

# Zenoss Resource Manager Release Notes

Release 5.3.0

Zenoss, Inc.

www.zenoss.com

# **Zenoss Resource Manager Release Notes**

Copyright © 2017 Zenoss, Inc. All rights reserved.

Zenoss, Own IT, and the Zenoss logo are trademarks or registered trademarks of Zenoss, Inc., in the United States and other countries. All other trademarks, logos, and service marks are the property of Zenoss or other third parties. Use of these marks is prohibited without the express written consent of Zenoss, Inc., or the third-party owner.

Amazon Web Services, AWS, and EC2 are trademarks of Amazon.com, Inc. or its affiliates in the United States and/or other countries.

Flash is a registered trademark of Adobe Systems Incorporated.

Oracle, the Oracle logo, Java, and MySQL are registered trademarks of the Oracle Corporation and/or its affiliates.

Linux is a registered trademark of Linus Torvalds.

RabbitMQ is a trademark of Pivotal Software, Inc.

SNMP Informant is a trademark of Garth K. Williams (Informant Systems, Inc.).

Sybase is a registered trademark of Sybase, Inc.

Tomcat is a trademark of the Apache Software Foundation.

VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

All other companies and products mentioned are trademarks and property of their respective owners.

Part Number: 1002.17.229

Zenoss, Inc. 11305 Four Points Drive Bldg 1 - Suite 300 Austin, Texas 78726

# About this document

Zenoss Resource Manager Release Notes contains important information about minor and micro releases of Zenoss Resource Manager (Resource Manager).

For information about Control Center, refer to the Control Center Release Notes.

This document provides information about the following releases of Resource Manager:

Date	Release
17 August 2017	5.3.0
07 July 2017	5.2.6
19 June 2017	5.2.5 (withdrawn)
03 May 2017	5.2.4
13 April 2017	5.2.3
27 February 2017	5.2.2
25 January 2017	5.2.1
30 November 2016	5.2.0

# Supported operating systems and browsers

The following table identifies the supported combinations of client operating systems and web browsers.

Client OS	Supported Browsers	
Windows 7 and 8.1	Internet Explorer 11 (Enterprise mode only; compatibility mode is not supported.)	
	Internet Explorer 10 <sup>*</sup>	
Windows 10	Internet Explorer 11 (Enterprise mode only; compatibility mode is not supported.)	
	Internet Explorer 10 <sup>*</sup>	
	Firefox 50 and later	
	Chrome 54 and later	
	Microsoft Edge	
Windows Server 2012 R2	Firefox 30	
	Chrome 36	
Macintosh OS/X 10.9	Firefox 30 and above	
	Chrome 36 and above	
Ubuntu 14.04 LTS	Firefox 30 and above	
	Chrome 37 and above	
Red Hat Enterprise Linux 6.5,	Firefox 30 and above	
CentOS 6.5	Chrome 37 and above	

Support for Internet Explorer 10 will be withdrawn beginning with the next major release of Resource Manager.

# Supported operating environments

The Resource Manager application is deployed in and managed by Control Center. The supported operating environments of Resource Manager are the environments that Control Center supports at a given release. The following sections identify the supported operating environments of Resource Manager.

#### Resource Manager, Control Center, and operating systems

The following table identifies the supported combinations of Resource Manager, Control Center, and operating system releases.

Resource Manager release	lanager release Control Center	
	release	Host OS
5.3.0	1.3.0, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.4.0	RHEL/CentOS 7.1, 7.2, or 7.3 (64-bit)
5.2.0, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.6 <sup>*</sup>	1.2.0, 1.2.1, 1.2.2, 1.2.3, 1.3.0, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.4.0	RHEL/CentOS 7.1, 7.2, or 7.3 (64-bit)
5.1.9, 5.1.10	1.1.9, 1.2.0	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.8	1.1.5, 1.1.6, 1.1.7. 1.1.8, 1.1.9	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.7	1.1.5, 1.1.6, 1.1.7, 1.1.8	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.6 (internal release only)	(none)	(none)
5.1.4, 5.1.5	1.1.5, 1.1.6, 1.1.7	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.3	1.1.2, 1.1.3, 1.1.5	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.2	1.1.2, 1.1.3	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.1	1.1.1, 1.1.2	RHEL/CentOS 7.1 or 7.2 (64-bit)

#### Hypervisors

Hypervisor	Versions
VMware vSphere	5.0, 5.1, 5.5, 6.0, 6.5
Microsoft Hyper-V	Version 2.0 with Windows Server 2008 R2 SP1
	Version 3.0 with Windows Server 2012 and 2012 R2

#### **Public cloud platforms**

Amazon Web Services (AWS) is fully supported.

Microsoft Azure is supported only for collector pools. Deploying a full Control Center cluster to operate Resource Manager is NOT supported on Microsoft Azure.

#### Supported clients and browsers

Resource Manager supports the same client operating systems and web browsers that Control Center supports. For more information, refer to Control Center documentation.

Version 5.2.5 was withdrawn.

# **Resource Manager 5.3.0**

Beginning with this release, Zenoss has implemented a change to release artifacts. Appliance artifacts remain the preferred option for installations and upgrades. These artifacts are OVA for VMware installations, ISO images for vSphere and bare metal installations, and the ISO updater. If you choose not to use the appliance, a single set of artifacts with all components and prerequisites is available. Use the converged artifacts for all installations and upgrades, whether online with an internet connection, or offline without a connection. When upgrading your system, use the converged artifacts, regardless of whether the original installation was performed online or offline.

New Resource Manager artifacts are no longer available from Docker Hub, and a Docker Hub account is no longer required to access Resource Manager images. Use your LeapFILE account to download all artifacts.

For Resource Manager versions earlier than 5.3.0, artifacts will remain available from Docker Hub for as long as Zenoss maintains that release. Customers should carefully review the Install and Upgrade Guides for both Resource Manager and Control Center for details.

#### **New features**

This release of Resource Manager provides the following new features.

#### Audit logging enhancements

The Resource Manager audit log tracks user actions in log files in a format that is optimized for searching and reporting. Audit logs are stored in ElasticSearch and are viewable in the Kibana browser interface.

In this release, audit logs are also propagated to a flat file so that retention policies and export actions can be applied to them separately from Resource Manager operational logs. By default, the audit logs are stored at /opt/zenoss/log/audit.log. The retention rules of the applicationaudit.log file are governed by the logrotate configuration file. For more information, refer to the *Zenoss Resource Manager Administration Guide*.

#### **Graph enhancements**

To better accommodate graphs with many series (for example, component graphs with many components with "All On Same Graph" selected), the upper and lower graph legends are now consolidated into one active legend below the graph. Controls for making a particular series visible or not, formerly available in the upper legend, are now located in the legend below the graph.

Issues with pan, zoom, and shift functions in standalone graphs have been addressed.

#### **Multi-Graph Report portlet**

The Multi-Graph Report portlet displays an existing Multi-Graph Report that was created by using the **Reports** page. You can choose a specific graph group from the multi-graph report and select the time range for the portlet.

#### **Dedicated Zopes**

To maintain responsiveness of the browser interface, Resource Manager now provides dedicated Zope instances for the following purposes:

- Reporting The service zenreports provides a Zope instance that is dedicated to long-running report generation.
- JSON API use The service zenapi provides a Zope instance to support heavy use of the Resource Manager JSON API.
- Debugging The service zendebug enables the Zenoss Support team to bring up a separate Zope instance for troubleshooting.

By default, zenreports and zenapi start when you launch Resource Manager, and you can disable these services. By default, zendebug is stopped, and you can enable the service when instructed to do so by Zenoss Support. Do not remove zendebug from the Resource Manager service definition because it is a supportability service.

For more information, refer to the Zenoss Resource Manager Administration Guide.

#### Low storage event alerts

ZenPacks.zenoss.ControlCenter monitors the Control Center application management and orchestration system. Updates in version 1.2.1 of this ZenPack enable Resource Manager to alert you to low storage events in the tenant application file systems and the underlying thin pool data metadata devices before a severe outage occurs. Available with Control Center version 1.1.6 and later, the ZenPack provides

- Graceful degradation of monitoring capability.
- Storage usage reports for the thin pool data and metadata devices.
- Usage statistics in MiB/GiB units in both the browser interface and the command-line interface (serviced volume status command).
- For DFS volumes and thin pool data and metadata devices, events as follows:
  - At 80% full, generates a "space low" warning.
  - At 90% full, generates a "space very low" alarm.

### **Fixed issues**

#### Table 1: Release 5.3.0

ID	Description
ZEN-5652	audit.log does not properly log removal of templates from device classes.
ZEN-18127	Missing audit.log messages if SMTP configuration is wrong.
ZEN-19495	Zope containers are failing when modeling from the UI.
ZEN-21035	audit.log file is difficult to search in version 5.x.

ID	Description
ZEN-21070	Graph is essentially blank when selecting the cache hit ratio for a set of DBs to display "All on the same Graph".
ZEN-23132	Unable to add Control Center VIP to the /Control Center device class.
ZEN-23490	The Zope serviced definition for zenossdbpack command does not get updated during upgrade.
ZEN-26387	The stateChange field in .csv export in epoch time is inconsistent with other fields.
ZEN-26414	The ControlCenter ZenPack reports incorrect values for services with multiple entries.
ZEN-26670	zenossdbpack.log gets logging from unrelated daemons.
ZEN-27118	The PowerNet-MIB.mib load is missing two traps by default.
ZEN-27228	The Group total for a group of devices is incorrect.
ZEN-27413	Ping status does not include supressed events.
ZEN-27458	smidump introduces zeroes into Zenoss MIBs.
ZEN-27605	Cisco UCS devices not batch loading correctly using zenbatchload command.
ZEN-27612	ZEN-26581 degrades, rather than enhances MIB management functionality.
ZEN-27727	Special characters in the <b>Infrastructure &gt; Devices</b> view can cause CatalogServiceException <b>flares</b> .
ZEN-27735	vSphere devices are not filtered with Down status on the Infrastructure page. This column is not shown by default. Users can add this column and then will be able to use the filters
ZEN-27778	Invalid TALES expressions cause notifications to fail.
ZEN-27796	audit.log lacking detail for changes to mappings.
ZEN-27826	Malformed JSON in Events details leads to index/ETL errors.
ZEN-27834	Heartbeat timeouts are not configurable.
ZEN-27853	Negative values displayed on Modeled Devices graph (Advanced/ControlCenter/ RemoteCollector/Graphs).
ZEN-27925	Email notifications are concatenating content onto a single line.
ZEN-27928	Event detail log timestamps do not respect user's time zone.
ZEN-27935	A warning should be issued when collection fails due to an IP address not being configured on a device.
ZEN-27940	Resource Manager site portal URL point to wrong page.
ZEN-28025	Google map portlet: Viewing parent location generates a site error.
ZEN-28055	quiesce-rabbitmq.sh script fails to pause service during backup.
ZEN-28058	Set default RAM value to 32 GB for PoC appliance.

# **Known issues**

#### Table 2: Release 5.3.0

ID	Description	Status
ZEN-23606	When modeling Linux servers as a root user, you must not require the root user to use TTY. See the "Notes and workarounds" section below for detailed instructions.	Open
ZEN-27381	ZenPack dependencies not always installed in correct order during Resource Manager upgrade.	Open
ZEN-27499	"ERR Failed to publish events caused by: EOF" error messages caused by issues with filebeat and Logstash closing connections it thinks are idle. This is a benign error. The ZenPack install and upgrade completes just fine.	Open
ZEN-28227	Audit log information level is not configurable in a permanent way. Whenever a container is bounced, the configuration changes are lost unless the container is committed.	Open
ZPS-1988	Upgrade from 5.1.1, 5.1.2, 5.1.3, or 5.1.4 to 5.3.0 with the BigIP ZenPack causes a traceback. The workaround is to remove the BigIP ZenPack and move forward with the upgrade.	Open

# ZenPacks

This release of Resource Manager supports ZenPacks at the current version listed in the following table. For more information about ZenPacks, see the http://www.zenoss.com/product/zenpacks.

ZenPack	Current version	Previous version
ZenPacks.zenoss.AdvancedSearch	1.2.1	Same
ZenPacks.zenoss.AixMonitor	2.2.3	2.2.2
ZenPacks.zenoss.ApacheMonitor	2.1.4	Same
ZenPacks.zenoss.AuditLog	1.4.1	1.4.0
ZenPacks.zenoss.BigIpMonitor	2.7.1	Same
ZenPacks.zenoss.BrocadeMonitor	2.1.1	Same
ZenPacks.zenoss.CalculatedPerformance	2.4.1	Same
ZenPacks.zenoss.CatalogService	3.1.3	3.1.1
ZenPacks.zenoss.CheckPointMonitor	2.0.2	Same
ZenPacks.zenoss.CiscoMonitor	5.8.0	Same
ZenPacks.zenoss.CiscoUCS	2.6.1	Same
ZenPacks.zenoss.ComponentGroups	1.4.0	Same
ZenPacks.zenoss.ControlCenter	1.5.2	1.5.1
ZenPacks.zenoss.Dashboard	1.2.6	1.2.5

#### Table 3: Release 5.3.0

ZenPack	Current version	Previous version
ZenPacks.zenoss.DellMonitor	2.2.0	Same
ZenPacks.zenoss.Diagram	1.3.1	Same
ZenPacks.zenoss.DigMonitor	1.1.0	Same
ZenPacks.zenoss.DistributedCollector	3.1.5	3.1.4
ZenPacks.zenoss.DnsMonitor	2.1.0	Same
ZenPacks.zenoss.DynamicView	1.5.0	Same
ZenPacks.zenoss.EnterpriseCollector	1.7.4	Same
ZenPacks.zenoss.EnterpriseReports	2.4.1	Same
ZenPacks.zenoss.EnterpriseSecurity	1.2.0	Same
ZenPacks.zenoss.EnterpriseSkin	3.3.4	Same
ZenPacks.zenoss.FtpMonitor	1.1.0	Same
ZenPacks.zenoss.HPMonitor	2.1.0	Same
ZenPacks.zenoss.HpuxMonitor	2.0.2	2.0.1
ZenPacks.zenoss.HttpMonitor	2.1.0	Same
ZenPacks.zenoss.JBossMonitor	2.4.2	Same
ZenPacks.zenoss.JuniperMonitor	2.1.1	Same
ZenPacks.zenoss.LDAPAuthenticator	3.3.0	Same
ZenPacks.zenoss.LDAPMonitor	1.4.1	Same
ZenPacks.zenoss.Licensing	0.2.0	Same
ZenPacks.zenoss.LinuxMonitor	2.2.6	2.2.2
ZenPacks.zenoss.Microsoft.HyperV	1.4.0	Same
ZenPacks.zenoss.Microsoft.Windows	2.7.8	2.7.4
ZenPacks.zenoss.MySqlMonitor	3.0.7	Same
ZenPacks.zenoss.NetAppMonitor	3.5.0	3.3.2
ZenPacks.zenoss.NetScreenMonitor	2.2.2	Same
ZenPacks.zenoss.NortelMonitor	2.0.2	Same
ZenPacks.zenoss.NtpMonitor	2.2.2	Same
ZenPacks.zenoss.PredictiveThreshold	1.2.2	1.2.1
ZenPacks.zenoss.PropertyMonitor	1.1.0	Same
ZenPacks.zenoss.PythonCollector	1.9.0	1.8.2
ZenPacks.zenoss.SolarisMonitor	2.5.0	Same
ZenPacks.zenoss.StorageBase	1.4.1	Same
ZenPacks.zenoss.SupportBundle	1.1.1	1.1.0
ZenPacks.zenoss.TomcatMonitor	2.3.0	Same

ZenPack	Current version	Previous version
ZenPacks.zenoss.vCloud	1.4.9	Same
ZenPacks.zenoss.vSphere	3.6.3	3.6.2
ZenPacks.zenoss.WBEM	1.0.3	Same
ZenPacks.zenoss.WebLogicMonitor	2.2.3	Same
ZenPacks.zenoss.WebsphereMonitor	1.2.2	Same
ZenPacks.zenoss.ZenDeviceACL	2.2.0	Same
ZenPacks.zenoss.ZenJMX	3.12.1	Same
ZenPacks.zenoss.ZenMail	5.1.0	Same
ZenPacks.zenoss.ZenMailTx	2.6.0	Same
ZenPacks.zenoss.ZenOperatorRole	2.1.0	Same
ZenPacks.zenoss.ZenPackLib	2.0.6	2.0.5
ZenPacks.zenoss.ZenSQLTx	2.6.5	Same
ZenPacks.zenoss.ZenWebTx	3.0.1	3.0.0

### Notes and workarounds

#### ZEN-27866: Loading MIBs change

Resource Manager prevents duplicate OID values in the database, regardless of the MIB module in which the OID exists. When loading a MIB, Resource Manager compares OID values with data from the source (zenmib input file, ZenPack objects.xml file, or browser interface), and takes the following action:

- If the OID exists in the same MIB module, it overwrites the OID with data from the source.
- If the OID exists in a different MIB module, it deletes the OID, and then creates the OID as defined in the source.
- If the OID does not exist, it creates the OID as defined in the source.

#### ZEN-23606: Using a root user to model Linux devices

The Linux Monitor ZenPack requires the ability to run the pvs, vgs, lvs, systemctl, initctl, and service commands remotely on your Linux server(s) using SSH. By default, these commands are only allowed to be run locally. To remotely run these command, the root user must not be required to use TTY.

Perform the following on your Linux server(s):

- 1 Install the sudo package on your server(s).
- 2 Allow root user to execute commands via SSH without a TTY.
  - **a** Edit the /etc/sudoers file.
  - **b** Find the line containing root ALL=(ALL) ALL.
  - c Add the following line underneath it:

Defaults:root !requiretty

d Save the changes and exit.

# **Resource Manager 5.2.6**

# **New features**

There are no new features in this release.

### **Fixed issues**

#### Table 4: Release 5.2.6

ID	Description
ZEN-14068	Dynamic view does not fill up available real estate.
ZEN-23197	Update Settings to display "Hostname" instead of "Zenoss Hostname".
ZEN-26818	Timezone is unclear in Event Details.
ZEN-27310	Service definitions are different from installed and upgraded systems.
ZEN-27455	
ZEN-27358	Incorrect time sent in syslog notification.
ZEN-27394	Systems/Groups/Component Groups need a manual refresh to be visible after creation.
ZEN-27446	Flare message displayed when adding a custom graph that does not have a template.
ZEN-27520	Support Bundle does not accurately pull zope logs.
ZEN-27549	When redis is down, zminion aggressively attempts to reconnect, potentially flooding network with SYN packets.
ZEN-27555	Event Details Only Include Fields with ifIndex Suffix leading to broken transforms.
ZEN-27579	Improved model performance with zodb.
ZEN-27589	Zenhub invalidation workers stop processing.
ZEN-27611	When a device has a state of Down, polling does not occur; however, the Missed_Runs performance metric begins to increment. Stopping polling due to a Down state should not be considered a missed run.

ID	Description
ZEN-27630	Filter is unavailable for Device Status column.
ZEN-27676	Improved security around Kibana log access.
ZEN-27695	Manual subscribers are not getting notifications via email.
ZEN-27696	Improved logging of the Metric pipeline, in particular log progress of specified metrics through pipeline.
ZEN-27699	zauth_eventlog constantly reports failed login attempts by zenoss_system.

# Known issues

#### Table 5: Release 5.2.6

ID	Description	Status
ZEN-27381	ZenPack dependencies not always installed in correct order during Resource Manager upgrade	Open

### ZenPacks

This release of Resource Manager supports ZenPacks at the current version listed in the following table. For more information about ZenPacks, see the http://www.zenoss.com/product/zenpacks.

#### Table 6: Release 5.2.6

ZenPack	Current version	Previous version
ZenPacks.zenoss.AdvancedSearch	1.2.1	Same
ZenPacks.zenoss.AixMonitor	2.2.2	Same
ZenPacks.zenoss.ApacheMonitor	2.1.4	Same
ZenPacks.zenoss.AuditLog	1.4.0	Same
ZenPacks.zenoss.BigIpMonitor	2.7.1	Same
ZenPacks.zenoss.BrocadeMonitor	2.1.1	Same
ZenPacks.zenoss.CalculatedPerformance	2.4.1	2.3.2
ZenPacks.zenoss.CatalogService	3.1.1	Same
ZenPacks.zenoss.CheckPointMonitor	2.0.2	Same
ZenPacks.zenoss.CiscoMonitor	5.8.0	5.7.3
ZenPacks.zenoss.CiscoUCS	2.6.1	2.6.0
ZenPacks.zenoss.ComponentGroups	1.4.0	1.3.0
ZenPacks.zenoss.ControlCenter	1.5.1	1.5.0
ZenPacks.zenoss.Dashboard	1.2.5	Same
ZenPacks.zenoss.DellMonitor	2.2.0	Same
ZenPacks.zenoss.Diagram	1.3.1	Same

ZenPack	Current version	Previous version
ZenPacks.zenoss.DigMonitor	1.1.0	Same
ZenPacks.zenoss.DistributedCollector	3.1.4	Same
ZenPacks.zenoss.DnsMonitor	2.1.0	Same
ZenPacks.zenoss.DynamicView	1.5.0	Same
ZenPacks.zenoss.EnterpriseCollector	1.7.4	1.7.3
ZenPacks.zenoss.EnterpriseReports	2.4.1	Same
ZenPacks.zenoss.EnterpriseSecurity	1.2.0	Same
ZenPacks.zenoss.EnterpriseSkin	3.3.4	Same
ZenPacks.zenoss.FtpMonitor	1.1.0	Same
ZenPacks.zenoss.HPMonitor	2.1.0	Same
ZenPacks.zenoss.HpuxMonitor	2.0.1	Same
ZenPacks.zenoss.HttpMonitor	2.1.0	Same
ZenPacks.zenoss.JBossMonitor	2.4.2	Same
ZenPacks.zenoss.JuniperMonitor	2.1.1	Same
ZenPacks.zenoss.LDAPAuthenticator	3.3.0	Same
ZenPacks.zenoss.LDAPMonitor	1.4.1	Same
ZenPacks.zenoss.Licensing	0.2.0	Same
ZenPacks.zenoss.LinuxMonitor	2.2.2	2.2.0
ZenPacks.zenoss.Microsoft.Windows	2.7.4	2.7.0
ZenPacks.zenoss.MySqlMonitor	3.0.7	Same
ZenPacks.zenoss.NetAppMonitor	3.5.0	3.3.2
ZenPacks.zenoss.NetScreenMonitor	2.2.2	Same
ZenPacks.zenoss.NortelMonitor	2.0.2	Same
ZenPacks.zenoss.NtpMonitor	2.2.2	Same
ZenPacks.zenoss.PredictiveThreshold	1.2.2	1.2.1
ZenPacks.zenoss.PropertyMonitor	1.1.0	Same
ZenPacks.zenoss.PythonCollector	1.9.0	1.8.2
ZenPacks.zenoss.SolarisMonitor	2.5.0	Same
ZenPacks.zenoss.StorageBase	1.4.1	Same
ZenPacks.zenoss.SupportBundle	1.1.1	1.1.0
ZenPacks.zenoss.TomcatMonitor	2.3.0	Same
ZenPacks.zenoss.vCloud	1.4.9	Same
ZenPacks.zenoss.vSphere	3.6.2	Same
ZenPacks.zenoss.WBEM	1.0.3	Same

ZenPack	Current version	Previous version
ZenPacks.zenoss.WebLogicMonitor	2.2.3	Same
ZenPacks.zenoss.WebsphereMonitor	1.2.2	Same
ZenPacks.zenoss.ZenDeviceACL	2.2.0	Same
ZenPacks.zenoss.ZenJMX	3.12.1	Same
ZenPacks.zenoss.ZenMail	5.1.0	Same
ZenPacks.zenoss.ZenMailTx	2.6.0	Same
ZenPacks.zenoss.ZenOperatorRole	2.1.0	Same
ZenPacks.zenoss.ZenPackLib	2.0.5	2.0.4
ZenPacks.zenoss.ZenSQLTx	2.6.6	Same
ZenPacks.zenoss.ZenWebTx	3.0.0	Same

# **Resource Manager 5.2.5**

Resource Manager 5.2.5 was withdrawn.

3

# 4

# **Resource Manager 5.2.4**

## **New features**

No new features in this release.

# **Fixed issues**

#### Table 7: Release 5.2.4

ID	Description
ZEN-23079	Dependency View takes 5 minutes or more to load.
ZEN-24220	Component graphs show internal ID instead of hostname.
ZEN-26930	Once the device tree contains a minimal set of sub-organizers (Devices, Groups, Systems, Locations), the auto-refresh is slow. While the tree is being retrieved, the entire tree becomes blank and displays a loading message.
ZEN-26998	Graph range for 'Yesterday' is actually the last 24 hours.
ZEN-27057	Projected values are not being displayed.
ZEN-27094	Resource Manager will allow duplicate IPs for a device.
ZEN-27096 / ZEN-27291	When filtering on production state AND sorting other fields on the Infrastructure page, a ProdStateNotSetError flare is displayed.
ZEN-27128	MultiGraph reports display last group name for all graphs.
ZEN-27168	The Device component list in the Resource Manager UI is not sorted alphabetically.
ZEN-27184	Model Collection Age displays epoch time instead of "Not Modeled" for devices that are not modeled.
ZEN-27211 / ZEN-27230 / ZEN-27380	Service definitions should be consistent between fresh and upgraded systems.
ZEN-27221	Unable to ack or close events within the Infrastructure page.
ZEN-27276	OS Process Monitoring (SNMP) can send duplicate events if the component has been removed.

ID	Description
ZEN-27278	Uninstalling a ZenPack that has a service results in a traceback error.
ZEN-27289	By default, zauth zserver-threads are set to 10.
ZEN-27331	No event is raised when SNMPv3 modeling fails with a traceback.
ZEN-27337	Graph export file (CSV) does not have any unit of measure.
ZEN-27341	ZenPacks are not always installed in the correct order during Resource Manager upgrade.
ZEN-27347	When a backup is taken while the system has a large number of DB writes happening, the restore from the backup may result in database corruption.
ZEN-27353	Zenoss toolbox should be included in the product image.
ZEN-27361	In appliance install, an upgrade of Control Center on delegates from version 1.3.0 to 1.3.x does not complete.
ZEN-27379	With component groups containing vSphere pNICs, many will have the same name. the user will not be able to tell which pNIC goes with which host, or which vNIC with which VM.

# ZenPacks

This release of Resource Manager supports ZenPacks at the current version listed in the following table. For more information about ZenPacks, see the http://www.zenoss.com/product/zenpacks.

#### Table 8: Release 5.2.4

ZenPack	Current version	Previous version
ZenPacks.zenoss.AdvancedSearch	1.2.1	Same
ZenPacks.zenoss.AixMonitor	2.2.2	Same
ZenPacks.zenoss.ApacheMonitor	2.1.4	Same
ZenPacks.zenoss.AuditLog	1.4.0	Same
ZenPacks.zenoss.BigIpMonitor	2.7.1	Same
ZenPacks.zenoss.BrocadeMonitor	2.1.1	Same
ZenPacks.zenoss.CalculatedPerformance	2.4.1	2.3.2
ZenPacks.zenoss.CatalogService	3.1.1	Same
ZenPacks.zenoss.CheckPointMonitor	2.0.2	Same
ZenPacks.zenoss.CiscoMonitor	5.7.3	Same
ZenPacks.zenoss.CiscoUCS	2.6.0	2.5.5
ZenPacks.zenoss.ComponentGroups	1.4.0	1.3.0
ZenPacks.zenoss.ControlCenter	1.5.0	1.4.2
ZenPacks.zenoss.Dashboard	1.2.5	Same
ZenPacks.zenoss.DellMonitor	2.2.0	Same
ZenPacks.zenoss.Diagram	1.3.1	Same
ZenPacks.zenoss.DigMonitor	1.1.0	Same

ZenPack	Current version	Previous version
ZenPacks.zenoss.DistributedCollector	3.1.4	Same
ZenPacks.zenoss.DnsMonitor	2.1.0	Same
ZenPacks.zenoss.DynamicView	1.5.0	Same
ZenPacks.zenoss.EnterpriseCollector	1.7.3	Same
ZenPacks.zenoss.EnterpriseReports	2.4.1	Same
ZenPacks.zenoss.EnterpriseSecurity	1.2.0	Same
ZenPacks.zenoss.EnterpriseSkin	3.3.4	Same
ZenPacks.zenoss.FtpMonitor	1.1.0	Same
ZenPacks.zenoss.HPMonitor	2.1.0	Same
ZenPacks.zenoss.HpuxMonitor	2.0.1	Same
ZenPacks.zenoss.HttpMonitor	2.1.0	Same
ZenPacks.zenoss.JBossMonitor	2.4.2	Same
ZenPacks.zenoss.JuniperMonitor	2.1.1	Same
ZenPacks.zenoss.LDAPAuthenticator	3.3.0	Same
ZenPacks.zenoss.LDAPMonitor	1.4.1	Same
ZenPacks.zenoss.Licensing	0.2.0	Same
ZenPacks.zenoss.LinuxMonitor	2.2.0	2.1.3
ZenPacks.zenoss.Microsoft.Windows	2.7.0	2.6.11
ZenPacks.zenoss.MySqlMonitor	3.0.7	Same
ZenPacks.zenoss.NetAppMonitor	3.5.0	3.3.2
ZenPacks.zenoss.NetScreenMonitor	2.2.2	Same
ZenPacks.zenoss.NortelMonitor	2.0.2	Same
ZenPacks.zenoss.NtpMonitor	2.2.2	Same
ZenPacks.zenoss.PredictiveThreshold	1.2.2	1.2.1
ZenPacks.zenoss.PropertyMonitor	1.1.0	Same
ZenPacks.zenoss.PythonCollector	1.9.0	1.8.2
ZenPacks.zenoss.SolarisMonitor	2.5.0	Same
ZenPacks.zenoss.StorageBase	1.4.1	Same
ZenPacks.zenoss.SupportBundle	1.1.0	Same
ZenPacks.zenoss.TomcatMonitor	2.3.0	Same
ZenPacks.zenoss.vCloud	1.4.9	Same
ZenPacks.zenoss.vSphere	3.6.2	Same
ZenPacks.zenoss.WBEM	1.0.3	Same
ZenPacks.zenoss.WebLogicMonitor	2.2.3	Same

ZenPack	Current version	Previous version
ZenPacks.zenoss.WebsphereMonitor	1.2.2	Same
ZenPacks.zenoss.ZenDeviceACL	2.2.0	Same
ZenPacks.zenoss.ZenJMX	3.12.1	Same
ZenPacks.zenoss.ZenMail	5.1.0	Same
ZenPacks.zenoss.ZenMailTx	2.6.0	Same
ZenPacks.zenoss.ZenOperatorRole	2.1.0	Same
ZenPacks.zenoss.ZenPackLib	2.0.5	2.0.4
ZenPacks.zenoss.ZenSQLTx	2.6.6	Same
ZenPacks.zenoss.ZenWebTx	3.0.0	Same

# **Resource Manager 5.2.3**

# **New features**

Resource Manager 5.2.3 provides the following new features:

#### ZenPacks installation

The ZenPack installation process is now greatly streamlined. During ZenPack installation or upgrade, changes to the model often occur. To avoid conflicts, the ZenPack installation process has been enhanced to briefly stop applied data maps in ZenHub and then restart them after installation. For revised ZenPack installation instructions, refer to the *Zenoss Resource Manager Administration Guide*.

#### Collection start

Getting device configurations from ZenHub on startup delays the start of collection. Implementation of a configuration caching layer shortens this delay. This enhancement enables collectors to start collecting (or continue collecting during restart) with the cached configurations while the new configurations are being loaded.

#### Appliance installation

This release provides ISO files for installing the Resource Manager appliance as a virtual machine managed by Microsoft Hyper-V. There are separate ISO files for the master host and delegates.

#### High-availability deployments

Documentation for this release describes how to install, configure, and upgrade Resource Manager on a high-availability Control Center cluster.

Upgrade process checks for sufficient storage space

A pre-upgrade check for sufficient DFS volume and metadata space prevents triggering emergency shutdown if space is insufficient. You can increase free storage space and then upgrade, or continue using the installed version of the product.

#### Alternate metric naming convention

Use of an alternate metric naming convention improves retrieval speed of metrics (graphing speed) for vSphere instances with thousands of LUNs or virtual machines. For new installations, the metrics for VMs and LUNs use the new naming convention. For upgrades, the metric names remain the same unless you edit the configuration properties to enable them. Note that changing the naming convention causes historical metrics to become inaccessible. For information about how to enable this enhancement, refer to the *Zenoss Resource Manager Upgrade Guide*.

# **Fixed issues**

#### Table 9: Release 5.2.3

ID	Description
ZEN-6972	Multi-graph reports are unable to show more than 39 entries in edit mode.
ZEN-19198	FileSystem transform fails because evt.eventKey no longer contains the data point name.
ZEN-23471	Date range filtering not working.
ZEN-23497	Provide an option to exclude full device location in graph title. Use to read device names when locations become long.
ZEN-23499	FQDN in multi-graph reports makes graphs difficult to read.
ZEN-23822	When utilizing an event bookmark, only columns currently visible get the filters applied; not all columns specified in the bookmark.
ZEN-24504	Select EVENTS > Event Classes > Status (as an example) and set the pull-down to Mapping Instances. The count at the bottom might display incorrect values when navigating.
ZEN-24685	findposkeyerror reports trace backs with the log "AttributeError: 'NoneType' object has no attribute 'getDatabase".
ZEN-25471	Devices can be added to <b>Component Group</b> as they are included in search results.
ZEN-26037	Test data source browser interface functionality should test on device's actual collector.
ZEN-26380	Event View dashboard portlet does not retain specified columns and filters.
ZEN-26449	A DERIVE type data point is performing like a COUNTER data point in graphs. In particular, when the delta of the current and previous value are negative, the graph displays a spike instead of a drop.
ZEN-26522	IPv6ServiceMap plug-in models services that are localhost-only.
ZEN-26530	When using a Custom Production State and zProdStateThreshold to disable monitoring for a device, the configuration does not take effect immediately.
ZEN-26596	When running an auto discovery on a very large network subnet, the discover job will timeout.
ZEN-26637	zenmodeler logging 'Scan time' of modeling immediately after modeling starts, resulting in inaccurate logging of modeling times.
ZEN-26645	zeneventd logging duplicate entries.
ZEN-26673	When a user with role ZenManager adds a device and a component group to a new user as an Administered Object, the new user is unable to add components to the group.
ZEN-26674	As a user with permissions only to a component group, clicking on a component from that group results in a redirect to the login prompt and resulting login will fail.
ZEN-26739	Unable to selectively adjust zFileSystemSizeOffset based on filesystem type. For example: Ext4 filesystems have five percent reserves and the product must take that into account.
ZEN-26741	When selecting <b>All on Same Graph</b> in Component Graphs, the legend will contain the device ID instead of the title, component ID instead of the title, GraphPoint legend is repeated, and device is included on each legend entry even though it is the same for all.

ID	Description
ZEN-26754	audit.log does not log changes to the Infrastructure > Manufacturers page.
ZEN-26795	SNMP INFORM via SNMPv3 are not being processed.
ZEN-26821	Bad transform events can cause an event loop. zeneventd will produce events sent to the root event class, events fail to find default mappings and mapped to /Unknown, and transform errors are logged.
ZEN-26829	zenhub stats does not include the pid of the zenhubworker for which a task is assigned. This new information is useful when debugging zenhub and its workers, especially in cases where a worker might be hanging or deadlocked.
ZEN-26882	zenbatchloadnocommit still commits changes.
ZEN-26883	Graph refresh button will request new graph data, even if previous request is still being processed, which leads to slowing down the system.
ZEN-26884	Graph continues to make refresh requests even when graphs are no longer visible, which leads to slowing down the system.
ZEN-26928	When an error is encountered when evaluating min/max threshold, the resulting logged error on the hub does not specify the device/component from which the error originated.
ZEN-26936	Device configuration loading speed is slow.
ZEN-26994	Existing graph reports will not allow a user to add additional device-level graphs.
ZEN-27000	RabbitMQ should not have an IP assignment because this limits the ability to provide application-level high-availability (HA) if a host fails.
ZEN-27008	Viewing a device graph where the value fluctuates over time, the actual maximum value might not display correctly. Zoom out from the graph and at certain intervals, the max value will drop, even though the higher value will still be within the graph's time range.
ZEN-27030	Setting the device parameter (evt.device) on an event transform prevents the production state from being set.
ZEN-27031	Using a formatted email notification, extra spaces are added in the html. The extra spaces can break rendering and formatting.
ZEN-27042	When a new data source name includes invalid characters, a message is needed to state the allowed characters.
ZEN-27044	In the component graphs section, graphs can have a group of disparate values of different sizes. When displayed individually, graphs will render correctly; however, when they are grouped, they render too large to be viewed without scrolling.
ZEN-27046	When deleting an organizational group, the devices that belong to that group are not completely removed from the group. Subsequently, if the group is re-created, the devices appear in the list of group members, even though the devices claim to not be a member of the group, and the group still claims to have zero members.
ZEN-27063	Most component graphs display IDs instead of title in legend and summary.

# **Known issues**

#### Table 10: Release 5.2.3

ID	Description	Status
ZEN-27381	ZenPack dependencies not always installed in correct order during Resource Manager upgrade	Open

# ZenPacks

This release of Resource Manager supports ZenPacks at the current version listed in the following table. For more information about ZenPacks, see the http://www.zenoss.com/product/zenpacks.

#### Table 11: Release 5.2.3

ZenPack	Current version	Previous version
ZenPacks.zenoss.AdvancedSearch	1.2.1	1.2.0
ZenPacks.zenoss.AixMonitor	2.2.2	Same
ZenPacks.zenoss.ApacheMonitor	2.1.4	Same
ZenPacks.zenoss.AuditLog	1.4.0	Same
ZenPacks.zenoss.BigIpMonitor	2.7.1	Same
ZenPacks.zenoss.BrocadeMonitor	2.1.1	Same
ZenPacks.zenoss.CalculatedPerformance	2.3.2	2.3.0
ZenPacks.zenoss.CatalogService	3.1.1	Same
ZenPacks.zenoss.CheckPointMonitor	2.0.2	Same
ZenPacks.zenoss.CiscoMonitor	5.7.3	Same
ZenPacks.zenoss.CiscoUCS	2.5.5	Same
ZenPacks.zenoss.ComponentGroups	1.3.0	1.2.0
ZenPacks.zenoss.ControlCenter	1.5.0	1.4.2
ZenPacks.zenoss.Dashboard	1.2.5	Same
ZenPacks.zenoss.DellMonitor	2.2.0	Same
ZenPacks.zenoss.Diagram	1.3.1	Same
ZenPacks.zenoss.DigMonitor	1.1.0	Same
ZenPacks.zenoss.DistributedCollector	3.1.4	3.1.2
ZenPacks.zenoss.DnsMonitor	2.1.0	Same
ZenPacks.zenoss.DynamicView	1.5.0	Same
ZenPacks.zenoss.EnterpriseCollector	1.7.3	1.7.0
ZenPacks.zenoss.EnterpriseReports	2.4.1	2.4.0
ZenPacks.zenoss.EnterpriseSecurity	1.2.0	Same
ZenPacks.zenoss.EnterpriseSkin	3.3.4	Same

ZenPacks.zenoss.FtpMonitor1.1.0SameZenPacks.zenoss.HPMonitor2.1.0SameZenPacks.zenoss.HItpMonitor2.0.1SameZenPacks.zenoss.HutpMonitor2.1.0SameZenPacks.zenoss.HutpMonitor2.1.0SameZenPacks.zenoss.JuossMonitor2.4.2SameZenPacks.zenoss.LDospMonitor2.1.1SameZenPacks.zenoss.LDAPAuthenticator3.3.0SameZenPacks.zenoss.LDAPAuthenticator3.3.0SameZenPacks.zenoss.Licensing0.2.0SameZenPacks.zenoss.Licensing0.2.0SameZenPacks.zenoss.Licensing0.2.0SameZenPacks.zenoss.Licensing0.2.0SameZenPacks.zenoss.Licensing0.2.0SameZenPacks.zenoss.NetNonitor2.1.32.1.0ZenPacks.zenoss.NetNonitor3.3.2SameZenPacks.zenoss.NetNopMonitor3.3.2SameZenPacks.zenoss.NetNopMonitor2.2.2SameZenPacks.zenoss.NetNopMonitor2.2.2SameZenPacks.zenoss.NotelMonitor2.2.2SameZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.Solaris/Monitor2.5.0SameZenPacks.zenoss.Solaris/Monitor2.3.0SameZenPacks.zenoss.Solaris/Monitor2.3.0SameZenPacks.zenoss.Solaris/Monitor2.3.0SameZenPacks.zenoss.Solaris/Monitor2.3.0SameZenPacks.zenoss.Solaris/Monitor2.3.0<	ZenPack	Current version	Previous version
ZenPacks.zenoss.HpuxMonitor2.0.1SameZenPacks.zenoss.JBossMonitor2.1.0SameZenPacks.zenoss.JBossMonitor2.4.2SameZenPacks.zenoss.LDAPAuthenticator3.3.0SameZenPacks.zenoss.LDAPAuthenticator3.3.0SameZenPacks.zenoss.LDAPAuthenticator1.4.1SameZenPacks.zenoss.Licensing0.2.0SameZenPacks.zenoss.Licensing0.2.0SameZenPacks.zenoss.Microsoft.Windows2.6.11SameZenPacks.zenoss.NetSorenMonitor3.0.7SameZenPacks.zenoss.NetAppMonitor3.3.2SameZenPacks.zenoss.NetScreenMonitor2.2.2SameZenPacks.zenoss.NetScreenMonitor2.2.2SameZenPacks.zenoss.NetScreenMonitor2.2.2SameZenPacks.zenoss.NetMontor1.1.0SameZenPacks.zenoss.NetMontor2.5.0SameZenPacks.zenoss.NetpMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.SuportBundle1.1.0SameZenPacks.zenoss.SuportBundle1.1.0SameZenPacks.zenoss.SuportBundle1.1.0SameZenPacks.zenoss.SuportBundle1.1.0SameZenPacks.zenoss.SuportBundle1.1.0SameZenPacks.zenoss.WebMitor2.3.0SameZenPacks.zenoss.WebMitor2.3.0SameZenPacks.zenoss.WebMitor2.2.2SameZenPacks.zenoss.VebLogicMonitor2.3.3SameZenPacks.zenoss.VebLogicMonitor2.3.0<	ZenPacks.zenoss.FtpMonitor	1.1.0	Same
ZenPacks zenoss.HttpMonitor2.1.0SameZenPacks zenoss.JBossMonitor2.4.2SameZenPacks zenoss.LDAPAuthenticator3.3.0SameZenPacks zenoss.LDAPAuthenticator3.3.0SameZenPacks zenoss.LDAPAnthenticator1.4.1SameZenPacks zenoss.Licensing0.2.0SameZenPacks zenoss.Licensing0.2.0SameZenPacks zenoss.Licensing0.2.0SameZenPacks zenoss.Microsoft.Windows2.6.11SameZenPacks zenoss.NetSequention3.0.7SameZenPacks zenoss.NetAppMonitor3.3.2SameZenPacks zenoss.NetGerenMonitor2.2.2SameZenPacks.zenoss.NetGerenMonitor2.2.2SameZenPacks.zenoss.NetGerenMonitor2.2.2SameZenPacks.zenoss.NetGerenMonitor2.2.2SameZenPacks.zenoss.NetMonitor2.2.2SameZenPacks.zenoss.NetMonitor2.2.2SameZenPacks.zenoss.NetMonitor2.5.0SameZenPacks.zenoss.NetPropertyMonitor1.1.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.ZenDshirtor2.2.3SameZenPacks.zenoss.Zenoss.WebMitor1.2.2SameZenPacks.zenoss.Zenoss.WebMitor2.2.3Same </td <td>ZenPacks.zenoss.HPMonitor</td> <td>2.1.0</td> <td>Same</td>	ZenPacks.zenoss.HPMonitor	2.1.0	Same
ZenPacks.zenoss.JBossMonitor2.4.2SameZenPacks.zenoss.JuniperMonitor2.1.1SameZenPacks.zenoss.LDAPAuthenticator3.3.0SameZenPacks.zenoss.LDAPMonitor1.4.1SameZenPacks.zenoss.Licensing0.2.0SameZenPacks.zenoss.LicuxMonitor2.1.32.1.0ZenPacks.zenoss.LinuxMonitor2.1.32.1.0ZenPacks.zenoss.MySqlMonitor3.0.7SameZenPacks.zenoss.NetSqlMonitor3.0.7SameZenPacks.zenoss.NetSpqlMonitor3.3.2SameZenPacks.zenoss.NetScreenMonitor2.2.2SameZenPacks.zenoss.NetEscreenMonitor2.2.2SameZenPacks.zenoss.NeteIMonitor2.0.2SameZenPacks.zenoss.NeteIMonitor2.0.2SameZenPacks.zenoss.NeteIMonitor1.1.0SameZenPacks.zenoss.NeteIMonitor1.1.0SameZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.VCloud1.4.9SameZenPacks.zenoss.WebLegicMonitor2.3.0SameZenPacks.zenoss.WebLegicMonitor2.2.3SameZenPacks.zenoss.WebLegicMonitor2.2.3SameZenPacks.zenoss.WebLegicMonitor2.2.2SameZenPacks.zenoss.WebLegicMonitor2.2.2SameZenPacks.zenoss.WebLegicMonitor2.2.3SameZenPacks.zenoss.WebLegicMonitor2.2.3SameZenPacks.zenoss.Zenoss.	ZenPacks.zenoss.HpuxMonitor	2.0.1	Same
ZenPacks zenoss. JuniperMonitor2.1.1SameZenPacks zenoss. LDAPAuthenticator3.3.0SameZenPacks zenoss. LDAPMonitor1.4.1SameZenPacks zenoss. Licensing0.2.0SameZenPacks zenoss. Licensing0.2.0SameZenPacks zenoss. LinuxMonitor2.1.32.1.0ZenPacks zenoss. MySqlMonitor3.0.7SameZenPacks zenoss. MySqlMonitor3.0.7SameZenPacks zenoss. NetAppMonitor3.3.2SameZenPacks zenoss. NetScreenMonitor2.2.2SameZenPacks zenoss. NetBornonitor2.2.2SameZenPacks zenoss. NetBornonitor2.2.2SameZenPacks zenoss. NetelMonitor2.0.2SameZenPacks zenoss. NetelMonitor2.0.2SameZenPacks zenoss. NetelMonitor2.2.2SameZenPacks zenoss. NetelMonitor1.2.11.2.0ZenPacks zenoss. PropertyMonitor1.1.0SameZenPacks zenoss. SolarisMonitor2.5.0SameZenPacks zenoss. StorageBase1.4.1SameZenPacks zenoss. Volud1.4.9SameZenPacks zenoss. Volud1.4.9SameZenPacks zenoss. VBEM1.0.3SameZenPacks zenoss. WebLogicMonitor2.2.3SameZenPacks zenoss. WebLogicMonitor2.2.2SameZenPacks zenoss. VBEM1.0.3SameZenPacks zenoss. VepphereMonitor1.2.2SameZenPacks zenoss. VephereMonitor1.2.2SameZenPacks zenoss. Zenoss. Zenose <t< td=""><td>ZenPacks.zenoss.HttpMonitor</td><td>2.1.0</td><td>Same</td></t<>	ZenPacks.zenoss.HttpMonitor	2.1.0	Same
ZenPacks zenoss.LDAPAuthenticator3.3.0SameZenPacks zenoss.LDAPMonitor1.4.1SameZenPacks zenoss.Licensing0.2.0SameZenPacks zenoss.LinuxMonitor2.1.32.1.0ZenPacks zenoss.Microsoft.Windows2.6.11SameZenPacks zenoss.MysqlMonitor3.0.7SameZenPacks zenoss.NysqlMonitor3.3.2SameZenPacks zenoss.NetAppMonitor3.3.2SameZenPacks zenoss.NetAppMonitor2.2.2SameZenPacks zenoss.NetScreenMonitor2.2.2SameZenPacks zenoss.NetelMonitor2.2.2SameZenPacks zenoss.PropertyMonitor1.2.11.2.0ZenPacks zenoss.PropertyMonitor1.1.0SameZenPacks zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.VelLogicMonitor2.3.0SameZenPacks.zenoss.VelLogicMonitor2.2.3SameZenPacks.zenoss.VelLogicMonitor2.2.3SameZenPacks.zenoss.Zenoss.VelLogicMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenMail5.1.0Same	ZenPacks.zenoss.JBossMonitor	2.4.2	Same
ZenPacks.zenoss.LDAPMonitor1.4.1SameZenPacks.zenoss.Licensing0.2.0SameZenPacks.zenoss.LinuxMonitor2.1.32.1.0ZenPacks.zenoss.Microsoft.Windows2.6.11SameZenPacks.zenoss.MySqlMonitor3.0.7SameZenPacks.zenoss.NetSop.MySqlMonitor3.3.2SameZenPacks.zenoss.NetSereenMonitor2.2.2SameZenPacks.zenoss.NetSereenMonitor2.0.2SameZenPacks.zenoss.NotelMonitor2.0.2SameZenPacks.zenoss.NetBordenMonitor2.2.2SameZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.SuportPyMonitor1.1.0SameZenPacks.zenoss.SuportBundle1.1.0SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.2.2SameZenPacks.zenoss.Volud1.2.2SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebpereMonitor1.2.2SameZenPacks.zenoss.ZendDeviceACL2.2.0SameZenPacks.zenoss.ZenoBericeACL2.2.0SameZenPacks.zenoss.ZenMail5.1.0Sa	ZenPacks.zenoss.JuniperMonitor	2.1.1	Same
ZenPacks.zenoss.Licensing0.2.0SameZenPacks.zenoss.LinuxMonitor2.1.32.1.0ZenPacks.zenoss.Microsoft.Windows2.6.11SameZenPacks.zenoss.MySqlMonitor3.0.7SameZenPacks.zenoss.NetAppMonitor3.3.2SameZenPacks.zenoss.NetSereenMonitor2.2.2SameZenPacks.zenoss.NetElMonitor2.0.2SameZenPacks.zenoss.NetElMonitor2.2.2SameZenPacks.zenoss.NeteIMonitor2.2.2SameZenPacks.zenoss.NeteIMonitor2.2.2SameZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.VEBM1.0.3SameZenPacks.zenoss.VEBM1.0.3SameZenPacks.zenoss.WEBM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.LDAPAuthenticator	3.3.0	Same
ZenPacks.zenoss.LinuxMonitor2.1.32.1.0ZenPacks.zenoss.Microsoft.Windows2.6.11SameZenPacks.zenoss.MySqlMonitor3.0.7SameZenPacks.zenoss.NetAppMonitor3.3.2SameZenPacks.zenoss.NetScreenMonitor2.2.2SameZenPacks.zenoss.NotelMonitor2.0.2SameZenPacks.zenoss.NtpMonitor2.2.2SameZenPacks.zenoss.NtpMonitor2.2.2SameZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.2.2SameZenPacks.zenoss.Veloud1.4.9SameZenPacks.zenoss.Veloud1.4.9SameZenPacks.zenoss.Veloud1.4.9SameZenPacks.zenoss.VelongicMonitor2.2.3SameZenPacks.zenoss.Veloud1.2.2SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.LDAPMonitor	1.4.1	Same
ZenPacks.zenoss.Microsoft.Windows2.6.11SameZenPacks.zenoss.MySqlMonitor3.0.7SameZenPacks.zenoss.NetAppMonitor3.3.2SameZenPacks.zenoss.NetScreenMonitor2.2.2SameZenPacks.zenoss.NetScreenMonitor2.0.2SameZenPacks.zenoss.NetScreenMonitor2.2.2SameZenPacks.zenoss.NtpMonitor2.2.2SameZenPacks.zenoss.NtpMonitor2.2.2SameZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.PythonCollector1.8.2SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.Vcloud1.4.9SameZenPacks.zenoss.Vcloud1.4.9SameZenPacks.zenoss.Vcloud1.4.9SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebSphereMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL2.6.0Same	ZenPacks.zenoss.Licensing	0.2.0	Same
ZenPacks.zenoss.NySqlMonitor3.0.7SameZenPacks.zenoss.NetAppMonitor3.3.2SameZenPacks.zenoss.NetScreenMonitor2.2.2SameZenPacks.zenoss.NortelMonitor2.0.2SameZenPacks.zenoss.NytpMonitor2.2.2SameZenPacks.zenoss.NtpMonitor2.2.2SameZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PythonCollector1.8.2SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.SolarisMonitor2.3.0SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.VCloud1.4.9SameZenPacks.zenoss.vSphere3.6.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebLogicMonitor2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.LinuxMonitor	2.1.3	2.1.0
ZenPacks.zenoss.NetAppMonitor3.3.2SameZenPacks.zenoss.NetScreenMonitor2.2.2SameZenPacks.zenoss.NotelMonitor2.0.2SameZenPacks.zenoss.NotelMonitor2.2.2SameZenPacks.zenoss.NtpMonitor2.2.2SameZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.PopertyMonitor2.5.0SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.Microsoft.Windows	2.6.11	Same
ZenPacks.zenoss.NetScreenMonitor2.2.2SameZenPacks.zenoss.NortelMonitor2.0.2SameZenPacks.zenoss.NtpMonitor2.2.2SameZenPacks.zenoss.NtpMonitor2.2.2SameZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.PropertyMonitor1.8.2SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.Vcloud1.4.9SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WeblogicMonitor2.2.3SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.MySqlMonitor	3.0.7	Same
ZenPacks.zenoss.NortelMonitor2.0.2SameZenPacks.zenoss.NtpMonitor2.2.2SameZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.PropertyMonitor1.8.2SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.VCloud1.4.9SameZenPacks.zenoss.VCloud1.4.9SameZenPacks.zenoss.WebEme3.6.23.5.3ZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebLogicMonitor1.2.2SameZenPacks.zenoss.WebLogicMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.NetAppMonitor	3.3.2	Same
ZenPacks.zenoss.NtpMonitor2.2.2SameZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.PythonCollector1.8.2SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.4.9SameZenPacks.zenoss.Volud1.2.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebLogicMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.NetScreenMonitor	2.2.2	Same
ZenPacks.zenoss.PredictiveThreshold1.2.11.2.0ZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.PythonCollector1.8.2SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.vCloud1.4.9SameZenPacks.zenoss.vSphere3.6.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebLogicMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.NortelMonitor	2.0.2	Same
ZenPacks.zenoss.PropertyMonitor1.1.0SameZenPacks.zenoss.PythonCollector1.8.2SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.vCloud1.4.9SameZenPacks.zenoss.vSupportBundle1.0.3SameZenPacks.zenoss.vSphere3.6.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.Zenoss.WebSphereMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.NtpMonitor	2.2.2	Same
ZenPacks.zenoss.PythonCollector1.8.2SameZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.vCloud1.4.9SameZenPacks.zenoss.vVSphere3.6.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebLogicMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.PredictiveThreshold	1.2.1	1.2.0
ZenPacks.zenoss.SolarisMonitor2.5.0SameZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.vCloud1.4.9SameZenPacks.zenoss.vCloud1.4.9SameZenPacks.zenoss.vSphere3.6.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebLogicMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.PropertyMonitor	1.1.0	Same
ZenPacks.zenoss.StorageBase1.4.1SameZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.vCloud1.4.9SameZenPacks.zenoss.vSphere3.6.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebLogicMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.PythonCollector	1.8.2	Same
ZenPacks.zenoss.SupportBundle1.1.0SameZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.vCloud1.4.9SameZenPacks.zenoss.vSphere3.6.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebLogicMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.SolarisMonitor	2.5.0	Same
ZenPacks.zenoss.TomcatMonitor2.3.0SameZenPacks.zenoss.vCloud1.4.9SameZenPacks.zenoss.vSphere3.6.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebsphereMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.StorageBase	1.4.1	Same
ZenPacks.zenoss.vCloud1.4.9SameZenPacks.zenoss.vSphere3.6.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebsphereMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL2.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.SupportBundle	1.1.0	Same
ZenPacks.zenoss.vSphere3.6.23.5.3ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebsphereMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenDeviceACL3.12.1SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.TomcatMonitor	2.3.0	Same
ZenPacks.zenoss.WBEM1.0.3SameZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebsphereMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.vCloud	1.4.9	Same
ZenPacks.zenoss.WebLogicMonitor2.2.3SameZenPacks.zenoss.WebsphereMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.vSphere	3.6.2	3.5.3
ZenPacks.zenoss.WebsphereMonitor1.2.2SameZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.WBEM	1.0.3	Same
ZenPacks.zenoss.ZenDeviceACL2.2.0SameZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.WebLogicMonitor	2.2.3	Same
ZenPacks.zenoss.ZenJMX3.12.1SameZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.WebsphereMonitor	1.2.2	Same
ZenPacks.zenoss.ZenMail5.1.0SameZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.ZenDeviceACL	2.2.0	Same
ZenPacks.zenoss.ZenMailTx2.6.0SameZenPacks.zenoss.ZenOperatorRole2.1.0Same	ZenPacks.zenoss.ZenJMX	3.12.1	Same
ZenPacks.zenoss.ZenOperatorRole 2.1.0 Same	ZenPacks.zenoss.ZenMail	5.1.0	Same
	ZenPacks.zenoss.ZenMailTx	2.6.0	Same
ZenPacks.zenoss.ZenPackLib2.0.42.0.3	ZenPacks.zenoss.ZenOperatorRole	2.1.0	Same
	ZenPacks.zenoss.ZenPackLib	2.0.4	2.0.3

ZenPack	Current version	Previous version
ZenPacks.zenoss.ZenSQLTx	2.6.6	2.6.5
ZenPacks.zenoss.ZenWebTx	3.0.0	Same

# 6

# **Resource Manager 5.2.2**

# **New features**

Resource Manager 5.2.2 provides the following new feature:

 When installing, upgrading, or removing ZenPacks, you can do so without first stopping services. When Resource Manager is managed by version 1.3.x or later of Control Center, rolling restart reduces or eliminates downtime for some services on restart.

### **Fixed issues**

#### Table 12: Release 5.2.2

ID	Description
ZEN-22244	Security: Restrictions are not placed on number of failed authentication attempts
ZEN-26171	Logging from zenossdbpack is not retained
ZEN-26260	Unable to change date format for First Seen/Last Seen columns in Event console
ZEN-26418	Details for cold start traps differ depending on version of SNMP
ZEN-26581	ZenPack loader and zenmib overwrites MIB files
ZEN-26629	Security: XSS on the device's Details page
ZEN-26630	Security: XSS in search results for events
ZEN-26631	Auto-cleared events have transient severity
ZEN-26646	Graph data point format is not honored in graph legend display
ZEN-26698	Overridden objects UI shows the device classes of devices when it should show the actual devices
ZEN-26704	Within Resource Manager, the link from a VM to the vCenter or vSphere endpoint is broken
ZEN-26756	Users are not alerted to missed collection runs
ZEN-26764	HBase defect leads to out of control growth on disk
ZEN-26769	Zoom in/Zoom out does not work on "Open in New Tab"

ID	Description
ZEN-26770	Expand graph pop-up window does not show data below window frame without scroll bar
ZEN-26775	Unable to change Docker IP address via menu
ZEN-26779	Graphs do not display thresholds unless threshold name is clicked
ZEN-26818	Time stamps are not consistent (local time vs. UTC) in event logs and some graph displays
ZEN-26830	Allow an admin to configure the number of reports a single user can run at a time, preventing UI slowness or zope crashes
ZEN-26859	Pop-up windows, resulting from hovering over a data point, can be hidden behind the left- side panel
ZEN-26873	SNMPv2c and SNMPv3 traps are not always associated with the agent's source address

# **Known issues**

#### Table 13: Release 5.2.2

ID	Description	Status
ZEN-26258	Device graph does not display the maximum value correctly. This issue has been removed from Resource Manager 5.2.2. It was previously listed as fixed in version 5.2.1.	Open

# ZenPacks

This release of Resource Manager supports ZenPacks at the current version listed in the following table. For more information about ZenPacks, see the http://www.zenoss.com/product/zenpacks.

Table 14: Release 5.2.2
-------------------------

ZenPack	Current version	Previous version
ZenPacks.zenoss.AdvancedSearch	1.2.1	1.2.0
ZenPacks.zenoss.AixMonitor	2.2.2	Same
ZenPacks.zenoss.ApacheMonitor	2.1.4	Same
ZenPacks.zenoss.AuditLog	1.4.0	Same
ZenPacks.zenoss.BigIpMonitor	2.7.1	Same
ZenPacks.zenoss.BrocadeMonitor	2.1.1	Same
ZenPacks.zenoss.CalculatedPerformance	2.3.0	Same
ZenPacks.zenoss.CatalogService	3.1.1	Same
ZenPacks.zenoss.CheckPointMonitor	2.0.2	Same
ZenPacks.zenoss.CiscoMonitor	5.7.3	Same
ZenPacks.zenoss.CiscoUCS	2.5.5	Same
ZenPacks.zenoss.ComponentGroups	1.2.0	Same
ZenPacks.zenoss.ControlCenter	1.5.0	1.4.2

ZenPack	Current version	Previous version
ZenPacks.zenoss.Dashboard	1.2.5	Same
ZenPacks.zenoss.DellMonitor	2.2.0	Same
ZenPacks.zenoss.Diagram	1.3.1	Same
ZenPacks.zenoss.DigMonitor	1.1.0	Same
ZenPacks.zenoss.DistributedCollector	3.1.2	Same
ZenPacks.zenoss.DnsMonitor	2.1.0	Same
ZenPacks.zenoss.DynamicView	1.5.0	Same
ZenPacks.zenoss.EnterpriseCollector	1.7.0	Same
ZenPacks.zenoss.EnterpriseReports	2.4.0	Same
ZenPacks.zenoss.EnterpriseSecurity	1.2.0	Same
ZenPacks.zenoss.EnterpriseSkin	3.3.4	Same
ZenPacks.zenoss.FtpMonitor	1.1.0	Same
ZenPacks.zenoss.HPMonitor	2.1.0	Same
ZenPacks.zenoss.HpuxMonitor	2.0.1	Same
ZenPacks.zenoss.HttpMonitor	2.1.0	Same
ZenPacks.zenoss.JBossMonitor	2.4.2	Same
ZenPacks.zenoss.JuniperMonitor	2.1.1	Same
ZenPacks.zenoss.LDAPAuthenticator	3.3.0	Same
ZenPacks.zenoss.LDAPMonitor	1.4.1	Same
ZenPacks.zenoss.Licensing	0.2.0	Same
ZenPacks.zenoss.LinuxMonitor	2.1.0	Same
ZenPacks.zenoss.Microsoft.Windows	2.6.11	Same
ZenPacks.zenoss.MySqlMonitor	3.0.7	Same
ZenPacks.zenoss.NetAppMonitor	3.3.2	Same
ZenPacks.zenoss.NetScreenMonitor	2.2.2	Same
ZenPacks.zenoss.NortelMonitor	2.0.2	Same
ZenPacks.zenoss.NtpMonitor	2.2.2	Same
ZenPacks.zenoss.PredictiveThreshold	1.2.0	Same
ZenPacks.zenoss.PropertyMonitor	1.1.0	Same
ZenPacks.zenoss.PythonCollector	1.8.2	Same
ZenPacks.zenoss.SolarisMonitor	2.5.0	Same
ZenPacks.zenoss.StorageBase	1.4.1	Same
ZenPacks.zenoss.SupportBundle	1.1.0	Same
ZenPacks.zenoss.TomcatMonitor	2.3.0	Same

ZenPack	Current version	Previous version
ZenPacks.zenoss.vCloud	1.4.9	Same
ZenPacks.zenoss.vSphere	3.5.3	Same
ZenPacks.zenoss.WBEM	1.0.3	Same
ZenPacks.zenoss.WebLogicMonitor	2.2.3	Same
ZenPacks.zenoss.WebsphereMonitor	1.2.2	Same
ZenPacks.zenoss.ZenDeviceACL	2.2.0	Same
ZenPacks.zenoss.ZenJMX	3.12.1	Same
ZenPacks.zenoss.ZenMail	5.1.0	Same
ZenPacks.zenoss.ZenMailTx	2.6.0	Same
ZenPacks.zenoss.ZenOperatorRole	2.1.0	Same
ZenPacks.zenoss.ZenPackLib	2.0.3	2.0.1
ZenPacks.zenoss.ZenSQLTx	2.6.5	Same
ZenPacks.zenoss.ZenWebTx	3.0.0	Same

### Notes and workarounds

#### Perform migration after upgrading Control Center to 1.3.0 (ZEN-26904)

Resource Manager 5.2.2 was released before Control Center 1.3.0. If you installed or upgraded Resource Manager to 5.2.2 before upgrading Control Center to 1.3.0, run the zenmigrate command. The migration command enables Resource Manager services to utilize the Control Center 1.3.0 emergency shutdown feature. For more information, see *Enabling emergency shutdown in Resource Manager* on page 30.

#### Enabling emergency shutdown in Resource Manager

Before performing this procedure, start Control Center and Resource Manager.

Use this procedure to enable Resource Manager services to utilize the emergency shutdown feature of Control Center 1.3.0. This procedure is only necessary for Resource Manager 5.2.2 deployments that upgraded Control Center from 1.2.x to 1.3.0 **after** installing or upgrading to Resource Manager 5.2.2.

- 1 Log in to the Control Center master host as root, or as a user with superuser privileges.
- 2 Invoke the migration script.

```
serviced service shell zope su - zenoss \
-c "zenmigrate --step=AddServiceRunLevels"
```

7

# Resource Manager 5.2.1

# **New features**

Resource Manager 5.2.1 provides the following new feature:

Updated release and inclusion of the Zenoss ZenPack SDK: This software development kit (SDK) is included as a ZenPack (ZenPacks.zenoss.ZenPackLib) and it contains numerous developer-focused enhancements that allow users to more easily build, test, and deploy custom ZenPacks. For more information, visit ZenPack SDK.

### **Fixed issues**

ID	Description
ZEN-21950	Links to Event views with time value filter do not include those time values when the link is followed.
ZEN-23196	Zen Packs that add or modify sequence numbers do not log the changes that were made during installation.
ZEN-23987	Exporting events does not work properly when the operator "!!" is used in filters.
ZEN-25636	For maintenance windows, the clearing event does not close the associated started maintenance window event.
ZEN-25963	User and time stamp for event log entries span multiple lines.
ZEN-25995	Possible XSS vulnerability when performing device searches.
ZEN-26020	MetricShipper can fail silently when the connection to MetricConsumer fails.
ZEN-26108	When displayed columns are configured in the Event Console, the Create Incident button disappears.
ZEN-26147	Date range filtering does not functioning in the Event Console.
ZEN-26254	Adding a new device or line to a graph does not get dynamically added to the link to the graph; only 28 items can be added.
ZEN-26258	Device graph does not display the maximum value correctly.

#### Table 15: Release 5.2.1

ID	Description
ZEN-26321	The default date format can be configured in User Settings.
ZEN-26403	One of the metricreporters in MetricConsumer and CentralQuery fail authentication.
ZEN-26439	Event summary and message details are displayed over multiple lines when the screen has room to display more of the content on the same line.
ZEN-26459	Pressing the Enter key does not add entries in an event log.
ZEN-26460	Typing a partial IP address into the IP address search box on the Infrastructure page results in meaningless log entries.
ZEN-26580	IPv6 addresses are not displayed in device interface components.
ZEN-26590	HRFileSystemMap plugin does not convert unsigned integers.
ZEN-26621	Pulling device configurations from a collector with large number of devices performs slowly.

# ZenPacks

This release of Resource Manager supports ZenPacks at the current version listed in the following table. For more information about ZenPacks, see the http://www.zenoss.com/product/zenpacks.

#### Table 16: Release 5.2.1

ZenPack	Current version	Previous version
ZenPacks.zenoss.AdvancedSearch	1.2.0	1.1.6
ZenPacks.zenoss.AixMonitor	2.2.2	Same
ZenPacks.zenoss.ApacheMonitor	2.1.4	Same
ZenPacks.zenoss.AuditLog	1.4.0	1.3.1
ZenPacks.zenoss.BigIpMonitor	2.7.1	Same
ZenPacks.zenoss.BrocadeMonitor	2.1.1	Same
ZenPacks.zenoss.CalculatedPerformance	2.3.0	2.2.1
ZenPacks.zenoss.CatalogService	3.1.1	3.0.11
ZenPacks.zenoss.CheckPointMonitor	2.0.2	2.0.1
ZenPacks.zenoss.CiscoMonitor	5.7.3	5.7.2
ZenPacks.zenoss.CiscoUCS	2.5.5	2.5.0
ZenPacks.zenoss.ComponentGroups	1.2.0	1.1.1
ZenPacks.zenoss.ControlCenter	1.4.2	1.4.1
ZenPacks.zenoss.Dashboard	1.2.5	1.2.4
ZenPacks.zenoss.DellMonitor	2.2.0	Same
ZenPacks.zenoss.Diagram	1.3.1	1.2.4
ZenPacks.zenoss.DigMonitor	1.1.0	Same
ZenPacks.zenoss.DistributedCollector	3.1.2	3.0.3

ZenPack	Current version	Previous version
ZenPacks.zenoss.DnsMonitor	2.1.0	Same
ZenPacks.zenoss.DynamicView	1.5.0	1.4.0
ZenPacks.zenoss.EnterpriseCollector	1.7.0	1.6.3
ZenPacks.zenoss.EnterpriseReports	2.4.0	2.4.0
ZenPacks.zenoss.EnterpriseSecurity	1.2.0	1.1.0
ZenPacks.zenoss.EnterpriseSkin	3.3.4	Same
ZenPacks.zenoss.FtpMonitor	1.1.0	Same
ZenPacks.zenoss.HPMonitor	2.1.0	Same
ZenPacks.zenoss.HpuxMonitor	2.0.1	Same
ZenPacks.zenoss.HttpMonitor	2.1.0	Same
ZenPacks.zenoss.JBossMonitor	2.4.2	Same
ZenPacks.zenoss.JuniperMonitor	2.1.1	Same
ZenPacks.zenoss.LDAPAuthenticator	3.3.0	3.2.1
ZenPacks.zenoss.LDAPMonitor	1.4.1	Same
ZenPacks.zenoss.Licensing	0.2.0	0.1.2
ZenPacks.zenoss.LinuxMonitor	2.1.0	2.0.4
ZenPacks.zenoss.Microsoft.Windows	2.6.11	2.6.8
ZenPacks.zenoss.MySqlMonitor	3.0.7	Same
ZenPacks.zenoss.NetAppMonitor	3.3.2	3.3.1
ZenPacks.zenoss.NetScreenMonitor	2.2.2	2.2.1
ZenPacks.zenoss.NortelMonitor	2.0.2	Same
ZenPacks.zenoss.NtpMonitor	2.2.2	Same
ZenPacks.zenoss.PredictiveThreshold	1.2.0	1.1.1
ZenPacks.zenoss.PropertyMonitor	1.1.0	Same
ZenPacks.zenoss.PythonCollector	1.8.2	1.8.1
ZenPacks.zenoss.SolarisMonitor	2.5.0	Same
ZenPacks.zenoss.StorageBase	1.4.1	Same
ZenPacks.zenoss.SupportBundle	1.1.0	1.0.0
ZenPacks.zenoss.TomcatMonitor	2.3.0	Same
ZenPacks.zenoss.vCloud	1.4.9	Same
ZenPacks.zenoss.vSphere	3.5.3	3.4.1
ZenPacks.zenoss.WBEM	1.0.3	Same
ZenPacks.zenoss.WebLogicMonitor	2.2.3	Same
ZenPacks.zenoss.WebsphereMonitor	1.2.2	Same

ZenPack	Current version	Previous version
ZenPacks.zenoss.ZenDeviceACL	2.2.0	2.1.1
ZenPacks.zenoss.ZenJMX	3.12.1	Same
ZenPacks.zenoss.ZenMail	5.1.0	5.0.2
ZenPacks.zenoss.ZenMailTx	2.6.0	2.6.0
ZenPacks.zenoss.ZenOperatorRole	2.1.0	2.0.2
ZenPacks.zenoss.ZenPackLib	2.0.1	New
ZenPacks.zenoss.ZenSQLTx	2.6.5	2.6.4
ZenPacks.zenoss.ZenWebTx	3.0.0	Same

# **Resource Manager 5.2.0**

### **New features**

Resource Manager 5.2.0 provides the following performance improvements:

- Improved browser interface scalability: The browser interface has been enhanced to support dozens of simultaneous users. In practice, the limit on the number of concurrent users will be subject to actual system sizing and activity level.
- Improved performance for production state changes: The amount of time required to change production state on a device (typically, to put a device into or out of maintenance mode) has been greatly reduced, allowing Resource Manager to put many hundreds of devices into maintenance mode in a few minutes. The actual performance will vary depending on the types of devices involved, particularly the number of components each device has.
- Upgraded service libraries: The following libraries have been updated with fixes for defects and enhancements:
  - **OpenTSDB**: Randomized unique identifiers provide better distribution among regions.
  - Logstash: Improved reliability under heavy loads.
  - Kibana: Improved log viewing.
  - Java 8: Enhanced security.
  - **Docker**: Performance enhancements.
  - Twisted: Enhanced SSH security.
  - Nginx: Performance enhancements.

### **Fixed issues**

#### Table 17: Release 5.2.0

ID	Description
ZEN-2851	Default first seen and last seen column width is too short
ZEN-5419	Modeling devices gives "running_extractAddressAndPort" messages
ZEN-6979	Cross-Site Request Forgery (CSRF) vulnerabilities
ZEN-10184	The prod_state option in zendisc.conf is not respected
ZEN-15322	Special characters in organizer names cause IpServices page not to load

ID	Description
ZEN-15367	Notifications created in ZenPack zep/actions.json do not get default values
ZEN-16792	Using the zenprocess.conf showprocs option breaks data collection
ZEN-19240	Ensure that the SSL certs use SHA-256
ZEN-20437	Resource Manager should indicate if the device has no data to show in the graphs
ZEN-21978	Not able to remove a data source from a monitoring template class
ZEN-22056	Multigraph reports show incorrect data
ZEN-22068	Multigraph reports show the same data for all devices/components for a particular datapoint
ZEN-22368	All LinuxMonitor graphs are too small
ZEN-22413	Legend color sequence mismatch in component graphs when "All on Same Graph" is used with hidden graphpoints
ZEN-22748	Resource Manager 5.1.1 SSH incompatible with OpenSSH 7.x
ZEN-23768	Unable to add component groups as administered objects to users and groups

# ZenPacks

This release of Resource Manager supports ZenPacks at the current version listed in the following table. For more information about ZenPacks, see the http://www.zenoss.com/product/zenpacks.

#### Table 18: Release 5.2.0

ZenPack	Current version	Previous version
ZenPacks.zenoss.AdvancedSearch	1.2.0	1.1.6
ZenPacks.zenoss.AixMonitor	2.2.2	Same
ZenPacks.zenoss.ApacheMonitor	2.1.4	Same
ZenPacks.zenoss.AuditLog	1.4.0	1.3.1
ZenPacks.zenoss.BigIpMonitor	2.7.1	Same
ZenPacks.zenoss.BrocadeMonitor	2.1.1	Same
ZenPacks.zenoss.CalculatedPerforman	ce2.3.0	2.2.1
ZenPacks.zenoss.CatalogService	3.1.1	3.0.11
ZenPacks.zenoss.CheckPointMonitor	2.0.2	2.0.1
ZenPacks.zenoss.CiscoMonitor	5.7.3	5.7.2
ZenPacks.zenoss.CiscoUCS	2.5.0	2.4.4
ZenPacks.zenoss.ComponentGroups	1.2.0	1.1.1
ZenPacks.zenoss.ControlCenter	1.4.1	1.2.5
ZenPacks.zenoss.Dashboard	1.2.4	1.2.3
ZenPacks.zenoss.DellMonitor	2.2.0	Same
ZenPacks.zenoss.Diagram	1.3.1	1.2.4

ZenPack	Current version	Previous version
ZenPacks.zenoss.DigMonitor	1.1.0	Same
ZenPacks.zenoss.DistributedCollector	3.1.2	3.0.3
ZenPacks.zenoss.DnsMonitor	2.1.0	Same
ZenPacks.zenoss.DynamicView	1.5.0	1.4.0
ZenPacks.zenoss.EnterpriseCollector	1.7.0	1.6.3
ZenPacks.zenoss.EnterpriseReports	2.4.0	2.4.0
ZenPacks.zenoss.EnterpriseSecurity	1.2.0	1.1.0
ZenPacks.zenoss.EnterpriseSkin	3.3.4	Same
ZenPacks.zenoss.FtpMonitor	1.1.0	Same
ZenPacks.zenoss.HPMonitor	2.1.0	Same
ZenPacks.zenoss.HpuxMonitor	2.0.1	Same
ZenPacks.zenoss.HttpMonitor	2.1.0	Same
ZenPacks.zenoss.JBossMonitor	2.4.2	Same
ZenPacks.zenoss.JuniperMonitor	2.1.1	Same
ZenPacks.zenoss.LDAPAuthenticator	3.3.0	3.2.1
ZenPacks.zenoss.LDAPMonitor	1.4.1	Same
ZenPacks.zenoss.Licensing	0.2.0	0.1.2
ZenPacks.zenoss.LinuxMonitor	2.1.0	2.0.4
ZenPacks.zenoss.Microsoft.Windows	2.6.8	2.6.3
ZenPacks.zenoss.MySqlMonitor	3.0.7	Same
ZenPacks.zenoss.NetAppMonitor	3.3.2	3.3.1
ZenPacks.zenoss.NetScreenMonitor	2.2.2	2.2.1
ZenPacks.zenoss.NortelMonitor	2.0.2	Same
ZenPacks.zenoss.NtpMonitor	2.2.2	Same
ZenPacks.zenoss.PredictiveThreshold	1.2.0	1.1.1
ZenPacks.zenoss.PropertyMonitor	1.1.0	Same
ZenPacks.zenoss.PythonCollector	1.8.2	1.8.1
ZenPacks.zenoss.SolarisMonitor	2.5.0	Same
ZenPacks.zenoss.StorageBase	1.4.1	Same
ZenPacks.zenoss.SupportBundle	1.1.0	1.0.0
ZenPacks.zenoss.TomcatMonitor	2.3.0	Same
ZenPacks.zenoss.vCloud	1.4.9	Same
ZenPacks.zenoss.vSphere	3.5.3	3.4.1
ZenPacks.zenoss.WBEM	1.0.3	Same

ZenPack	Current version	Previous version
ZenPacks.zenoss.WebLogicMonitor	2.2.3	Same
ZenPacks.zenoss.WebsphereMonitor	1.2.2	Same
ZenPacks.zenoss.ZenDeviceACL	2.2.0	2.1.1
ZenPacks.zenoss.ZenJMX	3.12.1	Same
ZenPacks.zenoss.ZenMail	5.1.0	5.0.2
ZenPacks.zenoss.ZenMailTx	2.6.0	2.6.0
ZenPacks.zenoss.ZenOperatorRole	2.1.0	2.0.2
ZenPacks.zenoss.ZenSQLTx	2.6.5	2.6.4
ZenPacks.zenoss.ZenWebTx	3.0.0	Same

# Limitations, errata, and documentation

A

This section includes the following information:

- Known limitations of Resource Manager
- Release-specific documentation errata, if any
- Descriptions of additional documentation

### Limitations

The size of the CentralQuery maximum memory allocation pool is set by the *RAMCommitment* variable in the CentralQuery service definition. The default value is 1024MB. Do not change the value to anything less than 1024MB. (ZEN-15907).

### **Additional information**

Beginning with release 5.0.0, all Resource Manager distributions include PDF versions of the following documents:

- Zenoss Resource Manager Planning Guide
- Zenoss Resource Manager Configuration Guide
- Zenoss Resource Manager Administration Guide

Likewise, all releases of Control Center include an HTML version of its documentation.

The documentation included in a release is in sync with the release. That is, instead of inserting errata into release notes, document errors are corrected, and the corrected documents are included in the upgrade or patch release. Similarly, when a feature change or addition is included in an upgrade or patch release, the documentation is updated, too.

#### **Documentation feedback**

Zenoss welcomes your comments and suggestions regarding our documentation. To share your comments, please send an email to docs@zenoss.com. In the email, include the document title and part number. The part number appears at the end of the list of trademarks, at the front of PDF versions of a document.