currently there is no workaround or solution for this limitation (SCOM-261151).
SCOM-261196	XIV volume information is not updated after the volume is migrated to another storage pool. To resolve this issue, remove the XIV storage system and then add it again by using the scomu.cmd utility.
SCOM-261197	Information regarding the relationship between FlashCopy consistency group and FlashCopy mapping is not updated for Storwize systems. Currently there is no workaround or solution for this limitation (SCOM-261197).
SCOM-261198	For IBM Flex System systems, only the target volume is displayed in the FlashCopy mapping relationship list. Currently there is no workaround or solution for this limitation (SCOM-261198).
SCOM-261200	The IBM Storage Management Pack only works when the SCOM Root Management Server (RMS) and SCOM agents reside in the same domain. Currently there is no other workaround or solution for this limitation (SCOM-261200).
SCOM-261238	The digital signature cannot be verified in Windows 2008.
SCOM-261242	The status of the SAN Volume Controller iSCSI port or Storwize iSCSI port is incorrect if the port is configured and the state of the link is not active.

Related information and publications

You can find additional information and publications related to the IBM Storage Management Pack for Microsoft SCOM on the following information sources.

- IBM Storage Host Software Solutions Information Center (publib.boulder.ibm.com/infocenter/strhosts/ic)
- IBM Flex System Information Center (publib.boulder.ibm.com/infocenter/flexsys/information)
- IBM Storwize V3500 Information Center (publib.boulder.ibm.com/infocenter/storwize/v3500_ic)
- IBM Storwize V3700 Information Center (publib.boulder.ibm.com/infocenter/storwize/v3700_ic)
- IBM Storwize V5000 Information Center (publib.boulder.ibm.com/infocenter/storwize/v5000_ic)
- IBM Storwize V7000 Information Center (publib.boulder.ibm.com/infocenter/storwize/ic)

- IBM Storwize V7000 Unified Information Center (publib.boulder.ibm.com/infocenter/storwize/unified_ic)
- IBM SAN Volume Controller Information Center (publib.boulder.ibm.com/infocenter/svc/ic)
- IBM DS8000 Information Center (publib.boulder.ibm.com/infocenter/dsichelp/ds8000ic)
- IBM XIV Storage System Information Center (publib.boulder.ibm.com/infocenter/ibmxiv/r2)
- Microsoft System Center Technical Resources website (technet.microsoft.com/en-us/systemcenter)

Getting information, help, and service

If you need help, service, technical assistance, or want more information about IBM products, you can find various sources to assist you. You can view the following websites to get information about IBM products and services and to find the latest technical information and support.

- IBM website (ibm.com[®])
- IBM Support Portal website (www.ibm.com/storage/support)
- IBM Directory of Worldwide Contacts website (www.ibm.com/planetwide)

Notices

These legal notices pertain to IBM Storage Host Software Solutions product documentation.

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.*

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

*Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan Ltd.
1623-14, Shimotsuruma, Yamato-shi
Kanagawa 242-8502 Japan*

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

*IBM Corporation
Attn: Office of Legal Counsel
650 Harry Road
San Jose, CA 95120-6099
U.S.A.*

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Copyright and trademark information website (www.ibm.com/legal/us/en/copytrade.shtml).

Microsoft, Windows Server, Windows, and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States, other countries, or both.

Other product and service names might be trademarks of IBM or other companies.



Printed in USA