SiteScope User Guide

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🐸 Introduction to SiteScope

Thank you for choosing SiteScope as your Web environment monitoring solution. This guide contains complete instructions for installing and setting up the SiteScope software. This document is also available in [PDF format,(all.pdf)](), in the SiteScope/docs directory.

What is SiteScope?

SiteScope is an easy−to−use yet versatile server monitoring and administration environment. SiteScope provides you with the tools needed to monitor the key aspects of your server and network environment that are vital to keeping Web sites available and functioning optimally. Its agentless, centralized monitoring model allows you to set up and scale your monitoring quickly and easily. The client−server architecture allows multi−user access by way of a convenient web browser interface.

SiteScope has over 30 types of monitors that can be used to watch different aspects of your Web environment. This includes monitors to verify availability of web pages and back−end applications as well as the status of supporting server and network parameters. SiteScope also includes several monitors designed to check the availability and proper function of web based transactions. This includes the capability to check all the key aspects of the transaction from the web page delivery, links to other pages and images, e−mail confirmations, and database updates.

You can create as many instances of any particular monitor that you need up to the number of monitors permitted by your license agreement. For example, you could create 50 URL Monitors to watch 50 web pages plus 20 Service Monitors to watch an array of web servers, and 10 Ping Monitors to check network connectivity, etc. Each monitor instance can be tailored in terms of target, run frequency, error condition, and error status threshold.

SiteScope Monitor Types

Network Services Monitors – test network applications by simulating a client application	
Database Monitor	The [Database Monitor]() allows you to verify that a query can be successfully processed by your standard database software. You can also monitor database statistics for use in reports.
DNS Monitor	The [DNS Monitor]() checks a Domain Name Server via the network. It verifies that the DNS server is accepting requests, and also verifies that the address for a specific domain name can be found.
eBusiness Transaction Chain Monitor	This [monitor]() enables you to verify that multiple tasks associated with a online transaction (e.g. web transaction, database entry, e−mail confirmation) are completed properly, ensuring end−to−end transaction success.
FTP Monitor	The [FTP Monitor]() connects to an FTP server and verifies that a file can be retrieved.
Mail Monitor	

	The [SiteScope Mail Monitor](#) verifies that the mail server is accepting requests, and that messages can sent and retrieved.
Ping Monitor	The [Ping Monitor](#) verifies that specified hosts are available via the network to ensure continuous availability of critical connections.
Port Monitor	The [Port Monitor](#) determines whether a service on a port can be connected to.
SNMP Monitor	The SiteScope [SNMP Monitor](#) reads a value from an SNMP device. Many network devices support the SNMP protocol as a way of monitoring the devices.
URL Monitor	The [URL Monitor](#) verifies availability and access time for specified URLs to ensure that your web pages are always available in an acceptable time frame. On the NT platform, SiteScope takes advantage of the platform's integrated support to monitor secure HTTPS URLs in addition to HTTP URLs.
URL Transaction Monitor	The [URL Transaction Monitor](#) simulates a user's session across several pages. An example of this would be entering an account name via a Web form, checking an account status for the page that is returned, and then following a sequence of links through several more pages.
Server Monitors – measure attributes of the server and operating system NOTE: On the NT platform these monitors may be used to gather information from remote machines	
CPU Monitor	The [CPU Monitor](#) reports the percentage of CPU currently in use to ensure that you know if the CPU is being overloaded.
Disk Space Monitor	The [Disk Space Monitor](#) reports the percentage of disk space currently in use so that you can act before you run out of disk space.
Memory Monitor	This [monitor](#) measures virtual memory usage and notifies you before you have a problem.
Network Monitor	The [Network Monitor](#) provides an easy way for you to track network statistics for your server. Information provided by the network monitor can help you track down performance problems related network interfaces on your servers.
Service Monitor	The [Service Monitor](#) verifies that specified processes are running, including Web, Mail, FTP, News, Gopher, Telnet, and DNS.
Web Server Monitor	The [Web Server Monitor](#) reads the web server log and reports data on hits, bytes, errors, hits per minute and bytes per minute. It supports Netscape Enterprise, Netscape FastTrack, Microsoft IIS, O'Reilly WebSite, and any web server that uses the common log format.
Application Monitors – monitor specific network applications and servers	
Apache	

Server Monitor	The Ariba Server Monitor reads the server data from the server administration pages and reports the d... to the SiteScope panel and logs.
Ariba Server Monitor	The Ariba Server Monitor reads the server data and reports the data to the SiteScope panel and logs .
MS ASP Server Monitor	The MS ASP Server Monitor reads the server data for Microsoft Active Server Page server and repor... the data to the SiteScope panel and logs.
CheckPoint Firewall–1 Monitor	The CheckPoint Firewall–1 Monitor reads the firewall data and reports the data to the SiteScope pane... and logs .
ColdFusion Server Monitor	The ColdFusion Server Monitor reads ColdFusion server statistics and reports the data to the SiteSco... panel and logs .
MS IIS Server Monitor	The IIS Server Monitor reads MS Internet Information Server statistics and reports the data to the SiteScope panel and logs .
Netscape Server Monitor	The Netscape Server Monitor reads Netscape server statistics from the server adminsitration page and reports the data to the SiteScope panel and logs .
RealSystem Server Monitor	The RealSystem Server Monitor reads Real server statistics and reports the data to the SiteScope pane... and logs .
SilverStream Server Monitor	The SilverStream Server Monitor reads SilverStream server statistics and reports the data to the SiteScope panel and logs .
MS Windows Media Server Monitor	The Windows Media Server Monitor reads MS Windows Media server statistics and reports the data ... the SiteScope panel and logs .
Advanced Monitors – for the specific needs of complex environments	
Composite Monitor	The Composite Monitor allows you to monitor the status readings of multiple monitors or multiple groups of monitors. This gives you the ability to create alerts based upon more than one status readin... from a group of monitors.
Directory Monitor	This monitor allows you to monitor file count and size within a directory.
LDAP Monitor	The SiteScope LDAP Monitor verifies that an LDAP server is working correctly by connecting to it a... performing a "simple" authentication. Optionally, it can check the result for expected content.
Link Check Monitor	This monitor checks all of the internal and external links on a site to ensure that they can be reached.

News Monitor	The News Monitor connects to a news (NNTP) server and verifies that groups can be retrieved.
URL Content Monitor	The URL Content Monitor retrieves a selected URL, checking for multiple strings of text within the page.
NT Event Log Monitor	The NT Event Log Monitor watches one of the Windows NT Event Logs (System, Application, or Security) and triggers alerts when entries are added.
NT Dial−up Monitor	The NT Dial−up Monitor dials into an ISP or Remote Access server and confirms that a connection ca be made. Once connected, it can execute user defined commands and measure performance.
NT Performance Counter Monitor	The NT Performance Counter Monitor (available only for the NT platform) retrieves the value of any Windows NT Performance Counter and can alert you if this value is out of your preferred range.
URL List Monitor	This monitor allows you to monitor an entire list of URLs, rather than defining several separate URL monitors.
File Monitor	The File Monitor checks the size, age, and, if you want, the content of a file, and notifies you if any o these change.
Log File Monitor	The Log File Monitor allows you to generate warnings and errors based upon data in an application's file. For example, many applications write error messages to a log file. This monitor can scan those l files, looking for error messages and generating alerts when it finds them.
Script Monitor	This monitor verifies that a script executes correctly.
Radius Monitor	The Radius Monitor sends an authentication request to a Radius Server.
Web Service Monitor	The Web Service Monitor is used to make requests to SOAP enabled web services to verify that they responding.

In addition to the default monitors, SiteScope allows you to add your own site−specific monitors for those components unique to your environment. SiteScope comes with several fully functional custom monitor examples. See the Custom Monitor section for more information about creating custom monitors.

Because an e−commerce environment may provide multiple services or functions, SiteScope allows you to create multiple instances of any type of monitor and to organize them into groups and subgroups. This helps simplify the administration of monitoring complex web environments.

The wide range of monitoring capabilities available with SiteScope is complemented with flexible alerting features. SiteScope alerts can be sent in a number of different media and tailored as to their specific content. This allows you to integrate SiteScope alerting with other problem tracking and logging systems. Alerts are

also flexible in their scope, triggering conditions, and send frequency. The table below lists the different alert types available in SiteScope.

Alert Type	Description
E–Mail Alert	The E–Mail Alert sends a problem notification and description as an e–mail message. The message content can be customized to include custom text and specific monitoring results.
Pager Alert	The Pager Alert is used to send notification to an electronic pager. Alerts can be sent as alphanumeric pages that include specific monitoring information.
Script Alert	The Script Alert is used to initiate the execution of a script or other program. Script Alerts provide you with the capability to run automated recovery actions based on particular monitoring results. This might include automatically rebooting a service or moving files.
SNMP Trap Alert	The SNMP Trap Alert can be used to send an SNMP trap to an enterprise management console. This gives you interoperability with network management applications.
Sound Alert	The Sound Alert allows you to have SiteScope play an audio file on the server where SiteScope is running.
Database Alert	The Database Alert allows you to log problem notification and descriptions to a database.
Disable or Enable Monitor Alert	The Disable or Enable Monitor Alert is used to automatically disable or enable an individual monitor or group of monitors. This is useful to suppress redundant alerting from monitors watching elements that are dependent on a single service that may have gone down.
Log Event Alert	The Log Event Alert allows you to log problem notifications as events into the Windows NT Event Log.
Post Alert	The Post Alert can be used to send problem notification and descriptions to another server application as a CGI POST.

SiteScope also provides monitoring reports which allow you to document the status of your web environment over a period of time. The reports are customizable to to provide data in both graphical and tabular format.

SiteScope runs as service on Windows NT and 2000 or as a background process on Solaris Unix. The SiteScope panel is your window into the SiteScope monitoring environment. It appears when you open a browser view of SiteScope and it displays a gauge and status icon for each defined monitor group. The first time you start SiteScope, you'll see a gauge and icon for the groups of monitors that you have created. Each time you add a monitor group, a new gauge and status icon is added to the SiteScope panel. SiteScope monitoring, alerting and reporting continue even if you close the browser interface as long as the service or process are running

How do I use this guide?

The SiteScope on–line User Guide is organized so that you can either follow the navigation links at the bottom of each page to read the guide in a book–like fashion, or you can start with the SiteScope Table of Contents and go directly to any topic or section that interests you. Each page includes a link at the top and bottom of the page that allows you to return the the Table of Contents or link the the next page. You can also access context specific pages of the User Guide by clicking on the Help button within the SiteScope product interface.

Where can I get help?

Help for SiteScope is available in several forms.

User Guide	You are reading the SiteScope User Guide. This document covers the use of SiteScope and should be your first resource when trying to answer a question about SiteScope. The User Guide is available from within the SiteScope view by pressing on the Help button on the navigation bar or other links. The SiteScope User Guide is also available in PDF format for printing. It is also available on the Freshwater Software website.
README file and Release Notes	Each SiteScope installation includes a README.htm file to explain specifics of installing SiteScope on Windows NT or Sun Solaris platforms. A copy of the release notes for your version of SiteScope is also included. The release notes document new features and product improvements that are available. This is also available on the Freshwater Software website.
On–line Support Database	Many common questions are answered in the Freshwater Support Database (http://www.freshwater.com/support.htm). If you can't find an answer to your question the on–line User Guide, be sure to check the support database.
e–Mail Support	For questions and problems that aren't addressed in other sources, please e–mail us at support@freshwater.com or click the Support Request Form link on the SiteScope main panel to e–mail us your question. This form even allows you to easily attach important SiteScope files that may be useful to us as we try to answer your questions. If you are a licensed customer who has purchased one of our Customer Care options, we'll typically respond within 1 business day. We'll respond to all other questions as soon as possible.
Technical Support Staff	If you are a licensed customer who has purchased one of our Customer Care options, you have the option of telephone support from our technical support staff. Technical support by telephone is available between 8:00 a.m. and 5:00 p.m. Mountain Standard Time (GMT −7) at +1−888−443−2266 ext 6801.

Licensing Notes

You may use SiteScope on a free trial basis for 10 days. At the end of the trial period you must either purchase a SiteScope license to continue using the software, or you must delete all SiteScope files and

directories.

If you are using SiteScope on a trial basis, you will see a counter on the SiteScope main panel which will indicate how many days are remaining in your trial period. When you purchase a SiteScope license, you will be instructed on how to use your license number to register your copy of SiteScope. The trial counter will no longer appear once you've completed the registration process.

The SiteScope application includes the following libraries. Click on the links to view licensing information specific to each of these products.

Java Runtime Environment, including JSSE, JIMI, and JDNI, from Sun Microsystems
Java SNMP package from Advent Network Management
Java Generic Library package from ObjectSpace
Java PerlTools package from ORO
Java XML Parser from Datachannel
Java MD5 library from Santeri
NT SSH client

🐤 Getting Started With SiteScope

This section introduces you to the SiteScope software product and the SiteScope interface. This is to help you quickly understand several key concepts that will enable you to quickly set up and start using the product.

SiteScope is a flexible and versatile monitoring environment for monitoring, alerting, and reporting on e−business performance from within your firewall. SiteScope is a client−server based application intended for centralized (agentless) monitoring. This speeds the installation and set up as well as eases administration and scaling. Using SiteScope you can monitor many of the most important aspects of your e−business and server environment including site availability, retrieval times, transaction functions, and link integrity. SiteScope's flexible alerting features, reporting formats, and diagnostic tools also help you stay on top of the work involved in maintaining a business−critical Web site.

Based on the client−server model, SiteScope is accessed through hypertext pages served to a standard web browser. The SiteScope main panel is the primary interface to the SiteScope product. It includes a graphical display of the status of monitoring results from groups of monitors as well as hyperlinks to other features of the product which are described further below.

If you haven't done so already, you should install SiteScope following the guidelines found in README.htm file.

 In this section we'll discuss:

- Some terms you should know
- An Overview of Setting Up a Monitoring Environment
- The SiteScope Main Page
    - The Navigation Bar
    - The SiteScope Panel
    - Other links
    - Setting preferences
        - Security and Access Control
        - SiteSeer® Access
    - Browsing SiteScope monitors
    - Diagnostic Tools
- Where to get help

Terms You Should Know

Here are a few SiteScope terms that are commonly used in this manual which are useful to know.

SiteScope Panel
>   The SiteScope Panel is SiteScope 's visual interface. It displays a status gauge and status icon for each group of monitors that have been defined.

Monitor
>   A monitor is a SiteScope program that tracks the status of one aspect of the e−business environment. A monitor reports a status of good, warning, or error based on criteria that you can control. SiteScope includes monitors that check web−based

transactions, server performance and resource parameters, and certain network parameters. You can create as many monitor instances of any type of monitor as you want based on the licensing agreement you have purchased.

Group

A group is a collection of one or more SiteScope monitors. The groups are displayed on the SiteScope Panel. An error or warning status is shown for the group if any of the monitors in the group is reporting an error or warning status. You can organize your monitors into groups and subgroups to ease administration, alerting, and reporting.

Alert

An alert is an action which is triggered by a change in status of a monitor. Alerts are set up separately from monitors and can be associated with one or more monitors or groups of monitors. Alerts can be sent in a variety of media including e−mail, pager and SNMP trap. Alerts also can be created that automatically trigger a script of batch file execution.

Report

A report is a presentation of data from monitors. SiteScope Management Reports document e−business performance based on data returned by monitors. Other reports provide information for managing the monitoring environment.

An Overview of Setting Up a Monitoring Environment

SiteScope is designed for ease of use and administration. The goal is to allow you to easily set up and begin monitoring important performance parameters in your web and e−business environment. The following outlines a series of steps that you can follow in setting up a monitoring environment with SiteScope. The specifics of setting up individual monitors, alerts, and reports are discussed in other parts of the help documentation.

1. Review your e−business environment and identify the critical elements. SiteScope includes tools for monitoring e−business from the end users perspective and we recommend that you plan to monitor the business critical transactions and functions and their supporting infrastructure that directly impact the user's experience.

2. Configure your servers for the monitoring environment. SiteScope is designed as a centralized monitoring solution that can monitor a large number of other servers from a single monitoring server. Transaction monitoring is done using standard Internet and network protocols. For some system level monitoring, it will be necessary to set up remote access between the production servers and the monitoring server to enable monitoring of server resource parameters. Your organization's network security policies will impact this level of monitoring. Be aware also that the monitoring function has process and storage requirements that merit having the application installed on a dedicated server.

3. Set up and organize your SiteScope monitors. Choose the monitor types that will enable you to watch the key elements of your e−business environment. You can create multiple instances of each type of monitor. Plan to organize the monitors logically into groups depending on your preferences for organizing the monitoring. For example, group monitors according to geography, customer, function, or application. The monitor run frequency and error thresholds to represent the importance of the

element being monitored. At the same time, remember that monitoring too frequently may impact performance of the monitored systems as well as the monitoring application.

4. Determine alerting expectations and media. Consider what conditions you want to be alerted for and how you want to be alerted. Identify who needs to receive alerts and if there different schedules that alerts should be active.

5. Set up SiteScope alerts. Select the type, media, and monitors that will be the subject of each alert. Remember that one alert can be used for a group of monitors to be triggered when any one of the monitors reports an error. The combination of alert media and trigger conditions allows you to create alerts of differing priority and visibility. Create schedules to control when alerts are active.

6. Identify your reporting requirements. Identify the key performance factors that you want to document and the audiences that should receive reports.

7. Set up SiteScope reports. Create scheduled Management Reports for the monitors that document key performance metrics such as uptime, availability, transaction accuracy, and links. Choose the report format and content to best convey the data to the intended audience. The Quick Management Reports are generated manually and can be an important tool in diagnosing system problems.

8. Review setup of the monitoring environment and adjust as needed. This includes a review of the monitor error thresholds and run rates, alert thresholds, triggering, and schedules, as well as report content, scheduling, and format.

You can use these steps to set up a small section or portion of your monitoring and then go back later as you adjust settings to cover more of your e−business environment. This should allow you to get the monitoring environment up and working is a matter of a hours rather than days.

The SiteScope Main Page

The SiteScope Main Page is the primary interface to the SiteScope monitoring product. This screen provides you with an overview monitoring status your e−business environment. It also includes links that give you access to detailed monitoring information, settings, and other tools for administering and managing the your monitoring envrionment. The following describes the features available of the main screen.

Navigation Bar

The navigation bar above the SiteScope Panel gives you quick access to the features described below. This navigation bar is available at the top of most other pages within SiteScope and can be used to navigate between the main sections.

(Overview Button)

> Choose this button, located on the left end of the navigation bar, to go to the SiteScope Multi−view panel. If you are running SiteScope on more than one server, you may want to use the SiteScope Multi−view panel to display the status of all of your SiteScope installations from a central location. The SiteScope Multi−view panel provides an overview of the status of each monitor defined in each SiteScope installation, and provides links back to the originating SiteScope for administration.

SiteScope

>Choose this button to return to the [SiteScope Panel](#) from other pages within SiteScope . You can use the **Back** button on your browser menu bar to return to a previous screen without returning to the SiteScope panel

Alerts

>Choose the Alerts button to go to the alerts detail page. An alert is a set of instructions that tell SiteScope how and when to notify you of an error or warning status being reported by one or more SiteScope monitors. From the alert detail page you can view the currently defined alerts. You can also add, edit, or delete alerts, see recently generated alerts, and access e−mail, pager, and SNMP preferences.

Reports

>Choose the Reports button to go to the SiteScope Management Reports page. Here you'll see a list of the currently defined reports. You may add, edit and delete scheduled reports from this page. You may also generate ad hoc, quick management reports, view the monitor run Progress page, and view a listing of current monitors that you have defined.

Help

>Choose the Help button to open the help text for the current page in a separate browser window.

The SiteScope Panel

The SiteScope Panel appears when you start SiteScope and provides a visual overview of the status of your Web server environment. It displays a status icon and a status gauge for each monitor group. The status icon reflects that monitor group's current status relative to the performance criteria defined for it. A warning status condition is considered to have a higher value than an OK status condition, and an error status condition is considered to have a higher value than a warning status condition. The status icon will reflect the monitor with highest value condition (OK, warning, or error) in that monitor group. The status gauge also reflects the highest value returned by any monitor in the group.

 The status icons indicate the following status conditions:

> OK status

> Warning status.

> Error status.

> Process in progress.

To add a new group of monitors, click the **Create Group** link on the SiteScope Panel. This takes you to the [Add Group](#) form where you can define the name and dependencies for the new group. Once you have created the new group you can add monitors through the [detail page](#).

To get more information about a monitor group, click on the group's name on the SiteScope Panel, located under the group's status gauge. This takes you to the group's [detail page](#). The group detail page provides separate status information for each of the group's monitors. From the detail page you can add, edit, or delete monitors. You can also rename or delete an entire group, as well as create sub−groups.

Other Links

Several other links are available on the SiteScope panel page below the SiteScope panel. This includes links to allow you to configure your SiteScope installation, browse SiteScope monitors, and request support.

The first link below the SiteScope panel will normally be the name of the next monitor that SiteScope will be updated. Click this link to go to the SiteScope Progress Report page. The Progress Report page provides an overview of the monitors SiteScope has run most recently and the status returned by those monitors.

Preferences

Choose the "Preferences" link to go to the SiteScope General Preferences page. This page contains a place to enter your SiteScope license number. You can also set the access controls for SiteScope , including user name and password settings. This page also contains navigation links to other pages where you can set preferences for e−mail, log files, schedules, and other configuration options. Two of the features that are accessed via the Preferences link are included below:

Security and Access Control

As installed, SiteScope is accessible to anyone that can access the IP address of the machine where it is installed. SiteScope has a number of options that allow you to control access to the program.

On the General Preferences page you can specify the IP addresses that are allowed to connect to SiteScope . If SiteScope is inside the firewall or within a DMZ, you may also choose to configure the firewall to restrict who is allowed to access the SiteScope HTTP port. It is also on the General Preferences page where you choose to require a login for other users that you may define.

In addition, on the User Preferences page in SiteScope , you can configure login/password access to SiteScope for the built−in "administrator" (full access) and "user" (limited access) users. You may also create additional users that have any combination of permissions and group access that you choose. This allows you to create a "view−only" mode that gives users access to SiteScope without giving them the ability to make changes to the SiteScope monitors, alerts, reports, or configuration.

For additional information on SiteScope access controls see the Security Overview note at the Freshwater Software Web site.

SiteSeer® Access

One of the links within the General Preferences page is a link to configure SiteSeer. This allows SiteScope users who also subscribe to Freshwater Software's SiteSeer remote monitoring service can access their SiteSeer accounts directly from the SiteScope panel. Choose the "Preferences" link on the SiteScope panel and then choose the **SiteSeer** link at the top of the page. Complete the SiteSeer Preferences information and save the changes. A

link to the SiteSeer account will appear as a group link on the SiteScope main panel.

If you're not currently using the SiteSeer service, choose the **Add SiteSeer** link on the SiteScope main panel to sign up for a free 10 day trial of the service. SiteSeer provides you with 24 x 7 information about your Web site's performance from outside your firewall, alerting you immediately if it detects any problems.

Browse Monitors

Choose the **Browse Monitors** link to go to the SiteScope Monitor Browser page. The Monitor Browser allows you to view all or a selected group of monitors based on criteria that you choose.

Diagnostic Tools

This link brings up the Diagnostic Tools page. This page contains links to tools that check network services, connectivity, and other tests useful to diagnose network problems.

How to Get Help

If you have any questions about SiteScope , you can choose the **Support Request Form** link near the bottom of the the SiteScope main page. This will bring up a form that will help you provide us with the information we need to provide you with the answer you need as quickly as possible. You can also check for technical support information on−line in our technical support database found on Freshwater Software's Web site.

Monitor Groups

This section introduces you to SiteScope monitor groups and the role they play in help organize and administer your monitoring environment. In this section we'll discuss:

- What is a SiteScope group?
- The default SiteScope monitor groups
- How to define your own groups
- How to create a group
- How to set group dependencies
- How to rename a group
- How to disable or enable monitors or temporarily disable alerts for monitors in a group
- How to refresh monitor readings
- How to reorder monitors
- How to delete a group

What is a Group?

A group is a collection of one or more monitors. A group might contain several of one type of monitor, such as URL monitors, or several different monitors that track specific portion of your web environment, such as web server, URL, network parameters related to a specific e−commerce transaction. There are no hard and fast rules for grouping monitors, but one method that works well is to group monitors that should generate similar alerts.

The Default SiteScope Monitor Groups

The first time you start SiteScope you'll see status gauges and icons for two default groups on the SiteScope Panel: Network and Server. SiteScope automatically creates these default groups. You can modify these two groups to meet your own monitoring needs.

Network Group

By default the Network group contains several monitors which provide you with information about your network connection to the Internet.

The monitors you will see in this group include:

Local Home Page

This is a URL Monitor that retrieves the local home page (http://localhost) to monitor availability and access time.

Network Interface

This is a Ping Monitor that pings the Freshwater Software server (www.freshwater.com) to monitor connectivity beyond your own network/localhost.

URL

A [URL Monitor](#) that retrieves the Freshwater Software home page (http://www.freshwater.com) as an additional monitor of connectivity and performance.

DNS

This includes a [DNS Monitor](#) for any Domain Name Servers in the local machine's configuration. This verifies that the DNS server is accepting requests and that a specific domain name can be located.

Ping

This includes [Ping Monitors](#) that ping all IP addresses for the local machine to verify the availability of critical connections.

Network (NT Only)

On the NT platform a [Network Monitor](#) is also added to measure your network's saturation.

The status and readings returned by these monitors assures you that your connection to the Internet is working well.

Server Group

The Server group created by SiteScope contains several monitors which report on different components of your Web server environment. The proper functioning of each of these components is vital to providing continuous access to your Web site visitors.

 By default the monitors configured for this group are:

CPU

This is a [CPU Utilization Monitor](#). It monitors the percentage of CPU time that is currently being used on your server, helping you to pinpoint potential overloading problems.

Memory

This is a [Memory Monitor,](#) which monitors the percentage of memory in use and generates an alert if usage exceeds the thresholds you set. By default, SiteScope sets the warning threshold at 80% and above with the error threshold set if memory usage exceeds 90%.

Disk Space

This is a [Disk Space Monitor](#). It monitors the available space on the specified disk, alerting you to disk space problems that may lead to system crashes and corruption of files. By default, one Disk Space Monitor is added for each disk or file system (Unix) detected on the server where SiteScope is installed.

Web server performance

This is a [Web Server Monitor](#). This monitor displays hits per minute, giving you a good indication of the amount of traffic your Web server is receiving.

Service Monitors

Several monitors are added to watch common services such as FTP, Web, Telnet and mail services on NT and http, inetd, sendmail, and ftpd processes on Unix.

Defining Your Own Groups

SiteScope allows you to create and edit your own groups of monitors. Within each group you may also create subgroups of monitors. This can ease the administration of monitoring large multi−server environments.

Each SiteScope monitor must belong to a group, so when you add a new monitor you either have to add it to an existing group, or you must first create a new group for it. SiteScope allows you to define virtually any number of groups. Each group in turn can contain any number of monitors and subgroups regardless of how many monitors you have purchased. For ease of administration it's best to arrange monitors into groups and subgroups that make sense for you. For example, if you intend to monitor a large number of processes running on your system, you may want all of them to be in a single group named "Processes". Or, if you're monitoring processes on several machines using the Remote Monitoring feature, you could create a primary group called Processes with several subgroups named after each of the remote machines that you are monitoring. This type of organization helps tremendously with administration, especially in large monitoring environments.

Here are some things you'll want to keep in mind when you start defining your own groups.

The total number of monitors you think you'll want to add.
> The more monitors you want to add, the more important your grouping becomes. When you have a large number of monitors, it's important that they're grouped in such a manner that it's easy to remember where they are located for administration purposes.

How you want to structure alert generation*.*
> SiteScope generates alerts based upon parameters set by you . You may define alerts for individual monitors or groups of monitors. For example, you may tell SiteScope to generate an alert anytime one specific monitor is in error, or you may instruct it to generate an alert when any monitor in a specific group of monitors is in error. Therefore, it's important that you put some thought into how you want to structure your alerts prior to assigning them to groups.

How your Web environment will change down the road.
> If you'll be expanding your Web environment in the near future, for example adding more Web servers on the machine on which SiteScope is running, you'll want to keep in mind what those changes will mean in terms of monitoring requirements and plan accordingly.

How often you'll want to change monitoring parameters.
> If there are certain kinds of monitors that you'll want to edit fairly regularly, for example URL monitors, you may want to group them into a single group for easier administration.

The number of groups you really need.
> Administration becomes tricky if you have a large number of randomly created groups and subgroups. Defining well−organized groups helps you with the following:
> > ◊ Monitor management
> > ◊ Alert management
> > ◊ Report management

No matter how you choose to setup your groups and monitors, SiteScope allows you to easily make changes with a set of tools that manage monitors and groups.

Creating a Group

The steps to create a new group are:

1. Start or open SiteScope. The SiteScope Main Panel page appears.
2. Click the "**Create** group" link on the SiteScope Panel. The Add Group form appears.
3. Enter the name of the group in the **Group Name:** field. You may only use alphanumeric characters, dashes (–), underscores (_), and periods (.) in the name. Name length is not restricted.
4. Click the "**Add** Group" button. The group detail page for this group appears.

That's all there is to it. Once you have created the group you can add the monitors that you want to be a part of this group. Check out the instructions for adding monitors. Once you have added monitors to a group, clicking on the group name link in the SiteScope panel will take you to the group detail page. The group detail page gives you an overview of the latest status and readings for all the monitors defined for that group.

Setting Group Dependencies

Group dependencies allow you to create groups of monitors which will only run as long as another monitor in another group is reporting either an OK or Error status. If you choose to have SiteScope dependent upon another monitor returning an OK status and that monitor goes into error, the monitors in this group will not run until the depended upon monitor begins to show an OK status again. For example, you could create a group of monitors for a specific machine which will only run if a Ping monitor for that machine returns an OK status. If the ping ever fails, the monitors in this group will not run, preventing you from being flooded with error messages.

If you choose to have this group dependent upon another monitor being in error, the monitors in the group will not become enabled unless the dependency control monitor returns an error status.

To set group dependencies:

1. Click the group's name on the SiteScope Panel to open the group's detail page. The detail page appears.
2. Click the "**Edit** Group Properties" link. The Edit Group page appears.
3. Under Advanced Options find the **Depends on** field choose the name of the monitor upon which this group should be dependent from the drop–down list.

Renaming a Group

Use the following steps to rename an existing group:

1. Click the group's name on the SiteScope Panel to open the group's detail page. The detail page appears.
2. Click the "**Edit** Group Properties" link. The Edit Group form appears.
3. Enter the new name for the group in the **Group Name:** field.
4. Click the "**Update** Group" button. The updated group detail page for this group appears.

Disabling and Enabling the Monitors or Alerts for Monitors in a Group

SiteScope allows you to disable all of the monitors in a group as well as any sub−groups in that group. You can disable monitors manually or specify a time period after which the monitors will be automatically re−enabled. This feature is useful for times when you know that the monitors will be in error, such as during routine maintenance or a prolonged outage. Disabling monitors will prevent alerts from being generated for the those monitors. *See also:* Monitor Scheduling.

To disable the monitors in a group:

1. Click the group's name on the SiteScope Panel to open the group's detail page. The group detail page appears.
2. Click the **Disable** all the monitors or alerts for monitors in this group link. The disable screen appears.
3. The disable screen contains 3 disable choices. Choose only one.
   - ♦ **Disable temporarily for the next *n* minutes/hours/days** allows you to immediately disable until a certain period of time. Enter a time period that the monitors should remain disabled. Leaving this field blank will permanently disable the monitors until they are manually re−enabled. Select minutes, hours or days as applicable.
   - ♦ **Disable on a one−time schedule from *t* to t** allows you to schedule a temporary disable for a time in the future. Enter a start time and an end time in the following format: 12:00 8/2/2001
   - ♦ **Undo one−time schedule** allows you to undo a temporary disable shedule that has been set. A list of any monitors which are currently scheduled appears just above the **Disable** button.
   - ♦ In the lower section of the page you can specify a time for the choice of **Disable alerts for the next *n* minutes/hours/days**. This will disable alerting for the selected monitor for the time period you select.
4. Enter an optional **Disable Description** in the field indicated. This description will appear as part of the monitor status in the group detail page.
5. Click the **Disable Monitor** or **Disable Alerts** to complete the action.
6. The updated group detail page for this group will appear showing if the monitors and sub−groups in the group are currently disabled. There will be no indication of whether a disable is scheduled in the future. (This information is only available as mentioned above −− it appears above the **Disable** button on the disable page.)
7. To enable the monitors, click the **Enable** all the monitors in this group link.

Refreshing Monitors in the Group

Monitors are set to run at time intervals that you select. This may vary from running several times each minute to only running once a day. SiteScope allows you to refresh monitor readings manually regardless of when the monitors are set to run. When you refresh a group, all of the monitors and sub−groups that belong to that group are run and the status reading is updated. Use the following steps to refresh group:

1. Click the group's name on the SiteScope Panel to open the group's detail page. The detail page appears.
2. Click the "**Refresh** all the monitors in this group" link. A confirmation message appears.

3. Click the **Refresh** button to conplete the action. Click on the Return to [groupname] link to return to the group detail page.

Reordering Monitors

The Reorder Monitors feature allows you to change the order that monitors are displayed in the group page. Use the following steps to reorder monitors:

1. click the "**Reorder** the monitors in this group" link on the Group Detail page.
2. Complete the fields on the SiteScope Reorder Monitor Form as described below.

By Position

Select the new position that you want each monitor to have. For example, put the number 1 next the monitor that should appear first on the Group Detail page.

Sort

Click the **Reorder Alphabetically** button to order the monitors in this group alphabetically.

3. Click either the **Reorder by Position** or the **Reorder Alphabetically** button to complete the action.

Deleting a Group

When you delete a group, all of the monitors and sub−groups that belong to that group are also deleted. Use the following steps to delete a group:

1. Click the group's name on the SiteScope Panel to open the group's detail page. The detail page appears.
2. Click the **Delete** this group link. A confirmation message appears.
3. Click the **Delete** [group name] button to delete the group. The SiteScope Panel appears.

🐸 Manage Monitors and Groups

The Manage Monitors and Groups page is available through a link on the monitor group detail page. This page allows you to move, duplicate, delete, disable, enable, and refresh monitors and groups. It also allows you to replace text strings that define various monitor parameters.

In this section we discuss:

- The Tree View of Groups and Monitors
- Moving Monitors and Groups
- Copying Monitors and Groups
- Duplicating Monitors and Groups
- Deleting Monitors and Groups
- Disabling Monitors and Groups
- Enabling Monitors and Groups
- Refreshing Monitors and Groups
- Replacing in Monitors and Groups
- Baselining Monitors and Groups

The Tree View of Groups and Monitors

The Monitor Tree View allows you to view monitors and the groups they are associated with. An example of the Monitor Tree View is shown below.

(Click the ⊞ to expand a group, and the ⊟ to collapse a group).

⊞**Base Group**

⊟**Example Group**

    ⊟**Web Server A Group**

        Ping main IP address

        Home Page URL Monitor

        Local CPU Utilization

        Server Memory Usage

        SiteScope Log Files

        Web Page URL Transaction

    ⊞**Web Server B Group**

    ⊞**Web Server C Group**

⊞**Network**

⊞**Database Monitors**

⊞**Server**

By default, the top level groups (Server, Network, URL's, etc.) are shown. By clicking on the ⊞, to the left of the group name you can expand the group to show the monitors and subgroups contained within that group. Clicking on the ⊟ will collapse the group display. The display of the tree is saved across visits to the page and the actions associated with it.

To select a monitor or group, click the check box to the left of the name of the monitor or group. Any combination of groups or monitors can be selected. Once you have made your selection, choose the action that you wish to take on the selected items by clicking one of the buttons on the lower portion of the page.

Moving Monitors and Groups

To move monitors or monitor groups from one group to another, select the items you want to move in the Monitor Tree View and click the **Move** Selected Items button. After clicking the Move Selected Items button, a page displaying the selected monitor items appears along with a pull−down menu box allowing you to specify the target group for the move. Choose the target group for the selected items and press the Move Monitor button.

Moving a monitor deletes it from its current group and adds it to the destination group. Any alerts defined for that specific monitor are transferred with the monitor.

> **Warning: Moving a monitor will start it's history over** – any reports generated for the monitor will start from the time that the monitor was moved. The history data will still be in the log files, but it will be inaccessible from the reports.

Moving a group will make the group a subgroup of the destination group. If it is already a subgroup, it will become a subgroup in the destination group. Unlike moving individual monitors, moving groups has no effect on history.

Copying Monitors and Groups

To copy monitors or monitor groups to another group, select the items you want to copy in the Monitor Tree View and click the **Copy** Selected Items button. After clicking the Copy Selected Items button, a page displaying the selected monitor items appears along with a pull−down menu box allowing you to specify the target group for the copy. Choose the target group for the selected items and press the Copy Monitor button.

As part of the Copy operation, it is possible to find and replace text strings and values in the parameters you have used to define various monitors. This can be very useful if there are changes you want to make on the copied monitors and groups. See below for specific instructions on this operation.

Copying a group will make the group a subgroup of the destination group. If it is already a subgroup, it will become a subgroup in the destination group.

Duplicating Monitors and Groups

To duplicate monitors or monitor groups, select the items you want to duplicate in the Monitor Tree View and click the **Duplicate** Selected Items button. After clicking the **Duplicate** Selected Items button, a page

displaying the selected monitor items appears along with a pull–down menu box allowing you to specify the target group. Choose the destination group for the selected items when they are duplicated. Next to each item is a text box allowing a new name for the item to be entered – the default is "Copy of *Monitor Name*". Press the **Duplicate** Monitor button to complete the action.

Under the Advanced Options section there are text fields for searching and replacing text in the items being duplicated. This is most useful when duplicating groups and allows all instances of a server name, for example, to be changed at once. If you had a group that contained a series of monitors for the machine www.freshtech.com and you wanted to create a similar monitoring suite for demo.freshtech.com, then entering www.freshtech.com in the Replace field, and demo.freshtech.com in the With field would change the setting in all of the monitors and groups being duplicated.

Duplicating a monitor makes a copy of the monitor and adds it to the destination group. Any alerts defined for that monitor are duplicated with the monitor. When you duplicate a group of monitors a copy is made of the group and all of its monitors and subgroups. The duplicate group is added as a subgroup in the destination group.

Deleting Monitors and Groups

To delete monitors or monitor groups, select the items you want to delete in the Monitor Tree View and click the **Delete** Selected Items button. After clicking the Delete Selected Items button, a page confirming the selected items is displayed. Clicking the Delete button will permanently delete the items from SiteScope.

Deleting a monitor will delete the monitor and any alerts defined for that monitor. Deleting a group will delete the group, all monitors in the group, and any subgroups of the group.

Disabling Monitors and Groups

To disable monitors or monitor groups, select the items you want to disable in the Monitor Tree View and click the **Disable** Selected Items button. After clicking the Disable Selected Items button a page listing the selected items is displayed.

The disable screen contains 3 disable choices.   Choose only one.

1. Choice one allows you to immediately disable until a certain period of time. Enter a time period that the monitors should remain disabled. Leaving this field blank will permanently disable the monitors until they are manually re–enabled.
2. Choice two allows you to schedule a temporary disable for a time in the future. Enter a start time and an end time in the following format:
   12:00 8/2/2001
3. Choice three allows you to undo a temporary disable shedule that has been set. A list of any monitors which are currently scheduled appears just above the **Disable** button.

Clicking the Disable Monitor button will disable the items.

Disabling a monitor causes the monitor to stop collecting data and to stop causing alerts until it is again enabled. Disabling a group will disable all of the monitors in a group, and all monitors in subgroups of the group.

Enabling Monitors and Groups

To enable monitors or monitor groups that were previously disabled, select the items you want to enable in the Monitor Tree View and click the **Enable** Selected Items button. After clicking the Enable Selected Items button a page confirming the selected items is displayed. Clicking the Enable Monitor button will enable the items.

Enabling a monitor causes the monitor to resume collecting data and to resume causing alerts if it was disabled. Enabling a group will enable all of the monitors in a group, and all monitors in subgroups of the group.

Refreshing Monitors and Groups

To refresh monitors or monitor groups, select the items you want to refresh in the Monitor Tree View and click the **Refresh** Selected Items button. After clicking the Refresh Selected Items button a page showing the selected items is displayed. Clicking the Refresh Monitor button will refresh the items.

Refreshing a group will refresh all of the monitors in a selected group, and all monitors in subgroups of the group.

Replacing in Monitors and Groups

You can use the Replace feature to find and replace text strings and values in the parameters you have used to define various monitors. This can be very useful if there are changes made to the system which effect multiple monitors such as a domain name change or URL change.

To replace text or values within monitors or monitor groups, select the items you want to search and replace within from the Monitor Tree View and click the **Replace** Selected Items button. After clicking the Replace Selected Items button, a page displaying the selected items and text field for specifying the values and attributes to find and replace is displayed. Enter the current value in the **Find** field and the new value in the **Replace With** field. Choosing the Replace Monitor button will replace all occurrences of the original value with the new value in the selected items.

Baselining Monitors and Groups

You can use the Baseline feature to collect monitoring data to establish average (i.e. baseline) performance characteristics and the standard deviation from that average. Once established, error/warning/good conditions may be set according to variances from that baseline. (See "# std dev from baseline" and "% differece from baseline" thresholds.) The date, average and standard deviation information is shown on the Edit Monitor page under the heading Baseline Info after the monitor has been baselined.

To baseline a monitor or monitor groups, select the items you want from within the Monitor Tree View and click the **Baseline** Selected Items button. After clicking the Basline Selected Items button, a page displaying the selected items and text field for specifying the number of days to include in the computation of the

average and standard deviation. Enter the number of days in the **Compute the baseline for the last days** field. Choosing the Baseline Monitor button will cause the baseline and standard deviation to be computed for all selected items.

Once the baseline has been computed, you may edit a monitor and set error, warning or good thresholds based on a variance from the baseline.

Monitors

SiteScope has many different types of monitors available to help you manage your Web server environment. These monitor types provide you with various monitoring capabilities. When you "create" a monitor, you select which type of monitoring function you want and then define the specific parameters for the monitor instance you are creating. You can create another instance of that monitor type but enter different monitoring parameters. For example, you can create multiple URL monitors which monitor different URL addresses.

SiteScope is sold on a number−of−monitors basis. This means you can purchase the number of monitors to meet your monitoring objectives while also having the number of copies of the SiteScope application software needed to scale the monitoring to your network environment. As your network grows or your monitoring needs increase, you will need to purchase a license for additional monitor sets.

Any single installation of SiteScope is capable of running virtually all of the monitors you have purchased. However, the type of monitors run and their run frequency may dictate that you divide your monitoring between multiple SiteScope installations. The calculation to keep in mind is how many monitors are scheduled to run per minute per SiteScope installation . For example, if you define 120 monitors each to run every 2 minutes, this equates to 60 monitors per minute. Generally, monitoring load won't be a concern if the average number of monitors run is less than 60 monitors per minute. The upper limit is about 300 monitors per minute. At this level the load on the monitoring system starts to affect your measurements. You can view the monitoring load on the server by going to the Reports page, and then click the View the Progress Page link. At the bottom of the Progress page you'll see the statistics for the current and maximum monitors per minute.

In this section we present an overview of the monitor types available in SiteScope as well as general monitor editing procedures that apply to all monitors as described below:

- The SiteScope monitor types.
    - ♦ Network Service Monitors
    - ♦ Server Monitors
    - ♦ Application Monitors
    - ♦ Advanced Monitors
    - ♦ Beta Monitors
- How to add a monitor to a Group.
- How to edit a monitor
- How to delete a monitor from a Group.
- How to move a monitor to another Group.
- How to duplicate a monitor.
- How to monitor a remote server

SiteScope Monitor Types

Network Services Monitors

Network Services monitors test networked applications and services by simulating end user actions. These include the following:

Database Monitor

> The Database Monitor connects to database and performs a query that you specify to verify that data can be retrieved.

DNS Monitor

> The DNS Monitor checks a Domain Name Server via the network. It verifies that the DNS server is accepting requests, and also verifies that the address for a specific domain name can be found.

eBusiness Transaction Chain Monitor

> This monitor verifies an eBusiness transaction by checking the complete chain of processes and actions, including front–end web servers, e–mail notifications, back–end databases, and extranet applications.

FTP Monitor

> The FTP Monitor connects to an FTP server and verifies that a file can be retrieved.

Mail Monitor

> The Mail Monitor verifies that the mail server is accepting requests, and that messages can be sent and retrieved.

Ping Monitor

> The Ping Monitor verifies that specified hosts are available via the network to ensure continuous availability of critical connections.

Port Monitor

> The Port Monitor determines whether a service on a port can be connected to.

SNMP Monitor

> The SiteScope SNMP Monitor reads a value from an SNMP device. Many network devices support the SNMP protocol as a way of monitoring the devices.

URL Monitor

> The URL Monitor verifies availability, content, and access time for specified URLs to ensure that your web pages are always available in an acceptable time frame. On the NT platform, SiteScope takes advantage of the platform's integrated support to monitor secure HTTPS URLs in addition to HTTP URLs.

URL Transaction Monitor

> The URL Transaction Monitor simulates a user's session across several pages. An example of this would be entering an account name via a Web form, checking an account status for the page that is returned, and then following a sequence of links through several more pages.

Server Monitors

Server monitors measure server resource and operating system attributes. These include the following:

CPU Utilization Monitor

The CPU Utilization Monitor reports the percentage of CPU currently in use to ensure that you know if the CPU is being overloaded.

Disk Space Monitor

The Disk Space Monitor reports the percentage and amount of disk space currently in use so that you can act before you run out of disk space.

Memory Monitor

This monitor measures virtual memory usage and notifies you before you have a problem.

Network Monitor

This monitor is available on the NT platform only and measures your network's saturation based upon packet errors, throughput (bits/second), and open connections.

Service Monitor

The Service Monitor verifies that specified processes are running, such as Web server, Mail, FTP, News, Gopher, Telnet, and DNS.

Web Server Monitor

The Web Server Monitor reads the web server log and reports data on hits, bytes, errors, hits per minute, and bytes per minute. It supports Netscape Enterprise, Netscape FastTrack, Microsoft IIS, O'Reilly WebSite, and any web server that uses the common log format.

Application Monitors

Application monitors are designed to query specific network applications and servers. Several of these monitors are specific to MS Windows environments. These include the following:

Apache Server Monitor

Apache Server Monitor allows you to monitor Apache server statistics like bytes per second, requests per second, and CPU load.

Ariba Server Monitor

Use this monitor to watch Ariba server statistics such as uptime, denies, and concurrent connections

MS ASP Server Monitor

This monitor watches the server statistics for Microsoft ASP Servers such as total bytes per seconds, requests queued, and errors per second.

CheckPoint Firewall−1 Monitor

The CheckPoint Firewall−1 monitor is used to monitor CheckPoint firewall parameters such as fwEvent, fwRejected, and fwLogged.

ColdFusion Server Monitor

The ColdFusion Server monitor lets you monitor ColdFusion statistics like the page hits per second, Queued Requests, or Avg Req Time.

MS IIS Monitor

This monitor allows you to monitor statistics for Microsoft Internet Information Servers (IIS) including post requests per second, bytes sent per second, and total not found errors.

Netscape Server Monitor

Use the Netscape Server monitor to monitor server response codes via the server administration page.

RealSystem Server Monitor

The RealSystem Server monitor can be used to monitor server statistics on RealNetworks streaming media servers.

SilverStream Server Monitor

The SilverStream Server monitor lets you monitor SilverStream statistics such as current load, total sessions, and average request process time

MS Windows Media Server Monitor

Use this monitor to watch MS Windows Media Server statistics like active streams, stream errors per second, or late reads per second.

Advanced Monitors

Advanced Monitors are special purpose monitors to provide specific functionality. These include the following:

Composite Monitor

The Composite Monitor checks the status of a set of monitors or monitor groups.

Directory Monitor

The Directory Monitor checks the file count and directory size and notifies you if any of these exceed criteria you specify.

File Monitor

The File Monitor checks the size, age, and, if you want, the content of a file, and notifies you if any of these change.

LDAP Monitor

The LDAP Monitor checks an LDAP server by sending a password authentication request and reports the result.

Link Check Monitor

This monitor checks all of the internal and external links on a site to ensure that they can be reached.

Log File Monitor

The Log File Monitor allows you to generate warnings and errors based upon data in an application's log file. For example, many applications write error messages to a log file. This monitor can scan those log files, looking for error messages and generating alerts when it finds them.

News Monitor
> The News Monitor connects to a news (NNTP) server and verifies that groups can be retrieved.

NT Performance Counter Monitor
> The NT Performance Counter Monitor tracks the values of any Window NT performance statistic. These are the same statistics that can be viewed using the Performance Monitor application under Windows NT. This monitor is only available on the Windows NT version of SiteScope.

NT Dial−up Monitor
> This monitor verifies that a dial−up connection can be made to an ISP or Remote Access server and measures performance over the dial−up connection.

NT Event Log Monitor
> The NT Event Log Monitor watches one of the Windows NT Event Logs (System, Application, or Security) and generates alerts when entries are added.

Script Monitor
> This monitor verifies that a script executes correctly.

URL Content Monitor
> This monitor retrieves a web page and compares and saves multiple matching values from the content.

URL List Monitor
> This monitor allows you to monitor an entire list of URLs, rather than defining several separate URL monitors.

Beta Monitors

Beta Monitors are special purpose monitors that are still in development but may offer useful functionality in their current state. As the status of these monitors is subject to change, they are not listed here.

How do I add a monitor to a group?

Monitors must be added to an existing group (there are on−line instructions for creating a group if you need them).

To add a monitor to a group:

1. From the SiteScope Panel, open the group to which you want to add the new monitor by clicking on the hyperlink for that group.
2. Click **Add** a new monitor to this group link. The Add Monitor form appears.
3. Choose the type of monitor that you want to add from the monitor list. this brings up the applicable monitor set up form.
4. Complete the monitor set−up information. For information about completing that monitor's information, choose the help button at the upper right hand corner of the Add Monitor form.

5. Click the **Add** Monitor button after you complete the set−up information. The monitor creation sequence is displayed. The group's detail page is refreshed and is displayed with the new monitor. Unless you specify a list order, the new monitor is listed last in the monitor table.

How do I edit a monitor?

To edit an existing monitor:

1. From the SiteScope Panel, open the group that contains the monitor you want to edit. The group's detail page appears.
   NOTE: If the monitor belongs to a sub−group, click the sub−group's name on the group detail page to access the subgroup detail page.
2. Locate the monitor that you want to edit in the monitor table and click the **Edit** link associated with that monitor. The monitor's current information appears.
3. Make the desired changes to the monitor set up parameters.
4. Click the **Update** [Monitor Name] button. The group's detail page appears and the changes are in effect.

How do I delete a monitor from a Group?

To delete a monitor from a group:

1. From the SiteScope Panel, open the group that contains the monitor you want to delete. The group's detail page appears.
   NOTE: If the monitor belongs to a sub−group, click the sub−group's name on the group detail page.
2. Locate the monitor to be deleted in the monitor table and click the **X** in that monitor's **Del** column. A confirmation message appears.
3. Click the **Delete Monitor** button. The group's detail page appears and the monitor is deleted.

How do I move a monitor to another group?

To move a monitor to another group:

1. Open the group that contains the monitor you want to move. The group's detail page appears.
2. Choose the **Manage Monitors and Groups** link. The Manage Monitors and Groups page appears.
3. Click the + symbol next to the name of the group that contains the monitor to be moved. The monitors belonging to this group are listed.
4. Select the monitor you want to move by clicking the selection box next to its name.
5. Click the **Move** Selected Items button. The Move Monitor page appears.
6. Select the group to which you want to move this monitor and click the **Move Monitor** button.

The monitor now appears in the new group.

How do I duplicate a monitor?

To duplicate a monitor:

1. Open the group that contains the monitor you want to duplicate. The group's detail page appears.
2. Choose the **Manage Monitors and Groups** link. The Manage Monitors and Groups page appears.
3. Click the + symbol next to the name of the group that contains the monitor to be duplicated. The monitors belonging to this group are listed.
4. Select the monitor you want to duplicate by clicking the selection box next to its name.
5. Click the **Duplicate** Selected Items button. The Duplicate Monitor page appears.
6. Enter the name you want this new monitor to have and then select the group it should appear in.
7. Click the **Duplicate Monitor** button.

The duplicated monitor now appears in the specified group.

How do I monitor a remote server?

Several SiteScope monitors (CPU, Disk Space, Memory, Service and Web Server) can monitor information on remote servers. This includes servers running the following operating systems:

- Windows NT
- Sun Solaris
- SGI Irix
- HP/UX
- Linux

Notes:
1. Monitors that can be used to monitor remote servers directly are limited to the CPU, Disk Space, Memory, Service, Script(Unix Only), NT Performance Counter, NT Event Log, or Web Server (NT Only) monitors.
2. Monitoring remote NT servers requires that the SiteScope service runs in a user account that has permission to access the NT performance registry on the remote server to be monitored. Use the Services control panel to make changes to the user account used by the SiteScope service. Select the SiteScope service from the list of services, click the Startup button, and fill in the Log On As fields with an account that can access the remote servers. Stop and start the SiteScope service to start using the new account.

To monitor a remote server, perform the following steps:

1. Select one of the applicable monitors: CPU, Disk Space, Memory, Service, Script(Unix Only), NT Performance Counter, NT Event Log, or Web Server (NT Only) monitors.
2. On the **Add a new monitor** page, click on the "Choose Server" link to the right of the Server display box.
3. Use the "Server" pull–down menu box to select a server from the list of servers in the current domain. For servers that are outside the current domain, enter the server name in the "Other Server" field.
4. Press the Choose Server button and fill out the remaining fields for the monitor.

For more information about remotely monitoring both Unix and NT servers, read the [Remote Servers]() help page in this document.

You can also check the Freshwater on–line [support database](#) for other information relating to monitoring remote servers.

Apache Server Monitor

The SiteScope Apache Server Monitor allows you to monitor the administrative and performance statistics for an Apache web server. The error and warning thresholds for the monitor can be set to one of several Apache server performance statistics.

Usage Guidelines

Why should I use this monitor?

The Apache Server Monitor allows you to monitor the server administration pages for Apache servers. This allows you to watch server loading for performance and capacity planning.

What should I monitor?

You should use this monitor to watch the load statistics of Apache servers. By default, the monitor captures the following server statistics:

- CPU Load
- Requests per seconds
- Bytes per seconds
- Busy servers
- Idle servers

It's most effective if you create a separate monitor for each Apache server you're running.

How should I schedule my monitors?

The default run schedule that we recommend for the Apache Server Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the Apache Server Monitor Form

To display the Apache Server Monitor Form, either click the name of an existing Apache Server Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Apache Monitor**" link.

Complete the fields on the Apache Server Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

URL
> Choose the URL you want to verify with this monitor. This should be the server statistics URL which usually has the form of `http://servername:port/server-status?auto`

Update every
> Enter how frequently the monitor should access the URL entered above. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must

specify a time increment of at least 15 seconds.

Title *(Optional)*

Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Timeout

The number of seconds that the URL monitor should wait for a page to complete downloading before timing−out. Once this time period passes, the URL monitor will log an error and report an error status. If you have checked the Retrieve Frames or Retrieve Images option, SiteScope will wait for these items to be retrieved before considering the page to be fully downloaded.

HTTP Proxy

Optionally, a proxy server can be used to access the URL. Enter the domain name and port of an HTTP Proxy Server.

Authorization User Name

If the URL specified requires a name and password for access, enter the name in this field.

Authorization Password

If the URL specified requires a name and password for access, enter the password in this field.

NT Challenge Response

Check this box if you want SiteScope to use Window's NT Challenge Response authorization when retrieving this Web page.

Proxy Server User Name

If the proxy server requires a name and password to access the URL, enter the name here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Proxy Server Password

If the proxy server requires a name and password to access the URL, enter the password here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but

as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order (Optional)

> By default, new monitors are listed last on the Monitor Detail page. You can use this pull−down menu to choose a different placement for this monitor.

Error if

> Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon hits per minute or bytes per minute. After choosing a parameter enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.
>
> For example, if you want SiteScope to report an error if your requests per second reaches 20 or higher, you would choose **requests per second** from the pop−up menu, select >= from the comparison value pop−up menu, and then type 40 in the text entry box.
>
> **Note:** Do not enter commas in the text entry field.

Warning if

> Use this field to set a warning threshold for this monitor. The warning threshold can be based on any of the choices displayed in the drop−down menu such as requests per second or CPU load. Set this value exactly as you would the Error threshold in the **Error if** field.
>
> For example, If you want SiteScope to report a warning condition if your CPU load reaches 90% or higher, you would choose **bytes/min** from the pop−up menu, select >= from the comparison value pop−up, and then type 90 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

> You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on either busy servers or requests per second. Complete this field exactly as you would the **Error if** and **Warning if** fields.

Ariba Monitor

The SiteScope Ariba Monitor allows you to monitor the availability of an Ariba server. The error and warning thresholds for the monitor can be set to one of several Ariba server performance statistics.

Usage Guidelines

Why should I use this monitor?

The Ariba Monitor allows you to monitor the server administration pages for Ariba servers. This allows you to watch server loading for performance and capacity planning. The server performance file for Ariba Servers is normally stored in XML format and requires an XML compatible browser to view it. SiteScope is XML compatible and parses the XML data from the server.

What should I monitor?

The monitor tests if you can connect to an Ariba server at the address and port number specified. It's most effective if you create a separate monitor for each Ariba server you're running.

How should I schedule my monitors?

The default run schedule that we recommend for the Ariba Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the Ariba Monitor Form

To display the Ariba Monitor Form, either click the name of an existing Ariba Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Ariba Monitor**" link.

Complete the fields on the Ariba Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

Host Name
> Enter the host name and address for performance metrics of the Ariba server you want to monitor. The Host name should include the protocol used to access it and either the IP address or domain name and a request for the performance data, such as
> `http://servername:port/metrics?query=getStats`

Port
> Enter the port number used to connect to the Ariba server.

Update every
> Enter how frequently the monitor should access the URL entered above. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title *(Optional)*
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Timeout
> The number of seconds that the URL monitor should wait for a page to complete downloading before timing−out. Once this time period passes, the URL monitor will log an error and report an error status. If you have checked the Retrieve Frames or Retrieve Images option, SiteScope will wait for these items to be retrieved before considering the page to be fully downloaded.

HTTP Proxy
> Optionally, a proxy server can be used to access the URL. Enter the domain name and port of an HTTP Proxy Server.

Authorization User Name
> If the URL specified requires a name and password for access, enter the name in this field.

Authorization Password
> If the URL specified requires a name and password for access, enter the password in this field.

NT Challenge Response
> Check this box if you want SiteScope to use Window's NT Challenge Response authorization when retrieving this Web page.

Proxy Server User Name
> If the proxy server requires a name and password to access the URL, enter the name here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Proxy Server Password
> If the proxy server requires a name and password to access the URL, enter the password here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Verify Error
> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)
> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You can use this pull−down menu to choose a different placement for this monitor.

Error if

Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon hits per minute or bytes per minute. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.

For example, if you want SiteScope to report an error if your denies rate reaches 10 or higher, you would choose **denies** from the pop−up menu, select **>=** from the comparison value pop−up menu, and then type 10 in the text entry box.

Note: Do not enter commas in the text entry field.

Warning if

Use this field to set a warning threshold for this monitor. The warning threshold can be based on any of the choices displayed in the drop−down menu such as denies or concurrent connections. Set this value exactly as you would the Error threshold in the **Error if** field.

For example, If you want SiteScope to report a warning condition if your concurrent connections reaches 40 or higher, you would choose **concurrent connections** from the pop−up menu, select **>=** from the comparison value pop−up, and then type 40 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on total connections. Complete this field exactly as you would the **Error if** and **Warning if** fields.

MS ASP Server Monitor

The SiteScope MS ASP (Active Server Pages) Monitor allows you to monitor the availability of an ASP server on Windows NT systems. The error and warning thresholds for the monitor can be set to one of several ASP server performance statistics.

Usage Guidelines

Why should I use this monitor?

The information gathered by the ASP Server Monitor gives you the ability to see how busy your ASP server is. This information allows you to plan hardware upgrades and configuration changes that will improve your visitors' experience.

What should I monitor?

It's most effective if you create a separate ASP Server Monitor for each ASP server you're running.

How should I schedule my monitors?

The default spacing that we recommend for the ASP Server Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the ASP Server Monitor Form

To display the ASP Server Monitor Form, either click the name of an existing ASP Server Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Web Server**" link.

Complete the fields on the ASP Server Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

Server
> Choose the server you want to monitor. Use the choose server link to view a list of servers or to enter a path name. On Unix servers, enter the full pathname of the web server log file.

Update every
> Enter how frequently the monitor should read the server statistics. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

>   Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Verify Error

>   Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

>   This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

>   By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

>   Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

>   Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order (Optional)

>   By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

>   Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon hits errors/sec or requests not found. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.

>   For example, if you want SiteScope to report an error if your errors/sec reaches 5 or higher, you would choose **errors/sec** from the pop−up menu, select **>=** from the comparison value pop−up menu, and then type 5 in the text entry box.

>   **Note:** Do not enter commas in the text entry field.

Warning if

Use this field to set a warning threshold for this monitor. The warning threshold can be based on any of the choices displayed in the drop−down menu such as transactions per second or errors per second. Set this value exactly as you would the Error threshold in the **Error if** field.

For example, If you want SiteScope to report a warning condition if your transactions/sec reach 10 or higher, you would choose **transactions/sec** from the pop−up menu, select **>=** from the comparison value pop−up, and then type 10 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on either hits per minute or bytes per minute. Complete this field exactly as you would the **Error if** and **Warning if** fields.

🐸 CheckPoint Firewall Monitor

The SiteScope CheckPoint Firewall Monitor allows you to monitor the statistics of a CheckPoint Firewall−1 using SNMP. The error and warning thresholds for the monitor can be set to one of several firewall statistics.

Usage Guidelines

Why should I use this monitor?

The information gathered by the CheckPoint Firewall Monitor gives you the ability to watch network activity associated with a CheckPoint Firewall−1. This information allows you to plan hardware upgrades and configuration changes that will improve your visitors' experience.

What should I monitor?

It's most effective if you create a separate CheckPoint Firewall Monitor for each CheckPoint firewall in your environement.

How should I schedule my monitors?

The default spacing that we recommend for the CheckPoint Firewall Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the CheckPoint Firewall Monitor Form

To display the CheckPoint Firewall Monitor Form, either click the name of an existing CheckPoint Firewall Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Web Server**" link.

Complete the fields on the CheckPoint Firewall Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

Host Name
> Enter the host name or IP address of the CheckPoint Firewall−1 server you want to monitor.

Update every
> Enter how frequently the monitor should read the server statistics. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Retry Delay

> Enter the time, in seconds, that SiteScope should wait before retrying a request.

Timeout

> Enter the total time, in seconds, that SiteScope should wait for a successful reply from the CheckPoint server. If a reply is not received in the time indicated, the monitor returns a timeout error.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order (Optional)

> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

> Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon hits per minute or bytes per minute. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.

For example, if you want SiteScope to report an error if your hits per minute reach 10,000 or higher, you would choose **hits/min** from the pop–up menu, select >= from the comparison value pop–up menu, and then type 10000 in the text entry box.

Note: Do not enter commas in the text entry field.

Warning if

Use this field to set a warning threshold for this monitor. The warning threshold can be based upon hits per minute or bytes per minute. Set this value exactly as you would the Error threshold in the **Error if** field.

For example, If you want SiteScope to report a warning condition if your bytes per minute reach 500,000 or higher, you would choose **bytes/min** from the pop–up menu, select >= from the comparison value pop–up, and then type 500000 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on either hits per minute or bytes per minute. Complete this field exactly as you would the **Error if** and **Warning if** fields.

🐸 ColdFusion Server Monitor

The SiteScope ColdFusion Server Monitor allows you to monitor the availability of an ColdFusion server on Windows NT systems. The error and warning thresholds for the monitor can be set to one of several ColdFusion server performance statistics.

Usage Guidelines

Why should I use this monitor?

The information gathered by the ColdFusion Server Monitor gives you the ability to see how busy your ColdFusion server is. This information allows you to plan hardware upgrades and configuration changes that will improve your visitors' experience.

What should I monitor?

It's most effective if you create a separate ColdFusion Server Monitor for each ColdFusion server you're running.

How should I schedule my monitors?

The default spacing that we recommend for the ColdFusion Server Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the ColdFusion Server Monitor Form

To display the ColdFusion Server Monitor Form, either click the name of an existing ColdFusion Server Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Web Server**" link.

Complete the fields on the ColdFusion Server Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

Server
> Choose the server you want to monitor. Use the choose server link to view a list of servers or to enter a path name. On Unix servers, enter the full pathname of the web server log file.

Update every
> Enter how frequently the monitor should read the server statistics. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Verify Error
> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)
> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*
> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*
> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*
> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order *(Optional)*
> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if
> Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon Queued Requests or bytes out/sec. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.
>
> For example, if you want SiteScope to report an error if your bytes out/sec reach 10,000 or higher, you would choose **bytes out/sec** from the pop−up menu, select >= from the comparison value pop−up menu, and then type 10000 in the text entry box.
>
> **Note:** Do not enter commas in the text entry field.

Warning if

Use this field to set a warning threshold for this monitor. The warning threshold can be based on any of the choices displayed in the drop−down menu such as page hits per second or bytes out per second. Set this value exactly as you would the Error threshold in the **Error if** field.

For example, If you want SiteScope to report a warning condition if your Queued Requests reach 10 or higher, you would choose **Queued Requests** from the pop−up menu, select **>=** from the comparison value pop−up, and then type 10 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on either hits per minute or bytes per minute. Complete this field exactly as you would the **Error if** and **Warning if** fields.

Composite Monitor

 The SiteScope Composite Monitor is designed to simplify the monitoring of complex network environments by checking the status readings of a set of other SiteScope monitors and/or monitor groups.

Each time the Composite Monitor runs, it returns a status based upon the the number and percentage of items in the specified monitors and/or groups currently reporting an error, warning, or OK status. It writes the percentages reported in the monitoring log file.

Usage Guidelines

Why should I use this monitor?

One reason you should use this monitor is if you want to create complex monitor alert logic. For example, if you wanted to trigger an alert when:

- 5 or more monitors in a group of 8 are in error
- 3 or more groups have monitors with errors in them
- of two monitors, exactly 1 in error

then you could create a Composite Monitor that went into error on these conditions, and then add alerts on the Composite Monitor to take the desired actions.

What should I monitor?

If you need alert logic that is more complex than SiteScope's standard alerts will allow, the Composite Monitor may help.

How should I schedule my monitors?

The Composite Monitor is very lightweight, so schedule it to run at least as often as the most frequent monitor that it is watching.

Status

The status is logged as good, warning or error. By default, the Composite Monitor will be in error if any of the monitors and/or groups that it is monitoring are in error.

If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Composite Monitor Form

To display the Composite Monitor Form, either click the name of an existing Composite Monitor in a monitor table, or click the **Add** a new Monitor to this Group link on a group's detail page and choose the **Add**

Composite Monitor link.

Complete the fields on the Composite Monitor form as follows. When all the fields are complete, click the **Add** Monitor button.

Items

> Choose one or more (using control−click) monitors and/or groups that the Composite Monitor will be comprised of.

Update every:

> Enter how frequently the monitor should check the status readings of the selected monitors and/or groups. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: (Optional)

> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use preset defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Run Monitors:

> Check this box if you want the Composite Monitor to actually run the monitors, as opposed to just checking their status readings. Any monitors that are to be run this way probably shouldn't be run on their own, so edit them and blank out the " Update Every" field. This will insure that they're only run by the Composite Monitor. This is useful if you want to make sure that the monitors run one after another or run at approximately the same time.

Monitor Delay:

> If Run Monitors is checked, this is the number of seconds to wait between running each monitor. This setting is useful if you need to wait for processing to occur on your systems before running the next monitor.

Check All Monitors in Group(s)

> By default, a group is checked and counted as a single item when checking status readings. If this box is checked, all of the monitors in selected groups (and their subgroups) are checked and counted.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also

affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read the instructions for Schedules.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this pull–down menu to choose a different placement for this monitor.

Error if:

Set the conditions under which the Composite Monitor should report an error status. Use the drop–down menu to select a criteria based on the total number of items or a percentage (%) of items reporting a given status. Next select the logic operator(s) for the error criteria. Then enter the value to be used as the threshold or trigger for this condition.

Warning if

Set the conditions under which the Composite Monitor should report a warning status. Use the steps outlined in the "Error if" section above.

Good if

Set the conditions under which the Composite Monitor should report a good status. Use the steps outlined in the "Error if" section above.

CPU Utilization Monitor

The SiteScope CPU Utilization Monitor reports the percentage of CPU time that's currently being used on the server. It's important to watch CPU usage on your Web server to ensure that it doesn't become overloaded on a regular basis.

Each time the CPU Utilization Monitor runs, it returns a status message and writes it in a log file.

Usage Guidelines

Why should I use this monitor?

When CPU usage becomes too high, visitors to your site will either find it very slow, or if your web server hangs as a result of the high usage, they simply won't be able to access it. Therefore, it's very important to keep an eye your CPU usage and do something about high usage before it causes you problems.

What should I monitor?

Whether you're running a machine with a single CPU or one with multiple CPUs, you only need to create one CPU monitor. If you have multiple CPUs, SiteScope will report on the average usage for all of them.

How should I schedule my monitors?

In general, the CPU Monitor doesn't need to be run as often as some of the other monitors. If you don't usually suffer from CPU problems, you can run it less frequently – perhaps every half hour or so. If you are prone to CPU usage problems, you should run it more frequently. All machines will have short spikes of CPU usage, but the primary thing that you're looking for is high usage on a regular basis. This indicates that your system is overloaded and that you need to look for a cause.

Status

The reading is the current value returned by this monitor; for example, 68% used. SiteScope displays an average for multiple CPU systems. On NT, this is the average CPU usage between runs of the monitor. On Unix, this is the instananeous CPU when the monitor runs.

The status is logged as either OK or warning. A warning status is returned if the CPU is in use more than 90% of the time. If you would like for SiteScope to respond if a warning status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e–mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the CPU Utilization Monitor Form

To display the CPU Utilization Monitor form, either click the name of an existing CPU Utilization Monitor in a monitor table, or click the " **Add** a new Monitor to this group" link on a group's detail page and choose the " **Add CPU Utilization Monitor**" link.

Complete the fields on the CPU Utilization Monitor form as follows. When all the fields are complete, click the **Add** Monitor button.

Server:

> Choose the server that you want to monitor. The default is to monitor CPU usage on this server. Click the **choose server** link to monitor CPU usage on another server.

Update every:

> Enter how frequently the CPU's utilization should be monitored. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: (Optional)

> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use preset defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order (Optional)

By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if:

By default, SiteScope only generates a warning status for the CPU monitor. You may choose to have SiteScope generate an error based on either the total CPU percentage or the percentage of CPU a particular CPU. Use the comparison value and comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if

By default, SiteScope generates warnings whenever CPU usage goes over 90%, but you can change this to generate a warning based uponn a different percentage or an actual ammount of CPU in use. Complete this section just as you would for the Error if section, described above.

Good if

SiteScope reports a good status for CPU monitors. You may change this to a specific percentage if you prefer.

Database Monitor

The SiteScope Database Monitor checks that a database is working correctly by connecting to it and performing a query. Optionally, it can check the result for expected content.

Each time the Database Monitor runs, it returns a status, the time it takes to perform the query, the number of rows in the query result, and the first two fields in the first row of the result and writes them in the monitoring log file.

In this section we include discussion of:

- Usage guidelines
- Completing the Database Monitor form
- Accessing Oracle databases without using ODBC
- Monitoring Informix databases
- Monitoring mySQL databases

Usage Guidelines

Why should I use this monitor?

If your database application is not working properly, the user may not be able to access web content and forms that depend on the database. Most importantly, the user won't be able to complete e−commerce transactions that use the database. The other reason to monitor database queries is so you can find performance bottlenecks. If the database interaction time and the associated user URL retrieval times are both increasing at about the same amount, the database is probably the bottleneck. If not, the bottleneck is probably somewhere else in the network.

What should I monitor?

The most important thing to monitor are the queries used by your most frequently used and most important web applications. If more than one database is used, you'll want to monitor each of the databases.

You may also choose to monitor internal database statistics. The statistics provided by each database are different but may include items such as database free space, transaction log free space, transactions/second, and average transaction duration.

How should I schedule my monitors?

You may want to monitor your most critical and most common queries frequently, every 2–5 minutes. For monitoring other database statisitics that change less frequently, every 30 or 60 minutes should be fine.

Status

The status is logged as either good, warning, or error. A warning status or error status is returned if the current value of the monitor is a condition that you have defined as other than OK. If you would like for

SiteScope to send a notification if a warning or an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail, pager, or SNMP trap. An alert can also be used to have SiteScope trigger the execution of an automatic recovery script when a problem is detected.

If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Database Monitor Form

To display the Database Monitor Form, either click the name of an existing Database Monitor in a monitor table, or click the **Add** a new Monitor to this Group link on a group's detail page and choose the **Add Database Monitor** link.

Complete the fields on the Database Monitor form as follows. When all the fields are complete, click the **Add** Monitor button.

Database Connection URL
> Enter a URL to a Database Connection. The easiest way to create a database connection is to use ODBC to create a named connection to a database. For example, first use the ODBC control panel to create a connection called test. Then, enter jdbc:odbc:test in this field as the connection URL.

Query
> Enter the SQL query to test. For example, `select * from sysobjects`.

Update every:
> Enter how frequently the monitor should check the Database server. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use preset defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Match Content:
> Enter a string of text to check for in the query result. If the text is not contained in the result, the monitor will display `no match on content`. The search is case sensitive. This works for XML tags as well.

You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an "i" after the trailing slash indicating case–insensitive matching. (for example, `/href=Doc\d+\.html/` or `/href=doc\d+\.html/i`). If you want a particular piece of text to be saved and displayed as part of the status, use parentheses in a Perl regular expression. For example `/Temperature: (\d+)/`. This would return the temperature as it appears on the page and this could be used when setting an Error if or Warning if threshold.

Database Username

Enter the username used to login to the database. If you are using Microsoft SQL server, you can leave this blank and choose NT Authentication when you setup the ODBC connection. With NT Authentication, SiteScope will connect using the login account of the SiteScope service.

Database Password

Enter a password used to login to the database. If you are using Microsoft SQL server, you can leave this blank and choose NT Authentication when you create the ODBC connection. With NT Authentication, SiteScope will connect using the login account of the SiteScope service.

Database Driver

Enter the java class name of the JDBC database driver. The default, sun.jdbc.odbc.JdbcOdbcDriver, uses ODBC to make Database connections. If a custom driver is used, the driver must also be installed in the SiteScope java directory.

File Path

The Database Monitor can read a database query from a file. Enter the name of the file that contains the query you want to run. The file should be a simple text format. Use this feature as an alternative to the Query field above for complex queries or queries that change and are updated by an external application.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, [read these instructions](#).

Monitor Description *(Optional)*

Enter any additional information to describe this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for the report for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop–up for the monitor.

List Order (Optional)

By default, new monitors are listed last on the Monitor Detail page. You may use the pull–down menu to choose a different placement for this monitor.

Error if:

Set the conditions under which the Database Monitor should report an error status. Use the drop–down menu to select a criteria based on the the content of the results or a performance value. Next select the logic operator(s) for the error criteria. Then enter the value to be used as the threshold or trigger for this condition.

Warning if

Set the conditions under which the Database Monitor should report a warning status. Use the steps outlined in the "Error if" section above.

Good if

Set the conditions under which the Database Monitor should report a status of "good". Use the steps outlined in the "Error if" section above.

Oracle Database Monitoring

If you want to monitor an Oracle database without using ODBC, a good alternative is to use the Oracle Thin JDBC Drivers. To set up SiteScope for to use the JDDB Thin Drivers:

1. Download the Oracle Thin JDBC drivers from http://technet.oracle.com/software/download.htm
2. Copy the downloaded driver package into the `SiteScope\java\lib\ext` subdirectory.
3. Stop and restart the SiteScope service.
4. Now, use your browser to add a Database Monitor within SiteScope.

The **Database Connection URL** format for the Oracle JDBC driver is:

```
jdbc:oracle:thin:@<tcp address>:<tcp port>:<database sid>
```

For example to connect to the ORCL database on a machine using port 1521 you would use:

```
jdbc:oracle:thin:@206.168.191.19:1521:ORCL
```

NOTE: After 'thin' is a colon ":" and then the "@"

Possible errrors:

- "*error, connect error, No suitable driver*": check for syntax errors in "Database Connection URL", such as dots instead of colons
- "*error, connect error, Io exception: The Network Adapter could not establish the connection*": in "Database Connection URL", check jdbc:oracle:thin:@206.168.191.19:1521:ORCL
- "*error, connect error, Io exception: Invalid connection string format, a valid format is: "host:port:sid*": in "Database Connection URL", check jdbc:oracle:thin:@**206.168.191.19:1521:ORCL**

- "*error, connect error, Invalid Oracle URL specified: OracleDriver.connect*": in "Database Connection URL", check for a colon before the '@' jdbc:oracle:thin**:**@206.168.191.19:1521:ORCL
- "*Refused:OR=(CODE=12505)(EMFI=4))))*": in "Database Connection URL", check the database SID is probably incorrect (ORCL part). This error can also occur when the tcp address, or tcp port is incorrect. If this is the case, verify the tcp port and check with the your database administrator to verify the proper SID.
- "*String Index out of range: −1*": in "Database Connection URL", check for the database server address, port, and the database SID.

The **Database Driver** for the Oracle thin JDBC driver is:

```
oracle.jdbc.driver.OracleDriver
```

Enter this string into the **Database Driver** field under the Advanced Options section of the Add Database Monitor form.

Possible errrors:

- "*error, driver connect error, oracle.jdbc.driver.OracleDriver*": check syntax in field "Database Driver"
- "*error, driver connect error, oracle.jdbc.driver.OracleDriver*": check that driver is loaded in correct place
- "*error, connect error, No suitable driver*": check driver specified in field "Database Driver"
- "*error, connect error, No suitable driver*": check for syntax errors in "Database Connection URL", such as dots instead of colons

Informix Database Monitoring

Monitoring a Informix database requires the use of a JDBC driver. To enable SiteScope to monitor an Informix database:

1. Download the Informix 1.4 JDBC driver from Informix. See the Informix web site for details.
2. Uncompress the distribution file
3. Open a DOS window and go to the `jdbc140jc2` directory
4. Unpack the driver by running the following command:

```
c:\SiteScope\java\bin\java -cp . setup
```

5. Copy `ifxjdbc.jar` to the `SiteScope\java\ext\bin\` directory.
6. Stop and restart SiteScope
7. Now, use your browser to add a Database Monitor within SiteScope.

The Database Connection URL format for the Informix JDBC driver is:

```
jdbc:informix-sqli://<database hostname>:<tcp port><database
server>:INFORMIXSERVER=<database>
```

If you require a username and password the Database Connection URL format for the Informix JDBC driver is:

```
    jdbc:informix-sqli://<database hostname>:<tcp port><database
server>:INFORMIXSERVER=<database>;user=myuser;password=mypassword
```

For example to connect to the Database Server `sysmaster` running on the machine called `pond.freshtech.com` and the Database called `maindbase`, you would use:

```
    jdbc:informix-sqli://pond.freshtech.com:1526/sysmaster:INFORMIXSERVER=main
```

The Database Driver for the Informix JDBC driver is:

```
    com.informix.jdbc.IfxDriver
```

Enter this string into the Database Driver field under the Advanced Options section of the Add Database Monitor form.

MySQL Database Monitoring

Monitoring a MySQL database requires the use of a JDBC driver. To enable SiteScope to monitor a MySQL database:

1. Download the JDBC driver from http://www.worldserver.com/mm.mysql/
2. Uncompress the distribution file
3. Among all the other files, you should find a file called mysql.jar. A .jar file is a form of .zip file with extra information, so unzip the mysql.jar file(preserving the pathnames)
4. After unzipping the file, you should end up with a directory named:

   ```
   gjt/mm/mysql
   ```

   inside of which should be a number of *.class files.

5. Copy the contents of the `gjt` directory into the `SiteScope/classes/org` directory
6. Stop and restart SiteScope
7. Now, use your browser to add a Database Monitor within SiteScope.

The Database Connection URL format for the MySQL JDBC driver is:

```
    jdbc:mysql://<database hostname>[:<tcp port>]/<database>
```

For example to connect to the MySQL database "aBigDatabase" on a machine using the standard MySQL port number 3306 you would use:

```
    jdbc:mysql://206.168.191.19/aBigDatabase
```

If you are using a different port to connect to the database then you should include that port number as part of the IP address.

The specification for the MySQL JDBC driver is: `org.gjt.mm.mysql.Driver`

Enter this string into the Database Driver field under the [Advanced Options](#) section of the Add Database Monitor form.

If, after setting this up, you get an authorization error in the Database Monitor, then you may have to grant rights for the SiteScope machine to access the MySQL database. Consult the MySQL Database administrator for setting up privileges for the SiteScope machine to access the MySQL server.

Directory Monitor

The Directory Monitor watches an entire directory and reports on the total number of files in the directory as well as the total amount of disk space used by those files. This information is useful if you have limited disk space, or want to monitor the number of files written to a specific directory.

Usage Guidelines

Why should I use this monitor?

The Directory Monitor is very useful for watching directories that contain log files or other files that tend to grow and multiply unpredictably. You can instruct SiteScope to notify you if either the number of files or total disk space used gets out of hand.

What should I monitor?

This monitor is most useful for directories that contain files that can grow large enough to cause you disk space problems, or directories in which new files are added and deleted frequently. A good example of the latter is an FTP directory. In the case of an FTP directory, you'll probably want to watch both the number files in the directory and the files contained in the directory.

How should I schedule my monitors?

Because the uses for the Directory Monitor vary so greatly there's no one interval that works best. Keep in mind that if you're watching a directory that contains a lot of files and subd–directorys, this monitor could take longer to run.

Status

The reading is the current value of the monitor, such as 15 files and 15K for this monitor. SiteScope will report a warning status if the number of files in the monitored directory exceeds 1000. If you'd like to be notified if a warning condition exists, create an alert.

Completing the Directory Monitor Form

To display the Directory Monitor Form, either click the name of an existing Directory Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**New Directory Monitor**" link.

Complete the fields on the Directory Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

Directory:
      Enter the directory that you want to monitor.

Update every:
> Enter how frequently the monitor should check this directory. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning condition thresholds. If you choose not to set them, SiteScope uses pre–set defaults if available. If a default is not available, SiteScope cannot utilize the condition.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un–check the box.

No Subdirectories
> Check this box if you do not want SiteScope to count subdirectories.

File Name Match
> Optional, enter text or an expression to match against. Only filenames which match will be counted in the totals.

Verify Error
> Check this box if you want SiteScope to immediately run the monitor again in the event an error is returned. This can help to detect temporary problems and prevent false alerts from being sent.

Update every (on error)
> Enter the amount of time that SiteScope should wait between checks when the status of the monitor is anything but ok. If you don't enter a value here, the Update value from above is used. This setting allows you to have SiteScope check more or less frequently than usual when the monitored item is not reporting an ok status.

Schedule
> You may specify when this monitor should be enabled. By default, it is enabled every day of the week. You may specify specific times for the settings to be either enabled or disabled by typing a from and to time in the appropriate fields and then choosing either the **enable** or the **disable** button. Note: All times should be entered in 24 hour notation. For example, you would enter 13:00 instead of 1:00 PM, and 15:00 instead of 3:00 PM.
>
> You can use the scheduling feature in the following way. If you have a person who should only be e–mailed during normal business hours, you can type 8:00 and 17:00 in the **from** and **to** fields for Monday through Friday. You would then also need to specify that this monitor should be disabled for all of Saturday and Sunday.

Monitor Description

Enter an additional string of text describing this monitor. This text will appear on the Monitor Detail page, making it easier to quickly identify what's being monitored from this page.

List Order

Choose where you want this monitor to be listed on the Monitor Detail page.

Error if:

Set the error threshold for this monitor. Choose one of the following two options from the pull−down menu and then type the new threshold in the text entry box. You must enter a whole number.

- ♦ Number of files >=
  Choose this option if you would like SiteScope to generate an error status if the number of files in the monitored directory exceeds a given number. Enter the lowest number of files that should trigger an error status in the text entry box. For example, if you want SiteScope to generate an error if there are 50 or more files in this directory, type 50 in the text entry box.

- ♦ total of file sizes>=
  Choose this option if you would like SiteScope to generate an error status if the total size of the directory exceeds a certain number of bytes. Enter the smallest size (in bytes) that should trigger an error status in the text entry box. For example, if you want SiteScope to generate an error if the size of the directory reaches or exceeds 100,000 bytes, type 100000 in the text entry box (notice that you do not need to enter commas).

Warning if:

Set the warning threshold for this monitor. By default SiteScope reports a warning condition if the number of files in the directory exceeds 1000. If you would like to change the warning threshold, choose one of the following options from the pull−down menu.

- ♦ Number of files >=
  Choose this option if you would like SiteScope to generate a warning status if the number of files in the monitored directory exceeds a given number. Enter the lowest number of files that should trigger a warning status in the text entry box. For example, if you want SiteScope to generate a warning if there are 50 or more files in this directory, type 50 in the text entry box.

- ♦ total of file sizes>=
  Choose this option if you would like SiteScope to generate a warning status if the total size of the directory exceeds a certain number of bytes. Enter the smallest size (in bytes) that should trigger a warning status in the text entry box. For example, if you want SiteScope to generate a warning if the size of the directory reaches or exceeds 100,000 bytes, type 100000 in the text entry box (notice that you do not need to enter commas).

Good if:

Enter the reading that SiteScope should consider as a good reading for this monitor. By default, SiteScope assumes the monitor is in a good state unless the criteria for a warning or error status are met.

🐸 Disk Space Monitor

The SiteScope Disk Space Monitor provides an easy way for you to track how much disk space is currently in use on your server. A full disk can cause a host of problems including system crashes and corrupt files.

Each time the Disk Space Monitor runs, it returns a status message and writes it in the monitoring log file.

Usage Guidelines

Why should I use this monitor?

Running out of disk space can cause a host of problems both large and small, and it's something that can happen slowly over time or very rapidly. Having SiteScope verify that your disk space is within acceptable limits can save you from a crashed system and corrupted files.

How should I schedule my monitors?

The disk space monitor doesn't require many resources, so you can check it as often as you like, but every 10 minutes should be sufficient. You can specify both warning and error thresholds so that SiteScope can notify you of a potential problem in time for you to do something about it. You may even want to have SiteScope execute a script that deletes all files in certain directories, such as /tmp, when space becomes constrained.

Status

The status reading is the current value of the monitor, such as 40% full for this monitor. The status is logged as either OK, warning, or error. A warning status is returned if the disk is more than 95% full. An error status is returned if the disk is more than 98% full.

If you would like for SiteScope to respond if a warning or error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e–mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Disk Space Monitor Form

To display the Disk Space Monitor Form, either click the name of an existing Disk Space Monitor in a monitor table, or click the **Add** a new Monitor to this Group link on a group's detail page and choose the **Add Disk Space Monitor** link.

Complete the fields on the Disk Space Monitor Form as follows. When all the fields are complete, click the **Update** Monitor button.

Server:
> Choose the server that you want to monitor. The default is to monitor disks on the server on which SiteScope is installed. Click the **choose server** link to monitors disks on another server.

Disk:

      Choose the disk drive that you want to monitor from the pop−up list.

Update every:

      Enter how frequently the monitor should check this drive. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: (Optional)

      Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning condition thresholds. If you choose not to set them, SiteScope uses pre−set defaults if available. If a default is not available, SiteScope cannot utilize the condition.

Disable

      Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Verify Error

      Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

      This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

      By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read the instructions on Schedules.

Monitor Description (Optional)

      Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

      Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order (Optional)

      By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if:

Set the Error threshold for this monitor. By default SiteScope reports an error condition if your disk becomes more than 98% full. If you want to change the error threshold, choose **percent full** and = from the pull−down menus and then type the new threshold in the text entry box. The value you enter must be a whole number.

For example, if you want SiteScope to report an error condition if your disk becomes 96% full, you need to choose **percent full** and = from the pull−down menus and then enter "96" in the comparison value text entry box.

Warning if:

Set the warning threshold for this monitor. By default SiteScope reports a warning condition if your disk becomes more than 95% full, but less than the error threshold. If you would like to change the warning threshold, choose **percent full >=** from the pull−down menu and type the new threshold in the text entry box. You must enter a whole number.

For example, if you want to change the warning threshold to 90%, choose **percent full >=** from the pull−down menu and then enter 90 in the text entry box.

Good if:

If you'd like, you can set conditions that must be met in order for SiteScope to return an OK status. If you don't set this, SiteScope will assume that the monitor should return an OK status unless either the Error or Warning thresholds are reached.

The symbols in the comparison value pop−up are the same as those for Error if.

DNS Monitor

 The SiteScope DNS Monitor checks a Domain Name Server via the network. It verifies that the DNS server is accepting requests, and also verifies that the address for a specific domain name can be found.

Each time the DNS Monitor runs, it returns a status and writes it in the monitoring log file. It also writes the total time it takes to receive the designated document in the log file.

Usage Guidelines

Why should I use this monitor?

If your DNS server is not working properly, you won't be able to get out on the network and people trying to reach your server won't be able to find it. Therefore, it's important that you monitor your DNS server(s) to ensure that they are working properly.

What should I monitor?

Most companies have both a primary and a secondary DNS server. If your company employs a firewall, these servers may sit outside the firewall with another DNS server located inside the firewall. This internal DNS server provides domain name service for internal machines. It's important to monitor all of these servers to ensure that each is functioning properly.

How should I schedule my monitors?

If your DNS servers fail, people will start complaining that "everything's broken", so you should monitor them often. Let's assume that you have both a primary and secondary DNS server outside your firewall and an internal DNS server inside your firewall. Your internal server is critical, so you should monitor that one every 2 – 5 minutes. That's also a good interval for your primary DNS server that sits outside of your firewall. You can monitor the secondary DNS server less often. Every 10 or 15 minutes should be fine.

Status

The status is logged as either good, warning, or error. A warning status or error status is returned if the current value of the monitor is a condition that you have defined as other than OK. If you would like for SiteScope to send a notification if a warning or an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail, pager, or SNMP trap. An alert can also be used to have SiteScope trigger the execution of an automatic recovery script when a problem is detected.

If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the DNS Monitor Form

To display the DNS Monitor Form, either click the name of an existing DNS Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add DNS Monitor**" link.

Complete the fields on the DNS Monitor form as follows. When all the fields are complete, click the "**Add** Monitor" button.

Server Address:

 Enter the IP address of the DNS server that you want to monitor (for example, 206.168.191.1).

Host Name:

 Enter the host name to lookup (for example, demo.freshtech.com).

Update every:

 Enter how frequently the monitor should check the DNS server. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: (Optional)

 Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use preset defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

 Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Host address: (Optional)

 Optionally, the address returned by the DNS server can be verified. Enter the expected IP address for the domain name.

Verify Error

 Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

 This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

 By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to

create or edit a monitor schedule. For information about creating schedules, <u>read these instructions</u>.

Monitor Description *(Optional)*
> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*
> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order *(Optional)*
> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if:
> Set the conditions under which the DNS monitor should report an error status. To set the error threshold, choose **milliseconds >=** from the pull−down menu and then, in the text entry box, enter the lowest value which should trigger a error condition . The value entered must be a whole number.

Warning if
> Set the conditions under which the DNS monitor should report a warning status. To set the warning threshold, choose **milliseconds >=** from the pull−down menu and then, in the text entry box, enter the lowest value which should trigger a warning condition . The value entered must be a whole number.

Good if
> By default, this monitor returns a status of "good" if the monitor received a status code of 200. You can change it to return a good value based upon round−trip time.

🐸 eBusiness Transaction Chain Monitor

The SiteScope eBusiness Transaction Chain Monitor enables you to verify the multiple tasks that make up an online transaction are completed properly, ensuring end−to−end transaction success. This may include successful navigation through a series of URLs, transmission of an e−mail confirming the transaction, and logging the information into a database file. This monitor runs a sequence of other SiteScope monitors, checking that each monitor returns a status of OK. If any monitor in the transaction sequence fails, the eBusiness Transaction Chain Monitor reports an Error status.

Each time the eBusiness Transaction Chain Monitor runs, it returns a status based upon the the number and percentage of items in the specified monitors and/or groups currently reporting an error, warning, or OK status. It writes the percentages reported in the monitoring log file.

Usage Guidelines

Why should I use this monitor?

Use this monitor to verify that an end−to−end transaction and associated processes complete properly. For example, you could use this monitor to verify that the following steps, each of which is a step in a single transaction, execute properly:

- Place an order on a web site (URL Transaction monitor)
- Check that the order status was updated (URL Transaction monitor)
- Check that a confirmation email was received (Mail monitor)
- Check that the order was added to the order database (Database monitor)
- Check that the order was transferred to a legacy system (Script monitor or Custom monitor)

Using this example, you would first create the URL Transaction monitor, Mail monitor, Database monitor, and applicable Script monitor needed to verify each step of the chain. Then you would create an eBusiness Transaction Chain Monitor and select each of these SiteScope monitors as a group in the order they should be executed. If any one monitor indicates a failure, the eBusiness Transaction Chain Monitor will report an error.

How do I edit the order of the monitors in the chain?

By default, Add eBusiness Transaction Chain Monitor page will list monitor groups and individual monitors in the order they are created. To have the eBusiness Transaction Chain Monitor invoke the chain of monitors in the proper order, they will need to appear in the proper order in the selection menu on the Add eBusiness Transaction Chain Monitor page. You can do this by creating the individual monitors in the order which they should be executed (see Setup section below). You can also use the "Reorder the monitors in this group" option on the Monitor Group page

What should I monitor?

You should monitor any multi−step transaction process that causes other updates or actions in your systems. Monitor each of the actions taken to ensure that updates were performed properly and that actions were

carried out successfully.

How should I schedule my monitors?

The general rule of thumb is to run these monitors every 10 minutes or so. If you have a very critical transaction process, you may want to run them more often.

Status

The status for the monitor is logged as good or error. By default, the eBusiness Transaction Chain Monitor will be in error if any of the monitors and/or groups it is monitoring are in error.

If you would like for SiteScope to respond if an error status is returned, create an [alert]. An alert contains instructions that tell SiteScope to either notify you via e−mail, pager or SNMP trap, or execute an automatic recovery script when a problem is detected.

Setting up Monitors for the eBusiness Transaction Chain

Before you can add an eBusiness Transaction Chain Monitor, you will need to define other SiteScope monitors that will report on the actions and results of the steps in the transaction chain. Using the example from the usage guidelines above, you might create one or more [URL Transaction monitors] for verifying the sequence of online actions, a [mail monitor] to confirm that an e−mail acknowledgement is sent, and a [database monitor] to see that information entered online is logged into a database. For ease of administration, use the following steps to set up a transaction chain monitor:

1. Create a new [group] that will contain all the individual monitors to be included in the transaction chain
2. Open the new monitor group
3. Add the first individual monitor type needed to for the transaction (e.g URL Transaction Monitor).

   Note: Monitors should be added in the order that they should be executed in the chain. For example, create a [URL Transaction Monitor] which will trigger an e−mail event **before** you create the [Mail Monitor] to check for the e−mail. See the note on [reordering] monitors above.

4. If necessary, set up the values to be passed from one monitor to another in the chain. For information about how this works see the section on [passing variables] between monitors below.
5. Add the other monitors for this transaction chain in the appropriate order of execution into the group

   Note: The individual monitors executed by the eBusiness Transaction Chain Monitor should generally not be run separately by SiteScope. You should make sure that the "Update Every" setting for each of these monitors is blank.

6. Return to the SiteScope main panel
7. Create a new group or open an existing group that will contain the e−business transaction chain monitor you are creating
8. Select the "Add a new monitor to the group" option and select the eBusiness Transaction Chain Monitor
9. Complete the [eBusiness Transaction Chain Monitor Form] as described below

Create monitor group for transaction step monitors.

Create indiv
monitors fo
transaction

Monitors in the "e-Commerce Steps" Group

Gauge	Status	Name	More	Edit	Refresh	Updated	Del
	0.58 sec, 5 steps, 29K total	URL Transaction: www.ebusiness-domain.com	Tools	Edit	Refresh	1:2 am 6/27/00	X
	successfully looped in 1.0 sec,	e-mail send to test account	Tools	Edit	Refresh	6:31 am 6/27/00	X
	0.12 sec	Check E-business Order DB	Tools	Edit	Refresh	5:26 am 6/27/00	X
	exist 0, 0.4 sec	Test for update on legacy system		Edit	Refresh	9:35 am 6/27/00	X

Create an eBusiness Transaction Chain Monitor to include the individual transaction steps

Add eBusiness Transaction Chain Monitor

Items
```
Monitor Group: Web Page URL Transaction
Monitor Group: URL List Monitor
e-Commerce Steps: URL Transaction: www.ebusinessdom
e-Commerce Steps: e-mail send to test account
e-Commerce Steps: Check E-business Order DB
e-Commerce Steps: Test for update on legacy system
Example Group: Monitor Group
Network: Local home page
```
select one or more groups and/or monitors that will be checked

Update every `10` `minutes`
amount of time between checks of a monitor

Title _____
title that should appear in the Monitor table (optional)

`Add` Monitor

Complete the eBusiness Transaction Chain Monitor

Monitors in the "Transaction Chain" Group

Gauge	Status	Name	More	Edit	Refresh	Updated	Del
	100% OK, 4 monitors run, all OK	Main e-Business Trans Chain		Edit	Refresh	1:17 pm 3/27/04	X

Get more information on a monitor by clicking on the name of the monitor.

Status

Completing the eBusiness Transaction Chain Monitor Form

To display the eBusiness Transaction Chain Monitor Form, click the **Add** a new Monitor to this Group link on a group's monitor detail page and choose the **Add eBusiness Transaction Chain Monitor** link. To edit an existing eBusiness Transaction Chain Monitor click the name of monitor in a monitor detail table

Complete the fields on the eBusiness Transaction Chain Monitor form as follows. When all the fields are complete, click the **Add** Monitor button to complete the action.

Items

Using the control key or equivalent, click on the group or set of monitors that will make up the eBusiness Transaction Chain Monitor. As noted in the set up section above, the monitors are run in the order that they are listed in their group.

Update every:

Enter how frequently the monitor should check the status readings of the selected monitors and/or groups. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: (Optional)

Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use preset defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

When Error:

Choose how you want errors during the transaction to be handled.
- ◊ Continue, run the remaining monitors – runs every monitor no matter what the status of a given monitor is
- ◊ Stop, do not run any of the remaining monitors – stops running the list of monitors immediately, if a monitor returns an error
- ◊ Run the last monitor – run the last monitor in the list, which is useful if a monitor is used for closing or logging off of a session opened in a previous monitor.

Single Session:

Check this box if you want any URL monitors to use the same network connection and the same set of cookies. This is useful if you are using the eBusiness Transaction Chain Monitor to group several URL Transaction monitors and don't want to include the login steps as part of each transaction

Monitor Delay:

If Run Monitors is checked, this is the number of seconds to wait between running each monitor. This setting is useful if you need to wait for processing to occur on your systems before running the next monitor.

Verify Error

    Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

    This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

    By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these [instructions](#).

Monitor Description (Optional)

    Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

    Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order (Optional)

    By default, new monitors are listed last on the Monitor Detail page. You may use this pull–down menu to choose a different placement for this monitor.

Error if:

    Set the conditions under which this Monitor should report an error status. Enter a comparison value and use the comparison operator pop–up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if

    Set the conditions under which this Monitor should report a warning status. Enter a comparison value and use the comparison operator pop–up to specify an warning threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Good if

    Set the conditions under which this Monitor should report a good status.

Passing Values From One Monitor to Another

You can pass values between individual monitors in an eBusiness Transaction Chain Monitor by using an extension of SiteScope's substitution syntax.

For example, to pass the matching value from a URL Monitor to the Receive Content Match field of a Mail Monitor, you would enter:

```
Receive Content Match: s|$value-step2.matchValue$|
```

where the "s| |" indicates that this should be treated as a substitution, "$value−xxxx$" means to retrieve the value from another monitor, "step2" means that the value should be retrieved from the second step of eBusiness Transaction Chain Monitor, and "matchValue" means get the matching value from that monitor

A complete list of terms like "matchValue" can be found in Template Properties.

File Monitor

The SiteScope File Monitor reads a specified file. In addition to checking the size and age of a file, the File Monitor can help you verify that the contents of files, either by matching the contents for a piece of text, or by checking to see if the contents of the file ever changes

Each time the File Monitor runs, it returns a reading and a status and writes them in the monitoring log file. It also writes the file size and age into the log file.

Usage Guidelines

Why should I use this monitor?

The File Monitor is useful for watching files that can grow too large and eat up disk space, such as log files. You can set up your File Monitors to watch for file size, setting a threshold at which you should be notified. You can even write scripts for SiteScope to execute that will automatically roll log files when they reach a certain size.

What should I monitor?

You can create File Monitors for any files that you want to monitor for size, age, or content. As mentioned before, you can set thresholds in SiteScope, telling it when to notify you of a problem. Log files are very good candidates for monitoring because they're prone to suddenly growing in size and crashing machines. Other files that you may want to watch are web pages that have important content that doesn't change often. SiteScope can alert you to unauthorized content changes so that you can correct them immediately.

How should I schedule my monitors?

The frequency with which you run File Monitors is strictly up to you. We suggest that you run them as often as every 10 minutes, but you can run them more often if you prefer.

Reading and Status

The reading is the current value of the monitor. Possible values are:

- OK
- content match error
- file not found
- contents changed

An error status is returned if the current value of the monitor is anything other than OK. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the File Monitor Form

To display the File Monitor Form, either click the name of an existing File Monitor in a monitor table, or click the **Add** a new Monitor to this Group link on a group's detail page and choose the **Add File Monitor** link.

Complete the fields on the File Monitor form as follows. When all the fields are complete, click the *Add* Monitor button.

File:
> Enter the name of the file to be monitored. For example, /pub/docs/mydoc.txt.

Update every:
> Enter how frequently the monitor should check this file. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: *(Optional)*
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un–check the box.

Match Content
> Enter a string of text to check for in the returned page. If the text is not contained in the page, the monitor will display "no match on content". The search is case sensitive. Remember that HTML tags are part of a text document, so include the HTML tags if they are part of the text you are searching for (for example, "<B> Hello</B> World"). This works for XML pages as well. You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an "i" after the trailing slash indicating case–insensitive matching. (for example, /href=Doc\d+\.html/ or /href=doc\d+\.html/i). If you want a particular piece of text to be saved and displayed as part of the status, use parentheses in a Perl regular expression. For example /Temperature: (\d+). This would return the temperature as it appears on the page and this could be used when setting an Error if or Warning if threshold.

Check for Content Changes
> Unless this is set to "no content checking" (the default) SiteScope will record a checksum of the document the first time the monitor runs and then does a checksum comparison each subsequent time it runs. If the checksum changes, the monitor will have a status of "content changed error" and go into error. If you want to check for content changes, you'll usually want to use "compare to saved contents".
>
> The options for this setting are:

◊ **no content checking** – (default) SiteScope doesn't check for content changes
◊ **compare to last contents** – The new checksum will be recorded as the default after the initial error "content changed error" occurs, so the monitor will return to OK until the checksum changes again
◊ **compare to saved contents** – The checksum is a snapshot of a given page (retrieved either during the initial or a specific run of the monitor). If the contents change, the monitor will get a "content changed error" and will stay in error until the contents return to the original contents, or the snapshot is update by resetting the saved contents
◊ **reset saved contents** – Takes a new snapshot of the page and saves the resulting checksum on the first monitor run after this option is chosen. After taking the snapshot, the monitor will revert to "compare to saved contents" mode.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the *Edit* schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

Enter additional information about this monitor that will make it easier to identify. The description will appear on the Monitor Detail page.

Report Description (Optional)

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop–up for a monitor.

List Order (Optional)

By default, new monitors are listed last on the Monitor Detail page. You may use this pull–down menu to choose a different placement for this monitor.

Error if

By default, SiteScope generates an error if the returned status indicates anything other than a successful retrieval of the file. You may choose to have SiteScope generate an error based on the size or age of the file. Use the comparison value pop–up to specify an error threshold.

The possible comparison values are:

♦ status – status values: OK (200), file not found (404), Content Changed Error (–995), Content Match Error (–999)
♦ file age – the age of the file in minutes.
♦ size – the size of the file in bytes.
♦ content match – When saving a match value, you can use this option to compare against the value saved in the regular expression. Make sure to put string values in single quotes.

Warning if

By default, SiteScope does not generate warnings for File monitors. You may choose to generate a warning based on the size or age. Complete this section just as you would the Error if section, described above.

Good if

By default this monitor returns a *good* reading if the status returned by the monitor is 200. You can change this default to be based upon file age or size. Choose one of these choices from the pop–up menu and then set the thresholds. The symbols in the comparison value pop–up are the same as those for Error if.

FTP Monitor

The SiteScope FTP Monitor attempts to log into an FTP server and retrieve a specified file. A successful file retrieval assures you that your FTP server is functioning properly.

In addition to retrieving specific files, the FTP Monitor can help you verify that the contents of files, either by matching the contents for a piece of text, or by checking to see if the contents of the file ever changes

Each time the FTP Monitor runs, it returns a [reading and a status](#) writes them in the monitoring log file. It also writes the total time it takes to receive the designated file in the log file.

Usage Guidelines

Why should I use this monitor?

If you provide FTP access to files, it's important to make sure that your FTP server is working properly. There's nothing more frustrating for a customer than to finally find the file they want, but then be unable to get it. The FTP monitor insures that you're the first to know if there's a problem.

What should I monitor?

While you may have many files available for FTP from your site, it's not necessary to monitor every one. You should get ample coverage by checking one or two files. Usually people choose to check on one small file and one large file.

If you have very important files available, you may also want to monitor them occasionally to verify that their contents and size don't change. If the file does change, you can create a SiteScope alert that will run a script to automatically replace the changed file with a back–up file.

How should I schedule my monitors?

A common strategy is to monitor a small file every 10 minutes or so just to verify that the server is functioning. Then schedule a separate monitor to FTP a large file once or twice a day. This allows you test the ability to FTP a large file without negatively impacting your machine's performance. You can schedule additional monitors that watch files for content and size changes to run every 15 minutes to half hour. Choose an interval that makes you comfortable.

Status

The reading is the current value of the monitor. Possible values are:

- OK
- unknown host name
- unable to reach server
- unable to connect to server
- timed out reading

- content match error
- login failed
- file not found
- contents changed

The status is logged as either good or error. An error status is returned if the current value of the monitor is anything other than OK. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the FTP Monitor Form

To display the FTP Monitor Form, either click the name of an existing FTP Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add FTP Monitor**" link.

Complete the fields on the FTP Monitor form as follows. When all the fields are complete, click the "**Add** Monitor" button.

FTP Server
> Enter the IP address or the name of the FTP server that you want to monitor. For example, you could enter either 206.168.191.22 or ftp.freshtech.com.

File
> Enter the file name to retrieve in this field, for example /pub/docs/mydoc.txt.

User Name
> Enter the name used to log into the FTP server in this field.

Password
> Enter the password used to log into the FTP server in this field.

Update every
> Enter how frequently the monitor should check this FTP server. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Timeout

> The number of seconds that the FTP monitor should wait for a file to complete downloading before timing−out. Once this time period passes, the FTP monitor will log an error and report an error status.

FTP Proxy

> You may instruct SiteScope to run the FTP through a proxy server. Generally, if you use an FTP proxy you will have it set up in your browser. Enter that same information here. For example, **proxy.freshtech.com:8080**. Remember to include the port.

Passive Mode

> Check this box if you want SiteScope to use FTP passive mode. This mode usually allows FTP to work through firewalls.

Match Content

> Enter a string of text to check for in the returned file. If the text is not contained in the file, the monitor will display "no match on content". The search is case sensitive. You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an "i" after the trailing slash indicating case−insensitive matching. (for example, "/Size \d\d/" or "/size \d\d/i").

Check for Content Changes

> Unless this is set to "no content checking" (the default) SiteScope will record a checksum of the document the first time the monitor runs and then does a checksum comparison each subsequent time it runs. If the checksum changes, the monitor will have a status of "content changed error" and go into error. If you want to check for content changes, you'll usually want to use "compare to saved contents".
>
> The options for this setting are:
>
> > ◊ **no content checking** – (default) SiteScope doesn't check for content changes
> > ◊ **compare to last contents** – The new checksum will be recorded as the default after the initial error "content changed error" occurs, so the monitor will return to OK until the checksum changes again
> > ◊ **compare to saved contents** – The checksum is a snapshot of a given page (retrieved either during the initial or a specific run of the monitor). If the contents change, the monitor will get a "content changed error" and will stay in error until the contents return to the original contents, or the snapshot is update by resetting the saved contents
> > ◊ **reset saved contents** – Takes a new snapshot of the page and saves the resulting checksum on the first monitor run after this option is chosen. After taking the snapshot, the monitor will revert to "compare to saved contents" mode.

Proxy Server User Name

> If the proxy server requires a name and password to access the URL, enter the name here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Proxy Server Password

> If the proxy server requires a name and password to access the URL, enter the password here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order (Optional)

> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

> By default, SiteScope generates an error if the returned status indicates anything other than a successful retrieval of the file. You may choose to have SiteScope generate an error based on the round trip retrieval time. Enter the shortest retrieval time (in milliseconds) that should generate an error. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if

> By default, SiteScope does not generate warnings for FTP monitors. You may choose to generate a warning based on round trip retrieval time. Enter the shortest retrieval time (in milliseconds) that should generate a warning. The symbols in the comparison value pop−up are the same as those for Error if.

Good if

> By default this monitor returns a good reading if the monitor returns a status of 200. You can change this to be tied to either file size or round−trip time. Choose the option you prefer from the pop−up menu and then set the threshold using the comparison value pop−up. The symbols in the comparison value pop−up are the same as those for Error if.

MS IIS Server Monitor

The SiteScope IIS Server Monitor allows you to monitor the availability of an MS IIS server on Windows NT systems. The error and warning thresholds for the monitor can be set to one of several IIS server performance statistics.

Usage Guidelines

Why should I use this monitor?

The information gathered by the IIS Server Monitor gives you the ability to see how busy your server is. This information allows you to plan hardware upgrades and configuration changes that will improve your visitors' experience.

What should I monitor?

It's most effective if you create a separate IIS Server Monitor for each IIS web server you're running.

How should I schedule my monitors?

The default spacing that we recommend for the IIS Server Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the IIS Server Monitor Form

To display the IIS Server Monitor Form, either click the name of an existing IIS Server Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Web Server**" link.

Complete the fields on the IIS Server Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

Server
> Choose the server you want to monitor. Use the choose server link to view a list of servers or to enter a path name. On Unix servers, enter the full pathname of the web server log file.

Update every
> Enter how frequently the monitor should read the server statistics. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable
>Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Verify Error
>Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)
>This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*
>By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, [read these instructions](#).

Monitor Description *(Optional)*
>Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*
>Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order *(Optional)*
>By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if
>Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon hits per minute or bytes per minute. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.
>
>For example, if you want SiteScope to report an error if your bytes sent per second reach 10,000 or higher, you would choose **bytes sent per second** from the pop−up menu, select >= from the comparison value pop−up menu, and then type 10000 in the text entry box.
>
>**Note:** Do not enter commas in the text entry field.

Warning if

Use this field to set a warning threshold for this monitor. The warning threshold can be based on any of the choices displayed in the drop−down menu such as total bytes per second or bytes sent per second. Set this value exactly as you would the Error threshold in the **Error if** field.

For example, If you want SiteScope to report a warning condition if your bytes sent per second reach 50,000 or higher, you would choose **bytes/min** from the pop−up menu, select **>=** from the comparison value pop−up, and then type 50000 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on either hits per minute or bytes per minute. Complete this field exactly as you would the **Error if** and **Warning if** fields.

LDAP Monitor

The SiteScope LDAP Monitor verifies that a Lightweight Directory Access Protocol (LDAP) server is working correctly by connecting to it and performing a "simple" authentication. Optionally, it can check the result for expected content.

Each time the LDAP Monitor runs, it returns a status based upon the time it takes to perform the connection.

Usage Guidelines

Why should I use this monitor?

If your LDAP server is not working properly, the user won't be able to access and update information in the directory. Most importantly, the user won't be able to perform any authentication using the LDAP server. The other reason to monitor the LDAP server is so you can find performance bottlenecks —— if your End User and LDAP times are both increasing at about the same amount, the LDAP server is probably the bottleneck. If not, the bottleneck is probably somewhere else.

What should I monitor?

The most important thing to monitor is the authentication of a specific user on the LDAP server. If more than one LDAP server is used, you'll want to monitor each of the servers.

You may also choose to monitor round trip time of the authentication process.

How should I schedule my monitors?

You may want to monitor your most critical and most common queries as frequently as every 10–15 minutes.

Status

The status is logged as either OK, warning, or error. An error status or warning status is returned if the current value of the monitor is anything other than OK. Errors occur if SiteScope is unable to connect, receives an unknown hostname error, or the IP address doesn't match the hostname.

If you would like for SiteScope to respond if an error or warning status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e–mail,pager, or SNMP trap, or execute an automatic recovery script when a problem is detected.

Completing the LDAP Monitor Form

To display the LDAP Monitor Form, either click the name of an existing LDAP Monitor in a monitor table, or click the **Add** a new Monitor to this Group link on a group's detail page and choose the **Add LDAP Monitor** link.

Complete the fields on the LDAP Monitor form as follows. When all the fields are complete, click the **Add** Monitor button.

LDAP Service Provider
> Enter the constant that holds the name of the environment property for specifying configuration information for the service provider to use. The value of the property should contain a URL string (e.g. "ldap://somehost:389"). This property may be specified in the environment, an applet parameter, a system property, or a resource file. If it is not specified in any of these sources, the default configuration is determined by the service provider.

LDAP Security Principal
> Enter the constant that holds the name of the environment property for specifying the identity of the principal for authenticating the caller to the service. The format of the principal depends on the authentication scheme. If this property is unspecified, the behaviour is determined by the service provider. This should be of the form (uid=testuser,ou=TEST,o=freshtech.com)

LDAP Security Credential
> Enter the constant that holds the name of the environment property for specifying the credentials of the principal for authenticating the caller to the service. The value of the property depends on the authentication scheme. For example, it could be a hashed password, clear–text password, key, certificate, and so on. If this property is unspecified, the behavior is determined by the service provider.

Update every:
> Enter how frequently the monitor should check the LDAP server. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use preset defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un–check the box.

Match Content:
> Enter a string of text to check for in the query result. If the text is not contained in the result, the monitor will display `no match on content`. The search is case sensitive. This works for XML tags as well. You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an `i` after the trailing slash indicating case–insensitive matching. (for example, `/href=Doc\d+\.html/` or `/href=doc\d+\.html/i`). If you want a particular piece of text to be saved and displayed as part of the status, use parentheses in a Perl regular expression. For example `/Temperature: (\d+)`. This would return the temperature as it appears on the page and this could be used when setting an Error if or Warning if threshold.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order (Optional)

> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if:

> Set the conditions under which the LDAP monitor should report an error status. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if

> Set the conditions under which the LDAP monitor should report a warning status. Enter a comparison value and the comparison operator as for the Error if section above.

Good if

> Set the conditions under which the LDAP monitor should report a good (OK) status. Enter a comparison value and the comparison operator as for the Error if section above.

Link Check Monitor

The SiteScope Link Check Monitor checks the internal and external links on a web page to insure that they can be reached. SiteScope begins checking links from a URL that you specify, verifies that linked graphics can be found, and follows HREF links to the referenced URL's. The monitor can be configured to check all of the links on your site or limited to a specified number of "hops".

In addition to checking the links, a Link Report is created. This report can be viewed by choosing the **Summary** link in the **More** column. The report displays all the links checked, the status of each link, size, estimated download time via a 28.8 connection, and the page containing the link. You may reorder the entries in this table by clicking on the column heading that you want the entries to be sorted by. For example, if you want the entries to be sorted by retrieval time, click the **Time** column heading.

Each time the Link Check Monitor runs, it returns a status and writes it in the monitoring log file. It also writes the total number of broken links, the total number of links, the total number of graphics, and the average time for retrieving a page.

Usage Guidelines

Why should I use this monitor?

There's nothing more frustrating for your web site visitors than trying to follow a broken link. Ensuring that your site is free of broken links is something that everyone knows they should do, but it's often the thing that gets moved to the bottom of the to–do list. This monitor can be set to check every link on your site, internal and external, every day, letting you know immediately which links have a problem.

What should I monitor?

You should monitor the web site for the availability of key content. This includes checking that image files and linked HTML files are accessible as referenced within the web pages. Starting with your home page, the Link Check Monitor will branch out and check every link available on your entire site by default. If you only want it to check a portion of your site, specify the URL that links into the targetted area. You can limit the number of linked "hops" the monitor will follow in the Advanced Options section. Even if you're not the person responsible for web content, you can set the monitor to run once a day and have the alerts e–mailed directly to your web content developer.

How should I schedule my monitors?

You probably only need to run the link monitor once a day to check for external links that have been moved or no longer work and internal links that have been changed. You can also run it on demand any time you do a major update of your web site.

Status

The status is logged as either good, warning, or error. An error status is returned if there are any broken links. Otherwise, the status is OK. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Link Check Monitor Form

To display the Link Check Monitor Form, either click the name of an existing Link Check Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Link Check Monitor**" link.

Complete the fields on the Link Check Monitor form as follows. When all the fields are complete, click the "**Add** Monitor" button.

URL
> Enter the URL that will be the starting point for checking links (for example, http://demo.freshtech.com). The link monitor will retrieve the page for this URL. Next, it will read the URLs for any links on the page. It will continue until it has checked all of the links on the site. Links to other servers will be checked but it will not continue and check all the links of those other servers.

Update every
> Enter how frequently the monitor should check this URL. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Pause
> The delay, in milliseconds, between each link check. Larger numbers will lengthen the total time to check links but will decrease the load on the server.

Maximum Links
> The maximum number of links this monitors will check. When the maximum is reached the monitor will stop running. Increase this number if you have a large site and want to check every page on the

site.

Maximum Hops

The maximum number of internal links that SiteScope should follow from the starting URL. For example, if you set the number of hops to three, SiteScope will check all internal pages that can be reached within 3 clicks from the starting URL. Limiting this number will reduce the number of URLs that SiteScope follows, shortening the time to complete the report. SiteScope will not follow any links on external pages.

Timeout

The number of seconds that the URL monitor should wait for a page to begin downloading before timing−out. Once this time period passes, the URL monitor will log an error and report an error status.

HTTP Proxy

Optionally, a proxy server can be used to access the URL. Enter the domain name and port of an HTTP Proxy Server.

Authorization User Name

If the URL specified requires a user name for access, enter the name in this field.

Authorization Password

If the URL specified requires a password for access, enter the password in this field.

Proxy Server User Name

If the proxy server requires a name to access the URL, enter the name here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Proxy Server Password

If the proxy server requires a password to access the URL, enter the password here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Post Data

Enter any form values required for the first page being checked. This is useful if you need to log in via an HTML form to reach the rest of the site that you're checking.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions on Schedules.

Monitor Description (Optional)

      Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

      Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order (Optional)

      By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

      By default, SiteScope generates an error if there are any broken links. You may choose to generate an error based on broken links, total pages, total graphics, or average retrieval time. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if

      By default, SiteScope does not generate warnings for Link Check monitors. You may choose to generate a warning based on broken links, total pages, total graphics, or average retrieval time. The symbols in the comparison value pop−up are the same as for the Error if condition.

Good if

      By default, this monitor returns a good reading if all links can be retrieved. You can change this to be dependent upon total pages, total graphics, or average retrieval time. Choose the option you want from the pop−up menu and then set the desired threshold. The symbols in the comparison value pop−up are the same as for the Error if condition.

Link Check Summary Report

The Link Check Summary Report page provides details of the links reported by a particular instance of the Link Check Monitor. By default, only links that are broken are displayed in the report table.

The following is an example of a Link Check Summary Report table for a Link Check Monitor set to monitor part of the Freshwater Software web site. A summary of the results returned by the monitor appears in parentheses under the page title. This summary lists the total number of links followed, the total number of links that are broken, when the monitor was last run, and the current display state of the report table. Clicking on the link "show all links" will refresh the report table to show all of the links that were checked by the monitor.

Link Check Summary Report

(292 links, 1 errors, checked at 1:50 pm 3/16/00, showing error links, show all links)

Status	Size (K bytes)	Time (secs)	Est. 28.8 time (secs)	Type	URL	Source P
not found	0.94	0.34	0.31	text/html	http://www.freshwater.com/missing.htm	http://www.freshwater.com

This example shows that a total of 292 links were followed and the target referenced by one link was not found. In this case the link was to a URL at a different web site which was either moved or deleted.

The report table contains the following information. The underlined links in the report table in SiteScope provide sorting functions or links to the referenced URL's.

Status

      This is the status returned by the monitor for the referenced links found in the chain of URL's being checked. This includes:
- ◊ unknown host name
- ◊ unable to reach server
- ◊ unable to connect to server
- ◊ timed out reading
- ◊ not found

Size (K bytes)

      This is size of the response given by the server to the Monitor's request for the referenced URL.

Time (secs)

      This is the time it took to retrieve the referenced URL or the error message from the applicable server.

Est. 28.8 time (secs)

      This is an estimated retrieval time for a connection through a 28.8 kps modem.

Type

      This represents the MIME type of the response from the server.

URL

This is the complete URL that the monitor attempted to retrieve. Clicking on this link will display the content of the URL or the applicable response from the server.

Source Page

This is the complete URL of the page which contains the link listed in the URL column. Clicking on this link will display the content of the URL.

External

This column indicates whether the link in the URL column of the row is a URL found on a different server than the server where the Source Page is found.

Count

This column indicates how many times the link to the target listed in the URL column appears within the scope of the currently defined link check.

The links in the header row of the table allow you to sort the data in the table according to the criteria shown above. Selecting a sort criteria will refresh the table and display the links that are in error in the sort order that was selected (e.g. sorted by count or by links that are external).

🐸 Log File Monitor

The Log File Monitor watches for specific entries added to a log file by looking for entries containing a text phrase or a regular expression.

The "Run Alerts" setting control how alerts are triggered by this monitor. If "for each log entry matched" is chosen, then the monitor triggers alerts for every matching log entry found. In this way, the monitor acts much like an event forwarder. If "once, after all log entries have been checked" is chosen, then the monitor counts up the number of matches and triggers alerts based on the "Error If" and "Warning If" thresholds defined for the monitor.

Each time the Log File Monitor runs, it examines only those log entries added since the last time it ran.

Usage Guidelines

Why should I use this monitor?

The Log File Monitor is useful for automatically scanning log files for error information that you'd want to know about. With SiteScope doing this for you at set intervals, you can eliminate the need to scan the logs manually. In addition, you can be notified of warning conditions that you might have otherwise been unaware of until something more serious happened. Each time that it runs this monitor, SiteScope starts from the point in the file where it stopped reading last time it ran. This insures that you're only notified of new entries and speeds the rate at which the monitor runs.

What should I monitor?

You can have SiteScope read any log file you want. The log files don't have to be in any particular format –– SiteScope just reads them a line at a time.

How should I schedule my monitors?

You can schedule your Log File Monitors to run as often as you like, but every 10 minutes is reasonable in most cases.

Completing the Log File Monitor Form

To display the Log File Monitor Form, either click the name of an existing Log File Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Log File Monitor**" link.

Complete the fields on the Log File Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

Server
> Select the server where the log files you want to monitor are located. Use the choose server link to access a list of remote Unix servers that have been specified to SiteScope.

Log File Pathname:

Enter the pathname to log file being monitored. You can access remote Win NT servers by including the UNC name as part of the pathname.

Run Alert:

Choose the method for running alerts. If "for each event matched" is chosen, then the monitor triggers alerts for every matching entry found.

NOTE: When the Log File Monitor is run in the "for each event matched" alert method, the monitor will never report a status of error or warning, regardless of the results of the content match or even if the target log file is not found.

If the "once, after all events have been checked" method is chosen, then the monitor counts up the number of matches and triggers alerts based on the "Error If" and "Warning If" thresholds defined for the monitor in the Advanced Options section.

Content Match

Enter the text to look for in log entries. Regular expressions may also be used in this field.

Update every:

Enter how frequently the monitor should read the application log file. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: *(Optional)*

Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Rules File Pathname:

Optional: In rare cases, it may be necessary to create a custom rules file to specify the log entries to match and the alerts to send. An example rules file is located in ~SiteScope/Classes/CustomMonitor/test.rules. Make a copy of this file and name it whatever you like. There is no required naming convention. Open the file with the editor of your choice, and using the comments as a guideline, edit the file to meet your needs. When you're finished, type the full path name to your rules file in this field.

Disable

Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, [read these instructions](#).

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop–up for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this pull–down menu to choose a different placement for this monitor.

Error if:

Set an error threshold for this monitor. The thresholds are used when the "Run Alerts: once, ..." option is chosen. By default, an error is signalled whenever there is one or more matching events. Select a comparison value from the list, and use the comparison operator pop–up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

The possible comparison values are:

- ♦ matches – the number of matches found.
- ♦ lines – the number of lines processed.
- ♦ lines/min – the number of lines per minute processed during this monitoring period.
- ♦ matches/min – the number of matches per minute that occurred during this monitoring period.

Warning if

Set the Warning threshold for this monitor. The default is to generate a warning if SiteScope is unable to read the log file. The symbols in the comparison value pop–up menu are the same as those for Error if.

Good if

The default is to mark the monitor as good if the log file can be read and there are no matches.

Mail Monitor

The SiteScope Mail Monitor checks a Mail Server via the network. It verifies that the mail server is accepting requests, and also verifies that a message can be sent and retrieved. It does this by sending a standard mail message using SMTP and then retrieving that same message via a POP user account. Each message that SiteScope sends includes a unique key which it checks to insure that it doesn't retrieve the wrong message and return a false OK reading. If SiteScope is unable to complete the entire loop it generates an error message.

Each time the Mail Monitor runs, it returns a status and writes it in the ~SiteScope/logs/SiteScope.log file. It also writes the total time it takes to send and receive the mail message in the log file.

Usage Guidelines

Why should I use this monitor?

Most companies are heavily dependent on e−mail today, and a missed or late e−mail message can spell disaster. The problem with e−mail is that unless you're expecting a message, you won't know it's missing. The mail monitor ensures that the mail server is both accepting and delivering messages properly.

What should I monitor?

Most companies have both a primary and a secondary mail server. At companies that employ a firewall, there may even be a third, internal, mail server. Each of these servers should be monitored regularly.

How should I schedule my monitors?

It's a good idea to monitor your primary mail server at least every five minutes. The other mail servers can be monitored less often. You may find it useful to set up a special mail account to receive the test e−mail messages send by SiteScope.

Status

The status is logged as either good or error. An error status is returned if the current value of the monitor is anything other than OK.

If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Mail Monitor Form

To display the Mail Monitor Form, either click the name of an existing Mail Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Mail Monitor**" link.

Complete the fields on the Mail Monitor form as follows. When all the fields are complete, click the
"**Add** Monitor" button.

Send & Receive

> Send & receive option will allow you to send a test message to an smtp server and then receive it
> back from the POP3 or IMAP4 server to make sure the mail server is up and running. The receive
> only option allows you to check the incoming POP3 or IMAP4 mail servers for a message that was
> sent previously. This check is done by matching the content of the previously sent message.
>
> **Note:** If the **Receive Only** option is selected the Match Content field must have a value to match
> against. Also note that if the **Receive Only** option is selected, you should use this monitor for a
> dedicated mail account that is NOT being accessed by any other mail client. If another mail client
> attempts to retrieve mail messages from the account that the Mail Monitor is monitoring in **Receive
> Only** mode, the monitor and the other mail client may lock each other out of the account such that
> neither is able to retrieve the messages.

Outgoing Mail Server (SMTP)

> Enter the hostname of the SMTP mail server to which the test mail message should be sent. (for
> example, mail.freshtech.com).

POP3 or IMAP4

> The POP3 option allows you to check the POP3 mail server for a sent message. The IMAP4 option
> allows you to check the IMAP mail server for a sent message.

Incoming Mail Server

> Enter the hostname of the POP3/IMAP4 mail server that should receive the test message. This can
> be the same mail server to which the test message was sent (for example, mail.freshtech.com).

Mail Server User Name

> Enter a POP user account name (for example, support). A test email message will be sent to this
> account and the Mail monitor will login to the account and verify that the message was received. No
> other mail in the account will be touched; therefore you can use your own personal mail account or
> another existing account for this purpose.**Note:** If you use a mail reader that automatically retrieves
> and deletes messages from the server, there's a chance that the Mail Monitor will never see the mail
> message and will therefore report an error.

Mail Server Password *(Optional)*

> Enter a password, if necessary, for the test mail account.

To Address

> Enter the mail address to which the test message should be sent. This should be the address for the
> POP account that you specified in the Mail Server User Name field. For example, if you specified
> "support" as the Mail Server User Name, the To Address might be "support@freshtech.com."

Update every

> Enter how frequently the monitor should check the Mail server. The pull–down menu to the right of
> the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify
> a time increment of at least 15 seconds.

Title *(Optional)*

Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, "Untitled Mail Monitor" appears in the **Name** field.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use preset defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Match Content

Enter a string of text to match against the contents of the incoming message. If the text is not contained in the incoming message, the monitor will be in error. This is for the receiving only option.(Example: Subject:MySubject). The search is case sensitive. Remember that HTML tags are part of a text document, so include the HTML tags if they are part of the text you are searching for (for example, "< B> Hello< /B> World"). This works for XML pages as well. You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an "i" after the trailing slash indicating case−insensitive matching. (for example, "/href=Doc\d+\.html/" or "/href=doc\d+\.html/i"). If you want a particular piece of text to be saved and displayed as part of the status, use parentheses in a Perl regular expression. For example /Temperature: (\d+). This would return the temperature as it appears on the page and this could be used when setting an Error if or Warning if threshold.

Disable

Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Timeout

The number of seconds that the Mail monitor should wait for a mail message to be received before timing−out. Once this time period passes, the Mail monitor will log an error and report an error status.

POP Check Delay *(Optional)*

After SiteScope sends the test message, it immediately logs into the mail account to verify that the message has been received. If the message hasn't been received, SiteScope will automatically wait 10 seconds before it checks again. You can adjust this wait time by indicating an alternate number of seconds to wait in this field.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, [read these instructions](#).

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order (Optional)

> By default, new monitors are listed last on the Monitor Detail page. You may use this pull–down menu to choose a different placement for this monitor.

Error if

> Set the conditions under which the Mail monitor should report an error status.

> To set the error threshold, choose **round trip time** from the pull–down menu, choose a comparison operator from the next pull–down menu and then, in the text entry box, enter the lowest value which should trigger a error condition . The value entered must be a whole number.

Warning if

> Set the conditions under which the Mail monitor should report a warning status.

> To set the warning threshold, choose **round–trip time** from the pull–down menu, choose a comparison operator from the next pull–down menu and then, in the text entry box, enter the lowest value which should trigger a warning condition . The value entered must be a whole number. The symbols for the comparison operator pop–up are the same as those for Error if.

Good if

> SiteScope assumes a good reading unless the returned reading falls into the warning or error thresholds. You can change this to be based upon round–trip time. Choose round–trip time from the pop–up menu and enter the desired threshold. The symbols in the comparison operator pop–up are the same as those for Error if.

Memory Monitor

The SiteScope Memory Monitor provides an easy way for you to track how much virtual memory is currently in use on your server. Running out of memory can cause server applications to fail and excessive paging can have a drastic effect on performance.

Each time the Memory Monitor runs, it returns a status message and writes it in the monitoring log file.

Usage Guidelines

Why should I use this monitor?

One of the primary factors that can affect your Web server's performance is memory. The two most important measurements to detect problems in this area are Pages per Second and Percentage of Virtual Memory Used, both monitored by the SiteScope Memory Monitor.

How often should I schedule this monitor to run?

In most environments, scheduling the memory monitor to run every 10 minutes should be sufficient. SiteScope will be able to notify you if memory starts to get low, and you'll have enough data points to create meaningful reports for comparison and trend analysis.

What are common problems and how do I fix them?

Pages per second measures the number of virtual memory pages that are moved between main memory and disk storage. If this number is consistently high (>10 pages/sec), system performance is being affected. One solution is to add more memory. Another solution is to turn off non–critical services that are using memory, or move these services to a different machine. The SiteScope Service Monitor measures the memory usage for each service.

Percentage of Virtual Memory Used measures the percentage of memory and paging file space used. If this number reaches 100%, services that are running may fail and new ones will not be able to start. Increasing the size of the paging file may solve the immediate problem but may decrease performance by increasing paging. A slow increase in Virtual Memory Used is often caused by a memory leak in a service. The SiteScope Process Detail tool (available when you choose the tools link listed in the Monitor Detail Table) can be used to view the memory used by each service. The ideal solution is to install an upgraded version of the service without the leak. An interim solution is to use the SiteScope Service Monitor to measure the service size and invoke a SiteScope Script alert to restart the service when it becomes too large. If restarting the service does not fix the leak, it may be necessary to add a SiteScope Script alert to restart the server when memory usage is too high.

Status

The status reading is the current value of the monitor, such as 40% used. The status is logged as either OK, warning, or error. A warning status is returned if the memory use is more than 80% full. An error status is returned if memory use is more than 90% full.

If you would like for SiteScope to respond if a warning or error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Memory Monitor Form

To display the Memory Monitor Form, either click the name of an existing Memory Monitor in a monitor table, or click the **Add** a new Monitor to this Group link on a group's detail page and choose the **Add Memory Monitor** link.

Complete the fields on the Memory Monitor Form as follows. When all the fields are complete, click the **Update** Monitor button.

Server

> Choose the server that you want to monitor. The default is to monitor memory on the server on which SiteScope is installed. Click the **choose server** link to monitors memory on another server.

Update every

> Enter how frequently the monitor should check this drive. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)

> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning condition thresholds. If you choose not to set them, SiteScope uses pre−set defaults if available. If a default is not available, SiteScope cannot utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again when it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order (Optional)

By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

Set the Error threshold for this monitor. By default SiteScope reports an error condition if memory use is more than 90%. You can change this to report errors based upon pages/second, Megabytes free, and percentage of memory in use. Choose the option you want from the pop−up menu, select a comparison value symbol, and enter a threshold value.

For example, if you want SiteScope to report an error condition if your memory use is more than 96%, you need to choose **percent used** from the pop−up menu, select >= from the comparison value pop−up, and then enter 96 in the text entry box.

Warning if

Set the warning threshold for this monitor. By default SiteScope reports a warning condition if your memory use is more than 90% full, but less than the error threshold. You can change this threshold or set it to generate a warning based upon pages per second, Megabytes free, or percentage of memory in use. You must enter a whole number.

For example, if you want to change the warning threshold to 50%, choose **percent used** from the pop−up menu, select >= from the comparison value pop−up, and enter 50 in the test entry box.

Good if

You may also specify a threshold for a good reading. You may base it on pages per second, Megabytes free, or percentage of memory in use.

🐸 Netscape Server Monitor

The SiteScope Netscape Server Monitor allows you to monitor the availability of an Netscape server. The error and warning thresholds for the monitor can be set to one of several Netscape server performance statistics or HTTP response codes.

Usage Guidelines

Why should I use this monitor?

The information gathered by the Netscape Server Monitor gives you the ability to see how busy your server is. This information allows you to plan hardware upgrades and configuration changes that will improve your visitors' experience.

What should I monitor?

It's most effective if you create a separate Netscape Server Monitor for each Netscape Server you're running.

How should I schedule my monitors?

The default spacing that we recommend for the Netscape Server Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the Netscape Server Monitor Form

To display the Netscape Server Monitor Form, either click the name of an existing Netscape Server Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Netscape Server**" link.

Complete the fields on the Netscape Server Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

URL
>Choose the URL you want to verify with this monitor. This URL should be the URL to the applicable server administration web page which usually has the form of `http://servername:port/bin/sitemon?doit`.

Update every
>Enter how frequently the monitor should access the URL entered above. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
>Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Timeout

> The number of seconds that the URL monitor should wait for a page to complete downloading before timing−out. Once this time period passes, the URL monitor will log an error and report an error status. If you have checked the Retrieve Frames or Retrieve Images option, SiteScope will wait for these items to be retrieved before considering the page to be fully downloaded.

HTTP Proxy

> Optionally, a proxy server can be used to access the URL. Enter the domain name and port of an HTTP Proxy Server.

Authorization User Name

> If the URL specified requires a name and password for access, enter the name in this field.

Authorization Password

> If the URL specified requires a name and password for access, enter the password in this field.

NT Challenge Response

> Check this box if you want SiteScope to use Window's NT Challenge Response authorization when retrieving this Web page.

Proxy Server User Name

> If the proxy server requires a name and password to access the URL, enter the name here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Proxy Server Password

> If the proxy server requires a name and password to access the URL, enter the password here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to

create or edit a monitor schedule. For information about creating schedules, <u>read these instructions</u>.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You can use this pull–down menu to choose a different placement for this monitor.

Error if

Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon hits per minute, bytes per minute, or the total number of a particular HTTP response code or range of response codes. The following are examples of the HTTP codes that can be used as error thresholds and their meanings in the context of the **Error if**, **Warning if**, and **Good if** threshold settings.

- ◊ 200 – number of successful transactions processed by the server since the last server restart.
- ◊ 2xx – The number of the server handles status codes in the 200 to 299 range since the last server restart.
- ◊ 3xx – The number of server handles status codes in the 300 to 399 range since the last server restart.
- ◊ 401 – The number of unauthorized requests handled by the server since the last server restart.
- ◊ 4xx – The number of server handles status codes in the 400 to 499 range since the last server restart.

After choosing a parameter or server handle code, enter a comparison value and use the comparison operator pop–up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.

Warning if

Use this field to set a warning threshold for this monitor. The warning threshold can be based on any of the choices displayed in the drop–down menu such as bytes transferred or 400 series error codes. Set this value exactly as you would the Error threshold in the **Error if** field.

For example, If you want SiteScope to report a warning condition if your bytes transferred reach 500,000 or higher, you would choose **bytes transferred** from the pop–up menu, select >= from the comparison value pop–up, and then type 500000 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on either hits per minute or bytes per minute. Complete this field exactly as you would the **Error if** and **Warning if** fields.

Network Monitor

The SiteScope Network Monitor provides an easy way for you to track network statistics for your server. Information provided by the network monitor can help you track down performance problems related to network interfaces on your servers.

Each time the Network Monitor runs, it returns a [reading and a status](#) message and writes them in the [~SiteScope/logs/SiteScope.log](#) file.

Usage Guidelines

Why should I use this monitor?

Web server performance is dictated largely by the network interface. The actual number of bytes being passed in and out of your server as well as the number of packets in error are all critical measures of a server's performance and are tracked by the Network Monitor. In addition, active connections are tracked.

How often should I schedule this monitor to run?

In most environments, scheduling the Network Monitor to run every 10 minutes should be sufficient. SiteScope can notify you if network performance begins to slow, and you'll have enough data points to create meaningful reports for comparison and trend analysis.

What are common problems and how do I fix them?

Packet Errors measure the number of packets that failed to reach the destination IP address. This can indicate a faulty network interface or media. If the problem shows up on several servers that are topologically close, it is likely the media. If this condition occurs on only one isolated server, you can suspect the interface.

Throughput indicators let you know how fully utilized your network interface is. For instance, if you are running on a conventional ethernet interface and you see numbers approaching 10 megabits / sec., the interface is nearly saturated.

Connections is the count of open ports on your network interface. This measure should settle at some some predictable level. Continuous climbing of the connection count indicates an error condition or run–away condition that will eventually slow the server due to resource constraints.

Status

The reading is the current value of the monitor, such as 40% saturated. The status is logged as either OK, warning, or error. A warning status is returned if the bytes out per second is more than 80% full. Full is defined as a fully saturated standard ethernet bandwidth or 10 megabits / sec. An error status is returned if bytes out per second is more than 90% saturation.

If you would like for SiteScope to respond if a warning or error status is returned, create an [alert.](#) An alert contains instructions that tell SiteScope to either notify you via sound, e–mail or pager, or execute an

automatic recovery script when a problem is detected.

Completing the Network Monitor Form

To display the Network Monitor Form, either click the name of an existing Network Monitor in a monitor table, or click the **Add** a new Monitor to this Group link on a group's detail page and choose the **Add Network Monitor** link.

Complete the fields on the Network Monitor Form as follows.   When all the fields are complete, click the **Update** Monitor button.

Update every
> Enter how frequently the monitor should check this drive.   The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning condition thresholds. If you choose not to set them, SiteScope uses pre−set defaults if available. If a default is not available, SiteScope cannot utilize the condition.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Verify Error
> Check this box if you want SiteScope to automatically run this monitor again when it detects an error.

Update Every (on error)
> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)
> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)
> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop–up for a monitor.

List Order (Optional)

By default, new monitors are listed last on the Monitor Detail page. You may use this pull–down menu to choose a different placement for this monitor.

Error if

Set the Error threshold for this monitor. By default SiteScope reports an error condition if any packet errors occur. You can change this to be dependent upon packet errors per second, the number of active connections, bytes per second received, or bytes per second sent. Choose the option you want from the pull–down menu, select a comparison value symbol, and enter the threshold number in the text entry box. You must enter a whole number.

For example, if you want SiteScope to report an error condition if your packed error count exceeds 5 errors per second, you need to choose **errorsPerSecond >=** from the pull–down menus and then enter 5 in the text entry box.

Warning if

Set the warning threshold for this monitor. By default SiteScope reports a warning condition if your bytes out per second is more than 50000. You can change this to be dependent upon packet errors per second, the number of active connections, bytes per second received, or bytes per second sent.

For example, if you want to change the warning threshold to 10000, choose **outBytesPerSecond >** from the pull–down menus and then enter 10000 in the text entry box.

Good if

By default SiteScope assumes a good status. You can change this to be dependent upon packet errors per second, the number of active connections, bytes per second received, or bytes per second sent.

News Monitor

The SiteScope News Monitor verifies that a news server can be connected to, and is responding. It also measures how long it takes to make a connection, and how many articles are currently in the specified news groups.

Each time the News Monitor runs, it returns a status message and writes it in the monitoring log file. It also writes the total time it takes to receive a response from the news server, and the number of articles available for each of the specified news groups.

Usage Guidelines

Why should I use this monitor?

Running the News Monitor on a regular basis can save you the headaches associated with the entire office coming in to tell you they can't read their news groups. With regular monitoring, you should be able to address any problems before the hordes notice anything's amiss.

In addition, you can manage the number of articles that are allowed to queue up, deleting them before they cause disk space problems.

What should I monitor?

You should monitor any news servers that you have running.

How should I schedule my monitors?

It's usually sufficient to monitor your news server every 10 minutes or so. If you notice that you're having problems, you can schedule the monitor(s) to run more frequently.

Status

The reading is the current value of the monitor. The possible values for the News Monitor are:

- OK
- unknown host name
- unable to reach server
- unable to connect to server
- timed out reading
- <news group> not found – the given news group was not found on the news server
- permission denied for connection – the connection could not be made, probably because the news server was configured to allow connections from a limited range of addresses.
- login expected – the news server expected a user name and password, but none were provided. In this case, enter a user name and password under the Advanced Options section of the monitor.
- login failed, unauthorized – the user name and password were not accepted by the news server

The status is logged as either good or error. An error status is returned if the current value of the monitor is anything other than OK. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the News Monitor Form

To display the News Monitor Form, either click the name of an existing News Monitor listed in a monitor table, or click the **Add** a new Monitor to this Group link on a group's detail page and choose the **New News Monitor** link.

Complete the fields on the News Monitor form as follows. When all the fields are complete, click the **Add** Monitor button.

News Server
> Enter the IP address or the name of the news server that you want to monitor. For example, you could enter either 206.168.191.21 or news.freshtech.com. If the port is not the standard news port, add the port after the server with a colon − for example, news.freshtech.com:7777.

News Groups
> Optionally enter a one or more news groups that will be checked, separated by commas. Each of these news groups will be checked for the current number of articles available in that news group − the reading of the monitor is the sum of articles available for each of the specified news groups.

Update every
> Enter how frequently the monitor should try to reach the host. The pull−down menu to the right of the text entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Timeout
> The number of seconds that the News monitor should wait for all of news transactions to complete before timing−out. Once this time period passes, the News monitor will log an error and report an error status.

User Name (Optional)
> If your News server requires authorization, enter a valid user name here.

Password *(Optional)*

> If your News server requires authorization, enter a valid password here.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Schedule *(Optional)*

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order *(Optional)*

> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

> This advanced option allows you to customize the conditions under which the News Monitor generates an error status message. By default SiteScope generates an error if the returned status is anything other than 200. You can change this to generate an error based on the average length of the round trip times or the number of articles present. To change the default choose an option from the pull−down menu, select a comparison value symbol, and enter the lowest value that should trigger an error in the text entry box.

Warning if:

> This advanced option allows you to customize the conditions under which the News Monitor generates a warning status message. By default, the News monitor does not have a warning threshold, but you can set this option to define one based upon round−trip time or number of articles present.

Good if

> SiteScope reports a good state if the status returned is 200. You can change this to be based upon round−trip time or number of articles present.

🦟 Ping Monitor

The SiteScope Ping Monitor checks the availability of a host via the network. Use this monitor to ensure that your connection to the Internet is alive and well.

Each time the Ping Monitor runs, it returns a reading and a status message and writes them in the monitoring log file. It also writes the total time it takes to receive a response from the designated host in the log file.

Usage Guidelines

Why should I use this monitor?

The network can often be a web–traffic bottleneck, especially on relatively slow wide area network connections. The Ping Monitor obtains two of the most common measurements used to determine if your network connection is congested: Round Trip Time and Loss Percentage. An increase of either of these suggests that you're experiencing problems. In the case of Loss Percentage, you want to see a 0% reading. A 100% reading indicates your link is completely down. Some loss may happen very occasionally, but if it becomes common, the network is either flaky (some packets are being lost), or very busy and the router may be dropping the Ping packets.

What should I be monitoring?

We suggest that you set up monitors that test your connection to the Internet at several different points. For example, if you have a T1 connection to a network provider who in turn has a connection to the backbone, you would want to set up a Ping Monitor to test each of those connections. The first monitor would ping the router on your side of the T1. The second would ping the router on your provider's side of the T1. The third monitor would ping your provider's connection to the backbone.

In addition to these monitors, it's also a good idea to have a couple of other monitors ping other major network providers. These monitors won't really tell you whether the other provider is having a problem, but it will tell you if your network provider is having trouble reaching them.

How often should I schedule Ping Monitors to run?

Because it won't cost you much performance wise, you can monitor your own router as often as every two minutes or so. That way you'll know about any problems on your end as quickly as possible. The monitors that watch your provider's connection to your line and to the backbone should only be run every ten minutes or so. This will minimize traffic while still providing you with sufficient coverage.

Status

The reading is the current value of the monitor. The possible values for the Ping Monitor are:

- OK
- fail
- N out of M missing (indicating that some pings failed)

The status message is either OK, error, or N out of M missing. An error status is generated if SiteScope cannot reach the host. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Ping Monitor Form

To display the Ping Monitor Form, either click the name of an existing Ping Monitor listed in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**New Ping Monitor**" link.

Complete the fields on the Ping Monitor form as follows. When all the fields are complete, click the **Add** Monitor button.

Host Name
> Enter the IP address or the name of the host that you want to monitor. For example, you could enter either 206.168.191.21 or demo.freshtech.com.

Update every
> Enter how frequently the monitor should try to reach the host. The pull−down menu to the right of the text entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Time Out
> This advanced option gives you the ability to customize the Ping Monitor's time out threshold −− the time that should pass before the ping times out. If you choose not to set it, SiteScope uses a pre−set default of 5000 milliseconds. To change the threshold, type the new value in the text entry box. The value must be in milliseconds.

Size
> This advanced option gives you the ability to customize the size of the ping packets sent. If you choose not to set it, SiteScope uses a pre−set default of 64 bytes. To change the threshold, type the new value in the text entry box. The value is in bytes.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this pull–down menu to choose a different placement for this monitor.

Error if

This option allows you to customize the conditions under which the Ping Monitor generates an error status message. Each time the Ping Monitor runs, it pings the specified host five times and then returns a value based on the average of all five pings. This helps to ensure against false readings. By default the Ping Monitor reports an error status any time it fails to reach a host after five pings.

You can change this to generate an error based on the average length of the round trip times. To change the default choose either % packets good or round trip time from the drop down menu. Next choose a comparison symbol from the pop–up. Use the comparison value pop–up to specify an error threshold.

Finally, enter the comparison value in the last text entry box to create a complete equation, such as % packets good <= 90.

SiteScope's reported round trip time is actually the average of the round trip times from all five pings executed each time the monitor runs. Enter the lowest average round trip time (in milliseconds) which should trigger an error status.

Warning if

This option allows you to customize the conditions under which the Ping Monitor generates a warning status message. Each time the Ping Monitor runs, it pings the specified host five times and then returns a value based on the average of all five pings. By default the Ping Monitor reports a warning status if it fails to reach a host on all five pings.

To set the warning threshold, choose either % packets good or round trip time from the drop down menu. Use the comparison operator pop–up to specify >= (greater than or equal to), != (not equal to),

or < (less than). Finally, enter the comparison value in the last text entry box to create a complete equation, such as % packets good <= 99.

SiteScope's reported round trip time is actually the average of the round trip times from all five pings executed each time the monitor runs. Enter the lowest average round trip time (in milliseconds) which should trigger a warning status.

Good if

This option allows you to customize the conditions under which the Ping Monitor generates a good status message. Each time the Ping Monitor runs, it pings the specified host five times and then returns a value based on the average of all five pings. This helps to ensure against false readings. By default, the Ping Monitor returns a good status if all five pings are successful. You may change this default if you like.

To set the Good if threshold, choose either % packets good or round trip time from the drop down menu. Next choose a comparison symbol from the pop–up. Use the comparison value pop–up to specify an good threshold.

Finally, enter the comparison value in the last text entry box to create a complete equation, such as % packets good >= 90.

Port Monitor

The SiteScope Port Monitor verifies that a connection can be made to a network port and measures the length of time it takes to make the connection. Optionally, it can look for a string of text to be returned or send a string of text once the connection is made.

Each time the Port Monitor runs, it returns a status message and writes them in the monitoring log file. It also writes the total time it takes to receive a response from the remote service.

Usage Guidelines

Why should I use this monitor?

The Port Monitor is useful for monitoring network applications that none of the other SiteScope monitors watch. You'll be notified immediately if SiteScope is unable to connect to the monitored port.

What should I monitor?

Most people use the Port Monitor to watch those network applications that SiteScope doesn't specifically watch, such as Gopher and IRC services, or custom network applications. It's an easy way to keep an eye on those applications and restart them if necessary.

How should I schedule my monitors?

Scheduling Port Monitors is pretty much up to you. This is a very lightweight monitor, so it won't hurt to schedule it frequently, but every 10 minutes is probably a good baseline to use.

Status

The reading is the current value of the monitor. The possible values for the Port Monitor are:

- OK
- unknown host name
- unable to reach server
- unable to connect to server
- timed out reading
- match error

The status is logged as either good or error. An error status is returned if the current value of the monitor is anything other than OK. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Port Monitor Form

To display the Port Monitor Form, either click the name of an existing Port Monitor listed in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**New Port Monitor**" link.

Complete the fields on the Port Monitor form as follows. When all the fields are complete, click the **Add** Monitor button.

Host Name

Enter the IP address or the name of the host that you want to monitor. For example, you could enter either 206.168.191.21 or demo.freshtech.com.

Port Number

Choose the port number to connect to from the list of services, or enter a port number in the text field. Additional entries can be added to list by editing the master.config file in the groups directory).

Update every

Enter how frequently the monitor should try to reach the host. The pull–down menu to the right of the text entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)

Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings.

Disable

Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un–check the box.

Send String

This advanced option gives you the ability to customize the string sent after a connection is made.

Match String

This advanced option gives you the ability to check for a string of text after a connection is made. If the text is not received, the monitor will display "no match on content". The search is case sensitive.

Timeout

The number of seconds that the Port monitor should wait for the connection to the port, and for any sending and receiving to complete. Once this time period passes, the Port monitor will log an error and report an error status.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but

as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

This advanced option allows you to customize the conditions under which the Port Monitor generates an error status message.

You can change this to generate an error based on the length of the round trip times. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if

This advanced option allows you to customize the conditions under which the Port Monitor generates a warning status message. By default, the Port monitor does not have a warning threshold, but you can set this option to define one.

Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Good if

SiteScope maintains a good status if the reading returned is 200, but you can change this to be based upon round−trip time.

Radius Monitor

The SiteScope Radius Monitor checks that a RADIUS server is working correctly by sending an authentication request and checking the result. The word RADIUS is an acronym for Remote Authentication Dial In User Service and a RADIUS server is used to authenticate users, often connecting through a remote connection such as a dialup modem or a DSL line.

Each time the Radius Monitor runs, it returns a status message and writes it in the monitoring log file. It also writes the total time it takes to receive a authentication response.

In order for SiteScope to monitor your Radius server you must first add the IP address of your SiteScope server to the list of Clients that the Radius server is allowed to communicate with. This must be done in order for the Radius Server to take requests from SiteScope. Failure to do this will result in "Unknown Client" errors on the Radius Server.

Usage Guidelines

Why should I use this monitor?

The Radius Monitor is useful for testing that the RADIUS server is correctly handling authentication requests. If the RADIUS server fails, any users that try to use it will be unable to login and access any services.

What should I monitor?

Most people would setup a Radius monitor for each of their RADIUS servers. You may want to setup multiple monitors per server if you want to test different kinds of login accounts.

How should I schedule my monitors?

This is a very lightweight monitor, so it won't hurt to schedule it frequently, maybe as often as every 5 minutes.

Status

The reading is the current value of the monitor. The possible values for the Radius Monitor are:

- OK
- unknown host name
- timed out reading
- match error

The status is logged as either good or error. An error status is returned if the current value of the monitor is anything other than OK. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Radius Monitor Form

To display the Radius Monitor Form, either click the name of an existing Radius Monitor listed in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**New Radius Monitor**" link.

Complete the fields on the Radius Monitor form as follows. When all the fields are complete, click the **Add** Monitor button.

RADIUS Server

>Enter the IP address or the name of the RADIUS server that you want to monitor. For example, you could enter either 206.168.191.21 or radius.freshtech.com.

Secret

>Enter the secret used to encrypt all requests to this RADIUS server

Username

>Enter the username to authenticate

Password

>Enter the password to authenticate

Update every

>Enter how frequently the monitor should try to reach the host. The pull–down menu to the right of the text entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)

>Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings.

Disable

>Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un–check the box.

Timeout

>The number of seconds that the Radius monitor should wait for the connection to the port, and for any sending and receiving to complete. Once this time period passes, the Radius monitor will log an error and report an error status.

Port Number

>Choose the TCP port used by the RADIUS server. The default port used by RADIUS servers is 1645 and does not usually need to be changed

Match Content

Enter a string of text to check for in the response. If the text is not contained in the response, the monitor will display "no match on content". The search is case sensitive. You may also perform a Perl regular expression match by enclosing the string in forward slashes, with an "i" after the trailing slash indicating case−insensitive matching. (for example, "/ \d\d/" or "/size \d\d/i").

Verify Error
Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)
This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)
By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)
Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)
Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order (Optional)
By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if
This advanced option allows you to customize the conditions under which the Radius Monitor generates an error status message.

You can change this to generate an error based on the length of the round trip times. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if
This advanced option allows you to customize the conditions under which the Radius Monitor generates a warning status message. By default, the Radius monitor does not have a warning threshold, but you can set this option to define one.

Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Good if
SiteScope maintains a good status if the reading returned is 200, but you can change this to be based upon round−trip time.

RealSystem Server Monitor

The SiteScope RealSystem Server Monitor allows you to monitor the availability of an RealSystem server on Windows NT systems. The error and warning thresholds for the monitor can be set to one of several RealSystem server performance statistics.

Usage Guidelines

Why should I use this monitor?

The information gathered by the RealSystem Server Monitor gives you the ability to see how busy your server is. This information allows you to plan hardware upgrades and configuration changes that will improve your visitors' experience.

What should I monitor?

It's most effective if you create a separate RealSystem Server Monitor for each RealSystem server you're running.

How should I schedule my monitors?

The default spacing that we recommend for the RealSystem Server Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the RealSystem Server Monitor Form

To display the RealSystem Server Monitor Form, either click the name of an existing RealSystem Server Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Web Server**" link.

Complete the fields on the RealSystem Server Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

Server
> Choose the server you want to monitor. Use the choose server link to view a list of servers or to enter a path name.

Update every
> Enter how frequently the monitor should read the server statistics. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order *(Optional)*

> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

> Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon hits per minute or bytes per minute. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.
>
> For example, if you want SiteScope to report an error if your hits per minute reach 10,000 or higher, you would choose **hits/min** from the pop−up menu, select >= from the comparison value pop−up menu, and then type 10000 in the text entry box.
>
> **Note:** Do not enter commas in the text entry field.

Warning if

Use this field to set a warning threshold for this monitor. The warning threshold can be based on any of the choices displayed in the drop–down menu such as hits per minute or bytes per minute. Set this value exactly as you would the Error threshold in the **Error if** field.

For example, If you want SiteScope to report a warning condition if your bytes per minute reach 500,000 or higher, you would choose **bytes/min** from the pop–up menu, select **>=** from the comparison value pop–up, and then type 500000 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on either hits per minute or bytes per minute. Complete this field exactly as you would the **Error if** and **Warning if** fields.

Real Time Streaming Protocol Monitor

Note: The RTSP Monitor is still being developed and may not be able to monitor some types of commonly used media formats and processing. You should carefully test any RTSP monitors you create for satisfactory performance before deploying them in a production environment.

The Real Time Streaming Protocol (RTSP) Monitor can be used to check the availability of time–based media files and real–time media streams.

Each time a RTSP Monitor runs, it attempts to open and read a media stream or download and play media file. The monitor records a status when the session is completed.

Usage Guidelines

Why should I use this monitor?

This monitor should be used to ensure the availability of a media source, that it can be retrieved, that the file is complete, and that the download rate meets your requirements.

What should I be monitoring?

The RTSP Monitor makes use of the Java Media Framework (JMF) which provides the capability of monitoring a variety of real time digital media types and protocols. This includes HTTP retrieval and RTSP streaming of the following file types:

Media Type	File Format
Audio Interchange File Format (Apple)	***.aiff**
Audio Video Interleave (Microsoft)	***.avi**
Flash (Macromedia)	***.swf, *.spl**
Global Standard for Mobile Communications GSM (wireless telephony standard)	***.gsm**
HotMedia (IBM)	***.mvr**
Musical Instrument Digital Interface (MIDI)	***.mid**
Motion **P**icture **E**xperts **G**roup MPEG–1 Video	***.mpg**
MPEG Layer II Audio	***.mp2**
MPEG Layer III Audio	***.mp3**
QuickTime Movie (Apple)	***.mov**
Sun Audio (Sun Microsystems)	***.au**
Wave audio file format (Microsoft)	***.wav**

A more complete list of supported media types can be found at:
http://java.sun.com/products/java−media/jmf/2.1/formats.html#RTPFormats

How often should I schedule RTSP Monitors to run?

These monitors should be set to run according to your reasonable acceptable error period. The utilization of monitoring bandwidth and overall monitoring system performance should be considered in setting the run interval for this type of monitor. The default run interval is set to 10 minutes.

Status

Each time the monitor runs it returns a status which includes the current value of the monitor. The possible status values are:

- OK
- warning
- error

The final status result is either OK, error, or warning based on threshold established for these conditions. If you would like for SiteScope to notify you or take action if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Add RTSP Monitor Form

Complete the fields on the RTSP Monitor form as follows. When the required fields are complete, click the **Add** Monitor button to create the monitor.

Media URL
> Enter the URL of the media file (for HTTP download and playback) or the URL of the media stream (for RTSP streaming) to be tested tested.

> **NOTE:** It is important to note that the SiteScope RTSP Monitor may not process media reference files or media metadata files that are commonly used with RealNetworks RealPlayer reference files and with some QuickTime movies.

Update every
> Enter how frequently the monitor run. The pull−down menu to the right of the text entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds for this monitor as well as other options. If you choose not to set the the error and warning thresholds, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Time Out

> This advanced option gives you the ability to customize the RTSP Monitor's time out threshold. The Timeout is the time that should pass before the RTSP Monitor process is timed out. If you choose not to set it, SiteScope uses a pre−set default of 60000 milliseconds. To change the threshold, type the new value in the text entry box. The value must be in units of milliseconds.

> **Note:** To ensure that media files are tested to completion, the Timeout value should be set to a value greater than the time that it should take to playback the subject media download. For example, if the media file should normally playback in 90 seconds, the Timeout value should be set for greater than 90 seconds.

Stop Time

> This advanced option gives you the ability to stop the media download after some specified amount of time has elapsed. Setting the value of 0 will cause the media stream to download until end of media is detected. Using a value greater than zero will stop the download of continuous broadcast streams (such as radio station multicasts) or very large media downloads.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order (Optional)

> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

> This option allows you to customize the conditions under which the RTSP Monitor generates an error status message.

Warning if
This option allows you to customize the conditions under which the RTSP Monitor generates a warning status message.

Good if
This option allows you to customize the conditions under which the Ping Monitor generates a good status message.

🐸 Script Monitor

The SiteScope Script Monitor runs an external command and reports the result. It is an easy way to integrate existing scripts into the SiteScope environment. In addition to reporting the command result, the Script Monitor can also parse and report a specific value from the command output.

Each time the Script Monitor runs, it returns a status and writes it into the monitoring log file. It also reports a command result, a value, and the time it took to run the command.

Usage Guidelines

One of the primary reasons for using the Script Monitor is to integrate an existing script that you use to do a particular function into SiteScope. For example, if you have a script that runs a diagnostic on an application and returns a 0 reading if everything's OK, you could create a script monitor that runs this script and recognizes any exit value other than 0 as an error. Then you could create an alert which would e−mail or page you in the event that this monitor was in error.

Scheduling Script monitors is dependent upon the script that you want SiteScope to run. You can use the scheduling option to have SiteScope run scripts at different intervals throughout the week.

Status

The command result is the exit value returned by running the command. This works for local UNIX scripts, but does not work for remote UNIX scripts, or Win NT batch files. Win NT batch file (*.bat) exit codes are not passed out of the command interpreter, and remote UNIX script exit codes are not passed back through the remote connection. See the example below for a way around this.

The status is logged as either good or error. An error status is returned if the script did not complete successfully. Any non−zero exit code from the script is also considered an error status. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Script Monitor Form

To display the Script Monitor Form, either click the name of an existing Script Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Script Monitor**" link.

Complete the fields on the Script Monitor form as follows. When all the fields are complete, click the "**Add** Monitor" button.

Script:

Enter the name of the script to run. For security reasons, only scripts placed into the `SiteScope/scripts` directory may be used. In that directory, there are several examples scripts with comments describing each one.

If you choose USE COMMAND the command saved inside of the text file in Remote Script Command File in the advance option is run on the remote Unix Machine

Update every:

Enter how frequently the monitor should run this Script. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title: (Optional)

Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings.

Disable

Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Remote Script Command File

You can save a single command in a text file and save the file in the SiteScope/script.remote directory. SiteScope will open this file and run the command at the command line of a remote Unix server chosen in the choose server section. The user can the use Match Expression to parse the output of the command and parse for valuable information.

Note: You can only use a single command per file

Match Expression (Optional)

To retrieve a value from the script output, enter a [Perl regular expression](#) in this field. For example, the expression: /(\d+)/ will match one or more digits returned by the script. The retrieved value can be used to set the error or warning status of the monitor and to trigger alerts. SiteScope will check up to four values returned. If this field is left blank, no value will be retrieved from the script.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order (Optional)

By default, new monitors are listed last on the Monitor Detail page. You may use this pull–down menu to choose a different placement for this monitor.

Error if

By default, SiteScope generates an error if the script returns an error as the exit status. You may choose to generate an error based on the exit status, any one of four matched script values, or the time it takes to run the script. Select a comparison value (must be numeric) and use the comparison operator pop–up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if

By default, SiteScope does not generate warnings for Script monitors. You may choose to generate a warning based on the exit status, the script value, or the time it takes to run the script.

Good if

SiteScope reports a good status if the exit status of the script equals 0, but you can change this to be based upon another value or round–trip time.

Return Status Example

In order to get around the fact that exit codes that are not returned to SiteScope after execution of Win NT batch files or UNIX scripts executed on remote servers, we recommend echoing to standard out a return value that is then matched in the Script monitor using a regular expression. The following is an example based on a UNIX script.

In the script that will run on a remote server include `echo` commands that represent the different logical paths that might be followed:

```
#!/bin/sh
```

...(script commands and logic here)...

`echo "Return Code: 1"`   (indicating the script failed to complete execution)

...(more script commands and logic here)...

`echo "Return Code: 0"`   (the end of the script, indicating the script completed successfully)

Under the [Advanced Options](#) in the Script Monitor set up page, create a Match Expression using the following [regular expression](#) pattern:

`/Return Code: (\d+)/`

Then set the Error, Warning, and Good thresholds for the monitor as follows:

      Error if value > 0
Warning if value == 'n/a'
      Good if value == 0

With this set up, if the echoed Return Code value is greater than 0, it signals that the script did not execute correctly. If the script doesn't run properly, meaning that no Return Code echo command in the script is executed, then a warning condition occurs (e.g. there won't be a match for the Match Expression which will return a 'n/a'). If the script echoes the Return Code of 0, then a good condition is detected. In this case the monitor status shown on the monitor detail page will display "matched 0" if the script executed successfully.

🐸 Service Monitor

The SiteScope Service Monitor checks to see if a service (NT environment) or a sepcific process is running. There are many services or processes that play an important role in the proper functioning of your server, including Web server, Mail, FTP, News, Gopher, and Telnet. Web environements which support e−commerce transactions may have other important processes that support data exchange.

Each time the Service Monitor runs, it returns a reading and a status message and writes them in the monitoring log file.

Usage Guidelines

Why should I use this monitor?

The Service Monitor verifies that specific processes are listed as running, and if you like, it can also check to see how much CPU a process is using. If a process that should be running doesn't show up or if it is using too much memory, SiteScope can either alert you to the problem so that you can address it yourself, or it can run a script to automatically restart the process to help minimize downtime.

What should I monitor?

You should create a service monitor for any service or process that should be running on a consistent basis. You can also create a script alert that will restart the service automatically if the service monitor in SiteScope can't find it. The restartService.bat script, located in the SiteScope/scripts directory, is an easily modifiable template which you can use to create a script for SiteScope to execute in the event your monitor fails.

How should I schedule my monitors?

The Service Monitor doesn't put a heavy load on your server so you can run it as often as you like. You'll probably want to monitor critical services and services that are prone to failure every five minutes or so. Less critical services and processes should be monitored less frequently.

Status

The reading is the current value of the monitor. For this monitor, the possible readings are:

- ♦ Running
- ♦ Not found

The status is logged as either OK or error. An error status is returned if the service is not found. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Completing the Service Monitor Form

To display the Service Monitor Form, either click the name of an existing Service Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Service Monitor**" link.

Complete the fields on the Service Monitor Form as follows. When all the fields are complete, click the **Add** Service Monitor button.

Server

> Choose the server that you want to monitor. The default is to monitor services on the server on which SiteScope is installed. Click the **choose server** link to monitor services on another NT server.

Service

> Choose the service (or process in Unix) that you want to monitor from the drop down list. To monitor a service other than those listed then select "Other" in the drop down list and enter the name of the service in the text field to the right. To monitor an NT process, select "(Using Process Name)" in the drop down list and enter the name of the **Process Name** text field under the Advanced Options section.

Update every

> Enter how frequently the monitor should check for this service. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)

> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre–set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un–check the box.

Process Name (NT Only)

> If you would like to get information about the percentage of CPU being used by a specific process and/or the number of a specific type of process running, enter the name of the process here. SiteScope is looking for the name of the process as it appears in NT Task Manager (example: explorer.exe).

Measure Process Memory Use (Unix Only)

If you would like SiteScope to report the amount of virtual memory being used by a specific process, enter the process name here.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop–up for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this pull–down menu to choose a different placement for this monitor.

Error if

Set the Error threshold for this monitor. By default SiteScope reports an error condition if it does not find at least one of the named processes running. If you would like to change this to report an error if multiple processes aren't found, or if the percentage of CPU used by the process exceeds a certain percentage number, or if the process memory size exceeds a certain number of bytes, you can do so here.

For example, if you want SiteScope to report an error if it doesn't find 3 HTTP processes running, chose the processes option in the drop–down box, != (not equal to) as the comparison operator, and type 3 in the text entry area.

Warning if

Set the Warning threshold for this monitor. SiteScope does not have a default warning threshold for this monitor. If you would like to define a warning threshold, you may do so here.

For example, if you want SiteScope to report a warning if the specified process starts using too much memory, choose the memory option in the drop–down box, and >= as the comparison operator, and type the memory threshold, in bytes, in the text entry area.

Good if

> SiteScope reports a good status if it detects the named process running. You can change this to be dependent upon multiple processes running, the percentage of CPU used by the process, or the status returned by the process.

SilverStream Server Monitor

The SiteScope SilverStream Server Monitor allows you to monitor the availability of an SilverStream server. The error and warning thresholds for the monitor can be set to one of several SilverStream server performance statistics.

Usage Guidelines

Why should I use this monitor?

The information gathered by the SilverStream Server Monitor gives you the ability to see how busy your server is. This information allows you to plan hardware upgrades and configuration changes that will improve your visitors' experience.

What should I monitor?

It's most effective if you create a separate SilverStream Server Monitor for each SilverStream Server you're running.

How should I schedule my monitors?

The default spacing that we recommend for the SilverStream Server Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the SilverStream Server Monitor Form

To display the SilverStream Server Monitor Form, either click the name of an existing SilverStream Server Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add SilverStream Server**" link.

Complete the fields on the SilverStream Server Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

URL
> Choose the URL you want to verify with this monitor. This URL should be the URL to the applicable server administration web page which usually has the form of `http://servername:port/SilverStream/Statistics`.

Update every
> Enter how frequently the monitor should access the URL entered above. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Timeout

> The number of seconds that the URL monitor should wait for a page to complete downloading before timing−out. Once this time period passes, the URL monitor will log an error and report an error status. If you have checked the Retrieve Frames or Retrieve Images option, SiteScope will wait for these items to be retrieved before considering the page to be fully downloaded.

HTTP Proxy

> Optionally, a proxy server can be used to access the URL. Enter the domain name and port of an HTTP Proxy Server.

Authorization User Name

> If the URL specified requires a name and password for access, enter the name in this field.

Authorization Password

> If the URL specified requires a name and password for access, enter the password in this field.

NT Challenge Response

> Check this box if you want SiteScope to use Window's NT Challenge Response authorization when retrieving this Web page.

Proxy Server User Name

> If the proxy server requires a name and password to access the URL, enter the name here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Proxy Server Password

> If the proxy server requires a name and password to access the URL, enter the password here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this

increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You can use this pull−down menu to choose a different placement for this monitor.

Error if

Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon total threads or average request process time. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.

For example, if you want SiteScope to report an error if your total threads reach 45 or higher, you would choose **total threads** from the pop−up menu, select >= from the comparison value pop−up menu, and then type 45 in the text entry box.

Note: Do not enter commas in the text entry field.

Warning if

Use this field to set a warning threshold for this monitor. The warning threshold can be based on any of the choices displayed in the drop−down menu such as current load or bytes. Set this value exactly as you would the Error threshold in the **Error if** field.

For example, If you want SiteScope to report a warning condition if your bytes reach 500,000 or higher, you would choose **bytes** from the pop−up menu, select >= from the comparison value pop−up, and then type 500000 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on either hits per minute or bytes per minute. Complete this field exactly as you would the **Error if** and **Warning if** fields.

SNMP Monitor

The SiteScope SNMP Monitor reads a value from an SNMP device. Many network devices support the SNMP protocol as a way of monitoring the devices.

Each time the SNMP Monitor runs, it returns a value and a status and writes them in the monitoring log file.

If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Usage Guidelines

Why should I use this monitor?

The SNMP monitor allows you to monitor devices that SiteScope doesn't otherwise watch. In addition, the SNMP monitor allows you to keep an eye on whatever values are available via SNMP for that device.

What should I monitor?

You can monitor anything you'd like with this monitor as long as it supports the SNMP protocol, from UPSs to routers. If your router supports SNMP, for example, you could have SiteScope watch for packet errors.

How should I schedule my monitors?

The standard 10 minute interval should suffice in most cases, but you can set the interval to whatever you're comfortable with.

Completing the SNMP Monitor Form

To display the SNMP Monitor Form, either click the name of an existing SNMP Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add SNMP Monitor**" link.

Complete the fields on the SNMP Monitor form as follows. When all the fields are complete, click the "**Add** Monitor" button.

Host Name
> Enter the host name or IP address of the SNMP device that you want to monitor (for example, "demo.freshtech.com"). By default, this will connect to port 161. If your SNMP device is using a different port, add it to the hostname using ":port". For example, to use port 170, you would enter "demo.freshwater.com:170".

Object ID

Enter the Object Identifier (OID) for the SNMP value you want to retrieve. The OID specifies which value should be retrieved from the device. (for example, .1.3.6.1.2.1.4.3)

Index

The index of the SNMP object. For non−table object IDs, this is 0.

Community

Enter the Community string for the SNMP device. This string can be used to limit SNMP access to a device. Most devices use "public" as a community string.

Update every

Enter how frequently the monitor should check this SNMP value. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)

Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

You can check the Freshwater on−line   support database   for other information relating to monitoring SNMP systems.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings.

Disable

Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Retry Delay

Enter the number of seconds SiteScope should wait before retrying the request. By default SiteScope will wait one second. It will continue to retry at the interval specified here until the Timeout threshold is met.

Timeout

Enter the total number of seconds SiteScope should wait for a successful reply.

Scaling

If you choose a scaling option from the scaling pop−up menu, SiteScope will divide the returned value by this factor before displaying it. Alternatively, you may specify a factor by which the value should be divided in the text entry field to the right of the pop−up menu.

Match Content

Use this field to match against an SNMP value, using a string or a regular expression or XML names.

Units

Enter an optional units string to append when displaying the value of this counter.

Measure as Delta

Click this box to have SiteScope report the measurement as the difference between the current value and the previous value.

Measure as Rate per Second

Click this box to have SiteScope divide the measurement by the number of seconds since the last measurement.

Percentage Base

Enter a number or SNMP object ID in this field. If entered, the measurement will be divided by this value to calculate a percentage. If an object ID if entered the Index from above will be used

Measure Base as Delta

Check this box to have SiteScope calculate the Percentage Base as the difference between the current base and the previous base. Use this option when an SNMP object ID is used for Percentage Base and the object is not a fixed value.

Gauge Maximum

Enter a maximum value that should be used to create the SiteScope gauge display for this object ID.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

By default, SiteScope generates an error if the returned status is anything other than 'ok'. You may choose to have SiteScope generate an error based on the SNMP value returned. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if

By default, SiteScope does not generate warnings for SNMP monitors. You may choose to have SiteScope generate an error based on the SNMP value returned.

Good if

SiteScope reports a good status if the reading returned is "OK". You can change this to be based upon a specific value or a content match.

🐸 URL Monitor

The SiteScope URL Monitor is one of the most versatile and powerful Web monitoring tools available to Webmasters. Its core function is to attempt to reach a specified Web page to verify that it can be retrieved, but it can also be used to do the following:

- ♦ Check secure pages using SSL, 128 bit SSL, and client certificates
- ♦ Check for specific content on the retrieved Web page
- ♦ Check the Web page for change
- ♦ Check for specific error messages
- ♦ Check the Web page for a value
- ♦ Retrieve detailed download information
- ♦ Check XML

When the URL Monitor retrieves a Web page, it retrieves the page's contents. A successful page retrieval assures you that your Web server is functioning properly. The URL Monitor doesn't automatically retrieve any objects linked from the page, such as images or frames. You can, however, instruct SiteScope to retrieve the images on the page by selecting the Retrieve Images or Retrieve Frames box located in the Advanced Options section of the Add Url Monitor Form.

In addition to retrieving specific Web pages, the URL Monitor can help you verify that CGI scripts and back−end databases are functioning properly. Just input the complete URL used to retrieve data from your database or trigger one of your CGI scripts, and the URL monitor will verify that the script generates a page and returns it to the user. For example, you can verify that your visitors are receiving a thank you page when they purchase something off of your site. The URL monitor's string matching capability even allows you to verify that the contents of the page are correct.

Each time the URL Monitor runs, it returns a reading or status and writes it in the monitoring log file. It also writes in the log file the total time it takes to receive the designated document. This status value is also displayed in the SiteScope Monitor tables and is included as part of alert messages sent via e−mail.

Usage Guidelines

Why should I use this monitor?

The SiteScope URL Monitors provide you with end−to−end verification that your web server is running, serving pages correctly, and doing so in a timely manner. Because it tests end−to−end, it is also able to determine whether back−end databases are available, verify the content of dynamically generated pages, check for changed content, and look for specific values from a page.

What should I monitor?

We suggest that you create URL monitors to watch pages that are critical to your web site (such as your home page), pages that are generated dynamically, and pages that depend upon other applications to work correctly (such as pages that utilize a back−end database). Your goal is to monitor a sampling of every type of page you serve to ensure that everything is working properly.

There's no need to verify that every page of a particular type is working correctly −− one or two will do.

When you're choosing which pages to monitor, try to pick pages with the lowest overhead. For example, if you have several page that are generated by another application, monitor the shortest one with the fewest graphics. This will put less load on your server while still providing you with the information you need.

How should I schedule my monitors?

Each URL Monitor puts no more load on your server than someone accessing your site and retrieving a page, so in most cases you can schedule them as closely together as you like. Keep in mind that the length of time between each run of a monitor is equal to the amount of time that can elapse before you're notified of a possible problem.

A common strategy is to schedule monitors for very critical pages to run every 1 to 2 minutes, and then schedule monitors for less critical pages to run only every 10 minutes or so. Using this strategy, you'll be notified immediately if a critical page goes down or if the entire web site goes down, but you won't have an excessive number of monitors running all the time.

Status

The status reading shows the the most recent result for the monitor. This status value is displayed in the URL Group table within SiteScope. It is also recorded in the SiteScope log files, e−mail alert messages, and can be transmitted as a pager alert. The possible status values are:

- ◆ OK
- ◆ unknown host name
- ◆ unable to reach server
- ◆ unable to connect to server
- ◆ timed out reading
- ◆ content match error
- ◆ document moved
- ◆ unauthorized
- ◆ forbidden
- ◆ not found
- ◆ proxy authentication required
- ◆ server error
- ◆ not implemented
- ◆ server busy

The status is logged as either good, warning, or error. A warning status or error status is returned if the current value of the monitor is a condition that you have defined as other than OK. If you would like for SiteScope to send a notification if a warning or an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail, pager, or SNMP trap. An alert can also be used to have SiteScope trigger the execution of an automatic recovery script when a problem is detected.

Completing the URL Monitor Form

To display the URL Monitor Form, either click the name of an existing URL Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the **"Add URL Monitor"** link.

Complete the fields on the URL Monitor form as follows. When all the fields are complete, click the "**Add** Monitor" button.

URL
> Enter the URL that you want to monitor (for example, http://demo.freshtech.com).
> *for NT Installations only*:
> > - If the URL starts with HTTPS, then a secure connection will be made using SSL (for example, https://www.freshtech.com). SiteScope for NT uses the SSL library from Internet Explorer.
> > - To monitor using SSL, installing Internet Explorer 4.0 or later is recommended.
> > - To monitor sites that require 128–bit SSL, the 128–bit patch to Internet Explorer must be installed.
> > - To monitor sites that require client certificates, the client certificate must be installed into Internet Explorer.

Match Content
> Enter a string of text to check for in the returned page or frameset. If the text is not contained in the page, the monitor will display "no match on content". The search is case sensitive. Remember that HTML tags are part of a text document, so include the HTML tags if they are part of the text you are searching for (for example, "< B> Hello< /B> World"). This works for XML pages as well. You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an "i" after the trailing slash indicating case–insensitive matching. (for example, "/href=Doc\d+\.html/" or "/href=doc\d+\.html/i"). If you want a particular piece of text to be saved and displayed as part of the status, use parentheses in a Perl regular expression. For example /Temperature: (\d+). This would return the temperature as it appears on the page and this could be used when setting an Error if or Warning if threshold.

Update every
> Enter how frequently the monitor should check this URL. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or define other optional settings. These includes:

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Timeout

> The number of seconds that the URL monitor should wait for a page to complete downloading before timing−out. Once this time period passes, the URL monitor will log an error and report an error status. If you have checked the Retrieve Frames or Retrieve Images option, SiteScope will wait for these items to be retrieved before considering the page to be fully downloaded.

HTTP Proxy

> Optionally, a proxy server can be used to access the URL. Enter the domain name and port of an HTTP Proxy Server.

Retrieve Images

> Check this box if you want the status and response time statistics to include the retrieval times for all of the embedded images in the page. Embedded images include those referenced by "IMG" and "INPUT TYPE=IMAGE" HTML tags. Images that appear more than once in a page are only retrieved once.

Retrieve Frames

> Check this box if you want SiteScope to retrieve the all frames references in a frameset and count their retrieval time in the total time to download this page. If Retrieve Images is also checked, SiteScope will attempt to retrieve all images in all frames.

Error If Match

> Enter a string of text to check for in the returned page or frameset. If the text **is** contained in the page, the monitor will display "no match on content". The search is case sensitive. Remember that HTML tags are part of a text document, so include the HTML tags if they are part of the text you are searching for (for example, "< B> Error < /B> Message"). You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an "i" after the trailing slash indicating case−insensitive matching. (for example, "/href=Doc\d+\.html/" or "/href=doc\d+\.html/i").

Check for Content Changes

> Unless this is set to "no content checking" (the default) SiteScope will record a checksum of the document the first time the monitor runs and then does a checksum comparison each subsequent time it runs. If the checksum changes, the monitor will have a status of "content changed error" and go into error. If you want to check for content changes, you'll usually want to use "compare to saved contents".

> The options for this setting are:

>> · **no content checking** – (default) SiteScope doesn't check for content changes
>> · **compare to last contents** – The new checksum will be recorded as the default after the initial error "content changed error" occurs, so the monitor will return to OK until the checksum changes again

· **compare to saved contents** – The checksum is a snapshot of a given page (retrieved either during the initial or a specific run of the monitor). If the contents change, the monitor will get a "content changed error" and will stay in error until the contents return to the original contents, or the snapshot is update by resetting the saved contents

· **reset saved contents** – Takes a new snapshot of the page and saves the resulting checksum on the first monitor run after this option is chosen. After taking the snapshot, the monitor will revert to "compare to saved contents" mode.

Authorization User Name

If the URL specified requires a name and password for access, enter the name in this field.

Authorization Password

If the URL specified requires a name and password for access, enter the password in this field.

NT Challenge Response

Check this box if you want SiteScope to use Window's NT Challenge Response authorization when retrieving this Web page.

Proxy Server User Name

If the proxy server requires a name and password to access the URL, enter the name here. Technical note: your proxy server must support Proxy–Authenticate for these options to function.

Proxy Server Password

If the proxy server requires a name and password to access the URL, enter the password here. Technical note: your proxy server must support Proxy–Authenticate for these options to function.

POST Data

If the URL is for a POST request, enter the post variables, one per line as name=value pairs. This option is used to verify that a form is working correctly by performing the same request that occurs when a user submits a form. See also the Match Content field for a way to verify that the correct form response was received. If this field is blank, a GET request is performed.

Advanced Option: The POST Data can be used to send cookie data. To send cookies with the request use the format "**Set–cookie: cookieName=cookieValue**".
To change the content type of a post, use the format "Content–Type: application/my–format". To hide values in the POST data, add a line like:

```
_private=_name=mysecret _value=rosebud
_private=_name=mypassword _privateValue=sesame
```

and then use the following form in the POST Data

```
s|username=$private-mysecret$|
s|password=$private-mypassword$|
```

and SiteScope will substitute the values from the master.config into the POST Data.

Error If Redirected

Check this box if you want SiteScope to notify you if a URL is redirected. Normally,
SiteScope follows redirects.

Show Detailed Measurement

Check this box if you want SiteScope to record a detailed break down of the process times
involved in retrieving the requested URL. This includes DNS lookup, connect time, HTTP
server reponse time, etc.

Verify Error

Check this box to have SiteScope verify an error by immediately performing the check again.

Show Detailed Measurements

Check this box if you would like for SiteScope to report detailed measurement times for
DNS lookup, connecting, server response, and downloading. These measurements are
available in both the log file and reports.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an
error.

Update Every (on error)

This option allows you to set a new monitoring interval for monitors that have registered an
error condition. For example, you may want SiteScope to monitor this item every 10 minutes
normally, but as often as every 2 minutes if an error has been detected. Note that this
increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however,
schedule your monitors to run only on certain days or on a fixed schedule. Choose the
Edit schedule link to create or edit a monitor schedule. For information about creating
schedules, read these instructions.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor
Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor
does. The description will appear on Management Reports and on the info pop–up for a
monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this
pull–down menu to choose a different placement for this monitor.

Error if

By default, SiteScope generates an error if the returned HTTP status is anything other than
200 ("OK"), which indicates a successful retrieval. You can choose to have SiteScope report
an error status based on any of the following measurements:

◊ round trip time – the total time for the entire request, in milliseconds

◊ DNS time – the amount of time to translate the host name to an IP adress, in milliseconds

◊ connect time – the amount of time to make the connection, in milliseconds

◊ response time – the amount of time before the first response was received, in milliseconds

◊ download time – the amount of time to receive the page contents, in milliseconds

◊ age –– the amount of time between the current time and the last–modified time for the page, in seconds

◊ content match

◊ total errors

◊ overall status

Choose a comparison operator from the pop–up menu, and enter a value for the comparison in the text field.

The URL Monitor follows HTTP redirect codes (301 and 302) to retrieve the actual page before returning the status of the URL retrieval. SiteScope will show a redirect error only if the redirects are more than 10 levels deep – this prevents infinite redirects from being followed, or if the Error On Redirect checkbox is selected.

Warning if

By default, SiteScope generates a warning if Check Images or Check Frames is chosen and there was a problem retrieving one of the images or frames. You may choose to have the monitor report a warning status based on any of the measurement options listed under Error if. Choose a comparision operator, and enter a value for the comparison to generate a warning.

Good if:

By default, SiteScope reports an OK status if the URL returns an HTTP status of 200 ("OK"). You may also choose to have SiteScope base an OK status on any of the measurement options listed under Error if. Enter the value that should generate an OK status.

🐸 URL Content Monitor

The SiteScope URL Content Monitor is a specialized variation of the [URL Monitor](#) that can match up to ten different values from the content of a specified URL. The matched values are displayed with the status of the monitor in the monitor group table and written to the monitor log.

The content values are matched using [regular expressions](#).

Each time the URL Content Monitor runs, it returns a [a status](#) and several match values and writes them in the monitoring log file. It also writes the total time it takes to receive the designated document in the log file.

Usage Guidelines

Why should I use this monitor?

You should use the URL Content Monitor if you need to verify multiple values (up to 10 variables) from the content of a single URL. Otherwise, the standard URL Monitor is normally used. One use of this monitor is to integrate SiteScope with other applications that export numeric data through a web page. The monitor includes the matched values as part of the monitor status which are written to the log. If the matched values are numeric data, the results can be plotted in a [management report](#).

What should I monitor?

The URL Content Monitor is primarily used to monitor web pages that are generated dynamically and display statistics about custom applications. By monitoring these pages, these statistics can be retrieved and integrated into the rest of your SiteScope system.

How should I schedule my monitors?

The frequency will depend on the statistics being monitored. For more statistics, every several minutes is often enough.

Status

The reading is the current value of the monitor. Possible values are:

- ♦ OK
- ♦ unknown host name
- ♦ unable to reach server
- ♦ unable to connect to server
- ♦ timed out reading
- ♦ content match error
- ♦ document moved
- ♦ unauthorized
- ♦ forbidden

♦ not found
♦ proxy authentication required
♦ server error
♦ not implemented
♦ server busy

The status is returned as good, warning, or error dependent on the results of the retrieval, content match, and the error or warning status criteria that you select.

Completing the URL Content Monitor Form

To display the URL Monitor Form, either click the name of an existing URL Content Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add URL Content Monitor**" link.

Complete the fields on the URL Content Monitor form as follows. When all the fields are complete, click the "**Add** Monitor" button.

URL
> Enter the URL that you want to monitor (for example, http://demo.freshtech.com). If you are monitoring a secure URL, be sure the URL reflects the correct transfer protocol (for example https://demo.freshtech.com).

Match Content
> Enter an expression describing the values to match in the returned page. If the expression is not contained in the page, the monitor will display "no match on content". A regular expression is used to define the values to match. For example, the expression /Copyright (\d*)−(\d*)/ would match two values, 1996 and 1998, from a page that contained the string Copyright 1996−1998

Update every
> Enter how frequently the monitor should check this URL. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings.

Disable
> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Timeout

> The number of seconds that the URL monitor should wait for a page to begin downloading before timing−out. Once this time period passes, the URL monitor will log an error and report an error status.

HTTP Proxy

> Optionally, a proxy server can be used to access the URL. Enter the domain name and port of an HTTP Proxy Server.

Retrieve Images

> Check this box if you want the status and response time statistics to include the retrieval times for all of the embedded images in the page. Embedded images include those referenced by "IMG" and "INPUT TYPE=IMAGE" HTML tags.

Retrieve Frames

> Check this box if you want SiteScope to retrieve the frames in a frameset and count their retrieval time in the total time to download this page.

Error If Match

> Enter a string of text to check for in the returned page. If the text **is** contained in the page, the monitor will display "no match on content". The search is case sensitive. Remember that HTML tags are part of a text document, so include the HTML tags if they are part of the text you are searching for (for example, "< B> Error < /B> Message"). You may also perform a Perl regular expression match by enclosing the string in forward slashes, with an "i" after the trailing slash indicating case−insensitive matching. (for example, "/href=Doc\d+\.html/" or "/href=doc\d+\.html/i").

Check for Content Changes

> Check this box if you want SiteScope to notify you if the contents of this document are changed. SiteScope records a checksum of the document the first time the monitor runs and then does a checksum each subsequent time it runs. If the checksum changes, you will be notified. The new checksum will be recorded as the default after the initial error has been issued.

Authorization User Name

> If the URL specified requires a name and password for access, enter the name in this field.

Authorization Password

> If the URL specified requires a name and password for access, enter the password in this field.

NT Challenge Response

> Check this box if you want SiteScope to use Window's NT Challenge Response authorization when retrieving this Web page.

Proxy Server User Name

> If the proxy server requires a name and password to access the URL, enter the name here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Proxy Server Password

If the proxy server requires a name and password to access the URL, enter the password here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Error On Redirect

Check this box if you want SiteScope to notify you if a URL is redirected. Normally, SiteScope follows redirects.

POST Data

If the URL is for a POST request, enter the post variables, one per line as name=value pairs. This option is used to verify that a form is working correctly by performing the same request that occurs when a user submits a form. See also the Match Content field for a way to verify that the correct form response was received. If this field is blank, a GET request is performed.

Advanced: This field can also be used to pass cookies with the request. For example, "Set−cookie: cookieName=cookieValue".

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

By default, SiteScope generates an error if the returned status is anything other than 200, which indicates a successful retrieval. You may choose to have SiteScope generate an error based on any of the following:

◊ tenth content match
◊ content match
◊ age
◊ second content match
◊ third content match
◊ fourth content match
◊ fifth content match
◊ sixth content match
◊ seventh content match
◊ eighth content match
◊ ninth content match
◊ download time
◊ connect time
◊ response time
◊ size
◊ dns time
◊ round trip time

At present, content match values used for error or warning generation must be numeric.

The URL Content Monitor follows redirect codes (301 and 302) to retrieve the actual page before returning the status of the URL retrieval. SiteScope will show a redirect error only if the redirects are more than 10 levels deep – this prevents infinite redirects from being followed, or if the Error On Redirect checkbox is selected..

Warning if

By default, SiteScope does not generate warnings for URL Content monitors. You may choose to generate a warning based any of the options listed under *Error if*. Enter the lowest value that should generate a warning.

Good if

By default, SiteScope returns an OK status if a 200 status is returned, but you may choose to base an ok status on any of the options listed under *Error if*. Enter the value that SiteScope should consider to be a good response.

URL List Monitor

The SiteScope URL List Monitor is used to check a large list of URLs. This monitor is commonly used by web hosting providers to measure the availability and performance of their customer's web sites.

A URL List is specified by giving a filename containing the list of URLs to check. The URLs that you want to monitor are saved in a plain text file. There is virtually no limit to the number that you can list though the run interval selected for the monitor may require that the number of URL's be limited. For each URL included in the URL list file, the monitor retrieves the contents of the URL or the server response to the request.

Each time the URL List Monitor runs, it returns the number of errors, if any, and writes it into the monitoring log file. It also writes the total number of URLs checked and the average time, in milliseconds, to retrieve each URL.

Usage Guidelines

Why should I use this monitor?

The URL List Monitor is designed to allow you to check large lists of URLs without having to create a separate URL monitor for each one. For example, this is useful if you host several web sites and simply want to ensure that they are each serving pages properly. The URL List Monitor is not used to confirm links between pages (Link Check Monitor) or other web transaction processes (URL Transaction Monitor).

What should I monitor?

The URL List Monitor is useful for monitoring any set of URL's that you simply want to make sure are available over the network.

How should I schedule my monitors?

This is strictly dependent upon how often to want to check to see if the URLs are working. Once an hour is common, but you can schedule it to run more often.

There are a few factors that affect how long it takes the URL List Monitor to complete a run: 1) number of URLs in the list, 2) URL retrieval time, and 3) the number of threads used. In some cases this may lead to the monitor not running as expected. As an example, let's say you have a list of 200 URLs that you want to monitor every 10 minutes, but, due to Internet traffic, SiteScope isn't able to complete checking all of the 200 URLs in that amount of time. The next time the monitor was scheduled to run, SiteScope would see that it hadn't completed the previous run and would wait for another 10 minutes before trying again.

If this happens once in awhile, it's probably not a problem, but if it happens more often there are three things you can do to resolve the issue.

1. The most obvious option is to schedule the monitor to run less frequently, but if that conflicts with some other objective, go to options 2 and 3.

2. The second thing you can do is reduce the pause interval set under the <u>Advanced Options</u>. This will minimize the time it takes for the monitor to retrieve all of the URLs.

3. The third option (which you can use in conjunction with number 2) is to increase the number of threads that SiteScope can use when checking the URLs. The more threads, the quicker SiteScope can check them. Of course, this will put a heavier load on your system, so you have to find a happy medium.

Ideally, you want SiteScope to have just completed checking the URLs in the list when it's time to start checking again. This would indicate that the load was evenly balanced. It may take some tweaking to get it just right.

Completing the URL List Monitor Form

To display the URL List Monitor Form, either click the name of an existing URL List Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add URL List Monitor**" link.

Complete the fields on the URL List Monitor form as follows. When all the fields are complete, click the "**Add** Monitor" button.

URL List Name
>Enter the path name for the file containing the list of URLs to be monitored. This file should be a plain text file and contain only one URL per line of text as shown here:

```
http://www.website.com/index.html
http://www.website.com/main/customer/order.html
http://www.website.net/default.htm
http://www.webpages.com/tech/support/ws/intro.html
```

Update every
>Enter how frequently the monitor should check this URL. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
>Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings.

Disable

Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Server

Enter the optional Server name to specify which URLs to check in the URL list. If the URLs are stored in a "map" format, this field is used to check a subset of the URLs from the list. By default, all the URLs in the list are checked.

Log

Enter the path name for the log file for this monitor. For each URL checked, an entry will be added to this log file. If this field is blank, a log is not created.

Error Log

Enter the path name for the error log file for this monitor. For each error retrieving a URL, an entry will be added to this log file. If this field is blank, a log is not created.

Threads

Enter the number of threads to retrieve URLs. This is the number of simultaneous checks to perform. Increasing this number will shorten the time for all of the URLs to be checked but also increase the load on the server.

Pause

Enter the pause, in milliseconds, between each URL check. Decreasing this number will shorten the total time required to check all of the URLs but will also increase the load on the server.

Retries *Enter the number of times you want SiteScope to try to reach URLs that are returning an error.*

HTTP Proxy

Optionally, a proxy server can be used to access the URLs in the list. Enter the domain name and port of an HTTP Proxy Server.

Authorization User Name

If the URLs in the list require a name and password for access, enter the name in this field.

Authorization Password

If the URLs in the list require a name and password for access, enter the password in this field.

Verify Error

Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

By default, SiteScope generates an error if any of the URLs cannot be successfully retrieved. You may choose to have SiteScope generate an error based on the number of URL errors, the number of URLs checked, or the average retrieval time. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if

By default, SiteScope does not generate warnings for URL List Monitors. You may choose to have SiteScope generate an error based on the number of URL errors, the number of URLs checked, or the average retrieval time.

Good if

You can use this option to change how SiteScope generates a good status. You can choose to have this based upon duration, number of URLs left to check, or errors.

URL Transaction Monitor

The SiteScope URL Transaction Monitor simulates a user's visit session across several pages. This is particularly useful for monitoring and testing multi−page e−commerce transactions and other interactive online applications. For example, you can instruct SiteScope retrieve a log−in page, enter an account name via a secure web form, check an account status for the page that is returned, and then follow a sequence of links through several more pages. URL Transaction Monitors are also very useful for checking pages that include dynamically generated information, such as session IDs, that are embedded in the web pages via dynamic links or hidden input fields.

A URL transaction begins with a specific URL acting as the starting point for the transaction. This can then be followed by additional URLs, or more commonly, links or form buttons that a user would be required to select in order to complete a specific transaction. By default, SiteScope allows you to define up to twenty transaction steps. For each step you may specify a content match or error string to search for, enter a user name and password if required, define custom POST data, as well as other optional criteria for that step.

Each time the URL Transaction Monitor runs it returns a reading and a status and writes them in the monitoring log file. SiteScope also writes the total round−trip time time for the transaction sequence as well as a break down of individual times for each step into the log file.

Usage Guidelines

Why should I use this monitor?

URL Transaction Monitors provide you with end−to−end verification that multiple−page transactions are working properly. This is especially important for e−commerce sites and sites that give users the ability to complete forms, etc. on−line. The URL Transaction Monitor Tool allows you to see what is returned at every step of a transaction, making trouble−shooting easier to complete.

What should I monitor?

You should monitor any multi−step transaction system that you have made available to general users because you are much less likely to hear about problems with these applications. Web site visitors often assume that any problems they encounter are due to user error rather than system error, especially if they're not familiar with your application. By using this monitor to perform transaction testing, you'll be certain that users are able to successfully complete transactions on your site.

How should I schedule my monitors?

The general rule of thumb is to run these monitors every 10 minutes or so. If you have a very critical transaction process, you may want to run them more often.

Status

The reading is the current value of the monitor. Possible status values include:

- ♦ OK
- ♦ unknown host name
- ♦ unable to reach server
- ♦ unable to connect to server
- ♦ timed out reading
- ♦ content match error
- ♦ document moved
- ♦ unauthorized
- ♦ forbidden
- ♦ not found
- ♦ proxy authentication required
- ♦ server error
- ♦ not implemented
- ♦ server busy

If the status returned is good or OK, the total time for the transaction, the number of steps completed, and an indication of the data transfered will be displayed. If an error is returned during the transaction, the URL in the sequence where the problem occurred is listed as part of the reading.

The status is logged as either good or error. An error status is returned if the current value of the monitor is anything other than OK. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail, pager, or SNMP trap, or execute an automatic recovery script when a problem is detected.

Using the Add URL Transaction Wizard

The Add URL Transaction Wizard enables you to quickly and easily create a URL Transaction Monitor. The wizard automatically opens when you choose the **Add URL Transaction Monitor** link on the SiteScope Add Monitor page. It guides you through creating and testing a URL Transaction Monitor. When you are finished, click the **Add Monitor** button to exit the wizard and add the new monitor to SiteScope.

Beginning a New URL Transaction Monitor

1. Enter the starting URL for the transaction in the **Other** text box under the **Enter the initial URL address** selection button box for Step 1.
2. Use the **Update Every** options to specify how often you want SiteScope to run this monitor.
3. Type a descriptive title in the **Title** text entry box.
4. Click the **Add Step** button.

The URL Transaction Wizard form will refresh, showing whether or not SiteScope was able to complete the first step of the transaction. The Step and its related action or URL is displayed in a list form at the top of the form. The HTTP response header and the content of the URL are appended to the bottom of the page. If SiteScope was unable to complete the step, an error screen will be displayed with information about the error. Click the **Back** button in the browser window to return to

the first step form. Check the form for errors, make corrections as needed, and then click the **Add Step** button to continue.

Note: Using the **Back 1 step** button causes SiteScope to reset all information for the current steps, allowing you to start over from the last successful step. Do not use this button as a method to view previously successful steps.

If the first page of this transaction requires that a User ID and Password be entered, or if you would like to check for specific content on this page, scroll down to the Advanced Options section of the wizard form and enter that data in the appropriate fields. Read more about how to complete these fields in the next section, titled **Completing the URL Transaction Monitor Form**.

When you have filled in the necessary information to complete the first step of the transaction, click on the **Add Step** button in the upper portion of the form. SiteScope will run the monitor to check the step defined and then display the the form for adding the next step to the transaction.

Defining the Next Step of the URL Transaction

When you've completed the first step successfully, you're ready to move on to the subsequent steps. This will be a repetitive process depending on the number of web pages and actions taht need to be taken to complete the transaction. The Add URL Transaction Wizard makes this easy by automatically showing you the available transaction related elements on the current page. You will use the Wizard to create each subsequent transaction step separately. Most transaction steps involve one of the following elements:

- ♦ Selecting a hyperlink (including image maps)
- ♦ Selecting a button on a form
- ♦ Selecting a Frame within a Frameset
- ♦ Following a META REFRESH redirection
- ♦ Specifying another URL manually

The figure below is an interactive example of the upper portion of the URL Transaction Wizard page. This is a hypothetical example created to illustrate how the different transaction elements are presented by the URL Transaction Wizard. The HTML FORM elements on this help page simulate the interaction of the actual Transaction Wizard page within SiteScope.

 Note: SiteScope does not parse or interpret embedded scripts or other client−side program code such as Javascript (ECMAscript). Web page content that is generated or controlled by client−side code will usually not appear in the URL Transaction Wizard. See the URL Transactions and Client−side Programs help page for more information on dealing with web page scripts.

Add URL Transaction Monitor (example)

Step 1   url   http://www.freshwater.com/

                     ok, 0.14 sec

Step 2   Select which option to use for the next step in the transaction

Freshwater's Internet Remote Managed Services over 1800 others Inside Info:
Monitoring Inside the Firewall Deep Monitoring Prevents False
Link: Positives Understand Your Site From the Outside Downtime = Lost
Revenue HOME ORDER PRODUCTS SUPPORT ABOUT
US index.htm aboutus.htm OrderOptions.htm download.htm SiteSeerForm.htm SiteSeerForm.h

This is a list of available links on this page

Form: {[1]/index−cgi/ice−form.pl}Search {[2]/index−cgi/login−form.pl}Member Login

This is a list of available Submit buttons on this page, the format is {FormName}ButtonName

{[1]/index−cgi/ice−form.pl}KEYWORDS= {[1]/index−cgi/ice−form.pl}DAYS=
{[1]/index−cgi/ice−form.pl}THESAURUS=
{[1]/index−cgi/ice−form.pl}SUBSTRING=substring
{[1]/index−cgi/ice−form.pl}CONTEXT=Search in all documents
{[2]/index−cgi/login−form.pl}USERNAME=
{[2]/index−cgi/login−form.pl}PASSWORD=

This is a list of available input items on this page, the format is {FormName}InputName

Frame: leftframetopframemainframe

This is a list of available frames on this page

Refresh: 5; url=Progress.html

This is a list of available meta refresh items on this page

URL: Enter URL in "Other" Field below.

Example: http://demo.freshtech.com

Other:

Select desired radio button and enter field here

Selecting a hyperlink

SiteScope parses the content of the URL in the current step and creates a list of hyperlinks that are
found. This includes links that are part of an image map. Any links found on this page of the
transaction can be displayed in the drop−down menu box to the right of the "Link" radio selection
button. Use the following steps to add a link step to the transaction:

1. Click the round selection button to the left of the list of links.
2. Click the arrow on the right of the box to display all available links and then click the link
   that you want SiteScope to follow. If you know a link is available on the subject page but it
   doesn't appear in the drop−down menu, see the note below on client−side programs.
3. (Optional) See the Advanced Options for the step you're currently defining and enter any
   string match or user name and password information you'd like SiteScope to use.
4. Click the **Add Step** button to move to the next step.

Selecting a form button

SiteScope parses the content of the URL in the current step and creates a list of form elements of the type "Submit". If SiteScope finds any HTML forms on the current page of the transaction, they will be displayed in a drop–down menu.

The listings are in the following format:

```
{[formNumber]FormName}ButtonName
```

For example, the *Search* button on a company's search page might be listed as:

```
{[1]http://www.CompanyName.com/bin/search}search
```

1. Click the round selection button to the left of the list of submit buttons.
2. Click the arrow on the right of the box to display all of the available form buttons and then click the one that you want SiteScope to select. If you know a form is available on the subject page but it doesn't appear in the drop–down menu, see the note below on client–side programs.
3. Directly below the list of submit buttons is a box that contains a listing of all of the input items available for this page. Locate the one(s) that pertain to the submit button you selected and type the appropriate post data after the = sign. You may need to run through the transaction in a separate browser window to determine the format and expected values for the post data.
4. (Optional) See the Advanced Options for the step you're currently defining and enter any string match or user name and password information you'd like SiteScope to use.
5. Click the **Add Step** button to move to the next step.

Selecting a Frame within a Frameset

Complete the following steps if the initial URL for this transaction contains a FRAMESET and you need to access a hyperlink, form, or form button that is a page displayed in one of the frames to proceed with the transaction.

1. Click the round selection button to the left of the Frame text entry box.
2. Click the arrow on the right of the box to display all available filenames displayed in the current FRAMESET and then click the file that you want SiteScope to retrieve.

Following a META Refresh redirection

If the page for this step of the transaction is controlled by a `<META HTTP-EQUIV="Refresh" CONTENT="timedelay; URL=filename.htm">` tag, you can instruct SiteScope to retrieve the specified file as the next step. This sort of construct is sometimes used for intro pages, splash screens, or pages redirecting visitors from an obsolete URL to the active URL.

1. Click the round selection button to the left of the Refresh text entry box.
2. Click the arrow on the right of the box to display all available Refresh filenames and then click the file that you want SiteScope to retrieve.

Go to another URL (manually)

Where the transaction uses the Common Gateway Interface (CGI) for data transmission between the client and the server, it may be useful to specify a particular URL and name−value pairs. You can enter the URL you want to request along with any name−value pairs needed to get to the next transaction step even if those values are available through some other page element (such as a form). This option also allows you to copy URL and CGI strings directly from the location or address bar of another browser client that you may be using to step through the transaction you are building.

Complete the following steps if you want to direct SiteScope to go to another URL.

1. Click the round selection button to the left of the URL text entry box.
2. Type the URL you'd like SiteScope to go to in the text entry box which contains **http://**.
3. See the Advanced Options for the step you're currently defining and enter any string match or user name and password information you'd like SiteScope to use.
4. Click the **Add Step** button to move to the next step.

Completing the Transaction

Once you have selected an element or action for the current step of the transaction, SiteScope sends the request to the specified server which returns the result. The result is usually another web page which includes other transaction elements or text to confirm the progress of the transaction so far. Continue using the URL Transaction Wizard to select the next transaction action or element and continue until you have created the steps that will complete the transaction. It is important to build end−to−end transaction monitors to be sure that you will know if users will be able to complete transactions.

The following entry fields are also included on the URL Transaction Wizard form:

Update every:

Within the Add URL Transaction Wizard, only the value entered for the final step of the transaction is remembered. The value is applied to the entire monitor.

Title

Enter the text for the title of this monitor that will be displayed in the SiteScope Monitor Detail Table. Within the Add URL Transaction Wizard, only the value entered for the final step of the transaction is remembered. You can change the title after adding the monitor via the Edit URL Transaction feature.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings. These settings are displayed for each step that is defined in the transaction. This allows you to make changes to match content expressions or POST data on previous steps if the request did not return the result that you wanted.

Disable

Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Like the transaction step type–reference pairs displayed in the upper portion of the form, the Advanced Options section displays the list of options for each step. Each step includes:

1. Step *n* POST Data
2. Step *n* Match Content
3. Step *n* Error If Match
4. Step *n* User Name
5. Step *n* Password
6. Step *n* Delay
7. Step *n* Title

The following describes these options:

Step n POST Data:
> If the URL at this step is for a POST request, enter the post variables, one per line as name=value pairs. This option is used to verify that a form is working correctly by performing the same request that occurs when a user submits a form. This field is most commonly used with the *Form* Reference Type. When the form is submitted, SiteScope fills in any fields that aren't specified with data here with the same defaults as a browser would have chosen.

Step n Match Content:
> Enter a string of text to check for in the returned page for this step. If the text is not contained in the page, the monitor will display *no match on content* for this step's URL. The search is case sensitive. Remember that HTML tags are part of a text document, so include the HTML tags if they are part of the text you are searching for (for example, "<B> Hello</B> World"). You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an *i* after the trailing slash indicating case–insensitive matching. (for example, /href=Doc\d+\.html/ or /href=doc\d+\.html/i).

Step n Error If Match:
> Enter a string of text to check for in the returned page for this step. If the text **is** contained in the page, the monitor will display *no match on content* for this step's URL. The search is case sensitive. Remember that HTML tags are part of a text document, so include the HTML tags if they are part of the text you are searching for (for example, "<B> Error </B> Message"). You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an *i* after the trailing slash indicating case–insensitive matching. (for example, /href=Doc\d+\.html/ or /href=doc\d+\.html/i).

Step n User Name:
> If the URL specified at this step requires a name and password for access, enter the name in this field.

Step n Password:
> If the URL specified at this step requires a name and password for access, enter the password in this field.

Step n Delay:
> (Optional) Enter how long SiteScope should wait before executing the next step of the transaction.

Step n Title

> (Optional) Enter the text for the title of this step within the transaction monitor. The title will only be displayed in the [Edit URL Transaction](#) form.

The advanced options for each step of a transaction are listed in sequential groups. The following advanced options apply to the entire transaction.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, [read these instructions](#).

Monitor Description *(Optional)*

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop–up for a monitor.

Timeout

> The number of seconds that the URL Transaction Monitor should wait for the entire transaction to complete before timing–out. Once this time period passes, the URL Transaction Monitor will log an error and report an error status.

Timeout is per Step

> Check this box if you want to use the value entered for the Timeout above as the Timeout for each step of the transaction rather than for the entire transaction. If the step takes more than this time to complete, the URL Transaction Monitor will log an error and report an error status.

HTTP Proxy:

> Optionally, a proxy server can be used to access the URLs in the transaction. Enter the domain name and port of an HTTP Proxy Server.

Retrieve Images:

> Check this box if you want the monitor to retrieve all of the graphics embedded in the pages of the transaction. The image retrieval time will be added to the total response time.

Retrieve Frames:
> Check this box if you want the monitor to retrieve the content of all frames related to the pages of the transaction. The frame retrieval time will be added to the total response time..

Proxy Server User Name:
> If the proxy server requires a name and password to access the URLs in the transaction, enter the name here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Proxy Server Password:
> If the proxy server requires a name and password to access the URLs in the transaction, enter the password here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

NT Challenge Response
> Check this box if you want SiteScope to use Window's NT Challenge Response when retrieving the URL in this step.

List Order (Optional)
> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if
> By default, SiteScope generates an error if the returned status for any step is anything other than 200 which indicates a successful retrieval. You may choose to have SiteScope generate an error based on the round trip retrieval time. Enter the shortest retrieval time (in milliseconds) that should generate an error. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if
> By default, SiteScope does not generate warnings for URL Transaction Monitors. You may choose to generate a warning based on round trip retrieval time. Enter the shortest retrieval time (in milliseconds) that should generate a warning.

Good if
> You can base a good status on the round−trip time for any one step if you would like. Choose the step from the drop−down menu and set the threshold.

Each time that you define a transaction step and press the Add Step button, SiteScope reruns all of the defined steps in the transaction as well as the step you have just added.

When you have successfully defined each step in the transaction that you want SiteScope to monitor, click the **Add Monitor** button. The URL Transaction Wizard will close and the new monitor will appear on the Group Detail page. Click the **Edit** button on this page to make changes to the URL Transaction Monitor.

Editing URL Transaction Monitors

The Edit URL Transaction Monitor Form is used for making changes to existing URL Transaction Monitors. To display the URL Transaction Monitor Form, click the **Edit** link of an existing URL Transaction Monitor in a monitor table.

A URL transaction begins with a specific URL acting as the starting point for the transaction. This can then be followed by additional URLs, links, or form buttons that a user would be required to select in order to complete a specific transaction. SiteScope allows you to define up to twenty transaction steps. Each step in the existing URL transaction is displayed in the upper portion of the Edit URL Transaction Monitor form. The steps are described by a type and a reference.

You change a content match, define an error content match, enter a user name and password if required, define custom POST data, as well as other optional criteria for each step in the Advanced Options section in the lower portion of the form.

Editing the URL Transaction

Complete the fields on the URL Transaction Monitor form as follows. Because the fields are the same for each of the steps, each field will only be documented once. When all the fields are complete, click the **Add** Monitor button.

Step n Type:
> Choose the type of item that the Reference represents.

Step n Reference:
> Enter the URL that you want to monitor (for example, http://demo.freshtech.com).
>
> The **URL** type is a full or relative URL. The first step is always a full URL. Relative URLs will be relative to the previous transaction step.
>
> *Notes for NT only:*
>> 1. If the URL starts with HTTPS, then a secure connection will be made using SSL (for example, https://www.freshtech.com). SiteScope for NT uses the SSL library from Internet Explorer. To monitor using SSL, installing Internet Explorer 4.0 or later is recommended.
>> 2. To monitor sites that require 128−bit SSL, the 128−bit patch to Internet Explorer must be installed.
>> 3. To monitor sites that require client certificates, the client certificate must be installed into Internet Explorer.>
>
> The **Form** type is the name of a Submit or Image button on the form. Enter either the displayed text of the button, or the name of the submit or image input item specified in the HTML. The match is case−sensitive. See the POST Data documentation below for more information about how form data is sent by the URL Transaction Monitor.

The **Link** type is the contents of a link. Enter the text that will match the contents of the link on the subject page.

The **Frame** type is the name of a frame. Enter text that will match the frame name (in the HTML).

The **Refresh** type URL in a HTML meta refresh tag. Enter text that will match the URL of the refresh in the META tag set.

The **XML** type is the name of an XML value. Enter the name of an XML value that will match a value in the XML document.

Each step of a transaction is listed in type−reference pairs. By default, SiteScope displays two additional type−reference pairs on the form that allows you to extend the current transaction by defining additional steps. The following two inputs apply to the entire transaction.

Update every:

Enter how frequently the monitor should check this URL. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title

Enter the text for the title of this monitor that will be displayed in the SiteScope Monitor Detail Table. This text entry has precedence over any other title text entered in the [Add URL Transaction Monitor](#) Wizard

Advanced Options

The advanced options give you the ability to customize error and warning thresholds, or complete optional settings. These settings are displayed for each step that is defined in the transaction. This allows you to make changes to match content expressions or POST data on previous steps if the request did not return the result that you wanted.

Disable

Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Like the transaction step type−reference pairs displayed in the upper portion of the form, the Advanced Options section displays the list of options for each step. Each step includes:

1. Step *n* POST Data
2. Step *n* Match Content
3. Step *n* Error If Match
4. Step *n* User Name
5. Step *n* Password
6. Step *n* Delay
7. Step *n* Title

The following describes these options:

Step n POST Data:

> If the URL at this step is for a POST request, enter the post variables, one per line as name=value pairs. This option is used to verify that a form is working correctly by performing the same request that occurs when a user submits a form. This field is most commonly used with the *Form* Reference Type. When the form is submitted, SiteScope fills in any fields that aren't specified with data here with the same defaults as a browser would have chosen.

Step n Match Content:

> Enter a string of text to check for in the returned page for this step. If the text is not contained in the page, the monitor will display *no match on content* for this step's URL. The search is case sensitive. Remember that HTML tags are part of a text document, so include the HTML tags if they are part of the text you are searching for (for example, "<B> Hello</B> World"). You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an *i* after the trailing slash indicating case−insensitive matching. (for example, /href=Doc\d+\.html/ or /href=doc\d+\.html/i).

Step n Error If Match:

> Enter a string of text to check for in the returned page for this step. If the text **is** contained in the page, the monitor will display *no match on content* for this step's URL. The search is case sensitive. Remember that HTML tags are part of a text document, so include the HTML tags if they are part of the text you are searching for (for example, "<B> Error </B> Message"). You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an *i* after the trailing slash indicating case−insensitive matching. (for example, /href=Doc\d+\.html/ or /href=doc\d+\.html/i).

Step n User Name:

> If the URL specified at this step requires a name and password for access, enter the name in this field.

Step n Password:

> If the URL specified at this step requires a name and password for access, enter the password in this field.

Step n Delay:

> (Optional) Enter how long SiteScope should wait before executing the next step of the transaction.

Step n Title

> (Optional) Enter the text for the title of this step within the transaction monitor. The title will only be displayed in the Edit URL Transaction form.

The advanced options for each step of a transaction are listed in sequential groups. As with the type−reference pairs above, SiteScope displays two additional sets of advanced options on the form that allows you to define these options for any additional steps. The following advanced options apply to the entire transaction.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

 This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

 By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, <u>read these instructions</u>.

Monitor Description *(Optional)*

 Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

 Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info pop−up for a monitor.

Timeout

 The number of seconds that the URL Transaction Monitor should wait for the entire transaction to complete before timing−out. Once this time period passes, the URL Transaction Monitor will log an error and report an error status.

Timeout is per Step

 Check this box if you want to use the value entered for the Timeout above as the Timeout for each step of the transaction rather than for the entire transaction. If the step takes more than this time to complete, the URL Transaction Monitor will log an error and report an error status.

HTTP Proxy:

 Optionally, a proxy server can be used to access the URLs in the transaction. Enter the domain name and port of an HTTP Proxy Server.

Retrieve Images:

 Check this box if you want the monitor to retrieve all of the graphics embedded in the pages of the transaction. The image retrieval time will be added to the total response time.

Retrieve Frames:

 Check this box if you want the monitor to retrieve the content of all frames related to the pages of the transaction. The frame retrieval time will be added to the total response time..

Proxy Server User Name:

 If the proxy server requires a name and password to access the URLs in the transaction, enter the name here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Proxy Server Password:

If the proxy server requires a name and password to access the URLs in the transaction, enter the password here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

NT Challenge Response

Check this box if you want SiteScope to use Window's NT Challenge Response when retrieving the URL in this step.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

By default, SiteScope generates an error if the returned status for any step is anything other than 200 which indicates a successful retrieval. You may choose to have SiteScope generate an error based on the round trip retrieval time. Enter the shortest retrieval time (in milliseconds) that should generate an error. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than).

Warning if

By default, SiteScope does not generate warnings for URL Transaction Monitors. You may choose to generate a warning based on round trip retrieval time. Enter the shortest retrieval time (in milliseconds) that should generate a warning.

Good if

You can base a good status on the round−trip time for any one step if you would like. Choose the step from the drop−down menu and set the threshold.

URL Transactions
and Dynamic Content

Web pages which include client−side programming or dynamically generated content can present problems in constructing SiteScope URL Transaction monitors. Client−side programs might include Java applets, ActiveX controls, Javascript, or VBScript. Web pages which are generated by server−side programming (Perl/CGI, ASP, CFM, SSI, etc.) can also present a problem if link references or form attributes are changed frequently.

SiteScope does not interpret Javascript, VBScript, Java applets, or Active X Controls embedded in HTML files. This may not be a problem when the functionality of the client−side program is isolated to visual effects on the page where it is embedded. Problems can arise when the client−side program code controls links to other URL's or modifies data submitted to a server−side program. Because SiteScope does not interpret client−side programs, actions or event handlers made available by scripts or applets will be invisible to the URL Transaction Wizard.

Some websites use dynamically generated link references on pages generated by server−side programming. While these web pages do not contain client−side programs, frequently changing link references or "cookie" data can make it difficult to set up and maintain a URL Transaction Monitor.

Dynamic Content Workarounds

There are several ways to make a SiteScope URL transaction monitor perform actions controlled by client−side programs and other dynamic content. Several of these workarounds are presented below. The workarounds generally require knowledge of the principles of web page construction, CGI programming, Perl−style regular expressions, and the programming used to support the web site being monitored.

Dynamic Content	SiteScope Work Around
A web page contains a script which controls a link to another URL (example: onClick = "document.location='http://...)	Use a Match Content regular expression in the tra step for the subject page to retain the filename.ext value from the .location="filename.ext" match pattern retained value can then be passed as a URL in the **Other** field of the next step of the transaction.
A client−side program reformats, edits, or adds data to a POST or GET data set collected by HTML form inputs.	Manually edit the script changes into the NAME=VALUE pairs displayed for the subject tran step. This can be done in the text box under the **Form** option in the URL Transaction Wizard or i **POST data** box for the applicable step in the Edit Transaction form. Requires familiarity with the so function and CGI request headers.

A client−side program generates HTML content which, after interpretation by a web browser, includes HTML `<A HREF=...>` links.	Use a Match Content regular expression to return `filename.ext` value from the `HREF="filename.ext"` pattern and pass it to URL field of the next transaction step.
A client−side program generates HTML content which, after interpretation by a web browser, includes forms submitted to a CGI program.	Manually enter the `NAME=VALUE` pairs for the su transaction step. This can be done in the text box the **Form** option in the URL Transaction Wizard **POST data** box for the applicable step in the Edit Transaction form. Requires familiarity with the so form structure, and CGI request headers.
A script dynamically sets the `ACTION` attribute of an HTML <FORM> tag.	Manually enter the `ACTION` URL for the next tra step. This can be done in the text box under the **URL** option in the URL Transaction Wizard or in **Step *n* Reference** box for the applicable step in th URL Transaction form. Requires familiarity with script.

The figure below illustrates several of the principles of constructing a URL Transaction Monitor using regular expressions. The regular expressions shown in the figure can be used to extract URLs from Javascript or other web page content. As indicated, content matches for a given step are performed on the content returned for that step. The parentheses used in the regular expressions cause the value matched by the expression inside the parentheses to be remembered or retained. This retained value can be passed on to the next step of the transaction by using the {$n} variable. Because the regular expression can contain more than one set of parentheses, the $n represents the match value from the $n[th] set of parentheses. The example in the figure only uses one set of parentheses and thus references the retained value as {$1}
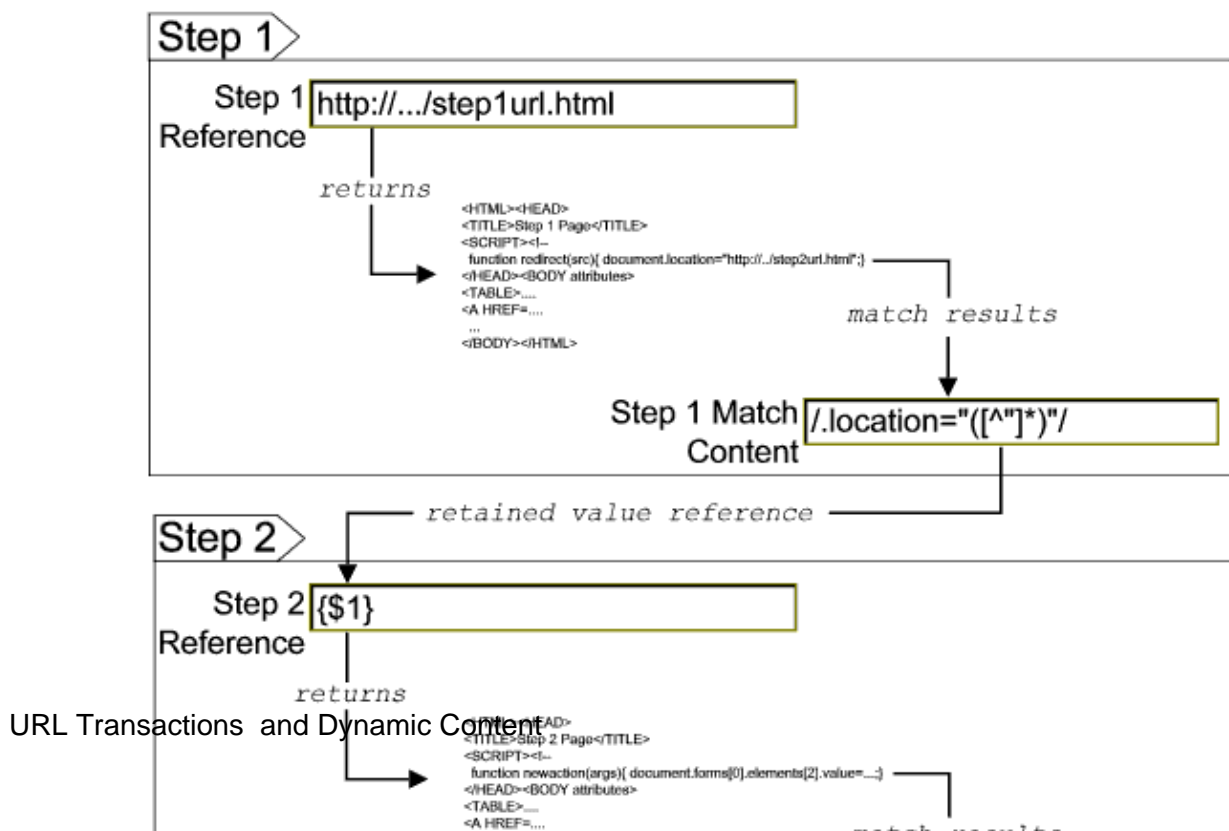
Web pages containing code that perform the following present additional challenges:

◆ A script parses a cookie or other dynamic content to be added to a CGI GET request.
◆ Link information is contained in an external script file accessed via a HTML `<SCRIPT HREF="http://... >` tag

Web pages with dynamically generated link and form content will probably not be parsed correctly by SiteScope URL Transaction Monitor Wizard.

Web Server Monitor

The Web Server Monitor reports statistics about the throughput of your web server. Each time the Web Server Monitor runs, it writes the current hits per minute and bytes per minute in the ~SiteScope/logs/SiteScope.log file. See the Advanced Topics section for notes on Reading Log File Data.

Usage Guidelines

Why should I use this monitor?

The information gathered by the Web Server Monitor gives you the ability to see how busy your web site is. This information allows you to plan hardware upgrades and configuration changes that will improve your visitors' experience.

What should I monitor?

It's most effective if you create a separate Web Server Monitor for each web server you're running. If you're running multiple web servers, each one should have its own log file so that SiteScope can report on them separately. See the notes on reading log file data for a review of what data is recorded.

How should I schedule my monitors?

The default spacing that we recommend for the Web Server Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the Web Server Monitor Form

To display the Web Server Monitor Form, either click the name of an existing Web Server Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Web Server**" link.

Complete the fields on the Web Server Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

Server
> Choose the server that you want to monitor. The default is to monitor web servers on the server on which SiteScope is running. Click the **choose server** link to monitor web servers on another NT server.

Web Server
> Choose the web server to monitor from the popup list. On Unix servers, enter the full pathname of the web server log file.

Update every
> Enter how frequently the monitor should read the Web server log file. The pull–down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title *(Optional)*

> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Log File Path

> If your web server does not appear in the Web Server list, you may still monitor it by entering the full path name to the web server log file.

> An example of a server log file path is:
> **c:/ns−home/httpd−test/logs/access**

> For servers that dynamically generate the filename for log files, you can include [regular expressions](#) as part of the log file path definition. The SiteScope can then retrieve data from a range of filenames based on evaluation of the regular expressions.

Request Size Column

> If your web server saves information in a custom format. Enter the column number which contains the Request Size. If this field is blank, the common log file format is assumed.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, [read these instructions](#).

Monitor Description *(Optional)*

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order *(Optional)*

> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

> Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon hits per minute or bytes per minute. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.
>
> For example, if you want SiteScope to report an error if your hits per minute reach 10,000 or higher, you would choose **hits/min** from the pop−up menu, select >= from the comparison value pop−up menu, and then type 10000 in the text entry box.
>
> **Note:** Do not enter commas in the text entry field.

Warning if

> Use this field to set a warning threshold for this monitor. The warning threshold can be based upon hits per minute or bytes per minute. Set this value exactly as you would the Error threshold in the **Error if** field.
>
> For example, If you want SiteScope to report a warning condition if your bytes per minute reach 500,000 or higher, you would choose **bytes/min** from the pop−up menu, select >= from the comparison value pop−up, and then type 500000 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

> You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on either hits per minute or bytes per minute. Complete this field exactly as you would the **Error if** and **Warning if** fields.

🐸 Web Services Monitor

The Web Service Monitor is used to check Simple Object Access Protocol (SOAP) enabled web services for availability and stability. The Web Services Monitor sends a SOAP based request to the server and checks the response to verify that the service is responding.

The Simple Object Access Protocol (SOAP) is a way for a program running under one operating system to communicate with another progam running under the same or different operating system (such as a Win 2000 program talking to a Linux based program) The Simple Object Access Protocol uses the Hypertext Transfer Protocol (HTTP) and Extensible Markup Language (XML) for information exchange with services in a distributed environment.

This monitor uses a Web Services Description Language (WSDL) file to extract information about a web service and uses information returned to create a SOAP request to that web service. The WSDL request is used to verify the syntax expected by the web service. The SOAP request is used to confirm that the web service is serving the expected data. The status of the Web Service Monitor is set based on the results of the SOAP request

Usage Guidelines

Why should I use this monitor?

This monitor should be used to ensure the availability of a web service accepting SOAP requests. The Web Serivces Monitor checks that the service can send a response to the client in certain amount of time and to ensure that the SOAP response is correct.

What should I monitor?

You can monitor any server that accepts SOAP requests and has a description in accordance to WSDL format.

You can find more information on SOAP on the W3C website at: http://www.w3.org/TR/SOAP/

For more information on WSDL is available from Microsoft® at: http://msdn.microsoft.com/xml/general/wsdl.asp

How often should I schedule Web Service Monitors to run?

You should set the monitor to run at an interval consistent with your reasonable acceptable error period. Depending on the importance of the service to your e−business mission, you may want to set the monitor to run every five or ten minutes. If the data from the service is used mostly for information, you may not need to run the monitor as often.

Some consideration to the utilization of monitoring bandwidth and monitoring system performance should also be used in determining the monitor run interval. Running the monitor every minute may impact the availability of the service to other users as well as adding load to the SiteScope service

Status

The status reading shows the the most recent result for the monitor. This status value is displayed in the URL Group table within SiteScope. It is also recorded in the SiteScope log files, e−mail alert messages, and can be transmitted as a pager alert. The possible status values are:

- OK
- unknown host name
- unable to reach server
- unable to connect to server
- timed out reading
- content match error
- document moved
- unauthorized
- forbidden
- not found
- proxy authentication required
- server error
- not implemented
- server busy

The final status result is either OK, error, or warning based on threshold established for these conditions. If you would like for SiteScope to respond if an error status is returned, create an alert. An alert contains instructions that tell SiteScope to either notify you via e−mail or pager, or execute an automatic recovery script when a problem is detected.

Error Codes Used by this Monitor

The error codes for this monitor are the same error codes used for the SiteScope URL monitor.

Completing the Web Service Monitor Form

To display the Web Service Monitor Form, either click the name of an existing Web Service Monitor listed in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Web Service Monitor**" link.

Complete the fields on the Add Web Services Monitor form as follows. When the required fields are complete, click the **Add** Monitor button.

URL of the WSDL
>   Enter the URL or the file path of the WSDL file to be used for this monitor.

Method Name
>   Enter the name of the method to be invoked. During initial setup this will be extracted from the WSDL file.

Server URL
>   Enter the URL of the web service to be monitored. During initial setup this will be extracted from the WSDL file.

Name of arguments

Enter the name of the arguments to the method specified above and their types. During initial setup this will be extracted from the WSDL file.

NOTE:

Site Scope only allows for simple types. For more complex types look at the example below.

If an argument name is `inputFloatArray(arrayoffloat)=`

Then the argument name–type pair would be:

`inputFloatArray(arrayoffloat)=[COMPLEX]`

This can be used if inputFloatArray() is represented by the following:

```
<inputFloatArray SOAP-ENC:arrayType="xsd:float[5]"
SOAP-ENC:offset="[0]">
    <item>123.4</item>
    <item>0.56789</item>
    <item>-1234.00007</item>
    <item>-111</item>
    <item>0</item>
</inputFloatArray>
```

NOTE: Make sure there are no extra spaces or carriage returns in the input.

Update every
Enter how frequently the monitor should try to reach the host. The pull–down menu to the right of the text entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds or greater.

Title (Optional)
Enter a title for this monitor. This title appears in the **Name** field on the monitor table when you open the subject group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre–set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable
Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un–check the box.

Match Content
Enter a string of text to check for in the returned page or frameset. If the text is not contained in the page, the monitor will display "no match on content". The search is case sensitive. Remember that HTML tags are part of a text document, so include the HTML tags if they are part of the text you are searching for (for example, "< B> Hello< /B> World"). This works

for XML pages as well. You may also perform a [Perl regular expression](#) match by enclosing the string in forward slashes, with an "i" after the trailing slash indicating case−insensitive matching. (for example, "/href=Doc\d+\.html/" or "/href=doc\d+\.html/i"). If you want a particular piece of text to be saved and displayed as part of the status, use parentheses in a Perl regular expression. For example /Temperature: (\d+). This would return the temperature as it appears on the page and this could be used when setting an Error if or Warning if threshold

Method Name Space
> The XML name space for the method in the SOAP request. During initial setup this value will be extracted from the WSDL file.

Content Type
> The SOAP http header content type value. Default is − text/xml; charset= utf−8 .

SOAP ACTION
> The SOAP ACTION url in the header of the SOAP request to the Web Service. During initial setup this will be extracted from the WSDL file.

Request's schema
> The request schema. Currently SiteScope only supports SOAP.

HTTP Proxy
> Optionally, a proxy server can be used to access the URL. Enter the domain name and port of an HTTP Proxy Server

Authorization User Name
> If the URL specified requires a name and password for access, enter the name in this field.

Authorization Password
> If the URL specified requires a name and password for access, enter the password in this field.

Proxy Server User Name

> If the proxy server requires a name and password to access the URL, enter the name here. Technical note: your proxy server must support Proxy−Authenticate for these options to function.

Proxy Server Password
> If the proxy server requires a name and password to access the URL, enter the password here. **Technical note:** Your proxy server must support Proxy−Authenticate for these options to function.

Verify Error
> Check this box if you want SiteScope to automatically run this monitor again immediately if it detects an error.

Update Every (on error)
> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes

normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule *(Optional)*

By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description *(Optional)*

Enter any additional information or details you want to associate with this monitor. The description will appear on the Monitor Detail page.

Report Description *(Optional)*

Enter a description for this monitor that will make it easier to understand what this monitor does. This description will appear in the headings of Management Reports and on the info popup for this monitor.

List Order *(Optional)*

By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

This option allows you to customize the conditions under which the Web Service Monitor generates an error status message.

Warning if

This option allows you to customize the conditions under which the Web Service Monitor generates a warning status message.

Good if

This option allows you to customize the conditions under which the Web Service Monitor generates a good status message.

On to the Windows Media Server Monitor

Table of Contents

Windows Media Server Monitor

The SiteScope Windows Media Server Monitor allows you to monitor the availability of an Windows Media server on Windows NT systems. The error and warning thresholds for the monitor can be set to one of several Windows Media server performance statistics.

Usage Guidelines

Why should I use this monitor?

The information gathered by the Windows Media Server Monitor gives you the ability to see how busy your Microsoft Windows Media server is. This information allows you to plan hardware upgrades and configuration changes that will improve your visitors' experience.

What should I monitor?

It's most effective if you create a separate Windows Media Server Monitor for each Windows Media server server you're running.

How should I schedule my monitors?

The default spacing that we recommend for the Windows Media Server Monitor is every 10 minutes, but you can run it more or less often if you prefer.

Completing the Windows Media Server Monitor Form

To display the Windows Media Server Monitor Form, either click the name of an existing Windows Media Server Monitor in a monitor table, or click the "**Add** a new Monitor to this Group" link on a group's detail page and choose the "**Add Web Server**" link.

Complete the fields on the Windows Media Server Monitor Form as follows. When all the fields are complete, click the **Add** Monitor button.

Server
> Choose the server you want to monitor. Use the choose server link to view a list of servers or to enter a path name. On Unix servers, enter the full pathname of the web server log file.

Update every
> Enter how frequently the monitor should read the server statistics. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Title (Optional)
> Enter a name for this monitor. This name appears in the **Name** field on the monitor table when you open the group's detail page. If you don't enter a name, a default name will be created.

Advanced Options

The advanced options give you the ability to customize error and warning thresholds. If you choose not to set them, SiteScope will use pre−set defaults if available. If a default is not available, SiteScope will not be able to utilize the condition.

Disable

> Check this box to temporarily disable this monitor and any associated alerts. To enable the monitor again, un−check the box.

Verify Error

> Check this box if you want SiteScope to automatically run this monitor again if it detects an error.

Update Every (on error)

> This options allows you to set a new monitoring interval for monitors that have registered an error condition. For example, you may want SiteScope to monitor this item every 10 minutes normally, but as often as every 2 minutes if an error has been detected. Note that this increased scheduling will also affect the number of alerts generated by this monitor.

Schedule (Optional)

> By default, SiteScope's monitors are enabled every day of the week. You may, however, schedule your monitors to run only on certain days or on a fixed schedule. Choose the **Edit** schedule link to create or edit a monitor schedule. For information about creating schedules, read these instructions.

Monitor Description (Optional)

> Enter additional information about this monitor. The description will appear on the Monitor Detail page.

Report Description (Optional)

> Enter a description for this monitor that will make it easier to understand what this monitor does. The description will appear on Management Reports and on the info popup for a monitor.

List Order (Optional)

> By default, new monitors are listed last on the Monitor Detail page. You may use this pull−down menu to choose a different placement for this monitor.

Error if

> Use this field to change the default Error threshold for this monitor. You may choose to have SiteScope generate an Error condition based upon active streams or stream errors per second. Enter a comparison value and use the comparison operator pop−up to specify an error threshold such as: >= (greater than or equal to), != (not equal to), or < (less than). The value entered must be a whole number.
>
> For example, if you want SiteScope to report an error if your stream errors per second reach 32 or higher, you would choose **stream errors/sec** from the pop−up menu, select **>=** from the comparison value pop−up menu, and then type 32 in the text entry box.

Note: Do not enter commas in the text entry field.

Warning if

Use this field to set a warning threshold for this monitor. The warning threshold can be based any of the choices displayed in the drop−down menu such as pending connections or late reads/sec. Set this value exactly as you would the Error threshold in the **Error if** field.

For example, If you want SiteScope to report a warning condition if your late reads/sec reach 20 or higher, you would choose **late reads/sec** from the pop−up menu, select >= from the comparison value pop−up, and then type 20 in the text entry box. **Note:** Do not enter commas in the text entry field.

Good if

You may instruct SiteScope to return a good status only if certain conditions are met. You may define those conditions here. You may base a good reading on either hits per minute or bytes per minute. Complete this field exactly as you would the **Error if** and **Warning if** fields.

🐸 SiteScope Alerts

You can instruct SiteScope to alert you when it detects a problem in your web environment. SiteScope offers several types of alerts including e−mail, electronic pager, and SNMP Trap. An alert definition contains instructions that tell SiteScope how to respond when there is a change in state for a monitor, for example a change from normal−to−error or normal−to−warning condition. You can create an alert that includes instructions for SiteScope to notify you via your pager or send you e−mail when a specific condition is detected.

In this document we discuss:

- Using Alerts
- The Alert Detail page
- Additional links
- How to create an alert
- How to edit an alert
- How to delete an alert
- How to disable an alert
- How to view alerts logs and other logs

Using Alerts

SiteScope alerts can be used in several ways to notify you of conditions in your web environment. Alerts can be associated with individual monitors, groups of monitors, or globally for all monitors on a particular installation of SiteScope. The table below shows the different ways alerts can be associated with monitors.

Alert Class	Description
Global Alerts	Alerts that are triggered when any monitor on a given SiteScope installation changes status.
Group Alerts	Alerts are triggered by any monitor within the specified group or within a selection of individual monitors.
Individual Monitor Alerts	Alerts are triggered when the specified monitor status changes.

By default, SiteScope sends one alert as soon as any monitor it is associated with detects an error condition. The options presented in the **When** section of the alert definition page allow you to control when alerts are actually sent in relation to when a given condition is detected. For example, you can choose to have SiteScope generate an alert only after an error condition persists for a specific interval corresponding to a given number of monitor runs. This is useful for monitors that run frequently that monitor dynamic, frequently changing environment parameters. In some cases, a single error condition may not warrant any intervention. The options in the When section are as follows:

When

Always, after the condition has occurred at least times
> Only cause an Alert after the condition occurs **at least** this many times, consecutively.

Once, after condition occurs exactly times
> only cause an Alert after the condition occurs **exactly** this many times, consecutively.

Initial alert and repeat every times afterwards
> cause an Alert after the condition occurs X consecutive times and repeat the alert every Y consecutive times therafter.

Once, after group errors
> cause an alert the first time that any monitor in this group gets this many consecutive error readings

Once, when all monitors of this group are in error
> cause an alert when all of the monitors in the group are in error

The following diagrams show examples of different alert configurations that send alerts after the error condition has persisted for more than one monitor run. It is important to note that the sample interval corresponds to how often the monitor is run. If a monitor runs every fifteen seconds and the alert is set to be sent after the third error reading, the alert will be sent 30 seconds after the error was detected. If the monitor run interval is once every hour with the same alert setup the alert would not be sent until 2 hours later.

Example 1a. Alert sent for each error reading after condition persists for at least three monitor runs. Compare with Example 1b below.

Alert setup	Always, after the condition has occurred at least times										
sample interval	0	1	2	3	4	5	6	7	8	9	10
status	🟢	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🟢	🔴	🟢
count	c=0	c=1	c=2	c=3 alert!	c=4 alert!	c=5 alert!	c=6 alert!	c=7 alert!	c=0	c=1	c=0

Example 1b. Alert sent for each error reading after condition persists for at least three monitor runs. Shows how the count is reset when the monitor returns one non−error reading between consecutive error readings. Compare with Example 1a above.

Alert setup:	Always, after the condition has occurred at least times										
sample interval	0	1	2	3	4	5	6	7	8	9	10
status	🟢	🔴	🔴	🟢	🔴	🔴	🔴	🔻	🟢	🔴	🟢
count	c=0	c=1	c=2	c=0	c=1	c=2	c=3 alert!	c=0	c=0	c=1	c=0

Example 2. Alert sent **ONLY ONCE** after condition persists for at least three monitor runs, regardless of how long the error is returned thereafter.

Alert setup:	Once, after the condition occurs exactly times										
sample interval	0	1	2	3	4	5	6	7	8	9	10
status	🟢	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴

count	c=0	c=1	c=2	c=3 alert!	c=4	c=5	c=6	c=0	c=1	c=0	c=0

Example 3a. Alert sent on the fifth error reading and for ever third consecutive error reading thereafter. Compare with Example 3b below.

Alert setup:	Initial alert and repeat every times afterwards.										
sample interval	0	1	2	3	4	5	6	7	8	9	10
status	🟢	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
count	c=0	c=1	c=2	c=3	c=4	c=5 alert!	c=6	c=7	c=8 alert!	c=9	c=10

Example 3b. Alert sent on the third error reading and for ever fifth consecutive error reading thereafter. Compare with Example 3a above.

Alert setup:	Initial alert and repeat every times afterwards.										
sample interval	0	1	2	3	4	5	6	7	8	9	10
status	🟢	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
count	c=0	c=1	c=2	c=3 alert!	c=4	c=5	c=6	c=7	c=8 alert!	c=9	c=10

Because you can create multiple alerts and associate more than one alert to a monitor, you can tell SiteScope to take more than one action for a given situation. For example, you can create one alert that tells SiteScope to page you whenever *any* monitor returns an error status. You can then create another alert that tells SiteScope to run a script file to delete files in the /tmp directory on your server if your Disk Space Monitor returns an error. Then if your disk ever became too full, SiteScope would page you because of the first alert definition **and** would run the script to delete files in the /tmp directory because of the second alert definition.

SiteScope alerts are generated when there is a change in state for a monitor reading. Thus you can set an alert for OK or warning conditions as well as error conditions. One way to take advantage of this is to add two alerts, one alert on error, and one alert on OK. Set alerts to be sent after the condition is detected 3 time. For the OK alert, check the box marked "Only allow alert if monitor was previously in error at least 3 times". This will prevent unmatched OK alerts, such as when a monitor was disabled for any reason (manually, by schedule, or by depends on) and then starts up again. This can also be used to ensure that an OK alert is only sent after a corresponding error alert was sent. With these two alerts you will get a page when a link or service goes down (monitor detects change from OK to error), and another when it comes back up (monitor detecting change from error to OK). The following diagram is an example of using two alerts with a monitor.

Example 4. Alert sent once for error after condition persists for at least three monitor runs. Alert sent once for OK after at least three error intervals and after OK condition persists for three intervals.

Alert on Error setup	**On** Error	Once, after the condition occurs exactly times

Alert on OK setup	**On** Ok	Once, after the condition occurs exactly times Only allow alert if monitor was previously in error at least times									
sample interval	0	1	2	3	4	5	6	7	8	9	10
status	🟢	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🟢	🟢	🟢
count	c=0	c=1	c=2	c=3 alert!	c=4	c=5	c=6	c=7	c=1 alert!	c=2	c=3

The Alert Detail Page

The Alert Detail page provides a tabular overview of the defined alerts. To reach this page, choose the Alerts button on the navigation bar. From this page you can create, edit, and delete alerts.

The Alert Table

The Alert Detail table gives you a summary view of the alerts currently defined. The columns of the Alert Detail table display the following information:

On

The status condition under which SiteScope should respond. For example, if this column contains **error x 1**, SiteScope will respond the first time a selected monitor returns a reading in the error range. It the column contains **error x 5**, SiteScope will only respond after the monitor returns a reading that indicates an error 5 times. If you've created an alert for several monitors, such as all monitors in a particular group, SiteScope will respond when **any** monitor in the group meets the indicated status condition.

Group

The name of the monitor or group of monitors this alert has been associated with. Global alerts are indicated by "all groups".

For

The monitor or monitors for which the alert status condition must be true. For global alerts this will be any monitor defined on this installation of SiteScope. Group alerts will be for any monitor in the group. Individual alerts will list the name of the specific monitor.

Do

The action that SiteScope should take when the condition is met for the specified monitor(s). For example, this column may contain something like **Send Mail to "webmaster@freshtech.com"** which indicates that e–mail should be sent to this address if the appropriate status condition exists.

History

Click on this link to display a table showing the alerts that were sent during the last day or 24–hour period.

Edit

Selecting this link will take you to the Edit Alert page. This will allow you to make changes in the alert criteria.

Test

Use this link to test an alert with a selected monitor. The Alert Test page is displayed which allows you to select an alert from a drop−down menu. Selecting the "Test Alert" button completes the action

Del

Click the X to delete this alert. A confirmation screen is displayed. Selecting the "Delete Alert" button completes the action

Additional Links

In addition to the alert table, the following links are also available on the alert detail page.

Add *a new alert*

Choose this link to create a new alert.

Disable *all Alerts*

Choose this link to disable all defined alerts. This is useful in the event of a major failure that you are already aware of.

Enable *all Alerts*

Choose this link to enable all currently defined alerts.

Edit E−mail Preferences

Choose this link to edit mail preferences. This is where you tell SiteScope how to reach you via e−mail.

Test E−mail

Choose this link to send a test message using e−mail. This allows you to verify that SiteScope will be able to reach you via e−mail in the event of an error or warning.

Edit Pager Preferences

Choose this link to edit pager preferences. Choose the Edit link to tell SiteScope how to reach you via pager.

Test Pager

Choose this link to send a test message to your pager. This allows you to verify that SiteScope will be able to reach you via pager in the event of an error or warning.

Edit SNMP Trap Preferences

Choose this link to edit SNMP preferences. This is where you tell SiteScope how to send messages to SNMP consoles.

Test SNMP Trap

Choose this link to send a test message using SNMP. This allows you to verify that SiteScope will be able to contact the SNMP console in the event of an error or warning.

Quick Report *of alerts sent*

Choose this link to specify a report of alerts that were sent.

View *the Log of alerts sent*

Choose this link to view Logs page. The Logs page includes links that allow you to view the tab delimited log files for the alerts that have been sent, the log of any errors encountered in sending the alerts, and date coded log files of SiteScope monitor readings.

Creating Alerts

SiteScope allows you to create as many alerts as you like.

To create a new alert:

1. On the SiteScope Panel, click the **Alerts** button on the navigation bar. The alert detail page appears.
2. Click the "**Add** a new alert" link. The Add Alert form appears.
3. Choose the category of monitor status that activates this alert – error, warning, or OK.
4. Click the radio button for the kind of alert you would like to add – e–mail, pager, script, etc..
5. Click that "**Define Alert**" button. The Define Alert form for the kind of alert that you selected will appear.
6. Complete the form for the specific alert you are creating. Each Define Alert page asks you to select the monitor or monitors that will trigger the alert, details of how and where the alert will be sent, and criteria defining when or how often the alert should be sent. Use the Help button on the navigation bar to see help specific to that kind of alert.
7. Click the "**Add** this alert" link. The new alert is created and the alert detail page is updated.

Editing Alerts

You may edit an alert at any time. Changes go into effect immediately.

To edit an alert:

1. On the SiteScope Panel, click the **Alerts** button on the navigation bar. The alert detail page appears.
2. Click the **Edit** link in the Alert Detail Table for the alert that you want to edit. The Edit Alert form appears.
3. Make the desired changes to the form.
4. Click the "**Update** this alert" link. The alert is updated and the alert detail page appears again.

Deleting Alerts

You may delete an alert at any time.

To delete an alert:

1. On the SiteScope Panel, click the **Alerts** button on the navigation bar. The alert detail page appears.
2. Click the X in the **Del** column of the Alert Detail Table.
3. A confirmation screen is displayed. Click on the Delete Alert button to confirm the action
4. The alert detail page is updated.

Disabling Alerts

You may disable alerts whenever you don't want SiteScope to notify you of an error.

To disable an alert:

1. On the SiteScope Panel, click the **Alerts** button on the navigation bar. The alert detail page appears.
2. Click the **Edit** link in the Alert Detail Table for the alert that you want to disable. The Edit Alert form appears.
3. Check the **disable** box located under **Advanced Options**.
4. Click the "**Update** this alert" link. The alert detail page appears again.

Viewing Sent Alerts and Logs

You may view a log of all the alerts that have been sent for the last day, a log of failed alert attempts, and date coded monitor logs.

To view the alert logs:

1. On the SiteScope Panel, click the **Alerts** button on the navigation bar. The alert detail page appears.
2. Click the **View the log of alerts sent** link near the bottom of the Alert Detail page. The Alert Log page appears.
3. Click the **Alert log** link to view the details of alerts that were sent. Click the **Failed alerts** link to view the details of alerts for which an error was encountered. An example may be that SiteScope was unable to reach a paging service. To view previous alert logs, choose a from the list of date coded links displayed below the Failed Alerts link on the page.

Database Alerts

The Database Alert allows you to export an alert with a description of the problem as a record to a SQL database. You can then use database tools to provide more advanced searching, sorting and reporting on your monitoring data.

Completing the Database Alert Form

Complete each section of the form as described below and then click the Add or Update button to record the changes.

On

> The category of monitor status that activates this alert. You may choose either Error, Warning, or Ok.

Alert Subjects

> Select the groups or monitors that will trigger this alert. You can select multiple groups and monitors by holding down the control key while making your selection. The choices include:
>
> ◊ **All Groups** – Select All Groups if you want SiteScope to perform an action whenever **any** monitor on this installation returns the indicated status condition. For example, you would choose this option if you want SiteScope to page you whenever any monitor returns an error status.
>
> ◊ **[group name]** – Select a specific group if you want SiteScope to perform an action whenever any monitor in the selected group returns the indicated status condition. For example, you would select the Network group if you wanted SiteScope to page you if any monitor in the Network group returned an error status.
>
> ◊ **[group name]: [monitor name]** – Select a specific monitor if you want SiteScope to perform an action only if the selected monitor returns the indicated status condition. For example, you would choose this option if you wanted SiteScope to send you e−mail if one specific monitor returned a warning status.

Database Connection URL

> Enter a URL to a Database Connection. The easiest way to create a database connection is to use an ODBC driver manager to create a named connection to a database. For example in Windows NT, first use the ODBC Data Sources manager in the Settings control panel to create a connection called `test`. Then, enter `jdbc:odbc:test` in this field as the connection URL.

SQL Statement

> Enter the SQL statement used to add the alert to the database. Items enclosed in < and > are replaced with fields from the monitor which caused the alert. For example, entering
> `INSERT INTO SiteScopeAlert VALUES('<name>')`
>
> will add a record with the name of the monitor which caused the alert.

When

  The number of times the alert conditions should be met before SiteScope executes the action you specified.

> ◊ **Always, after the condition has occurred at least N times** – After the condition occurs at least N times, SiteScope executes the action every time the alert conditions are met. Type the minimum number of times the alert conditions must be met in the text input field.

> ◊ **Once, after condition occurs exactly N times** – SiteScope executes the action once, after the conditions are met for the Nth time. Type the number of times the alert conditions must be met in the text input field.

> ◊ **Inital alert X and repeat every Y times afterwards** – Executes the alert action after the condition occurs X consecutive times and then repeats the alert every consecutive Y occurences thereafter. For example,if X was set to 3, and Y was set to 4, then the action would be triggered on the 3rd, 7th, 11th, etc. occurrences of the condition. Choose this option by selecting the applicable radio button, entering the multiple (E) and the minimum number of times (N) the alert conditions must be met in the text input fields provided.

> **Note:** This feature was modified in SiteScope version 5.5. Alert parameters set for this option in prior versions are transposed to this new format when upgrading to version 5.5 and may result in a change in the orginally intended behavior.

> ◊ **Once, after N errors in this group** – SiteScope executes the action only after any monitor in the group has been in error exactly N consecutive times. Type the number of errors in the text input field.

> ◊ **Once, when all monitors of group are in error** – SiteScope executes the action the first time all monitors in the group are in error.

Advanced Options

Using the Advanced Options, you can further filter which conditions should trigger an alert.

Disabled

  This check box prevents the alert from executing the action, even if the conditions are met. This is useful for temporarily turning off alerts.

Name Match

  This field allows you to make use of naming conventions for your monitors. You may enter a word or string that appears in the names of monitors in this field, and SiteScope will only generate an alert if the name of the monitor in error contains this word or string. For example, entering Ping: triggers this alert only for monitors that have a name that contains " Ping:" . The match is case sensitive.

Status Match

  This field allows you to match on specific status readings returned by a monitor. For example, if you type timeout in this field, an alert will only be triggered by a monitor which has a status of " timeout." This match is case sensitive.

E–mail Alerts

The E–Mail Alert form allows you to add or edit an Alert which sends an e–mail message to one or more people with a description of the error or warning. You can access the E–Mail Alert form by clicking the Alerts button on the SiteScope navigation bar and then selecting the **Edit** link in the Alert Detail table or the "Add an alert" link below the Alert Detail table.

Completing the E–mail Alert Form

Complete each section of the form as described below and then click the **Add** E–mail Alert button.

Alert Subjects

Select the groups and monitors handled by this alert. Select multiple groups and monitors by holding down the control key while making your selection. The choices are:

◊ **All Groups** – Select All Groups if you want SiteScope to perform an action whenever **any** monitor returns the indicated status condition. For example, you would choose this option if you want SiteScope to page you whenever any monitor returns an error status.

◊ **[group name]** – Select a specific group if you want SiteScope to perform an action whenever any monitor in the selected group returns the indicated status condition. For example, you would select the Network group if you wanted SiteScope to page you if any monitor in the Network group returned an error status.

◊ **[group name]: [monitor name]** – Select a specific monitor if you want SiteScope to perform an action only if the selected monitor returns the indicated status condition. For example, you would choose this option if you wanted SiteScope to send you e–mail if one specific monitor returned a warning status.

Send Mail

Send a standard SiteScope e–mail message to one or more predefined e–mail settings or addresses.

◊ **To**– You may type one or more e–mail addresses in the text input field. Separate multiple addresses with commas. Click the "**Edit Mail Preferences**" link to change your Mail Preferences.

◊ **Template**– Choose which message template SiteScope should use when sending the e–mail message. By default, SiteScope sends a detailed message about the error or warning status returned by a monitor. If you would prefer a shorter message you may choose the ShortMail option from the Template pulldown menu. This option is useful if your pager messages can be generated via e–mail. Other options allow you to choose what level of detail to include in the e–mail alerts. You may add additional templates into the ~/SiteScope/templates.mail directory.

Special Case Templates:

· For NT Event Log alerts, choose the NTEventLog template.
· For alerts that are generated when all monitors in a group are in error, choose the AllErrors template.

When

The number of times the alert conditions should be met before SiteScope executes the action you specified.

◊ **Always, after the condition has occurred at least N times** – After the condition occurs at least N times, SiteScope executes the action every time the alert conditions are met. Type the minimum number of times the alert conditions must be met in the text input field.

◊ **Once, after condition occurs exactly N times** – SiteScope executes the action once, after the conditions are met for the Nth time. Type the number of times the alert conditions must be met in the text input field.

◊ **Inital alert X and repeat every Y times afterwards** – Executes the alert action after the condition occurs X consecutive times and then repeats the alert every consecutive Y occurences thereafter. For example,if X was set to 3, and Y was set to 4, then the action would be triggered on the 3rd, 7th, 11th, etc. occurrences of the condition. Choose this option by selecting the applicable radio button, entering the multiple (E) and the minimum number of times (N) the alert conditions must be met in the text input fields provided.

Note: This feature was modified in SiteScope version 5.5. Alert parameters set for this option in prior versions are transposed to this new format when upgrading to version 5.5 and may result in a change in the orginally intended behavior.

◊ **Once, after N errors in this group** – SiteScope executes the action only after any monitor in the group has been in error exactly N consecutive times. Type the number of errors in the text input field.

◊ **Once, when all monitors of group are in error** – SiteScope executes the action the first time all monitors in the group are in error.

Advanced Options

Using the Advanced Options, you can further filter which conditions should trigger an alert.

Disabled

This check box prevents the e–mail alert from being executed, even if the alert conditions are met. This is useful for temporarily turning off alerts.

Name Match

This field allows you to make use of naming conventions for your monitors. You may enter a word or string that appears in the names of monitors in this field, and SiteScope will only generate an alert if the name of the monitor in error contains this word or string. For example, entering Ping: triggers this alert only for monitors that have a name that contains " Ping:" . The name match is case sensitive.

Status Match

This field allows you to match on specific status readings returned by a monitor. For example, if you type timeout in this field, an alert will only be triggered by a monitor which has a status of " timeout." This match is case sensitive.

🐸 Understanding SiteScope E–mail Alerts

SiteScope E–mail Alerts are one of the methods that SiteScope can use to notify you about problems with applications and servers being monitored by SiteScope. The E–mail Alert contains a description of the problem that occurred. It may also contain diagnostic information and descriptions of the most common causes of the problem. This document will help you better understand the information in the alert message.

If you followed a link embedded inside an e–mail message to get to this page and you are not familiar with Freshwater Software's SiteScope, perhaps some explanation is in order. SiteScope is software, installed on a server, that is used to monitor applications and servers and report if they are performing correctly. A system administrator configured the SiteScope software to send you this alert when SiteScope noticed a problem in the web environment.

In this section we will discuss:

- ♦ The SiteScope E–mail Alert Format
  - ◊ Alert E–mail Subject Field
  - ◊ Alert Message Header
  - ◊ More Information / Diagnostics
  - ◊ Monitor Details
- ♦ Questions About Alerts

SiteScope E–mail Alert Format

SiteScope e–mail alerts can provide you with important data about conditions in your web environment. Depending on which mail template has been chosen for the alert, the e–amil alert message contains details that allow you to quickly identify real and potential problems. These sections are described below:

Alert E–mail Subject Field

SiteScope e–mail alerts are sent with a summary of alert information written into the subject field of the e–mail message. This includes the following information:

- ♦ the subject of the message –– "SiteScope Alert"
- ♦ the category of the monitor alert –– error, warning, ok, or no data
- ♦ the name of the monitor or title of the monitor
- ♦ the status returned by the monitor
- ♦ the address, in parentheses, of the SiteScope installation that sent the alert

Example of a SiteScope generated e–mail alert header:

```
From: <sitescope admin e–mail>
To:   <you@yourdomain.com>
Subject: SiteScope Alert, error, URL: http://missing.freshtech.com, unknown host nam
```

Alert Message Header

The message text of the e−mail alert is divided into sections. The first section is the alert header. The first line in the alert header includes a link to the SiteScope installation which sent the alert. This provides you with quick access to the SiteScope installation reporting the problem.

Below the link to SiteScope is a block of text that further summarizes what caused the alert. This includes:

- the name of the monitor that triggered the alert
- the group to which the monitor belongs
- the alert status reported by the monitor
- the sample id number indicating how many times the monitor ran before the condition was reported
- the time of day when the error occurred

After this text block is a link to this help page of the SiteScope help documentation.

Example header section:

```
This alert is from SiteScope at http://demo.freshtech.com:8888/SiteScope

Monitor:  URL: http://missing.freshtech.com
Group:    empty
Status:   unknown host name
Sample #: 1034

Time:     9:57 am 9/8/98

For documentation about alerts, go to:
  http://demo.freshtech.com:8888/SiteScope/docs/AlertHelp.htm
```

More Information / Diagnostics

This section includes more diagnostic information about the error that occurred. Depending on the type of monitor this may include:

- a description of the error or alert condition
- descriptions of the most common causes for this condition
- if the monitor is the type that tests a network application, a ping test will be performed
- if the ping test fails some description of the most common causes for this failure
- if the ping test failed, a traceroute test will also be performed
- a description and listing of the traceroute results

Note: if you don't want diagnostics to run, such as when traceroutes are taking too long, choose the " NoDiagnostics " e−mail template from the Additional E−mail preferences page. This is accessible the Edit E−Mail Preferences link on the edit alert page for the subject alert.

Example:

```
More information:
```

```
        This message is returned when DNS cannot find an IP address for a name.
        Check the network connection to the DNS server.
        Check that the DNS server for that domain is running.
        Check that DNS is properly configured on the SiteScope machine.
        Check that the name exists in the configuration for that domain.


        A test of the internet connection to missing.freshtech.com failed.

        This suggests that the problem may be a failure of some piece of the network or the

        Trace Route results for missing.freshtech.com

        This trace shows you the path to missing.freshtech.com.
        Each line shows how long it took to get to the next step along the path.
        If the trace does not end at missing.freshtech.com, then the last line shows the las
        The times are in milliseconds -- a large change shows which step is the slowest part

          Unable to resolve target system name missing.freshtech.com.
```

Monitor Details

This section lists the settings for the monitor which caused the alert. These settings can be changed by using the Edit Monitor form.

Example:

```
        ---------------------  Detail  ---------------------
        URL: http://missing.freshtech.com
        Timeout: 60 sec
        Update every: 864000
        Title: URL: http://missing.freshtech.com
        Update every (on errors): n/a
        round trip time: n/a
```

Questions About Alerts

The following are some common questions about SiteScope e−mail alerts. You can find additional information on SiteScope alerts in the Freshwater Software Support Database.

Q: Why do I get a lot of email messages about the same error?

A: If an alert is configured to be sent "Always," , you'll get an alert every time SiteScope monitor runs the test and finds an error. This can generate a lot of e−mail alerts for monitors which run frequently. If you only want an alert when the problem first starts, change the setting to "Once" under the **When** section on the Define E−Mail Alert form. This will instruct SiteScope to send an alert only once when the monitor finds an error. The monitor may continue to report an error but the alert will only be sent once.

Q: How do I configure SiteScope so it only sends an alert after the problem happens more than once?

A: You can suppress transitory or intermittent alerts by making changes on the Define E−Mail Alert form. Most of the options under the **When** section on the form include text boxes for selecting a number. By default these are set to 1 (one). This means that an alert will be sent after the first time an error condition is reported. Changing this number for the option that you have selected will suppress the alerts until the error has been detected the number of time you have indicated. For example, changing the number of the option: "Always, after the condition has occured at least N times" from 1 to 5 will have SiteScope send you one alert the first time there are five consecutive errors reported.

Another choice for suppressing intermittent alerts is to check the "Verify Error" box on the Add / Edit Monitor form. When this box is checked, SiteScope will verify the test result by immediately re−running the test when there is an error. Go to the Monitor detail page and click on the Edit link in the Monitor detail table to bring up the Edit Monitor form for the selected monitor.

Q: Why do I receive e−mail messages saying SiteScope has started when I haven't shut it down?

A: SiteScope normally re−intializes itself once each day. The E−Mail Preferences page allows you to choose to have SiteScope send a message whenever SiteScope restarts. If this checkbox is selected, SiteScope will send a brief status message to the administrator's e−mail address whenever SiteScope starts running or re−initializes. This means that you would normally receive a message once per day. This message will also be generated if someone manually stops and restarts the SiteScope process. Other incidences of this message may indicate that a monitor or process has taken too long to run. An example might be if a script being run by a script monitor hangs up during execution.

Log Event Alerts

The Log Event Alert form allows you to add or edit an Alert which will log an error to the Windows NT Application Event Log. Entries in the event log can then be viewed with the Event Viewer and/or used by other software utilities that perform centralized alerting from the event log.

Note: If you are also using SiteScope's Event Log Monitor, use of the Log Event alert requires caution as it is possible for a loop to get started that will quickly fill your log file; the Event Log Monitor detects an event, triggers a Log Event alert, which puts an event into the event log, which the Event Log Monitor then detects, and then triggers a Log Event alert, etc.

Completing the Log Event Alert Form

Complete each section of the form as described below and then click the Add or Update button.

On

> The monitor status that must be in effect in order to activate this alert. You may choose either Error, Warning, or Ok.

Alert Subjects

> Select the groups and monitors handled by this alert. Select multiple groups and monitors by holding down the control key while making your selection. The choices are:
>
> ◊ **All Groups** – Select All Groups if you want SiteScope to perform an action whenever **any** monitor returns the indicated status condition. For example, you would choose this option if you want SiteScope to page you whenever any monitor returns an error status.
>
> ◊ **[group name]** – Select a specific group if you want SiteScope to perform an action whenever any monitor in the selected group returns the indicated status condition. For example, you would select the Network group if you wanted SiteScope to page you if any monitor in the Network group returned an error status.
>
> ◊ **[group name]: [monitor name]** – Select a specific monitor if you want SiteScope to perform an action only if the selected monitor returns the indicated status condition. For example, you would choose this option if you wanted SiteScope to send you e–mail if one specific monitor returned a warning status.

Log Event

> Log a message to the Window NT Event Log.

Template

> By default, SiteScope sends a message about the error or warning status returned by a monitor. If you would prefer a specific format for this message, choose the desired option from the Template drop–down menu. You may add additional templates into the `templates.eventlog` directory.

When

The number of times the alert conditions should be met before SiteScope executes the action you specified.

◊ **Always, after the condition has occurred at least N times** – After the condition occurs at least N times, SiteScope executes the action every time the alert conditions are met. Type the minimum number of times the alert conditions must be met in the text input field.

◊ **Once, after condition occurs exactly N times** – SiteScope executes the action once, after the conditions are met for the Nth time. Type the number of times the alert conditions must be met in the text input field.

◊ **Inital alert X and repeat every Y times afterwards** – Executes the alert action after the condition occurs X consecutive times and then repeats the alert every consecutive Y occurences thereafter. For example,if X was set to 3, and Y was set to 4, then the action would be triggered on the 3rd, 7th, 11th, etc. occurrences of the condition. Choose this option by selecting the applicable radio button, entering the multiple (E) and the minimum number of times (N) the alert conditions must be met in the text input fields provided.

Note: This feature was modified in SiteScope version 5.5. Alert parameters set for this option in prior versions are transposed to this new format when upgrading to version 5.5 and may result in a change in the orginally intended behavior.

◊ **Once, after N errors in this group** – SiteScope executes the action only after any monitor in the group has been in error exactly N consecutive times. Type the number of errors in the text input field.

◊ **Once, when all monitors of group are in error** – SiteScope executes the action the first time all monitors in the group are in error.

Advanced Options

Using the Advanced Options, you can further filter which conditions should trigger an alert.

Event Source

Sets the Source field of the event that is logged.

Event ID

Sets the ID field of the event that is logged.

Event Type

Sets the type of the event: error, warning, or informational.

Disabled

This check box prevents the alert from executing the action, even if the conditions are met. This is useful for temporarily turning off alerts.

Name Match

This field allows you to make use of naming conventions for your monitors. You may enter a word or string that appears in the names of monitors in this field, and SiteScope will only

generate an alert if the name of the monitor in error contains this word or string. For example, entering Ping: triggers this alert only for monitors that have a name that contains " Ping:" . The match is case sensitive.

Status Match

This field allows you to match on specific status readings returned by a monitor. For example, if you type timeout in this field, an alert will only be triggered by a monitor which has a status of " timeout." This match is case sensitive.

🐸 Pager Alerts

The Pager Alert form allows you to add or edit an alert which sends a message to a pager. Depending on the type of pager you use and the capabilities of the pager service, you can configure the alert to send an alert with an abbreviated description of the problem.

Completing the Pager Alert Form

Complete each section of the form as described below and then click the Add or Update button.

On

> The category of monitor that activates this alert. You may choose either Error, Warning, or Ok.

Alert Subjects

> Select the groups and monitors handled by this alert. Select multiple groups and monitors by holding down the control key while making your selection. The choices are:
>
> ◊ **All Groups** – Select All Groups if you want SiteScope to perform an action whenever **any** monitor returns the indicated status condition. For example, you would choose this option if you want SiteScope to page you whenever any monitor returns an error status.
>
> ◊ **[group name]** – Select a specific group if you want SiteScope to perform an action whenever any monitor in the selected group returns the indicated status condition. For example, you would select the Network group if you wanted SiteScope to page you if any monitor in the Network group returned an error status.
>
> ◊ **[group name]: [monitor name]** – Select a specific monitor if you want SiteScope to perform an action only if the selected monitor returns the indicated status condition. For example, you would choose this option if you wanted SiteScope to send you e–mail if one specific monitor returned a warning status.

Send Page

> Send a page to the one or more pagers defined in the SiteScope Pager Settings. You can define additional pager settings by clicking the Edit Pager Preferences link.
>
> **Message**Type an optional prefix to the message will be sent to the pager. Please note that the maximum length for the entire message is 32 characters.
>
> **Template**Choose the pager template you want SiteScope to use when sending this page. SiteScope will automatically use the Default template if you don't choose another. **NOTE:**If this alert is for an NT Event Log monitor, choose the NTEventLog template. It this alert is only generated if all monitors in a group are in error, choose the AllErrors template.

When

The number of times the alert conditions should be met before SiteScope executes the action you specified.

◊ **Always, after the condition has occurred at least N times** – After the condition occurs at least N times, SiteScope executes the action every time the alert conditions are met. Type the minimum number of times the alert conditions must be met in the text input field.

◊ **Once, after condition occurs exactly N times** – SiteScope executes the action once, after the conditions are met for the Nth time. Type the number of times the alert conditions must be met in the text input field.

◊ **Inital alert X and repeat every Y times afterwards** – Executes the alert action after the condition occurs X consecutive times and then repeats the alert every consecutive Y occurences thereafter. For example,if X was set to 3, and Y was set to 4, then the action would be triggered on the 3rd, 7th, 11th, etc. occurrences of the condition. Choose this option by selecting the applicable radio button, entering the multiple (E) and the minimum number of times (N) the alert conditions must be met in the text input fields provided.

Note: This feature was modified in SiteScope version 5.5. Alert parameters set for this option in prior versions are transposed to this new format when upgrading to version 5.5 and may result in a change in the orginally intended behavior.

◊ **Once, after N errors in this group** – SiteScope executes the action only after any monitor in the group has been in error exactly N consecutive times. Type the number of errors in the text input field.

◊ **Once, when all monitors of group are in error** – SiteScope executes the action the first time all monitors in the group are in error.

Advanced Options

Using the Advanced Options, you can further filter which conditions should trigger an alert.

Disabled

This check box prevents the alert from executing the action, even if the conditions are met. This is useful for temporarily turning off alerts.

Name Match

This field allows you to make use of naming conventions for your monitors. You may enter a word or string that appears in the names of monitors in this field, and SiteScope will only generate an alert if the name of the monitor in error contains this word or string. For example, entering Ping: triggers this alert only for monitors that have a name that contains " Ping:" . The match is case sensitive.

Status Match

This field allows you to match on specific status readings returned by a monitor. For example,if you type timeout in this field, an alert will only be triggered by a monitor which has a status of " timeout." This match is case sensitive.

🐸 Post Alerts

The Post Alert form allows you to add or edit an Alert which submits a form with a description of the error to a CGI script. This type of alert provides you with a way of sending alert information through a firewall without having to make any security changes.

Completing the Post Alert Form

Complete each section of the form as described below and then click the Add or Update button.

On

> The category of monitor that activates this alert. You may choose either Error, Warning, or Ok.

Alert Subjects

> Select the groups and monitors handled by this alert. Select multiple groups and monitors by holding down the control key while making your selection. The choices are:
>
> ◊ **All Groups** – Select All Groups if you want SiteScope to perform an action whenever **any** monitor returns the indicated status condition. For example, you would choose this option if you want SiteScope to page you whenever any monitor returns an error status.
>
> ◊ **[group name]** – Select a specific group if you want SiteScope to perform an action whenever any monitor in the selected group returns the indicated status condition. For example, you would select the Network group if you wanted SiteScope to page you if any monitor in the Network group returned an error status.
>
> ◊ **[group name]: [monitor name]** – Select a specific monitor if you want SiteScope to perform an action only if the selected monitor returns the indicated status condition. For example, you would choose this option if you wanted SiteScope to send you e−mail if one specific monitor returned a warning status.

Action

> Send a standard SiteScope form submission to the indicated CGI URL. Type the desired URL in the text input field.

Template

> By default, SiteScope sends a descriptive form submission about the error or warning status returned by a monitor. If you would prefer a specific format, choose the desired option from the Template drop−down menu. You may add additional templates into the `templates.post` directory.

When

> The number of times the alert conditions should be met before SiteScope executes the action you specified.

◊ **Always, after the condition has occurred at least N times** – After the condition occurs at least N times, SiteScope executes the action every time the alert conditions are met. Type the minimum number of times the alert conditions must be met in the text input field.

◊ **Once, after condition occurs exactly N times** – SiteScope executes the action once, after the conditions are met for the Nth time. Type the number of times the alert conditions must be met in the text input field.

◊ **Inital alert X and repeat every Y times afterwards** – Executes the alert action after the condition occurs X consecutive times and then repeats the alert every consecutive Y occurences thereafter. For example,if X was set to 3, and Y was set to 4, then the action would be triggered on the 3rd, 7th, 11th, etc. occurrences of the condition. Choose this option by selecting the applicable radio button, entering the multiple (E) and the minimum number of times (N) the alert conditions must be met in the text input fields provided.

Note: This feature was modified in SiteScope version 5.5. Alert parameters set for this option in prior versions are transposed to this new format when upgrading to version 5.5 and may result in a change in the orginally intended behavior.

◊ **Once, after N errors in this group** – SiteScope executes the action only after any monitor in the group has been in error exactly N consecutive times. Type the number of errors in the text input field.

◊ **Once, when all monitors of group are in error** – SiteScope executes the action the first time all monitors in the group are in error.

Advanced Options

Authorization User Name
> If the URL specified requires a name and password for access, enter the name in this field.

Authorization Password
> If the URL specified requires a name and password for access, enter the password in this field.

NT Challenge Response
> Check this box if you want SiteScope to use Window's NT Challenge Response authorization when Posting to this Web page.

Proxy Server User Name
> If the proxy server requires a name and password to access the URL, enter the name here. Technical note: your proxy server must support Proxy–Authenticate for these options to function.

Proxy Server Password
> If the proxy server requires a name and password to access the URL, enter the password here. Technical note: your proxy server must support Proxy–Authenticate for these options to function.

Disabled

This check box prevents the alert from executing the action, even if the conditions are met. This is useful for temporarily turning off alerts.

Name Match

This field allows you to make use of naming conventions for your monitors. You may enter a word or string that appears in the names of monitors in this field, and SiteScope will only generate an alert if the name of the monitor in error contains this word or string. For example, entering Ping: triggers this alert only for monitors that have a name that contains " Ping:" . The match is case sensitive.

Status Match

This field allows you to match on specific status readings returned by a monitor. For example, if you type timeout in this field, an alert will only be triggered by a monitor which has a status of " timeout." This match is case sensitive.

🐸 Script Alerts

The Script Alert form allows you to add or edit an Alert which runs a script file. The script can be created and customized to perform any number of system commands or execute third party programs.

The current directory for when scripts run is `SiteScope\classes\` not the `SiteScope\scripts\` directory. Use full pathnames so you won't need to worry about the current directory or test your script by going to the classes directory and run the script using the full pathname of the script. The server system environment variables may not have been set up for the script execution, so you should use full pathnames for executables triggered by the script. If a script works when you run it from the command line, but not from SiteScope then this is something to check out.

The scripts are run with the permissions of the account used by the SiteScope service. Some scripts may need extra permissions and you will need to use the Services control panel to change the login account for SiteScope and then stop and start SiteScope. For example, scripts that restart services or reboot remote machines or scripts that copy protected files.

Since the script is run by the SiteScope service, anything done as part of your "login" won't have occurred in the script. For example, you can't rely on mapped drives or other login script items.

The script does not get any input so any action or command that requires user confirmation would cause the script to hang. Opening a win32 app (like Notepad) will also cause the script to hang because it will be waiting for the app to exit before continuing with the script execution.

Completing the Script Alert Form

Complete each section of the form as described below and then click the Add or Update button. Refer to the Advanced Topics section of the User Guide for information about writing recovery scripts.

On
> The category of monitor that activates this alert. You may choose either Error, Warning, or Ok.

Alert Subjects
> Select the groups and monitors handled by this alert. Select multiple groups and monitors by holding down the control key while making your selection. The choices are:
>
> ◊ **All Groups** – Select All Groups if you want SiteScope to perform an action whenever **any** monitor returns the indicated status condition. For example, you would choose this option if you want SiteScope to page you whenever any monitor returns an error status.
>
> ◊ **[group name]** – Select a specific group if you want SiteScope to perform an action whenever any monitor in the selected group returns the indicated status condition. For example, you would select the Network group if you wanted SiteScope to page you if any monitor in the Network group returned an error status.

◊ **[group name]: [monitor name]** – Select a specific monitor if you want SiteScope to perform an action only if the selected monitor returns the indicated status condition. For example, you would choose this option if you wanted SiteScope to send you e–mail if one specific monitor returned a warning status.

Run Script

Complete this section to specify the script to be run including the server, the script filename, the template to use in passing a file to the script, and any additional monitor parameters to be passed to the script.

Server
Choose the server on which the script should be run. On remote Unix servers, run the command line on the remote machine. Create a " scripts" directory in the remote login account to allow remote scripts to be invoked by SiteScope.

Script
Select the script that you want SiteScope to run in response to the selected condition. SiteScope comes with a simple script that will restart an IIS server, RestartIIS.bat, which you'll see on the pop–up menu. You may create as many custom scripts as you like. If you choose to create your own scripts, you must place them in the ~SiteScope/scripts directory. SiteScope will list all files in this directory on the pop–up menu.

Template
SiteScope creates a file containing information about the monitor that caused the error and passes the filename to your script as the fourth command line argument. Use the Template pull–down box to have SiteScope create the file using a different template. The template file includes SiteScope property variables which instruct SiteScope what data to include in the file. You can add your own custom templates into the SiteScope\templates.script directory.

Parameters
Specify any additional monitor parameters that you want to pass to your script. By default, the Script Alert always passes six parameters to a script as command line arguments. These are:

1. the pathname of the scripts directory
2. the name of the monitor that caused the alert
3. the current status of the monitor
4. the pathname to the alert message file
5. the id of the monitor
6. the group for the monitor

Parameters added into the **Parameters** input field are sent as the seventh, eighth, nineth, etc. command line arguments respectively. The parameters available to be passed to the script are dependent on the type of monitor that triggers the alert. A list of SiteScope parameters available from each kind of monitor are listed in the properties list. The syntax to use for additional parameters is to surround the property name variable as shown in the properties list with < > brackets. For example, to pass the server name to the script, enter <_machine> in the **Parameters** field. To pass more than one extra parameter, separate the

parameters with a single space the same way the arguments would be added on the command line.

When

The number of times the alert conditions should be met before SiteScope executes the action you specified.

◊ **Always, after the condition has occurred at least N times** – After the condition occurs at least N times, SiteScope executes the action every time the alert conditions are met. Type the minimum number of times the alert conditions must be met in the text input field.

◊ **Once, after condition occurs exactly N times** – SiteScope executes the action once, after the conditions are met for the Nth time. Type the number of times the alert conditions must be met in the text input field.

◊ **Inital alert X and repeat every Y times afterwards** – Executes the alert action after the condition occurs X consecutive times and then repeats the alert every consecutive Y occurences thereafter. For example,if X was set to 3, and Y was set to 4, then the action would be triggered on the 3rd, 7th, 11th, etc. occurrences of the condition. Choose this option by selecting the applicable radio button, entering the multiple (E) and the minimum number of times (N) the alert conditions must be met in the text input fields provided.

Note: This feature was modified in SiteScope version 5.5. Alert parameters set for this option in prior versions are transposed to this new format when upgrading to version 5.5 and may result in a change in the orginally intended behavior.

◊ **Once, after N errors in this group** – SiteScope executes the action only after any monitor in the group has been in error exactly N consecutive times. Type the number of errors in the text input field.

◊ **Once, when all monitors of group are in error** – SiteScope executes the action the first time all monitors in the group are in error.

Advanced Options

Using the Advanced Options, you can further filter which conditions should trigger an alert.

Disabled

This check box prevents the alert from executing the action, even if the conditions are met. This is useful for temporarily turning off alerts.

Name Match

This field allows you to make use of naming conventions for your monitors. You may enter a word or string that appears in the names of monitors in this field, and SiteScope will only generate an alert if the name of the monitor in error contains this word or string. For example, entering Ping: triggers this alert only for monitors that have a name that contains " Ping:" . The match is case sensitive.

Status Match

This field allows you to match on specific status readings returned by a monitor. For example, if you type timeout in this field, an alert will only be triggered by a monitor which has a status of " timeout." This match is case sensitive.

SNMP Trap Alerts

The SNMP Alert form allows you to add or edit an Alert which sends an SNMP trap to an SNMP management console.

Completing the SNMP Alert Form

Complete each section of the form as described below and then click the Add or Update button.

On

> The category of monitor that activates this alert. You may choose either Error, Warning, or Ok.

Alert Subjects

> Select the groups and monitors handled by this alert. Select multiple groups and monitors by holding down the control key while making your selection. The choices are:
>
> ◊ **All Groups** – Select All Groups if you want SiteScope to perform an action whenever **any** monitor returns the indicated status condition. For example, you would choose this option if you want SiteScope to page you whenever any monitor returns an error status.
>
> ◊ **[group name]** – Select a specific group if you want SiteScope to perform an action whenever any monitor in the selected group returns the indicated status condition. For example, you would select the Network group if you wanted SiteScope to page you if any monitor in the Network group returned an error status.
>
> ◊ **[group name]: [monitor name]** – Select a specific monitor if you want SiteScope to perform an action only if the selected monitor returns the indicated status condition. For example, you would choose this option if you wanted SiteScope to send you e–mail if one specific monitor returned a warning status.

Send SNMP Trap

> Send a SNMP trap message to an SNMP console defined in the [SiteScope SNMP Preferences](#).

Message

> Type and optional prefix to the SNMP trap in the text input field.

Template

> Choose the template for the SNMP trap to be sent. Each line in the template will be sent as a separate SNMP variable. If the first line of the template file is of the form: `[Agent Host: hostname-or-ip-address]`, then the trap will be sent with that hostname or IP address as the source of the trap. By default, the IP address of the machine that SiteScope is running on is used as the source of the trap.The template file can also be modified of the form `[Command: command name]` this will override the default command. Or for the default type `[Type: var-type]` will override the default type of the object. `[OID: object id]` will change the default object id. This could be a solution for varying the the

var–binding variable object id.

To

Choose the SNMP settings to use when sending this trap. Normally only the default SNMP will be available. To add or edit SNMP trap settings see the SNMP Preferences for options on SNMP settings as well as the help page for Adding Additional SNMP settings.

When

The number of times the alert conditions should be met before SiteScope executes the action you specified.

◊ **Always, after the condition has occurred at least N times** – After the condition occurs at least N times, SiteScope executes the action every time the alert conditions are met. Type the minimum number of times the alert conditions must be met in the text input field.

◊ **Once, after condition occurs exactly N times** – SiteScope executes the action once, after the conditions are met for the Nth time. Type the number of times the alert conditions must be met in the text input field.

◊ **Inital alert X and repeat every Y times afterwards** – Executes the alert action after the condition occurs X consecutive times and then repeats the alert every consecutive Y occurences thereafter. For example,if X was set to 3, and Y was set to 4, then the action would be triggered on the 3rd, 7th, 11th, etc. occurrences of the condition. Choose this option by selecting the applicable radio button, entering the multiple (E) and the minimum number of times (N) the alert conditions must be met in the text input fields provided.

Note: This feature was modified in SiteScope version 5.5. Alert parameters set for this option in prior versions are transposed to this new format when upgrading to version 5.5 and may result in a change in the orginally intended behavior.

◊ **Once, after N errors in this group** – SiteScope executes the action only after any monitor in the group has been in error exactly N consecutive times. Type the number of errors in the text input field.

◊ **Once, when all monitors of group are in error** – SiteScope executes the action the first time all monitors in the group are in error.

Advanced Options

Using the Advanced Options, you can further filter which conditions should trigger an SNMP alert.

Disabled

Checking this check box prevents the disables the alert from executing the action, even if the conditions are met. This is useful for temporarily turning off alerts.

Name Match

This field allows you to make use of naming conventions for your monitors. You may enter a word or string that appears in the names of monitors in this field, and SiteScope will only generate an alert if the name of the monitor in error contains this word or string. For

example, entering Ping: triggers this alert only for monitors that have a name that contains " Ping:" . The name match is case sensitive.

Status Match

This field allows you to match on specific status readings returned by a monitor. For example, if you type timeout in this field, an alert will only be triggered by a monitor which has a status of " timeout." This match is case sensitive.

Sound Alerts

The Sound Alert form allows you to add or edit an Alert which plays a sound on the machine on which SiteScope is running. It is important to note that the sound alert is limited to the machine on which SiteScope is running. Therefore, a sound alert will be effective only if the SiteScope server is in an area that is regularly occupied by your support staff.

Alternatively, SiteScope can be configured to embed an alert audio file into the web pages served by SiteScope. This audio file is included with any SiteScope page that includes an error status for any monitor, such as the main panel or group detail pages. While this allows audio notification to all SiteScope clients through the user interface, it is not a true SiteScope alert and thus does not allow the same configuration options as the Sound Alert. For information on how to confgure SiteScope to embed audio files for error notification, see the following technical support note:http://www.freshwater.com/support/notes/noteTN10104.htm

Completing the Sound Alert Form

Complete each section of the form as described below and then click the Add or Update button.

On
> The category of monitor that activates this alert. You may choose either Error, Warning, or Ok.

Alert Subjects
> Select the groups and monitors handled by this alert. Select multiple groups and monitors by holding down the control key while making your selection. The choices are:
>
> ◊ **All Groups** – Select All Groups if you want SiteScope to perform an action whenever **any** monitor returns the indicated status condition. For example, you would choose this option if you want SiteScope to page you whenever any monitor returns an error status.
>
> ◊ **[group name]** – Select a specific group if you want SiteScope to perform an action whenever any monitor in the selected group returns the indicated status condition. For example, you would select the Network group if you wanted SiteScope to page you if any monitor in the Network group returned an error status.
>
> ◊ **[group name]: [monitor name]** – Select a specific monitor if you want SiteScope to perform an action only if the selected monitor returns the indicated status condition. For example, you would choose this option if you wanted SiteScope to send you e−mail if one specific monitor returned a warning status.

Sound File
> Pick the sound to be played from the list. Additional sounds may be added to the templates.sound directory in the AU format (8 bit, law, 8000 Hz, one−channel) with a `.au` suffix.

When

> The number of times the alert conditions should be met before SiteScope executes the action you specified.

> ◊ **Always, after the condition has occurred at least N times** – After the condition occurs at least N times, SiteScope executes the action every time the alert conditions are met. Type the minimum number of times the alert conditions must be met in the text input field.

> ◊ **Once, after condition occurs exactly N times** – SiteScope executes the action once, after the conditions are met for the Nth time. Type the number of times the alert conditions must be met in the text input field.

> ◊ **Inital alert X and repeat every Y times afterwards** – Executes the alert action after the condition occurs X consecutive times and then repeats the alert every consecutive Y occurences thereafter. For example,if X was set to 3, and Y was set to 4, then the action would be triggered on the 3rd, 7th, 11th, etc. occurrences of the condition. Choose this option by selecting the applicable radio button, entering the multiple (E) and the minimum number of times (N) the alert conditions must be met in the text input fields provided.

> **Note:** This feature was modified in SiteScope version 5.5. Alert parameters set for this option in prior versions are transposed to this new format when upgrading to version 5.5 and may result in a change in the orginally intended behavior.

> ◊ **Once, after N errors in this group** – SiteScope executes the action only after any monitor in the group has been in error exactly N consecutive times. Type the number of errors in the text input field.

> ◊ **Once, when all monitors of group are in error** – SiteScope executes the action the first time all monitors in the group are in error.

Advanced Options

Using the Advanced Options, you can further filter which conditions should trigger an alert.

Disabled

> This check box prevents the alert from executing the action, even if the conditions are met. This is useful for temporarily turning off alerts.

> This field allows you to make use of naming conventions for your monitors. You may enter a word or string that appears in the names of monitors in this field, and SiteScope will only generate an alert if the name of the monitor in error contains this word or string. For example, entering Ping: triggers this alert only for monitors that have a name that contains Ping:. The match is case sensitive.

Status Match

> This field allows you to match on specific status readings returned by a monitor. For example, if you type timeout in this field, an alert will only be triggered by a monitor which has a status of timeout. This match is case sensitive.

Disable or Enable Monitor Alerts

The Disable or Enable Monitor(s) Alert allows you to automatically enable or disable monitors or monitor groups based on a change of state in another monitor or monitor group. This is useful for times when you're doing server maintenance or other activities that would logically result in errors for some monitors and cause unnecessary alerts to be generated. This alert provides a functionality similar to the Depends On feature for building group dependencies between monitor groups. One important difference is that monitors disabled by this type of alert are not automatically re–enabled when the status of teh subject monitor or group changes back to the orginal state.

Completing the Disable or Enable Monitor(s) Alert Form

Complete each section of the form as described below and then click the Add or Update button to add the alert.

On

The category of monitor that activates this alert. You may choose either Error, Warning, or Ok.

Alert Subjects

Select the groups and monitors that will trigger this alert. Select multiple groups and monitors by holding down the control key while making your selection. The choices are:

◊ **All Groups** – Select All Groups if you want SiteScope to perform an action whenever **any** monitor returns the indicated status condition. For example, you would choose this option if you want SiteScope to page you whenever any monitor returns an error status.

◊ **[group name]** – Select a specific group if you want SiteScope to perform an action whenever any monitor in the selected group returns the indicated status condition. For example, you would select the Network group if you wanted SiteScope to page you if any monitor in the Network group returned an error status.

◊ **[group name]: [monitor name]** – Select a specific monitor if you want SiteScope to perform an action only if the selected monitor returns the indicated status condition. For example, you would choose this option if you wanted SiteScope to send you e–mail if one specific monitor returned a warning status.

Disable or Enable Monitor(s)

Choose whether this alert will act to enable or disable other monitors. Remember that any monitors disabled by this type of alert are not automatically enabled after a given period of time; therefore, if you disable monitors on an error condition, you should add another Enable Monitors alert to re–enable them.

You can choose any combination of groups and monitors to act upon from the Targets list – to select multiple items, hold down the Control key while clicking on additional items.

When

> The number of times the alert conditions should be met before SiteScope executes the action you specified.

◊ **Always, after the condition has occurred at least N times** – After the condition occurs at least N times, SiteScope executes the action every time the alert conditions are met. Type the minimum number of times the alert conditions must be met in the text input field.

◊ **Once, after condition occurs exactly N times** – SiteScope executes the action once, after the conditions are met for the Nth time. Type the number of times the alert conditions must be met in the text input field.

◊ **Inital alert X and repeat every Y times afterwards** – Executes the alert action after the condition occurs X consecutive times and then repeats the alert every consecutive Y occurences thereafter. For example,if X was set to 3, and Y was set to 4, then the action would be triggered on the 3rd, 7th, 11th, etc. occurrences of the condition. Choose this option by selecting the applicable radio button, entering the multiple (E) and the minimum number of times (N) the alert conditions must be met in the text input fields provided.

Note: This feature was modified in SiteScope version 5.5. Alert parameters set for this option in prior versions are transposed to this new format when upgrading to version 5.5 and may result in a slight change in orginally intended function.

◊ **Once, after N errors in this group** – SiteScope executes the action only after any monitor in the group has been in error exactly N consecutive times. Type the number of errors in the text input field.

◊ **Once, when all monitors of group are in error** – SiteScope executes the action the first time all monitors in the group are in error.

Advanced Options

Using the Advanced Options, you can further filter which conditions should trigger the alert.

Disabled

> This check box prevents the alert from executing the action, even if the conditions are met. This is useful for temporarily turning off alerts.

Name Match

> This field allows you to make use of naming conventions for your monitors. You may enter a word or string that appears in the names of monitors in this field, and SiteScope will only generate an alert if the name of the monitor in error contains this word or string. For example, entering Ping: triggers this alert only for monitors that have a name that contains "Ping:". The match is case sensitive.

Status Match

> This field allows you to match on specific status readings returned by a monitor. For example, if you type timeout in this field, an alert will only be triggered by a monitor which has a status of "timeout." This match is case sensitive.

🐸 Show Quick Alert Report

The Show Quick Alert Report form allows you to create a one−time SiteScope alert report. This report will display the alerts sent over the specified time period.

Completing the Quick Alert Form

To generate a quick management report, complete each section of the form as described below and then click the " View Alerts" button. The length of time that it takes to generate the report will vary depending upon the speed of the Web server machine, the number of monitors to report on, and the selected report time period.

Time Period
> Select the time period for which you want to view alerts.

Alert Type
> Select the types of alerts that will be displayed in the report. You can use control−click (in most browser) to select multiple types, or accept the All Types default to see all alerts sent.

Detail Level
> Select the detail level for the alert report. Basic shows the time and summary information for each alert. Detail for Failed Alerts shows detailed diagnostic output for any alerts that failed − all other alerts are shown with summary information. Detail for All Alerts shows the detailed alert output for all alerts in the report.

Example Report

Alerts from 10:28 am 1/18/99 to 11:28 am 1/18/99

Time	Type	Message	Monitor	Group
11:17 am 1/18/99	Email alert sent	pete@freshtech.com	Second URL Test	Web Server
11:17 am 1/18/99	Email alert sent	pete@freshtech.com	First URL Test	Web Server
11:20 am 1/18/99	Email alert sent	pete@freshtech.com	First URL Test	Web Server
11:18 am 1/18/99	Email alert sent	pete@freshtech.com	Second URL Test	Web Server
11:20 am 1/18/99	Email alert sent	pete@freshtech.com	Second URL Test	Web Server
11:18 am 1/18/99	Email alert sent	pete@freshtech.com	First URL Test	Web Server
11:21 am 1/18/99	Email alert sent	pete@freshtech.com	First URL Test	Web Server
11:19 am 1/18/99	Email alert sent	pete@freshtech.com	Second URL Test	Web Server
11:21 am 1/18/99	Email alert sent	pete@freshtech.com	Second URL Test	Web Server
11:19 am 1/18/99	Email alert sent	pete@freshtech.com	First URL Test	Web Server

![icon] SiteScope Reports

Knowing the current status of parameters that SiteScope is monitoring is only half the battle. It is also important to know how the servers and applications you are monitoring have performed over time and to easily review the monitoring environment. SiteScope includes four kinds of management reports: scheduled Management Reports, ad hoc Quick Management Reports, the Progress report, and Monitor Description reports. The scheduled Management Reports provide you with the information you need to see emerging trends and correct potential problems before they become a crisis. The Quick Management Report can be used to look at specific time periods and monitors as needed in order to look at particular events or problems. The Progress report or page gives you information of monitoring load and run sequence for scaling and troubleshooting.

Because of SiteScope's range of e–business monitoring capabilities, SiteScope reports are also valuable to anyone in your organization that uses the Intranet or Extranet as a communication medium, including management personnel in Sales, Marketing, PR, Customer Support, and Operations. SiteScope User accounts can be created to allow these users access to the SiteScope service. Because it may not be necessary for people in these areas to have the ability to make changes to SiteScope, you may use your Web server's security features to restrict their access to only the management report directories.

Each time you choose to view a particular report, SiteScope reads the applicable log files and generates the report based on the most recent information.

 In this section we'll discuss:

- ♦ The Management Reports page.
- ♦ About Scheduled Management Reports.
- ♦ How to add Management Reports.
- ♦ How to edit Management Reports.
- ♦ How to delete Management Reports.

The Management Report Page

The SiteScope Management Report page contains a table that lists all defined management reports. SiteScope automatically creates two default management reports for both the Network and Server groups. If you find these reports useful, you can keep them; otherwise, you can edit them to better meet your needs or, if you don't need them, you can delete them. You can also add as many additional reports as you like.

Report Table

The report table contains the following columns:

Report

> By default, this column contains the name of the report. Click the link in this field for access to the Report page. The Report page contains a link to the most recently generated report as well as a table that shows summary information for the ten most recently generated reports.

There is also an option on this page to generate the management report immediately.

Time Period

> This column contains the time period for which the historical data will be reported.

Edit

> This column contains a link to the Update Management Report page. From this page you can edit the management report parameters.

Del

> Click the **X** in this column to delete a management report definition.

Additional Links

The Management Reports page also contains the following links below the Report Table:

Add _a new management report_

> Click this link to go to the Add Management Report page whereyou can define a new management report.

Quick _management report_

> Click this link to generate a quick management report. A quick management report is generated once and is saved temporarily to a text file. This file is overwritten periodically when new reports are generated.

View the **_Progress_** _page_

> Click this link to go to the SiteScope Progress page. This page indicates which is the next monitor that will be run as well as a listing of the monitors that have run most recently.

View the **_Monitor Description_** _report_

> Click this link to display a list of currently defined monitors and monitor names. You may choose to view all defined monitors or all defined monitors in a particular group.

About Scheduled Management Reports

The Management Report option allows you to define reports that will be generated automatically based on the schedule option you choose. You can choose to generate a management report for a single monitor, several monitors, or even several monitor groups. SiteScope management reports include several report content options including tables and bar charts or line graphs. Reports can be printed directly from the browser window. You can also save report data to a text file suitable for importing into a spreadsheet application. Bar charts and line graphs can alternately be saved individually as JPEG graphics. To save a graph or chart graphic, move your mouse pointer over the object, right−click with the mouse, and select the Picture As"option. Report data can also be sent in an e−mail message in either a comma−delimited text or as XML tagged text.

SiteScope automatically creates two scheduled Management Reports for the default monitor groups. These reports provide historical information for the monitors in these groups over the last day and week. You can leave the reports as they are, change them to meet your needs, or delete them altogether.

Click the link in the **Reports** column to view a list of the ten most recently generated issues of the selected management report definition. Each report list shows a table with a date link showing when each report issue was generated as well as summary information from each of the reports. Each report is listed by the date and time the report was generated. To view an entire report, click the date link in the **Link to Report** column. You'll find more information about how the historical information is presented in Reading SiteScope Management Reports.

Adding Management Reports

You can add management reports for a single monitor, multiple monitors, or entire monitor groups. When you add a management report, you set the report parameters. You choose which monitor or group of monitors you want to report on and over what time period. You can also choose to output the report to a text file for import to a spreadsheet application such as Excel.

To create a management report:

1. Choose the **Add** a new management report link at the bottom of the Management Reports page. The Add Management Report page appears.

2. Complete the Add Management Report form.

3. Click the **Add** Management Report button. The Management Reports page appears with the new report listed at the bottom of the report table.

To generate and view a management report immediately, click the link in the **Report Subject(s)** column on the report table and choose the Generate This Report Now link. Otherwise you can wait to view a report until after the report's scheduled generation time.

Editing Management Reports

The parameters for a management report can be changed at any time. You can change the monitors you're gathering historical information for, the time period over which to report, and the scheduled generation time.

To edit a management report:

1. Click the **Edit** link in the report table for the management report you want to edit. The Update Management Report form appears.

2. Complete the Update Management Report form.

3. Choose the **Update** Management Report link. The Management Report page appears and displays the updated information.

Deleting Management Reports

There is no limit to the number of management reports you can have, but for ease of use you should probably delete any reports that you no longer need.

Deleting management reports is easy. Simply click the **X** in the Del column for that report. A confirmation screen appears. Click on the Delete Report button to complete the action.

Note that when you delete a management report, you delete the definition for the report. This does not delete the previously generated reports that may be stored on the server.

🐸 Adding or Updating a Management Report

The Add/Update Management Report form allows you to create or edit a SiteScope management report. You can add or delete monitors from the report, as well as change which data is shown, how the data is displayed, and the time period to be reported on. Making changes to a management report will become effective for future reports. Previously generated reports will continue to reflect the format and content choices that were in effect when they were generated. See the section on Reading Management Reports for additional information on reports.

Completing the Add/Update Management Report Form

To create a management report, complete each section of the form as described below and then click the "**Add** management report" link. To edit an existing report, make the changes to the parameters in the form and click on the "**Update** management report" link.

Report Subject(s)
> You may choose to show the past performance of one or more groups of monitors or one or more selected monitors. Select the monitor(s) you want included in the report from the selection list.

Time Period
> Select the time period for which you want to view historical data. You may choose to show data for a number of hours, the last day or several days, the past week, or month. Daily reports are generated every day at the scheduled time, weekly reports are generated on Sunday at the scheduled time, and monthly reports are generated on the first day of following the selected month so that they'll contain an entire month's worth of data.

Report Sections
> The SiteScope Management reports can be customized to show key monitor data in different formats. By default, SiteScope generates reports with five sections.

> 1. **Uptime and Readings**
> 2. **Time in Error Summary**
> 3. **A choice of graphical formats**
> 4. **Table of Monitor Readings**
> 5. **Listing of Errors**

> Two other report sections, *Listing of Alerts Sent* and *Time in Error Summary*, are also available, though normally disabled. You can choose to include or exclude each of these six report sections by checking or un−checking the check box next to the section title. A seventh option in this group allows you to choose table and color formatting for the report.

> For **graph** reports, use the pull−down box to choose either a bar chart or one of the line graph formats described below. A bar graph is generated using standard HTML, so it can be printed from all browser types. Line graphs are generated using a java applet and may not print directly from all browsers. Read About Line Graphs for more information about this type of graph.

◊ **bar graph − one graph per measurement:** This bar graph displays a single type of measurement for one monitor during a specified time frame. For example, this type of graph is useful for displaying information like CPU usage over a given period of time.

◊ **line graph − one graph per measurement:** This line graph displays a single type of measurement for a single monitor during a specified time frame. Like the bar graph, this type of graph is useful for displaying CPU usage, URL round−trip times, and other items you're interested in measuring over time.

◊ **line graph − one graph per monitor:** This line graph plots all the readings from a single monitor on one graph. This is useful when you want to compare the readings against one another. For example, this type of graph would be very useful in comparing the steps executed by a URL Transaction Monitor.

◊ **line graph − one graph per type of measurement:** This line graph plots a single type of measurement gathered by several different monitors. For example, you can use this type of graph to plot the URL round trip times returned by several different URL monitors.

◊ **line graph − one graph for all measurements:** Using this option, you may select multiple instances of similar monitors and display all measurements from those monitors on a single graph. The monitor data is grouped for the monitors selected and line graphs are generated for each type of monitor in the group. If all of the monitors selected for the report are of the same type, for example URL monitors, then one line graph is generated with a line for each of the monitors. If different types of monitors are selected, such as CPU and Memory monitors, separate line graphs are created for each type of monitor in the group.

Send Report by E−mail

E−mail

Your may choose to forward reports by e−mail. Enter the e−mail address(es) to which this report should be sent each time its generated. To send the reports to multiple e−mail addresses, separate the e−mail addresses with commas.

Send using HTML format

Select this option box if you want the report(s) sent in HTML format. Use this option to include the SiteScope report graphics. If you do not select this option only a text summary of the report is sent.

Template

Select a template for SiteScope to use to create the e−mail message. You can choose from the following templates or make a copy of one of these and customize it to meet your own needs.

◊ **HistoryLongMail** – Choose this option to send a detailed history report. It contains both user and administration links.

◊ **HistoryLongXMLMail** – Choose this option to send a detailed history report. It contains both user and administration links for reports & XML files.

◊ **HistoryMail** – This is the default option.

◊ **HistoryMailAlertDetail** – Choose this option to have all alerts included in the report that's e−mailed.

◊ **HistoryMailNoLinks** – Choose this option to send the report without any links in it.

◊ **HistoryUserMail** – Choose this option for users without SiteScope administration privileges.

Report Title (optional)

> Enter a name for this report. This name will appear at the top of each report and on the report list. If you don't specify a name here, SiteScope will use a default name.

Advanced Options

Show Detail

> If this box is checked, the all of the information gathered for each monitor is displayed on the report. Otherwise, only the primary data is displayed for each monitor. For example, on a URL Transaction Monitor, if this box is checked, the timing information for each step in the transaction will be displayed in the report.

Show Monitors

> By default, the report will show data for all of the monitors in the report. This option allows only a subset of those monitors to be shown – those that have had the specified status something during the report's time frame. For example, choosing "show only monitors that had errors" will display report data only if that monitor had spent time in error sometime during the time interval of the report.

Schedule Filter

> By default, the report will show data for the full period of the report. This option allows only a subset of the data to be shown – those monitors that have samples during the time period of the schedule. For example, choosing "weekdays, 9–6" will display report data for the selected monitors with samples inside the 9am to 6pm time period, Monday thru Friday. Also, only this data is used for all the calculations.

Disable

> Check this box to temporarily disable this report. To enable the report again, un–check the box.

Generate comma–delimited file

> Check this box to save a generated management report to a comma–delimited text file which you can then import into a spreadsheet application. SiteScope automatically saves these files in the ~SiteScope/htdocs directory. To find the exact location of the saved file on your machine, choose the Reports button on the SiteScope navigation bar and click the link for this report in the **Reports** column to go to the Report page. The full path to the file will be listed in parenthesis directly next to the date line. If you enter an e–mail address in the **E–mail** text entry area, SiteScope will send a copy of the comma–delimited file to that address.

> **Note:** The comma–delimited file creates two columns for each monitor reading, one containing the value with units, and the other containing just the value. This is to make it easier to import the XML data into a third party application which may not automatically separate data values from the text describing the units.

Generate XML file

> Check this box to save a generated management report to an XML text file. SiteScope automatically saves these files in the ~SiteScope/htdocs directory. To find the exact location of the saved file on your machine, choose the Reports button on the SiteScope navigation bar and click the link for this report in the **Reports** column to go to the Report

page. The full path to the file will be listed in parenthesis directly next to the date link. If you enter an e−mail address in the **E−mail** text entry area, SiteScope will send a copy of the XML file to that address.

Note: The XML file creates two columns for each monitor reading, one containing the value with units, and the other containing just the value. This is to make it easier to import the XML data into a third party application which may not automatically separate data values from the text describing the units.

Time Scale

The time scale option allows you to choose the time interval between monitor readings. By default, SiteScope uses automatic scaling. When automatic scaling is used, SiteScope determines how many readings were taken over the chosen time period for the given monitor(s) and then selects an appropriate interval for the management report. The Scale option allows you to choose intervals that range from once every minute to once a day.

Vertical Scale

The vertical scale option allows you to choose the maximum value displayed on a graph. By default, SiteScope will use the maximum sample value. Choosing a specific scale value will make it easier to compare graphs from different monitors and times.

End Time

By default SiteScope generates reports starting at the indicated time and ending at the time the report was generated. You may choose an alternate end time by selecting a time from the drop−down menu. For example, you may want to have your reports run from midnight to midnight.

Schedule

Indicate the time that you want SiteScope to generate this management report. The report will contain information for the last day, week, or month, ending at the time the report is run. For example, if a daily report is generated at 24:00 (midnight), it will contain data generated between midnight the previous day and midnight of the current day.

🐸 Management Report Summary

The management report summary page provides an overview of monitor readings for the most recent reporting periods. This page also provides access to the detailed views of the most recently generated management reports for that group. The link above the table takes you to the most recent report while the table itself contains links to the ten most recently generated reports. At the bottom of the page is a **Generate** button which allows you to generate a new report for the currently displayed monitor(s) regardless of when the report was normally scheduled.

The following is an example of a report summary table for a URL monitor group. Because this is an example, the underlined links are not active.

URL Monitor

[Most Recent Report](#)

Information For	URL: http://www.freshtech.com		public web server		secure web server		secure home page		Se Trans
	avg	peak	avg	peak	avg	peak	avg	peak	avg
1:56 pm 11/4/99 - 1:56 pm 11/5/99	0.15 sec	34 sec	15 hits/min	66 hits/min	1.02 hits/min	7.30 hits/min	1.97 sec	11 sec	0.59 sec
1:00 am 11/4/99 - 1:00 am 11/5/99	0.09 sec	13 sec	14 hits/min	73 hits/min	0.89 hits/min	7.30 hits/min	2.11 sec	17 sec	0.43 sec
1:00 am 11/3/99 - 1:00 am 11/4/99	0.06 sec	12 sec	13 hits/min	43 hits/min	0.67 hits/min	2.09 hits/min	2.02 sec	12 sec	0.47 sec
1:00 am 11/2/99 - 1:00 am 11/3/99	0.41 sec	60 sec	15 hits/min	72 hits/min	0.67 hits/min	2.19 hits/min	2.62 sec	59 sec	1.02 sec
1:00 am 11/1/99 - 1:00 am 11/2/99	0.05 sec	15 sec	13 hits/min	72 hits/min	0.67 hits/min	2.20 hits/min	1.98 sec	10 sec	0.52 sec
1:00 am 10/31/99 - 1:00 am 11/1/99	0.04 sec	13 sec	9.66 hits/min	63 hits/min	0.62 hits/min	2.20 hits/min	2.98 sec	23 sec	2.74 sec

Clicking the **Most Recent Report** link above the summary table will display the latest report available for this monitor or group.

The **Report** column contains date coded links to previously generated reports. The link to the report is actually the date and time the report was generated. For example, in the table above, the first report link contains the following information: 1:00am 9/23/99 – 1:00am 9/24/99. This link would display the report generated at 1:00am on September 24, 1999. SiteScope uses a 24 hour clock, so if this

report had been generated at 1:00 P.M. on September 24, 1999, the link would have read 13:00pm 9/23/99 – 13:00pm 9/24/99.

Each report is stored with the content and formatting that was in effect when the report was generated. If you update a report format, the changes will only apply to future reports. Changes are not retroactive to previous reports.

To the right of the **Report** column you'll see columns headed with the names of the monitors being reported on. Each monitor includes two columns of data: **avg** and **peak**.

The **peak** column contains the highest reading returned for each monitor during the reporting period. For example, if three readings of 7, 4, and 13 were returned for a particular monitor during this time period, the **peak** column would contain the number 13 because it was the highest number returned. To help you quickly spot values that are in the warning or error range defined for that monitor, the background color of the cells with readings in these ranges are colored red or yellow, with red indicating an error status and yellow a warning status.

The **avg** column contains the average of all the readings returned during the report time period. The average is the sum of all readings returned during the report time period divided by the number of readings taken.

For example, if three readings of 7, 4, and 13 were returned during this time period, the **avg** column would contain the number 8, which is the average of these three numbers. To help you quickly spot values in the warning or error range, the background color in cells with readings in these ranges are colored red or yellow, with red indicating an error status and yellow a warning status.

🐸 Reading Management Reports

 SiteScope management reports provide status information for one or more monitors over a given period of time. When you add a management report you specify when or how often you want SiteScope to automatically generate the report. With a Quick Report you can scale the report time period to focus on particular events or time periods. The reports are generated from current monitor readings and previous readings recorded in the SiteScope log data

There are a number of ways that you can access management reports. To view custom management reports that you have created and the SiteScope default management reports, click on the **Report** button on the navigation bar from anywhere within SiteScope. This brings up the Management Reports page. Click on the name of the monitor or monitor group that you want to view to bring up the Management Report Summary page. The dated links in the left hand column of the summary table are links to the applicable reports for the date indicated.

To view the default report for an individual monitor, go to the group page for that monitor and click the monitor's name in the monitor table. This generates a management report for the individual monitor using the default report format. The time period of this report will depend on how often the subject monitor runs. Generally, this report will display the data from the most recent 20 monitor runs. This means that the report time period for monitors that run frequently will be smaller than the report time period for monitors that run less frequently. For example, if a monitor is set to run every 10 minutes, the default report for that monitor will cover a period of 200 minutes (10 minutes x 20 samples). For a monitor running once every hour, the report will cover a period of 20 hours (60 minutes x 20 samples).

You can generate a management report at a time other than the scheduled time by going to the SiteScope Management Reports page. On the Management Reports table, click the named link in the Report column of the table for the report you want to generate. This takes you to the Management Report page for that group or monitor. Choose the **Generate** button at the bottom of the page to generate an update to that report.

Another way to generate a report is to use the Quick management report link Management Report Summary page. The Quick management report allows you to select monitors and groups as well as a number of other parameters to define a one−time management report. It is important to note that the selections you make for a Quick Management Report are not saved for future use.

The Management Report Format

Each type of SiteScope management report includes up to five optional report sections. These are:

1. Uptime and Readings
2. Time in Error Summary
3. Readings in Graphical Format
    a. Bar Graph Format
    b. Line Graph Format
4. Readings in Table Format
5. Error Listing
6. Alert Listing

By default, the first four sections are enabled for every report. The content of each report will reflect selections made when the report was defined in the Add Management Report page. Each of the report sections may be enabled or disabled by select/de–select check boxes on the Update Management Reports form.

Below are descriptions of the different report sections including some example graphs and tables. For additional explanation of how to interpret management reports read Interpreting SiteScope Management Reports

Uptime and Measurements

The first section contains two tables that display an uptime summary and a reading summary for the selected monitor(s). The uptime summary contains information about what percentage of the reported time period the monitor(s) returned an OK, error or warning status, as well as what the most current status is. The reading summary shows what parameter is being measured (i.e. round trip time), as well as the maximum, average, and last reading for the time period being reported on.

In terms of eBusiness performance monitoring, the uptime summary is of particular interest. The following explains how the uptime calculation is made.

SiteScope monitors are not run continuously. In fact, given the principles of network communication, it is a misconception to consider a networked exchange of information as being continuous. When a monitor is run, a request is sent and a response is received. The response is recorded as the result of the monitor run with the status (e.g. good, warning, or error) is determined based on the parameters set for that monitor. These discreet monitor results are used to extrapolate the performance of the system being monitored.

Uptime percentage is calculated by adding the intervals for "good" readings found within the report period and dividing the sum by the sum of the period intervals. The example in Table A illustrates the calculation of uptime. This example is for a report period of two hours from 8:00 to 10:00. The subject monitor is set to run every ten minutes. It is important to note that the monitor ran at ten minute intervals but that these do not match the ten minute clock intervals that would result from dividing the two hour period (8:00 to 10:00) into ten minute intervals. The monitor reading prior to the start of the report period is included as well as the monitor reading immediately following the report period for context.

Table A. Example Uptime Calculation for a Report Period 8:00 – 10:00

Monitor Run	Status	Comment	"Good" Count	"Error" Count	"Warning" Count	Repo (min
7:52	good	(outside of report period)				
8:00		start of report period				
8:02	good	start of report data	0	0	0	0
8:12	good	first value counted	10	0	0	10
8:22	good	second value counted	20	0	0	20

8:32	good	etc.	30	0	0	30
8:42	error	first error value	30	10	0	40
8:52	good		40	10	0	50
9:02	good		50	10	0	60
9:12	no data	no values incremented	50	10	0	60
9:22	no data	no values incremented	50	10	0	60
9:32	error		50	20	0	70
9:42	good		60	20	0	80
9:52	good	end of report data	70	20	0	90
10:00		end of report period				
10:02	good	(outside of report period)				

For the example in the table above there are twelve (12) monitor readings found within the report period of 8:00 to 10:00. Of these twelve, the first reading is used to mark the beginning of the report time period (the reading at 8:02). The status counters and total period counters are set to zero for this point. The status of the second reading is extrapolated backward as the status value for the first interval. This pattern continues through each of the data values with the appropriate status count (i.e. good, error, or warning) being incremented accordingly. Where a status of "no data" is found, none of the counters are incremented, including the total report time counter. In the example in Table A, two of the twelve data points are not counted because of a status of "no data". This leaves nine (9) intervals that are used in the calculation of uptime. The uptime calculation then gives the following:

Uptime% = Good Count / Report Period = 70 / 90 = 77.778%

Error% = Error Count / Report Period = 20 / 90 = 22.222%

Warning% = Warning Count / Report Period = 0 / 90 = 0.000%

The Measurements Summary section gives the average of the results for report period for each of the monitors included in the report. It also lists the maximum value recorded during the period.

Uptime and Measurements

The Time in Error Summary is the total amount of time that the monitor was in error during the reporting period. The calculation methods described above apply to the Time in Error Summary.

Readings in Graphical Format

The third section of the report displays all the readings taken during the reported time period in either a bar graph or a linear graph format. This same information is also displayed in a

<u>tabular</u> format in the third section of the report.

Bar Graph Format

In the bar graph view you'll see a graph of the data returned by the monitor which will look something like the following examples:

Figure 1. Example of a Network Interface monitor that returns varied readings.
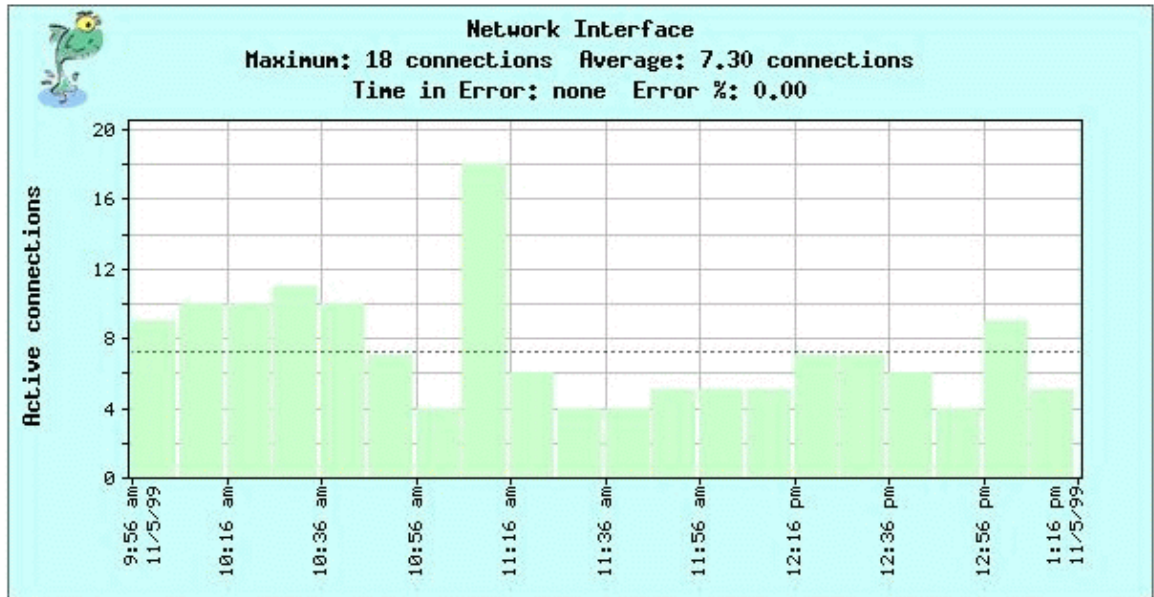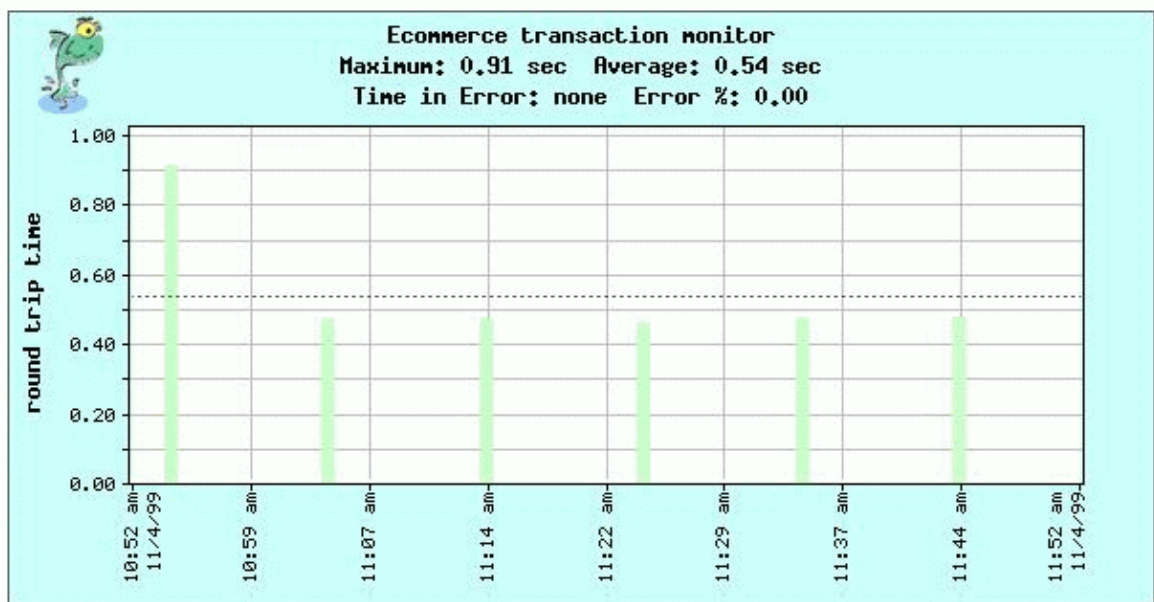

Figure 2. Sample Bar Graph for E–Commerce Transaction Monitor

Time is represented along the horizontal axis of the graphs. This axis is subdivided into sample intervals. Each bar represents the monitor results recorded during that fraction of the total reporting time period. This sample interval or width of the bar is variable and depends upon the total length of

time for which the data is being reported as well as any time scale that you chose for the report. If you didn't indicate a time scale when you created the report, SiteScope will automatically choose a scale based upon the number of readings for the monitor over the entire report period. In many cases the report period will be subdivided into approximately 40 sample intervals. Depending on the time period of the report and the number of monitor readings recorded for the period, there may be sample intervals with no data or "gaps".

You can change the granularity of a report by adjusting the time scale for the report under the **Advanced Option** section of the report setup page. This can be used to reduce the number of sample intervals used for the report.

Report gaps or unevenly combined (averaged) values in the report can be caused by one of several things. These include:

- The report time period and time scale are too narrow for the monitor run interval. For example, selecting a report time period of one day (24 hours) for a monitor that runs every 2 hours. Selecting a time scale of one hour intervals results in a report with gaps between bars. The monitor record only 10 readings for the report interval although the report was constructed with 24 sample intervals.
- Multiple monitors with different run frequencies are included in the same report. The unless the time scale is explicitly set to match the run rate of the least frequently run monitor, the time scale will be set to match the most frequently run monitor. For example, a report on server loading includes a number of CPU and memory monitors. Most of the monitors are set to run every minute but some of the memory monitors are set to run every two minutes. When displayed on a single report, the once–a–minute monitors would display as adjacent bars whereas the once–every–two–minute memory monitors would display with gaps between adjacent bars.
- A schedule is in effect for the monitor. This results in intervals when the monitor is not running and therefore no data is available. Normally this will be evident on reports that cover more than one day. Report periods of one day or less may show a gap for the interval that the subject monitor was not running.
- The report time scale matches monitor run interval very closely but there is an offset for some monitor readings due to process loading. This may be the case when there are seemingly random gaps in an otherwise continuous graph. For example, in an quick report for a monitor that runs every hour. the report period is selected as one day (24 hours) and the time scale is selected as every hour. This will create 24 time buckets (sample intervals) representing the twenty–four hours. During the period normal monitoring queuing and report generation delayed the monitor run while a scheduled monthly report is generated. Due to a close match between the sample interval boundaries and the time that the monitor was normally run, the delay was enough to move the resulting reading into an adjacent sample interval. The report then shows two runs in one sample interval and a gap in the adjacent sample interval slot due to the processing delay.

The formula for adjusting report time period and time scale to close gaps is as follows:

$$\text{readings per interval} \geq 1$$

$$\text{readings per interval} = \left(\frac{\text{monitor run frequency}}{\text{time scale}} \right)$$

Readings in Graphical Format

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The value of the monitor readings is plotted on the vertical axis. If you didn't indicate a vertical scale when you created the report, SiteScope will scale the vertical scale based on the maximum reading for the period.

The height of each bar in the graph represents the monitor's reading during that interval of the report period. If the monitor ran more than once during a sample interval, the height of the colored bar represents the average the multiple readings in that interval. The color of the bar represents the worst status of the readings for that interval. For example, if you select a report period of one day (24 hours) for a monitor that runs once every minute, the report will encompass approximately 1440 monitor readings. Rather than display each of these readings as an individual bar, the readings are averaged into sample intervals based on the time scale. For this example, if a time scale of one hour is selected, the report period is subdivided into 24 sample intervals with each bar representing the average of the 60 monitor readings in that interval. The color of the bar is determined by the worst status recorded for the interval. For example, if one of the 60 readings in a given interval is reported as in error the bar will be red, even if the other 59 readings are reported as good. A gray bar will be displayed behind the colored bar for the maximum reading in that interval.

The color of the bar indicates what status for the interval, with **red** representing an error status, **yellow** a warning status, **green** an OK status, and **blue** for a disabled status. Intervals may have a **gray** colored portion showing above (behind) the colored bar. This means that there was more than one monitor reading for that sample interval and the gray bar represents the peak or maximum reading during that sample interval. If the peak or maximum reading is the same as the average status, the gray bar won't be visible. Where no bar is shown means that no reading was found for that period of time.

The title block of each bar graph may contain the following additional historical information:

Maximum

This is the highest reading returned during the entire reporting period.

Average

This is the average of all of the readings returned during the entire reporting period.

Time In Error

This is the total amount of time that the monitor was in error during the reporting period.

Error %

This is the percent of time that the monitor was in error during the reporting period.

Line Graph Format

Line graph reports are shown using a Java applet. Unlike bar graphs, line graphs can show multiple items or monitors on a single graph as well as individual measurements. They cannot, however, be printed directly from some browsers. They can be saved separately as jpeg files from the browser window.

Figure 3. Sample Line Graph for a Server Monitor
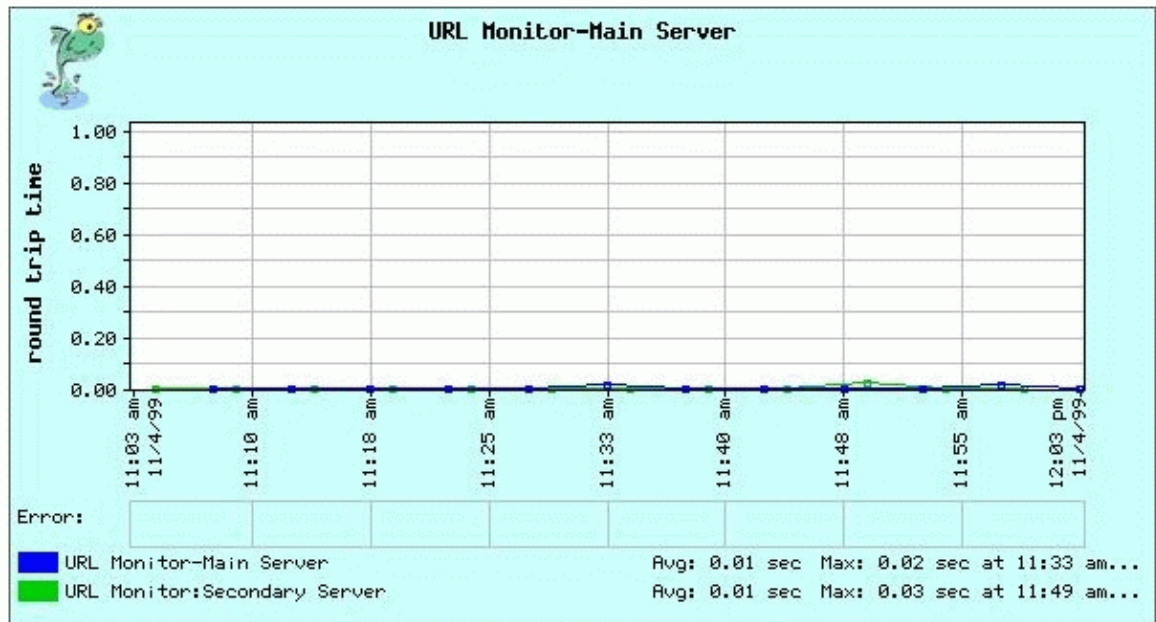
Line graphs can be created in a Quick Report, or can be part of a scheduled management report, just like bar graphs. Line graphs are not generated for the default reports that are triggered from the monitor name link on the Monitor Detail page.

The line graph shows the type of measurement, with the vertical scale on the far left and the time scale at the bottom. When the line graph is displayed as small squares connected by lines, each square represents an individual sample (see figure 1). Monitors that are sampling less often have more widely separated samples than those that sample more often.

As with the bar graph format, the title block of the line graph contains includes the maximum reading, average reading, Time in Error, and error percentage for the period. If the readings for more than one monitor are displayed on a single graph, the color legend at the bottom of each graph shows the name of the monitor represented by that color and the average and maximum values for that monitor over the graphed time period.

The Error section (see figure 2 for an example) shows the period of time that the monitor was in error, and thus, has no value for display in the main graph area. Error bars are color coded to match the monitors they represent.

When there are too many samples to show separately on a graph, such as on the monthly graph shown in figure 2, the line chart displays a modified bar chart. In this case, the height of the solid colored lines represents an average of several values for each interval on the graph. The dashed lines represent the maximum values for each interval on the chart.

Readings in Table Format

The historical information of monitor readings is available in a tabular format in the third section of the report. An example of this section is shown below:

Time	Network Interface Bytes/sec Sent	Ping: Main Server Round Trip Time	URL Monitor-Main Server Round Trip Time	DNS: Main Server Round Trip Time	Ping: Secondary Server Round Trip Time
12:48 pm 11/4/99			0.01 sec	0.02 sec	0.01 sec
12:49 pm 11/4/99					
12:50 pm 11/4/99					
12:51 pm 11/4/99		0.01 sec			
12:52 pm 11/4/99					
12:53 pm 11/4/99			0.01 sec		
12:54 pm 11/4/99					
12:55 pm 11/4/99					
12:56 pm 11/4/99	0.00 bytes/sec	0.01 sec			
12:57 pm 11/4/99					
12:58 pm 11/4/99			0.01 sec	0.02 sec	0.01 sec

As in the graphical view, the total reporting period is divided into equal fractions of the total reporting period. If you chose a specific time increment using the scale option, that will be used; otherwise SiteScope will choose an appropriate scale based on the number of readings taken over the course of the entire reporting period.

The values reported for each time period may or may not reflect actual values returned by the monitor. If only one reading was taken during that segment of time, the value listed will reflect that reading; otherwise, the value will be an average of all readings taken during that time. If the monitor returns only an OK or fail status, the value will reflect the "worst" status reported during that segment of time.

There may be times that you see blank entries. This indicates that no readings were available for that portion of the reporting period. This doesn't mean that the monitor wasn't running correctly – only that the monitor was running less frequently than the length of the time increments on the management report.

Error Listing

The fifth section of the report contains a list of up to the last 100 errors generated for the monitors included in the report. The Error Listing section displays the time that each error was detected by SiteScope. The name of the monitor that was in error and the status are also listed. This allows you to see at a glance how the monitors described in this report performed during the reported time period. If no errors were generated, that will be indicated as well.

Alert Listing

The Alert Listing details the Alerts that were generated for the monitor(s) during the reported time period. In addition to the time the alert was generated, you can also see what type of alert was generated (pager, email, SNMP, or script), the message that was sent, the name of the monitor and the group to which it belongs.

It's easy to look at the Error Listing and compare it with the Alert listing to see if alerts were generated appropriately. If an error was detected but no alert was generated, it's very likely that you don't have your alerts defined properly. Go back and check them out.

🐸 Interpreting Management Reports

SiteScope provides you with a lot of great information about your Web environment, but what does it all mean? Should you be happy with SiteScope's findings, or should you be trying to implement improvements. And what if there's a problem – what then?

How you interpret a SiteScope report is dependent upon the item being monitored. To keep things simple, we'll divide the eight SiteScope monitors into two groups: network dependent monitors and network independent monitors. The first group consists of the DNS, URL, Mail, and Ping monitors, all of which depend on network connectivity. The second group consists of the Disk Space, CPU, Service, and Web Server monitors.

An ideal report for all monitors has all green bars with values in an acceptable range. For network dependent monitors the values should be less than a couple of seconds. For network independent monitors, acceptable values will vary. A graph like this means that your site has high availability and is performing well. Good for you!

Let's say you don't live in a perfect world though, and you see errors (red bars) in your SiteScope reports. The first step is to understand what the errors mean. First, ignore any errors that you were already expecting to see. For example, if your system crashed and you were down for a short time, you would expect to see errors in your reports and you wouldn't need to look any further for a cause. Now you're ready to deal with the other errors you're seeing.

Now you need to determine what type of error you're looking at. There are two basic causes of errors: component failure and capacity overload.

Component Failure

Component failure means something different for network dependent and independent monitors. For network dependent monitors, it's when one of the many pieces necessary to handle requests is down for a period of time. For network independent monitors, it's when the monitored item itself is down. These errors show up as a block of several errors in a row for the duration of the problem. For example, if the web server process crashes, a report for a URL monitor will show a series of red bars until it's started again.
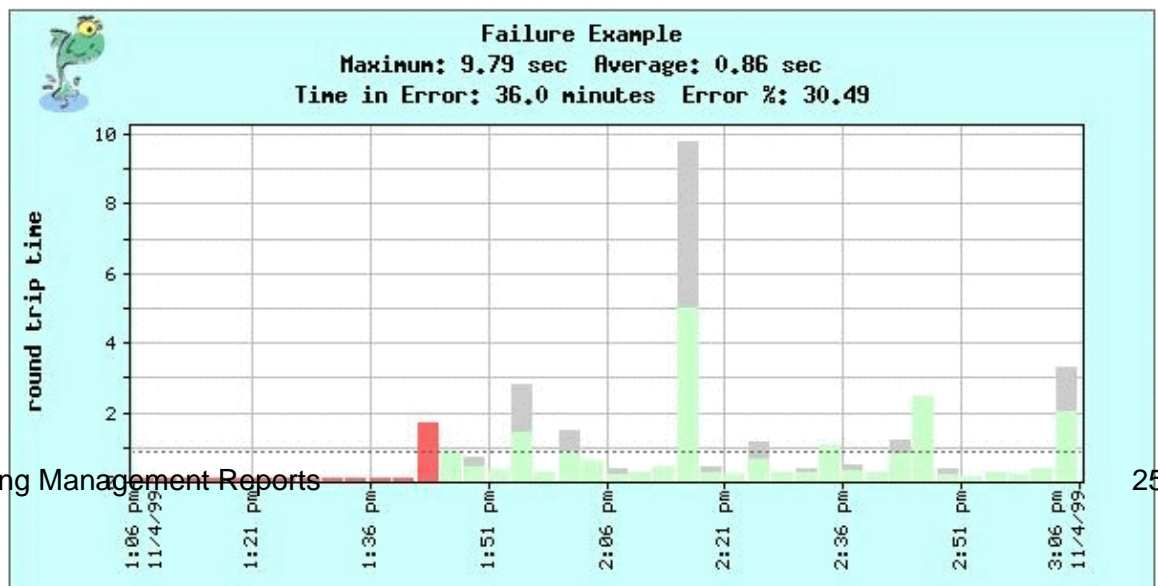
To determine where component failure is occurring for network dependent items, do a traceroute to determine if the errors were caused by your server, your network, your ISP, or the internet backbone. The necessary corrective action will depend on where you determine the problem is occurring.

For network independent items, first set up an Alert that automatically initiates corrective action to minimize any impact on users. Next, analyze your reports to see if there's a pattern of failure. For example, if you have process that is continually crashing, check to see if there are any consistent factors associated with the crashes, like another process starting up, etc.

Capacity Overload

Capacity overload is when an error occurs because some part of your site has reached capacity. For network dependent items these errors appear one at a time on graphs because while most requests are handled correctly, some of them are refused. This type of problem can also show up as increased response times. Often you'll notice the increase occurs at the same time every day. For example, if your T1 line is at capacity every morning, you'll see higher response times and possibly an error or two on your reports.

For network independent items, these errors can appear as either spikes or continuous high readings on the graph. These high readings may correspond directly to errors reported by other monitors.
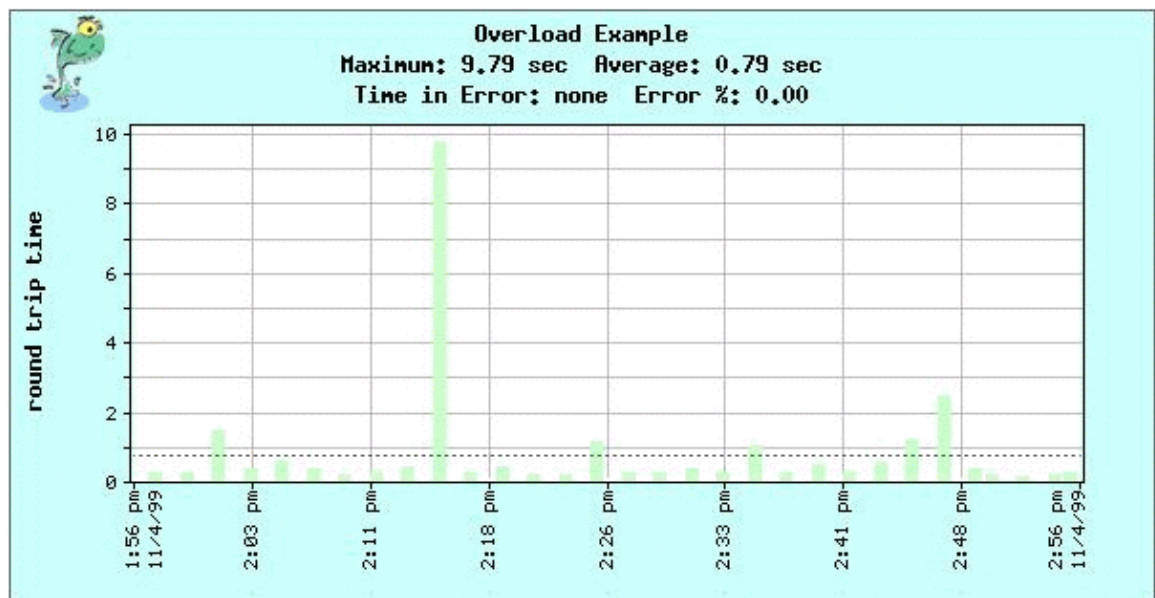
For capacity overload problems, measure the network and server load to see if you're reaching capacity at the same time that SiteScope is reporting your peak response times. Look at reports for CPU, disk use, and memory use. You'll also want to look at your Web server report and compare hits with peak usage to determine if specific CGIs are causing a load problem.

Slow Response Time

Even if your reports show no errors, you may still notice that response times are unusually slow at certain times of the day. Use the same techniques used for understanding capacity overload to figure

out what's causing your slow response time.
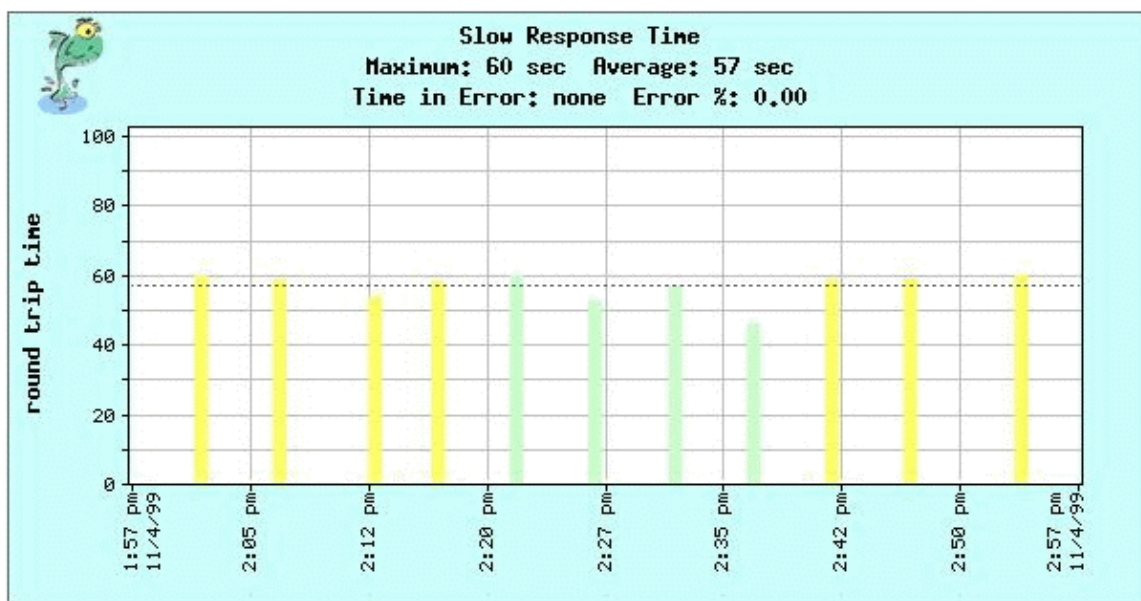
Check to see if you're reaching capacity at the times that SiteScope is reporting slow response times. Look at reports for CPU, disk use, and memory use on the server, and do some log analysis to determine if CGIs are causing the problem

![frog icon] Show Quick Management Report

The Show Quick Management Report form allows you to create a one–time SiteScope management report. This report will be generated immediately and will be displayed in both a text and graph format, but it will not be automatically saved. If you'd like to retain a quick management report, you'll have to save it using the File/Save As command on your browser. To get to the Quick Management Report form, click the **Reports** button on the navigation bar and then choose the "**Quick** management report" link. This displays the Show Quick Management Form.

Completing the Quick Management Form

To generate a quick management report, complete each section of the form as described below and then click the "**Show Quick** Management Report" link. The length of time that it takes to generate the report will vary depending upon the speed of the Web server machine, the number of monitors to report on, and the selected report time period.

Report Subject(s)
> You may choose to report on a single monitor, several monitors, or even several monitor groups. Select whatever report subjects you want in the selection window.

Time Period
> Select the time period for which you want to view historical data.

Report Type
> Select how the report should be displayed, choosing the sections of information that will be included in the report. The possible sections to be included are:

>> ◊ **Summary of Uptime and Readings** – a summary of uptime percentage, error percentage, and the average and maximum of the monitor readings shown over the specified time period.
>> ◊ **Time in Error Summary** – the total amount of time that the monitor was in error during the reporting period.
>> ◊ **Graph Type** – Bar graphs are the only reports that can be printed. Line graphs, displayed using a java applet, are useful for showing several measurements on one graph but cannot be printed with many browsers. Read Creating Line Graphs for more information about this type of graph. The Comma–delimited type is useful for importing into other tools like Excel or a database.
>> ◊ **Table of Monitor Readings** – a tabular view of the monitor readings
>> ◊ **Listing of Errors** – a listing of the error readings taken over the time period of the report.
>> ◊ **Listing of Alerts Sent** – lists alerts sent over the time period for any of the monitors in the report. The Detail Level controls the amount of information printed for each alert.Basic shows the time and summary information for each alert. Detail for Failed Alerts shows detailed diagnostic output for any alerts that failed – all other alerts are shown with summary information. Detail for All Alerts shows the detailed alert output for all alerts in the report.

Advanced Options

Show Detail

 Check this box to have the full detail of monitor readings displayed on the report. Leaving this box un−checked will display only the summary data.

Show Monitors

 By default, the report will show data for all of the monitors in the report. This option allows only a subset of those monitors to be shown − those that have had the specified status something during the report's time frame. For example, choosing "show only monitors that had errors" will display report data only if that monitor had spent time in error sometime during the time interval of the report.

Schedule Filter

 By default, the report will show data for the full period of the report. This option allows only a subset of the data to be shown − those monitors that have samples during the time period of the schedule. For example, choosing "weekdays, 9−6" will display report data for the selected monitors with samples inside the 9am to 6pm time period, Monday thru Friday. Also, only this data is used for all the calculations.

Time Scale

 The time scale option allows you to choose the time interval between monitor readings. By default, SiteScope uses automatic scaling. When automatic scaling is used, SiteScope determines how many readings were taken over the chosen time period for the given monitor(s) and then selects an appropriate interval for the management report. The Scale option allows you to choose intervals that range from once every minute to once a day.

Vertical Scale

 The vertical scale option allows you to choose the maximum value displayed on a graph. By default, SiteScope will use the maximum sample value. Choosing a specific scale value will make it easier to compare graphs from different monitors and times.

Report Title

 Fill in the optional Report Title and Description text fields to identify the report you are creating. If you leave these fields blank SiteScope will create a title that is descriptive of the report content.

🐸 Monitor Description Report

The Monitor Description report provides you with detailed information about the monitors defined in one or more monitor groups. You can use this report to view setup information on particular monitorsas well as the organization and makeup of groups of monitors.

Completing the SiteScope Monitor Description Report Form

To display the SiteScope Monitor Description Form, choose the **Reports** button on the navigation bar and click the View the **Monitor Description** report link, located at the bottom of the Reports page. This brings up the the SiteScope Monitor Description Report Form.

Complete the fields on the SiteScope Monitor Description Form as follows:

Report Subject(s)
> Choose the monitors or groups of monitors that you'd like the report to include. Hold down the shift key to select a set of adjacent groups. Use the CTRL key to select non−adjacent items.

Display Columns
> Choose the monitor information to display in the report columns. Hold down the shift key to select a set of adjacent groups. Use the CTRL key to select non−adjacent items. Data is shown in the report for the selected parameters only if the particular option has been selected, such as **Disabled** and **Verify Error**, or if a value has been supplied, such as Monitor Descriptions. If the option or value has not been defined in the particular monitor setup, the column is blank for that parameter for that monitor.

Show Parameters
> Check this box if you want the report to contain the parameters defined for each monitor. This option includes a list of the active options defined for each selected monitor in a single table cell rather than individual columns as with the option above.

After making your selections, click the **Show Report** button to generate the report.

Reading the SiteScope Monitor Description Report

Monitor Description Report is presented in a table format. The columns in the report include the following information:

1. Group to which the monitor belongs
2. Name of the monitor
3. The frequency at which it is run
4. Whether or not this monitor is disabled
5. The schedule this monitor is tied to

6. A description of the parameters defined for the monitor

Below is an example of a Monitor Description Report for the Server group running on Windows NT.

Group	Monitor	Frequency	Disabled	Schedule	Parameters
Server	CPU	1 hour			
Server	Disk space on C	1 hour			Disk: C
Server	Disk space on D	2 hours			Disk: D
Server	Memory	1 hour			
Server	Microsoft IIS	1 hour			Web Server: Microsoft|
Server	World Wide Web Publishing Service	30 minutes			Service: World Wide Web Publishing Service

🌱 Progress Report

The SiteScope Progress page provides an overview of which SiteScope monitors are running, and which monitors have run recently, at what time, and what the returned status was. This page is updated every 20 seconds, so the information is always current.

The following is a sample progress report table.

Recent Monitors

Date	Group	Monitor	Status
1:07pm 01/08/97	**Network**	**will update monitor Connection to Freshwater Software server**	in 28 seconds
1:07pm 01/08/97	server	Disk space on /dev/root	ok 86% full
1:06pm 01/08/97	Server	CPU usage	ok 2% used
1:06pm 01/08/97	Network	Internal Router	ok 2 ms
1:06pm 01/08/97	Network	Test Router	ok 2 ms

The information in each column is as follows:

> *Date*
>> The date and time the monitor ran.
>
> *Group*
>> The group to which the monitor belongs.
>
> *Monitor*
>> The name of the monitor that SiteScope ran.
>
> *Status*
>> The status returned by the monitor.

At the bottom of the page, SiteScope's monitoring load statistics are displayed.

The following is a sample load monitoring report table.

Monitoring Load

	Monitors Run Per Minute	**Monitors Running**
Current	6.33	0
Maximum	9.00 at 10:20 pm 1/22/99	2 at 10:19 pm 1/22/99

Maximums are since last startup at 10:18 pm 1/22/99

The monitors run per minute is a rolling average of the last 10 minutes of monitoring, and tracks the rate at which monitors are being run. This is the primary measure of how heavily loaded SiteScope is. The Monitors Running are the number of monitors running at a particular moment. For both statistics, the current and peak values are displayed.

🐸 Preferences

SiteScope allows you to set several types of preferences: general, SNMP, pager, and e−mail. General preferences are related to the SiteScope built−in Web server. SNMP preferences allow you to set the parameters that SiteScope uses when sending an SNMP trap message. Pager and e−mail notification preferences allow you to tell SiteScope how to contact you via pager and e−mail.

To get to the General Preferences page, choose the General Preferences link on the SiteScope main panel. To reach the SNMP, pager, and e−mail preference pages, choose the Alert option on the SiteScope navigation bar to display the Alert Detail page. Beneath the alert table you'll see three links that take you to these preference pages.

For more information about how to set the various preferences, choose the appropriate link below:

- general preferences
- pager preferences
- mail preferences
- SNMP preferences

🐸 General Preferences

The General Preferences page gives you access to a number of <u>other pages</u> that allow you to set various preferences for SiteScope. This includes E–mail, Pager, Log, and User account configurations.

The General Preferences page itself is where you enter your SiteScope license information and where you can choose to use a web server other than the built–in server which is part of the SiteScope package. If you choose to use the SiteScope server, you can specify a port and access privileges for the server so you can restrict access to SiteScope. If you choose not to use the SiteScope Web server and instead want to use a stand–alone Web server, you'll need to refer to the instructions for how to <u>set up your server</u> to serve SiteScope pages.

Completing the General Preferences Form

Complete the form as indicated below and then click the **Save Changes** button located at the bottom of the page.

License Number
> Enter your SiteScope license number to register your SiteScope monitors. This number is issued to you when you purchase a set of monitors. You must purchase a license if you intend to use SiteScope beyond the trial period. If you have multiple installations of SiteScope you will need to enter the same license number in each of your SiteScope installations.

Count Monitors
> This link brings up the <u>SiteScope Monitor Count</u> feature. This feature allows you to get a count of the monitor instances that are currently defined for mulitple SiteScope installations in your environment.

Enable locale–specific display of date and time
> Selecting this option allows SiteScope to display dates and times in the default locale format. If this option is not set, then the US locale is used.
>
> If you want to over–ride the default locale used by SiteScope:
>
> 1. Edit the master.config file in the SiteScope\groups directory.
> 2. Find the entry "_localeCountry=", and assign it an uppercase 2–character ISO–3166 country code. You can find a full list of these codes at a number of sites, such as <u>http://www.chemie.fu–berlin.de/diverse/doc/ISO_3166.html</u>.   For example: _localeCountry=US
> 3. Find the entry "_localeLanguage=", and assign it a lowercase 2–character ISO–639 language code. You can find a full list of these codes at a number of sites, such as <u>http://www.ics.uci.edu/pub/ietf/http/related/iso639.txt</u>.   For example: _localeLanguage=en
> 4. Save the master.config file, and then restart the SiteScope service.

Enable Operator Acknowledgement Functionality
Check this box to enable the optional monitor status acknowledgement feature. This option will add an extra column to each monitor group table labeled **Ack**. This column contains an acknowledgement icon which, when clicked, provides an entry field to create a comment or note associated with the monitor. This note or comment is then available to other users as a floating tooltip for group communication. The comment text is cleared from the interface when the monitor changes from one state to another. The acknowledgement notes are also recorded in the `SiteScope\logs\Operator.log` file.

Built−in Web Server

IP Addresses Allowed Access
You can restrict the IP addresses that are allowed access to the SiteScope Web server by entering which IP addresses should be allowed access. You can use a wildcard at the end of the IP address to indicate a range of addresses. For example, 206.168.191.* allows access to the 206.168.191 subnet.

Require both IP address and Login
Selecting this option adds further security by restricting SiteScope access to users who have both a correct username/password **and** an allowed IP address.

SiteScope Port
Enter the port on which the SiteScope server should be accessed. By default, this port value is normally set to `8888` and the access method is HTTP. You can change this to be some other available port number.

You can also set up SiteScope to be accessible via Secure HTTP (HTTPS). To do this you will have to obtain and install a digital certificate on the SiteScope server. You will also have to define a port number for the SiteScope _httpSecurePort parameter. Leaving the SiteScope Port field blank will have one of two effects. If the _httpSecurePort parameter is defined, leaving the SiteScope Port empty will force all access to the SiteScope server to be Secure HTTP connections. If the _httpSecurePort parameter is not defined, and no valid port is entered in the SiteScope Port field, the SiteScope Web server will not start and will not serve the SiteScope Web pages. Use this option if you want to use another Web server to serve SiteScope pages. Refer to the instructions for how to set up a stand−alone server.

Create static HTML pages
Selecting this option tells SiteScope to write out HTML files. This allows access to SiteScope information from a separate web server application. You may choose to use this option if you need to use special security options supported by your web server.

Web Server Address
Enter the name **or** the IP address of the machine on which SiteScope is installed. For example, you could enter either the machine's IP address, as in 206.168.191.44, or you could enter the machine's name. as in trout.freshtech.com. This information is used for providing links to SiteScope management report pages in your management summary e−mail.

Other Links

The General Preferences page also includes links to pages that allow you to configure the following:

- ♦ Where SiteScope will send **E–mail** reports and warnings
- ♦ Set the size of SiteScope **Log** files
- ♦ **Pager** telephone numbers
- ♦ Define a **Schedule** that can trigger monitors
- ♦ Integration of your **SiteSeer** account
- ♦ **SNMP** hosts or addresses
- ♦ Connections to **Unix Remotes**
- ♦ Account names and privileges for other **Users**

SiteScope Monitor Count

Although SiteScope is based on an agentless deployment model, there are cases where, for security, monitoring capacity, and performance reasons, you may have multiple installations of SiteScope in your network environment. For administration of SiteScope licensing it is useful to have easy access to your current monitoring usage. The SiteScope Monitor Count feature accesses the configuration information from multiple SiteScope servers to provide a count of current usage as well as license information. This feature is accessed from the **Monitor Count** link on the General Preferences page.

This section covers the following subjects:

- The SiteScope Monitor Count Page
- The SiteScope Server List
- The Update SiteScope Server Form

SiteScope Monitor Count

The SiteScope Monitor Count page provides an overview of the monitoring usage and connectivity of multiple SiteScope servers within your network environment. This includes a status message for SiteScope's attempt at accessing each remote SiteScope server, a link to edit the SiteScope server list, and the Monitor Usage Detail table.

Use the **Edit** the Server list link to add a new server to the list or to update the information for an existing server. This link will bring up the SiteScope Server List page.

Monitor Usage Detail Table

The Monitor Usage Detail table gives a summary view of the monitor usage on a SiteScope server basis. This includes the following information:

Server

Lists the IP addresses of the SiteScope servers that have been identified to the server you are accessing.

Monitors Used

This column shows the total number of monitor instances active on applicable server.

Licensed Monitors

This column indicates the number of monitor instances are licensed for use on the given server. Where this number is less than the **Monitors Used** number means that you can create additional monitor instances with your existing licensing.

License #

This column shows the license key being used on server indicated in the first column.

SiteScope Server List

The SiteScope Server List page displays a list of remote SiteScope servers that have been defined to the current installation of SiteScope. You access this page by clicking on the **Edit** the Server list link on the SiteScope Monitor Count page.

SiteScope Server List Table

The SiteScope Server List table displays the address of all of the SiteScope servers currently specified to the current SiteScope server. The columns of the table are as follows:

Name

> Lists the optional name or IP addresses of the SiteScope servers that have been identified to the server you are accessing.

Edit

> Click on the Edit hyper link to update the information for this server. This brings up the Update SiteScope Server form.

Del

> Click the **X** in this column to remove a SiteScope server from the list.

Below the SiteScope Server List table are several links to add and update server list information. Click on the **Add** to the SiteScope server list link to add a new remote SiteScope server to the list. Click on the **Add** a group to the SiteScope server list. The **Monitor Count** link brings up the SiteScope Monitor Count page.

Update SiteScope Server Form

Complete the form as indicated below and then click the **Save Changes** button located at the bottom of the page.

Server Address

> Enter the server address and port that SiteScope is running on for the remote SiteScope server (for example, demo.freshwater.com:8888)

Title

> Enter an optional title for this server for use in the Multi−View window and Monitor Count views. The default title is the server IP address.

Advanced Options

The advanced options give you the ability to customize the method SiteScope will use to access remote SiteScope server information. Complete these options as necessary to login to remote your SiteScope servers.

User Name

> By default, SiteScope will to use the administrator user name to access remote SiteScope servers. To use another SiteScope login account you can enter the user name for connecting

to the SiteScope server in this field.

Password

Where necessary, enter the password required to connect to the remote SiteScope server. The default is to use the administrator password, if it has been defined.

Proxy

If you need to use a proxy server to connect to a remote server, enter the IP address for the proxy server including port number (for example, proxy.freshwater.com:8080).

Proxy User Name

When connecting through a proxy, enter the user name for connecting as applicable for the proxy server.

Proxy Password

Enter the password for the user name entered above when connecting through a proxy server.

Timeout

You can set an optional timeout for retrieving information from the SiteScope server. If SiteScope is not able to retrieve the information within the timeout period, it will post an error message.

Usage

The Usage option determines whether this server will be included in the [Multi−View panel](#), the Monitor Count feature, or both. The default is to have the server included in both the Multi−view panel and Monitor Count listing.

Click the **Update Server** button to record the changes to the SiteScope Server list.

🐸 Accessing SiteScope via HTTPS

You can setup the SiteScope web server to use an SSL connection with access via the https protocol. The steps you need to take to do this are described here.

Important: The process for creating, requesting, and installing a digital certificate requires close attention to detail. Be sure to make a note of the parameters and command line arguments that you use in each step of the process as it is very important that you use the same values thoughout the procedure.

SiteScope is shipped with Keytool.exe. Keytool is a key and certificate management utility. It enables users to administer their own public/private key pairs and associated certificates for authentication using digital signatures. It also allows users to cache the public keys of the parties they communicate with. This is installed in SiteScope/java/bin directory.

You can find out more about keytool at the Sun Microsystems site:

http://java.sun.com/products/jdk/1.2/docs/tooldocs/win32/keytool.html

You need to have a digital certificate that can be imported into the key storage file used by Keytool. If your organization does not currently have a digital certificate for this purpose, you will need to make a request to a Certificate Authority to issue you a certificate.

Creating a Key Storage File

To create the the key storage data file needed for a certificate you need to first create a key pair. To do this you need to run the following command from the SiteScope/java/bin directory: (**Note**: this needs to be entered on a single line. It is displayed here on multiple lines to ease presentation.)

keytool −genkey −dname "CN=*www.yourDomain.com*, OU=*yourDepartment*, O=*yourCompanyName*,L=*yourLocation*, S=*yourState*, C=*yourCountryCode*" −alias *yourAlias* −keypass *keypass* −keystore ..\..\groups\serverKeystore −storepass *passphrase* −keyalg "RSA" −validity *valdays*

The value of a `−dname` option must be in the following order where the italicized values are replaced by values of your choosing. The keywords are abbreviations for the following:

CN = *commonName* − common name of a person, e.g., "Warren Pease"

OU = *organizationUnit* − small organizational unit (e.g, "NetAdmin"

O = *organizationName* − large organization name, e.g., "ACMe−Systems, Inc."

L = *localityName* − locality (city) name, e.g., "Palo Alto"

S = *stateName* − state or province name, e.g., "California"

C = *country* – two–letter country code, e.g., "US"

The subcomponents within the ?dname (distinguished name string) variable are case–insensitive but they are order sensitive although you do not have to include all of the subcomponents. The ?dname variable should represent your company and the cn is the domain name of the webserver sitescope is installed on.

The value of ?storepass passphrase is a password used to protect the Key Store file. This password must be at least 6 characters long. You will need to use this password to import to and remove certificate data from the key store.

The ?alias variable is an alias or nickname you use to identify an entry in your keystore.

This command will create a file called serverKeystore (MAKE SURE YOU KEEP A BACK UP COPY OF THIS FILE SOMEWHERE else). SiteScope will use this key store file to store the certificates used in your secure sessions.

Creating a Certificate Request File

Next you need to create a certificate request file. To do this run the following command from the same directory as above.

keytool –certreq –alias *yourAlias* –file ..\..\groups*filename*.csr –keypass *keypass* –keystore ..\..\groups\serverKeystore –storepass *passphrase* –keyalg "RSA"

This will generate a *filename*.csr to be used as a request file. You need to send this file to a Certificate Authority (CA) along with your request for a certificate.

Importing the Certificate

After you receive your certificate from a Certificate Authority (the reply should include a file called cert.cer) then you need to import this certificate into the KeyStore file you created with the procedure above. The file should be called serverKeystore. To import the certificate data into the KeyStore file run the following command from the same directory as above:

keytool –import –trustcacerts –alias *yourAlias* –file *cert.cer* –keystore ../../groups/serverKeystore

Setting up SiteScope to Use HTTPS

After you do this you need to make some parameter changes to instruct SiteScope to run a secured connection. To do this you need to add or modify the following parameters in the master.config file:

_httpSecurePort=8899

The number you use for the _httpSecurePort parameter can be set to any available port number. We recommend that you use a port number other than 8888 which is the default port for the accessing SiteScope using http (unsecure). You also need to add or modify the following parameters:

To use https exclusively you need to clear the setting _httpPort and set the _httpSecurePort to 8899.

_httpSSLKeystorePassword=*passphrase*

_httpSSLKeyPassword=*keypass*

All the parameters in the master.config file are case and syntax sensitive. Be sure not to add any extra spaces or lines to the file.

Save the changes to the master.config file. You will then need to stop and restart the SiteScope service for the changes to become effective. Then you should be able to access SiteScope using http at:

http://*server_IP_address*:8888 (e.g. for access from inside the firewall)

and using https at the following, based on the example above:

https://*server_IP_address*:8899 (e.g. for secure access from outside the firewall)

🐸 Using a Stand–alone Web server

SiteScope has a built–in Web server which we encourage you to use to serve SiteScope's Web pages. SiteScope can interface directly with this server rather than invoking a CGI script, making retrieval times quicker, and eliminating the need for configuration changes to your stand–alone Web server. There may be times, however, when it's necessary to serve SiteScope's pages through your own Web server, such as when you have a firewall set up and want SiteScope's pages to use that firewall.

If you do decide to serve SiteScope's pages through a stand–alone server, you will first have to set up SiteScope using the default setup as downloaded. After installing SiteScope, you will need to set up two virtual server paths for the SiteScope documents. The following are instructions for doing this using either an IIS, Apache, or Netscape or other server.

Using an IIS Server

1. Connect to SiteScope through the SiteScope server (default installation), and choose the **General Preferences** link on the SiteScope main page.

2. Under the section **Built–in Web Server** remove anything in the **SiteScope Port field**, (normally 8888) and select the **Create Static HTML** checkbox.

3. Save these changes. This shuts down SiteScope's internal web server and tells SiteScope to create HTML files that can be accessed using a separate web server. The browser will normally return an error message when refreshed at this point.

4. From the Windows Start menu, open the Internet Service Manager and open up the IIS properties. Choose the `Directories` option.

5. In the IIS directory view or using the IIS Wizard, add a new virtual directory configured to point to wherever you have SiteScope installed as follows:

   > Virtual Directory name or Alias: `SiteScope`
   > Physical Directory: `path:\SiteScope` where `path` represents the physical device path where SiteScope is installed.
   > Select `Read` as the only access permission
   > Create the virtual directory

6. In the IIS directory view, open the new SiteScope directory and select the cgi subdirectory. Change the properties of this subdirectory as follows :

   > Where applicable, verify that only the "Read", "Log visits", and "Index this resource" options are checked. Otherwise deselect all other Access Permissions and Content Controls.
   > Select the Execute Scripts option or set the Execute Permissions to "Scripts and Executables".
   > Save the changes

Now, you'll be able to access SiteScope at:

```
http://your.machine/SiteScope/htdocs/SiteScope.html
```

Restricting Access To SiteScope Using an IIS Server

IIS uses NT file permissions to restrict access. By changing the NT file permissions, you can control who can access the SiteScope web pages:

1. Open the Directory Permissions window for the SiteScope directory.
2. Select the SiteScope directory
3. Choose Properties from the File Menu
4. Choose the Security tab
5. Choose the Permissions button
6. Check Replace Permissions on Subdirectories
7. Check Replace Permission on Exiting Files

To restrict access to SiteScope, complete the following instructions:

1. Remove the Everyone group
2. Add the sitescope administrator account with Full Control permissions
3. If you want to allow read only access to some users, add these accounts with Read permission
4. Choose OK to save the permissions

The url for admin access will be:

```
http://yourServerName/SiteScope/htdocs/SiteScope.html
```

The url for read only access will be:

```
http://yourServerName/SiteScope/userhtml/SiteScope.html
```

Note: If you're using Internet Explorer, one confusing "feature" is that IE automatically logs into web pages using your current login account, without showing you a password dialog. For example, if you are logged into the TestUser account and go to an IIS web server that restricts access to a page, IE will invisibly log you in using TestUser. To always get the login dialog, disable the "Windows NT Challenge/Response" checkbox in the authentication options of IIS.

Using Apache

For the Apache web server, add these lines to `conf/srm.conf` and restart

```
AddHandler cgi-script .exe Alias /SiteScope
/usr/SiteScope ScriptAlias /SiteScope/cgi
/usr/SiteScope/cgi
```

Using a Netscape or Other Server

1. Determine how virtual directories are added for your server.

2. Add a virtual directory that maps /SiteScope to wherever you installed SiteScope.

   For example, if SiteScope is installed in a folder named Applications located on your C drive, you would map `/SiteScope` to `c:/Applications/SiteScope`.

3. Add a virtual cgi directory for `/SiteScope/cgi` as follows:

   ◊ for "url prefix", use `/SitesScope/cgi`
   ◊ for "shell cgi directory", use `C:/SiteScope/cgi` (or use the path where you installed SiteScope) press OK

4. Save and apply your changes.

   Note: it may be necessary to restart your server to apply these changes.

5. Now, you'll be able to access SiteScope at:

   `http://your.machine/SiteScope/htdocs/SiteScope.html`

🐸 Pager Preferences

Use the Pager Preferences form to set the default method that SiteScope should use when instructed to send a page. SiteScope sends pages using a modem connected directly to the server on which the SiteScope application resides.

If you would like for SiteScope to send pages to different pagers or more than one pager at once, create multiple pager settings by completing the Add Additional Pager Settings form. This form is available by clicking on the **Add additional pager settings** link at the bottom of the SiteScope Pager Preferences form.

Completing the Pager Preferences Form

use the following steps to complete the Pager Preferences form.

From the **Modem port** pull–down menu, select the communications port that your modem is connected to on the SiteScope server.

From the **Modem speed** pull–down menu, select the modem speed used for connections to your paging service . The default of 1200 baud is likely to work with most paging systems.

Select the method of communication you want SiteScope to use to send pages.

There are different methods for sending a message to your paging service. The **preferred method** is to connect directly to a **modem at your pager service**. When a modem–to–modem connection is used, SiteScope is able to verify that the message was sent successfully and can receive messages describing any communication problem. The other connection options generally send messages to automated voice response systems using touch tone dialing. The touch tone dialing method is limited to numeric messages and SiteScope cannot confirm that your paging service correctly received the message.

Send Alphanumeric messages by connecting to Modem Number at paging service
> Choose this option if you have an alphanumeric pager and use an alphanumeric paging service.
>
> In the **Modem Number** text entry field, type the phone number to use for sending alphanumeric pages to the paging service modem. This number is provided by your paging service. Sometimes, the paging service will call this the TAP/IXO number. Some of the Modem Numbers for the larger services are:
>
> > ◊ Airtouch: (800)326–0038
> > ◊ MCI: (800) 555–0909
> > ◊ Mobile Media: (800)622–5742
> > ◊ Mobilecomm: (800)946–4644
> > ◊ Pagenet: (800)720–8398
> > ◊ PageMart: (800)864–9499
> > ◊ SkyTel: (800)759–6366 or (800)679–2778

◊ USA Mobile: (800)589–9776

In the **PIN number** text entry field, type the last seven digits of the PIN number for your alphanumeric pager. Then Press the **Save Changes** button to save these settings.

Dial phone number and enter message (numeric only)

Choose this option if you dial a direct phone number to send a page. Most local paging companies work like this.

In the **Phone number** text entry field, enter the phone number exactly as you would dial it from your telephone, including other numbers you might need such as a number to get an outside line. You can use dashes to make the number easier to read, but they aren't required. Use commas to separate the portions of the phone number. Each comma causes the modem script to pause for a few seconds before dialing the rest of the number.

For example, if you're dialing your pager from your office and you have to dial 9 to get an outside line, you might type:

```
9, 555-6789
```

Press the **Save Changes** button to save these settings.

Dial phone number, enter a command, and then enter message (numeric only)

Choose this option if you have a direct number, but need to enter a command before sending a page. Also, choose this option if your paging company uses a single phone number for all pagers and requests a PIN number before sending a page.

In the **Phone number** text entry field, type the phone number exactly as you would dial it from your telephone, including other numbers you might need such as a number to get an outside line. You can use dashes to make the number easier to read, but they aren't required. Use commas to separate the portions of the phone number. Each comma causes the modem script to pause for a few seconds before dialing the rest of the number.

For example, if you're dialing your pager from your office where you have to dial 9 to get an outside line, you might type:

```
9, 123-4567
```

In the **Send page command** text entry field, type the page command exactly as you would dial it from your touch tone telephone.

Press the **Save Changes** button to save these settings.

Customized modem command string

Use this option if your paging company does not use either of the two previous choices.

In the **Modem command** text entry field, type the entire modem command including the phone number to dial, any additional digits, and $message. SiteScope replaces $message with the message you specified for each alert. Use commas to separate the portions of the phone number. Each comma causes the modem script to pause for a few seconds before dialing the rest of the number.

For example, if the pager company's number is 123–4567, your pager PIN is 333–3333, and your pager company requires that you follow each command with the # key, the command might look like this:

```
ATDT 123-4567,,333-3333#,,$message#
```

Unix Only: Enter the device path for your modem in the Modem Path field. To see a list of devices using Solaris, use the `ls /dev/term/*` command. To see a list of devices using IRIX, use the `ls /dev/ttym*` command.

Additional Pager Settings

This table lists any pager settings that you've defined in addition to the default settings. If you only define the default settings, this table will be empty. When you create an alert, you may choose to send a page to one or more pagers defined by these settings.

The table of Additional Pager Settings also contains links to help you administer pager settings. The link in the **Edit** column allows you to update and change the setting. The link in the **Test** column allows you to send a test page using the settings to confirm that the settings are correct. Click the **X** to delete settings for the subject pager.

If you'd like to add additional pager settings, choose the **Add additional pager setting** link below the table. This will take you to the [Add Additional Pager Settings](#) form.

When you've completed the form choose the **Save Changes** button.

Add Additional Pager Settings

Use the Add Additional Pager Settings form to define additional pagers to which SiteScope can send pages in the event of an error or warning condition. You must complete this form for each pager you want to add. You may instruct SiteScope to send a page to one or more of the defined pagers when you set up a new pager alert.

SiteScope sends pages using a modem connected directly to the server on which the SiteScope application resides.

Once you've completed the this form, click the **Save Additional Setting** button to save the new pager settings.

Completing the Add Additional Pager Settings Form

Different paging companies have different procedures for sending a page. If you have an alphanumeric paging service, choose that option. For numeric pages, choose the option that matches the steps you use to send a page using a touch tone phone.

Setting Name
> Type in the name for these pager settings. For example, if this pager belongs to Joe, you might simply type Joe in the text entry area. When you add an alert you can choose Joe from the list of pager settings to have a page sent to him in the event of an error or warning condition.

Disabled
> Click this button to stop pages from being sent to this pager. This allows you to temporarily disable a particular pager without editing every alert that contains this persons pager. For example, when Joe goes on vacation you will want to disable his pager setting. Of course, you'll also want to make sure that there's another pager specified for each alert that Joe is selected on so that someone will receive a page if there's a problem.

Alphanumeric pages
> Choose this option if you have an alphanumeric pager and an alphanumeric paging service.
>
> In the **Phone number** text entry field, type the phone number for sending alphanumeric pages. This number is provided by your paging service. Sometimes, the paging service will call this the Modem number.
>
> In the **PIN number** text entry field, type the PIN number for your alphanumeric pager.

Dial phone number and enter message
> Choose this option if you dial a direct phone number to send a page. Most local paging companies work like this.
>
> In the **Phone number** text entry field, enter the phone number exactly as you would dial it from your telephone, including other numbers you might need such as a number to get an

outside line. You can use dashes to make the number easier to read, but they aren't required. Use commas to separate the portions of the phone number. Each comma causes the modem script to pause for a few seconds before dialing the rest of the number.

For example, if you're dialing your pager from your office and you have to dial 9 to get an outside line, you might type:

> 9, 555–6789

Dial phone number, enter a command, and then enter message

Choose this option if you have a direct number, but need to enter a command before sending a page. Also, choose this option if your paging company uses a single phone number for all pagers and requests a PIN number before sending a page.

In the **Phone number** text entry field, type the phone number exactly as you would dial it from your telephone, including other numbers you might need such as a number to get an outside line. You can use dashes to make the number easier to read, but they aren't required. Use commas to separate the portions of the phone number. Each comma causes the modem script to pause for a few seconds before dialing the rest of the number.

For example, if you're dialing your pager from your office where you have to dial 9 to get an outside line, you might type:

> 9, 123–4567

In the **Send page command** text entry field, type the page command exactly as you would dial it from your touch tone telephone.

Customized modem command string

Use this option if your paging company does not use either of the two previous choices.

In the **Modem command** text entry field, type the entire modem command including the phone number to dial, any additional digits, and $message. SiteScope replaces $message with the message you specified for each alert. Use commas to separate the portions of the phone number. Each comma causes the modem script to pause for a few seconds before dialing the rest of the number.

For example, if the pager company's number is 123–4567, your pager PIN is 333–3333, and your pager company requires that you follow each command with the # key, the command might look like this:

> ATDT 123–4567,,333–3333#,,$message#

When you've completed the form choose the **Save Changes** button.

Advanced Options

You can specify when these pager settings should be enabled and disabled. By default, they are enabled every day of the week. You can define specific times for the settings to be either enabled or disabled by typing a **from** and **to** time in the appropriate fields and then choosing either the **enable** or the **disable** button.

Note: All times should be entered in 24 hour notation. For example, you would enter 13:00 instead of 1:00 PM, and 15:00 instead of 3:00 PM. This would mean that if you have a person who should only be paged during normal business hours, you should enter type 8:00 and 17:00 in the **from** and **to** fields for Monday through Friday. You would then also need to specify that these pager settings should be disabled for all of Saturday and Sunday.

As above, choose the **Save Changes** button when you've completed the form to save your changes.

Mail Preferences

The Mail Preferences form allows you to indicate the SMTP mail server that SiteScope should use when sending an alert e−mail message. If you would like to create named e−mail lists for SiteScope to send alerts to, complete the Add Additional Mail Settings form. This form is available from the **Add Additional E−mail settings** link at the bottom of the SiteScope E−mail Preferences form.

Completing the Mail Preferences Form

Complete the form as indicated below and then click the **Save Changes** button.

Mail Server Domain Name

> Enter the domain name of the SMTP mail server that SiteScope should use when sending e−mail messages. For example, the domain name for the Freshwater Software mail server is `mail.freshtech.com`. If you are unsure of your mail server's domain name, check with your Systems Administrator.

Administrator E−mail Address

> Enter the e−mail address to which SiteScope should send status messages. For example, the administrator e−mail address for Freshwater Software is "webmaster@freshtech.com". SiteScope uses this address to send various status messages.

Send daily status messages

> If this checkbox is selected, SiteScope will send a brief daily status message to the administrator's e−mail address. This email is scheduled to be generated at 7:07 AM every day. The subject of email sent will include: "SiteScope daily status". The e−mail content includes the number of active monitors and groups, along with a URL link to the applicable SiteScope main page plus the version number of SiteScope installation. .

Send message whenever SiteScope starts

> If this checkbox is selected, SiteScope will send a brief status message to the administrator's e−mail address whenever SiteScope starts running or re−initializes. SiteScope normally re−intializes itself once each day. This means that you would normally receive a message once per day. The subject of email sent will include: "SiteScope started". The e−mail content includes the number of active monitors and groups, along with a URL link to the applicable SiteScope main page plus the version number of SiteScope installation. This message will also be generated if someone manually stops and restarts the SiteScope process. Other incidences of this message may indicate that a monitor or process has taken too long to run. An example might be if a script being run by a script monitor hangs up during execution.

From Email Address

> Enter the email address used as the From Address for mail generated by SiteScope. Specifying an email address may make it easier for you to browse and sort email sent by SiteScope. For example, you may want mail generated by SiteScope to come from sitescope@mycompany.com. If nothing is entered, the from address will be the same as the address where the mail is sent.

Backup Mail Server Domain Name

Enter the domain name of the SMTP mail server that SiteScope should use whenever the primary mail server cannot be reached. For example, the domain name for the Freshwater Software backup mail server is `gateway.freshtech.com`. If you are unsure of your backup mail server's domain name, check with your Systems Administrator.

Additional E−mail Settings

At the bottom of the E−mail Preferences page is a table of <u>Additional E−mail Settings</u>. This table lists the name of any alert e−mail lists and schedules that have been defined. Click on the "**Add** additional e−mail setting" link to bring up the Add Additional E−mail Setting form.

Add Additional E−Mail Settings

Use the Add Additional E−mail Settings form to define named e−mail lists to which SiteScope can send e−mail in the event of an error or warning condition. You access the Add Additional E−mail Settings form by clicking on the link You must complete this form for each e−mail list you want to add. You can then instruct SiteScope to use one of these named lists when sending alerts.

Once you've completed this form, click the **Save Additional Setting** button to save the new e−mail settings.

Completing the E−mail Additional Setting Form

Setting Name
> Type in the name for this e−mail list. For example, if the e−mail addresses in this list belong to the night shift operators, you might simply type Night Shift in the text entry area. When you add an alert you can choose Night Shift from the list of e−mail settings to have an e−mail sent to the e−mail addresses in the list when an error or warning condition occurs.

E−mail To
> The e−mail address(es) that you want to send the alert to (for example, test@freshwater.com). You can enter multiple e−mail addresses by separating the e−mail addresses with commas (test@freshwater.com, support@freshwater.com).

Disabled
> Click this button to stop e−mail alerts from being sent to these e−mail addresses. This allows you to temporarily disable a particular e−mail without editing every alert that contains this e−mail setting

Advanced Options

Template
> If you want e−mail alerts sent to these settings to use a particular template, then choose it from the popup menu. Otherwise, whatever template is specified in the alert will be used. One use of this feature is to define a single alert that will go to people and pagers, using the ShortMail template for the pagers.

Schedule
> You may specify when these e−mail settings should be enabled. By default, they are enabled every day of the week. You may specify specific times for the settings to be either enabled or disabled by typing a from and to time in the appropriate fields and then choosing either the **enable** or the **disable** button. Note: All times should be entered in 24 hour notation. For example, you would enter 13:00 instead of 1:00 PM, and 15:00 instead of 3:00 PM.
>
> You can use the scheduling feature in the following way. If you have a person who should only be e−mailed during normal business hours, you can type 8:00 and 17:00 in the **from** and **to** fields for Monday through Friday. You would then also need to specify that these e−mail settings should be disabled for all of Saturday and Sunday.

Log Preferences and Database Logging

SiteScope saves alert data, error data, and other readings returned by monitors into special log files. These data are stored as tab delimited text files. SiteScope uses the log files to generate various management reports. SiteScope can also send the data to a database application. Within SiteScope you can access the current alert and monitor logs through the "**View** the log of alerts sent" link on the SiteScope Alert detail page. In this section we discuss setting SiteScope log preferences.

Completing the Log Preferences Form

The Log Preferences page allows you to limit how much log information SiteScope saves. In order to create a management report the log information for the duration of the report must be available. Log file information is kept in separate daily files.

Complete the form as indicated below and then click the **Save Changes** button located at the bottom of the form.

Daily Logs To Keep

> Enter the number of days of monitoring data to keep. Once a day, SiteScope deletes any logs older than the specified number of days. By default this is set to 40 days, which saves enough data to create monthly reports.

Maximum Size of Logs

> Enter the maximum size allowed for all monitoring logs. Once a day, SiteScope checks the total size of all monitoring logs and removes any old logs that are over the maximum size. By default, this setting is blank and not used as it can result in the loss of report data.

Database Logging

SiteScope can optionally log a copy of all the monitoring data into a database. Any database which supports the ODBC or JDBC standards can be used, including Microsoft SQL Server and Oracle.

Database Connection URL

> To enable Database logging, enter a URL to a Database Connection. The easiest way to create a database connection is to use ODBC to create a named connection to a database. For example, first use the ODBC control panel to create a connection called SiteScopeLog. Then, enter `jdbc:odbc:SiteScopeLog` in this field as the connection URL.

Database Username

> Enter the username used to login to the database. If you are using Microsoft SQL server, you can leave this blank and choose NT Authentication when you setup the ODBC connection. With NT Authentication, SiteScope connects using the login account of the SiteScope service.

Database Password

> Enter a password used to login to the database. If you are using Microsoft SQL server, you can leave this blank and choose NT Authentication when you create the ODBC connection. With NT Authentication, SiteScope connects using the login account of the SiteScope

service.

After you save changes to the Database preferences, you need to stop and restart the SiteScope service to have the changes take effect.

Troubleshooting Database Connections

When Database logging is active and working correctly, you should see a table called `SiteScopeLog` in your database and a record added to the table every time a monitor runs. The data is sent to the database as a single table in a flat−file format. For additional details, see the section about Log Descriptions.

If a table called `SiteScopeLog` is not created or is empty, check the SiteScope `~SiteScope/logs/RunMonitor.log` and `~SiteScope/logs/Error.log` files for log messages starting with "jdbc" or "odbc". When Database logging is working correctly, you should see a set of messages in `RunMonitor.log` that looks like this:

```
jdbc log, reconnect seconds=600
jdbc log, loading, driver=sun.jdbc.odbc.JdbcOdbcDriver
jdbc log, connecting, url=jdbc:odbc:SiteScopeLog,
jdbc log, logged in
jdbc log, checking log table
jdbc log, created log table
jdbc log, prepare insert, 19, INSERT INTO SiteScopeLog...
jdbc log, connected
```

If these entries don't appear in the log file there is a problem with the database interface or configuration of the database connection. You should also carefully check the Database Connection URL you entered above. This parameter is case sensitive. It is also sensitive to leading or trailing white space which may be the reason the connection does not work properly. Check the spelling and letter case of the connection URL and be sure there are no leading or trailing spaces present in the text entry field.

You can also check the Freshwater on−line support database for other information relating to database logging.

Log Descriptions

SiteScope records the readings and measurements from the monitors you have defined in log files. The tab delimited text log files can be viewed directly and they are used to generate management reports. The log files can also be used for operational analysis by other software applications. This page describes the format of the SiteScope log files and log database.

SiteScope Log Files

Every time SiteScope runs a monitor, the measurements for the monitor are written in the SiteScope log file. The current SiteScope log files are located in the `~SiteScope/logs` directory and is named based on the date – for example, the log file for August 1, 1998 is named `SiteScope1998_08_01.log`. Within SiteScope you can access the monitor logs by clicking on the "**View** the log of alerts sent" link on the SiteScope Alert detail page.

(Previous versions of SiteScope saved this information in files called SiteScope.log and SiteScope.log.old)

The SiteScope log file contains monitoring data separated into tab delimited fields. The following is a sample of some log entries:

```
11:54:50 07/25/96      good    Server  Web server performance  8.61 hits/min   1:232   10
11:54:51 07/25/96      error   Server  Local home page forbidden       2:112
11:54:54 07/25/96      good    Server  FTP Service     running 3:154
11:55:04 07/25/96      good    Network CPU     36% used        1:311
11:56:28 07/25/96      good    Network CPU     34% used        1:312
11:57:27 07/25/96      good    Network CPU     19% used        1:313
11:58:06 07/25/96      good    Server  Disk space on C drive   68% full        4:43
```

Below is a description of the information listed in each column of the log file:

Log File Column	Data	Description
1	11:54:50	The first column contains the time and date that the monitor ran.
2	good	The second column contains the monitor's current status.
3	Server	The third column contains the name of the group that the monitor belongs to.
4	Web server performance	The fourth column contains the monitor's name.
5	8.61 hits/min	The fifth column contains the monitor's current reading.

6	1:232	The sixth column contains the monitor ID and sample number. The monitor ID is before the : (in this case 1) and the sample number is after the : (in this case 232).
7, 8, 9, ...	(variable)	The remaining columns contain additional data specific to that monitor. For a full description of all of the columns for each type of monitor, refer to the [Detailed SiteScope Log File Columns]() listing.

For information about a monitor's status or reading, refer to the help text for that monitor.

Other Logs

SiteScope produces several other log files and the following provides a brief outline of what you'll find in each one. All log files are found in the SiteScope/logs directory.

access.log
> Access.log records hits on SiteScope's internal web server. The format follows the Common Logfile Format, which is the format used by many web servers.

alert.log
> alert.log records all of the alerts sent or run by SiteScope –– both those that are successful and those that fail for some reason

error.log
> error.log records any errors and some diagnostic information (SiteScope startup is the most common). Errors include failed alerts, errors in the web server HTTP requests (if you have a login, the most common will be an HTTPRequestException 401, which are normal authentication errors), or monitors that run for a long time.

RunMonitor.log
> RunMonitor.log is a progress log for SiteScope and is not all that useful for most users.

SiteScope Log Database Table

When a monitor runs, a record can optionally be saved into a SQL database. See the [Log Preferences]() page for more information about [database logging]().

Log data is contained in a single table called `SiteScopeLog`. The first nine fields of each database record are the same for all monitors. The next ten fields contain different measurements depending on the kind of monitor supplying the data. All the fields use the `VARCHAR(255)` data type. A description of the fields in the log database record are shown in the table below along with their default field names:

Field Name	Example Data	Description
datex	1999–01–20 11:54:54	The first field contains the date that the monitor ran.

serverName	demo.freshwater.com	The second field contains the name of the server where SiteScope is running.
class	URLMonitor	The third field contains the type of the monitor
sample	23	The fourth field contains the sample number of this monitor
category	good	The fifth field contains the category name of the monitor
groupName	URLs	The sixth field contains the group name of the monitor
monitorName	Home Page	The seventh field contains the name of the monitor
status	1.01 seconds	The eighth field contains the status of the monitor
monitorID	10	The ninth field contains the ID of the monitor
value1, value2, ... value10	(variable)	The tenth through nineteeth fields contain the monitor specific data as described in the Log Columns page. The first variable field (value1) will correspond to the value listed as column 7 in the log files.

The logging statement can be changed by editing _logJdbcInsertSiteScopeLog in the groups/master.config file. A stored procedure can be called by replacing the insert statement with a call statement. For example, "call logit(?,?,?)" would call the stored procedure named logit passing it the first three parameters.

Contact support@freshwater.com if you are interested in saving separate records for each measurement of a monitor.

🐸 Schedule Preferences

Use the Schedule Preferences page lets you view current schedules and gives you access to the forms used to create new schedules for your SiteScope monitors. The Schedule Preferences page includes a table of Schedules that lists the currently defined schedule names and type. As with other tables within SiteScope, the Schedules table includes links that allow you to Edit or Delete items from the table. Below the table are links to the forms you can use to create custom schedules.

SiteScope has two types of scheduling: **Range Scheduling** and **Absolute Scheduling**.

Range Scheduling

> Range Scheduling allows you to specify a time range during which SiteScope will either enable or disable particular monitors. If you specify an enabled time range for a new monitor, SiteScope will only run the monitor during that range. For example, if you create a range of 8am – 9pm, Monday through Friday, any monitors that have that range selected will only be run during those times. A common use of range scheduling is to set up different pager alerts and monitors to coincide with the times that various administrators are on call.
>
> Note: You can enter multiple ranges by entering several start times and several end time separated by commas. For example to disable from 2–3am and 7–8am, you would enter 2:00,3:00 to 7:00,8:00

Absolute Scheduling

> Absolute Scheduling lets you set specific times to trigger monitors to run. Generally, an absolute schedule will trigger a monitor to run **only once** at each time specified in the schedule. Absolute times are specified in a daily schedule. You may define multiple times for a monitor to run in a single day (e.g. 6:00am, 12:00pm, and 6:00pm) by separating the times with a "," (comma). You may want to use this type of scheduling for monitors, such as the Link Checking monitor, which you want to only run once a day at a time when the server generally has a lighter load.

Adding Additional Schedules

To create a new schedule choose the either the **Add additional range schedule** or **Add additional absolute schedule** links listed under the Schedules Table. The links bring up the Schedule Preferences page for the type of schedule you have selected.

Completing the Schedule Preferences Form

For each new schedule you want to create, type the name you want for the schedule into the **Schedule name** text area. We encourage you to create descriptive schedule names so that you'll be able to easily identify them later. If you don't specify a name for a schedule, SiteScope will create one that describes the times specified. You can edit or change a schedule name by typing the new characters into the **Schedule name** text area.

After entering the schedule name, fill in the times that the schedule should be enabled for each of the days listed. For Range Scheduling, fill in the start and stop times that describe the period during which the monitors will be enabled. For Absolute Scheduling, enter the time at which you want monitors triggered.

Times are specified in 24 hour format, also known as military format. Multiple times can be entered on a single day by separating the times by commas.
Examples of valid times entries are:

- **10:23** (10:23 am)
- **23** (11:00 pm)
- **01,02:30,23:30** (1:00 am, again at 2:30 am, and again at 11:30 pm)
- **00:00** (midnight)

When you've completed the form, choose the **Save Changes** button near the top of the page.

🐸 SiteScope Mirror Preferences

The SiteScope Mirror feature allows you to setup a SiteScope mirror or failover server that automatically updates or "mirrors" the monitoring configuration from another SiteScope server at scheduled intervals. Providing for a SiteScope mirror or failover is a useful tactic in making sure that e−commerce operations monitoring is always available in your network environment.

This section describes how you can set up a secondary or mirror SiteScope installation to copy the monitor configurations from a primary SiteScope installation, and to optionally have the mirror SiteScope activate monitoring automatically as a failover if the primary SiteScope becomes unavailable.

Setting Up SiteScope Mirrors and Failovers

To activate this feature you need to do the following:

1. Upgrade your product licensing to include SiteScope High Availability licensing.

2. Install SiteScope on at least two servers in your network environment. One of these can be an existing SiteScope running production monitoring. The other SiteScope server would be the designated mirror/failover server.

3. On the mirror/failover server, open the `master.config` file in the `SiteScope/Groups` directory and add the setting `_mirrorPageLink=true` to the file. Be sure not to add extra spaces or carriage returns to this file.

4. Stop and restart the SiteScope service on the mirror/failover server for the changes to take effect.

5. If you are setting up the mirror SiteScope server as a failover, create a new monitor group on the mirror/failover server.

   In the new monitor group, create one or more monitors that monitor key attributes of the primary SiteScope server. For example, set up a URL monitor to watch `http://`*`primaryserver`*`:8888/SiteScope/htdocs/Progress.html` You can create other monitors watching other elements of the primary SiteScope server and encapsulate them in a [Composite Monitor](#).

6. Go to the [General Preferences](#) page by clicking on the Preferences link below the monitor groups.

7. A new **Mirror** hyperlink should appear in the row of preference hyperlinks below the navigation bar. Click on the Mirror hyperlink to bring up the Mirror Preferences page.

8. Complete the Mirror/Failover Form as described below to set up the server as a mirror or mirror/failover for your production monitoring.

If you want the failover or mirror SiteScope installation to perform redundant monitoring to the primary or production server, then fill in only the **Mirror/Failover** section. If you want the mirrored SiteScope monitoring on this server to be enabled only when the primary SiteScope fails, then fill in both the **Mirror/Failover** and **Failover** sections

Completing the Mirror/Failover Form

Server

> The IP address and the SiteScope port of the server that you want this SiteScope server to mirror configuration from(for example, demo.freshwater.com:8888).

Admin Login

> The SiteScope administrative login of the SiteScope installation that is being mirrored.

Admin Password

> The administrative password of the SiteScope on the mirrored machine.

Run Mirror Sync

> When this box is checked the mirrored configuration synchronizing will be performed when you click the **Save Changes** button at the bottom of this page and then again at the schedule time indicated in the **Schedule** option below. If you leave this box unchecked, the configuration synchronizing will only occur at the time indicated by the **Schedule** option below.

Schedule

> The Schedule is for the synchronization of the mirror server. Scheduled synchronization is used to make sure that the mirror SiteScope configuration reflects any changes to the monitoring configuration on the primary SiteScope server. This is an absolute schedule on either daily or on Sundays at the time shown.

The Failover Section

SiteScope can optionally keep all of the monitors disabled on the secondary machine until a monitor to the primary machine goes into error. This allows you to set up automatic SiteScope failovers. By default, a mirror SiteScope will copy and activate redundant monitoring of the monitoring that is active on the primary SiteScope server. In order to have the mirror SiteScope activate the monitoring only when a certain error condition exists on the primary server, select a primary monitor to act as trigger for the failover activation.

Primary Monitor

> Select the monitor that will be used as the failover for this SiteScope. If this monitor goes into error, then the monitoring on this SiteScope will be enabled – when this monitor goes back to OK, then monitoring on this SiteScope will be disabled.
>
> **Note:** the group that this monitor is in will not be overwritten by the mirror synchronization from the primary SiteScope. The copied monitors will be created in groups that mirror the groups on the primary server.

🐸 SiteSeer Preferences

The SiteSeer Preferences form allows you to add the information from your SiteSeer remote monitoring account on the SiteScope main panel and the Multi–view page. Clicking on the SiteSeer group name link takes you to the SiteSeer sccount screen. Use the Back button in your browser to return to the SiteScope panel.

Completing the SiteSeer Preferences Form

Complete the form as indicated below and then click the **Save Changes** button located at the bottom of the page to complete the action.

SiteSeer Account
> Enter the name of your SiteSeer account. The account name is normally the domain name specified in your email address. You can determine what it is by looking at the URL for your SiteSeer account. For example, if your SiteSeer URL is `http://siteseer.freshtech.com/SiteScope?account=mycompany.com` then your account name is `mycompany.com`

SiteSeer Username
> Enter the user name used to login to your SiteSeer account. This will be the same username as is displayed on the main screen of your SiteSeer account.

SiteSeer Password
> Enter the password used to login to the SiteSeer account.

SiteSeer Host Name
> Enter the host name of the SiteSeer service. This is usally siteseer2.freshtech.com or siteseer.freshtech.com. Look at the URL for your SiteSeer account to determine if yours is different. For example,if your URL is `http://siteseer2.freshtech.com/SiteScope?account=mycompany.com`, your host name is `siteseer2.freshtech.com`

Advanced Options

The advanced options section lets you further control access and display of your SiteSeer account information in the SiteScope interface.

Disabled
> Checking this box will hide the SiteSeer group on the SiteScope main panel display. This does not disable any monitors currently active on the subject SiteSeer account.

SiteSeer Title
> Enter an optional title that you want to use to label the SiteSeer account group in the SiteScope panel. By default, "SiteSeer" is used as the group name.

SiteSeer Proxy

If you are required to use a proxy server in order to access your SiteSeer account, enter the proxy address or domain name here.

SiteSeer Proxy Username

If you are using a proxy, enter your proxy username.

SiteSeer Proxy Password

If you are using a proxy, enter your proxy password here.

Hide SiteSeer Group

Automatic SiteSeer Login

Check this box to allow automatic login to the SiteSeer account.

SiteSeer Read Only Username

Enter the username used to log in to your SiteSeer account for read only access. This is used if you have defined a SiteSeer login account other than the default administrator account. This would normally be the "user" account.

SiteSeer Read Only Password

Enter the password used to log in to your SiteSeer account for read only access.

🐸 SNMP Preferences

The SNMP Preferences form allows you to set the SNMP parameters that SiteScope should use when sending an SNMP trap message.

Completing the SNMP Preferences Form

Complete the form as indicated below and then click the **Save Changes** button.

Send to Host
> Enter the domain name or IP address of the machine that will receive all SNMP trap messages. This is normally the machine running the SNMP console. For example, snmp.freshwater.com or 206.168.191.20.

SNMP Object ID
> The System object from MIB−II (RFC 1213) that is sending the trap. The object is used by console to indentify what kind of object is sending the message. The default object ID is the System object.

SNMP Community
> The SNMP community name used for this trap. The default community by most systems is "public". The community string must match the community string used by the SNMP console.

Trap ID
> The type of trap to send. There are several predefined types for common conditions. If the type is enterprise specific, the specific field should contain the number of the specific trap type.

Add Additional SNMP Settings

Use the Add Additional SNMP Settings form to create named settings that you can then select when creating alerts.

Once you've completed the this form, click the **Save Additional Setting** button to save the new SNMP settings.

Completing the Additional SNMP Settings Form

Setting Name

Type in the name for these SNMP settings. For example, if you want to use these settings for a secnodary console, type `secondary settings` in the text entry area. When you add an alert you can choose `secondary settings` from the list of SNMP settings.

Disabled

Click this button to stop SNMP alerts from being sent using these settings.

Send to Host

Enter the host name of the machine to which this trap should be sent. For example, snmp.freshtech.com. This machine must be running an SNMP console.

SNMP Object ID

Indicate the SNMP object that is sending the trap. For example .1.3.6.1.2.1.1 is the "system" object from MIB−II (RFC 1213).

SNMP Community

Enter the SNMP community name used for this trap – usually this is "public".

Trap ID:Generic

Specify the generic trap type. If the generic trap type is "enterprise specific", then enter the number that represents the specific trap type.

When you've completed the form choose the **Save Changes** button.

Remote Unix Servers

SiteScope can monitor other Unix servers remotely for certain statistics (such as CPU, Disk Space, Memory, or Services) without the installation of agent software on each server. SiteScope does this by running command line tools on the remote machine as a remote user. Before you can add monitors to monitor remote Unix servers, you need to define the server and connection method that SiteScope should use to login to the server. You will also need to create or modify an account on the remote server that corresponds with the connection method and permissions you intend to grant to SiteScope. After you define a remote Unix server and restart the SiteScope service, you can create a monitor to watch the status of that server. Clicking the **choose server** link on an Add Monitor page will display a list of the remote servers you have defined. You can then select the server that you wish to monitor.

In this section we'll discuss:

- Remote Servers Table
- Adding a remote Unix machine
- Technical Notes on Remote Unix Monitoring

Remote Servers Table

From the General Preferences page click the **Unix Remotes** link under the navigation bar at the top of the page. This brings up the Remote Servers page which lists in table format the currently defined remote Unix servers. The Remote Servers Table lists the following information on the currently defined Unix servers.

Name
> This shows the optional name assigned to the server definition.

Server
> This field indicates the server address or URL

OS
> This shows the operating system that was defined for the server. This should be the operating system that is running on the remote machine.

Method
> The Method entry shows the connection method – Telnet, rlogin, HTTP – specified for the server.

Edit
> Click the **Edit** link to edit the specifications for that server.

Test
> Click the **Test** link to run a test on that server.

Detailed Test
> Click the link in the Detailed Test column to run a test on that server.

Del

>Click the **X** in this field to delete the server definition.

Adding a Remote Machine

You can add remote Unix servers by choosing the **Add** a Remote Machine link below the Remote Servers Table. This brings up the Add Remote Server page.

To create a remote Unix server definition, you need to provide the following information:

Server Address

>The IP address or host name of the server you wish to monitor. If you are using the HTTP method of monitoring, enter the full URL of the CGI script (for example: `http://demo.freshtech.com/cgi-bin/run.sh`)

OS

>The operating system running on the remote server. This is required so that the correct information can be obtained from that server. Use the drop down list feature to select from the currently supported operating systems. For servers running versions of Unix which are not included in the list, see the section on the SiteScope Remote Unix Adapter Kit.

Connection Method

>The method for connecting to the server. The currently supported methods are:

>>◊ Telnet: log in to the remote server using Telnet
>>◊ SSH: log in to the remote server using the SSH protocol line.
>>◊ Rlogin: log in to the remote server using the Rlogin protocol
>>◊ HTTP: connect to an HTTP server on the remote server and run the command via a CGI. For this method the Login and Password are optional and are used for authorizing SiteScope to logon to the remote machine if required.

Login

>The login for the remote server.

Password

>The password for the remote server.

Title

>A name by which the remote machine should be known. This name will appear in the pop−up menu.

After defining the server for SiteScope, you can test the settings by clicking on the test link. SiteScope attempts to display the working directory of the remote machine (the "pwd" command on Unix, or "cd" on Windows NT), as a test to ensure that the remote machine can be accessed and can run commands properly.

Advanced Options

Prompt

>This is the prompt output when the system is ready to handle a command – the default is #

Login Prompt

This is the prompt output when the system is waiting for the login to be entered – the default is "ogin:"

Password Prompt

This is the prompt output when the system is waiting for the password to be entered – the default is "assword:"

Trace

Check this option to trace messages to and from the remote server in the RunMonitor.log file

Technical Notes on Remote Unix Monitoring

The following is additional information relating to the setup of remote Unix servers in SiteScope and the monitoring of remote Unix server performance.

Connection Methods for Remote Unix

You can choose one of several methods that SiteScope should use to connect to remote Unix servers. These include the following:

telnet

Along with SSH, telnet is another popular method for connecting to remote Unix servers. You can set up your remote servers to require a password for `telnet`, or to allow access without a password (like "rsh"). SiteScope will handle either case.

SSH

For Solaris, use of the SSH access method requires that an SSH client is installed on the SiteScope machine and the SSH server installed on the servers you are monitoring. The path to the SSH client should be:
`/usr/local/bin/ssh`

For Windows NT or 2000, an SSH client is included in the package. For debugging, the Windows SSH client can be run from the command line, replacing the values for the username, host name, and password:

`\SiteScope\tools\plink.exe –ssh myUser@myServer.myCompany.com –pw myPassword`

Using SSH requires that digital certificates be installed on each of the servers you will be connecting to.

rlogin

You can set up your remote servers to require a password for `rlogin`, or to allow access without a password (like `"rsh"`). SiteScope will handle either case.

CGI

There are some cases where it may be useful to use a Common Gateway Interface program to access performance data or application data from a Unix server. Two simple CGI scripts are included with

SiteScope: `/SiteScope/classes/CustomRemote/examples/remote.pl`
`/SiteScope/classes/CustomRemote/examples/remote.sh`

The `remote.pl` CGI is a Perl (version 4 and above) script that executes a command on the server; the remote.sh script does the same, except as a Unix sh script. CGI commands are passed in via the COMMAND CGI variable. If you are using the CGI connection method and you want to use remote actions, remember that the permissions for both the directory containing the CGI script and the `/script` directory need to allow the Web server (probably running as a user with few permissions) to execute in those directories. Additionally, the scripts need to have execute permission.

If you wish to use a CGI script that puts more restrictive limits on the commands that can be run, you can use a different CGI script. All that matters is that the CGI returns the output of the command passed in via the COMMAND variable. For greater security, you can set up your Web server to require a login/password authorization to run the script (this is recommended). Also, if you have a secure Web Server on that server, you can set up the script to run using the Secure Sockets Layer (SSL, used in https requests), so that the request and output is encrypted.

We are open to requests for additional connection modes and the API for writing connectors is available. We have also included information on how to create an adapter file to remotely monitor versions of Unix that are not currently supported as one of the SiteScope defaults. In either case, drop us an e−mail at support@freshtech.com and we can talk about adding a connector that fits your specific needs. A sample connector Java class, which outlines the structure of a connector, can be found in the following directory:

`/SiteScope/classes/CustomRemote/examples`

If you choose to write one yourself, let us know – we'd like to hear how it goes.

🐸 User Preferences

The Users preference page allows you to administer the users that are allowed access to SiteScope. As a client–server based architecture, a single SiteScope can be accessed by multiple users simultaneously. You can define multiple SiteScope user accounts that provide different permissions for different audiences. A list of current user accounts is displayed in the Users Table. This table includes links for editing and removing users.

When you install SiteScope the application creates two default accounts. These are:

SiteScope Administrator

> This account allows full access to view and change anything in SiteScope. The SiteScope Administrator is the **only** account that is allowed to make changes to user profiles on the User Preferences form. This account cannot be disabled or deleted.

SiteScope User

> This default account allows **read only** access to SiteScope. This account cannot be deleted and is disabled by default. To enable this account, select the Edit link on the user table for this user profile and uncheck the **Disable** option on the Update User page.

> Use the following special URL in order to log into this read–only User account:

> ```
> http://<sitescope_server_address:port>/SiteScope/userhtml/SiteScop
> ```

> This account can also be used to allow individuals who do not access SiteScope for monitoring purposes but may want acces to SiteScope generated reports. These reports may be sent as a hyperlink in an e–mail message that links to a SiteScope report.

It is important to note that the adminstrator account is the default account used when accessing SiteScope. This means that anyone requesting the server address and port number where SiteScope is running will, by default, be logged in on the adminstrator account. In order to restrict access to this account, you need to edit the adminstrator account to have a user name and login password.

You can add other user accounts or edit existing accounts by following the steps outlined below. Each account can be given a unique username and password.

Users

Name	Login URL	Edit	Del
SiteScope Administrator	/SiteScope?account=administrator	Edit	
SiteScope User (disabled)	/SiteScope?account=user	Edit	
Guest Login	/SiteScope?account=login1	Edit	X

Example of a SiteScope User Table

When a user connects to Sitescope, a login form is displayed with fields for entering their username and password. Depending on whether you have mulitple browser windows open at the time, the login form may be an HTML form or a system dialogue challenge.

If you want to skip the login form, you can go directly to a specific account using the URL specified in the Login URL column of the table. For example, to access SiteScope via the Guest Login displayed in the example table above, you can use the following URL:

```
http://<server>:<port>/SiteScope?account=login1
```

where `<server>` is the server name or IP address of the server where SiteScope is running and `<port>` is the port that SiteScope is running on. By default this is port 8888.

Note: SiteScope sets a cookie in the browser to keep track of which user account is being accessed by the browser. In some cases it may be necessary to close all browser windows on the client workstation before you will be presented with the SiteScope login screen to log into a different account.

To edit a user account, click the **Edit** link beside the user profile in the User table. To add a new user profile, click the **Add** User link below the User table. This will bring up the Update User or Add User forms.

Completing the Add / Update User Form

Use the Add User to create a new user login account and set SiteScope permissions for that account. Use the Update User form to make changes to an exisiting user account. The following fields are displayed on the Add User and Update User forms:

Login Name
> Enter the SiteScope login name for this user. This is the user login name that must be entered Alternatively, you can have users log into SiteScope using LDAP authentication. See the section below for more information.

Password
> Enter the SiteScope login password for this user. Enter the password again in the field below to confirm the password. If you will be using LDAP for user authentication, you do not need to enter a password here. Users will have to enter their LDAP password on the SiteScope login dialog box when they login to this user account.

LDAP service provider
> If you want users to access the SiteScope service using a centralized LDAP authentication rather than the SiteScope specific password, enter the information in the fields provided. In this way password authenication for access to SiteScope can be performed by LDAP. Users will still need to have a SiteScope login name defined on this page.
>
> Before users can use LDAP to access SiteScope, they must have a user login and security principal assigned to them on the LDAP server. Once this has been set up, enter the URL of

the applicable LDAP server that SiteScope should connect to for authentication in the text
box on this page
(for example: `ldap://ldap.freshwater.com:389`)

LDAP Security Principal

When using LDAP Authentication for SiteScope access enter the Security Principal for this
user. The following is an example of a LDAP Security Principal showing the typical syntax:
`uid=testuser,ou=TEST,o=freshwater.com`.

Groups

Optionally, you can limit the groups that can be accessed by a partiular user. The default is to
allow access to all groups. By default, the login name is used.

Disabled

When Disabled is checked, access to SiteScope with this username and password is not
allowed.

Title

Optionally, enter a title for this User profile. The title is displayed in the list of users. By
default, if you do not enter a title, the login name is used.

Permissions

Select the permissions for this account. The permissions determine which links are displayed
and which actions are allowed when this user connects to SiteScope. A list of the available
permissions is shown with a check box beside each option. By default most of the
permissions are granted. To restrict the permissions of a user account, uncheck the options
that you do not want granted for that account.

🐸 Monitor Browser

The SiteScope Monitor Browser allows you to display your monitors using a variety of views. For example, you can display only the monitors that are in error, only selected URL Monitors, or only disk space monitors.

Browser Filter Options

Use the drop−down menus and text fields below the navigation bar at the top of the page to select which monitors you want SiteScope to display. Then use the **Refresh** button to display the monitors based on the filter options you have selected.

Status Select
> The first drop−down menu on the upper left allows you to select monitors based on their reported status. Click the arrows to the right of the box to select the status criteria that you wish to display, such as error, warning, or OK. Some options allow you to exclude certain monitors.

Monitor Type Select
> The other menu selection box on the top row is the monitor type selection field. You can choose to view only the monitors of a given type, such as URL, database, or Service. By default, monitors of all type are shown. To choose another type, click the scroll arrows on the right side of the box.

Status Filter
> This allows you to filter the monitors by the status of the monitor. You can use regular expression to a perform a match in this field.
>
> A regular expression is used to define the values to match. For example, the expression `/timed out | unable to reach/` would match monitors which report the status of either "timed out" or "unable to reach"

Name Filter
> This allows you to filter the monitors by the name of the monitor. You can perform a match in this field.
>
> A regular expression is used to define the values to match. For example, the expression `/URL Monitor.* \.gov/` would match all monitor names containing the string `URL Monitor` with addresses containing the domain `.gov`

Machine Filter
> Type in the name or IP address of a particular machine to display only those monitors associated with that machine. You can perform a match in this field.
>
> A regular expression is used to define the values to match. For example, the expression `/206.168.191.(\d+)/` would match all the machines at ports defined by the last digits of the IP address containing the string `206.168.191.`

Sort Order

> This drop–down menu allows you to choose the field on which to sort the monitors. By default, monitors are sorted by status, with the monitors in error at the top, the monitors in warning below them, and the monitors that are OK below them.

Refresh Option

> You can choose the have this page automatically refresh at intervals between 15 seconds and 5 minutes. By default, the page is set to manual refresh and does not refresh automatically.

Browse Monitor Table

The Browse Monitor table lists each of the monitors that meet the filter criteria selected above. The monitor table provides the following information for each monitor.

Status Icon

> A status icon that indicates whether the monitor's current reading is OK, or whether it indicates a warning, error, or in–progress status. Refer to the individual monitor's help page for an explanation of OK, warning, and error status conditions for that monitor. Clicking on the status icon also provides a shortcut to disable a monitor. Click the icon and a confirmation message will appear asking if you want to disable the monitor. Click the **Disable Monitor** button to complete the action.

Status Gauge

> A status gauge that provides a graphical representation of the monitor's current reading. The reading is the current value returned by the monitor, such as 40% full for the Disk Space Monitor. Only those monitors that return a numeric reading have a status gauge.

Status

> The status returned by the monitor the last time it ran. If the monitor is disabled, the reason for being disabled is displayed.

Name

> The name that you specified for this monitor. If you didn't specify a name, "untitled [monitor name]" is displayed. The monitor name is also a link that will display the Summary report for that monitor.

More

> A link to any tools or additional information that may help you to diagnose a problem detected by a particular monitor.

Edit

> Click the **Edit** link to edit the specifications for that monitor. For more information about editing a monitor, see the documentation for the specific monitor you want to edit.

Refresh

> Click the **Refresh** link to tell SiteScope to run the monitor immediately.

Updated

The time that the monitor ran most recently.

Del

Click the **X** in this field to delete the monitor.

🦎 Diagnostic Tools

SiteScope provides tools to help you diagnose problems when they occur. In the future we'll add additional tools that help diagnose problems. The tools can be accessed either by clicking on the "more" section of a group's monitor list or by selecting a tool from the Diagnostic Tools page. The Diagnostic Tools page can be accessed using the link in the main SiteScope page (below the main panel). Below are links to information on the current tools:

SiteScope Diagnostic Tools

Application Diagnostic Tools – operate as a client application	
Check FTP Server	Check whether an FTP file can be retrieved.
Mail Round Trip Test	Test a mail server by sending and retrieving a test message.
Get URL	Requests a URL from a server and prints the returned data.
Check URL Transaction	Retrieve a sequence of URL's.
Server Tools – show server statistics.	
Network	Display the server's network interface status and active connections
Services	Shows a list of currently running Services.
Network Tools – test network connectivity and performance	
DNS Lookup	Test a DNS to see if it can resolve a domain name.
Ping	Performs a roundtrip Ping test across the network.
Traceroute	Performs a traceroute test on the network.
Advanced Tools – for complex environments (may require additional setup)	
LDAP Authentication	Test an LDAP server by authenticating a user.
Check News Server	Check whether a News Server is operational.

Win NT Event Log	Display portions of the Event Log.
Get URL Content	Requests a URL from a server and display the page received.

🐸 DNS Lookup

 DNS Lookup is a tool which looks up names from a Domain Name Server. It shows you the IP address for a domain name. It also shows you information about the name servers for a domain. When there is a problem on the network, one cause is that the DNS server is not providing the right IP addresses for your servers. You can use this utility to verify that your DNS server is returning the correct addresses for your own servers. You can also use it to verify that it is able to lookup the addresses for external domains.

The DNS Lookup form provides a gateway to the standard nslookup program. It will send the request to the DNS server entered in the "DNS Address" text entry box. Alternately, it will display the IP address for the host name entered in the "Host Name" text entry box. Clicking the **DNS Lookup** button initiates the test. The results of the DNS lookup are displayed in the lower portion of the page.

🐸 Check FTP Server

Check FTP Server is a tool that allows you to access an FTP server and view the interaction between SiteScope (acting as an FTP client) and the FTP server. For example, if you receive an alert from SiteScope saying that your FTP server is not working properly, the first step is to use this tool to help track down the problem.

To check an FTP server complete the fields on the Check FTP Server form as outlined below. When the required fields are complete, click the **Check FTP Server** button to initiate the test.

FTP Server
> Enter the IP address or the name of the FTP server that you want to test. For example, you could enter either 206.168.191.22 or ftp.freshtech.com.

File
> Enter the file name to retrieve in this field, for example /pub/docs/mydoc.txt.

User Name
> Enter the name used to log into the FTP server in this field.

Password
> Enter the password used to log into the FTP server in this field.

Update every
> Enter how frequently the monitor should check this FTP server. The pull−down menu to the right of the entry field lets you specify time increments of seconds, minutes, hours, or days. You must specify a time increment of at least 15 seconds.

Use Passive
> Select this box to have SiteScope use a passive FTP connection. This is commonly required to access FTP servers through a firewall.

Proxy (Optional)
> Enter the proxy name or IP address if you want to use a proxy server for the FTP test.

Proxy User Name (Optional)
> Enter the name used to log into the proxy server in this field.

Proxy User Password (Optional)
> Enter the password used to log into the proxy server in this field.

The following is an sample output from the Check FTP Server tool. In this case, the FTP server allowed us to log on without a problem, indicating that the server is running and accepting requests. The failure is caused when the server was unable to locate the file that was requested: file.txt. Correcting this particular problem may be as easy as replacing the missing file or verifying the file location.

```
Received: 220 public Microsoft FTP Service (Version 2.0).
```

```
Sent:     USER anonymous
Received: 331 Anonymous access allowed, send identity (e-mail name) as password.
Sent:     PASS anonymous
Received: 230 Anonymous user logged in.
Sent:     PASV
Received: 227 Entering Passive Mode (206,168,191,1,5,183).

Connecting to server 206.168.191.1 port 1463

Sent:     RETR file.txt
Received: 550 file.txt: The system cannot find the file specified.
Sent:     QUIT
Received: 221
```

🐸 Mail Round Trip Test

The SiteScope Mail Test checks a Mail Server via the network. It verifies that the mail server is accepting requests, and also verifies that a message can be sent and retrieved. It does this by sending a standard mail message using SMTP and then retrieving that same message via a POP user account. Each message that SiteScope sends includes a unique key which it checks for to insure that it doesn't retrieve the wrong message and return a false OK reading.

Completing the Send and Receive Mail Test Form

Complete the fields on the Mail Monitor form as follows. When all the fields are complete, click the "**Check Mail Server**" button.

Outgoing Mail Server (SMTP):
> Enter the hostname of the SMTP mail server to which the test mail message should be sent. (for example, mail.freshtech.com).

Incoming Mail Server (POP):
> Enter the hostname of the POP mail server that should receive the test message. This can be the same mail server to which the test message was sent (for example, mail.freshtech.com).

Mail Server User Name:
> Enter a POP user account name (for example, support@freshtech.com). A test email message will be sent to this account and the Mail monitor will login to the account and verify that the message was received. No other mail in the account will be touched; therefore you can use your own personal mail account or another existing account for this purpose.**Note:** If you use a mail reader that automatically retrieves and deletes messages from the server, there's a chance that the Mail Monitor will never see the mail message and will therefore report an error.

Mail Server Password: (Optional)
> Enter a password, if necessary, for the test mail account.

To Address
> Enter the mail address to which the test message should be sent. This should be the address for the POP account that you specified in the Mail Server User Name field. For example, if you specified "support" as the Mail Server User Name, the To Address might be "support@freshtech.com."

Timeout
> The number of seconds that the Mail monitor should wait for a mail message to be received before timing−out. Once this time period passes, the Mail monitor will log an error and report an error status.

Retrieve Pause:
> After SiteScope sends the test message, it immediately logs into the mail account to verify that the message has been received. If the message hasn't been received, SiteScope will

automatically wait 10 seconds before it checks again. You can adjust this wait time by indicating an alternate number of seconds to wait in this field.

Check News Server

Check News Server is a tool that allows you to access a news server and view the NNTP interaction between SiteScope (acting as a news client) and the news server.

To perform a news server check, complete the Check News Server form as indicated. You can optionally specify one or more news groups by entering them into the "News group" field. Separate multiple news group names by commas. If the news server requires a username and password, enter them in the fields provided. Clicking the **Check News Group** button will initiate the test. The results of the test will be displayed in the lower portion of the page.

Ping

Ping is a tool that sends a packet to another location and back to the sender. It shows you the round–trip time along the path. When there is a problem with the network, ping can tell you if another location can be reached. The Ping Tool will do a ping from the current server to another location. Enter the domain name or IP address of the location you want to ping in the text entry box.

For example, enter either:

demo.freshtech.com (this is the host name)
OR
206.168.112.53 (this is the IP address)

You will see something like this displayed on the screen:

```
Pinging 206.168.112.53 with 32 bytes of data:

Reply from 206.168.112.53: bytes=32 time=20ms TTL=59

Reply from 206.168.112.53: bytes=32 time=10ms TTL=59

Reply from 206.168.112.53: bytes=32 time=10ms TTL=59

Reply from 206.168.112.53: bytes=32 time=10ms TTL=59

Reply from 206.168.112.53: bytes=32 time=20ms TTL=59
```

The Ping tool page also contains a link to the TraceRoute tool. Click on the **TraceRoute** link below the navigation bar at the top of the page.

TraceRoute

TraceRoute is a tool that shows you the network path between two locations. It shows you the address and how long it takes to get to each hop in the path. When there is a problem with the network, traceroute can often be used to narrow down where the problem is occurring. This tool will do a traceroute from your server to another location. The TraceRoute tool is accessible by a link below the navigation bar on the Ping tool page.

This TraceRoute form provides a gateway to the standard UNIX traceroute program which determines the route across a network taken by packets from one host to another host. In this case, the traceroute will start from your server. It will display the path taken to reach the host or IP address you have listed in the text entry box.

You can use this utility to verify connectivity of a host and determine how the host is connected to the Internet. You can also determine the path taken from your server to the specified host. This will allow you, for example, to determine where packet loss may be occurring when you attempt to connect to hosts elsewhere on the Internet.

To perform a traceroute, enter the domain name or IP address of the other location in the text entry box. Clicking the TraceRoute button initiates the action.

Get URL Tool

Get URL is a tool to retrieve an item from a web server. The URL specifies the server to contact and the item to return. Because SiteScope displays the content of the requested URL, this tool also functions as a Get URL Content tool. You can use this utility to verify that a given URL can be accessed from a web server. You can also use it to see how long it takes for the page to be returned.

The user name and password can be optionally entered for pages requiring authorization, and a proxy name or address can be optionally entered to use a given proxy. You can also choose to have SiteScope retrieve any frames and/or images that are part of the URL being requested. Normally SiteScope retreives only the content of the requested URL.

Complete the Get URL form as indicated. Clicking the **Get URL** button will initiate the test. The results of the test are displayed on the lower portion of the page. The results include statistics on the URL retreival as well as a text representation of the URL content.

🐸 Check URL Transaction Tool

 The Check URL Transaction Tool simulates a user's session across several pages. An example of this would be entering an account name via a Web form, checking an account status for the page that is returned, and then following a sequence of links through several more pages. The Check URL Transaction Tool page is accessed either by clicking on the **Tools** link that is displayed with the monitor status in the [Monitor Detail](#) table or by clicking on the Check URL Transaction link on the [Diagnostic Tools](#) page.

> **Note:** Accessing the Check URL Transaction Tool via the Monitor Detail page is considered to be more useful than using it as a diagnostic tool. Access via the Monitor Detail page allows you to modify existing URL transactions including use of the URL Transaction Wizard.

A URL transaction is specified by giving a URL to start at and then specifying either additional URLs, or more commonly, links or buttons to follow. For each step you may specify a match or error string to search for, a user name and password to enter, and POST data for that step.

The URL Transaction tool returns the status and time taken for each step in the sequence. It also embeds a copy of the page returned at each step of the sequence in it's output so that a more graphical view of the transaction can be viewed. Note that any graphics referenced by these pages will show up as broken – this is so that the HTML that is output is the exact same HTML that was retrieved, making debugging more precise.

Completing the Check URL Transaction Form

Complete the fields on the Check URL Transaction form as follows. When all the fields are complete, click the **Check URL Transaction** button to test the transacation or the **Update Monitor** button to save any changes that you have made to the current monitor. Press the Press the **Wizard** button to edit the existing transaction in the [URL Transaction Wizard](#) interface.

Step 1 – Reference:
> Select the type of object or target from the drop down list in the first column. This represents the either a webpage, a hyper link, form element, etc. that defines the transaction path. The type for Step 1 should alsways be a URL. Enter the specific URL of the first page in the transaction that you want SiteScope to complete. For example, if you want SiteScope to test your order process, you might enter a URL such as https://www.freshwater.com/order.html

Step (2 thru N) – Reference:
> From Step 2 on, you must tell SiteScope what you want it to do next. In the Type column, tell SiteScope what type of item it will be looking for in this step. For example, if SiteScope will be doing the equivalent of selecting a submit button, you would choose the **Form – match the displayed name of a Submit button**. SiteScope uses this information to scan the HTML for the proper text matches.

> Enter the URL, link, or submit button to be followed in the second column for this step. For example, if SiteScope should follow the submit button on the page and the name on the

button (its value) is "Place My Order", type Place My Order in this field. To instruct SiteScope to follow a link on the page, type the text of the link. For example, if the link says Next, type the word Next in this field. You can also type in a full URL.

If an image is used as the submit button, you must enter the name value for the image. You'll find this by looking at the HTML for the form.

Advanced Settings

The advanced settings give you the ability to customize error and warning thresholds, or complete other optional settings.

POST Data:
    If this step contains a URL for a POST request, enter the post variables, one per line as name=value pairs. This option is used to verify that a form is working correctly by performing the same request that occurs when a user submits a form. See also the Match Content field for a way to verify that the correct form response was received. If this field is blank, a GET request is performed.

Match Content:
    Enter an expression describing the values to match in the returned page. If the expression is not contained in the page, the monitor will display "no match on content". A regular expression can be used to define the values to match.

Error If Match:
    Enter an expression describing the values that, if found on the page returned, indicate an error in teh transaction process. For example, if the phrase "Login Error" appears there may be a problem with user profile data. If the Error If Match expression is found in the page, the monitor will signal an error. A regular expression can be used to define the values to match.

User Name:
    Enter the user name, if any, required for this step.

Password:
    Enter the password, if any, required for this step.

Delay:
    Enter an optional delay period that SiteScope will wait before executing the next step.

Title:
    Enter an optional title to be associated with this step of the transaction. It is best to select a title that describes what is being accomplished in this step.

Network Tool

The Network Tool reports the current network interface statistics and lists the active network connections. This information can be useful to determine the health of you network interface. You can also use this tool to track down problems where network connections are being left open or runaway conditions where more and more connections are being opened without ever being closed.

The Network Tool runs once when it is opened and reports the network information. The data returned by the tool are displayed on the lower portion of the Network Tool page. The information can be updated by clicking on the **Run Network** button.

🐸 Services Tool

The Services tool displays NT services running on the server where SiteScope is installed. This can be useful to confirm that critical services are available. It is also possible to view services running on another server by entering the name of that server in the **Server Name** text box. Click the **Show Services** button to initiate the action.

A listing of the services available on the server is displayed on the Services page below the **Show Services** button. At the bottom of this listing is a "Got to **Process Detail**" link that allows you to display a listing of the current processes running on the local server or the server specified in the Server Name box. Use the "Got to **Services**" link at the bottom of the Process Detail listing to toggle back to the services listing for that server.

Get URL Tool

Get URL is a tool to retrieve an item from a web server. The URL specifies the server to contact and the item to return. Because SiteScope displays the content of the requested URL, this tool also functions as a Get URL Content tool. You can use this utility to verify that a given URL can be accessed from a web server. You can also use it to see how long it takes for the page to be returned.

The user name and password can be optionally entered for pages requiring authorization, and a proxy name or address can be optionally entered to use a given proxy. You can also choose to have SiteScope retrieve any frames and/or images that are part of the URL being requested. Normally SiteScope retreives only the content of the requested URL.

Complete the Get URL form as indicated. Clicking the **Get URL** button will initiate the test. The results of the test are displayed on the lower portion of the page. The results include statistics on the URL retreival as well as a text representation of the URL content.

![icon] SiteScope Multi–view Panel

The SiteScope Multi–view Panel allows you to view the status of several installations of SiteScope running on different machines. For example, you could have SiteScope installed and running on six Web servers located in different departments in your company. Using SiteScope's Multi–view Panel, you could watch the status of each of these SiteScopes from one central location. You can even access these SiteScopes from the Multi–view Panel, enabling you to handle all administration tasks from a single location.

An example of the SiteScope Multi–view Panel if shown below. Of course, your Multi–view panel will show your SiteScope monitor groups.

Each server is listed by name or IP address. The name or IP address is a link to the SiteScope main panel for that server.

Listed beneath each server name are the groups defined for that server. Each group name is a link to that group's detail page. To the left of the group name is a status icon which indicates the overall status for that group. If all monitors in the group are reporting an OK status, the icon will be a green circle. Otherwise the icon will indicate the most serious condition reported by any monitor(s) in the group.

To the right of the group name is a string of smaller status icons. Each of these icons represents one monitor in the group. These icons allow you to quickly assess whether one monitor's reporting a problem, or several. If you hold your mouse over any of the status icons, you will see a popup with the name and current status of the monitor.

Editing the Multi–view Panel

When you first open the Multi–view Panel, the only SiteScope listed will be the SiteScope that you're currently using. To display additional SiteScopes, complete the following steps:

1. Choose the **Edit Multi−view Panel** link in the lower portion of the Multi−view Panel. The Servers in Multi−view Panel appears.

2. Choose the **Add** to Multi−view Panel link. The Add to Multi−view Panel appears.
3. Type the host name and SiteScope port number of the server in the text entry field (for example, demo.freshtech.com:8888).
4. Press the **Add to** Multi−view Panel button.

The newly added server will be listed last in the server table and will appear on the Multi−view panel the next time the screen refreshes.

Advanced Options

The following options can be changed by editing the **SiteScope/groups/master.config** file.

♦ The size of the Multi−view window can be changed by editing the **_overviewOptions** value in the **SiteScope/groups/master.config** file. Other window options, such as whether scroll bars or toolbars are displayed, can also be controlled with this option.
♦ The number of columns in the Multi−view Panel can be changed by editing the **_overviewColumns** value. A value of 0 (zero) will put all the groups for a server on one line.
♦ The refresh rate (the number of seconds before the page is automatically reloaded) can be changed by editing the **_overviewRefreshRate** value.

🐸 Servers in Multi−view Panel

This page allows you to administer the different SiteScopes displayed on the Multi−view Panel. At the top of the page you'll see the servers table which displays the servers currently listed on the SiteScope Multi−view Panel. Each of these servers must be running SiteScope. In addition to viewing the currently displayed servers, you may add, edit, and delete servers from this page.

In this section we'll discuss:

- The servers table
- Adding a server to the Multi−view Panel
- Deleting a server from the Multi−view Panel
- Editing a server on the Multi−view Panel

The Servers Table

The servers table displays the servers currently displayed on the Multi−view Panel. The server's name is listed in the **Name** column, and directly to the right of each name are an **Edit** and **Del** columns. To edit the server name or IP address, choose the **Edit** link. To remove a server from the Multi−view Panel, choose the link in the **Del** column.

Adding a Server to the Multi−view Panel

When you first open the Multi−view Panel, only the SiteScope that you're currently using will be displayed. If you have SiteScope running on additional servers and would like to be able to view and administer them from a central location, you may add them from this page.

To add a server running SiteScope to the SiteScope Multi−view Panel, complete the following steps:

1. Choose the **Add** to Multi−view Panel link. The Add to Multi−view Panel appears.
2. Type the host name and port number of the server in the text entry field (for example, demo.freshtech.com:8888).
3. Optionally, enter a title to use instead of the server name and port number.
4. Optionally, enter the user name and password needed to connect to this server.
5. Optionally, enter the proxy, proxy username, and proxy password to connect to this server using a proxy server.
6. Press the **Add to** Multi−view Panel button.

The newly added server will be listed last in the server table and will appear on the Multi−view panel the next time the screen refreshes.

Note: If you've added a server that doesn't exist or is not running SiteScope, you will see an error on the Multi−view Panel.

Deleting a Server from the Multi−view Panel

To delete a server from the Multi−view Panel, complete the following steps:

1. Click the **X** link in the **Del** column. A confirmation message appears.
2. Click the **Delete** button.

The server will no longer appear in either the server table or the Multi−view Panel.

Editing a Server in the Multi−view Panel

To change the name or IP address of a server in the Multi−view Panel, complete the following steps.

1. Choose the **Edit** link in the **Edit** column next to the server you want to change. The Update Multi−view Panel page appears.
2. Type the new name or IP address in the **Server Address** text entry field.
3. Optionally, enter a title to use instead of the server name and port number.
4. Optionally, enter the user name and password needed to connect to this server.
5. Optionally, enter the proxy, proxy username, and proxy password to connect to this server using a proxy server.
6. Click the **Update** Multi−view Panel button.

Your changes will appear immediately in the server table, and will appear on the Multi−view Panel the next time the page refreshes.