## Leveraging Open Source to Better Manage the IT Infrastructure

#### INTRODUCTION

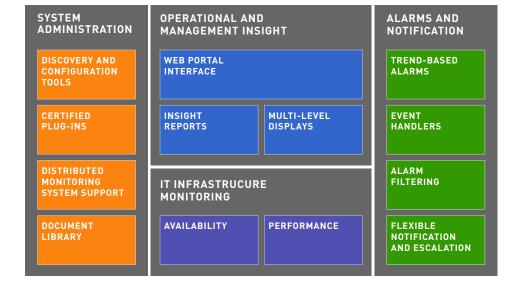
GroundWork Monitor is a full-featured, highly practical monitoring solution that embodies all the benefits of enhanced open source software — including low cost, flexibility, enterprise-level support and fast deployment.

GroundWork Monitor tracks and displays availability and performance data via an easy-to-use, browser-based interface. If any indicators dip below acceptable levels, GroundWork Monitor alerts your key contacts via email, page or phone call. The system provides real time status maps, detailed component-level views and robust reporting of availability and performance trends, alert history and event logs.

GroundWork Monitor is completely scalable, so it continues to provide comprehensive coverage as your needs and infrastructure grow. The system integrates seamlessly with third party monitoring systems and service desk applications, providing a single view into your entire IT infrastructure.

"GroundWork delivered on its promise of comprehensive functionality at a low cost. And unlike commercial tools, the solution was designed, delivered, implemented, calibrated and documented within days."

Jorge Borbolla, CIO, AutoTradeCenter



## **KEY BENEFITS**

- Improved IT infrastructure availability and performance
- Improved IT service levels and staff productivity
- Faster, less complex and more cost-effective deployment
- Reduced complexity for easier maintenance and support
- More accurate network operations forecasts and budgets
- 80% lower cost of ownership vs. commercial tools

"Large companies are running open source software. Why? Because they believe open source does the job at a lower cost than its commercial alternatives."

## Forrester Research, September 2003

### **OPEN SOURCE APPROACH**

GroundWork starts with the belief that open source software can outperform commercial software for a fraction of the cost. Integrating and enhancing a robust set of best-of-breed open source tools, including the Nagios monitoring system, GroundWork Monitor is a true composite application. This foundation of open source software results in a solution that is low cost, highly flexible and configurable to accommodate customers' varied and rapidly changing IT environments.

GroundWork Monitor is designed according to industry best practices and GroundWork's hands-on experience designing IT management systems. Whether you install GroundWork Monitor yourself or take advantage of GroundWork Deployment Services, the solution includes a complete library of technical documentation and configuration settings that reflect standard, practical and proven monitoring system design. By combining open source with best-practice-based design, GroundWork provides uniquely efficient solutions that are less costly to deploy, maintain and support throughout their entire lifecycles.

# DEPLOYMENT AND SUPPORT SERVICES

To ensure GroundWork Monitor is installed and operating at maximum efficiency, GroundWork Deployment Services provide two options for installation and configuration. Our ITIL-certified consultants can design and install complete solutions customized for your company, or give you the support and advice to deploy the tools yourself.

GroundWork Install is a complete, turnkey deployment service. Our consultants work with you to design and install a complete working system, typically in four to six weeks. Should you prefer to deploy GroundWork Monitor yourself, GroundWork Assist provides remote advice and consultation to help you configure and tune your system. In either case, we share our IT management and open source expertise so your IT staff is fully trained to manage and extend your GroundWork Monitor System.

Whichever deployment option you choose, GroundWork Support ensures that your system is up-to-date and performing efficiently. We provide the latest certified versions of GroundWork Monitor (including all open source and GroundWork software); access to GroundWork technical engineers; bug fixes, and access to GroundWork's library of configuration settings and product documentation.

#### **KEY FEATURES**

#### Complete infrastructure coverage

- Applications
- Databases
- Servers
- Network devices
- Network traffic

## Flexible monitoring techniques

- Active and passive agents
- Application-specific plug-ins
- Port status checks
- Port-based content requests
- SNMP traps and polled MIBs
- Synthetic transactions
- Log file parsing
- Event correlation

#### Web-based interface

- Configurable
- Role-based views
- Single sign-on to access multiple open source tools

## Proactive alerting and notification

- Notification via email, pager, telephone, SMS, IM
- Notification by host, service, or group
- Configurable escalation rules

## Easy configuration and management

- Pre-processed events and dependencies
- Automated problem resolution during service or host events
- Configurable host and service checks
- Definable host hierarchy
- Support for multiple monitoring servers and third-party tools

### Sophisticated alarm processing

- User configurable warning and critical thresholds
- Trend and statistics-based alarms
- Adaptive thresholds
- Alarm filters for scheduled maintenance, flapping, or other conditions
- Configurable rechecks at variable intervals
- Low-level event correlation to reduce false and spurious alarms
- Auto recovery scipts and auto data collection event handlers

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#### Flexible notification schemes

- Notification via email, pager, telephone, SMS, IM
- Notification by host, service, or host group
- Configurable escalation and acknowledgement rules

#### Configuration and system administration

- Discovery of network topology and server configuration
- Configurable templates for all monitoring functions
- Wizards and GUI for setup and maintenance
- Certified, documented plug-ins (agents, scripts)
- Self-monitoring of system health, connectivity tracking, communication path monitoring and connectivity tracking
- Distributed monitoring system support

## Third-party system integration

- Monitoring systems
- Service desk systems
- Configuration management systems

## Online document library

- GroundWork Design and Coverage Specification
- Installation Guide
- GroundWork System Manager's Guide
- GroundWork System Operator's Guide
- Open source software documentation



## MONITORING COVERAGE

#### Networks

- Switches
- Routers
- Firewalls
- Load balancers
- Network traffic

#### Servers

- Windows servers
- Unix/Linux servers
- Connectivity servers
- Web servers
- Mail servers
- Application servers

## **Applications**

- Exchange
- NT 2000 services
- Dell OpenManage
- Compaq Insight Manager
- BEA WebLogic
- Enterprise applications

## **Databases**

- Standard RDBMS
- Unix/Linux SQL
- In-depth SQL Server monitoring

#### Other

- Web Services
- Service Levels
- Printers
- UPS
- Synthetic transactions

# INTEGRATED OPEN SOURCE COMPONENTS

- Nagios (monitoring)
- Jetspeed (Web portal framework)
- Ntop (network traffic analysis)
- Syslog NG (log file analysis, consolidation and filtering)
- RRDtool (analytical graphing)
- Cacti (network and systems performance graphing)
- MySQL (relational database)
- Nmap (network discovery)
- Red Hat or Novell SUSE Linux (operating system)

## ABOUT GROUNDWORK

GroundWork Open Source Solutions, Inc. provides open source-based IT infrastructure management solutions such as network and systems monitoring, service desk management and IT dashboards. GroundWork's solutions enable IT management to leverage the flexibility and low cost of open source tools to achieve enterprise-level availability, performance and operational efficiency for a fraction of the cost of commercial software

#### Contact us

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