

# SELECT CUSTOMERS SLAC NATIONAL ACCELERATOR LABORATORY TO BE THE STATEMS NUTRISYSTEMS

"We are seeing reduced system downtime, increased application performance, and improved control over our IT environment. We have been able to not only meet, but actually exceed our SLA (Service Level Agreement) targets thanks largely to GroundWork."

Wilvin Szeto
VP Technology Operations
SendMe

### **GROUNDWORK MONITOR ENTERPRISE**

GroundWork Monitor Enterprise is a scalable server, network, and application monitoring platform designed to meet the needs of complex and distributed organizations. GroundWork Monitor Enterprise provides the reporting, visualization, and analysis capabilities needed to turn high volumes of monitoring data into concise and actionable views that support day-to-day business decisions and operations.

### **BENEFITS**

- Gain rapid, precise insight into the status and performance of every element of your infrastructure, including systems, networks, devices, and applications
- Define policies to detect and address issues before they impact customers or end-users
- Minimize the cost and complexity of managing your infrastructure via central control and configuration
- Avoid vendor lock-in by relying on proven and trusted open source projects integrated into one enterprise monitoring solution
- Monitor tens of thousands centrally-configured devices from one aggregated and consolidated view while conforming to the geographical, organizational, and technological constraints of your organization
- Deliver accurate and timely information to management, customers, and internal teams via customizable, role-based dashboards
- Receive actionable, concise notifications and alarms based on best practice monitoring profiles included with your GroundWork Monitor subscription
- Eliminate alarm storms with GroundWork Monitor's built-in state engine that applies dependency logic before sending notifications
- View disparate data sets from varied monitoring and system management solutions in one integrated, single view





### WHY CHOOSE GROUNDWORK?

GroundWork enables you to use trusted open source projects in large-scale production deployments. The GroundWork Monitor solution combines projects into a consistent, intuitive platform with the scalability and characteristics needed by the most demanding applications. GroundWork stands behind this solution with a range of support offerings including optional 24x7 coverage.





### SERVICE LEVEL MANAGEMENT

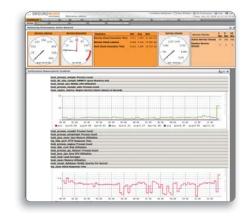
GroundWork Monitor's dashboards and reports enable you to quickly confirm that IT operations are achieving required levels of quality and service in the following service level management categories:

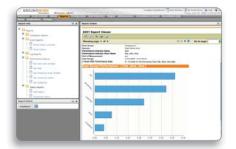
- Availability Availability information is instantly visible in the status viewer. The automatic service level calculation ensures agreed service levels are maintained. Elements of the monitored environment can be combined on a single dashboard to create a business-process specific view that can be shared with users.
- Capacity Trending reports provide the historical data needed to predict future demand and ensure services are provided in the optimal and most cost effective manner.
- Problem and Incident Management The event console and status viewer are designed to provide information in an intuitive and rich interface that minimizes the impact and time to resolution of problems. Event History and Log Exception reports help identify problematic areas and direct preventative maintenance efforts.

### **CUSTOMIZABLE DASHBOARDS**

GroundWork Monitor's portal design makes it easy to create new pages and views, share them and lock down access to authorized users. Customization and control means information is no longer just for system administrators but can be targeted to other types of users, such as DBAs, network specialists, or managers.

With the Dashboard Builder you can create dashboards to display only the information relevant to a specific line of business or business process. For example, tailor a dashboard to only display the health of systems the accounting department depends on.







### **ACTIONABLE USER INTERFACE**

GroundWork Monitor displays monitoring information in an easy-to-digest, actionable format that assures problems are found and resolved quickly.

Data generated by the underlying open source projects is normalized and combined in the user interface where it is presented in a consistent, logical manner.

By combining availability information, performance measurements, log messages and events into a single view GroundWork Monitor enables support teams to respond quickly to critical issues. The GroundWork Monitor portal interface integrates with existing ticketing, knowledge management and configuration tools to ensure smooth, efficient hand-off between operations, network, application and engineering teams.

### **Distributed Options**

GroundWork Monitor Enterprise distributed options add versatility and comprehensive coverage typically associated with monolithic and expensive proprietary monitoring products.

## **GroundWork Monitor Standby Server**

Provides active-passive failover capabilities. The GroundWork Monitor Standby Server gracefully returns control to the Primary server when it returns to normal operations.

### **Distributed Monitoring Agents**

Are ideal for independent remote locations with intermittent or low bandwidth connections.

# **GroundWork Monitor Child Servers**

Provide detailed information on the status of remote locations. Can be deployed to Windows or Linux platforms.

# Network Management Options

GroundWork Monitor Enterprise can be configured with optional modules that let you monitor network traffic from topological views of your network. For details, refer to the NMS datasheet available at: www.gwos.com/resources/datasheets/GWM-NMS.pdf

### **Network Discovery Module**

Automatically discovers network topology and configurations for network devices and servers.

### **Traffic Graphing Module**

Graphs network traffic with multiple display options using either included or custom templates.

### **Protocol Analysis Module**

Provides network protocol traffic usage tracking and analysis.

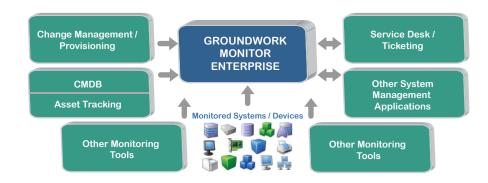
### **Network Map Module**

Displays utilization and status of network, including LAN and WAN connections.

### **DATACENTER INTEGRATION**

GroundWork Monitor fulfills the monitoring and event management needs of your enterprise environment and can preserve your existing investments by interfacing with what you already have to create an integrated solution.

GroundWork Monitor's extensible, open source architecture allows for integration with other critical components of the enterprise datacenter ecosystem, such as CMDBs, asset tracking systems, help desk applications, optional third-party consoles, and third-party monitors. GroundWork Monitor collects and manages data via secure web services for use in customer portals, enterprise reporting tools, and other applications. The following are examples of GroundWork's successfully deployed integrations.



### Help Desk/ Ticketing System Integration

GroundWork offers bi-directional integration with external help desk or trouble ticketing systems such as Remedy or Magic, enabling trouble ticket creation direct from the GroundWork Monitor Console in response to an event.

### **Optional Third-Party Console Integration**

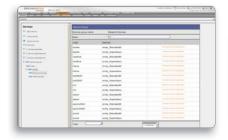
While GroundWork Monitor includes role-based dashboards and consoles, you may also wish to use an optional third-party console to display information if your existing processes are heavily linked in. For these scenarios, GroundWork Monitor can provide information to external consoles via automatic data feeds.

### **Asset Management/ CMDB Integration**

Through a standard API, easily import adds, changes, and deletes from external CMDB systems to your monitored elements.

### **Third-Party Monitor Integration**

In addition to shipping with a wide assortment of open source monitoring tools, GroundWork Monitor also collects data from proprietary or legacy monitors that you may wish to continue using, allowing for a single, consolidated view across all your systems, networks, and devices with minimal disruption to existing systems.





### System Requirements

### Minimum Hardware

Up to 250 active service checks / min. (standard profiles)

- x86 32-bit and 64-bit, single core 2.8GHz
- 4GB RAM
- 160GB Disk

### **Recommended Hardware**

Up to 750 active service checks / min. (standard profiles)

- x86 64-bit, dual core 3GHz or higher
- 8ĞB RAM
- · 200GB System disk
- 500GB Application disk

### **Supported Distributions**

- Red Hat Enterprise Linux 5
- Red Hat Enterprise Linux 4
- CentOS 5, 32 or 64-bits
- · CentOS 4, 32-bit only
- Novell SuSE Linux Enterprise Server 10

### **Browsers**

- Firefox 3.x
- Internet Explorer 7 or 8

### **Key Components**

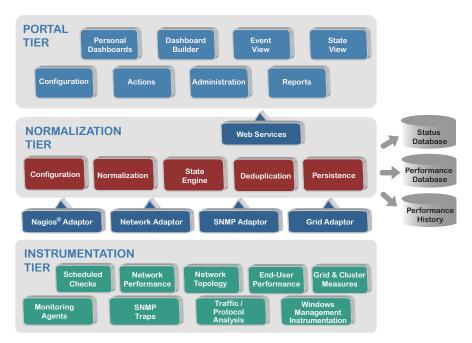
Key components of GroundWork Monitor Enterprise include:

- ICEfaces Rich browserbased application controls
- JBoss Portal Contains key application features and provides, authentication, authorization and access control. Enables tight integration with other system management applications
- Nagios® Provides availability and performance measurement information
- net-snmp and snmptt -Provide SNMP polling and trap processing
- RRDtool Provides performance graphing, visualization and trend analysis

### **SOLUTION ARCHITECTURE**

With GroundWork Monitor, organizations reap the benefits of an open source monitoring strategy: excellent coverage, flexibility, and reliability without the problems that accompany integrating, configuring, and maintaining separate projects on an ongoing basis.

Each component of the GroundWork stack is stable, established, well-respected, and supported by an active community that offers improvements, extensions, and features. GroundWork Monitor integrates each project into one easy-to-deploy package, resulting in an end-to-end monitoring solution that offers reporting, graphing, visualization, and configuration features.



GroundWork Monitor Enterprise Solution Architecture

GroundWork Monitor Enterprise is a three-tier software stack based around loosely coupled software components that make it easy to deploy the elements required by any environment. The key tiers are:

- Instrumentation Tier Scalable and flexible data collection services provide wide coverage for hardware, operating systems, networks, applications, and services.
- Normalization Tier To combine measurements from the instrumentation tier, normalization and deduplication rules are applied to incoming data streams. Incoming data is mapped to state changes within the environment, assuring that users receive actionable alerts with contextual information.
- Portal Tier Combines all operations, configuration, and reporting functions into an intuitive and flexible user interface. The portal ensures all users have the information they need to support decision-making, whether they are operators, administrators, managers, or end-users.

### **ABOUT GWOS**

San Francisco-based GroundWork Open Source, Inc. (GWOS) is the market leader in commercial open source network and systems management software, delivering enterpriseclass network, system and application management solutions at a fraction of the cost of proprietary solutions.

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