Release Notes for Zenoss Service Dynamics Resource Management Version 4.1

Part Number: 23-092011-4.1-v01

1. About These Notes

These release notes contain important information about this release of Zenoss Service Dynamics Resource Management ("Resource Manager"), including:

- New features

- Where to download the software

- Supported software and environments

- Installation, upgrade, and implementation notes

- Known issues

- Reporting problems and providing feedback

- Defects and issues fixed in the release

1.1. What's New?

This version of Resource Manager:

- Introduces audit logs, which maintain logged information in a format optimized for searching and reporting. To learn more about this feature, refer to the chapter titled "General Administration" in *Zenoss Service Dynamics Resource Management Administration*.

- Supports integration with Zenoss Service Dynamics Analytics and Optimization 4.1 and Zenoss Service Dynamics Global Operations Manager 4.1

- Includes significant improvements to the event processing system, increasing to 100M+ events per day

Other features and improvements include:

- Queuing mechanism that allows separation of event processing, horizontal scaling, and the ability to subscribe to event queues for custom processing.

- REST API for querying events.

- Triggers and notifications, which offer more robust and granular options for event alerting rules.

- Zenoss DataStore, an updated database that provides partitioning to support the new Resource Manager event processing system.

- RelStorage, which improves the performance of Zope object database queries.

- Support for SNMPv3 traps.

- Ability to monitor devices directly over IPv6.

- All performance collecting daemons have moved to the collector framework for more consistent operation and higher reliability.

- Can graph ping performance information for devices and interfaces. Per-interface pinging requires a component template be created for the interface to be monitored.

- Incremental device loading per daemon. This enables monitoring to start before all device information is loaded, and helps spread the monitoring load over a period of time rather than all at once.

1.2. Downloading Resource Manager

Resource Manager is available from the Zenoss Support Portal, at:

https://support.zenoss.com

Contact your Zenoss representative for more information.

1.3. Supported Software and Environments

You can install this version of Resource Manager on these Linux® platforms:

- RedHat® Enterprise Linux 5
- CentOS 5 (verified with CentOS 5.6)

For each system that will access Resource Manager through a Web browser, you need:

- Firefox (verified with 4, 5, 6) or Internet Explorer (verified with 7, 8, 9)
- Adobe® Flash® Player 10 or later version

The following partial list of resources can be managed by Resource Manager:

- Cisco Unified Computing System^{TM}
- VMware ESX® Infrastructure, VMware vSphere^{TM}, VMware vCloud^{TM}
- NetApp®
- Windows Server (2000, 2003, 2008), Windows XP, and Windows Vista®, Windows 7
- Linux or other UNIX® server
- OpenStack
- Tomcat^{TM} and other Java®/JMX servers
- Any SNMP- or SSH-enabled device

1.4. Installation, Upgrade and Implementation Notes

Read this section for important installation, upgrade, and implementation updates. For complete installation and update instructions, refer to the latest version of the *Resource Management Installation* guide.

1.4.1. Upgrade

- You can upgrade directly to Resource Manager 4.1 from:
  - Zenoss Enterprise 3.2.x
  - Resource Manager 4.0.x
- First, install any missing prerequisites, as outlined in the chapter titled "Installing for RHEL 5 or CentOS 5" in *Resource Management Installation*. Then follow the instructions in the chapter titled "Upgrading" to upgrade your Zenoss Enterprise 3.2.x instance or Resource Manager 4.0.x instance to Resource Manager 4.1.

- If you are running Resource Manager 4.0.2, and have Impact installed, contact Zenoss Support before upgrading to Resource Manager 4.1.

- When upgrading the Zenoss DataStore, any customizations made to the `zends.cnf` file may need to be manually merged. Refer to the *Resource Management Installation* guide, in the chapter titled "Upgrading" for more information. (Internal Defect 28844)

- If you currently are running Zenoss DataStore 5.5.13, you must install an updated version of the Zenoss DataStore (Version 5.5.15). To install the new version, run this series of commands:

```
service zenoss stop
service zends stop
rpm -Uvh zends-5.5.15-1.Version.el5.i386.rpm
service zends start
service zenoss start
```

- Zenoss Resource Manager includes a fully redesigned event processing and storage system. At this time, upgrades to Resource Manager will not automatically migrate events from Zenoss Enterprise 3.2.x. A new, empty event table is created in the new schema after upgrade.

  If you want to migrate events to Resource Manager as part of your upgrade, then a managed migration path is available. Zenoss recommends you contact Zenoss Professional Services for assistance, and then create an output file of your current MySQL events database.

  To create the output file, enter this command:

```
mysqldump -u root -p [ROOT_PASSWORD] events | gzip -c > zenoss_events.sql.gz
```

- If you are running with a load-balanced configuration with multiple Zope instances, or have a highly customized distributed collector environment, your configuration may be slightly modified during upgrade to this release of Resource Manager. Specifically, if your main Zenoss 3.2.x master has a `DAEMONS_TXT_ONLY` and `daemons.txt` file to restrict the daemons run on your master server, you will be affected. The upgrade process will save these two files to your `$ZENHOME/etc` directory with the extension "rpmsave," and your post-upgraded system will return to the default daemon starting behavior.

  After upgrade, you can safely modify these files and restrict the daemons started on your master server again. If you do so, please take notice of the daemons needed for Resource Manager Version 4.1, as these have changed from earlier releases.

- Zenoss does not test or evaluate community, customer-developed, or other custom ZenPacks for upgrades.

  If you are using one or more ZenPacks that are not installed through the standard Resource Manager installation process, you should contact the ZenPack author about its compatibility with this release. Do not upgrade until you ensure compatibility of all custom ZenPacks. Zenoss further recommends you test the ZenPack for upgrade compatibility in a test environment.

1.4.2. Updating Custom ZenPacks

- Custom ZenPacks must be compatible with Python 2.7. You must upgrade custom ZenPacks with Python 2.7-compiled extensions.

- If you have a custom ZenPack running on Zenoss Enterprise 3.2.x that includes alerting rules with custom actions, then you must modify the ZenPack before you can use it with Resource Manager. Otherwise, the system will produce warning messages similar to this:

```
WARNING:zen.migrate: <rule>: Successfully migrated rule to Trigger, \
but was unable to create a Notification - rule has invalid or unknown action type: <action>
```

  You must add the following code to your custom ZenPack, in `configure.zcml`:

```
<configure xmlns="http://namespaces.zope.org/zope">
  <utility factory=".actions.MyAction"
           provides="Products.ZenModel.interfaces.IAction"
           name="my_action"/>
```

```
</configure>
```

Read the IAction class declaration in `$ZENHOME/Products/ZenModel/interfaces.py` for documentation of the attributes and methods your action needs to implement. Add the following code to `actions.py` in your custom ZenPack:

```
class MyAction(IActionBase):
    implements(IAction)

    id = 'my_action'
    name = 'My Action'
    actionContentInfo = ICommandActionContentInfo

    def execute(self, notification, signal):
        ...

    def updateContent(self, content=None, data=None):
        ...
```

Note that the name attribute in the `configure.zcml` file matches up to the id attribute in the `actions.py` file. Examples of implementing actions are in `$ZENHOME/Products/ZenModel/actions.py`, which declares four core actions: email, page, command, and trap.

1.4.3. Event Console Filtering

Event console filtering behavior in Resource Manager is different than that of Zenoss 3.2.x, as follows:

- Regular expressions are not supported when filtering by device or component.
- Matching works as follows in the device/component fields:
    - If you enclose a query in double quotes, it searches for that device or component by using an exact match search (fastest). For example, searching for "abc" matches abc, but not abcd or babc.
    - If you enter a query of less than three characters, or terminate the query with * (asterisk), the query is a "begins with" query. For example, searching for "a" matches "a*" but not "ba."
    - If you enter a query of three characters or more that is not enclosed in quotes, or does not end with an asterisk, then substring matching is performed. For example, searching for "abc" returns matches for devcies "abc" and "babcd."

For more information about event console filtering, see the chapter titled "Using Resource Manager" in *Resource Management Administration*.

1.4.4. Zenoss DataStore

Command-line access to the Zenoss DataStore is available only to the zenoss user; the Zenoss DataStore tools are located only in the zenoss user's $PATH.

Run all Zenoss DataStore commands as the zenoss user, as in:

```
su - zenoss
zends -u root
```

1.4.5. IPv6

Resource Manager can model and monitor IPv6-addressed devices by using SNMP, Telnet or SSH. Ping monitoring is also supported for IPv6. Resource Manager installation (and communications links among Resource Manager components) must continue to be over IPv4. This includes all links between local or distributed ZenHubs and collectors, and Resource Manager dependencies (such as RabbitMQ).

When adding a new device to Resource Manager, the DNS resolution of the device name dictates whether Resource Manager attempts to connect by using IPv4 or IPv6. If you enter an IP address directly (either as a device name or by manually changing a device's management IP), then Resource Manager can be forced to use IPv4 or IPv6 manually.

If you want to monitor devices in your infrastructure that have IPv6 addresses, make sure you have installed and configured an IPv6 interface on your Resource Manager server.

1.4.6. zenhub

This release of Resource Manager uses RelStorage, a backend for ZODB that stores pickles in a relational database. With the switch to RelStorage, the `pcachesize` and `pcachedir` options are no longer relevant. Remove these options from any daemon configuration (`.conf`) files. (Defect 28620)

1.4.7. TrapForwarder ZenPack

The TrapForwarder ZenPack is deprecated in this release. SNMP traps are now handled as part of notifications. For more information, see the chapter titled "Using Resource Manager" in *Resource Management Administration*.

1.4.8. Reports

The process for determining device state has changed for the Availability report. Previously, if an event was reported that indicated a device down condition before the start of the report window, this event would not be seen, and the device would be considered 100% available. The Availability report now looks for all open events reported before or during the reporting window, and computes availability by using the device state based on prior open events.

1.4.9. Event Commands and Alerting Rules

Do not escape event command messages and event summaries. For example, write this command as: `echo $evt/summary` (rather than `echo '$evt/summary'`). (Internal Defect 28755)

Alerting rules or event commands that perform starts or ends with queries on the ntevid field, or perform comparisons against a non-numeric ntevid field, cannot be migrated to the equivalent 4.0.x trigger rule. These alerting rules or event commands must be manually migrated to the appropriate trigger after installation. (Internal Defect 28818)

1.4.10. Debug Logging from zeneventd

To enable debug logging for `zeneventd`, you must run `zeneventd` with the -v10 option. (Internal Defect 28626)

```
zeneventd start -v10
```

1.5. Known Issues

The following issues are known for this version of Resource Manager.

1.5.1. Audit Logging

The current version of audit logging has these known issues and limitations:
- The following are not yet audited:
  - Command line usage
  - Some UI actions, including log outs and stopping daemons
  - VMware, Cisco, and Nexus7k
  - Impact and Event Management
- Some output is inconsistent:

- Performing an action in multiple ways may produce different output.
- Old values are displayed for only some items; primarily templates.
- Configuration is limited:
  - Individual audits cannot be disabled, or use a different log level.
  - The format has limited flexibility, and is alphabetical.
  - Multiple steps are required to change log locations.

1.5.2. Distributed Collector

Only one `zentrap` instance can be run on a server, as it must bind to the SNMP trap port (162). If you install multiple collectors on the same server, you must assign different port numbers to additional `zentrap` daemons. Attempting to run additional `zentrap` daemons using the same port will cause them to fail at startup. (Defect 29157)

1.5.3. Active Directory

When monitoring Windows 2008 SP1 servers using the ActiveDirectory ZenPack, some performance counters expected by the ZenPack will not be available, and will generate error messages and cause missing performance counters. See the section "Changes to performance counters" at http://technet.microsoft.com/en-us/library/cc754463(WS.10).aspx for more details about changes in Windows 2008. (Defect 28640)

1.5.4. ZenPacks

- The definitions of the Text and TextLine schema have changed. Any ZenPacks that use Text or TextLine in their interface definitions must be updated. (Defect 28507)

- The 1.4.0 version of the CiscoUCS ZenPack in Resource Manager changes the event class structure for events that originate from a UCS Manager. The previous event classes /CiscoUCS/Events and /CiscoUCS/Faults are no longer present. Events that come in will be in the /Unknown class unless they are mapped to the /Status/Blade or /Status/Chassis class. If you have created custom mappings or transforms for the /CiscoUCS/Events or /CiscoUCS/Faults event classes, they will be lost.

- In the LDAPMonitor ZenPack, you must place quotes around Bind DN values. (Defect 2919)

- The `zope.app` namespace was deprecated by Zope and has been removed. Resource Manager includes a backwards compatibility layer, but any references in ZenPacks to `zope.app.*` should be changed to `zope.*` instead. (Defect 28930)

1.5.5. Site Window Portlet

Some Web sites may not be compatible with the Site Window (Welcome) portlet that appears on the Dashboard. Before customizing this portlet to point to another Web site, make sure that site is not running a JavaScript "frame breaker" script. (Defect 27151)

1.5.6. Internet Explorer 9

When using Internet Explorer 9, Resource Manager user interface page elements may not load and display correctly. To work around this issue, go to the Internet Options **Advanced** tab (from Settings > Internet Options), and then reset Internet Explorer settings.

1.5.7. Reports

After upgrade, reports may not display correctly for users with no assigned roles. (Internal Defect 28822)

To work around this issue, re-index the catalog with the command:

```
zencatalog --reindex
```

1.5.8. Windows Services

Resource Manager displays a status of "unknown" for Windows services that are disabled or not monitored. (Defect 27028)

1.5.9. Zenoss Global Dashboard

Zenoss Global Dashboard is not supported in this release. If you are running Zenoss Global Dashboard, you must contact Support before upgrading.

1.6. Reporting Problems and Providing Feedback

To contact Zenoss Customer Support, go to the support portal at:

https://support.zenoss.com

1.6.1. Product Documentation Feedback

Zenoss welcomes your comments and suggestions to help us improve our product documentation. Please send your comments to:

docs@zenoss.com

1.7. Defects Fixed in this Release

See the document titled "Zenoss Service Dynamics Resolved Defects" (appended to these release notes) for the list of defects that were resolved in this release of Resource Manager.

Resolved Defects for Zenoss Service Dynamics 4.1

Defect	Summary
2859	Flare messages and Devices tree empty for user with no role
27837	Manually created users on Insight cannot log in
28100	remove insight version from directory
28196	Zenping doesn't send correct clear event (and pings deleted devices)
28405	Can't configure ZenETL in IE
28596	Event Occurrences needed for Analytics Histograms and simplified availability reports.
28623	Nexus7k ZenPacks
28645	add filter to Organizer Graph reports
28652	Authorization/Authentication failures in SNMPv3 hang up SNMP based threads (zenperfsnmp, zenprocess, zenmodeler, zendisc)
28679	Buildbot needs to build new zenoss-utils Java components
28680	zensocket and pyraw permissions wrong in RPM builds
28684	ZenHub hosed by software modeling
28696	Zope logins are reverting to http after logging in as https
28702	Weekly cron jobs failing on distributed collectors (patch proposed)
28711	No .upgraded file created with rpm -Uvh
28712	totaltxs - IndexError: list index out of range
28716	upgrade: Event proxy fields are incorrect for firstTime/lastTime
28718	Event class criteria missing from triggers after upgrade
28719	Triggers page does not scroll
28721	Zope security patches needed
28726	SnmpTrapConfig creates disproportionate load on zenhub
28728	Make index interval and limit configurable in ZEP
28729	ZEP scheduled tasks need to run more often
28730	CancellationException thrown when editing ZEP configuration values
28733	Possible traceback when installing Impact ZenPack
28735	upgrade: Warning on upgrading the AdvancedSearch ZenPack
28737	Upgrades to 4.0.0/ZenDS are not properly using ZenDS
28740	zenhub performance metrics for distributed hubs are missing
28742	Error running command RemodelOnMigration after a fresh installation
28744	Server Exception error when trying to display Virtual CPUs of a host (3.2.0 only)
28745	Event trigger bottleneck while indexing
28746	upgrade: Notification migrations don't set __primary_parent__ properly on windows
28749	Upgrades with remote ZenDS instructions are missing
28750	don't try to start mysqld locally when MYSQLHOST != localhost
28751	Notifications using ${evt/severityString} fail
28753	Bad notification email body fails silently with traceback, no other signal
28754	Maintenance windows are not migrating properly to 4.0.0
28755	If there are quotes in evt/message, event commands will fail
28757	zencommand doesn't deduplicate command output for processing

28758	Zope can't connect to DB after migrating from 3.1.0 to 4.0.1 with remote DB
28759	upgrade: WARNING on transform that contains txnCommit()
28761	RRDView.getRRDValues() does not work with remote zenrender
28762	Administration Guide: SNMP Device Prep, SNMPv3 Traps Support Statement Incorrect
28763	UnicodeDecodeError with Python 2.7.2 / httplib
28764	Navigating to a nonexistent device asks for login, forever
28765	Unit test failures on test-perf-1 - tupleToTime (ZenPacks.zenoss.ZenVMware.Utils)
28770	Update installation documentation for remote hubs/collectors on upgrades
28773	Documentation for MySQL, ZenSQLTX ZenPacks missing requirement
28774	Distributed collectors without ZenDS report errors on stop/start
28776	ZenHub with workers is slow to publish events in a storm
28778	zenperfsnmp error: 'module' object has no attribute 'Warn'
28779	Adding a VMware infrastructure with a remote collector is not showing perf data
28780	ConflictErrors in applyDataMaps
28781	Uncaught ConflictError in a hub worker causes it never to finish
28782	Default remote method prioritization doesn't make sense anymore
28783	Traceback in zenhub log: Unhandled error in Deferred
28784	Not working unacknowledge button on device level event *history*
28785	ZenVMware ZenPacks version needs updating
28786	CiscoUCS ZenPacks version needs updating
28787	Remove or update the "On the Horizon: Zenoss Datacenter Insight"
28788	Reports that use data point ids fail
28791	Interface utilization report has incorrect units
28792	Another Zope security patch! XSS thing (3.2 version)
28793	Another Zope security patch! (4.0.2 version)
28794	ZenVMware ZenPacks version needs updating for 3.2
28795	CiscoUCS ZenPacks version needs updating for 3.2.0
28800	Google Maps appears to require locations to use a zip code in their address
28802	Software link is missing from the Device page
28804	Several pages need to be sped up
28805	No way to know what trigger/notification caused an action
28806	The 'object_state' table in zodb is growing very large
28807	LDAPMonitor ZenPack error when changing bind type
28808	"innodb_bugger_pool_size" in zends.cnf
28810	Processes page can say that another user has modified since last reload
28814	Fix migrate scripts for Avalon to use version 4.0.0
28816	ZenAWS broken on trunk in Python 2.7
28817	upgrade: vCPUs aren't modeled after 3.1.0->4.0.2
28818	Complex alerting rule broken on upgrade from 3.1.0 -> 4.0.2
28819	add bailout nag for rpm if history keeping relstorage detected
28820	Build 1235 3.2 Traceback during installation
28822	upgrade: Reports not displaying for users with no roles after upgrade
28824	User can not remove its own organizers
28825	evid on event summary proxy is incorrect

28837	event_summary.ibd grows too fast, consumes too much space
28840	Error 2013 running changeToNonHistoryZODB.py
28841	Force the use of SSH for rsycing collector deployments
28842	deviceClass becomes unlinked from the device object
28844	Update ZenDS default innodb purge settings
28849	Error in doc string that breaks epydoc
28852	RPM nag for changeToNonHistoryZODB.py fails for remote ZenDS
28853	changeToNonHistoryZODB.py fails to abort if Zenoss partially running
28854	upgrade: don't attempt to start mysql server on zenoss master on upgrade unless MYSQLHOST == localhost
28855	Verify ZenVMware Compatibility with vSphere 5
28856	Verify Compatibility with vCloud Director 1.5
28857	Paging not being sent in 4.0.x
28858	[DOC] 4.0.2 install documentation references a URL that does not exist.
28859	zenoss 4.0.2 + zends + Upgrade notes wrong for running processes
28861	Error during Distributed Collector ZenPack install - Zoectl daemon
28866	We should include 'mysql' in the exfiles exclusion list for the DC ZenPacks
28870	VMware Events are not being displayed
28877	upgrade: 4.0.2 migration failure from 3.1 if PreUpgrade ZenPack is not removed
28878	selection unchanged by filtering
28882	Unit test failures on build 1250 (3.2.0)
28884	IPv6 is attempted over IPv4, prevents properly adding devices
28888	vCloud Unit Test Failures (AttributeError: zport)
28890	Traceback with "ImportError: No module named ipaddr" when starting zentrap, zenperfsnmp
28892	Add note about ipv6 in release notes
28898	When running with ZenHub workers, change notifications cause AttributeError exceptions
28899	User is unable to assign an administered object to a user
28900	Restore of zodb in 4.x is taking a very long time
28902	"NoRole" user can not navigate through the application
28905	Tree on infrastructure page is not sorting and not refreshing properly
28908	Site Window portlet displays links to Avalon docs instead of 3.2.0 docs
28911	bump versions for changed enterprise ZenPacks for 3.2.x branch
28917	pyraw/zenping memory leak
28919	Log file issues for ZenPacks installed after DC
28920	The browser title on the Analytics "configuration" page incorrectly says analysis
28922	Signing into Analytics gives a 404 error on /zenoss_insight/flow.html
28923	SSO is not working for Zenoss 4.0.2 -> Analytics
28925	Installation instructions for 4.1.0 must specify upgrades to 4.0.2 required
28929	Unit test failure on build 1260, Nexus7K ZenPack
28930	upgrade: Tracebacks during upgrade from 4.0.2 to 4.1.0
28931	Configure the Insight host server is broken
28933	Error starting Zenoss Analytics server
28934	Save Settings button resets password on user's Edit page (IE only)
28935	win7 IE9 on 4.0.2: Dashboard/portals do not display, contrary to release notes.

28936	ImpactServerException (status 503) when browsing to Services
28937	GOM is not forwarding messages
28938	Missing relationships for OS Processes and IP Services cause issues with deleting either
28939	RRD files not being updated if OID starts with a . (period)
28940	zencommand - data sources not collected (except for first one)
28941	Analytics cannot schedule a perf batch for remote collectors
28944	Modeler plugin lists are reversed
28948	ZEP services unavailable on startup while index rebuilds
28949	Don't pre-create a large number of partitions for event occurrences
28951	Do not exist some Reports files and zenoss cannot change their owner
28952	add jre dependency to zenoss spec
28954	Some Analytics reports include "Insight" within them
28956	Trying to view and Zenoss report shows a traceback about connection failures
28958	Analytics database configuration script is broken
28959	Tracebacks on reports when MySQL runs out of file descriptors
28960	Analytics batch interval setting not honored or constantly reset to 8?
28961	Add support for aging critical severity events in ZEP
28962	IE: Add/Edit GOM window is out of place and its elements are getting cut off
28968	After installing GOM the Component column do not work as expected
28970	GOM is allowing to set localhost as Source
28971	upgrade: detect for relstorage on 3.2.1 upgrade; bailout with nag during rpm install
28972	Analytics RPM should check for JAVA_HOME
28973	New ZenPack configure.zcml "not well-formed"
28975	Traceback related to GOM found in event.log when zopectl is down
28976	GOM does not save changes after edit a source
28977	Zeneventserver looks for local ZenDS socket even when MYSQLHOST != localhost
28979	IE9: Dynamic Service page elements are not loading
28984	New JRE-checking requirements break install-functions.sh
28985	Critical events (red badge) in Infrastructure page do not link to events
28986	New Devices report shows Unix epoch date for non modeled devices
28990	Analytics role is still called InsightUser in the Zenoss Master Server
28996	3.2 - SNMPv1 traps are not handled by zentrap
28999	The "admin" user on the Zenoss instance is retrieving a java exception when tries to login into the Analytics Server
29002	Some fields have a whitespace in the summary field on "Event Details Subreport"
29006	'Add Device' and 'Production State' changes not allowed
29007	upgrade: 3.2 enterprise ZenPacks do not upgrade Advanced Search ZenPack (it gets removed)
29010	trackback in zentrap because ZenPacks placing a ghost object in the wrong device hierarchy
29014	Events coming in via zentrap are now set to 'Info' instead of 'Warn'
29015	zenactiond doesn't produce audit trail
29016	Change "Override Template" to "Copy/Override Template"
29017	isip method breaks on systems with IPv6 disabled
29018	Update release notes and other documentation around support platforms
29019	Traceback while removing Dynamic Services

29020	upgrade: New traceback during upgrade from 4.0.2 to 4.1.0
29025	Can't change production state on multiple devices
29026	GOM fails when started before a user has logged in
29027	GOM should configure routing based on the configured targets
29028	Adding a note on consolidating instance leads to two added notes
29030	The "Advanced" tab into the Reports Section is not present in Zenoss 3.2.0
29040	Unit test errors detected on continues integration
29041	need to create a hard limit on the number of collectors per hub
29042	The table "dim_ip_address" has missed the column "ip_interface_key"
29045	Getting error page while trying to change the role value on Administered Objects
29050	upgrade: Catalog migrate scripts taking forever to run on 3.2
29052	Change to zendsevent line 171
29053	"Show historical events" check box misplaced at Impact Events page
29055	Frequent OutOfMemoryErrors with Lucene index and large events database
29056	Events for new devices are not forwarded after Update Model is checked
29057	Email Notifications broken	'EmailAction' object has no attribute 'guidManager'
29058	Verify Deep linking between reports and devices is not working
29061	zenbackup fails to back up ZEP (index files are modified during the backup)
29062	pyflakes undefined name warnings in 3.2.x enterprise ZenPacks
29065	Audit: Model Existing Devices action is not being shown on any log
29068	Audit log shows zProperty passwords
29069	Audit: Model devices by using Add multiple Devices option is no being shown on any log
29070	zensnpp failing on Zenoss 4.x
29072	Can't modify details of a user-added interface
29073	Audit: Editing of users and groups isn't recorded
29074	Audit: Hub and Collector changes aren't tracked
29075	Audit: Logins aren't being recorded
29081	Prerequisites installation fails on CentOS 5.7
29082	upgrade: Two tracebacks after running service zenoss start when doing the upgrade from 3.2.0 to 4.1.0 directly
29086	Traceback when viewing distributed collector in UI
29089	"Add multiple devices" doesn't work on zenusers with a class as administered object
29090	Impact: Impact Events right pane is not being refreshed
29092	upgrade: Traceback upgrading from 3.2.0 to 4.1.0, latest build
29093	Don't screw the user when they enter a bad regex and then reload the Infrastructure page
29095	upgrade: zenoss_upgrade_patch_zenpacks.sh patch failing (*.rej) 3.2.0 to 4.1.0
29098	IE: remove button is missing on Set Systems and Set Group window
29100	Analytics fails to start after install with pre-reqs met
29103	upgrade: 3.2.0 to 4.1.0 upgrade fails during rpm -Uvh portion
29104	Modifications page doesn't work, but link is still present
29105	Analytics layouts are misplaced on Internet Explorer
29109	Audit: Reset Password button isn't tracked.
29113	Events created on the source with a class that not exists on the target are not forwarded
29115	The detailed view of the events is not being displayed correctly on the Event Console.

29117	VMware Documentation Issues
29121	Unable to model VMware Infrastructure from UI
29122	VMware Discovery fails after ISO install
29128	The Alerting Rule Report should be renaming adding "Zenoss 3.x only"
29129	Analytics - Top N IP Interface Volume report result are not matching between analytics and zenoss
29133	KeyError on uid when editing IPService or OS Processes
29134	Zenoss base RPM build 1295 depends on libpq.so.4
29135	ImportError: cannot import name ZEN_VIEW_MODIFICATIONS
29136	Documentation for the process of upgrading from 3.2 to 4.1.0 directly is needed
29137	Creating an OS process and then leaving page can't go back unless you clear browser history
29138	OS Processes count is showing number of OS Processes defined, not number of devices using it
29144	Need Option to Obscure Community String from Device Overview/Configuration Properties
29146	Audit: By default audit log appears off
29147	Upgrade: Tracebacks when upgrading from 4.0.2 to 4.1.0 with local and distributed DB.
29152	Upgrade: Tracebacks are displayed during the upgrade from 4.0.2 to 4.1.0 with Impact installed
29155	Multiple thresholds on same data point broken
29157	Zentrap does not start when you create a collector and the reason it not logged anywhere
29162	Traceback while a user with the role "ZenUser" tries to change a property for a device
2309	DC Differences
2359	collector setup fails if main server doesn't have eth0 with ip address
2721	[1] Modeling output in the UI no longer indicates whether a device is associated with local collector versus distributed
2725	Restricted users can't see their assigned groups
2941	No compression of CSV files
3104	[1] Add a 'holiday', 'weekend', 'business_day' attributes to dim_date
3300	Remove Zope-SQLAlchemy from externallibs
27009	Moving device from one device class to another doesn't change all classes
27159	User Settings UI is confusing when changing password
27366	[1] GoogleMaps stop working
27387	Overwriting a Template locally fails to reload new instance
27541	zooming into graphs broken
27577	Web Interface Leaks Memory in Browser
27698	Step 1 has to be removed from the point 30.5 of the Extended Monitoring Guide
28131	No information been collected on UCS's PSU after almost 30 minutes
28175	Deletion of group does not delete associations with Administered Objects
28176	Administered Objects don't work properly in 3.1
28325	Device Inventory Report not clear with device class
28344	Streaming output window displays sensitive data in URL
28391	New Configuration Page, Suggested Text Changes
28420	New traps sent from Avalon do not implement entire zenoss mib
28455	NetApp modeling failure because of Storage Enclosure information
28483	Add Portlet: Zenoss Issues Selection/Portlet Title s/b Resource Manager

28487	zenjmx fails to run for a device if a typo in a tales call
28551	zencatalog --forceindex fails with Traceback
28585	Broken catalogs on new installs
28594	auto parser does not understand scientific notation
28610	Nexus 7010 Modeling failure with v3 snmp
28626	Unable to get debug logging from ZeneventD
28643	Command actions should use better names and defaults
28662	ZenPacks command should exit with a non-zero return code if ZEP not running
28685	Customer gets error when viewing events with Python array as property value
28689	removing networks organizer can cause modelling to fail
28708	Unit tests have relstorage.adapters.mysql warnings and Operationals Error
28709	Initial error message on setting Diagram background image
28725	Add organizers to report filter for standard reports
28731	Move impact exchange/queue/message definitions to Impact ZenPacks
28738	Restorage's zodbopack does not parse zope.conf
28747	add threshold to graph display is too narrow
28769	Impact ZenPack showing extraneous output during installation
28771	Modeling a vm in 'inaccessible' state causes vmware modeling to fail on vcpu info
28772	Reducing the number of vCPUs will cause vmware modeling to fail
28790	Dist. Collector removal fails due to failure to edit daemons.txt
28828	Clear notifications sent even if delay specified and no down notification sent
28851	Add qtree name to qtrees, allow qtrees to be monitored
28863	live search needs delay AND enter forces search
28867	Error re-running addTriggersAndNotifications migrate script
28879	Error in 3.x event test layer tearDown: existing MySQL transaction when truncating tables
28887	Make Incremental Loading Tree optional
28901	Can not delete Impact Custom Global Policy
28904	Livegrid loses the last rows of large number of items
28909	zenping correlation engine should be replaceable
28912	Removing a built in IPservice and adding another similar causes odd naming issue
28924	MinMax thresholds should return back the min/max/current results into the event
28943	ZEP dedup event processing performance slower than it needs to be
28950	Wrong trigger name visible in actions if it was ever changed.
28982	Printable Graphs button only produces hourly graphs (regression)
29005	zenhub has traceback
29008	Uninstall of ZenPacks causes ZEP traceback
29046	The command: "service zenoss_analytics configure_mail_server " redirects to the wrong path
29096	AMQP Publish retries don't work if a connection has already been closed
29123	Daemons fail to read maxlogsize and maxbackuplogs from config files
29154	Data too long for column 'element_sub_title' at row 1
29164	Database conflict in ZenJobs
2733	Not showing Groups or Systems to users with proper permissions
3311	URLs in email notifications don't work for events

26189	"saint pol de leon france" breaks Google Map
27530	ZenPacks --help creates traceback
27717	Commands options on device details page don't work on Google Chrome browser
27751	Zenoss 3 Device Production State Combo-box Bug
27914	Unable to page past 40 alerting rules
28190	Please port the latest zenbatchload changes back into 3.1.x
28362	Add zMySqlPort property to ZenPacks/template
28520	Login page for insight stacktraces when no zenoss instances are configured
28815	Error in /Perf/Filesystem transform (fills zenhub.log)
28848	BIG-IP Graph Custom Definiton
28891	vCloud Unit Test Failures (Unable to find context path /zport/dmd/Events/Status)
28910	Renaming device sometimes fails
28947	Fail to render error page when the exception has a required argument
28978	The available context for clear events in notifications is not documented
29101	auto-reload of new graphs page resets zoom level
3314	Refreshing Device List gives javascript errors
3344	Doc release note for Availability Reports
26958	not existant devices are clickable
27462	zenrrdcached returns it is running with a stale pid file
28439	RPM uninstall requires MYSQL to be running.
28821	WMI modeler does not parse socket number from socket string
28903	Update ZenPackTemplate
28927	pynetsnmp traps sent from net-snmp >= 5.6 and < 5.6.1.1 are invalid