Description of Software, Support, and Services

June 19, 2016

Zenoss reserves the right to revise this DOSSS at any time at its sole discretion.

Table of Contents

Zenoss Software

Zenoss Service Dynamics

Zenoss Service Dynamics is a suite of software products – *Resource Manager*, *Service Impact, Analytics* – that's built on a unified, agentless-platform and designed from the ground up to meet the needs of any enterprise from mid-sized organizations to the Fortune 50.

Zenoss Service Dynamics monitors today's highly dynamic enterprise IT infrastructures with a single platform. Highly flexible and scalable, Zenoss Service Dynamics provides the actionable visibility into the physical, virtualized and cloud-based infrastructure required to deliver your critical IT services:

- **Scale Out Monitoring, Scale Back Costs**

  Gain end-to-end infrastructure performance visibility and control with flexible, unified, monitoring that adapts easily to any environment, identifies service issues more quickly and reduces the cost to operate IT and delivery services to the business.

- **Avoid Service Disruption**

  Ensure service reliability with near real-time visibility into the health of your IT services, faster root cause analysis, and business intelligence to proactively analyze operations trends.

- **Respond Quickly to Business Demands**

  Increase monitoring speed and agility, reduce friction and realize faster time-to-value when adopting new technologies in support of strategic initiatives.

Zenoss' open architecture and APIs enable quick and proven integration with other ITSM, orchestration, and management systems, and supports DevOps monitoring workflows. Zenoss works with existing management frameworks, log consolidators, ITSM solutions, and IT orchestration engines.

Organizations may deploy and manage Zenoss Service Dynamics on-premise or use Zenoss as a Service which provides the same capabilities delivered as a cloud-based service and managed by Zenoss.

Zenoss Resource Manager

Resource Manager, the base product in the Zenoss Service Dynamics suite, unifies and automates performance and availability monitoring and event management for your entire heterogeneous IT infrastructure – applications, servers, storage, networks, virtualization, converged and cloud.

With Zenoss Resource Manager, IT operations teams have an authoritative, near real time "single source of truth" into the health of all enterprise IT resources which eliminates silo views of the infrastructure and streamlines the identification and resolution of resource and service issues.

Resource Manager automatically discovers resources in your infrastructure, then uses the information it collects about devices and their components to construct a near real-time model of your environment. Reports aggregate data from all of the devices and components being monitored.

Resource Manager and ZenPacks make it easy to unify, enhance and extend your monitoring. These plugins use standard APIs and protocols to collect configuration data and monitor specific elements, devices or systems without agents. Refer to the Zenoss Glossary for more information about ZenPacks.

At a minimum, Zenoss Resource Manager along with a Zenoss support plan, must be purchased.

Zenoss Service Impact and Analytics

Zenoss Service Impact and Analytics takes the guesswork out of knowing when an infrastructure event, such as a drive failure, puts critical business services at risk. This component of Zenoss Service Dynamics helps you visualize and manage your IT infrastructure as a portfolio of services instead of as a collection of individual components or devices.

The Zenoss service model displays dependencies among infrastructure components that comprise your business services and is able to maintain these models in near real-time for highly dynamic targets such as virtualized environments (e.g. VMware) and converged infrastructure (e.g. Cisco UCS).

By putting a service context to all of your infrastructure components, you can increase the Mean Time Between Failures (MTBF) and decrease the Mean Time to Resolution (MTTR) by focusing the operations teams on actionable, relevant issues before they degenerate into service delivery problems. The patent-pending confidence ranking engine expedites root cause identification.

Zenoss analytics provides out-of-the-box and ad-hoc reporting to visualize and understand historical performance and event management trends to help you improve SLA performance, project and manage future capacity requirements, and avoid potential performance degradation and service outages.

Pilot Software

Pilot Software grants you a temporary license to use the specified software products for trials, pilots, proof of concepts, and limited production use, subject to restrictions and limitations stated in your Order Form. Your use of Pilot Software may be limited by Usage Term, scope of the project, authorized quantities, geography, or other variables as specified in the Order Form. At the conclusion of the Pilot Software Usage Term, you may continue using Zenoss Software by purchasing a Zenoss Subscription License, or discontinue the use of the Pilot Software in accordance with the terms and conditions in your Master Agreement.

Zenoss as a Service (ZaaS)

Zenoss as a Service allows organizations to accelerate time-to-value and lower total cost-of-ownership by adopting Zenoss Service Dynamics as cloud-based service that is managed and supported by Zenoss. The service addresses your monitoring and management challenges and allows your IT professionals to focus on delivering value instead of keeping the lights on.

With Zenoss as a Service, you don't have to worry about deploying Zenoss Service Dynamics, managing and upgrading your Zenoss installation or architecting your unified IT monitoring infrastructure for high availability. Zenoss takes care of all of this for you.

With Zenoss as a Service, you'll always have the latest version of Zenoss Service Dynamics monitoring your environment. Getting started is easy – simply deploy a light-weight Zenoss virtual appliance in your environment to manage collection and begin monitoring.

Zenoss Service Dynamics Launchpad

Zenoss Service Dynamics Launchpad is an introductory package that includes a one (1) year subscription of Zenoss Service Dynamics (for a fixed number of Managed Resources with Premium Support) and the Zenoss Service Dynamics QuickStart Services Product Package (PKG-QSP-ZSD) and two (2) Zenoss Product Training seats. Organizations may deploy Zenoss Service Dynamics software on-premise or use Zenoss as a Service (ZaaS).

Software Licensing Policies

Zenoss software products provide unsurpassed value and flexibility by licensing based on the total number of Managed Resources monitored, and includes access to 100+ Zenoss developed and supported enterprise ZenPacks at no additional charge. For non-virtual environments, a Managed Resource is any network-connected device such as a server, router switch, IP phone, UPS, etc. For virtualized environments, in addition to all connected devices, each virtual machine (VM) with a unique IP address is counted as a Managed Resource. For example, a VMware ESX server with ten (10) guest operating systems would equal eleven (11) Managed Resources.

You will obtain your copy of the Software by download from a password protected URL that will be provided to you by Zenoss when your Order Form is accepted. You must download the Software from the password-protected site within fifteen (15) days of the Effective Date. If you have not provided Zenoss with the location at which the Software is installed, it is presumed to be installed at the billing address listed on your Order Form. All Software shall be deemed accepted by you upon the earlier to occur of download, copying, or receipt from Zenoss, or 15 days following the Effective Date.

If Zenoss makes source code for any Software available to you, you may use that source code solely for internal testing purposes. You shall not: (a) make copies of Software, except for reasonable numbers of copies made for backup or archival purposes; (b) copy Software onto any public or distributed network or otherwise resell, distribute, or disclose Software to any third party; (c) use the Software to process, store, accept or analyze data from applications other than the Software; (d) use the Software for any purpose other than the Permitted Use and authorized quantity expressly designated on your Order Form; (e) resell or make available ; (f) change any proprietary rights notices that appear in the Software; (g)"frame", "fork", "mirror", modify, reverse engineer, disassemble, de-compile, create derivative works based on the Software or distribute the Software.

Zenoss has the right to audit your records and systems for three years (3 years) after termination of your Service to determine compliance with any agreement between you and Zenoss ("Verification Audit"). Zenoss shall give you thirty days (30 day) written notice of any verification audit and will deliver a copy of the audit results to you. Zenoss may request Software-generated Usage Data be delivered to Zenoss in unmodified form within fifteen days (15 days) of its written notice to audit.

The Zenoss Open Source Community (www.zenoss.org) distributes certain extensions for the Software known as "ZenPacks" under an open source license ("Community ZenPacks"). You may use Community ZenPacks with the Software, but you may not use any other software distributed by the Zenoss Community in connection with any part of the Software.

Third Party Offerings

Zenoss UC Insight With Log Analytics

Powered by LayerX Technologies' patented AnalytiX software, Zenoss UC Insight with Log Analytics delivers rich quality of service monitoring across multiple Unified Communications (UC) platforms as well as log monitoring and analytics at scale. UC Insight with Log Analytics incorporates the ability to collect all data within a UC environment (e.g. Syslog, Proprietary Logs, Flow, RTCP, SDN Data, CMR/CDR, SQL Queries, SNMP) and index it under a single architecture. Its powerful correlation engine can extract the log file data, correlate it, and take actions on multiple points within a UC or application ecosystem, allowing organizations to view and analyze overall access, quality and performance.

Zenoss UC Insight with Log Analytics is licensed based on the total number of Unified Communications users. The license also includes the ability to collect and analyze log data produced from devices (up to 5% of the licensed number of UC users). For example, if you're licensed for 6,000 UC users you may also collect and analyze log data produced from up to 300 devices.

Zenoss provides support for Zenoss UC Insight with Log Analytics as determined by the active Zenoss support plan associated with your Zenoss Resource Manager or Zenoss Service Dynamics license.

Zenoss Log Insight

Powered by LayerX Technologies' patented AnalytiX software, Zenoss Log Insight delivers rich quality of service monitoring across heterogeneous environments. Zenoss Log Insight incorporates the ability to collect all forms of log data (e.g. Syslog, Proprietary Logs, EHR Logs, Telemetry Logs, SQL Queries, ODBC queries, API access) from a customer's infrastructure. Zenoss Log Insight indexes data under a single architecture and correlates against performance thresholds to discover anomalistic behaviors and analyze overall access, quality and performance of critical infrastructure.

Zenoss Log Insight is licensed based on the total number of devices from which logs are being produced (not from where they're collected). Zenoss provides support for Zenoss Log Insight as determined by the active Zenoss support plan associated with your Zenoss Resource Manager or Zenoss Service Dynamics license.

Zenoss NetFlow Insight

Powered by LayerX Technologies' patented AnalytiX software, Zenoss NetFlow Insight delivers rich quality of service monitoring across network infrastructure. Zenoss NetFlow Insight incorporates the ability to collect NetFlow data from a customer's network infrastructure (NetFlow v5 / v9 and IPFIX) and index it under a single architecture. Its powerful platform can then extract that NetFlow data, aggregate, and take actions on multiple points, allowing customers to view and analyze overall access, quality and performance of their critical network infrastructure.

Zenoss NetFlow Insight is licensed based on the total number of flows per second. Zenoss provides support for Zenoss NetFlow Insight as determined by the active Zenoss support plan associated with your Zenoss Resource Manager or Zenoss Service Dynamics license.

Zenoss Support

Basic and Premium Support

Zenoss offers multiple, comprehensive Support plans allowing Customers to choose the plan that best meets their needs. All Customers receive Basic Support included with their current Subscription, or current Perpetual Maintenance and Support Package. Many Customers elect to purchase a Premium Support package to receive enhanced support features.

	Basic Support	Premium Support
Support Hours	8:00PM Sunday - 8:00PM Friday*	8:00PM Sunday - 8:00PM Friday*
Initial Response Time	Urgent: 4 hrs High: 6 hrs Normal: 10 hrs Low: 24 hrs	Urgent: 2 hrs** High: 4 hrs Normal: 8 hrs Low: 16 hrs
Web Support Portal Access	Unlimited	Unlimited
Email Support Access	Unlimited	Unlimited
Phone Support	2 Calls / Month	Unlimited
Named Support Contacts	4	8
Remote Troubleshooting	Yes	Yes
		Premium Support Only
24x7 Support for Urgent Issues	-	Yes
Targeted Resolution Time	-	Yes
Targeted Zenoss as a Service (Zaas) Uptime	-	Yes
Service Level Credits	-	Yes
Management Escalation	-	Yes
API Support	-	Yes
Off Hours Support	-	Yes
Technical Account Manager	-	Yes
Quarterly Reviews	-	Yes

* Zenoss Support Hours are 8:00PM Sunday through 8:00PM Friday United States Eastern Time, excluding federal public holidays in the United States and Zenoss-observed holidays that are announced in advance and published on the Web Support Portal.

** Zenoss will respond to Urgent issues raised by Premium Support customers 24 hours a day, every day including holidays. Initial response will be less than 2 hours. All other severities are responded to according to Zenoss Support Hours.

Support Definitions

Response time is prioritized based on issue severity for which Zenoss uses the following definitions:

Urgent	An error has caused a catastrophic failure of the Software that has rendered the entire system unusable (i.e. complete system outage)
High	An error has caused a failure of the Software that severely impacts one or more critical functions of the Software (i.e. daemon(s) failed, no data collection, UI not accessible)
Normal	An error in the form of a bug or administrative issue is preventing a non-critical Software function from working (i.e. error running a report)
Low	An error in the form of a bug or administrative issue that makes a Software function difficult to use, but some Workaround is known (also includes "How do I" questions)

An “error” means a failure of the Zenoss software to materially conform to Zenoss-published user documentation.

Zenoss Support obligations do not include correction of Errors not under the control of Zenoss, including, but not limited to, Errors due to the non-availability of your Internet service provider or any telecommunications service provider, failure of your hardware, or failure of any third-party software. Zenoss will respond to bugs in the code of the Zenoss system in accordance with the response time corresponding to the level of Support you have purchased. Zenoss will not provide Support for third party modifications or customizations of the Software. Zenoss will provide Support for each version of the Software for a period of up to one (1) year after the general availability of the subsequent version of the Software. Any training provided pursuant to a new agreement must be taken during the sixty (60) day period following the effective date of the agreement that included the training. You may purchase optional training as it is made available by Zenoss. Zenoss will include the terms of any training in the announcement of the availability of such training.

Support Engagement Methods

Zenoss Support offers several ways for named support contacts to get help, providing customers with the flexibility they need. Named support contacts may access any of the following resources.

Web Support Portal

The Zenoss online Web Support Portal is the fastest method for issue resolution. The support portal allows you to communicate directly with Zenoss Support in one central location to submit new cases, append/upload file attachments associated with open cases, track the status of existing cases, and review past cases.

The support portal is also home for tools such as our extensive knowledgebase and announcement forums frequently populated with the latest information on known issues, helpful how-to guides and service pack announcements.

Email Support

You may open a ticket via email at support@zenoss.com. Zenoss encourages you to use the Web Support Portal rather than email so that we can more readily capture the information needed, such as the severity level of your request. Once you have created a ticket in the portal, you may easily update the ticket by responding to portal messages via email.

Phone

Phone support is available during Zenoss Support hours by calling +1-512-687-6854 (select option 2).

Named Support Contacts

Premium customers may name up to (8) individual support contacts and Basic customers may name (4). Your named support contacts must be reasonably proficient in the use of information technology, familiar with the customer resources that are monitored by means of the software, and must speak English. You must provide information reasonably requested by Zenoss for the purpose of reproducing any error or otherwise resolving a support request.

Remote Troubleshooting

At your request, Zenoss will use a remote assistance technology to help you identify and resolve your issue. You may request a remote support session at any time, but we may need to schedule your session at a future time depending on our workload.

Premium Support

24x7 Support for Urgent Issues

Premium customers will receive 24x7x365 support for their Urgent issues. You will be provided with an "Urgent Issues" telephone number to be used outside of Zenoss support hours for Urgent issues only.

Targeted Resolution Time

If Zenoss Support is unable to restore operation on an Urgent issue within 4 hours after the initial acknowledgement, then Zenoss Support will engage with engineering staff on the issue.

Once engaged, Zenoss will use diligent efforts to restore operations to a working state. Until the system has been restored, Zenoss will provide a named contact that will lead the resolution efforts. This contact will communicate the proposed resolution path and provide updates at reasonable intervals.

Targeted Zenoss as a Service Uptime

The Zenoss as a Service shall be available to you with an uptime percentage of at least 99.9% of the time as measured annually. An uptime percentage means the percentage which is calculated by subtracting from 100% the periods of time in which the Zenoss as a Service was unavailable as measured annually.

Unavailable means Zenoss as a Service can't be accessed by users and excludes downtime associated with service maintenance periods. Also excluded is the service not being available due to circumstances beyond Zenoss' control, including without limitation modifications of the service by any person other than Zenoss or a person acting at Zenoss' direction, a Force Majeure Event, general Internet outages, failure of the customer's infrastructure or connectivity (including without limitation, direct connectivity and virtual private network (VPN) connectivity to the service), computer and telecommunications failures and delays, and network intrusions or denial-of-service or other criminal attacks.

Service Level Credits

Premium Support customers are eligible for a Service Level Credit if they experience an Urgent Severity Level issue caused by an error in the Zenoss Software where the system is not returned to an operational state within 8 hours of their submission of their support request.

If the complete system outage extends beyond the 8th hour, you may elect to receive a Service Level Credit of $100 per each hour that the Software is not operational after the 8th hour, not to exceed $1,000 per issue. You

must submit a request for the Service Credit to the Web Support Portal no later than 30 days following the date of the original support request. Zenoss is not obligated to issue more than one Service Level Credit in any three month period. If you elect to receive the Service Credit, then the Service Credit is your sole and exclusive remedy for the issue giving rise to the support request.

If Zenoss does not meet at least 95% of the Zenoss as a Service (ZaaS) uptime percentage measured on an annual basis, Zenoss shall allow you to receive a credit of .25% of your annual Subscription fee to the Service which shall be applied only towards future renewals of ZaaS. If Zenoss does not meet at least 85% of the uptime percentage, Zenoss shall allow you to receive a credit of .5% of your annual subscription fee to the Service which shall be applied only towards future renewals of ZaaS.

Notwithstanding the foregoing, Zenoss shall not be responsible for not complying with the uptime percentage if such noncompliance is due to any unavailability of the Service which is caused by the customer's environment or other circumstances beyond the control of Zenoss.

Management Escalation

Premium Support customers receive the benefit of automatic ticket escalations ensuring that Zenoss management has the proper visibility into customer-impacting issues. Escalations occur based on time elapsed since the ticket was opened.

	Urgent	High	Medium	Low
Manager Support	At Ticket Creation	Next Bus. Day	3 Bus. Day	4 Bus. Day
VP Support	1 Bus. Day	3 Bus. Day	4 Bus. Day	6 Bus. Day
SVP Customer Success	2 Bus. Day	4 Bus. Day	5 Bus. Day	8 Bus. Day

API Support

While developer support is not part of the standard support offering, Zenoss will make reasonable attempts to assist with API programming related issues for Premium Support customers. API Support is restricted to the published APIs and does not include additional functionality not documented with the released version.

Off-Hours Support

Zenoss recognizes that some Updates must be installed outside of business hours. Premium Support customers may request that support be available for non-urgent issues outside of Zenoss Support Hours up to 2 times a year (up to a total of 8 hours). The request must be logged via a ticket and at least 1 week in advance of the requested time/date.

Technical Account Manager

Premium support accounts are assigned a technical account manager (TAM) who is responsible for maintaining consistent communications, monitoring open incidents, and acts as a single point of contact.

Quarterly Reviews

Quarterly ticket reviews with the Premium Support customers will be conducted by the TAM to review performance to date in the handling of incidents and identify areas of improvement to making handling of future incidents more efficient.

Perpetual Maintenance and Support Packages

Customers who elect to license Zenoss Software using a Perpetual Software License must also purchase an annual Perpetual Maintenance and Support Package in order to receive benefits of Zenoss Support (whether Basic Support or Premium Support), and software maintenance (service packs, patches, and fixes as they are release). Zenoss offers two Maintenance and Support Packages: Basic and Premium.

Maintenance and Support Package – Basic

Perpetual Maintenance and Support Package – Basic includes:

- Software maintenance (service packs, patches, and fixes as they are release).
- Zenoss Basic Support, as described in the table above.

Maintenance and Support Package – Premium

Perpetual Maintenance and Support Package – Premium includes:

- Software maintenance (service packs, patches, and fixes as they are release).
- Zenoss Premium Support, as described in the table above.

Maintenance, Upgrades, and Support Policies

Customers with a current Subscription, or a current Perpetual Maintenance and Support package, receive access to the latest generally available service packs, patches, and fixes as they are released. This only applies to software versions for which Zenoss is currently providing maintenance. For more information, please visit https://support.zenoss.com/hc/en-us/articles/202991725-End-of-Life-Product-Support-Dates-. Customers are not required to implement service packs, patches, and fixes, but Zenoss is not responsible for any delay in providing support that could have been avoided by your reasonably prompt installation of a service pack, patch, or fix. Zenoss maintenance is limited to correcting errors, bugs or other defects with the standard software product and does not extend to any technology customers use with the software.

Customers with a current Subscription, or perpetual license and a current Support package, receive access to new versions of software products as they are released.

Zenoss Support is not available for any deliverable provided as part of a professional services engagement unless otherwise agreed in writing as part of the engagement. Zenoss is not required to provide maintenance for a version of the software after 12 months following the release of the subsequent version of the software.

You may not use Zenoss Support in connection with open source licensed software (for example, “Zenoss Core”), unless specifically stated.

Zenoss Services Packages

Zenoss is driven by enterprise software that is easy to deploy, manage, and sustain. Zenoss is able to deploy, implement and manage thousands of devices in days, not months / years. Our product for one and, two, we’ve adapted the best and most pragmatic concepts from industry standards such as Software Development Lifecycle (SDLC), Project Portfolio Management, and Agile to create the Zenoss Deployment Methodology.

Whether you choose one of our QuickStart packages, Expert Implementation Services, or a combination, these four simple stages of our Zenoss Deployment Methodology guide a Zenoss implementation:

- Discover - Determine requirements for success

- Prepare - Build the base platform for deployment
- Deploy - Configure the platform iteratively
- Operate - Prepare for go-live and transition to operations mode

Zenoss offers a broad spectrum of comprehensive professional services to help our customers reach their IT operations and service management goals. From QuickStart packages to a la carte style Advisory Services to comprehensive turn-key Expert Implementation Services, our goal is your success. We are more than leaders in delivering monitoring technology. It's about the business relationship between your company and us. It's a partnership for mutual success.

The Zenoss Professional Services organization is comprised of highly experienced project managers, architects, developers, and deployment consultants who are available to work with the Customer as a blended team, or independently as the situation dictates.

Types of Services

Zenoss QuickStart Packages provide our customers with an essential infrastructure monitoring foothold grounded in Zenoss' best practices based on experience gathered from thousands of implementations.

QuickStart is foundational, functional and fast – most deployments can be completed in less than 4 weeks. Our Project Managers will be with you every step of the way to monitor, track and check overall project status identifying issues, decisions, and actions along the way.

Customers who benefit most from QuickStart expect:

- More Knowledge Transfer Focus – Zenoss shows you how; customers rinse and repeat
- Quicker Product Standup – out of the box focused; providing accelerated time to value
- Iterative rollout – Zenoss sets up monitoring for a sample set of sample of devices; customers rinse and repeat

Advisory Services provide the pointed expertise you need, right when you need it. It is intended as an extension to QuickStart Packages, but can be used anytime. Whether it's custom reporting, operations management assistance, or a deeper dive into high availability or disaster recovery scenarios, Zenoss subject matter experts join your team in interactive Internet sessions to discuss best practices and share their experience across many Zenoss deployments.

Customers who benefit most from Advisory Services expect:

- Short Duration – small number of interactive Internet sessions and few consulting hours
- Lower Formality – no scoping, SOWs or planned deliverables; just your team and our experts
- Targeted Expertise – the right expertise to solve a problem when you need it
- Collaborative Sessions – interactive Internet sessions with Zenoss SMEs

Expert Implementation Services go deep in the discovery of your monitoring needs and requirements. Our Zenoss experts can cover all aspects of your Zenoss deployment lifecycle from Zenoss architecture, Zenoss system high availability, disaster recovery scenarios, custom system integration, and ZenPack development to monitor devices not already monitored by Zenoss commercial ZenPacks. Customers can either completely tailor their implementation with a customized deployment plan based on their monitoring requirements or iteratively add specific implementation services to a QuickStart package.

Customers who benefit most from Expert Implementation Services expect:

- More Turnkey Focus – Zenoss provides more system-wide delivery
- Tailored Delivery – deeper dive into monitoring requirements and expectations
- Delivery Expertise – deep monitoring industry expertise and scenario evaluations
- Customizations – special device monitoring or custom integration

Training Services provide a comprehensive and holistic set of offerings to rapidly provide your team with the skills necessary to accelerate Zenoss-specific product knowledge. Our professional trainers are experienced industry practitioners who not only have a deep understanding of Zenoss products, but also of the IT challenges that Zenoss products solve. All courses feature hands-on exercises and real-world examples.

Services Product Packages

PKG-QSP-RM: QuickStart Package: Resource Manager

Project Description

All Zenoss Product QuickStart packages (Resource Manager, Impact, Analytics) include an architectural review and project management oversight. A Zenoss architect will work with Customer to review the monitoring needs of the current deployment along with planned growth. This information will be used to size the infrastructure configuration that will be required to meet the Customer's needs for the Zenoss product(s) deployment. An architecture recommendation document will be provided that will specifies the CPU, RAM, and disk space for each Zenoss infrastructure device. A Zenoss project manager will work with Customer from day one to understand the Customers monitoring requirements, manage the Zenoss deployment from start to finish, provide project status updates, and keep the project on schedule.

Deliverable - Zenoss Resource Manager Product Configuration

Zenoss will install, setup, and configure Zenoss Resource Manager (RM). This process will be done in concert with Customer staff member(s) to provide product training and knowledge transfer on the install process and event management administration. The installation process will include servers required for the installation.

- Architecture Recommendation Document
- Project Status Reports
- Resource Manager installation and set up
- Install available Recommended Patch Sets (RPS)
- Configure a sample set of administrators and groups
- Establish and configure monitoring criteria
- Model and classify a sample set of infrastructure devices, applications, and databases
- Configure event management and alerting for sample model devices
- Configure a syslog device
- Define a sample set of mappings/transforms if required

Acceptance – Resource Manager Product Configuration

Date Achieved	Initials	Component
		A user is able to login to the RM URL
		A user is able to add a device to be monitored

		A user is able to model a device
		A user is able to modify a threshold
		A user is able to add a trigger
		A user is able to setup a notification
		A user is able to set up a user group (if needed)
		A user is able to create a new user
		A user is able to stop and start the platform
		A user is able to apply an RPS update (if needed)
		A user is able to add a ZenPack (if needed)
		A user is able to show how to sort event console to manage events
		A user is able to navigate event management
		A user is able to reclassify SNMP traps (if needed)
		A user is able to run, access, and review Zentune results

PKG-QSP-IMP: QuickStart Package: Service Impact

Project Description

All Zenoss Product QuickStart packages (Resource Manager, Impact, Analytics) include an architectural review and project management oversight. A Zenoss architect will work with Customer to review the monitoring needs of the current deployment along with planned growth. This information will be used to size the infrastructure configuration that will be required to meet the Customer's needs for the Zenoss product(s) deployment. An architecture recommendation document will be provided that will specifies the CPU, RAM, and disk space for each Zenoss infrastructure device. A Zenoss project manager will work with Customer from day one to understand the Customers monitoring requirements, manage the Zenoss deployment from start to finish, provide project status updates, and keep the project on schedule.

Deliverable - Zenoss Service Impact Product Configuration

Zenoss will install, setup, and configure the Zenoss Impact Product. This process will be done in concert with Customer staff member(s) to provide product training and knowledge transfer on the install process.

- Architecture Recommendation Document (if required)
- Project Status Reports
- Install and deploy Service Impact
- Work with Customer to determine services to be monitored
- Work with Customer to determine service policies
- Sample Impact Service setup with up to ten (10) dependencies
    - Relationships between devices must already be modeled and monitored by Zenoss Resource Manager

Acceptance - Zenoss Service Impact Product Configuration

Date Achieved	**Initials**	**Component**

		A user is able to successfully navigate to Services tab and it shows the Impact Services View.
		A user is able to define a sample service within Zenoss with up to 10 devices
		A user is able to define service notifications
		A user is able to view the sample service in the Services View on RM
		A user is able to validate that service notifications are being sent

PKG-QSP-ANL: Service Analytics

Project Description

All Zenoss Product QuickStart packages (Resource Manager, Impact, Analytics) include an architectural review and project management oversight. A Zenoss architect will work with Customer to review the monitoring needs of the current deployment along with planned growth. This information will be used to size the infrastructure configuration that will be required to meet the Customer's needs for the Zenoss product(s) deployment. An architecture recommendation document will be provided that will specifies the CPU, RAM, and disk space for each Zenoss infrastructure device. A Zenoss project manager will work with Customer from day one to understand the Customers monitoring requirements, manage the Zenoss deployment from start to finish, provide project status updates, and keep the project on schedule.

Deliverable - Zenoss Service Analytics Product Configuration

Zenoss will install, setup, and configure Zenoss Service Analytics Product to work with the Resource Manager installation. This process will be done in concert with Customer staff member(s) to provide product training and knowledge transfer on the install process. The installation process will include servers required for the analytics software and data warehouse. As a standard practice, the installation is allowed to run for a week or two prior to the report review to allow data to gather for the report samples.

- Project Status Reports
- Install and deploy Analytics
- Work with Customer to set up system parameters, data retention policy, user access, etc.
- Configure and verify Model ETL is working successfully for master
- Configure and verify Event ETL is working successfully for master
- Configure and verify Performance ETL is working successfully for master
- Validate all ETL jobs are working correctly
- Allow for one to two weeks of data to be collected
- Walk through of the out of box reports

Note: Custom Analytics report development and/or report development training are available through an additional agreement

Acceptance - **Zenoss Service Analytics Product Configuration**

Date Achieved	**Initials**	**Component**

		A user is able to validate single sign on between RM and Analytics works via logging into RM using a user account with the ReportingUser role and then navigating to Reports->Advanced successfully logs user into Analytics
		A user is able to validate Model ETL is working successfully for master
		A user is able to validate Event ETL is working successfully for master
		A user is able to validate Performance ETL is working successfully for all local and remote collectors
		A user is able to validate all ETL jobs to be working successfully
		A user is able to execute New Reports for 4.3->Analytics Status Reports->Analytics Batch Status Report to verify all batches for MODEL, EVENT and PERFORMANCE on all collectors show COMPLETED status (no FAILED batches)
		A user is able to execute New Reports for 4.3->Device Performance->Availability, CPU Usage and Memory Usage Exceptions Report with thresholds of "greater than 0" to verify aliases applied during install and daily aggregation process is running successfully. You should get data returned.

PKG-QSP-ZSD: Zenoss Service Dynamics

Project Description
Zenoss Service Dynamics QuickStart package (PKG-QSP-ZSD) includes the following three packages:

- Zenoss Resource Manager (PKG_QSP_RM)
- Zenoss Service Impact (PKG_QSP_IMP)
- Zenoss Service Analytics (PKG_QSP_ANL)

All Zenoss Product QuickStart packages (Resource Manager, Impact, Analytics) include an architectural review and project management oversight. A Zenoss architect will work with Customer to review the monitoring needs of the current deployment along with planned growth. This information will be used to size the infrastructure configuration that will be required to meet the Customer's needs for the Zenoss product(s) deployment. An architecture recommendation document will be provided that will specifies the CPU, RAM, and disk space for each Zenoss infrastructure device. A Zenoss project manager will work with Customer from day one to understand the Customers monitoring requirements, manage the Zenoss deployment from start to finish, provide project status updates, and keep the project on schedule.

Deliverable 1 - Zenoss Resource Manager Product Configuration
Zenoss will install, setup, and configure Zenoss Resource Manager (RM). This process will be done in concert with Customer staff member(s) to provide product training and knowledge transfer on the install process and event management administration. The installation process will include servers required for the installation.

- Architecture Recommendation Document
- Project Status Reports
- Resource Manager installation and set up
- Install available Recommended Patch Sets (RPS)

- Configure a sample set of administrators and groups
- Establish and configure monitoring criteria
- Model and classify a sample set of infrastructure devices, applications, and databases
- Configure event management and alerting for sample model devices
- Configure a syslog device
- Define a sample set of mappings/transforms if required

Acceptance 1 – Resource Manager Product Configuration

Date Achieved	Initials	Component
		A user is able to login to the RM URL
		A user is able to add a device to be monitored
		A user is able to model a device
		A user is able to modify a threshold
		A user is able to add a trigger
		A user is able to setup a notification
		A user is able to set up a user group (if needed)
		A user is able to create a new user
		A user is able to stop and start the platform
		A user is able to apply an RPS update (if needed)
		A user is able to add a ZenPack (if needed)
		A user is able to show how to sort event console to manage events
		A user is able to navigate event management
		A user is able to reclassify SNMP traps (if needed)
		A user is able to run, access, and review Zentune results

Deliverable 2 - Zenoss Service Impact Product Configuration

Zenoss will install, setup, and configure the Zenoss Impact Product. This process will be done in concert with Customer staff member(s) to provide product training and knowledge transfer on the install process.

- Project Status Reports
- Install and deploy Service Impact
- Work with Customer to determine services to be monitored
- Work with Customer to determine service policies
- Sample Impact Service Setup with up to ten (10) dependencies
    - Relationships between devices must already be modeled and monitored by Zenoss Resource Manager

Acceptance 2 - Zenoss Service Impact Product Configuration

Date Achieved	Initials	Component

		A user is able to successfully navigate to Services tab and it shows the Impact Services View.
		A user is able to define a sample service within Zenoss with up to 10 devices
		A user is able to define service notifications
		A user is able to view the sample service in the Services View on RM
		A user is able to validate that service notifications are being sent

Deliverable 3 - Zenoss Service Analytics Product Configuration

Zenoss will install, setup, and configure Zenoss Analytics Product to work with the Resource Manager installation. This process will be done in concert with Customer staff member(s) to provide product training and knowledge transfer on the install process. The installation process will include servers required for the analytics software and data warehouse. As a standard practice, the installation is allowed to run for a week or two prior to the report review to allow data to gather for the report samples.

- Project Status Reports
- Install and deploy Analytics
- Work with Customer to set up system parameters, data retention policy, user access, etc.
- Configure and verify Model ETL is working successfully for master
- Configure and verify Event ETL is working successfully for master
- Configure and verify Performance ETL is working successfully for master
- Validate all ETL jobs are working correctly
- Allow for one to two weeks of data to be collected
- Walk through of the out of box reports

Note: Custom Analytics report development and/or report development training are available through an additional agreement

Acceptance 3 - Zenoss Service Analytics Product Configuration

Date Achieved	**Initials**	**Component**
		A user is able to validate single sign on between RM and Analytics works via logging into RM using a user account with the ReportingUser role and then navigating to Reports->Advanced successfully logs user into Analytics
		A user is able to validate Model ETL is working successfully for master
		A user is able to validate Event ETL is working successfully for master
		A user is able to validate Performance ETL is working successfully for all local and remote collectors
		A user is able to validate all ETL jobs to be working successfully
		A user is able to execute **New Reports for 4.3->Analytics Status Reports->Analytics Batch Status Report** to verify all batches for MODEL, EVENT and PERFORMANCE on all collectors show COMPLETED status (no FAILED batches)

		A user is able to execute **New Reports for 4.3->Device Performance->Availability, CPU Usage and Memory Usage Exceptions Report** with thresholds of "greater than 0" to verify aliases applied during install and daily aggregation process is running successfully. You should get data returned.

PKG-QSP-ZSD-ZAAS: QuickStart Package: Zenoss Service Dynamics (Zenoss as a Service)

Project Description

The Zenoss Service Dynamics Zenoss as a Service (ZAAS) QuickStart package (PKG-QSP-ZSD) is for assistance and knowledge transfer for the following three products:

- ZAAS Resource Manager
- ZAAS Service Impact
- ZAAS Service Analytics

All Zenoss Product QuickStart packages include project management oversight. A Zenoss project manager will work with Customer from day one to understand the Customers monitoring requirements, manage the Zenoss project from start to finish, provide project status updates, and keep the project on schedule.

Deliverable 1 - ZAAS Resource Manager Product Configuration

Zenoss will configure ZAAS Resource Manager (RM). This process will be done in concert with Customer staff member(s) to provide product training and knowledge transfer on the use and administration of the ZAAS Resource management product. The knowledge transfer process will include administrations for all servers required for the installation.

- Project Status Reports
- Configure a sample set of administrators and groups
- Establish and configure monitoring criteria
- Model and classify a sample set of infrastructure devices, applications, and databases
- Configure event management and alerting for sample model devices
- Configure a syslog device
- Define a sample set of mappings/transforms if required

Acceptance 1 – ZAAS Resource Manager Product Configuration

Date Achieved	Initials	Component
		A user is able to login to the RM URL
		A user is able to add a device to be monitored
		A user is able to model a device
		A user is able to modify a threshold
		A user is able to add a trigger
		A user is able to setup a notification
		A user is able to stop and start the platform

		A user is able to show how to sort event console to manage events
		A user is able to navigate event management
		A user is able to reclassify SNMP traps (if needed)

Deliverable 2 - ZAAS Service Impact Product Configuration

Zenoss will configure the ZAAS Impact Product. This process will be done in concert with Customer staff member(s) to provide product training and knowledge transfer on the use of Impact.

- Project Status Reports
- Work with Customer to determine services to be monitored
- Work with Customer to determine service policies
- Sample Impact Service with up to ten (10) dependencies
    - Relationships between devices must already be modeled and monitored by Zenoss Resource Manager

Acceptance 2 - ZAAS Service Impact Product Configuration

Date Achieved	**Initials**	**Component**
		A user is able to successfully navigate to Services tab and it shows the Impact Services View.
		A user is able to define a sample service within Zenoss with up to 10 devices
		A user is able to define service notifications
		A user is able to view the sample service in the Services View on RM
		A user is able to validate that service notifications are being sent

Deliverable 3 - ZAAS Service Analytics Product Configuration

Zenoss will configure ZAAS Analytics Product to work with the Resource Manager. This process will be done in concert with Customer staff member(s) to provide product training and knowledge transfer on the Analytics product. As a standard practice, the installation is allowed to run for a week or two prior to the report review to allow data to gather for the report samples.

- Project Status Reports
- Work with Customer to set up system parameters, data retention policy, user access, etc.
- Configure and verify Model ETL is working successfully for master
- Configure and verify Event ETL is working successfully for master
- Configure and verify Performance ETL is working successfully for master
- Validate all ETL jobs are working correctly
- Allow for one to two weeks of data to be collected
- Walk through of the out of box reports
  Note: Custom Analytics report development and/or report development training are available through an additional agreement

Acceptance 3 - Zenoss Service Analytics Product Configuration

Date Achieved	**Initials**	**Component**

		A user is able to validate single sign on between RM and Analytics works via logging into RM using a user account with the ReportingUser role and then navigating to Reports->Advanced successfully logs user into Analytics
		A user is able to validate Model ETL is working successfully for master
		A user is able to validate Event ETL is working successfully for master
		A user is able to validate Performance ETL is working successfully for all local and remote collectors
		A user is able to validate all ETL jobs to be working successfully
		A user is able to execute **New Reports for 4.3->Analytics Status Reports->Analytics Batch Status Report** to verify all batches for MODEL, EVENT and PERFORMANCE on all collectors show COMPLETED status (no FAILED batches)
		A user is able to execute **New Reports for 4.3->Device Performance->Availability, CPU Usage and Memory Usage Exceptions Report** with thresholds of "greater than 0" to verify aliases applied during install and daily aggregation process is running successfully. You should get data returned.

PKG-QSP-RM-ZAAS: QuickStart Package: Resource Manager (Zenoss as a Service)

Project Description

All Zenoss Product QuickStart packages include project management oversight. A Zenoss project manager will work with Customer from day one to understand the Customers monitoring requirements, manage the Zenoss project from start to finish, provide project status updates, and keep the project on schedule.

Deliverable 1 - ZAAS Resource Manager Product Configuration

Zenoss will configure ZAAS Resource Manager (RM). This process will be done in concert with Customer staff member(s) to provide product training and knowledge transfer on the use and administration of the Zenoss Resource management product.

- Project Status Reports
- Establish and configure monitoring criteria
- Model and classify a sample set of infrastructure devices, applications, and databases
- Configure event management and alerting for sample model devices
- Configure a syslog device
- Define a sample set of mappings/transforms if required

Acceptance 1 – ZAAS Resource Manager Product Configuration

Date Achieved	Initials	Component
		A user is able to login to the RM URL
		A user is able to add a device to be monitored
		A user is able to model a device
		A user is able to modify a threshold
		A user is able to add a trigger

		A user is able to setup a notification
		A user is able to stop and start the platform
		A user is able to show how to sort event console to manage events
		A user is able to navigate event management
		A user is able to reclassify SNMP traps (if needed)

SUB-QSS-IM: QuickStart Service: Incident Management Integration

Project Description

QuickStart Service for Incident Management integration (SUB-QSS-IM) interfaces Zenoss with third-party Incident Management systems, such as: ServiceNow, Remedy, CA, Jira, and other WebService based systems. The SUB-QSS-IM package is provided on an annual subscription basis and shall expire upon the one (10 year anniversary of this Service QuickStart Service Package. The SUB-QSS-IM package shall include the following.

NOTE: Modifications to the ZenPack code will require a development SOW.

Deliverable - Zenoss Incident Management Integration

Zenoss will install, setup, and configure the Zenoss Incident Management integration Zenpack. This provides an automated integration between an incident management ticketing systems and Zenoss event management. This integration provides the capability for the following functionality:

- Create incidents automatically via Zenoss triggers/notifications
- Close incident when corresponding event is closed via event console
- Close incident when corresponding event is cleared
- Re-open an incident when its corresponding event is unacknowledged or re-opened
- When an event is acknowledged, assign the incident to the user acknowledging the event (matches users between systems based on email addresses)
- Acknowledge events when their corresponding incidents are assigned
- Automatically close events when their corresponding incidents are closed
- Associate existing events with existing incidents
- Create incidents manually via event console
- Manually created incidents follow automation updates and closes

Acceptance - Service Now Incident Management Integration

Date Achieved	**Initials**	
		A user is able to create incidents automatically via Zenoss triggers/notifications
		A user is able to close incident when corresponding event is closed via event console
		A user is able to close incident when corresponding event is cleared
		A user is able to re-open an incident when its corresponding event is unacknowledged or re-opened
		A user is able to assign the incident to the user acknowledging the event when an event is acknowledged

		A user is able acknowledge events when their corresponding incidents are assigned
		A user is able automatically close events when their corresponding incidents are closed
		A user is able associate existing events with existing incidents
		A user is able create incidents manually via event console

SUB-QSS-SNOW-CM: QuickStart Service: ServiceNow-Certified CMDB Integration

Project Description
SUB-QSS-SNOW-CM package includes the following deliverables.

NOTE: Modifications to the ZenPack code will require a development SOW.

Deliverable 1 - Zenoss ServiceNow Certified CMDB Integration
The Zenoss CMDB Integration Zenpack is designed to allow for the automation of new CMDB device object detection and updates. The Zenpack allows for several configurable elements to promote enabling Customers to self-manage the setup and configuration as well as adjust mappings between the systems. Once installed, the configuration for Service Now URL, credentials, and polling interval will need to be set up.

The Zenpack contains a daemon that will poll the CMDB system on a configurable interval for any new devices, or changes to the status of existing devices (for example, going from Production to Decommissioned). New devices will be added to Zenoss in the /Discovered class. The administrator will have to move the devices to the appropriate Device class to enable correct modeling and monitoring.

The GUID or CI ID assigned to the objects in the CMDB will be used to match up the CMDB objects with objects in Zenoss.

- Zenoss will poll CMDB for new devices (Devices Only)
- Zenoss will poll CMDB for existing device status changes
- New CMDB devices will be added to the Zenoss /Discovered class
- Administrators will be responsible for moving /Discovered devices to the appropriate modeling/monitoring device class
- Configurable polling interval
- Configurable CMDB device to CMDB component object mapping
- The GUID or CI ID assigned to the object in the CMDB will be used as a unique identifier to match to objects in Zenoss

Acceptance 1 - ServiceNow Certified CMDB Integration

Date Achieved	**Initials**	
		A user is able to add a device to the CMDB and see it added to /Discovered in Zenoss following a polling interval
		A user is able to move a device from the /Discovered to a device class

		A user is able to change a device status in the CMDB and see it get changed in Zenoss following a polling interval
		A user is able to set the configurable polling interval
		A user is able to set CMDB device to CMDB component object mapping
		A user is able to see the CMDB ID (GUID or CI) on the Zenoss device

SUB-QSS-SNOW-PKG: Service Now Incident Management & CMDB Integration

Project Description
SUB-QSS-SNOW-PKG package includes the following deliverables.

NOTE: Modifications to the ZenPack code will require an SOW.

Deliverable 1 - Zenoss Service Now Incident Management Integration
Zenoss will install, setup, and configure the Zenoss Incident Management integration Zenpack. This provides an automated integration between an incident management ticketing systems and Zenoss event management. This integration provides the capability for the following functionality:

- Create incidents automatically via Zenoss triggers/notifications
- Close incident when corresponding event is closed via event console
- Close incident when corresponding event is cleared
- Re-open an incident when its corresponding event is unacknowledged or re-opened
- When an event is acknowledged, assign the incident to the user acknowledging the event (matches users between systems based on email addresses)
- Acknowledge events when their corresponding incidents are assigned
- Automatically close events when their corresponding incidents are closed
- Associate existing events with existing incidents
- Create incidents manually via event console
- Manually created incidents follow automation updates and closes

Acceptance 1 - Service Now Incident Management Integration

Date Achieved	Initials	
		A user is able to create incidents automatically via Zenoss triggers/notifications
		A user is able to close incident when corresponding event is closed via event console
		A user is able to close incident when corresponding event is cleared
		A user is able to re-open an incident when its corresponding event is unacknowledged or re-opened
		A user is able to assign the incident to the user acknowledging the event when an event is acknowledged
		A user is able acknowledge events when their corresponding incidents are assigned
		A user is able automatically close events when their corresponding incidents are closed

		A user is able associate existing events with existing incidents
		A user is able create incidents manually via event console

Deliverable 2 - Zenoss Service Now Certified CMDB Integration

The Zenoss CMDB Integration Zenpack is designed to allow for the automation of new CMDB device object detection and updates. The Zenpack allows for several configurable elements to promote enabling Customers to self-manage the setup and configuration as well as adjust mappings between the systems. Once installed, the configuration for Service Now URL, credentials, and polling interval will need to be set up.

The Zenpack contains a daemon that will poll the CMDB system on a configurable interval for any new devices, or changes to the status of existing devices (for example, going from Production to Decommissioned). New devices will be added to Zenoss in the /Discovered class. The administrator will have to move the devices to the appropriate Device class to enable correct modeling and monitoring.

The GUID or CI ID assigned to the objects in the CMDB will be used to match up the CMDB objects with objects in Zenoss.

- Zenoss will poll CMDB for new devices (Devices Only)
- Zenoss will poll CMDB for existing device status changes
- New CMDB devices will be added to the Zenoss /Discovered class
- Administrators will be responsible for moving /Discovered devices to the appropriate modeling/monitoring device class
- Configurable polling interval
- Configurable CMDB device to CMDB component object mapping
- The GUID or CI ID assigned to the object in the CMDB will be used as a unique identifier to match to objects in Zenoss

Acceptance 2 - Service Now Certified CMDB Integration

Date Achieved	Initials	
		A user is able to add a device to the CMDB and see it added to /Discovered in Zenoss following a polling interval
		A user is able to move a device from the /Discovered to a device class
		A user is able to change a device status in the CMDB and see it get changed in Zenoss following a polling interval
		A user is able to set the configurable polling interval
		A user is able to set CMDB device to CMDB component object mapping
		A user is able to see the CMDB ID (GUID or CI) on the Zenoss device

PKG-QSS-DS: QuickStart Service: Data Source Scheduler

Project Description

The QuickStart Service package for Data Source Scheduler integration (PKG-QSS-DS) provides the ability to schedule times in which command data sources are available for performance data collection and includes the following deliverables.

Deliverable 1 - Zenoss Data Source Scheduler Configuration
Zenoss will install, setup, and configure the Zenoss Data Source Scheduler Zenpack. This provides the ability to schedule times in which command data sources are available for performance data collection. A new interface within the monitoring template view is provided to allow for scheduled rules to be associated with a particular data source. Given these rules, the corresponding data source will be enabled or disabled at the appropriate time.

This integration provides the capability for the following functionality:

- Provides flexible scheduling for temporarily enabling/suspending performance data collection
- Adjust for 23.59 by 7 scheduling - thou shalt not cross midnight!
- Adjust for holidays - ability to add days in a year and have the whole day suppressed
- Allows for pre-built rules/schedules that you can then apply to a data source
- Provides an additional UI element for managing schedules on the monitoring template screen - Add Rules, Delete Rules, Add Schedule, and Delete Schedule

The data source schedule provides a method to turn off monitoring and performance data collection during scheduled hours that is different from Maintenance Mode:

Maintenance Mode

- Continues to monitor devices but suppress alerting
- Performance data was still being collected and stored
- Reports will reflect the stored maintenance period data

Data Source Scheduler

- Does not monitor or contact the device during the off schedule times
- Suppresses any local automations that may be run via monitoring scripts
- Will not collect potentially misleading performance data during scheduled maintenance of the box

Acceptance 1 – Data Source Scheduler Configuration

Date Achieved	Initials	
		A user is able to set the schedule for a data source managed through the "Schedules" area of the Monitoring Template
		A user is able to add/delete a Rule
		A user is able to add/delete a data source schedule

PKG-QSS-PALOALTO: QuickStart Service: Palo Alto ZenPack

Project Description
Client hereby purchases the QuickStart Service for Palo Alto ZenPack (PKG-QSS-PaloAlto). The Palo Alto ZenPack monitors Palo Alto Networks PA-series devices using SNMP. It is possible to monitor PA-7050, PA-5000 series, PA-3000 series, PA-500 series, PA-200 series, and Panorama devices.

Deliverable 1 - Zenoss Palo Alto ZenPack

Zenoss will install, setup, and configure the Zenoss Palo Alto Zenpack. This provides monitoring for specified Palo Alto devices and components that are available. This integration provides the capability for the following functionality:

The zenmodeler daemon can discover the following components if present:

- Chassis
- Processors
- CPU Core Sensors
- Memory
- Swap
- Packet Buffers
- Fan Trays
- Fan Sensors
- Power Supplies
- Disks
- Partitions
- Vsys
- Modules
- Temp Sensors
- Network Interfaces
- GPG Tunnels Utilization
- Sessions Utilization

NOTE: Any requested modifications to the ZenPack code will require a development SOW.

Acceptance 1 – Palo Alto ZenPack

Date Achieved	Initials	
		A user is able to add a device from the Infrastructure view in Zenoss UI
		A user is able to see the device is listed in the UI after modeling
		A user is able click on the device and see components, templates, graphs
		A user is able to see modeler plugins
		A user is able view the individual components that are present and validate data is being monitored
		A user is able to reset the default alarm thresholds on the components

PKG-QSS-SAPHANA: QuickStart Service: SAP HANA ZenPack

Project Description

This ZenPack provides modeling and monitoring of SAP HANA instances.

Features:

1. A new device class ``/Devices/HANA`` is added to the system.
2. The following components are modeled and monitored:
    a. HANA Endpoint (the HANA system as a whole)
    b. HANA Hosts
    c. HANA Disks
    d. HANA Services
3. Endpoint Data Sources are included to provide the following information:
    a. Count of the number of current connections to HANA
    b. Create Zenoss events from HANA Alerts
    c. Ability to run a generic query with results stored and available for threshold
    d. Current memory usage and limit for licensing purposes
    e. Ability to capture/measure the response time of generic SQL query
    f. Ability to monitor and alert on Nameserver or Indexserver role changes
    g. Ability to count the number of currently running queries
4. Host Data Sources
    a. All metrics from the M_HOST_RESOURCE_UTILIZATION table
5. Disk Data Sources
    a. Ability to store and threshold on disk total and used sizes
6. Service Data Sources
    a. Measure Heap utilization of a service
    b. All metrics from the M_SERVICE_MEMORY table
    c. All metrics from the M_SERVICE_STATISTICS table

Prerequisites:

Prerequisite	Restriction	Min Version
Product	Zenoss Resource Manager	4.2.4
	Zenoss Analytics	4.3.0
	Zenoss Service Impact	4.2.6
ZenPacks	ZenPacks.zenoss.PythonCollector	1.4.0
	ZenPacks.zenoss.CalculatedPerformance	2.0.1
Other dependencies	unixODBC.x86_64	2.0.1
	Installed SAP ODBC driver ***	

*** Note: This ZenPack uses ODBC to connect to the HANA instance. Therefore each collector collecting for HANA systems must have the unixODBC package installed as well as the SAP HANA ODBC driver (libodbcHDB.so). Additionally, /etc/odbc.ini must be configured with the location of the library and a DSN, e.g.

Deliverable 1 - Zenoss SAP HANA ZenPack

Zenoss will install, setup, and configure the Zenoss SAP HANA Zenpack. This effort will be performed with Client staff to provide knowledge transfer and acceptance review.

NOTE: Modification requests to the ZenPack code will require a development SOW.

Acceptance 1 – SAP HANA ZenPack

Date Achieved	Initials	
		The ZenPack is installed
		A user is able to add a HANA endpoint
		A user is able to see the new device in Infrastructure /devices/HANA
		A user is able to see that components are created after Modeling has run
		A user is able to see the monitored data in graphs
		A user is able to create and modify a threshold against monitored data
		A user is able add the HANA endpoint to an Impact service*
		A user is able to see HANA data in Analytics**

* Requires Client has Zenoss Impact installed and running

** Requires Client has Zenoss Analytics installed and running

PKG-AVS-CH: Zenoss Advisory Service Hours: Consulting Hours (20)

Project Description
The Zenoss Package for Advisory Services (PKG_AVS-CH) consists of twenty (20) consulting hours. A Zenoss Professional Services project manager, architect, developer, or consultant will be available to provide advice and help with Customer's Zenoss deployment. Consulting hours can be utilized for a variety of items. Consulting hours do not include travel and are limited to standard U.S. business hours.

Deliverable 1 – Consulting Hours
Zenoss Services will coordinate with Customer to utilize the consulting hours to address the Customer's needs.

Acceptance 1 – Consulting Hours
Zenoss assigned Project Manager will track consulting hours used and provide a report to Customer as needed. Typically these would be monthly or on request.

PKG-AVS-IW: Zenoss Advisory Services – Interactive Web Sessions (6-Pack)

Project Description
The Zenoss Package for Advisory Services (PKG_AVS-IW) consists of six (6) interactive WebEx sessions of up to one (1) hour each. A Zenoss Professional Services architect, developer, or consultant will be available to provide advice and help with Customer's Zenoss deployment.

Requesting a WebEx Session:

There will be several options for requesting a WebEx session. Please, provide questions or topics of which you wish to discuss.

- Request through your sales representative

- Request through your support ZenDesk account via ticket request
- Request through assigned Professional Service project manager

Possible Session Topics:

- Infrastructure and architectural
- ZenPack construction and development
- Zenoss administration, configuration, tuning, and usage
- Zenoss Service Impact and service models
- Zenoss Service Analytics and reporting
- Customer specific "how to"

WebEx Session Guidelines:

- Each sessions is one-hour in length
- A WebEx session may be recorded at Customer request
- Sessions must be requested in advance and scheduled
- Sessions can be combined if scheduling permits (please request ahead of time)
- No work will be performed outside of the sessions

Deliverable - Six (6) interactive WebEx sessions of up to one (1) hour each

Acceptance - The six sessions have been used

CNS-PS-HRS: Zenoss Professional Services Consulting Hours (1)

Project Description

With the Zenoss Professional Services Consulting Hours Services Package (VNS-PS-HRS), you may purchase a specified number of Zenoss Professional Services Consulting Hours (CNS-PS-HRS). A Zenoss Professional Services project manager, architect, developer, or consultant will be available to provide advice and help with Customer's Zenoss deployment. Consulting hours can be utilized for a variety of items. Consulting hours do not include travel and are limited to standard U.S. business hours. Zenoss recommends working with a Zenoss project manager to develop a detailed SOW.

Deliverable 1 – Consulting Hours

Zenoss Services will coordinate with Customer to utilize the consulting hours to address the Customer's needs.

Acceptance 1 – Consulting Hours

Zenoss assigned Project Manager will track consulting hours used and provide a report to Customer as needed. Typically these would be monthly or on request.

Training Services

Zenoss Training Services provide a comprehensive and holistic set of offerings to rapidly provide your team with the skills necessary to accelerate Zenoss-specific product knowledge. Our professional trainers are experienced industry practitioners who not only have a deep understanding of Zenoss products, but also of the IT challenges that Zenoss products solve. All courses feature hands-on exercises and real-world examples. Zenoss Training Services are non-refundable.

Zenoss Resource Manager 5.x Monitoring I & II Training

Learn how to use Zenoss Resource Manager 5.x to monitor the performance of your data center resources. Monitoring I covers the most commonly encountered data center devices, while Monitoring II expands upon Monitoring I to include additional items such as device component, application, and web site monitoring.

Both courses are delivered online by a live instructor. Both include live demonstrations of product functionality and hands-on lab exercises. Participants will have the opportunity to ask questions of the instructor and to interact with other participants. Each participant will be provided with their own Zenoss training instance (hosted by Zenoss) for the duration of the class.

Zenoss 5.x Platform Administration I & II Training

Learn how to configure and maintain Zenoss Resource Manager. Platform Administration I teaches the skills necessary to perform basic administrative tasks in Control Center and Zenoss Resource Manager. Platform Administration II expands on Platform Administration I to include advanced topics, command line administration of Resource Manager services, and troubleshooting tools and techniques.

Both courses are delivered online by a live instructor. Both include live demonstrations of product functionality and hands-on lab exercises. Participants will have the opportunity to ask questions of the instructor and to interact with other participants. Each participant will be provided with their own Zenoss training instance (hosted by Zenoss) for the duration of the class.

Zenoss Resource Manager 4.x Administrator Training

Learn how to use Zenoss Resource Manager 4.x to monitor the performance of your data center resources, to prepare commonly encountered devices to be monitored, and learn the basics of administering the Resource Manager software itself.

Instruction will be delivered via bi-directional WebEx with a live instructor. Students will have the opportunity to ask questions of the instructor and interact with other students. Each student will be supplied with a Zenoss training instance hosted by Zenoss as well as lab devices to monitor. The course is delivered online only, in (2) four-hour sessions held over two consecutive days.

Zenoss Resource Manager 4.x Advanced Training

Learn advanced techniques for customizing and extending the Zenoss Resource Manager to provide monitoring of your data center resources tailored to your needs.

Training is held quarterly in our facilities in Austin, TX. Students are encouraged to attend in person but may also opt to attend remotely via WebEx provided they have bi-directional video capability. Each student is supplied with a Zenoss training instance hosted by Zenoss as well as lab devices to monitor for this hands on, exercise-packed session. The course is delivered over two days and lunch is provided.

Zenoss Service Impact and Event Management Training

Learn how to use the Zenoss Service Impact software to define service models that provide dynamic service impact analysis with automated root cause analysis.

The course will be delivered live by an expert instructor over a WebEx session. Participants have the opportunity to ask questions of the instructor and interact with other participants. Each participant will

have access to an individual Zenoss training instance hosted by Zenoss as well as shared lab devices to monitor. The course is delivered in (2) four-hour sessions held over two consecutive days and is typically offered at least once per quarter.

Zenoss Analytics Training

Learn how to use the Zenoss Analytics software to extract, transform, and structure raw data from Zenoss Resource Manager into reports and visualizations that provide your organization with invaluable insight into your IT infrastructure.

The course is delivered live by an expert instructor and shared in a WebEx session, offering students the option of attending in-person or remotely. Students have the opportunity to ask questions of the instructor and interact with other participants. The course includes instructor demos and 14 hands-on exercises on a live Analytics installation hosted by Zenoss. The course is delivered in (2) six-hour sessions held over two consecutive days and is typically offered at least once per quarter.

Zenoss ZenPack Developer Training

The ZenPack Developer Training course will teach you how to develop and deploy complex customizations to Zenoss through ZenPacks (Zenoss' extension framework). Through a series of progressive, hands-on exercises, each student will build a new ZenPack that models and monitors a custom device type and includes updates to the Zenoss user interface.

Instruction is delivered in a classroom setting by a Zenoss developer. Each student is provided with a dedicated Zenoss training instance and is tasked with creating the new ZenPack under instructor guidance. The class is delivered over two days and lunch is provided.

Zenoss Service Dynamics 5.x Training Passport

The Zenoss Training Passport package is a discounted training bundle for 5.x Service Dynamics that is valid for 12 months. Passport usage is reserved for the individual employee who is the named Passport holder and includes a seat in each of the following regularly scheduled courses:

- Monitoring I
- Monitoring II
- Platform Administration I
- Platform Administration II
- Zenoss Service Impact
- Zenoss Analytics
- ZenPack Development

Benefits

- Tuition Fee Savings: save on the standard per-course price.
- New Skills: Grow and deepen your knowledge and skills in Zenoss and enhance its value within your organization.
- Course Materials: Receive copies of instructor presentations and the hands-on exercises for your course, both printed and electronic
- Save Time: Save time and paperwork by handling an entire year of training — in a single order

Zenoss User Conference Pass

The Zenoss User Conference is the premier event of the year for Zenoss practitioners from around the world to converge together. A multitude of information-packed sessions and events are designed for all levels of IT professionals and leaders to enhance their contributions in running highly efficient IT operations, building next generation Intelligent Data Centers, and architecting hyper-converged Infrastructures. Attendees get access to more Zenoss tools, content, connections, partners, and technical education than available anywhere else.

Services Terms and Conditions

Customer agrees to the following Terms and Conditions in conjunction with the applicable Zenoss Services Packages set forth in an Order Form or SOW. Services Terms and Conditions amend and are subject to the Zenoss Master License and Services Agreement ("MLSA"), or a mutually agreed master agreement (the "Master Agreement"). Capitalized terms not defined here shall have the meaning ascribed to them in the Master Agreement.

The term of Services shall expire on the earlier of (i) the termination of the Master Agreement for any reason, or (ii) one (1) year following the Services Order effective date listed in the Order Form or SOW. Zenoss shall have no obligation to perform services after expiration of the term. Payment obligations will survive termination. All Zenoss Services Packages are non-refundable.

Zenoss Services will be performed at the Zenoss' facilities, unless other specifically indicated in the Order Form or SOW. If requested, Customer will provide Zenoss access to the hardware hosting the Zenoss server and provide on-site assistance during the period of Services.

Travel and other expenses are not included in the Services fees unless specifically listed within the Order Form or SOW. For Travel, Customer shall pay all reasonable travel and other expenses incurred by Zenoss in performing Services, based on actual receipts. Zenoss will not incur any travel or other expenses above any specified limit, without prior written authorization from the Customer.

Customer's environment will meet or exceed the hardware and operation environment software minimum requirement stated in the Zenoss Service Dynamics Installation Guide.

Customer will:

- Provide a designated Customer team lead to serve as the primary technical contact to assist in coordinating schedules and service requirements.
- Provide Zenoss Consultants with access to Customer's servers, systems and data as required while performing the services.
- Provide Customer project team members with suitable business expertise, technical expertise and decision-making authority to ensure efficient project progress.

All Services shall be deemed accepted by Customer if not rejected in writing within fifteen (15) days of performance of the Services. All Services performed, documents, and deliverables shall be owned exclusively by Zenoss. No copyrightable aspects of the Services, documents, and deliverables shall be considered "works made for hire" by Customer. Zenoss and the successors and permitted assigns of Zenoss will have the right to obtain and hold in their own names any intellectual property rights in and to the Services, documents and deliverables. Customer will reasonably cooperate with Zenoss in securing, enforcing and otherwise protecting Zenoss' interest in such Services, documents, and deliverables including executing documents reasonably requested by Zenoss. Any technology developed pursuant to Services performed which is jointly created by the

parties or created by Customer as a direct result of Customer activities relating to these Services, shall be owned by Zenoss. Customer agrees to sign any such documentation that Zenoss may reasonably request in connection with the foregoing.

Zenoss' Expectations of Its Customers.

You shall be solely responsible for obtaining, installing, maintaining and paying for: (a) any designated third party software (including updated versions of designated third party software); and (b) server and system capabilities necessary to meet the minimum hardware and software requirements for the Software as set forth in the product documentation for the Software. You shall install all Software Upgrades, modifications and corrections made available by Zenoss to you.

You agree that all requests for Support must be made by and coordinated through English speaking points of contact (a "Support Point of Contact"). You may have up to the maximum number of Support Points of Contact set forth in the Quote. Your Support Point of Contact must be properly trained in applications technical support and qualified to submit requests for Support to Zenoss. When contacting Zenoss, your Support Point of Contact must provide his or her name and phone number and your name, and provide a detailed description of the Error.

You represent and warrant that you possess server and system capabilities, which meet or exceed the minimum hardware and software requirements for the Software as set forth in the product documentation accompanying the Software.

You will provide Zenoss with all access, information, documentation and assistance that Zenoss may require to provide Support.

You agree that Zenoss shall have the right to identify you as a Zenoss customer, and you grant Zenoss a license to use your name, logo(s), and trademark(s) for promotional and publicity purposes including, without limitation, press announcements, advertisements in trade and other publications, marketing collateral and media kits, listings on web pages and links to your website subject to any of your trademark and or style guidelines then in effect.

Any suggested changes, clarifications, additions, modifications or improvements (collectively "Improvements") to the Software which you suggest to Zenoss shall constitute an assignment to Zenoss (without charge) of all right, title and interest in such Improvements. Zenoss shall have the right, but not the obligation, to incorporate Improvements into the Software, as it deems advisable. Zenoss shall be the exclusive owner of the Improvements, including all intellectual property rights related thereto.

MySQL. This package contains MySQL® Software ("MySQL Software") and your use of the MySQL Software is subject to the same restrictions on use as is the Zenoss Software. You may not use the MySQL Software as a general SQL server, as a standalone application or with applications other than the Zenoss Software, you may not change any proprietary rights notices which appear in the MySQL Software, and you may not modify the MySQL Software. All third party licensors and suppliers of Oracle and MySQL retain all right, title and interest in third party software and all copies thereof, including all copyright and other intellectual property rights. You may transfer the license to the MySQL Software only if (a) you comply with any transfer terms imposed by Zenoss; (b) deliver all copies of the MySQL Software to your transferee along with any agreement; (c) your transferee accepts the terms and conditions of any agreement as a condition to any transfer; and, (d) your license to use the Zenoss Software and the MySQL Software terminates upon transfer. You must immediately destroy all copies of the MySQL Software upon termination of any agreement. In the event Oracle and MySQL are third party beneficiaries of any agreement.

The Software may include reporting features ("Usage Data") that are designed to assist Zenoss in providing Support and verifying your compliance with the terms of any agreement. You acknowledge that the Software, as delivered, may be configured to run these features automatically, but that you may disable any automatic reporting feature at your discretion, subject to the requirements for Verification.

Zenoss Glossary

The following is a brief glossary of key Zenoss terms.

Zenoss Core

Zenoss Core is the free, open-source version of Zenoss. To understand how Zenoss Core differs from Zenoss Service Dynamics visit Core vs. Commercial.

Zenoss Community

The Zenoss Community is where users go to download Zenoss Core and available ZenPacks as well as connect with other users, participate in forums, share ideas and suggestions, and report bugs.

To visit the Zenoss Community site, go to Zenoss Community.

Zenoss Commercial

Zenoss Commercial is synonymous with Zenoss Service Dynamics – the paid version of Zenoss. To understand how Zenoss Service Dynamics differs from Zenoss Core visit Core vs. Commercial.

Managed Resource

Zenoss software products provide unsurpassed value and flexibility by licensing based on the total number of Managed Resources monitored, and includes access to 100+ Zenoss developed and supported enterprise ZenPacks at no additional charge.

A "Managed Resource" (MR) is any physical device, virtual device, virtual context that emulates a physical device, application component, unique URL for a web application, or any element that is present in the database created by Zenoss Service Dynamics and is designated by the database as being managed or monitored.

For non-virtual environments, a Managed Resource is any network-connected device such as a server, router switch, IP phone, UPS, etc. For virtualized environments, in addition to all connected devices, each virtual machine (VM) with a unique IP address is counted as a Managed Resource. For example, a VMware ESX server with (10) guest operating systems would equal (11) Managed Resources.

Zenoss licensing provides unsurpassed value and flexibility. Some vendors license their software for a device based on the number of components / interfaces (e.g. CPUs, ports) and data points collected which adds complexity – tightly coupling the license to a device type – and can drastically distort value.

Take, for example, a switch from which 1,000 data points can be collected. With Zenoss, the switch is (1) Managed Resource vs. other vendors who license on a per data point basis where the resulting price can be higher by factor of 50. At a minimum, Zenoss Resource Manager along with a Zenoss support plan (available offerings are described later in this document) must be purchased.

ZenPacks

A ZenPack is a plugin or extension to Zenoss Service Dynamics or Zenoss Core. Typically, ZenPacks are used to collect data from a target resource in the IT environment, but may also be used to add capabilities to the software itself. There are (4) classifications of ZenPacks:

Commercial	Developed and supported by Zenoss; these ZenPacks are only made available to Zenoss Service Dynamics customers
Open Source	Developed by Zenoss and made freely available to all Zenoss users; Zenoss support is provided for Zenoss Service Dynamics customers whereas community support is available for Zenoss Core users
Community	Developed and supported by the Zenoss Community
Custom	Zenoss users may develop their own ZenPacks or contract Zenoss Professional Services for ZenPack development

To see which ZenPacks are available, visit the ZenPack Catalog