

Solutions Report

A BLI Fleet Management Software Assessment | NOVEMBER 2011

Netaphor SiteAudit 5.0

****	Feature Set
★★★☆	Value
****	Ease of Administration
****	Ease of Use
****	Data Analysis and Reporting
****	Compatibility
****	Software Integration
****	Security
****	Reseller Support and Training
Not Rated	Customer Support and Training
****	Documentation
★★★☆	Global Business Readiness
****	Upgrade Path





OVERVIEW

Netaphor SiteAudit is an integrated fleet-assessment and fleet-management platform that delivers audit tools and usage/service analytics for a wide range of output devices. Intended for use both by IT departments within mid-size companies to large enterprises as well as managed print services (MPS) providers such as MFP/printer equipment dealers, the solution helps customers view print/copy volumes, maximize printer utilization, track compliance with Service Level Agreements (SLAs), and more. Moreover, the solution's proactive notification and reporting features help companies reduce supplies inventory, operations and other costs associated with an output device fleet. A device-agnostic solution, SiteAudit can discover and report on both networked and locally connected devices from all major OEMs, regardless of brand.



Strengths:

- Integrated assessment/management platform allows customers to move seamlessly from fleet assessment to fleet management
- Scalable solution supports up to 25,000 devices per server
- Available in both on-site and hosted configurations
- Supports networked and locally connected devices
- Device-agnostic utility reports on any device with a printer MIB, no matter what the brand
- Powerful drag-and-drop report building
- Calculates uptime/downtime for devices
- Shows consumables yields, estimated remaining life, cost per page and more
- Calculates coverage and cost-per-page data
- Summary views give top-level of fleet
- Interface supports drag-and-drop and right-clicking for easy navigation and manipulation

Weaknesses:

- Higher price per managed device than some leading fleet-management platforms
- No built-in map view

What We Thought

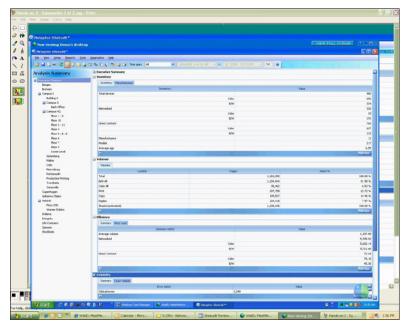


Netphor's SiteAudit 5.0 is a very powerful, feature-rich print fleet management platform well-suited to enterprises and MPS service providers that have a large number of devices to manage. SiteAudit is more scalable than most platforms BLI has evaluated, supporting up to 25,000 devices per server instance. More importantly, its well-thought-out interface design, with a hierarchical organization tree on the left to allow the intelligent grouping of devices, enables the tracking thousands of devices. The UI also offers full support for drag-and-drop actions, right-click mouse input and so on, which makes navigating and customizing lists and reports extremely easy with very little training required.

SiteAudit's other strength lies in its customizable reporting. Rather than a couple dozen canned reports, which must then be exported for more granular analysis if desired, SiteAudit users can construct very complex queries against the database via simple drag-and-drop actions. Users can quickly call up volume analysis, job analysis, incident history or other data, then easily filter by desired parameters



(such as by device or manufacturer), then filter even further until the report shows exactly the data they desire.



SiteAudit users can see summary views of devices, output volumes, reliability and more with a single click.

SiteAudit also provides invaluable data to IT administrators and reseller personnel alike. The product can calculate uptime/downtime for a device or group of devices for a specified time period, and the cost-per-page analysis is especially useful for IT and other managers within an organization to help them identify devices that are most friendly (or harmful) to a company's bottom line. This kind of data can arm an organization with valuable information that can be used to make better purchasing decisions and to ensure that vendors are living up to their service-level agreements.

SiteAudit also tracks consumables levels (in as much detail as supported by the device) to calculate yields and estimated life remaining. User can set rules-based notification thresholds for proactive management and quick problem resolution. Another plus: SiteAudit is available as a traditional server-based tool as well as a hosted cloud-based solution to match the manner of deployment a customer prefers.

On the downside, it should be noted that SiteAudit's features are concentrated mainly on fleet management and reporting, not print-reduction/cost-containment as are some in-house print management products. And while SiteAudit is more costly per managed device than some other third-party fleet management platforms, it also delivers more functionality than most. So for dealers or organizations that need to manage hundreds to thousands of devices in great detail, it is worth the investment.



Product Profile

Product: Netaphor SiteAudit

Test Version: Version 5.0

Software Developer: Netaphor Software, Inc. **Suggested Retail Price:** \$20 per year per device

Server Requirements (for on-site deployment):

Dual quad-core processors, 4-GB RAM, 300-MB hard drive space, Microsoft Windows Server 2003 or Server 2008, Microsoft SQL Server 2005 or 2008, .NET Framework 3.5 or later (Windows XP and SQL Server Express 2005/08 acceptable

for installations of fewer than 250 devices)

Dual quad-core processors, 2-GB RAM, Microsoft Windows XP (SP2 or later), **Client Requirements:**

Vista or Windows 7

Supported Devices: SNMP-enabled networked and locally connected output devices with an

industry-standard printer MIB

Availability: The solution is available from authorized Netaphor resellers and partners.



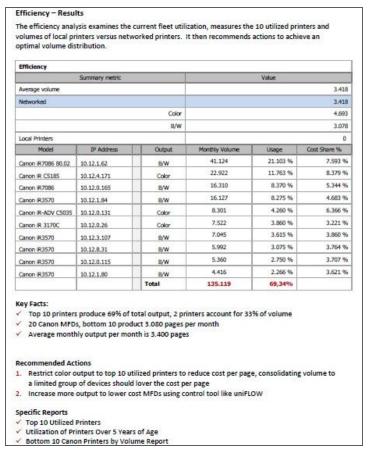
Feature Set



Netaphor SiteAudit has all the features an enterprise or reseller would need to assess and track output devices and meter counts. It supports both networked and locally connected printers and MFPs of any brand, and can report any of the attributes contained in the public MIB (Management Information Base) including total, print and copy meters (broken down by color and black-and-white), page size (ledger/A3, letter/A4, and A6), duplex pages, and much more—up to 500 attributes, depending on the functionality of the device. In addition, Netaphor has relationships with most leading OEMs that gives them access to private MIB data, as well. And unlike some other output management utilities, SiteAudit also tracks and reports on fax and scan/send volumes for MFPs. The latter is becoming increasingly important to enterprises and resellers as digital sending and scan capture become more integral to an organization's workflow.

Most notable versus competing platforms is the integration of an assessment report, which utilizes key performance indicators (KPIs) built into SiteAudit software, with the fleet management platform. The integration means a separate audit tool is not required: MPS providers can go from the assessment phase to fleet management without changing tools or needing to perform another initial data collection.





The integrated assessment tool allows resellers to create custom audit reports showing device output, efficiency, potential cost savings and more.

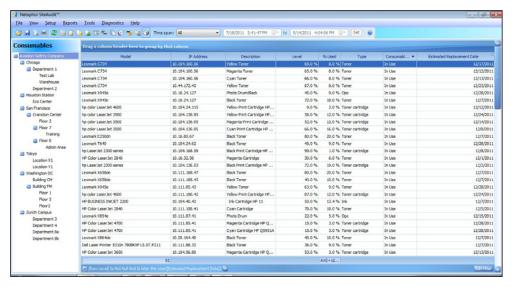
SiteAudit's consumables tracking features are particularly robust. The software can show the percentage of remaining toner available (in as granular an increment as provided by the device) and estimate the replacement date and/or pages remaining based on past usage to enable just-in-time ordering, which cuts down on the supplies a company or service provider needs to have on hand. The software also tracks ink/toner coverage for output, and hence can provide a very accurate cost-per-page analysis. In addition to ink/toner consumables, SiteAudit tracks and reports on the remaining life of drums, fuser units, developer, transfer units, cleaning kits and more.

In addition to meter and consumables data, SiteAudit also tracks errors at the device level. This lets IT administrators or service providers generate uptime/downtime reports to identify problem machines and those with the fewest errors—particularly useful data points when it comes time to replace machines. Resellers and customers can also use SiteAudit to track response time to service calls as well as SLAs (Service Level Agreements).

SiteAudit also provides complete Move, Add and Change (MAC) tracking, reporting and alerting for devices in the fleet. MAC event logging includes reporting of



newly added devices, when a previously detected printer is retired, when a retired printer is put back into service, when the printer location changes, when a printer is re-assigned to a new department and when the IP address of a printer changes. MAC tracking ensures that the reported inventory accuracy is constant, reduces the chance of printers being misplaced, eliminates the inadvertent assignment of duplicate IP addresses and means that device history (such as meter counts and error logs) stays with the device's entry in the database, even if its IP address, group, or location changes.



SiteAudit can track consumables of all types and alert designated users when supplies are low.

SiteAudit delivers highly customizable rules-based notification features. Alerts can be sent to outside service providers or in-house personnel based on the type and severity of the error, ensuring maximum device uptime and improving first-call problem resolution. And SiteAudit's reporting features are second to none. The program offers 70 standard reports, but in actuality the number of tabular reports that a user can create is limitless, since any parameters on a given table can be combined to create a custom report.

In fact, the only fleet management and reporting feature missing from SiteAudit that BLI can identify is a mapping tool to show the locations of devices. But while Site-Audit does not offer a built-in map view, it does integrate with a third-party mapping tool (AssetDB, from NewField IT) for those that want it.



New features and enhancements in Version 5.0

- Integrated Assessment Report delivers a complete, customizable fleet assessment, with no need to use a separate audit tool
- New usage metrics, including average pages produced per day to help measure toner usage rates
- New license process to streamline device license management
- A4 and A6 (for banks) volume tracking and analysis
- Expanded device support for Brother devices and older Canon models



Value



The company charges \$20 per year per device under management, a price that includes complete assessment, monitoring and reporting-there are no hidden add-ons to drive up the price. That price is higher than the \$9 to \$12 per device per year charged by some competing third-party fleet-management platforms, although it should be noted that SiteAudit delivers more features and functionality than most others. And adding to its overall value proposition are the unique custom reporting features SiteAudit delivers, as well as its scalability. The company estimates an ROI for the solution of about six months.

The cost for ongoing maintenance and support is 18 percent of the deployment cost, which is competitive with others in the industry.



Tech Speak: SNMP and MIBs

Simple Network Management Protocol (SNMP) is a standard protocol for managing devices on IP networks. Technically speaking, it's designed to facilitate the exchange of management information between devices such as PCs and network switches and routers. By using SNMP data, IT administrators can manage devices, monitor performance and solve network problems on the network.

Management Information Base (MIB) is a virtual database describing a particular piece of hardware that's attached to a network. Data stored in the MIB tells the network what the device is, what it can do (print, copy, scan, and fax for example) and other basic information. For remote management utilities, the MIB is the source of information on device configuration and utilization. MIBs and SNMP were originally created and deployed to manage the routers and switches that make up a network. Today, there are hundreds of different MIBs for any kind of hardware that needs to be connected to and managed via a network. Remote management solutions make use of SNMP to discover MFPs and printers on the network, and return data from them to the software. Almost every printer- and copier-based device on the market today includes a version of the standard printer MIB, which was developed by the Internet Engineering Task Force and a consortium of document imaging manufacturers as a common standard defining the data that all output devices should report over networks.

The standard printer MIB includes several subsections, or tables. There's the general table, which covers the name of the manufacturer, the model name and serial number, as well as the device's default settings and information currently displayed on the control panel. The cover table indicates whether the device's covers are open or closed. The input table details the paper trays and their contents, while the output table reports on the output trays. The marker table describes anything related to marking paper (toner or ink supplies, for example), the device's resolution, margin settings and imaging technology (laser, LED or inkjet). The supplies table covers life remaining in the toner or ink cartridge, as well as data about the fuser or developer if they're included. The public MIB also indicates the overall page count meter for the device.

Each hardware manufacturer supports its own private MIB, the structure of which is usually proprietary and not shared with the wider world. Private MIBs provide a place for information and features that aren't covered in the public variety but need to be available for a manufacturer's software applications; for example, remote monitoring solutions. Every vendor offers features that set it apart from the competition—if all a manufacturer used was the public MIB, then its devices would be equally compatible with every third-party application on the market. By reserving some information for the private MIB, manufacturers can keep a leg up on the competition. In addition, the public MIB doesn't specify how the device should report certain pieces of critical information.

For instance, detailed meters are often not included in the public MIB—they're kept private. For remote management applications, this means detailed information on duplexing, color usage, scan counters and other data can be difficult to procure for third-party solutions, unless there's an arranged agreement.



Ease of Administration



Deploying SiteAudit is similar to other device management platforms. Two components need to be installed: the server-resident SiteAudit Monitor, which collects data from managed devices; and the client PC-resident SiteAudit Viewer, which enables end users to see and work with the server-resident data. The hardware and software requirements (as outlined in the Product Profile sidebar) are fairly straightforward and similar to those of other device management platforms BLI has evaluated, although it should be noted that some competing platforms are cloud-based services that require no server installation, only a small data-collection applet to be placed on a networked PC. As with other packages, administrators should be familiar with setting up a SQL database (Microsoft SQL Server Express, included as part of the product download, is fine for monitoring fewer than 250 devices, while SQL Server 2005 or 2008 is needed for monitoring more than that), .NET Framework 3.5 (which is automatically installed if not present) and various Windows services (Netaphor offers a handy Deployment Checklist article in its knowledgebase). Assuming the SQL database is in place, the wizard-based installation walks the administrator through the deployment, and can typically be completed in a matter of minutes. And as noted, Netaphor also offers a cloud-based hosted iteration of SiteAudit, which necessitates only the deployment of a data collection agent on the network to communicate with the hosted servers.

One advantage of SiteAudit versus the competition is the integration of the assessment tool with the management platform. With other solutions, an equipment dealer typically performs a fleet audit to gather initial data about a site's output devices. After a set period (typically 30 days), the full fleet-management tool is put in place-necessitating another software installation and data collection. Version 5.0 integrates the two, delivering an Integrated Assessment Report that tabulates device inventory, volume, reliability and efficiency and creates a finished report from the data. The tool delivers a five-part analysis including user-defined analysis of key facts, recommended actions based on the data collected and a return-oninvestment analysis. The report can then be customized with commentary, graphics and logos, and is provided in Microsoft Word format for easy editing.

Once SiteAudit is deployed, administrators or resellers can perform a device discovery to populate the database in a number of ways. An automatic discovery broadcasts to the network and finds all SNMP-enabled devices that respond to the broadcast. Administrators can also enter a list or range of IP addresses manually, opt to scan specified sub-nets only, opt to scan for a specified set of devices only, prevent discovery of locally connected devices, exclude the IP addresses of devices they don't want to manage with SiteAudit, and other options. These discovery parameters are more varied than those of other management utilities BLI has tested. And unlike most other management solutions, SiteAudit can discover and monitor devices locally connected to networked PCs (via USB or parallel connections) without the use of a local agent installed on the device's host PC.

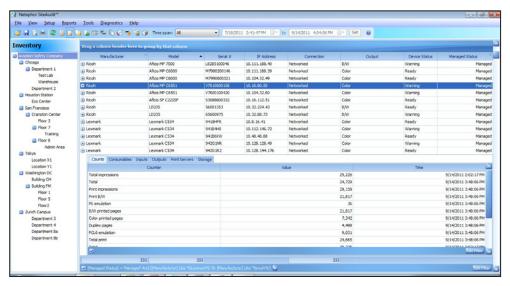
After the initial discovery, SiteAudit performs a discovery task automatically every six days, and the company reports that network traffic is kept to a minimum. Some other management systems can be set to perform a discovery task more often or even at startup, but Netaphor's approach is preferable for enterprises with thou-



sands of PCs and devices, since pinging each device on the network often could noticeably impact network bandwidth.

The new license management feature allows the administrator to select which discovered printers are to be monitored and managed. For example, if on organization has a SiteAudit license for 100 printers but a fleet of 110 printers, previous versions of SiteAudit would find and manage all 110 printers. With version 5.0, the administrator can select the 100 printers they want to manage and the other 10 can be sent into an "unmanaged" group. Of course, they can subsequently add those devices to a managed group at any time by purchasing more licenses.

SiteAudit also supports Move, Add and Change (MAC) events. MAC events provide a way for administrators to maintain control of their printer fleet and to be notified when changes occur in the printer environment. Along with that improvement, version 5.0 eliminated the need for administrators to manually resolve duplicate address conflicts. Netaphor's developers devised new algorithms to ensure that collected data is always associated with the correct device, even if the device's IP address changes. (In prior versions, when printers shared IP addresses, data from one device was stored with data from another device, and the administrator was required to resolve the duplicate addresses and delete suspect data.)



With SiteAudit, administrators or resellers can construct a hierarchical view of the organization (the frame on the left), then click on a particular node in the organizational tree to see a detailed view of the discovered devices.

The Setup > Company organization menu choice lets administrators or resellers create a hierarchical-structure view that corresponds to the organization. For example, resellers can create top-level entries for individual clients, with nested sub-nodes for various offices; or enterprises using SiteAudit for in-house management can create a hierarchical structure by location, department or cost center. Once the structure has been defined, individual devices can then be assigned to departments, cost centers, locations, or other units within the structure.



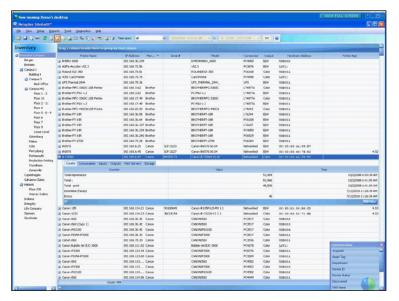
Ease of Use



Administrators and reseller personnel familiar with other in-house or remote device management utilities will have no trouble adapting to SiteAudit, and even users unfamiliar with such platforms should have no trouble performing common tasks with very little training. The main user interface is very straightforward, with the organizational structure set up by the administrator—company, departments, cost centers, locations—in a frame on the left and the list of devices in the center. Users can easily see all the devices associated with a company by selecting the uppermost entry, or limit the device list to particular department, location and so on by clicking on one of the sub-entries.

SiteAudit offers a handy "Analysis Summary" that shows a top-level view of the selected organizational entry. Users can quickly see inventory by device type (such as networked or direct-connected) or manufacturer; output volumes (broken down by color, black and white, print, copy duplex and more); an "efficiency" summary that shows average volume and most-used devices; and a "reliability" summary that shows the number of critical errors for the selected group, the number of errors needing trained personnel, total downtime per printer, average uptime, average response time and more. The "reliability" summary also has a tab showing the least-reliable devices.

Working directly with a particular device list is also easy. These more detailed lists show individual rows for each device in the selected organizational entry, with columns for the device name, manufacturer, model, IP address, serial number, connection port, page totals, usage (the percentage of all output volumes the particular device is responsible for) and much more. The attributes that appear on the device list are completely customizable, and columns can be re-ordered by simply dragging the column header to a new location and sorted by a given attribute (in ascending or descending order) by clicking on the desired header.



To see the details of a particular device, users simply click on the entry in the list to open a tabbed view with entries for counts, consumables, inputs, outputs and more.



Clicking on an individual row expands that device's entry to show more detailed information on the selected device. We found this approach to be more convenient than how some other utilities handle drilling down into the details of a particular device, a command that often launches a new window rather than letting the user work in-line in the devices list. As with other management utilities, the granularity of information shown in the drill-down view will vary depending on what data is available in the devices' MIBs. For example, in BLI's evaluation a Canon imageRUNNER C5068 entry showed tabs detailing meter counts, consumables levels, input-tray levels, storage levels on the device's hard drive and more. The entry for a Brother MFC-440 device, however, showed only a tab for meter counts.

One convention common to other management utilities BLI technicians would like to see in SiteAudit is a green/yellow/red icon indicator on the device list next to each device, so users can see at a glance if any devices need attention. Also, some utilities maintain a top-level folder, updated in real-time, that shows all devices currently in need of attention as error messages are received from the devices.



Data Analysis and Reporting



SiteAudit makes it extremely easy for end users to slice and dice information for analysis and reporting. There are 70 standard reports included, but the mix-and-match nature of the analysis process means report creation is essentially unlimited.

To get users started in data analysis, SiteAudit features icons in the toolbar along the top for Volume Analysis, Lifetime Counters, Host Analysis, Job Analysis, Incident History, Problem Analysis, SLA Analysis and Consumables. Users simply select the organizational entry (company, location, department and so on) they wish to analyze, then click on the toolbar icon to see the associated data for those devices.

Volume Analysis shows current meter count breakdowns for each device, including total pages, black and white pages, color pages, total copies, duplex pages, 11x17 pages and more. The Lifetime Counters tool generates a list of total meter counts for the lifetime of the device, including prints (color and black), copies (color and black), scans and more. The unique Host Analysis tool shows information on host PC/servers discovered on the network, including the driver revision loaded on the PC and the pages printed from that PC. The Job Analysis tool creates a summary report of job types, collected from the Windows spooler.

SiteAudit also allows users to create cost-per-page reports and makes it easy for customers and resellers to identify troublesome and trouble-free devices, which can be especially useful when it comes time to make replacement decisions. The Incident History report shows a complete list of all errors messages generated, including the severity level, whether the incident required a response from an untrained (paper out, for example) or trained (replace fuser) individual, the status of the incident (resolved or unresolved), the incident's duration and more. For even more granularity, the Problem Analysis view shows a top-level count of the total errors for each device and its total downtime. Users can then drill down into a

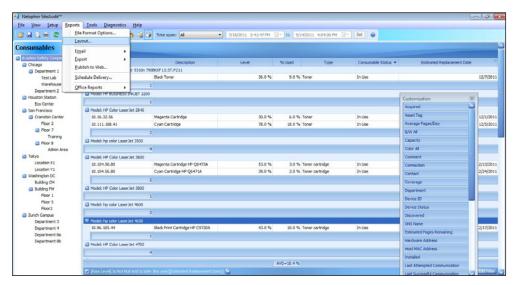


particular device's entry to see a description of each error that has occurred (such as "perform printer maintenance" or "low consumables: maintenance kit") and its severity (Warning, critical and so on).

BLI also appreciates the copy vs. print report, so customers can see the mix of function usage to better right-size their fleet. Also handy is the color vs. black-and-white report, which can be a useful tool to help drive down unnecessary color usage.

The utility also offers an SLA Analysis view, which shows the service level agreement attached to a device, its uptime and downtime, and the number of incidents that were handled in the timeframe specified in the SLA and those that were not. And the handy Consumables report shows the level of ink/toner (in percentage increments as supported by the device) remaining for each device.

If Netaphor's developers were to have stopped there, SiteAudit would offer very robust reporting tools for most users, especially since lists could be easily sorted to find a particular device. But since the solution was designed to handle thousands of devices, SiteAudit takes the analysis one step further, allowing users to customize the results lists by specific parameters.



SiteAudit users can construct custom reports—essentially an unlimited number of them—by simply dragging column headers to the space above the device list. Here we created a report for color copies by manufacturer.

When viewing a default report, a user can drag any column header (or headers) and drop it in the space provided above the list to generate a custom query of the SQL database—no coding required. For example, when viewing the Volume Analysis report, a user can drag-and-drop the column header for Manufacturer to the space to see meters by manufacturer. Need more granularity? Next drag-and-drop the header for Model to the area, and the list shows output by manufacturer and model. Want to see just color print volume for that subset of devices? Just drag and drop the column header Color Print to the area and the report gets even more detailed.



This powerful build-your-own analysis feature is not only exceedingly easy (and frankly, fun) to play with, it frees users from having to parse the data (often in a separate program, like Excel) returned by a canned report typically offered by such utilities if they need an analysis that is not on the menu. And as expected, SiteAudit lets users schedule reports to run reports at a set time and deliver the results via e-mail to an unlimited number of recipients.



Compatibility



SiteAudit is compatible with all SNMP-enabled networked and locally connected output devices with an industry-standard printer MIB. And unlike management utilities from hardware OEMs, SiteAudit is device-agnostic, and the company's relationships with leading hardware makers allows it to capture data from both the public and private MIBs of most devices, and devices' embedded Web pages.



Software Integration



SiteAudit connects to the leading billing platforms, such as SAP, OMD, and Abacus, used by many equipment resellers. It also connects to the service-dispatch platforms common in the industry, such as Remedy and Magic.



Security



A login is required to access SiteAudit, so administrators can control the data and its integrity. All communication between devices and the server is via a secure connection. In adition, access to reports is controlled through Microsoft IIS credentials, which allows control over which reports users can access.



Company Profile

Vendor: Netaphor Software, Inc.; Irvine, CA

Phone: 949-470-7955

Web: www.netaphor.com

Status: Privately held



Reseller Support and Training



Netaphor-certified partners are offered extensive training. Sales and technical leads at the reseller are required to take a one-day remote training course (the program is different for each role), which is offered free of charge. In-person training is also offered, with the fee dependent upon the location and required curriculum. In addition to the required online training, Netaphor encourages quarterly and ad-hoc training as new features are added to the platform.

Technical support is offered to resellers via e-mail and online chat, but not by phone. General tech support is offered free of charge, and the company also offers fee-based programs depending on the level of support requested. The company also offers remote support via online tools as well as access to an extensive knowledge-base of clearly written articles covering every major topic and feature of SiteAudit.



Customer Support and Training

Not Rated

Customer support and training is handled by the individual reseller, and those partners have the option to pass along the remote training offered to resellers. Partners also have the option to sell expedited support service (ultimately handled by Netaphor) that responds in 15 minutes during business hours.





Documentation



Netaphor offers searchable PDF documentation—over 200 pages worth—that covers all aspects of SiteAudit, from setup to custom reporting. And as noted above, partners and customers can access the online knowledgebase that contains clearly written articles covering dozens of topics.



Global Business Readiness



Netaphor sells and services SiteAudit in North America, Europe, South Africa and Japan. The solution is available in English, Spanish, French, German and Japanese.



Upgrade Path



SiteAudit is a true enterprise solution that can accommodate up to 25,000 devices per server instance, as opposed to the few thousand supported by some competing platforms. Users moving to SiteAudit from another management platform can generally migrate existing data without programmer involvement, says the company.

Netaphor releases updates on a quarterly basis, and those are offered free of charge to customers with a maintenance agreement. Full versions are released about every 24 months.



What is Print Management?

Hardcopy output is a significant expense for most businesses and organizations—accounting for up to 10 percent of revenues according to some studies—so understanding and controlling the full scope of document output is a key way to improve the bottom line. A print management solution allows organizations to track and account for print/copy usage to reduce (and in some cases, recoup) costs, optimize fleet deployment, and promote more environmentally friendly print practices to help satisfy "green" initiatives.

Print management solutions can be deployed and used either internally within the organization looking to manage hardcopy output, or externally by an equipment dealer or other reseller as part of an MPS (managed print services) engagement. The features of a print management/MPS tool can range from meter collection (for billing and analysis purposes), supplies management (for the automated re-ordering of consumables based on usage) and device status monitoring (to enable a proactive service model) to print-job rerouting (from high-cost-per-page printers to more cost-effective MFPs, for example) and behavior modification (to encourage/enforce duplex vs. simplex or monochrome vs. color printing, for example).

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